July 31, 2018

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 – June 2018

The following is the monthly report for June 2018 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 June 2018, 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/laboratory 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 June 2018.

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 June 2018.

We trust that the information provided in this monthly report is acceptable and should you have any questions regarding this report please contact myself, Connor Devereaux (ext. 6010), or Timothy Ray Sewell at 416.364.8820 ext. 6054.

Regards,

Bill Bowden

William Bowden
Environmental Superintendent

Reviewed by:

Timothy Ray Sewell
Head of Health, Safety and Environment

Attach: Tables 1, 2, and 3
Cc: Jonathon Mesher, Ian Parsons (INAC); Grant Goddard, William Napier, Megan Lord-Hoyle, Timothy Ray Sewell, Sylvain Proulx, Gerald Rogers, Francois Gaudrau, Connor Devereaux (Baffinland); Stephen Bathory (QIA);

Table 1: Monitoring Program Water Sampling Summary for June 2018

Monitoring Program Station	Sampling Date	Lab ID#	Comment
Milne Port			
MP-01 (Sewage Treatment Facility)	6/05/2018	L2107700-1	Discharge volume reported daily
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)	6/13/2018	L2112845-1	Volume reported daily during discharge
MP-04 (Landfarm Facility & Snow Containment Facility)	N/A	N/A	Volume reported daily during discharge. No discharge occurred.
MP-05 (Ore Stockpile Sedimentation Pond (East)	6/05/2018 6/19/2018	L2107676-1 L2116394-1	Volume reported daily during discharge
MP-0501 (Field Duplicate of MP-05)	6/05/2018	L2107676-3	Volume reported daily during discharge
MP-06 (Ore Stockpile Sedimentation Pond (West)	6/05/2018 6/19/2018	L2107676-2 L2116369-1	Volume reported daily during discharge
MP-0601 (Field Duplicate of MP-06)	6/19/2018	L2116369-2	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)	6/11/2018 6/25/2018	L2111033-2 L2120589-7	
MP-C-B01 (Downstream of Construction Area)	6/04/2018 6/11/2018 6/25/2018	L2107359-1 L2111033-3 L2120589-5	
MP-C-B0101 (Field Duplicate of MP-C-B01)	6/11/2018 6/25/2018	L2111033-4 L2120589-6	
MP-C-D (Downstream of Construction Area)	N/A	N/A	No flow, location is being retired due to lack of flow.
MP-C-E (Downstream of Construction Area)	N/A	N/A	No flow, location is being retired due to lack of flow.
MP-C-F (Downstream of Construction Area)	N/A	N/A	No flow during month of June
MP-C-H (Downstream of Construction Area)	6/04/2018 6/11/2018 6/18/2018 6/25/2018	L2107359-6 L2111033-1 L2116243-1 L2120589-1	

Monitoring Program Station	Sampling Date	Lab ID#	Comment
MP-C-H01 (Field Duplicate of MP-C-H)	6/04/2018	L2107359-5	
MP-Q1-01 (Downstream of Q1 Quarry)	6/04/2018 6/19/2018 6/25/2018	L2107359-4 L2117043-1 L2120589-2	
MP-Q1-0102 (Field Blank of MP-Q1-01)	6/19/2018	L2117043-2	
MP-Q1-02 (Downstream of Q1 Quarry)	6/06/2018 6/26/2018	L2108622-1 L2120296-1	

Mary River Mine Site			
MS-01 (Sewage Treatment Facility)	6/05/2018	L2107707-1	Discharge volume reported daily
MS-01b (Sewage Treatment Facility)	6/05/2018	L2107710-1	Discharge volume reported daily
MS-MRY-1 (Freshwater Intake Camp Lake)	N/A	N/A	Withdrawal volume reported daily
MS-MRY-04a	N/A	N/A	Volume reported daily during discharge. No discharge occurred.
MS-MRY-04b	N/A	N/A	Volume reported daily during discharge. No discharge occurred.
MS-MRY-04c	N/A	N/A	Volume reported daily during discharge. No discharge occurred.
MS-03 (Milne Site Bulk Fuel Storage Facility Stormwater)	N/A	N/A	Volume reported daily during discharge
MS-06 (Ore Stockpile Pond Stormwater)	6/13/2018 6/19/2018 6/29/2018 6/30/2018	L2113176-4 L2117069-1 L2121631-1 L2122069-1	Volume reported daily during discharge
MS-0601 (Field Duplicate of MS-06)	6/24/2018 6/30/2018	L2117877-2 L2122069-2	Volume reported daily during discharge
MS-08 (Mine Waste Rock Stockpile pond)	6/30/2018	L2122068-1	Volume reported daily during discharge
MS-0801 (Field Duplicate of MS-08)	6/30/2018	L2122068-2	Volume reported daily during discharge
MS-MRY-6 (Exploration Camp Bladder Farm Stormwater)	6/5/2018 6/5/2018 6/5/2018	L2107678-1 L2107678-2 L2107678-3	Volume reported daily during discharge
MS-MRY-09 (Bulk Sample Pit)	N/A	N/A	No flow during month of June
MS-MRY-10 (Weathered Ore Bulk Sample Stockpile)	N/A	N/A	No flow during month of June
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)	6/04/2018 6/11/2018 6/18/2018 6/25/2018	L2107717-10 L2112089-11 L2116590-11 L2120528-11	
MS-MRY-13B (Downstream Non-Hazardous Landfill)	6/04/2018 6/11/2018 6/18/2018 6/25/2018	L2107717-11 L2112089-12 L2116590-12 L2120528-12	
MS-C-A (Downstream of Construction and Borrow Areas)	6/04/2018 6/11/2018 6/18/2018 6/25/2018	L2107717-5 L2112089-6 L2116590-6 L2120528-6	
MS-C-A02 (Field Blank of MS-C-A)	6/04/2018	L2107717-6	
MS-C-B (Downstream of Construction and Borrow Areas)	6/04/2018 6/11/2018 6/18/2018 6/25/2018	L2107717-7 L2112089-4 L2116590-4 L2120528-4	
MS-C-C (Downstream of Construction and Borrow Areas)	6/04/2018 6/11/2018 6/18/2018 6/25/2018	L2107717-15 L2112089-14 L2116590-14 L2120528-14	
MS-C-D (Downstream of Construction and Borrow Areas)	6/04/2018 6/11/2018 6/18/2018 6/25/2018	L2107717-14 L2112089-10 L2116590-10 L2120528-10	
MS-C-E (Downstream of Construction and Borrow Areas)	6/04/2018 6/11/2018 6/18/2018 6/25/2018	L2107717-8 L2112089-7 L2116590-5 L2120528-5	
MS-C-E01 (Field Duplicate of MS-C-E)	6/11/2018	L2112089-5	
MS-C-E03 (Travel Blank of MS-C-E)	6/04/2018	L2107717-9	
MS-C-F (Downstream of Construction and Borrow Areas)	6/04/2018 6/11/2018 6/18/2018 6/25/2018	L2107717-2 L2112089-9 L2116590-9 L2120528-9	
MS-C-F02 (Field Blank of MS-C-F)	6/11/2018	L2112089-8	
MS-C-F03 (Travel Blank of MS-C-F)	6/18/2018	L2116590-8	
MS-C-G (Downstream of Construction and Borrow Areas)	6/04/2018 6/25/2018	L2107717-12 L2120528-15	
MS-C-H (Downstream of Construction and Borrow Areas)	6/04/2018 6/11/2018 6/19/2018 6/25/2018	L2107717-13 L2112089-13 L2116590-13 L2120528-13	
MQ-C-A (Downstream of QMR2 Quarry)	6/04/2018 6/11/2018 6/18/2018 6/25/2018	L2107717-1 L2112089-2 L2116590-2 L2120528-2	
MQ-C-A01 (Field Duplicate of MQ-C-A)	6/25/2018	L2120528-7	
MQ-C-B (Downstream of QMR2 Quarry)	6/11/2018 6/18/2018 6/25/2018	L2112089-1 L2116590-1 L2120528-1	

MQ-C-B02 (Field Blank of MQ-C-B)	6/18/2018 6/25/2018	L2116590-7 L2120528-8	
MQ-C-D (Downstream of QMR2 Quarry)	6/04/2018 6/11/2018 6/18/2018 6/25/2018	L2107717-3 L2112089-3 L2116590-3 L2120528-3	
MQ-C-E (Downstream of QMR2 Quarry)	6/04/2018 6/27/2018	L2107717-4 L2122135-1	
MQ-C-E03 (Travel Blank of MQ-C-E)	6/27/2018	L2122135-2	
Steensby Port			
Steensby Exploration Camp is presently not active.	N/A	N/A	

TABLE 2 - WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-01

Analyte	Sample ID			MP-01
	ALS Laboratory Sample ID			L2107700-1
	Sample Date & Time			6/5/2018 1:45:00 PM
	QA/QC Sample Type			N/A
	Units	LOR	Water Licence Criteria[1]	
pH	pH units	0.1	6.0 - 9.5	7.26
Total Suspended Solids	mg/L	2	<120	<2.0
Alkalinity, Total (as CaCO3)	mg/L	10	-	69
Ammonia, Total (as N)	mg/L	0.02	-	0.12
Total Kjeldahl Nitrogen	mg/L	0.15	-	2.02
Phosphorus, Total	mg/L	0.003	-	9.25
Fecal Coliforms	CFU/100mL	0	10,000	0
BOD	mg/L	2	100	<2.0
COD	mg/L	10	-	36
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0

Notes:

Grey and bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 5: Effluent Quality Discharge Limits for Sewage Treatment Facilities to the Ocean

TABLE 2 - WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-01

Analyte	Sample ID			MP-03
	ALS Laboratory Sample ID			L2112845-1
	Sample Date & Time			6/13/2018 12:15:00 PM
	QA/QC Sample Type			N/A
	Units	LOR	Water Licence Criteria[1]	
pH	pH units	0.1	6.0 - 9.5	8.06
Total Suspended Solids	mg/L	2	<120	3.3
Total Dissolved Solids	mg/L	20	-	-
Turbidity	NTU	0.1	-	-
Lead (Pb)-Total	mg/L	0.0005	1	<0.00050 *
Oil and Grease, Total	mg/L	2	15,000 and no visible sheen	<2.0
Benzene	ug/L	0.5	370	<0.50
Ethylbenzene	ug/L	0.5	90	<0.50
Toluene	ug/L	0.5	2	<0.50
o-Xylene	ug/L	0.5	100	<0.50
m+p-Xylenes	ug/L	1	-	<1.0
Xylenes (Total)	ug/L	1.1	-	<1.1
4-Bromofluorobenzene	%	Surrogate	-	94.2
1,4-Difluorobenzene	%	Surrogate	-	98.6
F1 (C6-C10)	ug/L	100	-	<100
F1-BTEX	ug/L	100	-	<100
F2 (C10-C16)	ug/L	100	-	270
F3 (C16-C34)	ug/L	250	-	<250
F4 (C34-C50)	ug/L	250	-	<250
Total Hydrocarbons (C6-C50)	ug/L	380	-	<380
Chrom. to baseline at nC50		n/a	-	YES
2-Bromobenzotrifluoride	%	Surrogate	-	96.5
3,4-Dichlorotoluene	%	Surrogate	-	95.6

Notes:

Grey and bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 8: Effluent Quality Discharge Limits for Bulk Fuel Storage Facilities

TABLE 2 - WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-05

Analyte	Sample ID			MP-05	MP-0501	MP-05
	ALS Laboratory Sample ID			L2107676-1	L2107676-3	L2116394-1
	Sample Date & Time			6/5/2018 10:45:00 AM	6/5/2018 10:45:00 AM	6/19/2018 11:00:00 AM
	QA/QC Sample Type			N/A	Duplicate	N/A
	Units	LOR	Water Licence Criteria[1]			
Hardness (as CaCO3)	mg/L	10	-	293	294	274
pH	pH units	0.1	6.0 - 9.5	7.98	7.99	8.13
Total Suspended Solids	mg/L	2	15	<2.0	3.2	2
Total Dissolved Solids	mg/L	20	-	581 *	555 *	581 *
Turbidity	NTU	0.1	-	8.21	7.81	10.2
Alkalinity, Total (as CaCO3)	mg/L	10	-	65	68	83
Ammonia, Total (as N)	mg/L	0.02	No visible sheen	0.828	0.831	0.868
Chloride (Cl)	mg/L	0.5	-	182	182	178
Fluoride (F)	mg/L	0.02	-	0.153	0.154	0.204
Nitrate (as N)	mg/L	0.02	-	5.81	5.81	7.64
Total Kjeldahl Nitrogen	mg/L	0.15	-	1.58	1.62	1.35
Phosphorus, Total	mg/L	0.003	-	0.0091	0.0108	0.006
Sulfate (SO4)	mg/L	0.3	-	127	127	120
Dissolved Organic Carbon	mg/L	1	-	4	4	3.5
Total Organic Carbon	mg/L	1	-	4.2	4.2	3.6
Aluminum (Al)-Total	mg/L	0.01	-	0.103	0.095	0.115
Arsenic (As)-Total	mg/L	0.0001	-	0.0002	0.0002	0.00021
Cadmium (Cd)-Total	mg/L	0.00001	-	<0.000010	<0.000010	<0.000010
Calcium (Ca)-Total	mg/L	0.5	-	47.1	47.9	54.9
Copper (Cu)-Total	mg/L	0.001	-	0.0014	0.0014	0.0014
Iron (Fe)-Total	mg/L	0.05	-	0.12	0.133	0.144
Lead (Pb)-Total	mg/L	0.0001	-	0.00014	0.00014	0.00014
Magnesium (Mg)-Total	mg/L	0.05	-	39.5	39.5	37.1
Manganese (Mn)-Total	mg/L	0.0005	-	0.385	0.385	0.0312
Mercury (Hg)-Total	mg/L	0.00001	-	<0.000010	<0.000010	<0.000010
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.00427	0.00452	0.00519
Nickel (Ni)-Total	mg/L	0.0005	-	0.0026	0.00288	0.00138
Potassium (K)-Total	mg/L	0.05	-	9.6	9.36	10.3
Selenium (Se)-Total	mg/L	0.00005	-	0.00029	0.000296	0.000223
Sodium (Na)-Total	mg/L	0.5	-	78.7	80.1	77.4
Thallium (Tl)-Total	mg/L	0.00001	-	0.000023	0.000023	0.000025
Uranium (U)-Total	mg/L	0.00001	-	0.0211	0.021	0.0335
Zinc (Zn)-Total	mg/L	0.003	-	0.006	0.0055	0.0037
Dissolved Mercury Filtration Location		n/a	-	FIELD	FIELD	FIELD
Dissolved Metals Filtration Location		n/a	-	FIELD	FIELD	FIELD
Aluminum (Al)-Dissolved	mg/L	0.005	-	0.0086	0.0084	0.0141
Arsenic (As)-Dissolved	mg/L	0.0001	0.5	0.00019	0.00017	0.00016
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	<0.000010	<0.000010	<0.000010
Calcium (Ca)-Dissolved	mg/L	0.05	-	48.7	49.3	51.8
Copper (Cu)-Dissolved	mg/L	0.0002	0.3	0.00121	0.00128	0.00112
Iron (Fe)-Dissolved	mg/L	0.01	-	<0.010	<0.010	<0.010
Lead (Pb)-Dissolved	mg/L	0.00005	0.2	<0.000050	<0.000050	<0.000050
Magnesium (Mg)-Dissolved	mg/L	0.05	-	41.5	41.5	35.2
Manganese (Mn)-Dissolved	mg/L	0.0005	-	0.352	0.346	0.0141
Mercury (Hg)-Dissolved	mg/L	0.00001	-	<0.000010	<0.000010	<0.000010
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	0.00406	0.00406	0.0048
Nickel (Ni)-Dissolved	mg/L	0.0005	0.5	0.00227	0.00228	0.0011
Potassium (K)-Dissolved	mg/L	0.05	-	10.6	10.6	9.93
Selenium (Se)-Dissolved	mg/L	0.00005	-	0.000307	0.000286	0.000248
Sodium (Na)-Dissolved	mg/L	0.5	-	82.3	81.9	72.2
Thallium (Tl)-Dissolved	mg/L	0.00001	-	0.00002	0.000017	0.000023
Uranium (U)-Dissolved	mg/L	0.00001	-	0.0194	0.0191	0.0312
Zinc (Zn)-Dissolved	mg/L	0.001	0.5	0.0053	0.005	0.0026
Acute Toxicity	-	-	Non-Lethal	Non-Lethal	-	-

Notes: L2107676-3 and L2107676-1 Pre discharge samples

Grey and bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds

TABLE 2 - WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-06

Analyte	Sample ID			MP-06	MP-06	MP-0601
	ALS Laboratory Sample ID			L2107676-2	L2116369-1	L2116369-2
	Sample Date & Time			6/5/2018 11:30:00 AM	6/19/2018 11:45:00 AM	6/19/2018 11:45:00 AM
	QA/QC Sample Type			N/A	N/A	Duplicate
	Units	LOR	Water Licence Criteria[1]			
Hardness (as CaCO3)	mg/L	10	-	207	507	507
pH	pH units	0.1	6.0 - 9.5	7.64	7.96	7.9
Total Suspended Solids	mg/L	2	15	2.3	<2.0	4.8
Total Dissolved Solids	mg/L	20	-	305 *	822 *	845 *
Turbidity	NTU	0.1	-	13.9	8.82	10.2
Alkalinity, Total (as CaCO3)	mg/L	10	-	25	59	59
Ammonia, Total (as N)	mg/L	0.02	No visible sheen	0.522	0.894	0.879
Chloride (Cl)	mg/L	0.5	-	24.7	65.2	64.7
Fluoride (F)	mg/L	0.02	-	0.046	0.078	0.078
Nitrate (as N)	mg/L	0.02	-	0.966	3.76	3.76
Total Kjeldahl Nitrogen	mg/L	0.15	-	0.7	1.3	1.29
Phosphorus, Total	mg/L	0.003	-	<0.0030	<0.030 *	<0.030 *
Sulfate (SO4)	mg/L	0.3	-	165	427	426
Dissolved Organic Carbon	mg/L	1	-	1.5	2.8	2.3
Total Organic Carbon	mg/L	1	-	1.8	2.5	2.3
Aluminum (Al)-Total	mg/L	0.01	-	0.066	0.045	0.061
Arsenic (As)-Total	mg/L	0.0001	-	<0.00010	0.00014	0.00013
Cadmium (Cd)-Total	mg/L	0.00001	-	<0.000010	<0.000010	<0.000010
Calcium (Ca)-Total	mg/L	0.5	-	25	70.9	71.5
Copper (Cu)-Total	mg/L	0.001	-	<0.0010	<0.0010	<0.0010
Iron (Fe)-Total	mg/L	0.05	-	0.162	0.122	0.18
Lead (Pb)-Total	mg/L	0.0001	-	<0.00010	<0.00010	0.00011
Magnesium (Mg)-Total	mg/L	0.05	-	32.6	83.6	82.3
Manganese (Mn)-Total	mg/L	0.0005	-	1.06	1.86	1.76
Mercury (Hg)-Total	mg/L	0.00001	-	<0.000010	<0.000010	<0.000010
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.000675	0.00157	0.00159
Nickel (Ni)-Total	mg/L	0.0005	-	0.00363	0.00338	0.00343
Potassium (K)-Total	mg/L	0.05	-	1.59	4.92	4.81
Selenium (Se)-Total	mg/L	0.00005	-	0.000449	0.00133	0.00135
Sodium (Na)-Total	mg/L	0.5	-	11.4	28.6	28
Thallium (Tl)-Total	mg/L	0.00001	-	0.000016	0.000026	0.000026
Uranium (U)-Total	mg/L	0.00001	-	0.00168	0.00667	0.00703
Zinc (Zn)-Total	mg/L	0.003	-	<0.0030	<0.0030	<0.0030
Dissolved Mercury Filtration Location		n/a	-	FIELD	FIELD	FIELD
Dissolved Metals Filtration Location		n/a	-	FIELD	FIELD	FIELD
Aluminum (Al)-Dissolved	mg/L	0.005	-	<0.0050	<0.0050	<0.0050
Arsenic (As)-Dissolved	mg/L	0.0001	0.5	<0.00010	<0.00010	<0.00010
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	<0.000010	<0.000010	<0.000010
Calcium (Ca)-Dissolved	mg/L	0.05	-	25.6	71.3	72.2
Copper (Cu)-Dissolved	mg/L	0.0002	0.3	0.0002	0.00055	0.00054
Iron (Fe)-Dissolved	mg/L	0.01	-	<0.010	<0.010	<0.010
Lead (Pb)-Dissolved	mg/L	0.00005	0.2	<0.000050	<0.000050	<0.000050
Magnesium (Mg)-Dissolved	mg/L	0.05	-	34.6	79.8	79.3
Manganese (Mn)-Dissolved	mg/L	0.0005	-	1.06	1.69	1.71
Mercury (Hg)-Dissolved	mg/L	0.00001	-	<0.000010	<0.000010	<0.000010
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	0.000733	0.00158	0.00156
Nickel (Ni)-Dissolved	mg/L	0.0005	0.5	0.00331	0.00304	0.00303
Potassium (K)-Dissolved	mg/L	0.05	-	1.83	4.77	4.56
Selenium (Se)-Dissolved	mg/L	0.00005	-	0.000453	0.00135	0.00134
Sodium (Na)-Dissolved	mg/L	0.5	-	12.1	27.3	26.4
Thallium (Tl)-Dissolved	mg/L	0.00001	-	0.000014	0.000028	0.000026
Uranium (U)-Dissolved	mg/L	0.00001	-	0.00149	0.00686	0.00695
Zinc (Zn)-Dissolved	mg/L	0.001	0.5	0.0015	0.0013	0.0013
Acute Toxicity	-	-	Non-Lethal	Non-Lethal	-	-

Notes:L2107676-2 Pre Discharge Sample

Grey and bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds

Analyte	Sample ID			MS-MRY-6-20
	ALS Laboratory Sample ID			L2107678-3
	Sample Date & Time			6/5/2018 7:45:00 PM
	QA/QC Sample Type			N/A
	Units	LOR	Water Licence Criteria[1]	
pH	pH units	0.1	6.0 - 9.5	6.44
Total Suspended Solids	mg/L	2	35	14
Total Dissolved Solids	mg/L	20	-	-
Turbidity	NTU	0.1	-	-
Lead (Pb)-Total	mg/L	0.0005	1	<0.00050 *
Oil and Grease, Total	mg/L	2	15 and no visible sheen	<2.0
Benzene	ug/L	0.5	370	<0.50
Ethylbenzene	ug/L	0.5	90	<0.50
Toluene	ug/L	0.5	2	<0.50
o-Xylene	ug/L	0.5	100	<0.50
m+p-Xylenes	ug/L	1	-	<1.0
Xylenes (Total)	ug/L	1.1	-	<1.1
4-Bromofluorobenzene	%	Surrogate	-	102
1,4-Difluorobenzene	%	Surrogate	-	102.3
F1 (C6-C10)	ug/L	100	-	<100
F1-BTEX	ug/L	100	-	<100
F2 (C10-C16)	ug/L	100	-	<100
F3 (C16-C34)	ug/L	250	-	490
F4 (C34-C50)	ug/L	250	-	<250
Total Hydrocarbons (C6-C50)	ug/L	380	-	490
Chrom. to baseline at nC50		n/a	-	YES
2-Bromobenzotrifluoride	%	Surrogate	-	93.9
3,4-Dichlorotoluene	%	Surrogate	-	99.3

Notes:

Grey and bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 6: Effluent Quality Discharge Limits for Oily Water Treatment Facilities

TABLE 2 - WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-01

Analyte	Sample ID			MS-01
	ALS Laboratory Sample ID			L2107707-1
	Sample Date & Time			6/5/2018 3:00:00 PM
	QA/QC Sample Type			N/A
	Units	LOR	Water Licence Criteria[1]	
pH	pH units	0.1	6.0 - 9.5	7.62
Total Suspended Solids	mg/L	2	35	2.1
Alkalinity, Total (as CaCO3)	mg/L	10	-	103
Ammonia, Total (as N)	mg/L	0.02	4	1.6
Total Kjeldahl Nitrogen	mg/L	0.15	-	3.81
Phosphorus, Total	mg/L	0.003	4	1.13
Fecal Coliforms	CFU/100mL	0	1,000	24
BOD	mg/L	2	30	2.4
COD	mg/L	10	-	38
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0

Notes:

Grey and bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 4: Effluent Quality Discharge Limits for Sewage Treatment Facilities to Freshwater Receiving Environment

TABLE 2 - WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-01B

Analyte	Sample ID			MS-01B
	ALS Laboratory Sample ID			L2107710-1
	Sample Date & Time			6/5/2018 2:35:00 PM
	QA/QC Sample Type			N/A
	Units	LOR	Water Licence Criteria[1]	
pH	pH units	0.1	6.0 - 9.5	7.54
Total Suspended Solids	mg/L	2	35	6.7
Alkalinity, Total (as CaCO3)	mg/L	10	-	43
Ammonia, Total (as N)	mg/L	0.02	4	0.137
Total Kjeldahl Nitrogen	mg/L	0.15	-	0.35
Phosphorus, Total	mg/L	0.003	4	2.87 *
Fecal Coliforms	CFU/100mL	0	1,000	0
BOD	mg/L	2	30	<2.0
COD	mg/L	10	-	29
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0

Notes:

Grey and bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 4: Effluent Quality Discharge Limits for Sewage Treatment

TABLE 2 - WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-06

Analyte	Sample ID			MS-06	MS-06	MS-06	MS-06	MS-0601
	ALS Laboratory Sample ID			L2113176-4	L2117069-1	L2121631-1	L2122069-1	L2122069-2
	Sample Date & Time			6/13/2018 2:55:00 PM	6/19/2018 12:00:00 PM	6/29/2018 10:00:00 AM	6/30/2018 8:40:00 AM	6/30/2018 8:40:00 AM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	Duplicate
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3			836			
Hardness (as CaCO3)	mg/L	10	-	385	430	1000	1000	1000
pH	pH units	0.1	6.0 - 9.5	7.65	7.61	7.61	7.61	7.61
Total Suspended Solids	mg/L	2	15	5.5	2.7	<2.0	<2.1	<2.2
Total Dissolved Solids	mg/L	10	-	518 *	648 *	760	760	760
Turbidity	NTU	0.1	-	15.8	-	8.66	8.66	8.66
Acidity (as CaCO3)	mg/L	2	-	-	2.8	<0.0020	<0.0021	<0.0022
Alkalinity, Total (as CaCO3)	mg/L	10	-	31	31	0.0274	1.0274	2.0274
Ammonia, Total (as N)	mg/L	0.02	-	0.308	0.444	<0.00010	<0.00011	<0.00012
Chloride (Cl)	mg/L	0.5	-	12.8	15.3	0.00011	0.00011	0.00011
Fluoride (F)	mg/L	0.02	-	0.035	0.042	0.0125	0.0125	0.0125
Nitrate (as N)	mg/L	0.02	-	4.06	4.66	<0.00010	<0.00010	<0.00010
Total Kjeldahl Nitrogen	mg/L	0.15	-	0.61	0.81	<0.000050	<0.000050	<0.000050
Phosphorus, Total	mg/L	0.003	-	<0.030 *	<0.0030	0.03	0.03	0.03
Sulfate (SO4)	mg/L	0.3	-	314	387	0.0000406	0.0000406	0.0000406
Cyanide, Total	mg/L	0.002	-	<0.0020	<0.0020	44.5	44.5	44.5
Dissolved Organic Carbon	mg/L	1	-	1.7	1.5	0.000014	0.000014	0.000014
Total Organic Carbon	mg/L	1	-	1.5	1.7	<0.00050	<0.00051	<0.00052
Aluminum (Al)-Total	mg/L	0.01	-	0.154	0.0628	0.00514	1.00514	2.00514
Antimony (Sb)-Total	mg/L	0.0001	-	-	<0.00010	<0.0010	<0.0011	<0.0012
Arsenic (As)-Total	mg/L	0.0001	0.5	0.00013	0.00012	0.066	0.066	0.066
Barium (Ba)-Total	mg/L	0.0001	-	-	0.0106	0.00007	0.00007	0.00007
Beryllium (Be)-Total	mg/L	0.0001	-	-	<0.00010	0.0186	0.0186	0.0186
Bismuth (Bi)-Total	mg/L	0.00005	-	-	<0.000050	94	94	94
Boron (B)-Total	mg/L	0.01	-	-	0.025	1.52	1.52	1.52
Cadmium (Cd)-Total	mg/L	0.00001	-	0.000027	0.000042	0.000916	0.000916	0.000916
Calcium (Ca)-Total	mg/L	0.5	-	26.5	34.7	0.00881	0.00881	0.00881
Cesium (Cs)-Total	mg/L	0.00001	-	-	0.000012	<0.050	<0.051	<0.052
Chromium (Cr)-Total	mg/L	0.0005	-	-	<0.00050	10.9	10.9	10.9
Cobalt (Co)-Total	mg/L	0.0001	0.3	-	0.00601	0.00625	0.00625	0.00625
Copper (Cu)-Total	mg/L	0.001	-	0.0012	<0.0010	0.00121	0.00121	0.00121
Iron (Fe)-Total	mg/L	0.05	-	0.509	0.206	0.45	0.45	0.45
Lead (Pb)-Total	mg/L	0.0001	0.2	0.00028	0.000138	<0.000050	<0.000051	<0.000052
Lithium (Li)-Total	mg/L	0.001	-	-	0.015	7.03	7.03	7.03
Magnesium (Mg)-Total	mg/L	0.05	-	70.2	82.1	0.0724	0.0724	0.0724
Manganese (Mn)-Total	mg/L	0.0005	-	1.11	1.41	162	162	162
Mercury (Hg)-Total	mg/L	0.00001	-	<0.000010	<0.000010	<0.00020	<0.00021	<0.00022
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.000501	0.000669	0.000029	1.000029	2.000029
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.00976	0.00891	<0.00010	<0.00010	<0.00010
Phosphorus (P)-Total	mg/L	0.05	-	-	<0.050	<0.00010	<0.00010	<0.00010
Potassium (K)-Total	mg/L	0.05	-	8.51	9.77	<0.00055 *	<0.00055 *	<0.00055 *
Rubidium (Rb)-Total	mg/L	0.0002	-	-	0.00504	<0.00010	<0.00011	<0.00012
Selenium (Se)-Total	mg/L	0.00005	-	0.000899	0.00103	0.0018	1.0018	2.0018
Silicon (Si)-Total	mg/L	0.1	-	-	0.45	<0.00050	<0.00051	<0.00052
Silver (Ag)-Total	mg/L	0.00005	-	-	<0.000050	0.0053	1.0053	2.0053
Sodium (Na)-Total	mg/L	0.5	-	5.39	0.45	<0.00030	<0.00031	<0.00032
Strontium (Sr)-Total	mg/L	0.001	-	-	0.0571			
Sulfur (S)-Total	mg/L	0.5	-	-	136			
Tellurium (Te)-Total	mg/L	0.0002	-	-	<0.00020			
Thallium (Tl)-Total	mg/L	0.00001	-	0.00002	0.000023			
Thorium (Th)-Total	mg/L	0.0001	-	-	<0.00010			
Tin (Sn)-Total	mg/L	0.0001	-	-	<0.00010			
Titanium (Ti)-Total	mg/L	0.0008	-	-	<0.00080 *			
Tungsten (W)-Total	mg/L	0.0001	-	-	<0.00010			
Uranium (U)-Total	mg/L	0.00001	-	0.00191	0.0019			
Vanadium (V)-Total	mg/L	0.0005	-	-	<0.00050			
Zinc (Zn)-Total	mg/L	0.003	-	0.0035	0.0089			
Zirconium (Zr)-Total	mg/L	0.0003	-	-	<0.00030			
Dissolved Mercury Filtration Location		n/a	-	FIELD	FIELD			
Dissolved Metals Filtration Location		n/a	-	FIELD	FIELD			
Aluminum (Al)-Dissolved	mg/L	0.005	-	<0.0050	<0.0050			
Antimony (Sb)-Dissolved	mg/L	0.0001	-	-	<0.00010			
Arsenic (As)-Dissolved	mg/L	0.0001	-	<0.00010	<0.00010			
Barium (Ba)-Dissolved	mg/L	0.0001	-	-	0.0103			
Beryllium (Be)-Dissolved	mg/L	0.0001	-	-	<0.00010			
Bismuth (Bi)-Dissolved	mg/L	0.00005	-	-	<0.000050			
Boron (B)-Dissolved	mg/L	0.01	-	-	0.024			
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	0.000025	0.0000334			
Calcium (Ca)-Dissolved	mg/L	0.05	-	28.6	33.6			
Cesium (Cs)-Dissolved	mg/L	0.00001	-	-	0.000012			
Chromium (Cr)-Dissolved	mg/L	0.0005	-	-	<0.00050			
Cobalt (Co)-Dissolved	mg/L	0.0001	-	-	0.00567			
Copper (Cu)-Dissolved	mg/L	0.0002	-	0.00054	0.00047			
Iron (Fe)-Dissolved	mg/L	0.01	-	<0.010	<0.010			
Lead (Pb)-Dissolved	mg/L	0.00005	-	0.000077	<0.000050			
Lithium (Li)-Dissolved	mg/L	0.001	-	-	0.0151			
Magnesium (Mg)-Dissolved	mg/L	0.05	-	76.1	84.1			
Manganese (Mn)-Dissolved	mg/L	0.0005	-	1.14	1.4			
Mercury (Hg)-Dissolved	mg/L	0.00001	-	<0.000010	<0.000010			
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	0.000483	0.000654			
Nickel (Ni)-Dissolved	mg/L	0.0005	-	0.0094	0.00859			
Phosphorus (P)-Dissolved	mg/L	0.05	-	-	<0.050			
Potassium (K)-Dissolved	mg/L	0.05	-	9.2	10.2			
Rubidium (Rb)-Dissolved	mg/L	0.0002	-	-	0.00507			
Selenium (Se)-Dissolved	mg/L	0.00005	-	0.000908	0.00101			
Silicon (Si)-Dissolved	mg/L	0.05	-	-	0.365			
Silver (Ag)-Dissolved	mg/L	0.00005	-	-	<0.000050			
Sodium (Na)-Dissolved	mg/L	0.5	-	5.53	6.42			
Strontium (Sr)-Dissolved	mg/L	0.001	-	-	0.0559			
Sulfur (S)-Dissolved	mg/L	0.5	-	-	142			
Tellurium (Te)-Dissolved	mg/L	0.0002	-	-	<0.00020			
Thallium (Tl)-Dissolved	mg/L	0.00001	-	0.000018	0.000023			
Thorium (Th)-Dissolved	mg/L	0.0001	-	-	<0.00010			
Tin (Sn)-Dissolved	mg/L	0.0001	-	-	<0.00010			
Titanium (Ti)-Dissolved	mg/L	0.0003	-	-	<0.00030			
Tungsten (W)-Dissolved	mg/L	0.0001	-	-	<0.00010			
Uranium (U)-Dissolved	mg/L	0.00001	-	0.00152	0.00174			
Vanadium (V)-Dissolved	mg/L	0.0005	-	-	<0.00050			
Zinc (Zn)-Dissolved	mg/L	0.001	0.5	0.0033	0.0085			
Zirconium (Zr)-Dissolved	mg/L	0.0003	-	0.0033	<0.00030			
Ra-226	Bq/L	0.0069	-	0.017				

Notes:

Grey and bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles and Sedimentation Ponds

TABLE 2 - WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-08

Analyte	Sample ID			MS-08	MS-0801
	ALS Laboratory Sample ID			L2122068-1	L2122068-2
	Sample Date & Time			6/30/2018 3:40:00 PM	6/30/2018 3:40:00 PM
	QA/QC Sample Type			N/A	Duplicate
	Units	LOR	Water Licence Criteria[1]		
Conductivity	umhos/cm	3	-	3170	3180
pH	pH units	0.1	6.0-9.5	8.89	8.89
Total Suspended Solids	mg/L	2	15	6.4	8
Total Dissolved Solids	mg/L	20	-	3220	3140
Turbidity	NTU	0.1	-	12.5	12.7
Cyanide, Total	mg/L	0.002	-	0.0063	0.0063
Aluminum (Al)-Total	mg/L	0.05	-	0.058 *	<0.050 *
Antimony (Sb)-Total	mg/L	0.001	-	<0.0010 *	<0.0010 *
Arsenic (As)-Total	mg/L	0.001	0.5	<0.0010 *	<0.0010 *
Barium (Ba)-Total	mg/L	0.001	-	0.0186 *	0.0191 *
Beryllium (Be)-Total	mg/L	0.001	-	<0.0010 *	<0.0010 *
Bismuth (Bi)-Total	mg/L	0.0005	-	<0.00050 *	<0.00050 *
Boron (B)-Total	mg/L	0.1	-	<0.10 *	<0.10 *
Cadmium (Cd)-Total	mg/L	0.00005	-	<0.000050 *	<0.000050 *
Calcium (Ca)-Total	mg/L	0.5	-	223 *	221 *
Cesium (Cs)-Total	mg/L	0.0001	-	<0.00010 *	<0.00010 *
Chromium (Cr)-Total	mg/L	0.005	-	<0.0050 *	<0.0050 *
Cobalt (Co)-Total	mg/L	0.001	-	0.0119 *	0.0119 *
Copper (Cu)-Total	mg/L	0.01	0.3	<0.010 *	<0.010 *
Iron (Fe)-Total	mg/L	0.1	-	2.19 *	2.15 *
Lead (Pb)-Total	mg/L	0.0005	0.2	<0.00050 *	<0.00050 *
Lithium (Li)-Total	mg/L	0.01	-	0.054 *	0.051 *
Magnesium (Mg)-Total	mg/L	0.05	-	393 *	391 *
Manganese (Mn)-Total	mg/L	0.005	-	3.21 *	3.25 *
Molybdenum (Mo)-Total	mg/L	0.0005	-	<0.00050 *	<0.00050 *
Nickel (Ni)-Total	mg/L	0.005	0.5	0.0153 *	0.0145 *
Phosphorus (P)-Total	mg/L	0.5	-	<0.50 *	<0.50 *
Potassium (K)-Total	mg/L	0.5	-	3.86 *	3.91 *
Rubidium (Rb)-Total	mg/L	0.002	-	0.0075 *	0.0073 *
Selenium (Se)-Total	mg/L	0.0005	-	0.00336 *	0.00395 *
Silicon (Si)-Total	mg/L	1	-	<1.0 *	<1.0 *
Silver (Ag)-Total	mg/L	0.0005	-	<0.00050 *	<0.00050 *
Sodium (Na)-Total	mg/L	0.5	-	6.54 *	6.57 *
Strontium (Sr)-Total	mg/L	0.01	-	0.476 *	0.471 *
Sulfur (S)-Total	mg/L	5	-	705 *	725 *
Tellurium (Te)-Total	mg/L	0.002	-	<0.0020 *	<0.0020 *
Thallium (Tl)-Total	mg/L	0.0001	-	0.00011 *	<0.00015 *
Thorium (Th)-Total	mg/L	0.001	-	<0.0010 *	<0.0010 *
Tin (Sn)-Total	mg/L	0.001	-	<0.0010 *	<0.0010 *
Titanium (Ti)-Total	mg/L	0.003	-	<0.0030 *	<0.0030 *
Tungsten (W)-Total	mg/L	0.001	-	<0.0010 *	<0.0010 *
Uranium (U)-Total	mg/L	0.0001	-	0.00024 *	0.00025 *
Vanadium (V)-Total	mg/L	0.005	-	<0.0050 *	<0.0050 *
Zinc (Zn)-Total	mg/L	0.03	-	<0.030 *	<0.030 *
Zirconium (Zr)-Total	mg/L	0.003	-	<0.0030 *	<0.0030 *

Notes:

Grey and bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles and Sedimentation Ponds

TABLE 2 - WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-C-B

Analyte	Sample ID			MP-C-B	MP-C-B
	ALS Laboratory Sample ID			L2111033-2	L2120589-7
	Sample Date & Time			6/11/2018 1:40:00 PM	6/25/2018 10:45:00 AM
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Water Licence Criteria[1]		
Conductivity	umhos/cm	3	-	566	469
pH	pH units	0.1	6.0 - 9.5	8.05	8.21
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	17.4	2.5
Total Dissolved Solids	mg/L	10	-	-	-
Turbidity	NTU	0.1	-	-	-
Ammonia, Total (as N)	mg/L	0.02	-	1.32 *	1.26 *
Nitrate (as N)	mg/L	0.02	-	4.88	6.13
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	<2.0

Notes:

Grey and bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

TABLE 2 - WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-C-B01

Analyte	Sample ID			MP-C-B01	MP-C-B01	MP-C-B0101	MP-C-B01	MP-C-B0101
	ALS Laboratory Sample ID			L2107359-1	L2111033-3	L2111033-4	L2120589-5	L2120589-6
	Sample Date & Time			6/4/2018 8:40:00 AM	6/11/2018 2:00:00 PM	6/11/2018 2:00:00 PM	6/25/2018 10:20:00 AM	6/25/2018 10:20:00 AM
	QA/QC Sample Type			N/A	N/A	Duplicate	N/A	Duplicate
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	339	-	-	467	465
pH	pH units	0.1	6.0 - 9.5	7.9	8.03	8.04	8.17	8.19
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	**44.7**	**46.1**	**52.4**	3.2	2.8
Total Dissolved Solids	mg/L	10	-	-	369 *	364 *	-	-
Turbidity	NTU	0.1	-	-	115	116	-	-
Ammonia, Total (as N)	mg/L	0.02	-	0.501	-	-	1.37 *	1.37 *
Nitrate (as N)	mg/L	0.02	-	1.29	-	-	6.53	6.3
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	-	-	<2.0	<2.0

Notes:L2107359-1 and L2111033-3Elevated TSS due to Freshet flows

Grey and bold highlight indicate results that exceeded the applicable water quality criteria.
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

TABLE 2 - WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-C-H

Analyte	Sample ID			MP-C-H	MP-C-H01	MP-C-H	MP-C-H	MP-C-H
	ALS Laboratory Sample ID			L2107359-6	L2107359-5	L2111033-1	L2116243-1	L2120589-1
	Sample Date & Time			6/4/2018 6:20:00 AM	6/4/2018 6:20:00 AM	6/11/2018 9:20:00 AM	6/18/2018 3:00:00 PM	6/25/2018 8:20:00 AM
	QA/QC Sample Type			N/A	Duplicate	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	1140	1150	-	112	-
pH	pH units	0.1	6.0 - 9.5	7.90	7.90	7.86	7.94	8.05
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	3.6	7.2	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	-	-	99 *	-	82 *
Turbidity	NTU	0.1	-	-	-	3.77	-	0.77 *
Ammonia, Total (as N)	mg/L	0.02	-	0.059	0.056	-	<0.020	-
Nitrate (as N)	mg/L	0.02	-	0.294	0.277	-	<0.020	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	<2.0	-	<2.0	-

Notes:

Grey and bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

TABLE 2 - WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-Q1-01

Analyte	Sample ID			MP-Q1-01	MP-Q1-01	MP-Q1-0102	MP-Q1-01
	ALS Laboratory Sample ID			L2107359-4	L2117043-1	L2117043-2	L2120589-2
	Sample Date & Time			6/4/2018 7:15:00 AM	6/19/2018 7:10:00 PM	6/19/2018 7:10:00 PM	6/25/2018 8:50:00 AM
	QA/QC Sample Type			N/A	N/A	Field Blank	N/A
	Units	LOR	Water Licence Criteria[1]				
Conductivity	umhos/cm	3	-	238	160	<3.0	-
pH	pH units	0.1	6.0 - 9.5	8.00	7.99	6.22	8.05
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	**144.0**	5.8	<2.0	5.3
Total Dissolved Solids	mg/L	10	-	-	-	-	162 *
Turbidity	NTU	0.1	-	-	-	-	14.8 *
Ammonia, Total (as N)	mg/L	0.02	-	0.607	0.419	<0.020	-
Nitrate (as N)	mg/L	0.02	-	4.79	3.09	<0.020	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	<2.0	<2.0	-
Acute Toxicity	-	-	Non-Lethal	-	Non-Lethal	-	-

Notes:L2107359-4 Elevated levels potentially resultant of drainage and quarry pioneering

Grey and bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

TABLE 2 - WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-Q1-02

Analyte	Sample ID			MP-Q1-02	MP-Q1-02
	ALS Laboratory Sample ID			L2108622-1	L2120296-1
	Sample Date & Time			6/6/2018 7:50:00 AM	6/26/2018 7:35:00 PM
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Water Licence Criteria[1]		
Conductivity	umhos/cm	3	-	447	430
pH	pH units	0.1	6.0 - 9.5	8.02	7.99
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	86.1	16.1
Total Dissolved Solids	mg/L	10	-	-	-
Turbidity	NTU	0.1	-	-	-
Ammonia, Total (as N)	mg/L	0.02	-	1.77	2.91 *
Nitrate (as N)	mg/L	0.02	-	5.63	21.4
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	<2.0
Acute Toxicity	-	-	Non-Lethal	-	Non-Lethal

Notes: L2108622-1 Elevated levels potentially resultant of drainage and quarry pioneering

Grey and bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

TABLE 2 - WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-A

Analyte	Sample ID			MS-C-A	MS-C-A02	MS-C-A	MS-C-A	MS-C-A
	ALS Laboratory Sample ID			L2107717-5	L2107717-6	L2112089-6	L2116590-6	L2120528-6
	Sample Date & Time			6/4/2018 10:15:00 AM	6/4/2018 10:15:00 AM	6/11/2018 1:40:00 PM	6/18/2018 11:00:00 AM	6/25/2018 8:40:00 AM
	QA/QC Sample Type			N/A	Field Blank	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	57	<3.0	-	128	-
pH	pH units	0.1	6.0 - 9.5	7.62	6.27	7.64	7.75	7.95
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	-	-	59 *	-	106 *
Turbidity	NTU	0.1	-	-	-	19.7	-	1.08 *
Ammonia, Total (as N)	mg/L	0.02	-	<0.02	<0.02	-	<0.020	-
Nitrate (as N)	mg/L	0.02	-	0.029	<0.02	-	0.124	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	<2.0	-	<2.0	-

Notes:

Grey and bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

TABLE 2 - WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-B

Analyte	Sample ID			MS-C-B	MS-C-B	MS-C-B	MS-C-B
	ALS Laboratory Sample ID			L2107717-7	L2112089-4	L2116590-4	L2120528-4
	Sample Date & Time			6/4/2018 11:00:00 AM	6/11/2018 1:55:00 PM	6/18/2018 11:35:00 AM	6/25/2018 9:20:00 AM
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]				
Conductivity	umhos/cm	3	-	54.3	-	122	-
pH	pH units	0.1	6.0 - 9.5	7.41	7.55	7.72	7.92
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	-	60 *	-	96 *
Turbidity	NTU	0.1	-	-	21.5	-	1.54 *
Ammonia, Total (as N)	mg/L	0.02	-	<0.02	-	0.041	-
Nitrate (as N)	mg/L	0.02	-	0.032	-	0.126	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	-	<2.0	-

Notes:

Grey and bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

TABLE 2 - WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-C

Analyte	Sample ID			MS-C-C	MS-C-C	MS-C-C	MS-C-C
	ALS Laboratory Sample ID			L2107717-15	L2112089-14	L2116590-14	L2120528-14
	Sample Date & Time			6/4/2018 2:25:00 PM	6/11/2018 2:50:00 PM	6/18/2018 3:30:00 PM	6/25/2018 10:10:00 AM
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]				
Conductivity	umhos/cm	3	-	405	-	438	-
pH	pH units	0.1	6.0 - 9.5	7.87	7.92	7.91	8.13
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	4.2	<2.0	8.2	<2.0
Total Dissolved Solids	mg/L	10	-	-	197 *	-	419 *
Turbidity	NTU	0.1	-	-	2.01	-	1.05 *
Ammonia, Total (as N)	mg/L	0.02	-	0.239	-	<0.020	-
Nitrate (as N)	mg/L	0.02	-	1.64	-	2.36	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	-	<2.0	-

Notes:

Grey and bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

TABLE 2 - WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-D

Analyte	Sample ID			MS-C-D	MS-C-D	MS-C-D	MS-C-D
	ALS Laboratory Sample ID			L2107717-14	L2112089-10	L2116590-10	L2120528-10
	Sample Date & Time			6/4/2018 1:55:00 PM	6/11/2018 2:35:00 PM	6/18/2018 3:00:00 PM	6/25/2018 9:55:00 AM
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]				
Conductivity	umhos/cm	3	-	279	-	516	-
pH	pH units	0.1	6.0 - 9.5	7.88	7.99	8.1	8.25
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	2.7	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	-	179 *	-	428 *
Turbidity	NTU	0.1	-	-	9.23	-	2.94 *
Ammonia, Total (as N)	mg/L	0.02	-	0.23	-	0.122	-
Nitrate (as N)	mg/L	0.02	-	0.784	-	1.83	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	-	<2.0	-

Notes:

Grey and bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

TABLE 2 - WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-E

Analyte	Sample ID			MS-C-E	MS-C-E03	MS-C-E	MS-C-E01	MS-C-E	MS-C-E
	ALS Laboratory Sample ID			L2107717-8	L2107717-9	L2112089-7	L2112089-5	L2116590-5	L2120528-5
	Sample Date & Time			6/4/2018 11:50:00 AM	6/4/2018 11:50:00 AM	6/11/2018 2:25:00 PM	6/11/2018 2:25:00 PM	6/18/2018 2:35:00 PM	6/25/2018 5:35:00 PM
	QA/QC Sample Type			N/A	Travel Blank	N/A	Duplicate	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	180	<3.0	-	-	430	-
pH	pH units	0.1	6.0 - 9.5	7.78	6.08	8	7.99	8.03	8.25
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	5.3	<2.0	<2.0	9.7	<2.0	4.5
Total Dissolved Solids	mg/L	10	-	-	-	163 *	171 *	-	357 *
Turbidity	NTU	0.1	-	-	-	2.98	6.21	-	2.13 *
Ammonia, Total (as N)	mg/L	0.02	-	0.041	<0.02	-	-	<0.020	-
Nitrate (as N)	mg/L	0.02	-	0.419	<0.02	-	-	1.21	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	<2.0	-	-	<2.0	-

Notes:

Grey and bold highlight indicate results that exceeded the applicable water quality criteria.
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

TABLE 2 - WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-F

Analyte	Sample ID			MS-C-F	MS-C-F	MS-C-F02	MS-C-F	MS-C-F03	MS-C-F
	ALS Laboratory Sample ID			L2107717-2	L2112089-9	L2112089-8	L2116590-9	L2116590-8	L2120528-9
	Sample Date & Time			6/4/2018 5:35:00 PM	6/11/2018 5:45:00 PM	6/11/2018 5:45:00 PM	6/18/2018 12:10:00 PM	6/18/2018 12:10:00 PM	6/25/2018 2:10:00 PM
	QA/QC Sample Type			N/A	N/A	Field Blank	N/A	Travel Blank	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	50.7	-	-	167	<3.0	-
pH	pH units	0.1	6.0 - 9.5	7.38	7.58	6.15	7.7	5.85	7.91
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	2.1	2	<2.0	4.1	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	-	61 *	<10	-	-	151 *
Turbidity	NTU	0.1	-	-	24.8	0.8	-	-	7.61 *
Ammonia, Total (as N)	mg/L	0.02	-	<0.02	-	-	<0.020	0.021	-
Nitrate (as N)	mg/L	0.02	-	0.033	-	-	0.215	<0.020	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	-	-	<2.0	<2.0	-

Notes:

Grey and bold highlight indicate results that exceeded the applicable water quality criteria.
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

TABLE 2 - WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-G

Analyte	Sample ID			MS-C-G	MS-C-G
	ALS Laboratory Sample ID			L2107717-12	L2120528-15
	Sample Date & Time			6/4/2018 5:00:00 PM	6/25/2018 11:45:00 AM
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Water Licence Criteria[1]		
Conductivity	umhos/cm	3	-	77.9	152
pH	pH units	0.1	6.0 - 9.5	7.62	8.07
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	2.6	6.9
Total Dissolved Solids	mg/L	10	-	-	-
Turbidity	NTU	0.1	-	-	-
Ammonia, Total (as N)	mg/L	0.02	-	0.187	<0.020
Nitrate (as N)	mg/L	0.02	-	0.277	0.093
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	<2.0

Notes:

Grey and bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

TABLE 2 - WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-H

Analyte	Sample ID			MS-C-H	MS-C-H	MS-C-H	MS-C-H	MS-C-H
	ALS Laboratory Sample ID			L2107717-13	L2112089-13	L2116590-13	L2120528-13	L2124774-13
	Sample Date & Time			6/4/2018 4:15:00 PM	6/11/2018 5:10:00 PM	6/19/2018 9:45:00 AM	6/25/2018 12:00:00 PM	7/4/2018 11:50:00 AM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	59.6	-	126	-	185
pH	pH units	0.1	6.0 - 9.5	7.58	7.76	7.93	8.08	7.98
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	-	33 *	-	109 *	
Turbidity	NTU	0.1	-	-	13.3	-	0.88 *	
Ammonia, Total (as N)	mg/L	0.02	-	0.028	-	<0.020	-	<0.020
Nitrate (as N)	mg/L	0.02	-	0.112	-	0.473	-	0.106
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	-	<2.0	-	<2.0

Notes:

Grey and bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

TABLE 2 - WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MQ-C-A

Analyte	Sample ID			MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A01
	ALS Laboratory Sample ID			L2107717-1	L2112089-2	L2116590-2	L2120528-2	L2120528-7
	Sample Date & Time			6/4/2018 8:15:00 AM	6/11/2018 10:45:00 AM	6/18/2018 9:25:00 AM	6/25/2018 10:35:00 AM	6/25/2018 10:35:00 AM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	Duplicate
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	86.2	-	170	-	-
pH	pH units	0.1	6.0 - 9.5	7.64	7.84	8.01	8.08	8.08
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	-	40 *	-	82 *	89 *
Turbidity	NTU	0.1	-	-	5.36	-	0.57 *	0.84 *
Ammonia, Total (as N)	mg/L	0.02	-	0.031	-	<0.020	-	-
Nitrate (as N)	mg/L	0.02	-	0.101	-	0.033	-	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	-	<2.0	-	-

Notes:

Grey and bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

TABLE 2 - WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MQ-C-B

Analyte	Sample ID			MQ-C-B	MQ-C-B	MQ-C-B02	MQ-C-B	MQ-C-B02
	ALS Laboratory Sample ID			L2112089-1	L2116590-1	L2116590-7	L2120528-1	L2120528-8
	Sample Date & Time			6/11/2018 11:15:00 AM	6/18/2018 10:30:00 AM	6/18/2018 10:30:00 AM	6/25/2018 3:00:00 PM	6/25/2018 3:00:00 PM
	QA/QC Sample Type			N/A	N/A	Field Blank	N/A	Field Blank
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	-	167	<3.0	-	-
pH	pH units	0.1	6.0 - 9.5	7.74	7.89	5.91	8.11	6.04
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	8	22.3	<2.0	2.2	<2.0
Total Dissolved Solids	mg/L	10	-	48 *	-	-	148 *	<10
Turbidity	NTU	0.1	-	35.8	-	-	7.60 *	0.69 *
Ammonia, Total (as N)	mg/L	0.02	-	-	0.58	<0.020	-	-
Nitrate (as N)	mg/L	0.02	-	-	2.85	<0.020	-	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	-	<2.0	<2.0	-	-

Notes:

Grey and bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

TABLE 2 - WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MQ-C-D

Analyte	Sample ID			MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D
	ALS Laboratory Sample ID			L2107717-3	L2112089-3	L2116590-3	L2120528-3
	Sample Date & Time			6/4/2018 9:00:00 AM	6/11/2018 10:55:00 AM	6/19/2018 4:15:00 PM	6/25/2018 3:30:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]				
Conductivity	umhos/cm	3	-	192	-	157	-
pH	pH units	0.1	6.0 - 9.5	7.89	7.8	8.39	8.02
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	3.9	4.2	2.9	7.5
Total Dissolved Solids	mg/L	10	-	-	95 *	-	137 *
Turbidity	NTU	0.1	-	-	33.8	-	44.7 *
Ammonia, Total (as N)	mg/L	0.02	-	0.129	-	0.288	-
Nitrate (as N)	mg/L	0.02	-	0.579	-	1.43	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	-	<2.0	-
Acute Toxicity	-	-	Non-Lethal	-	-	Non-Lethal	-

Notes:

Grey and bold highlight indicate results that exceeded the applicable water quality criteria.

*Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

TABLE 2 - WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MQ-C-E

Analyte	Sample ID			MQ-C-E	MQ-C-E	MQ-C-E03
	ALS Laboratory Sample ID			L2107717-4	L2122135-1	L2122135-2
	Sample Date & Time			6/4/2018 6:25:00 PM	6/27/2018 1:50:00 PM	6/27/2018 1:50:00 PM
	QA/QC Sample Type			N/A	N/A	Travel Blank
	Units	LOR	Water Licence Criteria[1]			
Conductivity	umhos/cm	3	-	59.9	156	5.4
pH	pH units	0.1	6.0 - 9.5	7.46	7.75 *	6.09 *
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	5.1	25.1	<2.0
Total Dissolved Solids	mg/L	10	-	-	-	-
Turbidity	NTU	0.1	-	-	-	-
Ammonia, Total (as N)	mg/L	0.02	-	0.188	<0.020	0.04
Nitrate (as N)	mg/L	0.02	-	0.525	0.796	<0.020
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	<2.0	<2.0

Notes:

Grey and bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

TABLE 2 - WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-MRY-13A

Analyte	Sample ID			MS-MRY-13A	MS-MRY-13A	MS-MRY-13A	MS-MRY-13A
	ALS Laboratory Sample ID			L2107717-10	L2112089-11	L2116590-11	L2120528-11
	Sample Date & Time			6/4/2018 3:30:00 PM	6/11/2018 4:35:00 PM	6/18/2018 5:15:00 PM	6/25/2018 4:40:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]				
Conductivity	umhos/cm	3	-	518	1310	1080	-
pH	pH units	0.1	6.0 - 9.5	7.44	7.8	7.92	8.18
Total Suspended Solids	mg/L	2	15	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	-	893 *	728 *	513 *
Turbidity	NTU	0.1	-	-	-	-	1.32 *
Alkalinity, Total (as CaCO3)	mg/L	10	-	<0.020	62	78	-
Dissolved Organic Carbon	mg/L	1	-	0.129	4.2	4.9	-
Total Organic Carbon	mg/L	1	-	<2.0	5.3	5.2	-
Aluminum (Al)-Total	mg/L	0.005	-	-	0.0269	0.0362	-
Antimony (Sb)-Total	mg/L	0.0001	-	-	0.00063	0.0003	-
Arsenic (As)-Total	mg/L	0.0001	0.5	-	0.00018	0.00015	-
Barium (Ba)-Total	mg/L	0.0002	-	-	0.0947	0.0676	-
Beryllium (Be)-Total	mg/L	0.0001	-	-	<0.00010	<0.00010	-
Bismuth (Bi)-Total	mg/L	0.00005	-	-	<0.000050	<0.000050	-
Boron (B)-Total	mg/L	0.01	-	-	0.064	0.031	-
Cadmium (Cd)-Total	mg/L	0.00001	-	-	0.0000503	0.000027	-
Calcium (Ca)-Total	mg/L	0.5	-	-	163	122	-
Cesium (Cs)-Total	mg/L	0.00001	-	-	-	-	-
Chromium (Cr)-Total	mg/L	0.0005	-	-	<0.00050	<0.00050	-
Cobalt (Co)-Total	mg/L	0.0001	-	-	<0.00010	0.00011	-
Copper (Cu)-Total	mg/L	0.001	0.3	-	0.0011	0.0012	-
Iron (Fe)-Total	mg/L	0.05	-	-	0.042	0.044	-
Lead (Pb)-Total	mg/L	0.00005	0.2	-	0.000053	0.000064	-
Lithium (Li)-Total	mg/L	0.001	-	-	0.0243	0.0139	-
Magnesium (Mg)-Total	mg/L	0.05	-	-	35.1	50.8	-
Manganese (Mn)-Total	mg/L	0.0005	-	-	0.00407	0.00446	-
Mercury (Hg)-Total	mg/L	0.00001	-	-	<0.000010	<0.000010	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	-	0.00188	0.000855	-
Nickel (Ni)-Total	mg/L	0.0005	0.5	-	0.0127	0.0115	-
Phosphorus (P)-Total	mg/L	0.05	-	-	-	-	-
Potassium (K)-Total	mg/L	0.05	-	-	6.99	4.59	-
Rubidium (Rb)-Total	mg/L	0.0002	-	-	-	-	-
Selenium (Se)-Total	mg/L	0.00005	-	-	<0.000050	<0.000050	-
Silicon (Si)-Total	mg/L	0.1	-	-	1.85	2.85	-
Silver (Ag)-Total	mg/L	0.00005	-	-	<0.000050	<0.000050	-
Sodium (Na)-Total	mg/L	0.5	-	-	17.4	15.2	-
Strontium (Sr)-Total	mg/L	0.001	-	-	0.253	0.155	-
Sulfur (S)-Total	mg/L	0.5	-	-	-	-	-
Tellurium (Te)-Total	mg/L	0.0002	-	-	-	-	-
Thallium (Tl)-Total	mg/L	0.00001	-	-	0.000039	0.000021	-
Thorium (Th)-Total	mg/L	0.0001	-	-	-	-	-
Tin (Sn)-Total	mg/L	0.0001	-	-	<0.00010	<0.00010	-
Titanium (Ti)-Total	mg/L	0.0003	-	-	0.00112	0.0014	-
Tungsten (W)-Total	mg/L	0.0001	-	-	0.0004	0.0002	-
Uranium (U)-Total	mg/L	0.00001	-	-	0.00105	0.000888	-
Vanadium (V)-Total	mg/L	0.0005	-	-	<0.00050	<0.00050	-
Zinc (Zn)-Total	mg/L	0.003	0.5	-	0.031	0.0169	-
Zirconium (Zr)-Total	mg/L	0.0003	-	-	<0.00030	<0.00030	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	-	<2.0	<2.0	-
Phenols (4AAP)	mg/L	0.001	-	-	<0.0010	0.0012	-
F1 (C6-C10)	ug/L	100	-	-	<100	<100	-
F2 (C10-C16)	ug/L	100	-	-	<100	<100	-
F3 (C16-C34)	ug/L	250	-	-	<250	<250	-
F4 (C34-C50)	ug/L	250	-	-	<250	<250	-
Total Hydrocarbons (C6-C50)	ug/L	380	-	-	<380	<380	-
Chrom. to baseline at nC50		n/a	-	-	YES	YES	-
2-Bromobenzotrifluoride	%	Surrogate	-	-	81.4	79.2	-
3,4-Dichlorotoluene	%	Surrogate	-	-	94.4	92.1	-

Notes:

Grey and bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 7: Effluent Quality Discharge Limits for the Landfill Facilities

TABLE 2 - WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-MRY-13B

Analyte	Sample ID			MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B
	ALS Laboratory Sample ID			L2107717-11	L2112089-12	L2116590-12	L2120528-12
	Sample Date & Time			6/4/2018 3:05:00 PM	6/11/2018 4:15:00 PM	6/18/2018 4:50:00 PM	6/25/2018 4:25:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]				
Conductivity	umhos/cm	3	-	513	1150	1040	-
pH	pH units	0.1	6.0 - 9.5	7.53	7.94	7.99	8.25
Total Suspended Solids	mg/L	2	15	<2.0	<2.0	<2.0	3
Total Dissolved Solids	mg/L	10	-	-	805 *	700 *	729 *
Turbidity	NTU	0.1	-	-	-	-	1.54 *
Alkalinity, Total (as CaCO3)	mg/L	10	-	<0.020	62	85	-
Dissolved Organic Carbon	mg/L	1	-	0.085	3.9	4.8	-
Total Organic Carbon	mg/L	1	-	<2.0	4.1	5	-
Aluminum (Al)-Total	mg/L	0.005	-	-	0.0053	0.0299	-
Antimony (Sb)-Total	mg/L	0.0001	-	-	0.00045	0.00018	-
Arsenic (As)-Total	mg/L	0.0001	0.5	-	0.00015	0.00018	-
Barium (Ba)-Total	mg/L	0.0002	-	-	0.0905	0.0693	-
Beryllium (Be)-Total	mg/L	0.0001	-	-	<0.00010	<0.00010	-
Bismuth (Bi)-Total	mg/L	0.00005	-	-	<0.000050	<0.000050	-
Boron (B)-Total	mg/L	0.01	-	-	0.049	0.033	-
Cadmium (Cd)-Total	mg/L	0.00001	-	-	0.0000156	0.0000146	-
Calcium (Ca)-Total	mg/L	0.5	-	-	128	121	-
Cesium (Cs)-Total	mg/L	0.00001	-	-	-	-	-
Chromium (Cr)-Total	mg/L	0.0005	-	-	<0.00050	<0.00050	-
Cobalt (Co)-Total	mg/L	0.0001	-	-	<0.00010	<0.00010	-
Copper (Cu)-Total	mg/L	0.001	0.3	-	<0.0010	0.0013	-
Iron (Fe)-Total	mg/L	0.05	-	-	0.013	0.058	-
Lead (Pb)-Total	mg/L	0.00005	0.2	-	<0.000050	0.000051	-
Lithium (Li)-Total	mg/L	0.001	-	-	0.0232	0.031	-
Magnesium (Mg)-Total	mg/L	0.05	-	-	37.8	51.8	-
Manganese (Mn)-Total	mg/L	0.0005	-	-	0.00096	0.0023	-
Mercury (Hg)-Total	mg/L	0.00001	-	-	<0.000010	<0.000010	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	-	0.00107	0.000726	-
Nickel (Ni)-Total	mg/L	0.0005	0.5	-	0.00831	0.00818	-
Phosphorus (P)-Total	mg/L	0.05	-	-	-	-	-
Potassium (K)-Total	mg/L	0.05	-	-	5.17	3.55	-
Rubidium (Rb)-Total	mg/L	0.0002	-	-	-	-	-
Selenium (Se)-Total	mg/L	0.00005	-	-	<0.000050	<0.000050	-
Silicon (Si)-Total	mg/L	0.1	-	-	1.77	2.69	-
Silver (Ag)-Total	mg/L	0.00005	-	-	<0.000050	<0.000050	-
Sodium (Na)-Total	mg/L	0.5	-	-	14.7	14.9	-
Strontium (Sr)-Total	mg/L	0.001	-	-	0.19	0.143	-
Sulfur (S)-Total	mg/L	0.5	-	-	-	-	-
Tellurium (Te)-Total	mg/L	0.0002	-	-	-	-	-
Thallium (Tl)-Total	mg/L	0.00001	-	-	0.000036	0.000018	-
Thorium (Th)-Total	mg/L	0.0001	-	-	-	-	-
Tin (Sn)-Total	mg/L	0.0001	-	-	<0.00010	<0.00010	-
Titanium (Ti)-Total	mg/L	0.0003	-	-	<0.00030	0.00131	-
Tungsten (W)-Total	mg/L	0.0001	-	-	0.00017	<0.00010	-
Uranium (U)-Total	mg/L	0.00001	-	-	0.00061	0.00108	-
Vanadium (V)-Total	mg/L	0.0005	-	-	<0.00050	<0.00050	-
Zinc (Zn)-Total	mg/L	0.003	0.5	-	<0.0030	0.0036	-
Zirconium (Zr)-Total	mg/L	0.0003	-	-	<0.00030	<0.00030	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	-	<2.0	<2.0	-
Phenols (4AAP)	mg/L	0.001	-	-	<0.0010	<0.0010	-
F1 (C6-C10)	ug/L	100	-	-	<100	<100	-
F2 (C10-C16)	ug/L	100	-	-	<100	<100	-
F3 (C16-C34)	ug/L	250	-	-	<250	<250	-
F4 (C34-C50)	ug/L	250	-	-	<250	<250	-
Total Hydrocarbons (C6-C50)	ug/L	380	-	-	<380	<380	-
Chrom. to baseline at nC50		n/a	-	-	YES	YES	-
2-Bromobenzotrifluoride	%	Surrogate	-	-	90.7	68.9	-
3,4-Dichlorotoluene	%	Surrogate	-	-	92.3	93.4	-

Notes:

Grey and bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 7: Effluent Quality Discharge Limits for the Landfill Facilities

Table 3: Flow and Volume Measurements-Part I Item 11 - June 2018

DATE	Camp Lake Freshwater Use (Mine Site Camp) - Daily Potable Water (m^3) MS-MRY-1	Treated Sewage Effluent (m^3) from MS-01 to Discharge Location #1	Treated Sewage Effluent (m^3) from MS-01b to Discharge Location #1	Sewage Sludge Removed (m^3) from Mine Site WWTP to Incinerator	Sewage Sludge Removed (m^3) from Mine Site WWTP to PWSP at Mine Site - MS-MRY-4a	Km 32 Lake Milne Port Camp Daily Potable Water (m^3) MP-MRY-3	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	Km 32 Lake Milne Port Camp Fresh Water Use for Other Purposes (m^3) MP-MRY-3	Effluent Discharge (m^3) from Mine Site Waste Rock Stockpile Pond (MS-08)	Effluent Discharge (m^3) from Milne Port Ore Stockpile Sedimentation Pond (East) to Milne Port (MP-05)	Water Use for Dust Suppression from Authorized Sources	Sewage Sludge Removed (m^3) from Milne Port WWTP to PWSP at Milne Port - MP-01a	Treated Oily Water (m^3) from Exploration Camp Bulk Fuel Storage Facility to Tundra (MS-MRY-6)	Effluent Discharge (m3) from Crusher Pad Sedimentation Pond to Milne Port (MS-06)	Treated Oily Water (m^3) from Milne Port Bulk Fuel Tank farm Facility to Milne Port (MP-03)	Effluent Discharge (m^3) from Milne Port Ore Stockpile Sedimentation Pond (West) to Milne Port (MP-06)
1-Jun-18	164.9	164.9	0.0	0.4	0.0	39.1	44.3	0.5	0.0	5.2	0.0	0.0	302.8	0.0	0.0	0.0	0.0	0.0
2-Jun-18	132.3	132.3	0.0	0.5	0.0	35.3	40.1	0.5	0.0	4.8	0.0	0.0	514.8	0.0	0.0	0.0	0.0	0.0
3-Jun-18	151.6	151.6	0.0	0.6	0.0	34.9	40.4	0.6	0.0	5.5	0.0	0.0	363.4	0.0	0.0	0.0	0.0	0.0
4-Jun-18	91.4	91.4	0.0	0.6	0.0	45.0	50.5	0.6	0.0	5.5	0.0	0.0	302.8	0.0	0.0	0.0	0.0	0.0
5-Jun-18	130.3	111.6	18.7	0.6	0.0	28.0	32.9	0.3	0.0	4.9	0.0	0.0	666.2	0.0	0.0	0.0	0.0	0.0
6-Jun-18	113.1	107.8	5.3	0.0	4.0	40.4	45.7	0.5	0.0	5.3	0.0	0.0	302.8	0.0	0.0	0.0	0.0	0.0
7-Jun-18	166.6	146.0	20.6	0.5	0.0	28.9	34.4	0.3	0.0	5.5	0.0	0.0	151.4	0.0	0.0	0.0	0.0	0.0
8-Jun-18	151.9	151.9	0.0	0.5	0.0	42.0	48.0	0.3	0.0	6.0	0.0	0.0	318.0	0.0	0.0	0.0	0.0	0.0
9-Jun-18	131.7	126.1	5.6	0.5	0.0	34.5	40.2	0.3	0.0	5.8	0.0	0.0	454.2	0.0	0.0	0.0	0.0	0.0
10-Jun-18	77.1	51.5	25.7	0.5	0.0	39.3	45.2	0.3	0.0	5.9	0.0	0.0	499.7	0.0	0.0	0.0	0.0	0.0
11-Jun-18	71.6	71.1	0.5	0.5	0.0	33.2	38.2	0.2	0.0	5.1	0.0	0.0	30.3	0.0	35.3	0.9	0.0	0.0
12-Jun-18	143.9	129.1	14.8	0.3	0.0	36.7	42.2	0.4	0.0	5.6	0.0	0.0	20.9	0.0	69.2	2.8	0.0	0.0
13-Jun-18	134.0	102.8	31.2	0.5	0.0	34.5	40.2	0.5	0.0	5.8	0.0	0.0	90.8	0.0	97.1	60.8	730.0	0.0
14-Jun-18	166.1	153.4	12.7	0.3	0.0	34.2	40.0	0.3	0.0	5.8	0.0	0.0	348.3	0.0	39.8	57.9	99.6	0.0
15-Jun-18	148.7	126.8	22.0	0.5	0.0	34.3	40.8	0.3	0.0	6.5	0.0	0.0	333.1	0.0	31.9	61.0	0.0	0.0
16-Jun-18	93.3	70.4	22.9	0.5	7.0	37.7	44.4	0.3	0.0	6.7	0.0	112.1	302.8	0.0	0.0	0.0	0.0	0.0
17-Jun-18	94.4	92.1	2.3	0.5	0.0	35.3	41.5	0.4	0.0	6.2	0.0	250.0	393.7	0.0	31.6	69.2	0.0	280.5
18-Jun-18	117.2	93.4	23.8	0.5	0.0	40.3	46.3	0.3	0.0	6.1	0.0	0.0	0.0	0.0	31.9	8.2	0.0	431.2
19-Jun-18	120.7	87.9	32.9	0.3	0.0	36.9	43.5	0.3	0.0	6.6	0.0	73.5	181.7	0.0	0.0	78.6	0.0	115.1
20-Jun-18	107.0	89.0	17.9	0.4	0.0	40.4	46.0	0.0	0.0	5.7	0.0	0.0	424.0	0.0	0.0	39.4	0.0	0.0
21-Jun-18	129.1	105.7	23.3	0.3	0.0	40.4	47.2	0.0	0.0	6.9	0.0	0.0	90.8	0.0	0.0	0.0	0.0	0.0
22-Jun-18	127.8	101.1	26.7	0.6	0.0	40.4	47.1	0.0	0.0	6.7	0.0	0.0	393.7	0.0	0.0	22.7	0.0	0.0
23-Jun-18	126.9	95.9	31.0	0.6	0.0	40.4	47.1	0.0	0.0	6.7	0.0	0.0	424.0	0.0	0.0	0.0	0.0	0.0
24-Jun-18	128.1	98.5	29.5	0.6	0.0	40.5	46.4	0.2	11.4	5.9	0.0	0.0	363.4	0.0	0.0	88.4	0.0	0.0
25-Jun-18	113.7	77.4	36.4	0.6	0.0	38.6	46.1	0.0	0.0	7.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26-Jun-18	132.2	107.9	24.3	0.6	7.0	34.0	41.5	0.0	0.0	7.6	0.0	0.0	363.4	0.0	0.0	0.0	0.0	0.0
27-Jun-18	113.3	91.9	21.4	0.6	0.0	44.9	52.6	0.0	22.7	7.7	0.0	0.0	454.2	4.0	0.0	0.0	0.0	0.0
28-Jun-18	120.2	98.2	22.1	0.2	0.0	36.7	44.1	0.0	0.0	7.5	0.0	0.0	605.7	3.5	0.0	0.0	0.0	0.0
29-Jun-18	126.6	97.4	29.2	0.0	0.0	27.0	34.8	0.0	0.7	7.9	0.0	0.0	545.1	5.0	0.0	49.0	0.0	0.0
30-Jun-18	174.3	146.9	27.3	0.0	0.0	39.4	45.0	0.0	0.0	5.6	931.1	0.0	704.1	4.0	0.0	82.9	0.0	0.0
Total	3800.1	**3272.2**	**527.9**	**12.7**	**18.0**	**1113.0**	**1297.3**	**7.7**	**34.8**	**184.3**	**931.1**	**435.6**	**9946.3**	**16.5**	**336.8**	**621.6**	**829.6**	**826.8**

Notes:

WWTP - Waste Water Treatment Plant

PWSP - Polishing Waste Stabilization Pond