

August 30, 2024

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

Resource Management Officer, CIRNAC
Nunavut District, Nunavut Region
P.O. Box 100
Iqaluit, NU X0A 0H0

**RE: Water Licence 2AM-MRY1325 Monthly Surveillance Network Program (SNP) Report
May 2024**

The following is the monthly report for July 2024 as required under Part I, Item 21 of the Type 'A' Water Licence 2AM-MRY1325 (the Licence) which 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 identify areas of non-compliance with regulated discharge parameters referred to in Part F"*

Monitoring Program

Table 1.1 presents a list of samples/monitoring conducted in July under the Licence at sites with discharge/flowing water conditions and the details concerning the collected water quality samples, including sample dates and laboratory identification numbers. Analytical water quality testing results are presented in Table 2. Table 3.1 presents water volumes consumed for domestic and industrial water purposes as well as select volumes of effluent and waste discharged and/or disposed at the Mary River Mine Site and Milne Port during July 2024.

Monitoring Program Results

Water Sampling and Analysis Results

Table 2 provides the analytical results related to the Sewage Treatment Plant (STP) facilities and SNP sampling requirements. In July 2024, there were no exceedances of applicable criteria at STP or SNP surface water monitoring stations.

On May 10, 2024, an uncontrolled release from the KM105 Surface Water Management Pond (KM105 Pond) to the isolated adjacent tundra occurred due to seepage upstream of the northwest embankment. A summary of this incident and the actions taken by Baffinland was reported in the May report submitted on June 30, 2024. In addition, details on initial mitigative actions were provided in the follow-up spill report submitted June 10, 2024. Monthly Water Licence samples will continue to be collected at an established representative water quality monitoring station when flowing water is present, and a representative sample can be collected.

Flow and Volume Measurements

Table 3.1 provides a breakdown of volume measurements for July 2024, as required by Part I, Item 9 of the Licence.

We trust that the information provided in this monthly report is acceptable. If you have any questions regarding this report, please contact the undersigned.

Prepared by:

A handwritten signature in black ink, appearing to read "Dale Kristoff".

Dale Kristoff
Environmental Specialist

Reviewed by:

Katie Babin
Environmental Superintendent

cc: Jeremy Fraser, Omer Pasalic, Sean Noble-Nowdluk (CIRNAC)
Conor Goddard, Chris Spencer, Amoudla Kootoo (QIA)
Tim Sewell, Megan Lord-Hoyle, Lou Kamermans, Elisabeth Luther, Francois Gaudreau, Martin Beausejour,
Connor Devereaux, Todd Swenson, Katie Babin, Allison Parker, Dale Kristoff (Baffinland)

Attachments

Attachments – Table 1.1, Table 2, Table 3.1

**Table 1.1: Monitoring Program
Water Sampling Summary**

Location	Location Description	Sample Date	Sample Type	Lab Sample ID
MP-01	Sewage Treatment Facility	2024-07-04	FB	WT2418654-004
MP-01	Sewage Treatment Facility	2024-07-04	P	WT2418654-003
MP-01B	Sewage Treatment Facility	2024-07-04	FB	WT2418654-002
MP-01B	Sewage Treatment Facility	2024-07-04	P	WT2418654-001
MP-06	Ore Stockpile Sedimentation Pond (West)	2024-07-08	FD	WT2418957-002
MP-06	Ore Stockpile Sedimentation Pond (West)	2024-07-08	P	WT2418957-001
MP-C-B	Downstream of Construction Area	2024-07-08	FD	WT2418945-003
MP-C-B	Downstream of Construction Area	2024-07-08	P	WT2418945-002
MP-C-B	Downstream of Construction Area	2024-07-15	P	BF2400187-007
MP-C-B	Downstream of Construction Area	2024-07-22	P	BF2400201-006
MP-C-B	Downstream of Construction Area	2024-07-29	P	BF2400211-003
MP-C-K	Downstream of Construction Area	2024-07-08	P	WT2418945-004
MP-C-K	Downstream of Construction Area	2024-07-15	P	BF2400187-006
MP-C-K	Downstream of Construction Area	2024-07-22	P	BF2400201-005
MP-C-K	Downstream of Construction Area	2024-07-29	P	BF2400211-007
MP-C-H	Downstream of Construction Area	2024-07-08	P	WT2418945-001
MP-C-H	Downstream of Construction Area	2024-07-15	P	BF2400187-001
MP-C-H	Downstream of Construction Area	2024-07-22	P	BF2400201-007
MP-C-H	Downstream of Construction Area	2024-07-29	FD	BF2400211-002
MP-C-H	Downstream of Construction Area	2024-07-29	P	BF2400211-001
MP-C-J	Downstream of Construction Area	2024-07-08	P	WT2418945-005
MP-C-J	Downstream of Construction Area	2024-07-15	P	BF2400187-005
MP-C-J	Downstream of Construction Area	2024-07-22	P	BF2400201-004
MP-C-J	Downstream of Construction Area	2024-07-29	P	BF2400211-006
MP-Q1-01	Downstream of Q1 Quarry	2024-07-08	P	WT2418945-006
MP-Q1-01	Downstream of Q1 Quarry	2024-07-15	FD	BF2400187-004
MP-Q1-01	Downstream of Q1 Quarry	2024-07-15	P	BF2400187-003
MP-Q1-01	Downstream of Q1 Quarry	2024-07-22	P	BF2400201-003
MP-Q1-01	Downstream of Q1 Quarry	2024-07-29	P	BF2400211-004
MP-Q1-02	Downstream of Q1 Quarry	2024-07-08	P	WT2418945-007
MP-Q1-02	Downstream of Q1 Quarry	2024-07-15	P	BF2400187-002
MP-Q1-02	Downstream of Q1 Quarry	2024-07-22	FD	BF2400201-002
MP-Q1-02	Downstream of Q1 Quarry	2024-07-22	P	BF2400201-001
MP-Q1-02	Downstream of Q1 Quarry	2024-07-29	P	BF2400211-005
MS-01	Sewage Treatment Facility	2024-07-04	FB	WT2418566-001
MS-01	Sewage Treatment Facility	2024-07-04	P	WT2418566-002
MS-01B	Sewage Treatment Facility	2024-07-04	FB	WT2418566-004
MS-01B	Sewage Treatment Facility	2024-07-04	P	WT2418566-005
MS-06	Ore Stockpile Pond Stormwater	2024-07-01	RW	BF2400153-001
MS-08	Mine Waste Rock Stockpile Pond	2024-07-09	P	BF2400177-001
MS-MRY-09	Deposit 1 Surface Water Drainage	2024-07-04	P	BF2400159-001
MS-MRY-09	Deposit 1 Surface Water Drainage	2024-07-09	P	BF2400176-001
MS-MRY-09	Deposit 1 Surface Water Drainage	2024-07-14	P	BF2400185-001
MS-MRY-09	Deposit 1 Surface Water Drainage	2024-07-20	P	BF2400199-001
MS-MRY-09	Deposit 1 Surface Water Drainage	2024-07-29	P	BF2400207-015
MS-MRY-13A	Downstream Non-Hazardous Landfill	2024-07-01	P	BF2400155-004
MS-MRY-13A	Downstream Non-Hazardous Landfill	2024-07-07	P	BF2400173-004
MS-MRY-13A	Downstream Non-Hazardous Landfill	2024-07-14	P	BF2400185-017
MS-MRY-13A	Downstream Non-Hazardous Landfill	2024-07-28	P	BF2400207-007
MS-MRY-13B	Downstream Non-Hazardous Landfill	2024-07-01	P	BF2400155-003
MS-MRY-13B	Downstream Non-Hazardous Landfill	2024-07-07	P	BF2400173-003
MS-MRY-13B	Downstream Non-Hazardous Landfill	2024-07-14	P	BF2400185-016
MS-MRY-13B	Downstream Non-Hazardous Landfill	2024-07-21	P	BF2400199-010
MS-MRY-13B	Downstream Non-Hazardous Landfill	2024-07-21	TB	BF2400199-011
MS-MRY-13B	Downstream Non-Hazardous Landfill	2024-07-28	P	BF2400207-006
MS-C-A	Downstream of Construction and Borrow Areas	2024-07-01	FD	BF2400155-008
MS-C-A	Downstream of Construction and Borrow Areas	2024-07-01	P	BF2400155-007
MS-C-A	Downstream of Construction and Borrow Areas	2024-07-07	FB	BF2400173-012
MS-C-A	Downstream of Construction and Borrow Areas	2024-07-07	P	BF2400173-011
MS-C-A	Downstream of Construction and Borrow Areas	2024-07-14	FB	BF2400185-005
MS-C-A	Downstream of Construction and Borrow Areas	2024-07-14	P	BF2400185-004
MS-C-A	Downstream of Construction and Borrow Areas	2024-07-21	P	BF2400199-005
MS-C-A	Downstream of Construction and Borrow Areas	2024-07-28	P	BF2400207-001

Notes:
Sample Types:
P - Permitted Sample
FB - Field Blank
FD - Field Duplicate
TB - Trip Blank
NST - No Sample Taken

**Table 1.1: Monitoring Program
Water Sampling Summary**

MS-C-B	Downstream of Construction and Borrow Areas	2024-07-01	P	BF2400155-009
MS-C-B	Downstream of Construction and Borrow Areas	2024-07-07	P	BF2400173-013
MS-C-B	Downstream of Construction and Borrow Areas	2024-07-14	P	BF2400185-006
MS-C-B	Downstream of Construction and Borrow Areas	2024-07-21	P	BF2400199-006
MS-C-B	Downstream of Construction and Borrow Areas	2024-07-28	P	BF2400207-002
MS-C-C	Downstream of Construction and Borrow Areas	2024-07-01	P	BF2400155-006
MS-C-C	Downstream of Construction and Borrow Areas	2024-07-07	P	BF2400173-006
MS-C-C	Downstream of Construction and Borrow Areas	2024-07-14	P	BF2400185-012
MS-C-C	Downstream of Construction and Borrow Areas	2024-07-21	P	BF2400199-014
MS-C-C	Downstream of Construction and Borrow Areas	2024-07-28	FD	BF2400207-011
MS-C-C	Downstream of Construction and Borrow Areas	2024-07-28	P	BF2400207-010
MS-C-D	Downstream of Construction and Borrow Areas	2024-07-01	P	BF2400155-005
MS-C-D	Downstream of Construction and Borrow Areas	2024-07-07	P	BF2400173-015
MS-C-D	Downstream of Construction and Borrow Areas	2024-07-14	P	BF2400185-011
MS-C-D	Downstream of Construction and Borrow Areas	2024-07-21	P	BF2400199-013
MS-C-D	Downstream of Construction and Borrow Areas	2024-07-28	P	BF2400207-009
MS-C-E	Downstream of Construction and Borrow Areas	2024-07-07	P	BF2400173-005
MS-C-E	Downstream of Construction and Borrow Areas	2024-07-14	P	BF2400185-010
MS-C-E	Downstream of Construction and Borrow Areas	2024-07-21	P	BF2400199-012
MS-C-E	Downstream of Construction and Borrow Areas	2024-07-28	P	BF2400207-008
MS-C-F	Downstream of Construction and Borrow Areas	2024-07-01	P	BF2400155-010
MS-C-F	Downstream of Construction and Borrow Areas	2024-07-07	P	BF2400173-014
MS-C-F	Downstream of Construction and Borrow Areas	2024-07-14	P	BF2400185-008
MS-C-F	Downstream of Construction and Borrow Areas	2024-07-21	P	BF2400199-007
MS-C-F	Downstream of Construction and Borrow Areas	2024-07-28	P	BF2400207-003
MS-C-G	Downstream of Construction and Borrow Areas	2024-07-01	P	BF2400155-002
MS-C-G	Downstream of Construction and Borrow Areas	2024-07-07	P	BF2400173-002
MS-C-G	Downstream of Construction and Borrow Areas	2024-07-14	FD	BF2400185-014
MS-C-G	Downstream of Construction and Borrow Areas	2024-07-14	P	BF2400185-013
MS-C-G	Downstream of Construction and Borrow Areas	2024-07-21	P	BF2400199-008
MS-C-G	Downstream of Construction and Borrow Areas	2024-07-28	P	BF2400207-004
MS-C-G	Downstream of Construction and Borrow Areas	2024-07-30	P	BF2400214-002
MS-C-H	Downstream of Construction and Borrow Areas	2024-07-01	P	BF2400155-001
MS-C-H	Downstream of Construction and Borrow Areas	2024-07-07	P	BF2400173-001
MS-C-H	Downstream of Construction and Borrow Areas	2024-07-14	P	BF2400185-015
MS-C-H	Downstream of Construction and Borrow Areas	2024-07-21	P	BF2400199-009
MS-C-H	Downstream of Construction and Borrow Areas	2024-07-28	P	BF2400207-005
MQ-C-A	Downstream of QMR2 Quarry	2024-07-01	P	BF2400155-011
MQ-C-A	Downstream of QMR2 Quarry	2024-07-07	FD	BF2400173-008
MQ-C-A	Downstream of QMR2 Quarry	2024-07-07	P	BF2400173-007
MQ-C-A	Downstream of QMR2 Quarry	2024-07-14	P	BF2400185-002
MQ-C-A	Downstream of QMR2 Quarry	2024-07-21	P	BF2400199-002
MQ-C-A	Downstream of QMR2 Quarry	2024-07-28	P	BF2400207-012
MQ-C-B	Downstream of QMR2 Quarry	2024-07-01	P	BF2400155-013
MQ-C-B	Downstream of QMR2 Quarry	2024-07-01	TB	BF2400155-014
MQ-C-B	Downstream of QMR2 Quarry	2024-07-07	P	BF2400173-010
MQ-C-B	Downstream of QMR2 Quarry	2024-07-14	P	BF2400185-007
MQ-C-B	Downstream of QMR2 Quarry	2024-07-14	TB	BF2400185-009
MQ-C-B	Downstream of QMR2 Quarry	2024-07-21	P	BF2400199-004
MQ-C-B	Downstream of QMR2 Quarry	2024-07-28	P	BF2400207-014
MQ-C-D	Downstream of QMR2 Quarry	2024-07-01	P	BF2400155-012
MQ-C-D	Downstream of QMR2 Quarry	2024-07-07	P	BF2400173-009
MQ-C-D	Downstream of QMR2 Quarry	2024-07-14	P	BF2400185-003
MQ-C-D	Downstream of QMR2 Quarry	2024-07-21	P	BF2400199-003
MQ-C-D	Downstream of QMR2 Quarry	2024-07-28	P	BF2400207-013
KM105-SWMP-SEEP-04		2024-07-04	P	BF2400160-001



Table 2 : Water Quality Results for Water Licence
Monitoring Location - MP-01

Location Name			MP-01	MP-01
Field Sample ID			MP-01_2024-07-04	QV-BF1_2024-07-04
ALS Laboratory Work Order			WT2418654	WT2418654
Sample Date			2024-07-04	2024-07-04
Sample Type			P	FB
Analyte	Units	Table 5 Criteria		
pH, Lab	pH units	9.5	7.76	5.20
Total Suspended Solids	mg/L	120	6.0	< 1.0
Total Dissolved Solids	mg/L		815	< 10
Turbidity	NTU		2.22	< 0.10
Alkalinity, Total	mg/L		72.6	< 2.0
Ammonia, Total (as N)	mg/L		0.0571	0.0058
Total Kjeldahl Nitrogen	mg/L		1.94	< 0.050
Fecal Coliforms	CFU/100mL	10000	< 1	< 1
BOD	mg/L	100	< 2.0	< 2.0
Oil and Grease, Total	mg/L		< 5.0	< 5.0
Phosphorus, Nutrient	mg/L		6.42	0.0033

Notes:
Highlight indicate result exceeded applicable criteria.
Half value used in monthly average when value is less than detection limit.
pH criteria is a range;6.0-9.5.
Sample Type:
P-Permitted
FD-Field Duplicate
FB-Field Blank
TB-Trip Blank



Table 2 : Water Quality Results for Water Licence
Monitoring Location - MP-01B

			Location Name	MP-01B	MP-01B
			Field Sample ID	MP-01B_2024-07-04	QV-BF2_2024-07-04
			ALS Laboratory Work Order	WT2418654	WT2418654
			Sample Date	2024-07-04	2024-07-04
			Sample Type	P	FB
Analyte	Units	Table 5 Criteria			
pH, Lab	pH units	9.5	7.56	5.30	
Total Suspended Solids	mg/L	120	< 1.0	< 1.0	
Total Dissolved Solids	mg/L		596	< 10	
Turbidity	NTU		0.12	< 0.10	
Alkalinity, Total	mg/L		42.6	< 2.0	
Ammonia, Total (as N)	mg/L		0.0192	0.0260	
Total Kjeldahl Nitrogen	mg/L		1.16	< 0.050	
Fecal Coliforms	CFU/100mL	10000	< 1	< 1	
BOD	mg/L	100	< 2.0	< 2.0	
Oil and Grease, Total	mg/L		< 5.0	< 5.0	
Phosphorus, Nutrient	mg/L		8.39	< 0.0020	

Notes:
Highlight indicate result exceeded applicable criteria.
Half value used in monthly average when value is less than detection limit.
pH criteria is a range;6.0-9.5.
Sample Type:
P-Permitted
FD-Field Duplicate
FB-Field Blank
TB-Trip Blank

**Table 2 : Water Quality Results for Water Licence
Monitoring Location - MP-06**

Location Name Field Sample ID ALS Laboratory Work Order Sample Date Sample Type			MP-06	MP-06
			MP-06_2024-07-08	QP-CC2_2024-07-08
			WT2418957	WT2418957
			2024-07-08	2024-07-08
			P	FD
Analyte	Units	Table 6 Criteria		
Hardness	mg/L		173	173
pH, Lab	pH units	9.5	8.20	8.06
Total Suspended Solids	mg/L	15	1.4	1.0
Total Dissolved Solids	mg/L		267	270
Turbidity	NTU		6.78	6.55
Alkalinity, Total	mg/L		75.8	75.3
Ammonia, Total (as N)	mg/L		0.0375	0.0096
Chloride	mg/L		75.4	75.5
Fluoride	mg/L		0.128	0.129
Nitrate	mg/L		0.846	0.823
Total Kjeldahl Nitrogen	mg/L		0.225	0.241
Sulfate	mg/L		57.4	57.5
Dissolved Organic	mg/L		4.32	7.29
Total Organic Carbon	mg/L		3.82	3.81
Aluminum - Total	mg/L		0.0567	0.0556
Antimony - Total	mg/L		0.00014	0.00014
Arsenic - Total	mg/L	0.50	0.00019	0.00019
Barium - Total	mg/L		0.0105	0.0107
Cadmium - Total	mg/L		< 0.0000050	< 0.0000050
Calcium - Total	mg/L		36.6	36.8
Chromium - Total	mg/L		< 0.00050	< 0.00050
Cobalt - Total	mg/L		0.00037	0.00036
Copper - Total	mg/L	0.30	0.00076	0.00078
Iron - Total	mg/L		0.085	0.084
Lead - Total	mg/L	0.20	< 0.000050	0.000051
Lithium - Total	mg/L		0.0107	0.0109
Magnesium - Total	mg/L		19.8	19.8
Manganese - Total	mg/L		0.0436	0.0431
Mercury - Total	mg/L		< 0.0000050	< 0.0000050
Molybdenum - Total	mg/L		0.00357	0.00376
Nickel - Total	mg/L	0.50	0.00067	0.00083
Phosphorus, Total	mg/L		< 0.050	< 0.050
Potassium - Total	mg/L		4.65	4.68
Selenium - Total	mg/L		0.000151	0.000147
Sodium - Total	mg/L		31.1	31.0
Strontium - Total	mg/L		0.130	0.131
Thallium - Total	mg/L		0.000019	0.000018
Tin - Total	mg/L		< 0.00010	< 0.00010
Titanium - Total	mg/L		< 0.00090	< 0.00090
Uranium - Total	mg/L		0.0446	0.0436
Vanadium - Total	mg/L		< 0.00050	< 0.00050
Zinc - Total	mg/L	0.50	< 0.0030	0.0083
Aluminum - Dissolved	mg/L		0.0159	0.0163
Arsenic - Dissolved	mg/L		0.00017	0.00019
Cadmium - Dissolved	mg/L		< 0.0000050	< 0.0000050
Calcium - Dissolved	mg/L		37.4	37.7
Copper - Dissolved	mg/L		0.00067	0.00067
Iron - Dissolved	mg/L		< 0.010	< 0.010
Lead - Dissolved	mg/L		< 0.000050	< 0.000050
Magnesium - Dissolved	mg/L		19.6	19.9
Manganese - Dissolved	mg/L		0.0303	0.0312
Mercury - Dissolved	mg/L		< 0.0000050	< 0.0000050
Molybdenum - Dissolved	mg/L		0.00366	0.00395
Nickel - Dissolved	mg/L		0.00052	0.00070
Potassium - Dissolved	mg/L		4.66	4.76
Selenium - Dissolved	mg/L		0.000166	0.000144
Sodium - Dissolved	mg/L		30.6	31.1
Thallium - Dissolved	mg/L		0.000017	0.000017
Uranium - Dissolved	mg/L		0.0416	0.0416
Zinc - Dissolved	mg/L		0.0022	0.0078
Visible Sheen (100=Yes, 0=No)	None	99	0	-
Phenols	ug/L		< 1.0	1.5
Mean Mortality to Daphnia magna	%	50	< 1.0	-
Mean Mortality to Rainbow Trout	%	50	< 1.0	-
Phosphorus, Nutrient	mg/L		0.0032	0.0032

Notes:

Highlight indicate result exceeded applicable criteria.

Half value used in monthly average when value is less than detection limit.

pH criteria is a range;6.0-9.5.

Sample Type:

P-Permitted

FD-Field Duplicate

FB-Field Blank

TB-Trip Blank

**Table 2 : Water Quality Results for Water Licence
Monitoring Location - MP-C-B**

Location Name			MP-C-B	MP-C-B	MP-C-B	MP-C-B	MP-C-B
Field Sample ID			MP-C-B_2024-07-08	QD-CC8_2024-07-08	MP-C-B_2024-07-15	MP-C-B_2024-07-22	MP-C-B_2024-07-29
ALS Laboratory Work Order			WT2418945	WT2418945	BF2400187	BF2400201	BF2400211
Sample Date			2024-07-08	2024-07-08	2024-07-15	2024-07-22	2024-07-29
Sample Type			P	FD	P	P	P
Analyte	Units	Table 9 Criteria					
Conductivity	umhos/cm		326	327	-	-	-
pH, Lab	pH units	9.5	8.33	8.34	8.28	7.95	8.21
Total Suspended Solids	mg/L	30	2.1	3.2	6.0	5.8	4.7
Total Dissolved Solids	mg/L		175	178	267	548	333
Turbidity	NTU		4.98	5.97	10.0	0.42	8.65
Ammonia, Total (as N)	mg/L		0.137	0.149	-	-	-
Nitrate	mg/L		3.22	3.25	-	-	-
Oil and Grease, Total	mg/L		< 5.0	< 5.0	-	-	-
Visible Sheen (100=Yes, 0=No)	None	99	0	-	0	0	0

Notes:

Highlight indicate result exceeded applicable criteria.

Half value used in monthly average when value is less than detection limit.

pH criteria is a range;6.0-9.5.

Sample Type:

P-Permitted

FD-Field Duplicate

FB-Field Blank

TB-Trip Blank



Table 2 : Water Quality Results for Water Licence
Monitoring Location - MP-C-K

Location Name Field Sample ID ALS Laboratory Work Order Sample Date Sample Type			MP-C-K	MP-C-K	MP-C-K	MP-C-K
			MP-C-K_2024-07-08	MP-C-K_2024-07-15	MP-C-K_2024-07-22	MP-C-K_2024-07-29
			WT2418945	BF2400187	BF2400201	BF2400211
			2024-07-08	2024-07-15	2024-07-22	2024-07-29
			P	P	P	P
Analyte	Units	Table 9 Criteria				
Conductivity	umhos/cm		542	-	-	-
pH, Lab	pH units	9.5	8.25	8.11	8.11	8.01
Total Suspended	mg/L	30	1.4	< 1.0	< 1.0	< 1.0
Total Dissolved Solids	mg/L		361	477	150	522
Turbidity	NTU		0.54	0.60	0.19	1.81
Ammonia, Total (as	mg/L		0.506	-	-	-
Nitrate	mg/L		1.01	-	-	-
Oil and Grease, Total	mg/L		< 5.0	-	-	-
Visible Sheen (100=Yes, 0=No)	None	99	0	0	0	0

Notes:
Highlight indicate result exceeded applicable criteria.
Half value used in monthly average when value is less than detection limit.
pH criteria is a range;6.0-9.5.
Sample Type:
P-Permitted
FD-Field Duplicate
FB-Field Blank
TB-Trip Blank



Table 2 : Water Quality Results for Water Licence
Monitoring Location - MP-C-H

Location Name Field Sample ID ALS Laboratory Work Order Sample Date Sample Type			MP-C-H	MP-C-H	MP-C-H	MP-C-H	MP-C-H
			MP-C-H_2024-07-08	MP-C-H_2024-07-15	MP-C-H_2024-07-22	MP-C-H_2024-07-29	QP-CC3_2024-07-29
			WT2418945	BF2400187	BF2400201	BF2400211	BF2400211
			2024-07-08	2024-07-15	2024-07-22	2024-07-29	2024-07-29
			P	P	P	P	FD
Analyte	Units	Table 9 Criteria					
Conductivity	umhos/cm		193	-	-	-	-
pH, Lab	pH units	9.5	8.31	8.10	8.24	8.05	8.06
Total Suspended	mg/L	30	1.7	< 1.0	2.5	< 1.0	< 1.0
Total Dissolved	mg/L		90	137	291	154	160
Turbidity	NTU		0.18	0.43	3.61	0.70	0.70
Ammonia, Total (as	mg/L		< 0.0050	-	-	-	-
Nitrate	mg/L		0.047	-	-	-	-
Oil and Grease, Total	mg/L		< 5.0	-	-	-	-
Visible Sheen (100=Yes, 0=No)	None	99	0	0	0	0	-

Notes:
Highlight indicate result exceeded applicable criteria.
Half value used in monthly average when value is less than detection limit.
pH criteria is a range;6.0-9.5.
Sample Type:
P-Permitted
FD-Field Duplicate
FB-Field Blank
TB-Trip Blank



**Table 2 : Water Quality Results for Water Licence
Monitoring Location - MP-C-J**

			Location Name	MP-C-J	MP-C-J	MP-C-J	MP-C-J
			Field Sample ID	MP-C-J_2024-07-08	MP-C-J_2024-07-15	MP-C-J_2024-07-22	MP-C-J_2024-07-29
			ALS Laboratory Work Order	WT2418945	BF2400187	BF2400201	BF2400211
			Sample Date	2024-07-08	2024-07-15	2024-07-22	2024-07-29
			Sample Type	P	P	P	P
Analyte	Units	Table 9 Criteria					
Conductivity	umhos/cm		356	-	-	-	-
pH, Lab	pH units	9.5	8.45	7.92	7.72	7.83	
Total Suspended Solids	mg/L	30	< 1.0	< 1.0	< 1.0	< 1.0	
Total Dissolved Solids	mg/L		183	209	231	226	
Turbidity	NTU		0.25	0.70	< 0.10	0.77	
Ammonia, Total (as N)	mg/L		0.0072	-	-	-	
Nitrate	mg/L		0.041	-	-	-	
Oil and Grease, Total	mg/L		< 5.0	-	-	-	
Visible Sheen (100=Yes, 0=No)	None	99	0	0	0	0	

Notes:

Highlight indicate result exceeded applicable criteria.

Half value used in monthly average when value is less than detection limit.

pH criteria is a range;6.0-9.5.

Sample Type:

P-Permitted

FD-Field Duplicate

FB-Field Blank

TB-Trip Blank



Table 2 : Water Quality Results for Water Licence
Monitoring Location - MP-Q1-01

				Location Name	MP-Q1-01	MP-Q1-01	MP-Q1-01	MP-Q1-01	MP-Q1-01
				Field Sample ID	MP-Q1-01_2024-07-08	MP-Q1-01_2024-07-15	QP-CC3_2024-07-15	MP-Q1-01_2024-07-22	MP-Q1-01_2024-07-29
				ALS Laboratory Work Order	WT2418945	BF2400187	BF2400187	BF2400201	BF2400211
				Sample Date	2024-07-08	2024-07-15	2024-07-15	2024-07-22	2024-07-29
				Sample Type	P	P	FD	P	P
Analyte	Units	Table 9 Criteria	Table 9 Criteria (Quarry)						
Conductivity	umhos/cm			204	-	-	-	-	-
pH, Lab	pH units	9.5	9.5	8.12	8.00	7.92	7.88	7.92	7.92
Total Suspended Solids	mg/L	30	30	1.4	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Dissolved Solids	mg/L			92	105	110	119	111	111
Turbidity	NTU			3.20	2.85	2.90	2.51	3.54	3.54
Ammonia, Total (as N)	mg/L			0.0116	-	-	-	-	-
Nitrate	mg/L			0.295	-	-	-	-	-
Oil and Grease, Total	mg/L			< 5.0	-	-	-	-	-
Visible Sheen (100=Yes, 0=No)	None	99	99	0	0	-	0	0	0

Notes:
Highlight indicate result exceeded applicable criteria.
Half value used in monthly average when value is less than detection limit.
pH criteria is a range;6.0-9.5.
Sample Type:
P-Permitted
FD-Field Duplicate
FB-Field Blank
TB-Trip Blank



**Table 2 : Water Quality Results for Water Licence
Monitoring Location - MP-Q1-02**

Location Name Field Sample ID ALS Laboratory Work Order Sample Date Sample Type				MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02
				MP-Q1-02_2024-07-08	MP-Q1-02_2024-07-15	MP-Q1-02_2024-07-22	QP-CC3_2024-07-22	MP-Q1-02_2024-07-29
				WT2418945	BF2400187	BF2400201	BF2400201	BF2400211
				2024-07-08	2024-07-15	2024-07-22	2024-07-22	2024-07-29
				P	P	P	FD	P
Analyte	Units	Table 9 Criteria	Table 9 Criteria (Quarry)					
Conductivity	umhos/cm			360	-	-	-	-
pH, Lab	pH units	9.5	9.5	8.27	8.02	7.89	7.88	7.86
Total Suspended Solids	mg/L	30	30	< 1.0	1.0	< 1.0	< 1.0	< 1.0
Total Dissolved Solids	mg/L			224	262	295	338	317
Turbidity	NTU			1.25	1.85	0.80	0.74	1.36
Ammonia, Total (as N)	mg/L			0.501	-	-	-	-
Nitrate	mg/L			10.0	-	-	-	-
Oil and Grease, Total	mg/L			< 5.0	-	-	-	-
Visible Sheen (100=Yes, 0=No)	None	99	99	0	0	0	-	0
Mean Mortality to Daphnia magna	%		50	< 1.0	-	-	-	-
Mean Mortality to Rainbow Trout	%		50	< 1.0	-	-	-	-

Notes:
Highlight indicate result exceeded applicable criteria.
Half value used in monthly average when value is less than detection limit.
pH criteria is a range;6.0-9.5.
Sample Type:
P-Permitted
FD-Field Duplicate
FB-Field Blank
TB-Trip Blank



Table 2 : Water Quality Results for Water Licence
Monitoring Location - MS-01

			Location Name	MS-01	MS-01
			Field Sample ID	QW-BF1_2024-07-04	MS-01_2024-07-04
			ALS Laboratory Work Order	WT2418566	WT2418566
			Sample Date	2024-07-04	2024-07-04
			Sample Type	FB	P
Analyte	Units	Table 4 Criteria			
pH, Lab	pH units	9.5	-	8.51	
pH, Lab	pH units	9.5	5.30	-	
Total Suspended Solids	mg/L	35	< 1.0	1.5	
Total Dissolved Solids	mg/L		< 10	2360	
Turbidity	NTU		< 0.10	0.76	
Alkalinity, Total	mg/L		< 2.0	268	
Ammonia, Total (as N)	mg/L	4.0	0.0066	0.0411	
Total Kjeldahl Nitrogen	mg/L		0.051	8.85	
Fecal Coliforms	CFU/100mL	1000	< 1	1	
BOD	mg/L	30	< 3.0	< 3.0	
Oil and Grease, Total	mg/L		< 5.0	< 5.0	
Visible Sheen (100=Yes, 0=No)	None	99	-	0	
Phosphorus, Nutrient	mg/L	4.0	< 0.0020	0.564	

Notes:
Highlight indicate result exceeded applicable criteria.
Half value used in monthly average when value is less than detection limit.
pH criteria is a range;6.0-9.5.
Sample Type:
P-Permitted
FD-Field Duplicate
FB-Field Blank
TB-Trip Blank



Table 2 : Water Quality Results for Water Licence
Monitoring Location - MS-01B

			Location Name	MS-01B	MS-01B
			Field Sample ID	QW-BF2_2024-07-04	MS-01B_2024-07-04
			ALS Laboratory Work Order	WT2418566	WT2418566
			Sample Date	2024-07-04	2024-07-04
			Sample Type	FB	P
Analyte	Units	Table 4 Criteria			
pH, Lab	pH units	9.5	-	8.34	
pH, Lab	pH units	9.5	5.32	-	
Total Suspended Solids	mg/L	35	< 1.0	< 1.0	
Total Dissolved Solids	mg/L		< 10	474	
Turbidity	NTU		0.14	0.18	
Alkalinity, Total	mg/L		< 2.0	196	
Ammonia, Total (as N)	mg/L	4.0	0.0055	0.390	
Total Kjeldahl Nitrogen	mg/L		< 0.050	1.72	
Fecal Coliforms	CFU/100mL	1000	< 1	12	
BOD	mg/L	30	< 3.0	< 3.0	
Oil and Grease, Total	mg/L		< 5.0	< 5.0	
Visible Sheen (100=Yes, 0=No)	None	99	-	0	
Phosphorus, Nutrient	mg/L	4.0	0.0029	0.178	

Notes:
Highlight indicate result exceeded applicable criteria.
Half value used in monthly average when value is less than detection limit.
pH criteria is a range;6.0-9.5.
Sample Type:
P-Permitted
FD-Field Duplicate
FB-Field Blank
TB-Trip Blank



Table 2 : Water Quality Results for Water Licence
Monitoring Location - MS-08

			Location Name
			Field Sample ID
			ALS Laboratory Work Order
			Sample Date
			Sample Type
Analyte	Units	Table 6 Criteria	
Hardness	mg/L		94.6
Conductivity	umhos/cm		218
pH, Lab	pH units	9.5	7.20
Total Suspended Solids	mg/L	15	7.8
Total Dissolved Solids	mg/L		140
Turbidity	NTU		13.7
Alkalinity, Total	mg/L		12.3
Ammonia, Total (as N)	mg/L		0.184
Chloride	mg/L		1.94
Fluoride	mg/L		0.040
Nitrate	mg/L		2.95
Total Kjeldahl Nitrogen	mg/L		0.419
Sulfate	mg/L		71.1
Dissolved Organic	mg/L		1.01
Total Organic Carbon	mg/L		1.00
Aluminum - Total	mg/L		0.378
Antimony - Total	mg/L		< 0.00010
Arsenic - Total	mg/L	0.50	< 0.00010
Barium - Total	mg/L		0.00629
Cadmium - Total	mg/L		0.0000212
Calcium - Total	mg/L		6.89
Chromium - Total	mg/L		0.00105
Cobalt - Total	mg/L		0.00418
Copper - Total	mg/L	0.30	0.00149
Iron - Total	mg/L		0.614
Lead - Total	mg/L	0.20	0.000269
Lithium - Total	mg/L		0.0028
Magnesium - Total	mg/L		20.4
Manganese - Total	mg/L		0.336
Mercury - Total	mg/L		< 0.0000050
Molybdenum - Total	mg/L		0.00286
Nickel - Total	mg/L	0.50	0.00534
Phosphorus, Total	mg/L		< 0.050
Potassium - Total	mg/L		1.73
Selenium - Total	mg/L		0.00135
Sodium - Total	mg/L		0.831
Strontium - Total	mg/L		0.0116
Thallium - Total	mg/L		0.000013
Tin - Total	mg/L		< 0.00010
Titanium - Total	mg/L		0.0122
Uranium - Total	mg/L		0.000283
Vanadium - Total	mg/L		0.00057
Zinc - Total	mg/L	0.50	< 0.0030
Aluminum - Dissolved	mg/L		0.0033
Arsenic - Dissolved	mg/L		< 0.00010
Cadmium - Dissolved	mg/L		0.0000183
Calcium - Dissolved	mg/L		6.74
Copper - Dissolved	mg/L		0.00033

Notes:
Highlight indicate result exceeded applicable criteria.
Half value used in monthly average when value is less than detection limit.
pH criteria is a range;6.0-9.5.
Sample Type:
P-Permitted
FD-Field Duplicate
FB-Field Blank
TB-Trip Blank



Table 2 : Water Quality Results for Water Licence
Monitoring Location - MS-08

Iron - Dissolved	mg/L		< 0.010
Lead - Dissolved	mg/L		< 0.000050
Magnesium - Dissolved	mg/L		18.9
Manganese - Dissolved	mg/L		0.299
Mercury - Dissolved	mg/L		< 0.0000050
Molybdenum - Dissolved	mg/L		0.00300
Nickel - Dissolved	mg/L		0.00423
Potassium - Dissolved	mg/L		1.70
Selenium - Dissolved	mg/L		0.00160
Sodium - Dissolved	mg/L		0.772
Thallium - Dissolved	mg/L		< 0.000010
Uranium - Dissolved	mg/L		0.000154
Zinc - Dissolved	mg/L		0.0013
Visible Sheen (100=Yes, 0=No)	None	99	0
Mean Mortality to Daphnia magna	%	50	< 1.0
Mean Mortality to Rainbow Trout	%	50	< 1.0
Phosphorus, Nutrient	mg/L		0.0070

Notes:
Highlight indicate result exceeded applicable criteria.
Half value used in monthly average when value is less than detection limit.
pH criteria is a range;6.0-9.5.
Sample Type:
P-Permitted
FD-Field Duplicate
FB-Field Blank
TB-Trip Blank

**Table 2 : Water Quality Results for Water Licence
Monitoring Location - MS-MRY-09**

Location Name Field Sample ID ALS Laboratory Work Order Sample Date Sample Type			MS-MRY-09	MS-MRY-09	MS-MRY-09	MS-MRY-09	MS-MRY-09
			MS-MRY-09_2024-07-04	MS-MRY-09_2024-07-09	MS-MRY-09_2024-07-14	MS-MRY-09_2024-07-20	MS-MRY-09_2024-07-29
			BF2400159	BF2400176	BF2400185	BF2400199	BF2400207
			2024-07-04	2024-07-09	2024-07-14	2024-07-20	2024-07-29
			P	P	P	P	P
Analyte	Units	Table 6 Criteria					
Hardness	mg/L		50.0	-	-	-	-
pH, Lab	pH units	9.5	7.99	7.46	7.78	7.68	7.98
Total Suspended Solids	mg/L	15	< 1.0	1.5	< 1.0	< 1.0	< 1.0
Total Dissolved Solids	mg/L		64	50	51	52	72
Turbidity	NTU		1.04	1.18	0.89	0.78	1.62
Alkalinity, Total	mg/L		39.5	-	-	-	-
Ammonia, Total (as N)	mg/L		< 0.0050	-	-	-	-
Chloride	mg/L		6.01	-	-	-	-
Fluoride	mg/L		< 0.020	-	-	-	-
Nitrate	mg/L		0.024	-	-	-	-
Total Kjeldahl Nitrogen	mg/L		0.059	-	-	-	-
Sulfate	mg/L		1.50	-	-	-	-
Dissolved Organic	mg/L		1.64	-	-	-	-
Total Organic Carbon	mg/L		2.03	-	-	-	-
Aluminum - Total	mg/L		0.0481	-	-	-	-
Antimony - Total	mg/L		< 0.00010	-	-	-	-
Arsenic - Total	mg/L	0.50	< 0.00010	-	-	-	-
Barium - Total	mg/L		0.00649	-	-	-	-
Cadmium - Total	mg/L		< 0.0000050	-	-	-	-
Calcium - Total	mg/L		9.12	-	-	-	-
Chromium - Total	mg/L		< 0.00050	-	-	-	-
Cobalt - Total	mg/L		< 0.00010	-	-	-	-
Copper - Total	mg/L	0.30	0.00187	-	-	-	-
Iron - Total	mg/L		0.055	-	-	-	-
Lead - Total	mg/L	0.20	0.000066	-	-	-	-
Lithium - Total	mg/L		< 0.0010	-	-	-	-
Magnesium - Total	mg/L		6.60	-	-	-	-
Manganese - Total	mg/L		0.00105	-	-	-	-
Mercury - Total	mg/L		< 0.0000050	-	-	-	-
Molybdenum - Total	mg/L		0.000332	-	-	-	-
Nickel - Total	mg/L	0.50	< 0.00050	-	-	-	-
Phosphorus, Total	mg/L		< 0.050	-	-	-	-
Potassium - Total	mg/L		1.22	-	-	-	-
Selenium - Total	mg/L		< 0.000050	-	-	-	-
Sodium - Total	mg/L		0.450	-	-	-	-
Strontium - Total	mg/L		0.00577	-	-	-	-
Thallium - Total	mg/L		< 0.000010	-	-	-	-
Tin - Total	mg/L		< 0.00010	-	-	-	-
Titanium - Total	mg/L		0.00186	-	-	-	-
Uranium - Total	mg/L		0.000691	-	-	-	-
Vanadium - Total	mg/L		< 0.00050	-	-	-	-
Zinc - Total	mg/L	0.50	< 0.0030	-	-	-	-
Aluminum - Dissolved	mg/L		0.0087	-	-	-	-
Arsenic - Dissolved	mg/L		< 0.00010	-	-	-	-
Cadmium - Dissolved	mg/L		< 0.0000050	-	-	-	-
Calcium - Dissolved	mg/L		9.37	-	-	-	-

Notes:

Highlight indicate result exceeded applicable criteria.

Half value used in monthly average when value is less than detection limit.

pH criteria is a range;6.0-9.5.

Sample Type:

P-Permitted

FD-Field Duplicate

FB-Field Blank

TB-Trip Blank

**Table 2 : Water Quality Results for Water Licence
Monitoring Location - MS-MRY-09**

Copper - Dissolved	mg/L		0.00181	-	-	-	-
Iron - Dissolved	mg/L		< 0.010	-	-	-	-
Lead - Dissolved	mg/L		< 0.000050	-	-	-	-
Magnesium - Dissolved	mg/L		6.32	-	-	-	-
Manganese - Dissolved	mg/L		0.00018	-	-	-	-
Mercury - Dissolved	mg/L		< 0.0000050	-	-	-	-
Molybdenum - Dissolved	mg/L		0.000303	-	-	-	-
Nickel - Dissolved	mg/L		< 0.00050	-	-	-	-
Potassium - Dissolved	mg/L		1.20	-	-	-	-
Selenium - Dissolved	mg/L		< 0.000050	-	-	-	-
Sodium - Dissolved	mg/L		0.445	-	-	-	-
Thallium - Dissolved	mg/L		< 0.000010	-	-	-	-
Uranium - Dissolved	mg/L		0.000636	-	-	-	-
Zinc - Dissolved	mg/L		< 0.0010	-	-	-	-
Visible Sheen (100=Yes, 0=No)	None	99	0	0	0	0	0
Phenols	ug/L		< 1.0	-	-	-	-
Mean Mortality to Daphnia magna	%	50	< 1.0	-	-	-	-
Mean Mortality to Rainbow Trout	%	50	< 1.0	-	-	-	-
Phosphorus, Nutrient	mg/L		0.0022	-	-	-	-

Notes:

Highlight indicate result exceeded applicable criteria.

Half value used in monthly average when value is less than detection limit.

pH criteria is a range;6.0-9.5.

Sample Type:

P-Permitted

FD-Field Duplicate

FB-Field Blank

TB-Trip Blank



**Table 2 : Water Quality Results for Water Licence
Monitoring Location - MS-MRY-13A**

			Location Name	MS-MRY-13A	MS-MRY-13A	MS-MRY-13A	MS-MRY-13A
			Field Sample ID	MS-MRY-13A_2024-07-01	MS-MRY-13A_2024-07-07	MS-MRY-13A_2024-07-14	MS-MRY-13A_2024-07-28
			ALS Laboratory Work Order	BF2400155	BF2400173	BF2400185	BF2400207
			Sample Date	2024-07-01	2024-07-07	2024-07-14	2024-07-28
			Sample Type	P	P	P	P
Analyte	Units	Table 10 Criteria					
Conductivity	umhos/cm		649	-	-	-	-
pH, Lab	pH units	9.5	7.98	8.00	8.18	8.05	
Total Suspended Solids	mg/L	15	< 1.0	< 1.0	< 1.0	< 1.0	
Total Dissolved Solids	mg/L		381	318	375	500	
Turbidity	NTU		0.37	0.31	0.97	0.62	
Alkalinity, Total	mg/L		160	-	-	-	
Dissolved Organic	mg/L		4.69	-	-	-	
Total Organic Carbon	mg/L		4.89	-	-	-	
Aluminum - Total	mg/L		0.0066	-	-	-	
Antimony - Total	mg/L		0.00012	-	-	-	
Arsenic - Total	mg/L	0.50	0.00020	-	-	-	
Barium - Total	mg/L		0.0431	-	-	-	
Cadmium - Total	mg/L		0.0000115	-	-	-	
Calcium - Total	mg/L		56.2	-	-	-	
Chromium - Total	mg/L		0.00056	-	-	-	
Cobalt - Total	mg/L		0.00019	-	-	-	
Copper - Total	mg/L	0.30	0.00118	-	-	-	
Iron - Total	mg/L		0.015	-	-	-	
Lead - Total	mg/L	0.20	< 0.000050	-	-	-	
Lithium - Total	mg/L		0.0327	-	-	-	
Magnesium - Total	mg/L		39.2	-	-	-	
Manganese - Total	mg/L		0.00946	-	-	-	
Mercury - Total	mg/L		< 0.0000050	-	-	-	
Molybdenum - Total	mg/L		0.000477	-	-	-	
Nickel - Total	mg/L	0.50	0.0105	-	-	-	
Phosphorus, Total	mg/L		< 0.050	-	-	-	
Potassium - Total	mg/L		4.98	-	-	-	
Selenium - Total	mg/L		< 0.000050	-	-	-	
Sodium - Total	mg/L		18.9	-	-	-	
Strontium - Total	mg/L		0.0560	-	-	-	
Thallium - Total	mg/L		0.000018	-	-	-	
Tin - Total	mg/L		< 0.00010	-	-	-	
Titanium - Total	mg/L		< 0.00030	-	-	-	
Uranium - Total	mg/L		0.00277	-	-	-	
Vanadium - Total	mg/L		< 0.00050	-	-	-	
Zinc - Total	mg/L	0.50	< 0.0030	-	-	-	
Oil and Grease, Total	mg/L		< 5.0	-	-	-	
Visible Sheen (100=Yes,	None	99	0	0	0	0	
Phenols	ug/L		< 1.0	-	-	-	
F1 (C6-C10)	ug/L		< 25	-	-	-	
F2 (C10-C16)	ug/L		< 100	-	-	-	
F3 (C16-C34)	ug/L		< 250	-	-	-	
F4 (C34-C50)	ug/L		< 250	-	-	-	
Total Petroleum	ug/L		< 370	-	-	-	
Hydrocarbons (C6-C50)							

Notes:

Highlight indicate result exceeded applicable criteria.

Half value used in monthly average when value is less than detection limit.

pH criteria is a range;6.0-9.5.

Sample Type:

P-Permitted

FD-Field Duplicate

FB-Field Blank

TB-Trip Blank



**Table 2 : Water Quality Results for Water Licence
Monitoring Location - MS-MRY-13B**

Location Name Field Sample ID ALS Laboratory Work Order Sample Date Sample Type			MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B
			MS-MRY-13B_2024-07-01	MS-MRY-13B_2024-07-07	MS-MRY-13B_2024-07-14	MS-MRY-13B_2024-07-21	QD-BT1_2024-07-21	MS-MRY-13B_2024-07-28
			BF2400155	BF2400173	BF2400185	BF2400199	BF2400199	BF2400207
			2024-07-01	2024-07-07	2024-07-14	2024-07-21	2024-07-21	2024-07-28
			P	P	P	P	TB	P
Analyte	Units	Table 10 Criteria						
Conductivity	umhos/cm		910	-	-	-	-	-
pH, Lab	pH units	9.5	7.97	8.04	8.12	7.94	7.11	8.07
Total Suspended Solids	mg/L	15	1.2	1.2	2.4	< 1.0	< 1.2	< 1.0
Total Dissolved Solids	mg/L		595	419	466	475	< 18	465
Turbidity	NTU		0.54	0.68	1.27	0.92	0.12	1.78
Alkalinity, Total	mg/L		193	-	-	-	-	-
Dissolved Organic	mg/L		6.81	-	-	-	-	-
Total Organic Carbon	mg/L		6.76	-	-	-	-	-
Aluminum - Total	mg/L		0.0186	-	-	-	-	-
Antimony - Total	mg/L		0.00015	-	-	-	-	-
Arsenic - Total	mg/L	0.50	0.00027	-	-	-	-	-
Barium - Total	mg/L		0.0498	-	-	-	-	-
Cadmium - Total	mg/L		0.0000216	-	-	-	-	-
Calcium - Total	mg/L		95.7	-	-	-	-	-
Chromium - Total	mg/L		0.00064	-	-	-	-	-
Cobalt - Total	mg/L		0.00040	-	-	-	-	-
Copper - Total	mg/L	0.30	0.00172	-	-	-	-	-
Iron - Total	mg/L		0.062	-	-	-	-	-
Lead - Total	mg/L	0.20	< 0.000050	-	-	-	-	-
Lithium - Total	mg/L		0.0908	-	-	-	-	-
Magnesium - Total	mg/L		47.2	-	-	-	-	-
Manganese - Total	mg/L		0.0170	-	-	-	-	-
Mercury - Total	mg/L		< 0.0000050	-	-	-	-	-
Molybdenum - Total	mg/L		0.000479	-	-	-	-	-
Nickel - Total	mg/L	0.50	0.0144	-	-	-	-	-
Phosphorus, Total	mg/L		< 0.050	-	-	-	-	-
Potassium - Total	mg/L		6.64	-	-	-	-	-
Selenium - Total	mg/L		0.000078	-	-	-	-	-
Sodium - Total	mg/L		32.9	-	-	-	-	-
Strontium - Total	mg/L		0.138	-	-	-	-	-
Thallium - Total	mg/L		0.000018	-	-	-	-	-
Tin - Total	mg/L		< 0.00010	-	-	-	-	-
Titanium - Total	mg/L		< 0.00090	-	-	-	-	-
Uranium - Total	mg/L		0.0111	-	-	-	-	-
Vanadium - Total	mg/L		< 0.00050	-	-	-	-	-
Zinc - Total	mg/L	0.50	< 0.0030	-	-	-	-	-
Oil and Grease, Total	mg/L		< 5.0	-	-	-	-	-
Visible Sheen (100=Yes,	None	99	0	0	0	0	-	0
Phenols	ug/L		< 1.0	-	-	-	-	-
F1 (C6-C10)	ug/L		< 25	-	-	-	-	-
F2 (C10-C16)	ug/L		< 100	-	-	-	-	-
F3 (C16-C34)	ug/L		< 250	-	-	-	-	-
F4 (C34-C50)	ug/L		< 250	-	-	-	-	-
Total Petroleum Hydrocarbons (C6-C50)	ug/L		< 370	-	-	-	-	-

Notes:

Highlight indicate result exceeded applicable criteria.

Half value used in monthly average when value is less than detection limit.

pH criteria is a range;6.0-9.5.

Sample Type:

P-Permitted

FD-Field Duplicate

FB-Field Blank

TB-Trip Blank



**Table 2 : Water Quality Results for Water Licence
Monitoring Location - MS-C-A**

Location Name Field Sample ID ALS Laboratory Work Order Sample Date Sample Type			MS-C-A	MS-C-A	MS-C-A	MS-C-A	MS-C-A	MS-C-A	MS-C-A	MS-C-A
			MS-C-A_2024-07-01	QD-CC7_2024-07-01	MS-C-A_2024-07-07	QD-BF1_2024-07-07	MS-C-A_2024-07-14	QD-BF1_2024-07-14	MS-C-A_2024-07-21	MS-C-A_2024-07-28
			BF2400155	BF2400155	BF2400173	BF2400173	BF2400185	BF2400185	BF2400199	BF2400207
			2024-07-01	2024-07-01	2024-07-07	2024-07-07	2024-07-14	2024-07-14	2024-07-21	2024-07-28
			P	FD	P	FB	P	FB	P	P
Analyte	Units	Table 9 Criteria								
Conductivity	umhos/cm		346	346	-	-	-	-	-	-
pH, Lab	pH units	9.5	7.80	7.70	7.83	-	7.76	-	7.53	7.50
pH, Lab	pH units	9.5	-	-	-	5.48	-	5.33	-	-
Total Suspended Solids	mg/L	30	1.5	1.2	6.5	< 1.0	< 1.0	< 1.0	< 1.0	1.2
Total Dissolved Solids	mg/L		196	200	198	< 18	375	< 20	496	480
Turbidity	NTU		1.62	1.60	11.1	< 0.10	1.05	< 0.10	0.50	0.92
Ammonia, Total (as N)	mg/L		0.0270	0.0276	-	-	-	-	-	-
Nitrate	mg/L		2.79	2.83	-	-	-	-	-	-
Oil and Grease, Total	mg/L		< 5.0	< 5.0	-	-	-	-	-	-
Visible Sheen (100=Yes, 0=No)	None	99	0	-	0	-	0	-	0	0

Notes:

Highlight indicate result exceeded applicable criteria.

Half value used in monthly average when value is less than detection limit.

pH criteria is a range;6.0-9.5.

Sample Type:

P-Permitted

FD-Field Duplicate

FB-Field Blank

TB-Trip Blank



Table 2 : Water Quality Results for Water Licence
Monitoring Location - MS-C-B

Location Name Field Sample ID ALS Laboratory Work Order Sample Date Sample Type			MS-C-B	MS-C-B	MS-C-B	MS-C-B	MS-C-B
			MS-C-B_2024-07-01	MS-C-B_2024-07-07	MS-C-B_2024-07-14	MS-C-B_2024-07-21	MS-C-B_2024-07-28
			BF2400155	BF2400173	BF2400185	BF2400199	BF2400207
			2024-07-01	2024-07-07	2024-07-14	2024-07-21	2024-07-28
			P	P	P	P	P
Analyte	Units	Table 9 Criteria					
Conductivity	umhos/cm		354	-	-	-	-
pH, Lab	pH units	9.5	7.60	7.49	7.30	7.47	7.46
Total Suspended Solids	mg/L	30	3.5	1.8	< 1.0	< 1.0	< 1.0
Total Dissolved Solids	mg/L		202	200	386	502	489
Turbidity	NTU		1.84	7.78	0.78	0.65	1.37
Ammonia, Total (as N)	mg/L		0.0297	-	-	-	-
Nitrate	mg/L		2.84	-	-	-	-
Oil and Grease, Total	mg/L		< 5.0	-	-	-	-
Visible Sheen (100=Yes, 0=No)	None	99	0	0	0	0	0

Notes:
Highlight indicate result exceeded applicable criteria.
Half value used in monthly average when value is less than detection limit.
pH criteria is a range;6.0-9.5.
Sample Type:
P-Permitted
FD-Field Duplicate
FB-Field Blank
TB-Trip Blank



Table 2 : Water Quality Results for Water Licence
Monitoring Location - MS-C-C

Location Name Field Sample ID ALS Laboratory Work Order Sample Date Sample Type			MS-C-C	MS-C-C	MS-C-C	MS-C-C	MS-C-C	MS-C-C
			MS-C-C_2024-07-01	MS-C-C_2024-07-07	MS-C-C_2024-07-14	MS-C-C_2024-07-21	MS-C-C_2024-07-28	QD-CC1_2024-07-28
			BF2400155	BF2400173	BF2400185	BF2400199	BF2400207	BF2400207
			2024-07-01	2024-07-07	2024-07-14	2024-07-21	2024-07-28	2024-07-28
			P	P	P	P	P	FD
Analyte	Units	Table 9 Criteria						
Conductivity	umhos/cm		850	-	-	-	-	-
pH, Lab	pH units	9.5	7.89	8.06	8.04	7.91	8.00	7.98
Total Suspended Solids	mg/L	30	3.5	2.0	4.5	1.2	3.1	3.5
Total Dissolved Solids	mg/L		540	468	554	567	496	502
Turbidity	NTU		2.11	4.69	6.61	2.64	9.22	9.74
Ammonia, Total (as N)	mg/L		0.0278	-	-	-	-	-
Nitrate	mg/L		3.86	-	-	-	-	-
Oil and Grease, Total	mg/L		< 5.0	-	-	-	-	-
Visible Sheen (100=Yes, 0=No)	None	99	0	0	0	0	0	-

Notes:
Highlight indicate result exceeded applicable criteria.
Half value used in monthly average when value is less than detection limit.
pH criteria is a range;6.0-9.5.
Sample Type:
P-Permitted
FD-Field Duplicate
FB-Field Blank
TB-Trip Blank



Table 2 : Water Quality Results for Water Licence
Monitoring Location - MS-C-D

Location Name Field Sample ID ALS Laboratory Work Order Sample Date Sample Type			MS-C-D	MS-C-D	MS-C-D	MS-C-D	MS-C-D
			MS-C-D_2024-07-01	MS-C-D_2024-07-07	MS-C-D_2024-07-14	MS-C-D_2024-07-21	MS-C-D_2024-07-28
			BF2400155	BF2400173	BF2400185	BF2400199	BF2400207
			2024-07-01	2024-07-07	2024-07-14	2024-07-21	2024-07-28
			P	P	P	P	P
Analyte	Units	Table 9 Criteria					
Conductivity	umhos/cm		569	-	-	-	-
pH, Lab	pH units	9.5	8.36	8.24	8.40	8.18	8.22
Total Suspended Solids	mg/L	30	9.8	23.6	3.5	6.4	11.0
Total Dissolved Solids	mg/L		327	439	451	520	540
Turbidity	NTU		6.78	23.4	5.07	13.4	23.0
Ammonia, Total (as N)	mg/L		0.0456	-	-	-	-
Nitrate	mg/L		1.03	-	-	-	-
Oil and Grease, Total	mg/L		< 5.0	-	-	-	-
Visible Sheen (100=Yes, 0=No)	None	99	0	0	0	0	0

Notes:
Highlight indicate result exceeded applicable criteria.
Half value used in monthly average when value is less than detection limit.
pH criteria is a range;6.0-9.5.
Sample Type:
P-Permitted
FD-Field Duplicate
FB-Field Blank
TB-Trip Blank



Table 2 : Water Quality Results for Water Licence
Monitoring Location - MS-C-E

Location Name Field Sample ID ALS Laboratory Work Order Sample Date Sample Type			MS-C-E	MS-C-E	MS-C-E	MS-C-E
			MS-C-E_2024-07-07	MS-C-E_2024-07-14	MS-C-E_2024-07-21	MS-C-E_2024-07-28
			BF2400173	BF2400185	BF2400199	BF2400207
			2024-07-07	2024-07-14	2024-07-21	2024-07-28
			P	P	P	P
Analyte	Units	Table 9 Criteria				
Conductivity	umhos/cm		628	-	-	-
pH, Lab	pH units	9.5	8.11	8.09	7.92	8.09
Total Suspended Solids	mg/L	30	19.4	6.0	1.2	1.5
Total Dissolved Solids	mg/L		383	448	515	469
Turbidity	NTU		36.8	5.89	3.36	5.93
Ammonia, Total (as N)	mg/L		0.0188	-	-	-
Nitrate	mg/L		2.80	-	-	-
Oil and Grease, Total	mg/L		< 5.0	-	-	-
Visible Sheen (100=Yes, 0=No)	None	99	0	0	0	0

Notes:
Highlight indicate result exceeded applicable criteria.
Half value used in monthly average when value is less than detection limit.
pH criteria is a range;6.0-9.5.
Sample Type:
P-Permitted
FD-Field Duplicate
FB-Field Blank
TB-Trip Blank



Table 2 : Water Quality Results for Water Licence
Monitoring Location - MS-C-F

Location Name Field Sample ID ALS Laboratory Work Order Sample Date Sample Type			MS-C-F	MS-C-F	MS-C-F	MS-C-F	MS-C-F
			MS-C-F_2024-07-01	MS-C-F_2024-07-07	MS-C-F_2024-07-14	MS-C-F_2024-07-21	MS-C-F_2024-07-28
			BF2400155	BF2400173	BF2400185	BF2400199	BF2400207
			2024-07-01	2024-07-07	2024-07-14	2024-07-21	2024-07-28
			P	P	P	P	P
Analyte	Units	Table 9 Criteria					
Conductivity	umhos/cm		398	-	-	-	-
pH, Lab	pH units	9.5	7.63	7.70	7.53	7.55	7.78
Total Suspended Solids	mg/L	30	4.7	8.8	4.0	2.4	6.4
Total Dissolved Solids	mg/L		230	217	509	688	570
Turbidity	NTU		5.05	16.9	5.04	3.93	12.1
Ammonia, Total (as N)	mg/L		0.173	-	-	-	-
Nitrate	mg/L		3.50	-	-	-	-
Oil and Grease, Total	mg/L		< 5.0	-	-	-	-
Visible Sheen (100=Yes, 0=No)	None	99	0	0	0	0	0

Notes:
Highlight indicate result exceeded applicable criteria.
Half value used in monthly average when value is less than detection limit.
pH criteria is a range;6.0-9.5.
Sample Type:
P-Permitted
FD-Field Duplicate
FB-Field Blank
TB-Trip Blank



**Table 2 : Water Quality Results for Water Licence
Monitoring Location - MS-C-G**

Location Name			MS-C-G	MS-C-G	MS-C-G	MS-C-G	MS-C-G	MS-C-G	MS-C-G
Field Sample ID			MS-C-G_2024-07-01	MS-C-G_2024-07-07	MS-C-G_2024-07-14	QD-CC1_2024-07-14	MS-C-G_2024-07-21	MS-C-G_2024-07-28	MS-C-G_2024-07-30
ALS Laboratory Work Order			BF2400155	BF2400173	BF2400185	BF2400185	BF2400199	BF2400207	BF2400214
Sample Date			2024-07-01	2024-07-07	2024-07-14	2024-07-14	2024-07-21	2024-07-28	2024-07-30
Sample Type			P	P	P	FD	P	P	P
Analyte	Units	Table 9 Criteria							
Hardness	mg/L		-	-	-	-	-	-	116
Conductivity	umhos/cm		165	-	-	-	-	-	242
pH, Lab	pH units	9.5	7.69	7.85	7.80	7.70	7.58	7.72	7.44
Total Suspended Solids	mg/L	30	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Dissolved Solids	mg/L		78	84	121	121	145	129	143
Turbidity	NTU		0.33	0.68	0.15	< 0.10	0.13	1.18	1.33
Alkalinity, Total	mg/L		-	-	-	-	-	-	86.4
Ammonia, Total (as N)	mg/L		0.0071	-	-	-	-	-	< 0.0050
Chloride	mg/L		-	-	-	-	-	-	1.16
Nitrate	mg/L		1.41	-	-	-	-	-	8.12
Total Kjeldahl Nitrogen	mg/L		-	-	-	-	-	-	0.406
Sulfate	mg/L		-	-	-	-	-	-	2.35
Dissolved Organic	mg/L		-	-	-	-	-	-	2.46
Total Organic Carbon	mg/L		-	-	-	-	-	-	2.71
Aluminum - Total	mg/L		-	-	-	-	-	-	0.0034
Antimony - Total	mg/L		-	-	-	-	-	-	< 0.00010
Arsenic - Total	mg/L		-	-	-	-	-	-	< 0.00010
Barium - Total	mg/L		-	-	-	-	-	-	0.0119
Cadmium - Total	mg/L		-	-	-	-	-	-	< 0.0000050
Calcium - Total	mg/L		-	-	-	-	-	-	23.1
Chromium - Total	mg/L		-	-	-	-	-	-	< 0.00050
Cobalt - Total	mg/L		-	-	-	-	-	-	< 0.00010
Copper - Total	mg/L		-	-	-	-	-	-	0.00113
Iron - Total	mg/L		-	-	-	-	-	-	< 0.010
Lead - Total	mg/L		-	-	-	-	-	-	< 0.000050
Lithium - Total	mg/L		-	-	-	-	-	-	0.0012
Magnesium - Total	mg/L		-	-	-	-	-	-	14.7
Manganese - Total	mg/L		-	-	-	-	-	-	0.00014
Mercury - Total	mg/L		-	-	-	-	-	-	< 0.0000050
Molybdenum - Total	mg/L		-	-	-	-	-	-	0.000581
Nickel - Total	mg/L		-	-	-	-	-	-	0.00129
Phosphorus, Total	mg/L		-	-	-	-	-	-	< 0.050
Potassium - Total	mg/L		-	-	-	-	-	-	1.39
Selenium - Total	mg/L		-	-	-	-	-	-	< 0.000050
Sodium - Total	mg/L		-	-	-	-	-	-	1.16
Strontium - Total	mg/L		-	-	-	-	-	-	0.0133
Thallium - Total	mg/L		-	-	-	-	-	-	< 0.000010
Tin - Total	mg/L		-	-	-	-	-	-	< 0.00010
Titanium - Total	mg/L		-	-	-	-	-	-	< 0.00030
Uranium - Total	mg/L		-	-	-	-	-	-	0.000606
Vanadium - Total	mg/L		-	-	-	-	-	-	< 0.00050
Zinc - Total	mg/L		-	-	-	-	-	-	< 0.0030
Aluminum - Dissolved	mg/L		-	-	-	-	-	-	0.0033
Arsenic - Dissolved	mg/L		-	-	-	-	-	-	< 0.00010
Cadmium - Dissolved	mg/L		-	-	-	-	-	-	< 0.0000050
Calcium - Dissolved	mg/L		-	-	-	-	-	-	22.3
Copper - Dissolved	mg/L		-	-	-	-	-	-	0.00108

Notes:

Highlight indicate result exceeded applicable criteria.

Half value used in monthly average when value is less than detection limit.

pH criteria is a range;6.0-9.5.

Sample Type:

P-Permitted

FD-Field Duplicate

FB-Field Blank

TB-Trip Blank



Table 2 : Water Quality Results for Water Licence
Monitoring Location - MS-C-G

Iron - Dissolved	mg/L		-	-	-	-	-	-	< 0.010
Lead - Dissolved	mg/L		-	-	-	-	-	-	< 0.000050
Magnesium - Dissolved	mg/L		-	-	-	-	-	-	14.6
Manganese - Dissolved	mg/L		-	-	-	-	-	-	0.00014
Mercury - Dissolved	mg/L		-	-	-	-	-	-	< 0.0000050
Molybdenum -	mg/L		-	-	-	-	-	-	0.000523
Nickel - Dissolved	mg/L		-	-	-	-	-	-	0.00127
Potassium - Dissolved	mg/L		-	-	-	-	-	-	1.37
Selenium - Dissolved	mg/L		-	-	-	-	-	-	< 0.000050
Sodium - Dissolved	mg/L		-	-	-	-	-	-	1.19
Thallium - Dissolved	mg/L		-	-	-	-	-	-	< 0.000010
Uranium - Dissolved	mg/L		-	-	-	-	-	-	0.000646
Zinc - Dissolved	mg/L		-	-	-	-	-	-	0.0024
Oil and Grease, Total	mg/L		< 5.0	-	-	-	-	-	-
Visible Sheen (100=Yes, 0=No)	None	99	0	0	0	-	0	0	0
Phenols	ug/L		-	-	-	-	-	-	< 1.0
Phosphorus, Nutrient	mg/L		-	-	-	-	-	-	< 0.0020

Notes:
Highlight indicate result exceeded applicable criteria.
Half value used in monthly average when value is less than detection limit.
pH criteria is a range;6.0-9.5.
Sample Type:
P-Permitted
FD-Field Duplicate
FB-Field Blank
TB-Trip Blank



Table 2 : Water Quality Results for Water Licence
Monitoring Location - MS-C-H

Location Name Field Sample ID ALS Laboratory Work Order Sample Date Sample Type			MS-C-H	MS-C-H	MS-C-H	MS-C-H	MS-C-H
			MS-C-H_2024-07-01	MS-C-H_2024-07-07	MS-C-H_2024-07-14	MS-C-H_2024-07-21	MS-C-H_2024-07-28
			BF2400155	BF2400173	BF2400185	BF2400199	BF2400207
			2024-07-01	2024-07-07	2024-07-14	2024-07-21	2024-07-28
			P	P	P	P	P
Analyte	Units	Table 9 Criteria					
Conductivity	umhos/cm		167	-	-	-	-
pH, Lab	pH units	9.5	7.68	7.95	7.95	7.89	8.11
Total Suspended Solids	mg/L	30	< 1.3	< 1.0	< 1.0	< 1.0	< 1.0
Total Dissolved Solids	mg/L		88	128	160	125	143
Turbidity	NTU		0.69	0.40	0.33	0.44	0.52
Ammonia, Total (as N)	mg/L		0.246	-	-	-	-
Nitrate	mg/L		1.88	-	-	-	-
Oil and Grease, Total	mg/L		< 5.0	-	-	-	-
Visible Sheen (100=Yes, 0=No)	None	99	0	0	0	0	0

Notes:
Highlight indicate result exceeded applicable criteria.
Half value used in monthly average when value is less than detection limit.
pH criteria is a range;6.0-9.5.
Sample Type:
P-Permitted
FD-Field Duplicate
FB-Field Blank
TB-Trip Blank



**Table 2 : Water Quality Results for Water Licence
Monitoring Location - MQ-C-A**

				Location Name	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A
				Field Sample ID	MQ-C-A_2024-07-01	MQ-C-A_2024-07-07	QD-CC1_2024-07-07	MQ-C-A_2024-07-14	MQ-C-A_2024-07-21	MQ-C-A_2024-07-28
				ALS Laboratory Work Order	BF2400155	BF2400173	BF2400173	BF2400185	BF2400199	BF2400207
				Sample Date	2024-07-01	2024-07-07	2024-07-07	2024-07-14	2024-07-21	2024-07-28
				Sample Type	P	P	FD	P	P	P
Analyte	Units	Table 9 Criteria	Table 9 Criteria (Quarry)							
Conductivity	umhos/cm			96.9	-	-	-	-	-	-
pH, Lab	pH units	9.5	9.5	7.79	8.16	8.05	8.02	7.95	8.09	
Total Suspended Solids	mg/L	30	30	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Dissolved Solids	mg/L			50	114	100	121	137	156	
Turbidity	NTU			5.73	0.79	1.24	0.29	0.39	1.30	
Ammonia, Total (as N)	mg/L			< 0.0050	-	-	-	-	-	-
Nitrate	mg/L			0.020	-	-	-	-	-	-
Oil and Grease, Total	mg/L			< 5.0	-	-	-	-	-	-
Visible Sheen (100=Yes, 0=No)	None	99	99	0	0	-	0	0	0	0

Notes:

Highlight indicate result exceeded applicable criteria.

Half value used in monthly average when value is less than detection limit.

pH criteria is a range;6.0-9.5.

Sample Type:

P-Permitted

FD-Field Duplicate

FB-Field Blank

TB-Trip Blank



Table 2 : Water Quality Results for Water Licence
Monitoring Location - MQ-C-B

Location Name Field Sample ID ALS Laboratory Work Order Sample Date Sample Type				MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B
				MQ-C-B_2024-07-01	QD-BT7_2024-07-01	MQ-C-B_2024-07-07	MQ-C-B_2024-07-14	QD-BT1_2024-07-14	MQ-C-B_2024-07-21	MQ-C-B_2024-07-28
				BF2400155	BF2400155	BF2400173	BF2400185	BF2400185	BF2400199	BF2400207
				2024-07-01	2024-07-01	2024-07-07	2024-07-14	2024-07-14	2024-07-21	2024-07-28
				P	TB	P	P	TB	P	P
Analyte	Units	Table 9 Criteria	Table 9 Criteria (Quarry)							
Conductivity	umhos/cm			178	2.5	-	-	-	-	-
pH, Lab	pH units	9.5	9.5	7.93	-	8.08	7.84	7.08	7.86	8.08
pH, Lab	pH units	9.5	9.5	-	5.74	-	-	-	-	-
Total Suspended Solids	mg/L	30	30	< 1.0	< 1.0	2.2	5.3	< 1.0	3.2	1.2
Total Dissolved Solids	mg/L			95	< 22	127	163	22	188	141
Turbidity	NTU			0.88	< 0.10	9.58	13.2	< 0.10	13.5	4.65
Ammonia, Total (as N)	mg/L			0.0216	0.0117	-	-	-	-	-
Nitrate	mg/L			< 0.020	< 0.020	-	-	-	-	-
Oil and Grease, Total	mg/L			< 5.0	< 5.0	-	-	-	-	-
Visible Sheen (100=Yes, 0=No)	None	99	99	0	-	0	0	-	0	0

Notes:
Highlight indicate result exceeded applicable criteria.
Half value used in monthly average when value is less than detection limit.
pH criteria is a range;6.0-9.5.
Sample Type:
P-Permitted
FD-Field Duplicate
FB-Field Blank
TB-Trip Blank

**Table 2 : Water Quality Results for Water Licence
Monitoring Location - MQ-C-D**

				Location Name	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D
				Field Sample ID	MQ-C-D_2024-07-01	MQ-C-D_2024-07-07	MQ-C-D_2024-07-14	MQ-C-D_2024-07-21	MQ-C-D_2024-07-28
				ALS Laboratory Work Order	BF2400155	BF2400173	BF2400185	BF2400199	BF2400207
				Sample Date	2024-07-01	2024-07-07	2024-07-14	2024-07-21	2024-07-28
				Sample Type	P	P	P	P	P
Analyte	Units	Table 9 Criteria	Table 9 Criteria (Quarry)						
Conductivity	umhos/cm			231	225	-	-	-	-
pH, Lab	pH units	9.5	9.5	8.01	8.10	8.09	8.02	8.13	
Total Suspended Solids	mg/L	30	30	5.9	3.0	3.8	1.8	3.5	
Total Dissolved Solids	mg/L			131	122	161	148	143	
Turbidity	NTU			12.0	10.8	8.52	4.14	6.78	
Ammonia, Total (as N)	mg/L			0.0685	0.0238	-	-	-	
Nitrate	mg/L			0.633	0.351	-	-	-	
Oil and Grease, Total	mg/L			< 5.0	< 5.0	-	-	-	
Visible Sheen (100=Yes, 0=No)	None	99	99	0	0	0	0	0	
Mean Mortality to Daphnia magna	%		50	-	< 1.0	-	-	-	
Mean Mortality to Rainbow Trout	%		50	-	< 1.0	-	-	-	

Notes:

Highlight indicate result exceeded applicable criteria.
Half value used in monthly average when value is less than detection limit.
pH criteria is a range;6.0-9.5.

Sample Type:

P-Permitted
FD-Field Duplicate
FB-Field Blank
TB-Trip Blank

**Table 2 : Water Quality Results for Water Licence
Monitoring Location - KM105-SWMP-SEEP-04**

			Location Name
			ALS Laboratory Work Order
			Sample Date
			Sample Type
Analyte	Units	Criteria	P
Hardness	mg/L		175
Conductivity	umhos/cm		396
pH, Lab	pH units	9.5	7.78
Total Suspended Solids	mg/L	30	19.8
Total Dissolved Solids	mg/L		228
Turbidity	NTU		12.9
Alkalinity, Total	mg/L		46.9
Ammonia, Total (as N)	mg/L		0.189
Chloride	mg/L		14.8
Fluoride	mg/L		0.090
Nitrate	mg/L		3.65
Total Kjeldahl Nitrogen	mg/L		0.591
Sulfate	mg/L		108
Dissolved Organic Carbon	mg/L		1.96
Total Organic Carbon	mg/L		1.59
Aluminum - Total	mg/L		0.620
Antimony - Total	mg/L		< 0.00010
Arsenic - Total	mg/L		0.00011
Barium - Total	mg/L		0.0170
Cadmium - Total	mg/L		0.0000732
Calcium - Total	mg/L		33.4
Chromium - Total	mg/L		0.00173
Cobalt - Total	mg/L		0.00110
Copper - Total	mg/L		0.00174
Iron - Total	mg/L		0.969
Lead - Total	mg/L		0.000408
Lithium - Total	mg/L		0.0071
Magnesium - Total	mg/L		23.7
Manganese - Total	mg/L		0.0902
Mercury - Total	mg/L		< 0.0000050
Molybdenum - Total	mg/L		0.00796
Nickel - Total	mg/L		0.00245
Phosphorus, Total	mg/L		< 0.050
Potassium - Total	mg/L		8.26
Selenium - Total	mg/L		0.000582
Sodium - Total	mg/L		3.74
Strontium - Total	mg/L		0.145
Thallium - Total	mg/L		0.000020
Tin - Total	mg/L		< 0.00010
Titanium - Total	mg/L		0.0254
Uranium - Total	mg/L		0.00819
Vanadium - Total	mg/L		0.00115
Zinc - Total	mg/L		< 0.0030
Aluminum - Dissolved	mg/L		0.0080
Arsenic - Dissolved	mg/L		< 0.00010
Cadmium - Dissolved	mg/L		0.0000565
Calcium - Dissolved	mg/L		32.8
Copper - Dissolved	mg/L		0.00071
Iron - Dissolved	mg/L		< 0.010
Lead - Dissolved	mg/L		< 0.000050
Magnesium - Dissolved	mg/L		22.6
Manganese - Dissolved	mg/L		0.0760
Mercury - Dissolved	mg/L		< 0.0000050
Molybdenum - Dissolved	mg/L		0.00790
Nickel - Dissolved	mg/L		0.00119
Potassium - Dissolved	mg/L		8.01
Selenium - Dissolved	mg/L		0.000678
Sodium - Dissolved	mg/L		3.57
Thallium - Dissolved	mg/L		0.000013
Uranium - Dissolved	mg/L		0.00775
Zinc - Dissolved	mg/L		0.0019
Visible Sheen (100=Yes, 0=No)	None	99	0
Mean Mortality to Daphnia magna	%		< 1.0
Mean Mortality to Rainbow Trout	%		< 1.0
Phosphorus, Nutrient	mg/L		0.0112

Notes:

Highlight indicate result exceeded applicable criteria.

Half value used in monthly average when value is less than detection limit.

pH criteria is a range;6.0-9.5.

Sample Type:

P-Permitted

FD-Field Duplicate

FB-Field Blank

TB-Trip Blank

Table 3.1: Flow and Volume Measurements - Part I Item 11 - July 2024

DATE	Camp Lake Freshwater for Domestic Use - Daily Water MS-MRY-1 (m³)	Camp Lake Freshwater for Industrial Use - Daily Water MS-MRY-1 (m³)	Treated Sewage Effluent from MS- 01 to Discharge Location #1 (m³)	Treated Sewage Effluent from MS- 01B to Discharge Location #1 (m³)	Sewage Sludge Removed from Mine Site WWTPs to Incinerator or Disposal Offsite by Backhaul (m³)	Sewage Sludge/Off-Spec Effluent Removed from Mine Site WWTPs to PWSP at Mine Site (m³)	Sewage Sludge Removed from Lift Stations to PWSP at Mine Site (m³)	Km 32 Lake Milne Port Camp Daily Water Use for Domestic Purposes MP- MRY-3 (m³)	Km 32 Lake Milne Port Camp Daily Water Use for Industrial Purposes MP- MRY-3 (m³)	Treated Sewage Effluent from MP- 01 to Milne Inlet (m³)	Treated Sewage Effluent from MP- 01B to Milne Inlet (m³)	Sewage Sludge Removed from Milne Port WWTPs to Incinerator or Disposal Offsite by Backhaul (m³)	Sewage Sludge Removed from Lift Stations to PWSP at Milne Port (m³)	Sludge Removed from Milne Port WWTPs/WTPs to PWSP at Milne Port (m³)	Water Use for Dust Suppression from Authorized Sources (m³)	Effluent Discharge from Mine Site Waste Rock Stockpile Pond (MS-08) (m³)	Effluent Discharge from KM105 Surface Water Management Pond (MS-11) (m³)	Effluent Discharge from Milne Port Ore Stockpile Sedimentation Pond (West) to Milne Inlet (MP-06) (m³)
1-Jul-24	151.0	10.6	34.0	151.3	0.0	0.0	0.0	80.1	0.0	27.0	26.0	0.3	0.0	0.0	726.7	4,655.0	1,702.2	0.0
2-Jul-24	158.4	12.0	28.0	98.9	1.7	0.0	0.0	86.0	0.0	24.0	28.8	0.3	0.0	0.0	0.0	5,202.0	2,874.8	0.0
3-Jul-24	168.8	2.8	27.0	107.0	0.0	0.0	0.0	87.5	0.0	29.0	33.9	0.3	0.0	0.0	0.0	4,845.0	4,767.8	0.0
4-Jul-24	157.3	3.3	29.0	139.9	0.9	0.0	0.0	64.0	0.0	28.0	38.8	0.3	0.0	0.0	0.0	3,372.0	7,617.9	0.0
5-Jul-24	156.3	34.5	34.0	134.8	1.8	0.0	0.0	99.7	0.0	21.0	35.4	0.3	0.0	0.0	0.0	0.0	13,261.6	0.0
6-Jul-24	133.3	6.8	29.0	126.1	0.7	0.0	0.0	84.2	2.0	24.0	32.6	0.3	0.0	0.0	666.2	5,067.0	9,815.5	0.0
7-Jul-24	132.7	28.6	35.0	137.9	0.0	0.0	0.0	93.1	4.0	24.0	31.4	0.2	0.0	0.0	908.4	5,108.0	6,896.4	0.0
8-Jul-24	146.9	22.5	34.0	126.4	1.4	0.0	0.0	50.9	0.0	23.0	35.9	0.3	0.0	0.0	938.7	869.0	5,807.6	119.9
9-Jul-24	154.2	25.0	39.0	141.8	1.0	0.0	0.0	61.7	0.0	19.0	29.4	0.2	0.0	0.0	969.0	4,895.0	4,510.3	39.2
10-Jul-24	148.9	6.5	35.0	152.0	1.1	0.0	0.0	48.2	0.0	21.0	40.6	0.3	0.0	0.0	878.1	3,398.0	3,923.5	0.0
11-Jul-24	148.8	14.6	34.0	146.7	0.0	0.0	0.0	97.0	0.0	18.0	38.9	0.3	0.0	0.0	938.7	5,519.0	3,005.2	0.0
12-Jul-24	153.6	10.7	29.0	131.7	0.9	0.0	0.0	77.2	0.0	24.0	41.2	0.2	0.0	0.0	999.2	3,135.0	2,478.7	0.0
13-Jul-24	119.1	22.6	36.0	138.4	0.0	0.0	0.0	79.7	2.0	24.0	31.5	0.3	0.0	0.0	787.3	4,211.0	2,223.7	0.0
14-Jul-24	147.6	26.5	37.0	127.5	1.1	0.0	0.0	50.1	0.0	23.0	34.3	0.3	0.0	0.0	1029.5	2,441.0	1,755.7	0.0
15-Jul-24	111.0	9.3	42.0	131.5	1.0	0.0	0.0	53.4	0.0	23.0	29.5	0.3	0.0	0.0	212.0	342.0	1,564.6	602.0
16-Jul-24	135.4	21.4	38.0	114.7	1.7	0.0	0.0	46.9	0.0	20.0	34.1	0.2	0.0	0.0	333.1	2,897.0	2,740.1	1302.2
17-Jul-24	126.3	23.5	35.0	125.3	0.0	0.0	0.0	67.5	0.0	24.0	39.2	0.3	0.0	0.0	787.3	3,485.5	2,738.7	1302.2
18-Jul-24	115.9	22.3	40.0	119.4	0.7	0.0	0.0	47.1	2.0	20.0	35.4	0.2	0.0	0.0	817.6	3,485.5	2,010.9	1302.2
19-Jul-24	115.5	20.4	30.0	110.3	0.5	0.0	0.0	52.9	0.0	24.0	33.3	0.3	0.0	0.0	696.4	3,249.0	1,638.2	0.0
20-Jul-24	96.6	29.9	30.0	117.7	0.7	0.0	0.0	74.3	0.0	24.0	37.8	0.3	0.0	0.0	726.7	7,683.0	1,478.3	0.0
21-Jul-24	119.9	14.4	30.0	104.9	1.0	0.0	0.0	51.7	8.0	23.0	35.7	0.3	0.0	0.0	908.4	1,651.0	1,718.2	0.0
22-Jul-24	120.4	15.8	21.0	115.5	0.4	0.0	0.0	48.8	0.0	22.0	30.4	0.3	0.0	0.0	666.2	4,716.0	1,442.8	0.0
23-Jul-24	131.2	24.9	36.0	122.2	1.2	0.0	0.0	49.7	0.0	19.0	29.3	0.3	0.0	0.0	242.2	3,759.0	1,646.2	367.6
24-Jul-24	135.0	7.0	31.0	131.0	1.3	0.0	0.0	69.9	0.0	21.0	39.4	0.2	0.0	0.0	575.3	3,000.0	1,967.2	0.0
25-Jul-24	119.3	16.8	29.0	117.1	1.0	0.0	0.0	66.3	0.0	24.0	47.9	0.3	0.0	0.0	0.0	2,793.0	1,627.6	0.0
26-Jul-24	128.2	7.0	29.0	129.9	1.0	0.0	0.0	64.0	0.0	24.0	43.5	0.3	0.0	0.0	333.1	2,227.0	2,785.8	0.0
27-Jul-24	116.4	16.5	31.0	111.2	0.0	0.0	0.0	44.2	0.0	24.0	36.5	0.3	0.0	0.0	90.8	3,538.0	2,994.1	0.0
28-Jul-24	126.2	4.1	30.0	111.2	1.6	0.0	0.0	70.6	0.0	24.0	36.8	0.2	0.0	0.0	0.0	1,692.0	3,534.6	0.0
29-Jul-24	125.0	29.1	19.0	122.1	1.2	0.0	0.0	67.4	0.0	28.0	34.6	0.3	0.0	0.0	396.2	2,101.0	5,263.9	0.0
30-Jul-24	122.6	22.3	32.0	128.3	0.7	0.0	0.0	66.7	4.0	27.0	45.0	0.3	0.0	0.0	0.0	2,220.0	5,375.6	0.0
31-Jul-24	119.5	23.8	33.0	126.2	1.3	0.0	0.0	55.3	0.0	27.0	42.1	0.3	0.0	0.0	0.0	2,154.0	4,544.7	0.0
Total	4,141.4	535.4	996.0	3,898.9	25.6	0.0	0.0	2,056.0	22.0	727.0	1,108.9	8.2	0.0	0.0	15,627.0	103,710.0	115,712.2	5,035.3

Notes:

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

Notes:

MS-11 Volume Estimated from Hydrology Station at MS-C-A/B (Installed June 22)