October 28, 2016

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

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

RE: Water Licence 2AM-MRY1325 Monthly SNP Report – September 2016

The following is the monthly report for September 2016 as required under Part I, Item 21 Water Licence 2AM-MRY1325. Part I, Item 21 of the above referenced Water Licence states:

"The Licensee shall submit to the Board, within thirty (30) days following the month being reported, a Monthly Monitoring Report. The Report shall include:

a. *All data and information required by this Part and generated by the Monitoring Program in the tables of Schedule I;*
b. *An assessment of data to identified area of non-compliance with regulated discharge parameters referred to in Part F"*

Monitoring Program

During the month of September 2016, water samples were collected as part of the Water Licence Monitoring Program.

Table 1 presents a list of samples/monitoring required under the Water Licences and the details concerning which water quality samples were collected along with sample date/lab identification number as appropriate. Analytical water quality testing results received are presented in Table 2. Volumes consumed for domestic and industrial water purposes and the volumes of effluent discharged at the Mary River Mine Site and Milne Port Camp are presented in the attached Table 3.

Monitoring Program Results

A) Water Sampling and Analysis Results

Table 2 provides the analytical results related to the Monitoring Program sampling requirements for September 2016.

B) Flow and Volume Measurements

Table 3 provides a breakdown of volume measurements as requested in Part I, Item 9 of the Water Licence for September 2016. Daily flow data for runoff and seepage sites are being collected and will be provided in the annual report.

We hope that the information provided in this monthly report is acceptable and should you have any questions regarding this report please contact the undersigned, William Bowden or Jim Millard at 416-364-8820 ext 6016.

Regards,

Lea Willemse
Environmental Coordinator

Reviewed by:

Jim Millard
Environmental Manager

Attach: Tables 1, 2 and 3
Cc: Erik Allain, Scott Burgess (INAC); Todd Burlingame, Wayne McPhee, Jim Millard, Sylvain Proulx, Robert Gagne (Baffinland); Stephen Bathory (QIA).

Table 1: Monitoring Program Water Sampling Summary for September 2016

Monitoring Program Station	Sampling Date	Lab ID#	Comment
Milne Port			
MP-01 (Sewage Treatment Facility)	13-Sep-16 20-Sep-16	L1828896-1 L1832535-1	Discharge volume reported daily
MP-01A (Milne Port PWSP)	N/A	N/A	Volume reported daily during discharge
MP-MRY-3 (Freshwater Intake from Km 32 Lake - Winter)	N/A	N/A	Volume reported daily during discharge
MP-MRY-04 (RBC at Exploration Camp)	N/A	N/A	Facility Inactive
MP-03 (Bulk Fuel Storage Facility Stormwater)	N/A	N/A	Volume reported daily during discharge
MP-04 (Landfarm Facility & Snow Containment Facility)	5-Sep-2016	L1824250-1	Volume reported daily during discharge
MP-05 (Ore Stockpile Sedimentation Pond (East)	N/A	N/A	Volume reported daily during discharge
MP-06 (Ore Stockpile Sedimentation Pond (West)	N/A	N/A	Volume reported daily during discharge
MP-MRY-12 (Bulk Sample Stockpile Area Seepage)	N/A	N/A	No flow, location is being retired due to lack of flow.
MP-C-A (Downstream of Construction Area)	N/A	N/A	No flow, location is being retired due to lack of flow.
MP-C-B (Downstream of Construction Area)	Sep-6-16	L1-824249-1	
MP-C-B01 (Downstream of Construction Area)	Sep-6-16	L1-824249-4	
MP-C-D (Downstream of Construction Area)	N/A	N/A	No flow during the month of August.
MP-C-E (Downstream of Construction Area)	N/A	N/A	No flow during the month of August.
MP-C-F (Downstream of Construction Area)	N/A	N/A	No flow during the month of August.
MP-C-H (Downstream of Construction Area)	Sep-6-16	L1-824249-6	
MP-Q1-01 (Downstream of Q1 Quarry)	Sep-6-16	L1-824249-1	
MP-Q1-02 (Downstream of Q1 Quarry)	Sep-6-16	L1-824249-2 48878	

Monitoring Program Station	Sampling Date	Lab ID#	Comment
Mary River Mine Site			
MS-01 (Sewage Treatment Facility)	14-Sep-16 20-Sep-16	L1828895-1 L1832540-1	Discharge volume reported daily
MS-MRY-1 (Freshwater Intake from Camp Lake)	N/A	N/A	Withdrawal volume reported daily
MS-MRY-04 (Exploration Camp RBC)	N/A	N/A	Facility Inactive
MS-03 (Milne Site Bulk Fuel Storage Facility Stormwater)	N/A	N/A	Volume reported daily during discharge
MS-06 (Ore Stockpile Pond Stormwater)	12-Sep-16	L182889-1	Volume reported daily during discharge
MS-08 (Mine Waste Rock Stockpile pond)	1-Sep-16 2-Sep-16 (11:30) 2-Sep-16 (17:00)	L1823700-1 L1823657-1 L1823657-2	Volume reported daily during discharge
MS-MRY-6 (Exploration Camp Bladder Farm Stormwater)	N/A	N/A	Volume reported daily during discharge
MS-MRY-09 (Bulk Sample Pit)	N/A	N/A	No discharge observed
MS-MRY-10 (Weathered Ore Bulk Sample Stockpile)	N/A	N/A	No discharge observed
MS-MRY-11 (Processing Bulk Sample Stockpile)	N/A	N/A	Area is being retired due to lack of flows
MS-MRY-13A (Downstream Non-Hazardous Landfill)	N/A	N/A	No discharge observed
MS-MRY-13B (Downstream Non-Hazardous Landfill)	5-Sep-16	L1824254-7	
MS-C-A (Downstream of Construction and Borrow Areas)	5-Sep-16	L1824254-3	
MS-C-B (Downstream of Construction and Borrow Areas)	5-Sep-16	L1824254-4	
MS-C-C (Downstream of Construction and Borrow Areas)	5-Sep-16	L1824254-8	
MS-C-D (Downstream of Construction and Borrow Areas)	5-Sep-16	L1824254-8	
MS-C-E (Downstream of Construction and Borrow Areas)	5-Sep-16	L1824254-1	
MS-C-F (Downstream of Construction and Borrow Areas)	5-Sep-16	L1824254-2	
MS-C-G (Downstream of Construction and Borrow Areas)	5-Sep-16	L1824254-5	

Monitoring Program Station	Sampling Date	Lab ID#	Comment
MS-C-H (Downstream of Construction and Borrow Areas)	5-Sep-16	L1824254-6	
MQ-C-A (Downstream of QMR2 Quarry)	5-Sep-16	L1824254-12	
MQ-C-B (Downstream of QMR2 Quarry)	6-Sep-16	L1824255-1 48877	
MQ-C-D (Downstream of QMR2 Quarry)	5-Sep-16	L1824254-11	
MQ-C-E (Downstream of D1Q2 Quarry)	5-Sep-16	L1824254-10	
Steensby Port			
Steensby Exploration Camp is presently not active.			

Table 2. Water Chemistry Results - September 2016						
Sample Number	**Sample ID**	**Date Sampled**	**Parameter Name**	**Result**	**Units**	**Lab**
MILNE PORT SITE						
L1828896-1	MP-01	13-Sep-16	pH	7.73	pH units	ALS
L1828896-1	MP-01	13-Sep-16	Total Suspended Solids	<2.0	mg/L	ALS
L1828896-1	MP-01	13-Sep-16	Ammonia, Total (as N)	0.065	mg/L	ALS
L1828896-1	MP-01	13-Sep-16	Total Phosphorus	9.37	mg/L	ALS
L1828896-1	MP-01	13-Sep-16	Biochemical Oxygen Demand	2.3	mg/L	ALS
L1828896-1	MP-01	13-Sep-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1832535-1	MP-01	20-Sep-16	pH	7.67	pH units	ALS
L1832535-1	MP-01	20-Sep-16	Total Suspended Solids	<2.0	mg/L	ALS
L1832535-1	MP-01	20-Sep-16	Ammonia, Total (as N)	0.097	mg/L	ALS
L1832535-1	MP-01	20-Sep-16	Total Phosphorus	11.9	mg/L	ALS
L1832535-1	MP-01	20-Sep-16	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1832535-1	MP-01	20-Sep-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1824250-1	MP-04	5-Sep-16	pH	8.73	pH units	ALS
L1824250-1	MP-04	5-Sep-16	Total Suspended Solids	2.8	mg/L	ALS
L1824250-1	MP-04	5-Sep-16	Lead (Pb)-Total	0.00039	mg/L	ALS
L1824250-1	MP-04	5-Sep-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1824250-1	MP-04	5-Sep-16	Benzene	<0.50	ug/L	ALS
L1824250-1	MP-04	5-Sep-16	Ethylbenzene	<0.50	ug/L	ALS
L1824250-1	MP-04	5-Sep-16	Toluene	<0.50	ug/L	ALS
L1824250-1	MP-04	5-Sep-16	F1 (C6-C10)	<100	ug/L	ALS
L1824250-1	MP-04	5-Sep-16	F1-BTEX	<100	ug/L	ALS
L1824250-1	MP-04	5-Sep-16	F2 (C10-C16)	340	ug/L	ALS
L1824250-1	MP-04	5-Sep-16	F3 (C16-C34)	710	ug/L	ALS
L1824250-1	MP-04	5-Sep-16	F4 (C34-C50)	<250	ug/L	ALS
L1824250-1	MP-04	5-Sep-16	Total Hydrocarbons (C6-C50)	1050	ug/L	ALS
L1824249-5	MP-C-B	6-Sep-16	Conductivity	705	uS/cm	ALS
L1824249-5	MP-C-B	6-Sep-16	pH	8.33	pH units	ALS
L1824249-5	MP-C-B	6-Sep-16	Total Suspended Solids	2.0	mg/L	ALS
L1824249-5	MP-C-B	6-Sep-16	Ammonia, Total (as N)	0.071	mg/L	ALS
L1824249-5	MP-C-B	6-Sep-16	Nitrate (as N)	1.37	mg/L	ALS
L1824249-5	MP-C-B	6-Sep-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1824249-4	MP-C-B01	6-Sep-16	Conductivity	737	uS/cm	ALS
L1824249-4	MP-C-B01	6-Sep-16	pH	8.34	pH units	ALS
L1824249-4	MP-C-B01	6-Sep-16	Total Suspended Solids	<2.0	mg/L	ALS
L1824249-4	MP-C-B01	6-Sep-16	Ammonia, Total (as N)	0.020	mg/L	ALS
L1824249-4	MP-C-B01	6-Sep-16	Nitrate (as N)	1.66	mg/L	ALS
L1824249-4	MP-C-B01	6-Sep-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1824249-6	MP-C-H	6-Sep-16	Conductivity	379	uS/cm	ALS
L1824249-6	MP-C-H	6-Sep-16	pH	8.36	pH units	ALS
L1824249-6	MP-C-H	6-Sep-16	Total Suspended Solids	<2.0	mg/L	ALS
L1824249-6	MP-C-H	6-Sep-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1824249-6	MP-C-H	6-Sep-16	Nitrate (as N)	0.150	mg/L	ALS
L1824249-6	MP-C-H	6-Sep-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1824249-3	MP-C-H (Duplicate)	6-Sep-16	Conductivity	376	uS/cm	ALS
L1824249-3	MP-C-H (Duplicate)	6-Sep-16	pH	8.33	pH units	ALS
L1824249-3	MP-C-H (Duplicate)	6-Sep-16	Total Suspended Solids	<2.0	mg/L	ALS
L1824249-3	MP-C-H (Duplicate)	6-Sep-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1824249-3	MP-C-H (Duplicate)	6-Sep-16	Nitrate (as N)	0.153	mg/L	ALS
L1824249-3	MP-C-H (Duplicate)	6-Sep-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1824249-1	MP-Q1-01	6-Sep-16	Conductivity	473	uS/cm	ALS
L1824249-1	MP-Q1-01	6-Sep-16	pH	8	pH units	ALS
L1824249-1	MP-Q1-01	6-Sep-16	Total Suspended Solids	<2.0	mg/L	ALS
L1824249-1	MP-Q1-01	6-Sep-16	Ammonia, Total (as N)	0.024	mg/L	ALS
L1824249-1	MP-Q1-01	6-Sep-16	Nitrate (as N)	2.12	mg/L	ALS
L1824249-1	MP-Q1-01	6-Sep-16	Oil and Grease, Total	<2.0	mg/L	ALS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1824249-2	MP-Q1-02	6-Sep-16	Conductivity	956	uS/cm	ALS
L1824249-2	MP-Q1-02	6-Sep-16	pH	8.12	pH units	ALS
L1824249-2	MP-Q1-02	6-Sep-16	Total Suspended Solids	<2.0	mg/L	ALS
L1824249-2	MP-Q1-02	6-Sep-16	Ammonia, Total (as N)	0.080	mg/L	ALS
L1824249-2	MP-Q1-02	6-Sep-16	Nitrate (as N)	12.9	mg/L	ALS
L1824249-2	MP-Q1-02	6-Sep-16	Oil and Grease, Total	<2.0	mg/L	ALS
48878	MP-Q1-02	6-Sep-16	Acute Toxicity*	non-lethal	mortality%	Aquatox
MINE SITE						
L1824254-12	MQ-C-A	5-Sep-16	Conductivity	373	uS/cm	ALS
L1824254-12	MQ-C-A	5-Sep-16	pH	8.35	pH units	ALS
L1824254-12	MQ-C-A	5-Sep-16	Total Suspended Solids	<2.0	mg/L	ALS
L1824254-12	MQ-C-A	5-Sep-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1824254-12	MQ-C-A	5-Sep-16	Nitrate (as N)	0.028	mg/L	ALS
L1824254-12	MQ-C-A	5-Sep-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1824255-1	MQ-C-B	6-Sep-16	Conductivity	574	uS/cm	ALS
L1824255-1	MQ-C-B	6-Sep-16	pH	8.28	pH units	ALS
L1824255-1	MQ-C-B	6-Sep-16	Total Suspended Solids	2.4	mg/L	ALS
L1824255-1	MQ-C-B	6-Sep-16	Ammonia, Total (as N)	0.16	mg/L	ALS
L1824255-1	MQ-C-B	6-Sep-16	Nitrate (as N)	2.91	mg/L	ALS
L1824255-1	MQ-C-B	6-Sep-16	Oil and Grease, Total	<2.0	mg/L	ALS
48877	MQ-C-B	6-Sep-16	Acute Toxicity*	non-lethal	mortality %	Aquatox
L1824254-11	MQ-C-D	5-Sep-16	Conductivity	484	uS/cm	ALS
L1824254-11	MQ-C-D	5-Sep-16	pH	8.31	pH units	ALS
L1824254-11	MQ-C-D	5-Sep-16	Total Suspended Solids	<2.0	mg/L	ALS
L1824254-11	MQ-C-D	5-Sep-16	Ammonia, Total (as N)	0.215	mg/L	ALS
L1824254-11	MQ-C-D	5-Sep-16	Nitrate (as N)	2.4	mg/L	ALS
L1824254-11	MQ-C-D	5-Sep-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1824254-10	MQ-C-E	5-Sep-16	Conductivity	387	uS/cm	ALS
L1824254-10	MQ-C-E	5-Sep-16	pH	8.3	pH units	ALS
L1824254-10	MQ-C-E	5-Sep-16	Total Suspended Solids	6.8	mg/L	ALS
L1824254-10	MQ-C-E	5-Sep-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1824254-10	MQ-C-E	5-Sep-16	Nitrate (as N)	4.47	mg/L	ALS
L1824254-10	MQ-C-E	5-Sep-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1828895-1	MS-01	14-Sep-16	pH	7.86	pH units	ALS
L1828895-1	MS-01	14-Sep-16	Total Suspended Solids	<2	mg/L	ALS
L1828895-1	MS-01	14-Sep-16	Ammonia, Total (as N)	1.39	mg/L	ALS
L1828895-1	MS-01	14-Sep-16	Total Phosphorus	1.28	mg/L	ALS
L1828895-1	MS-01	14-Sep-16	Biochemical Oxygen Demand	5.3	mg/L	ALS
L1828895-1	MS-01	14-Sep-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1832540-1	MS-01	20-Sep-16	pH	7.91	pH units	ALS
L1832540-1	MS-01	20-Sep-16	Total Suspended Solids	<2	mg/L	ALS
L1832540-1	MS-01	20-Sep-16	Ammonia, Total (as N)	2.61	mg/L	ALS
L1832540-1	MS-01	20-Sep-16	Total Phosphorus	1.22	mg/L	ALS
L1832540-1	MS-01	20-Sep-16	Biochemical Oxygen Demand	8.4	mg/L	ALS
L1832540-1	MS-01	20-Sep-16	Oil & Grease - Total	<2.0	mg/L	ALS
L182889-1	MS-06 (see Note 3)	12-Sep-16	pH	7.98	pH units	ALS
L182889-1	MS-06	12-Sep-16	Total Suspended Solids	4.4	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Total Dissolved Solids	183	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Turbidity	7.50	NTU	ALS
L182889-1	MS-06	12-Sep-16	Alkalinity, Total (as CaCO3)	57	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Chloride (Cl)	9.89	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Fluoride (F)	0.088	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Nitrate (as N)	0.744	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Total Kjeldahl Nitrogen	0.41	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Phosphorus, Total	0.0099	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Sulfate (SO4)	78.4	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Dissolved Organic Carbon	4.7	mg/L	ALS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L182889-1	MS-06	12-Sep-16	Total Organic Carbon	4.5	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Aluminum (Al)-Total	0.078	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Arsenic (As)-Total	0.00014	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Cadmium (Cd)-Total	<0.000010	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Calcium (Ca)-Total	25.4	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Copper (Cu)-Total	<0.0010	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Iron (Fe)-Total	0.110	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Lead (Pb)-Total	0.00013	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Magnesium (Mg)-Total	16.9	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Manganese (Mn)-Total	0.00658	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Mercury (Hg)-Total	<0.000010	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Molybdenum (Mo)-Total	0.00385	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Nickel (Ni)-Total	<0.00050	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Potassium (K)-Total	9.44	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Selenium (Se)-Total	0.000121	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Sodium (Na)-Total	4.01	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Thallium (Tl)-Total	0.000017	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Uranium (U)-Total	0.00372	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Zinc (Zn)-Total	<0.0030	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Aluminum (Al)-Dissolved	0.0162	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Arsenic (As)-Dissolved	0.00012	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Cadmium (Cd)-Dissolved	<0.000010	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Calcium (Ca)-Dissolved	26.0	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Copper (Cu)-Dissolved	0.00057	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Iron (Fe)-Dissolved	<0.010	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Lead (Pb)-Dissolved	<0.000050	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Magnesium (Mg)-Dissolved	16.6	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Manganese (Mn)-Dissolved	0.00337	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Mercury (Hg)-Dissolved	<0.000010	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Molybdenum (Mo)-Dissolved	0.00370	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Nickel (Ni)-Dissolved	<0.00050	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Potassium (K)-Dissolved	9.82	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Selenium (Se)-Dissolved	0.000097	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Sodium (Na)-Dissolved	4.08	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Thallium (Tl)-Dissolved	0.000019	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Uranium (U)-Dissolved	0.00353	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Zinc (Zn)-Dissolved	<0.0010	mg/L	ALS
L1823700-1	MS-08 (see Note 1)	1-Sep-16	pH	7.25	pH units	ALS
L1823700-1	MS-08	1-Sep-16	Total Suspended Solids	12.8	mg/L	ALS
L1823700-1	MS-08	1-Sep-16	Total Dissolved Solids	1040	mg/L	ALS
L1823700-1	MS-08	1-Sep-16	Turbidity	15.7	NTU	ALS
L1823657-1	MS-08	2-Sep-16 (11:30)	pH	6.99	pH units	ALS
L1823657-1	MS-08	2-Sep-16 (11:30)	Total Dissolved Solids	1070	mg/L	ALS
L1823657-1	MS-08	2-Sep-16 (11:30)	Turbidity	19.6	NTU	ALS
L1823657-1	MS-08 (see Note 2)	2-Sep-16 (11:30)	Total Suspended Solids	**16.8**	mg/L	ALS
L1823657-2	MS-08	2-Sep-16 (17:00)	pH	7.02	pH units	ALS
L1823657-2	MS-08	2-Sep-16 (17:00)	Total Suspended Solids	14	mg/L	ALS
L1823657-2	MS-08	2-Sep-16 (17:00)	Total Dissolved Solids	1050	mg/L	ALS
L1823657-2	MS-08	2-Sep-16 (17:00)	Turbidity	16.7	NTU	ALS
L1824254-3	MS-C-A	5-Sep-16	Conductivity	264	uS/cm	ALS
L1824254-3	MS-C-A	5-Sep-16	pH	8.17	pH units	ALS
L1824254-3	MS-C-A	5-Sep-16	Total Suspended Solids	<2.0	mg/L	ALS
L1824254-3	MS-C-A	5-Sep-16	Ammonia, Total (as N)	0.031	mg/L	ALS
L1824254-3	MS-C-A	5-Sep-16	Nitrate (as N)	0.668	mg/L	ALS
L1824254-3	MS-C-A	5-Sep-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1824254-4	MS-C-B	5-Sep-16	Conductivity	279	uS/cm	ALS
L1824254-4	MS-C-B	5-Sep-16	pH	8.13	pH units	ALS
L1824254-4	MS-C-B	5-Sep-16	Total Suspended Solids	<2.0	mg/L	ALS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1824254-4	MS-C-B	5-Sep-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1824254-4	MS-C-B	5-Sep-16	Nitrate (as N)	0.847	mg/L	ALS
L1824254-4	MS-C-B	5-Sep-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1824254-8	MS-C-C	5-Sep-16	Conductivity	807	uS/cm	ALS
L1824254-8	MS-C-C	5-Sep-16	pH	8.25	pH units	ALS
L1824254-8	MS-C-C	5-Sep-16	Total Suspended Solids	2.4	mg/L	ALS
L1824254-8	MS-C-C	5-Sep-16	Ammonia, Total (as N)	0.029	mg/L	ALS
L1824254-8	MS-C-C	5-Sep-16	Nitrate (as N)	6.01	mg/L	ALS
L1824254-8	MS-C-C	5-Sep-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1824254-9	MS-C-D	5-Sep-16	Conductivity	778	uS/cm	ALS
L1824254-9	MS-C-D	5-Sep-16	pH	8.38	pH units	ALS
L1824254-9	MS-C-D	5-Sep-16	Total Suspended Solids	<2.0	mg/L	ALS
L1824254-9	MS-C-D	5-Sep-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1824254-9	MS-C-D	5-Sep-16	Nitrate (as N)	6.96	mg/L	ALS
L1824254-9	MS-C-D	5-Sep-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1824254-1	MS-C-E	5-Sep-16	Conductivity	659	uS/cm	ALS
L1824254-1	MS-C-E	5-Sep-16	pH	8.2	pH units	ALS
L1824254-1	MS-C-E	5-Sep-16	Total Suspended Solids	10.4	mg/L	ALS
L1824254-1	MS-C-E	5-Sep-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1824254-1	MS-C-E	5-Sep-16	Nitrate (as N)	4.36	mg/L	ALS
L1824254-1	MS-C-E	5-Sep-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1824254-2	MS-C-F	5-Sep-16	Conductivity	299	uS/cm	ALS
L1824254-2	MS-C-F	5-Sep-16	pH	8.23	pH units	ALS
L1824254-2	MS-C-F	5-Sep-16	Total Suspended Solids	<2.0	mg/L	ALS
L1824254-2	MS-C-F	5-Sep-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1824254-2	MS-C-F	5-Sep-16	Nitrate (as N)	0.93	mg/L	ALS
L1824254-2	MS-C-F	5-Sep-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1824254-5	MS-C-G	5-Sep-16	Conductivity	225	uS/cm	ALS
L1824254-5	MS-C-G	5-Sep-16	pH	7.9	pH units	ALS
L1824254-5	MS-C-G	5-Sep-16	Total Suspended Solids	<2.0	mg/L	ALS
L1824254-5	MS-C-G	5-Sep-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1824254-5	MS-C-G	5-Sep-16	Nitrate (as N)	0.878	mg/L	ALS
L1824254-5	MS-C-G	5-Sep-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1824254-13	MS-C-G (Duplicate)	5-Sep-16	Conductivity	222	uS/cm	ALS
L1824254-13	MS-C-G (Duplicate)	5-Sep-16	pH	8.4	pH units	ALS
L1824254-13	MS-C-G (Duplicate)	5-Sep-16	Total Suspended Solids	<2.0	mg/L	ALS
L1824254-13	MS-C-G (Duplicate)	5-Sep-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1824254-13	MS-C-G (Duplicate)	5-Sep-16	Nitrate (as N)	0.869	mg/L	ALS
L1824254-13	MS-C-G (Duplicate)	5-Sep-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1824254-6	MS-C-H	5-Sep-16	Conductivity	254	uS/cm	ALS
L1824254-6	MS-C-H	5-Sep-16	pH	8.23	pH units	ALS
L1824254-6	MS-C-H	5-Sep-16	Total Suspended Solids	<2.0	mg/L	ALS
L1824254-6	MS-C-H	5-Sep-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1824254-6	MS-C-H	5-Sep-16	Nitrate (as N)	<0.20	mg/L	ALS
L1824254-6	MS-C-H	5-Sep-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Conductivity	1630	uS/cm	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	pH	8.11	pH units	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Total Suspended Solids	2.8	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Total Dissolved Solids	899	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Alkalinity, Total (as CaCO3)	144	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Dissolved Organic Carbon	4	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Total Organic Carbon	4.5	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Mercury (Hg)-Total	<0.000010	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Aluminum (Al)-Total	0.068	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Antimony (Sb)-Total	0.00018	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Arsenic (As)-Total	0.00014	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Barium (Ba)-Total	0.0767	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Beryllium (Be)-Total	<0.00010	mg/L	ALS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1824254-7	MS-MRY-13B	5-Sep-16	Bismuth (Bi)-Total	<0.000050	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Boron (B)-Total	0.021	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Cadmium (Cd)-Total	0.000012	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Calcium (Ca)-Total	126	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Chromium (Cr)-Total	0.00059	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Cobalt (Co)-Total	0.00012	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Copper (Cu)-Total	0.0011	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Iron (Fe)-Total	0.096	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Lead (Pb)-Total	<0.00010	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Lithium (Li)-Total	0.0088	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Magnesium (Mg)-Total	93	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Manganese (Mn)-Total	0.00223	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Molybdenum (Mo)-Total	0.000171	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Nickel (Ni)-Total	0.00882	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Potassium (K)-Total	2.36	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Selenium (Se)-Total	<0.000050	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Silicon (Si)-Total	4.18	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Silver (Ag)-Total	<0.000050	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Sodium (Na)-Total	13.3	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Strontium (Sr)-Total	0.0668	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Thallium (Tl)-Total	0.000014	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Tin (Sn)-Total	<0.00010	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Titanium (Ti)-Total	0.00428	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Uranium (U)-Total	0.00128	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Vanadium (V)-Total	<0.00050	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Zinc (Zn)-Total	<0.0030	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Phenols (4AAP)	0.0017	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	F1 (C6-C10)	<100	ug/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	F2 (C10-C16)	<100	ug/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	F3 (C16-C34)	<250	ug/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	F4 (C34-C50)	<250	ug/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Total Hydrocarbons (C6-C50)	<380	ug/L	ALS

Notes:

*Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

*Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

Exceedance of Water Licence water quality criteria.

Notes:

1. Due to logistical and holding time requirements, pre discharge sampling was completed on 30-August-16. Refer to Table 2 - Water Licence 2AM-MRY1325 Monthly SNP Report – August 2016.

2. Incliment waether restricted access to MS-08 on 2-Sep-16 (11:30). Sample was collected directly from the Waste Rock Pond. Elevated TSS levels were caused by snow and ice that had fallen into the pond at the sampling location which may have disturbed bottom sediments. A follow-up sample collecetd at 17:00 confirmed a TSS reading less than the Water Licence Criteria of 15 mg/L for grab samples. The monthly average of the 3 samples collected at MS-08 during September was 14.5 mg/L

3 Due to logistical and holding time requirements the monthly acute lethality sample collected at MS-06 on September,12 could not be analyzed upon receipt at the laboratory.

Table 3: Flow and Volume Measurements-Part I Item 11 - September 2016

DATE	Camp Lake Freshwater Use (Mine Site Camp) - Daily Potable Water (m^3) MS-MRY-1	Camp Lake Daily Freshwater Use for Other Purposes - (m^3) MS-MRY-1	Water Use for Dust Suppression from Authorized Sources	Km 32 Lake Milne Port Camp Daily Potable Water (m^3) MP-MRY-3	Borrow Pit Freshwater Use for Other Purposes (m^3)	Treated Sewage Effluent (m^3) from MS-01 to Discharge Location #1	Sewage Sludge Removed (m^3) from Mine Site WWTP to Incinerator	Treated Sewage Effluent (m^3) from MP-01 to Milne Port	Sewage Sludge Removed (m^3) from Milne Port WWTP to Incinerator	Sewage Removed (m^3) from Lift Stations to PWSP at Milne Port - MP-01a	Treated Oily Water (m^3) from Exploration Camp Bulk Fuel Storage Facility to Tundra (MS-MRY-6)	Treated Oily Water (m^3) from Milne Port Landfarm Facility to Tundra (MP-04)	Effluent Discharge (m^3) from Mine Site Waste Rock Stockpile Pond (MS-08)	Effluent Discharge (m^3) from Mine Site Ore Stockpile Pond (MS-06)	Effluent Discharge from Milne Port East Sedimentation Pond (MP-05)	Effluent Discharge from Milne Port West Sedimentation Pond (MP-06)
1-Sep	59.3	0.0	0.0	34.8	0.0	59.3	0.252	34.8	0.000	0.0	0.0	34.0	2017.3	0.0	0.0	0.0
2-Sep	63.9	0.0	0.0	69.7	0.0	63.9	0.252	69.7	0.361	0.0	0.0	35.0	1980.0	0.0	0.0	0.0
3-Sep	53.6	0.0	0.0	34.8	0.0	53.6	0.273	34.8	0.340	0.0	0.0	14.4	0.0	0.0	0.0	0.0
4-Sep	36.1	0.0	0.0	87.1	0.0	36.1	0.273	87.1	0.170	0.0	0.0	37.5	0.0	0.0	0.0	0.0
5-Sep	63.0	0.0	0.0	17.4	0.0	63.0	0.252	17.4	0.170	0.0	0.0	24.2	0.0	0.0	0.0	0.0
6-Sep	61.1	0.0	0.0	17.4	0.0	61.1	0.000	17.4	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7-Sep	61.1	0.0	0.0	69.7	0.0	61.1	0.336	69.7	0.340	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8-Sep	38.8	0.0	0.0	52.2	0.0	38.8	0.168	52.2	0.340	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9-Sep	53.6	0.0	0.0	34.8	0.0	53.6	0.168	34.8	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10-Sep	61.4	0.0	0.0	52.2	0.0	61.4	0.525	52.2	0.340	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11-Sep	64.2	0.0	0.0	52.2	0.0	64.2	0.168	52.2	0.340	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12-Sep	48.1	0.0	0.0	34.8	0.0	48.1	0.252	34.8	0.000	0.0	0.0	0.0	0.0	85.5	0.0	0.0
13-Sep	68.0	0.0	0.0	17.4	0.0	68.0	0.252	17.4	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14-Sep	30.9	0.0	0.0	17.4	0.0	30.9	0.252	17.4	0.340	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15-Sep	59.9	0.0	0.0	17.4	0.0	59.9	0.336	17.4	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16-Sep	56.0	0.0	0.0	52.2	0.0	56.0	0.147	52.2	0.340	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17-Sep	45.9	0.0	0.0	17.4	0.0	45.9	0.168	17.4	0.340	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18-Sep	59.1	0.0	0.0	17.4	0.0	59.1	0.168	17.4	0.340	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19-Sep	66.5	0.0	0.0	0.0	0.0	66.5	0.357	0.0	0.340	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20-Sep	67.1	0.0	0.0	43.5	0.0	67.1	0.336	43.5	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21-Sep	54.2	0.0	0.0	0.0	0.0	54.2	0.378	0.0	0.276	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22-Sep	44.7	0.0	0.0	47.7	0.0	44.7	0.336	47.7	0.276	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23-Sep	61.5	0.0	0.0	16.7	0.0	61.5	0.378	16.7	0.255	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24-Sep	46.0	0.0	0.0	50.3	0.0	46.0	0.399	50.3	0.255	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25-Sep	30.3	0.0	0.0	34.4	0.0	30.3	0.378	34.4	0.255	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26-Sep	60.1	0.0	0.0	34.8	0.0	60.1	0.378	34.8	0.276	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27-Sep	44.1	0.0	0.0	52.2	0.0	44.1	0.378	52.2	0.276	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28-Sep	53.6	0.0	0.0	17.4	0.0	53.6	0.378	17.4	0.170	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29-Sep	57.2	0.0	0.0	34.8	0.0	57.2	0.378	34.8	0.170	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30-Sep	50.9	0.0	0.0	34.8	0.0	50.9	0.252	34.8	0.340	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	**1620**	**0**	**0**	**1063**	**0**	**1620**	**9**	**1063**	**7**	**0**	**0**	**145**	**3997**	**86**	**0**	**0**

Notes:

WWTP - Waste Water Treatment Plant

PWSP - Polishing Waste Stabilization Pond