

November 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
October 2024**

The following is the monthly report for October 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 October 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 October 2024.

Monitoring Program Results

Water Sampling and Analysis Results

Table 2 provides the analytical results detailing monitoring requirements. In October 2024, there was one (1) exceedance at a Surveillance Network Program (SNP) surface water monitoring station.

Elevated levels of Total Suspended Solids (TSS) were observed on October 2 at MS-C-F, located downstream of the KM 105 dam infrastructure within a ponded area. The exceedance is a result of natural erosion, sedimentation events, and Project-related run-off associated with the severe rainfall event experienced in late September. MS-C-F was sampled the following week and TSS levels were well below the specified Water Licence criteria.

As described in the September monthly report, Baffinland's Mary River Mine Site and the surrounding region experienced unprecedented levels of rainfall from September 20 through September 22. Over the 3-day period, a maximum of 82.2 mm of rainfall was recorded at the Mary River Mine Site weather station

in a 24-hour period. Baffinland has since worked with consultants and determined this to be greater than a 1 in 1,000 year rainfall event based on rainfall records between 2013 and 2023. Rainfall continued past this 24-hr event and accumulated a maximum of 108 mm of precipitation over a 72-hour period.

All water quality monitoring and inspections of SNP sampling locations and ESC measures continued to be completed until the onset of frozen winter conditions. Existing ESC measures were assessed at the MS-C-F location and maintained as necessary in accordance with the Surface Water Aquatic Effects Management Plan (SWAEMP). As of mid-October, frozen conditions prevailed at all SNP sites and containment pond facilities.

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 subsequent actions taken 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 samples continued to be collected at an established representative water quality monitoring station when flowing water was present, and a representative sample could be collected until the onset of frozen winter conditions in mid-October.

Flow and Volume Measurements

Table 3.1 provides a breakdown of volume measurements for October 2024, as required by Part I, Item 9 of the Licence. There were no exceedances of the source specific daily volume withdrawal limits in October 2024.

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:



Allison Parker
Environmental Specialist

Reviewed by:



William Bowden
Senior 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, Allison Parker, Irniq Lecompte (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	2024-10-16	P	WT2430940-003
MP-01B	Sewage Treatment Facility	2024-10-16	P	WT2430940-004
MP-05	Ore Stockpile Sedimentation Pond (East)	2024-10-02	P	BF2400370-003
MP-06	Ore Stockpile Sedimentation Pond (West)	2024-10-02	P	BF2400370-001
MP-06	Ore Stockpile Sedimentation Pond (West)	2024-10-02	TB	BF2400370-002
MP-06	Ore Stockpile Sedimentation Pond (West)	2024-10-10	P	BF2400395-001
MP-C-B	Downstream of Construction Area	2024-10-01	P	BF2400366-007
MP-C-B	Downstream of Construction Area	2024-10-06	P	BF2400383-002
MP-C-B	Downstream of Construction Area	2024-10-06	FD	BF2400383-003
MP-C-B	Downstream of Construction Area	2024-10-14	P	BF2400400-002
MP-C-K	Downstream of Construction Area	2024-10-06	P	BF2400383-004
MP-C-K	Downstream of Construction Area	2024-10-14	P	BF2400400-001
MP-C-H	Downstream of Construction Area	2024-10-06	P	BF2400383-001
MP-C-J	Downstream of Construction Area	2024-10-06	P	BF2400383-005
MP-Q1-01	Downstream of Q1 Quarry	2024-10-06	P	BF2400383-006
MP-Q1-02	Downstream of Q1 Quarry	2024-10-06	P	BF2400383-007
MS-01	Sewage Treatment Facility	2024-10-16	P	WT2430950-003
MS-01B	Sewage Treatment Facility	2024-10-16	P	WT2430950-001
MS-06	Ore Stockpile Pond Stormwater	2024-10-01	P	BF2400367-001
MS-06	Ore Stockpile Pond Stormwater	2024-10-12	P	BF2400396-001
MS-06	Ore Stockpile Pond Stormwater	2024-10-13	P	BF2400397-001

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-07	Run of Mine Ore Stockpile Pond Stormwater	2024-10-08	P	BF2400388-001
MS-08	Mine Waste Rock Stockpile Pond	2024-10-01	P	WT2429212-001
KM105-SWMP-SEEP-04	Mine KM105 Pond	2024-10-01	P	BF2400368
MS-MRY-09	Deposit 1 Surface Water Drainage	2024-10-03	P	BF2400372-013
MS-MRY-09	Deposit 1 Surface Water Drainage	2024-10-10	P	BF2400394-005
MS-MRY-13A	Downstream Non-Hazardous Landfill	2024-10-02	P	BF2400372-002
MS-MRY-13A	Downstream Non-Hazardous Landfill	2024-10-06	P	BF2400379-005
MS-MRY-13B	Downstream Non-Hazardous Landfill	2024-10-02	P	BF2400372-001
MS-MRY-13B	Downstream Non-Hazardous Landfill	2024-10-06	P	BF2400379-004
MS-C-A	Downstream of Construction and Borrow Areas	2024-10-03	P	BF2400372-008
MS-C-A	Downstream of Construction and Borrow Areas	2024-10-06	P	BF2400379-008
MS-C-B	Downstream of Construction and Borrow Areas	2024-10-03	P	BF2400372-009
MS-C-B	Downstream of Construction and Borrow Areas	2024-10-06	P	BF2400379-009
MS-C-C	Downstream of Construction and Borrow Areas	2024-10-03	P	BF2400372-012
MS-C-C	Downstream of Construction and Borrow Areas	2024-10-09	P	BF2400394-003
MS-C-D	Downstream of Construction and Borrow Areas	2024-10-03	P	BF2400372-011
MS-C-D	Downstream of Construction and Borrow Areas	2024-10-09	P	BF2400394-001
MS-C-D	Downstream of Construction and Borrow Areas	2024-10-09	TB	BF2400394-002
MS-C-E	Downstream of Construction and Borrow Areas	2024-10-03	P	BF2400372-010

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-E	Downstream of Construction and Borrow Areas	2024-10-09	P	BF2400394-004
MS-C-E	Downstream of Construction and Borrow Areas	2024-10-13	P	BF2400398-004
MS-C-F	Downstream of Construction and Borrow Areas	2024-10-02	P	BF2400372-007
MS-C-F	Downstream of Construction and Borrow Areas	2024-10-08	P	BF2400385-002
MS-C-G	Downstream of Construction and Borrow Areas	2024-10-02	P	BF2400372-003
MS-C-G	Downstream of Construction and Borrow Areas	2024-10-02	FB	BF2400372-004
MS-C-G	Downstream of Construction and Borrow Areas	2024-10-06	P	BF2400379-006
MS-C-G	Downstream of Construction and Borrow Areas	2024-10-13	P	BF2400398-005
MS-C-H	Downstream of Construction and Borrow Areas	2024-10-02	P	BF2400372-005
MS-C-H	Downstream of Construction and Borrow Areas	2024-10-02	TB	BF2400372-006
MS-C-H	Downstream of Construction and Borrow Areas	2024-10-06	P	BF2400379-007
MQ-C-A	Downstream of QMR2 Quarry	2024-10-04	P	BF2400375-001
MQ-C-A	Downstream of QMR2 Quarry	2024-10-06	P	BF2400379-001
MQ-C-A	Downstream of QMR2 Quarry	2024-10-06	FD	BF2400379-010
MQ-C-A	Downstream of QMR2 Quarry	2024-10-13	P	BF2400398-001
MQ-C-B	Downstream of QMR2 Quarry	2024-10-04	P	BF2400375-003
MQ-C-B	Downstream of QMR2 Quarry	2024-10-06	P	BF2400379-003
MQ-C-B	Downstream of QMR2 Quarry	2024-10-13	P	BF2400398-003
MQ-C-D	Downstream of QMR2 Quarry	2024-10-04	P	BF2400375-002

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**

MQ-C-D	Downstream of QMR2 Quarry	2024-10-06	P	BF2400379-002
MQ-C-D	Downstream of QMR2 Quarry	2024-10-13	P	BF2400398-002

Notes:

Sample Types:

P - Permitted Sample

FB - Field Blank

FD - Field Duplicate

TB - Trip Blank

NST - No Sample Taken



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

		Location Name	MP-01
		Field Sample ID	MP-01_2024-10-16
		ALS Laboratory Work Order	WT2430940
		Sample Date	2024-10-16
		Sample Type	P
Analyte	Units	Table Criteria	
pH, Lab	pH units	6.0-9.5	7.95
Total Suspended Solids	mg/L	120	1.4
Total Dissolved Solids	mg/L	-	853
Turbidity	NTU	-	0.44
Alkalinity, Total	mg/L	-	99.2
Ammonia, Total (as N)	mg/L	-	0.0323
Total Kjeldahl Nitrogen	mg/L	-	1.20
Fecal Coliforms	CFU/100mL	10000	< 1
BOD	mg/L	100	< 2.0
Oil and Grease, Total	mg/L	-	< 5.0
Visible Sheen	-	No Visible Sheen	No Visible Sheen
Phosphorus, Nutrient	mg/L	4.0	4.80

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
Field Sample ID			MP-01B_2024-10-16
ALS Laboratory Work Order			WT2430940
Sample Date			2024-10-16
Sample Type			P
Analyte	Units	Table Criteria	
pH, Lab	pH units	6.0-9.5	7.90
Total Suspended Solids	mg/L	120	< 1.0
Total Dissolved Solids	mg/L	-	685
Turbidity	NTU	-	0.12
Alkalinity, Total	mg/L	-	86.0
Ammonia, Total (as N)	mg/L	-	0.0280
Total Kjeldahl Nitrogen	mg/L	-	1.16
Fecal Coliforms	CFU/100mL	10000	2
BOD	mg/L	100	< 2.0
Oil and Grease, Total	mg/L	-	< 5.0
Visible Sheen	-	No Visible Sheen	No Visible Sheen
Phosphorus, Nutrient	mg/L	-	8.46

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-05

		Location Name	MP-05
		Field Sample ID	MP-05_2024-10-02
		ALS Laboratory Work Order	BF2400370
		Sample Date	2024-10-02
		Sample Type	P
Analyte	Units	Table Criteria	
Hardness	mg/L	-	327
pH, Lab	pH units	6.0-9.5	8.23
Total Suspended Solids	mg/L	30	4.3
Total Dissolved Solids	mg/L	-	490
Turbidity	NTU	-	6.64
Alkalinity, Total	mg/L	-	173
Ammonia, Total (as N)	mg/L	-	0.0766
Chloride	mg/L	-	82.4
Fluoride	mg/L	-	0.179
Nitrate	mg/L	-	3.46
Total Kjeldahl Nitrogen	mg/L	-	0.574
Sulfate	mg/L	-	118
Dissolved Organic Carbon	mg/L	-	5.22
Total Organic Carbon	mg/L	-	5.30
Aluminum - Total	mg/L	-	0.0682
Antimony - Total	mg/L	-	0.00012
Arsenic - Total	mg/L	-	0.00026
Barium - Total	mg/L	-	0.0129
Cadmium - Total	mg/L	-	< 0.0000050
Calcium - Total	mg/L	-	67.8
Chromium - Total	mg/L	-	< 0.00050
Cobalt - Total	mg/L	-	0.00056
Copper - Total	mg/L	-	0.00162
Iron - Total	mg/L	-	0.135
Lead - Total	mg/L	-	0.000186
Lithium - Total	mg/L	-	0.0115
Magnesium - Total	mg/L	-	38.3
Manganese - Total	mg/L	-	0.335
Mercury - Total	mg/L	-	< 0.0000050
Molybdenum - Total	mg/L	-	0.00524
Nickel - Total	mg/L	-	0.00156
Phosphorus, Total	mg/L	-	< 0.050
Potassium - Total	mg/L	-	6.20
Selenium - Total	mg/L	-	0.000193
Sodium - Total	mg/L	-	37.2
Strontium - Total	mg/L	-	0.172
Thallium - Total	mg/L	-	0.000011

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-05**

Tin - Total	mg/L	-	< 0.00010
Titanium - Total	mg/L	-	< 0.00300
Uranium - Total	mg/L	-	0.140
Vanadium - Total	mg/L	-	< 0.00050
Zinc - Total	mg/L	-	0.0052
Aluminum - Dissolved	mg/L	-	0.0387
Arsenic - Dissolved	mg/L	-	0.00023
Cadmium - Dissolved	mg/L	-	0.0000067
Calcium - Dissolved	mg/L	-	68.5
Copper - Dissolved	mg/L	-	0.00147
Iron - Dissolved	mg/L	-	0.060
Lead - Dissolved	mg/L	-	0.000090
Magnesium - Dissolved	mg/L	-	39.1
Manganese - Dissolved	mg/L	-	0.328
Mercury - Dissolved	mg/L	-	< 0.0000050
Molybdenum - Dissolved	mg/L	-	0.00504
Nickel - Dissolved	mg/L	-	0.00121
Potassium - Dissolved	mg/L	-	6.06
Selenium - Dissolved	mg/L	-	0.000196
Sodium - Dissolved	mg/L	-	37.0
Thallium - Dissolved	mg/L	-	0.000011
Uranium - Dissolved	mg/L	-	0.142
Zinc - Dissolved	mg/L	-	0.0046
Visible Sheen	-	No Visible Sheen	No Visible Sheen
Phenols	ug/L	-	< 1.0
Mean Mortality to Daphnia magna	-	Not Acutely Toxic	Not Acutely Toxic
Mean Mortality to Rainbow Trout	-	Not Acutely Toxic	Not Acutely Toxic
Phosphorus, Nutrient	mg/L	-	0.0046

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
			MP-06_2024-10-02	QP-BT2_2024-10-02	MP-06_2024-10-10
			BF2400370	BF2400370	BF2400395
			2024-10-02	2024-10-02	2024-10-10
			P	TB	P
Analyte	Units	Table Criteria			
Hardness	mg/L	-	331	< 0.50	344
pH, Lab	pH units	6.0-9.5	8.20	6.84	8.10
Total Suspended Solids	mg/L	30	17.6	2.6	< 1.0
Total Dissolved Solids	mg/L	-	515	< 20	517
Turbidity	NTU	-	25.3	< 0.10	6.13
Alkalinity, Total	mg/L	-	159	< 2.0	175
Ammonia, Total (as N)	mg/L	-	0.206	< 0.0050	0.221
Chloride	mg/L	-	81.8	< 0.50	81.7
Fluoride	mg/L	-	0.164	< 0.020	0.186
Nitrate	mg/L	-	3.22	< 0.020	3.85
Total Kjeldahl Nitrogen	mg/L	-	0.706	< 0.050	0.531
Sulfate	mg/L	-	137	< 0.30	119
Dissolved Organic Carbon	mg/L	-	5.03	< 0.50	6.84
Total Organic Carbon	mg/L	-	4.66	< 0.50	4.53
Aluminum - Total	mg/L	-	0.194	< 0.0030	0.0648
Antimony - Total	mg/L	-	0.00013	< 0.00010	< 0.00100
Arsenic - Total	mg/L	-	0.00027	< 0.00010	< 0.00100
Barium - Total	mg/L	-	0.0146	< 0.00010	0.0122
Cadmium - Total	mg/L	-	0.0000066	< 0.0000050	< 0.0000500
Calcium - Total	mg/L	-	65.8	< 0.050	71.6
Chromium - Total	mg/L	-	< 0.00050	< 0.00050	< 0.00500
Cobalt - Total	mg/L	-	0.00115	< 0.00010	< 0.00100
Copper - Total	mg/L	-	0.00173	< 0.00050	< 0.00500
Iron - Total	mg/L	-	0.316	< 0.010	0.124
Lead - Total	mg/L	-	0.000395	0.000057	< 0.000500
Lithium - Total	mg/L	-	0.0126	< 0.0010	0.0118
Magnesium - Total	mg/L	-	40.5	< 0.0050	40.0
Manganese - Total	mg/L	-	0.466	0.00011	0.512
Mercury - Total	mg/L	-	< 0.0000050	< 0.0000050	< 0.0000050
Molybdenum - Total	mg/L	-	0.00429	< 0.000050	0.00518
Nickel - Total	mg/L	-	0.00159	< 0.00050	< 0.00500
Phosphorus, Total	mg/L	-	< 0.050	< 0.050	< 0.500
Potassium - Total	mg/L	-	6.25	< 0.050	6.18
Selenium - Total	mg/L	-	0.000251	< 0.000050	< 0.000500
Sodium - Total	mg/L	-	35.3	< 0.050	37.2
Strontium - Total	mg/L	-	0.173	< 0.00020	0.165

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**

Thallium - Total	mg/L	-	0.000018	< 0.000010	< 0.000100
Tin - Total	mg/L	-	0.00013	< 0.00010	< 0.00100
Titanium - Total	mg/L	-	0.00582	< 0.00030	< 0.00300
Uranium - Total	mg/L	-	0.114	< 0.000010	0.149
Vanadium - Total	mg/L	-	< 0.00050	< 0.00050	< 0.00500
Zinc - Total	mg/L	-	0.0054	< 0.0030	< 0.0300
Aluminum - Dissolved	mg/L	-	0.0117	< 0.0010	0.0635
Arsenic - Dissolved	mg/L	-	0.00018	< 0.00010	< 0.00100
Cadmium - Dissolved	mg/L	-	0.0000063	< 0.0000050	< 0.0000500
Calcium - Dissolved	mg/L	-	67.1	< 0.050	67.4
Copper - Dissolved	mg/L	-	0.00148	< 0.00020	< 0.00200
Iron - Dissolved	mg/L	-	< 0.010	< 0.010	< 0.100
Lead - Dissolved	mg/L	-	< 0.000050	< 0.000050	< 0.000500
Magnesium - Dissolved	mg/L	-	41.3	< 0.0050	39.3
Manganese - Dissolved	mg/L	-	0.457	< 0.00010	0.497
Mercury - Dissolved	mg/L	-	< 0.0000050	< 0.0000050	< 0.0000050
Molybdenum - Dissolved	mg/L	-	0.00434	< 0.000050	0.00482
Nickel - Dissolved	mg/L	-	0.00129	< 0.00050	< 0.00500
Potassium - Dissolved	mg/L	-	6.30	< 0.050	6.16
Selenium - Dissolved	mg/L	-	0.000305	< 0.000050	< 0.000500
Sodium - Dissolved	mg/L	-	35.4	< 0.050	36.8
Thallium - Dissolved	mg/L	-	0.000017	< 0.000010	< 0.000100
Uranium - Dissolved	mg/L	-	0.116	< 0.000010	0.141
Zinc - Dissolved	mg/L	-	0.0034	< 0.0010	0.0111
Visible Sheen	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen
Phenols	ug/L	-	< 1.0	< 1.0	< 1.0
Phosphorus, Nutrient	mg/L	-	0.0076	< 0.0020	0.0041

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 Field Sample ID ALS Laboratory Work Order Sample Date Sample Type			MP-C-B	MP-C-B	MP-C-B	MP-C-B
			MP-C-B_2024-10-01	MP-C-B_2024-10-06	QD-CC8_2024-10-06	MP-C-B_2024-10-14
			BF2400366	BF2400383	BF2400383	BF2400400
			2024-10-01	2024-10-06	2024-10-06	2024-10-14
			P	P	FD	P
Analyte	Units	Table Criteria				
Conductivity	umhos/cm	-	-	502	498	-
pH, Lab	pH units	6.0-9.5	8.04	8.06	8.07	7.66
Total Suspended Solids	mg/L	30	11.7	5.8	7.0	< 1.0
Total Dissolved Solids	mg/L	-	300	302	310	392
Turbidity	NTU	-	47.4	25.7	24.9	2.97
Ammonia, Total (as N)	mg/L	-	-	0.197	0.195	-
Nitrate	mg/L	-	-	2.56	2.57	-
Oil and Grease, Total	mg/L	-	-	< 5.0	< 5.0	-
Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen

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_2024-10-06	MP-C-K_2024-10-14
			BF2400383	BF2400400
			2024-10-06	2024-10-14
			P	P
Analyte	Units	Table Criteria		
Conductivity	umhos/cm	-	1050	-
pH, Lab	pH units	6.0-9.5	7.97	7.61
Total Suspended Solids	mg/L	30	< 1.0	< 1.3
Total Dissolved Solids	mg/L	-	705	730
Turbidity	NTU	-	1.02	0.14
Ammonia, Total (as N)	mg/L	-	0.0120	-
Nitrate	mg/L	-	2.91	-
Oil and Grease, Total	mg/L	-	< 5.0	-
Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen

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			MP-C-H
Field Sample ID			MP-C-H_2024-10-06
ALS Laboratory Work Order			BF2400383
Sample Date			2024-10-06
Sample Type			P
Analyte	Units	Table Criteria	
Conductivity	umhos/cm	-	267
pH, Lab	pH units	6.0-9.5	8.13
Total Suspended Solids	mg/L	30	< 1.0
Total Dissolved Solids	mg/L	-	132
Turbidity	NTU	-	0.50
Ammonia, Total (as N)	mg/L	-	< 0.0050
Nitrate	mg/L	-	0.050
Oil and Grease, Total	mg/L	-	< 5.0
Visible Sheen	-	No Visible Sheen	No Visible Sheen

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
			Field Sample ID	MP-C-J_2024-10-06
			ALS Laboratory Work Order	BF2400383
			Sample Date	2024-10-06
			Sample Type	P
Analyte	Units	Table Criteria		
Conductivity	umhos/cm	-		391
pH, Lab	pH units	6.0-9.5		7.99
Total Suspended Solids	mg/L	30		< 1.0
Total Dissolved Solids	mg/L	-		235
Turbidity	NTU	-		0.35
Ammonia, Total (as N)	mg/L	-		0.0152
Nitrate	mg/L	-		0.049
Oil and Grease, Total	mg/L	-		< 5.0
Visible Sheen	-	No Visible Sheen		No Visible Sheen

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
		Field Sample ID	MP-Q1-01_2024-10-06
		ALS Laboratory Work Order	BF2400383
		Sample Date	2024-10-06
		Sample Type	P
Analyte	Units	Table Criteria	
Conductivity	umhos/cm	-	166
pH, Lab	pH units	6.0-9.5	7.95
Total Suspended Solids	mg/L	30	< 1.0
Total Dissolved Solids	mg/L	-	122
Turbidity	NTU	-	4.58
Ammonia, Total (as N)	mg/L	-	< 0.0050
Nitrate	mg/L	-	0.242
Oil and Grease, Total	mg/L	-	< 5.0
Visible Sheen	-	No Visible Sheen	No Visible Sheen
Mean Mortality to Daphnia magna	-	Not Acutly Toxic	Not Acutly Toxic
Mean Mortality to Rainbow Trout	-	Not Acutly Toxic	Not Acutly Toxic

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	MP-Q1-02
			Field Sample ID	MP-Q1-02_2024-10-06
			ALS Laboratory Work Order	BF2400383
			Sample Date	2024-10-06
			Sample Type	P
Analyte	Units	Table Criteria		
Conductivity	umhos/cm	-		480
pH, Lab	pH units	6.0-9.5		7.88
Total Suspended Solids	mg/L	30		< 1.0
Total Dissolved Solids	mg/L	-		228
Turbidity	NTU	-		2.64
Ammonia, Total (as N)	mg/L	-		0.264
Nitrate	mg/L	-		14.3
Oil and Grease, Total	mg/L	-		< 5.0
Visible Sheen	-	No Visible Sheen		No Visible Sheen

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
		Field Sample ID	MS-01_2024-10-16
		ALS Laboratory Work Order	WT2430950
		Sample Date	2024-10-16
		Sample Type	P
Analyte	Units	Table Criteria	
pH, Lab	pH units	6.0-9.5	8.38
Total Suspended Solids	mg/L	35	4.8
Total Dissolved Solids	mg/L	-	2370
Turbidity	NTU	-	1.58
Alkalinity, Total	mg/L	-	261
Ammonia, Total (as N)	mg/L	4.0	0.0406
Total Kjeldahl Nitrogen	mg/L	-	4.13
Fecal Coliforms	CFU/100mL	1000	< 1
BOD	mg/L	30	< 2.0
Oil and Grease, Total	mg/L	-	< 5.0
Visible Sheen	-	No Visible Sheen	No Visible Sheen
Phosphorus, Nutrient	mg/L	4.0	0.353

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
Field Sample ID			MS-01B_2024-10-16
ALS Laboratory Work Order			WT2430950
Sample Date			2024-10-16
Sample Type			P
Analyte	Units	Table Criteria	
pH, Lab	pH units	6.0-9.5	8.34
Total Suspended Solids	mg/L	35	< 1.0
Total Dissolved Solids	mg/L	-	549
Turbidity	NTU	-	0.17
Alkalinity, Total	mg/L	-	156
Ammonia, Total (as N)	mg/L	4.0	0.0290
Total Kjeldahl Nitrogen	mg/L	-	1.20
Fecal Coliforms	CFU/100mL	1000	< 1
BOD	mg/L	30	< 2.0
Oil and Grease, Total	mg/L	-	< 5.0
Visible Sheen	-	No visible sheen	No visible sheen
Phosphorus, Nutrient	mg/L	1.0	0.793

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-06**

Location Name Field Sample ID ALS Laboratory Work Order Sample Date Sample Type			MS-06	MS-06	MS-06
			MS-06_2024-10-01	MS-06_2024-10-12	MS-06_2024-10-13
			BF2400367	BF2400396	BF2400397
			2024-10-01	2024-10-12	2024-10-13
			P	P	P
Analyte	Units	Table Criteria			
Hardness	mg/L	-	599	-	-
Conductivity	umhos/cm	-	1460	1900	1920
pH, Lab	pH units	6.0-9.5	7.35	6.94	6.91
Total Suspended Solids	mg/L	30	27.4	< 1.0	< 1.0
Total Dissolved Solids	mg/L	-	1040	1550	1520
Turbidity	NTU	-	64.4	7.97	5.68
Alkalinity, Total	mg/L	-	18.9	-	-
Ammonia, Total (as N)	mg/L	-	6.27	12.0	13.0
Chloride	mg/L	-	83.6	-	-
Fluoride	mg/L	-	< 0.100	-	-
Nitrate	mg/L	-	14.0	-	-
Total Kjeldahl Nitrogen	mg/L	-	7.88	-	-
Sulfate	mg/L	-	530	-	-
Dissolved Organic Carbon	mg/L	-	1.84	-	-
Total Organic Carbon	mg/L	-	2.34	-	-
Aluminum - Total	mg/L	-	0.427	0.0302	< 0.0300
Antimony - Total	mg/L	-	< 0.00100	< 0.00100	< 0.00100
Arsenic - Total	mg/L	-	< 0.00100	< 0.00100	< 0.00100
Barium - Total	mg/L	-	0.0230	0.0188	0.0189
Cadmium - Total	mg/L	-	0.000104	0.000135	0.000142
Calcium - Total	mg/L	-	40.8	52.5	53.3
Chromium - Total	mg/L	-	< 0.00500	< 0.00500	< 0.00500
Cobalt - Total	mg/L	-	0.0586	0.102	0.105
Copper - Total	mg/L	-	< 0.00500	< 0.00500	< 0.00500
Iron - Total	mg/L	-	1.10	0.110	< 0.100
Lead - Total	mg/L	-	< 0.000500	< 0.000500	< 0.000500
Lithium - Total	mg/L	-	0.0309	0.0550	0.0560
Magnesium - Total	mg/L	-	123	188	191
Manganese - Total	mg/L	-	17.0	25.9	26.8
Mercury - Total	mg/L	-	< 0.0000050	-	-
Molybdenum - Total	mg/L	-	0.00135	0.00111	0.00110
Nickel - Total	mg/L	-	0.0348	0.0594	0.0625
Phosphorus, Total	mg/L	-	< 0.500	< 0.500	< 0.500
Potassium - Total	mg/L	-	7.91	8.27	8.46
Selenium - Total	mg/L	-	0.00130	0.00208	0.00237
Sodium - Total	mg/L	-	37.0	62.6	63.8
Strontium - Total	mg/L	-	0.0916	0.109	0.110

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-06**

Thallium - Total	mg/L	-	0.000220	0.000368	0.000395
Tin - Total	mg/L	-	< 0.00100	< 0.00100	< 0.00100
Titanium - Total	mg/L	-	< 0.0200	< 0.00300	< 0.00300
Uranium - Total	mg/L	-	0.000357	< 0.000100	< 0.000100
Vanadium - Total	mg/L	-	< 0.00500	< 0.00500	< 0.00500
Zinc - Total	mg/L	-	< 0.0300	< 0.0300	< 0.0300
Aluminum - Dissolved	mg/L	-	< 0.0100	-	-
Arsenic - Dissolved	mg/L	-	< 0.00100	-	-
Cadmium - Dissolved	mg/L	-	0.0000896	-	-
Calcium - Dissolved	mg/L	-	40.2	-	-
Copper - Dissolved	mg/L	-	< 0.00200	-	-
Iron - Dissolved	mg/L	-	< 0.100	-	-
Lead - Dissolved	mg/L	-	< 0.000500	-	-
Magnesium - Dissolved	mg/L	-	121	-	-
Manganese - Dissolved	mg/L	-	15.6	-	-
Mercury - Dissolved	mg/L	-	< 0.0000050	-	-
Molybdenum - Dissolved	mg/L	-	0.00142	-	-
Nickel - Dissolved	mg/L	-	0.0322	-	-
Potassium - Dissolved	mg/L	-	8.07	-	-
Selenium - Dissolved	mg/L	-	0.00128	-	-
Sodium - Dissolved	mg/L	-	36.0	-	-
Thallium - Dissolved	mg/L	-	0.000227	-	-
Uranium - Dissolved	mg/L	-	0.000275	-	-
Zinc - Dissolved	mg/L	-	< 0.0100	-	-
Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Mean Mortality to Daphnia magna	-	Not Acutely Toxic	Not Acutely Toxic	-	-
Mean Mortality to Rainbow Trout	-	Not Acutely Toxic	Not Acutely Toxic	-	-
Phosphorus, Nutrient	mg/L	-	< 0.0040	-	-

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-07

			Location Name	MS-07
			Field Sample ID	MS-07_2024-10-08
			ALS Laboratory Work Order	BF2400388
			Sample Date	2024-10-08
			Sample Type	P
Analyte	Units	Table Criteria		
Hardness	mg/L	-		114
Conductivity	umhos/cm	-		268
pH, Lab	pH units	6.0-9.5		7.54
Total Suspended Solids	mg/L	30		2.5
Total Dissolved Solids	mg/L	-		168
Turbidity	NTU	-		9.46
Alkalinity, Total	mg/L	-		23.6
Ammonia, Total (as N)	mg/L	-		0.184
Chloride	mg/L	-		5.18
Fluoride	mg/L	-		0.043
Nitrate	mg/L	-		5.52
Total Kjeldahl Nitrogen	mg/L	-		0.492
Sulfate	mg/L	-		72.8
Dissolved Organic Carbon	mg/L	-		1.31
Total Organic Carbon	mg/L	-		1.05
Aluminum - Total	mg/L	-		0.158
Antimony - Total	mg/L	-		< 0.00010
Arsenic - Total	mg/L	-		< 0.00010
Barium - Total	mg/L	-		0.0109
Cadmium - Total	mg/L	-		0.0000455
Calcium - Total	mg/L	-		14.4
Chromium - Total	mg/L	-		0.00062
Cobalt - Total	mg/L	-		0.00170
Copper - Total	mg/L	-		0.00102
Iron - Total	mg/L	-		0.236
Lead - Total	mg/L	-		0.000258
Lithium - Total	mg/L	-		0.0029
Magnesium - Total	mg/L	-		19.4
Manganese - Total	mg/L	-		0.328
Mercury - Total	mg/L	-		< 0.0000050
Molybdenum - Total	mg/L	-		0.00247
Nickel - Total	mg/L	-		0.00137
Phosphorus, Total	mg/L	-		< 0.050
Potassium - Total	mg/L	-		3.93
Selenium - Total	mg/L	-		0.000673
Sodium - Total	mg/L	-		1.77
Strontium - Total	mg/L	-		0.0223

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-07**

Thallium - Total	mg/L	-	0.000016
Tin - Total	mg/L	-	< 0.00010
Titanium - Total	mg/L	-	0.00663
Uranium - Total	mg/L	-	0.000937
Vanadium - Total	mg/L	-	< 0.00050
Zinc - Total	mg/L	-	< 0.0030
Aluminum - Dissolved	mg/L	-	0.0030
Arsenic - Dissolved	mg/L	-	< 0.00010
Cadmium - Dissolved	mg/L	-	0.0000402
Calcium - Dissolved	mg/L	-	13.3
Copper - Dissolved	mg/L	-	0.00036
Iron - Dissolved	mg/L	-	< 0.010
Lead - Dissolved	mg/L	-	< 0.000050
Magnesium - Dissolved	mg/L	-	19.7
Manganese - Dissolved	mg/L	-	0.327
Mercury - Dissolved	mg/L	-	< 0.0000050
Molybdenum - Dissolved	mg/L	-	0.00258
Nickel - Dissolved	mg/L	-	0.00087
Potassium - Dissolved	mg/L	-	3.86
Selenium - Dissolved	mg/L	-	0.000616
Sodium - Dissolved	mg/L	-	1.83
Thallium - Dissolved	mg/L	-	0.000012
Uranium - Dissolved	mg/L	-	0.000818
Zinc - Dissolved	mg/L	-	< 0.0010
Visible Sheen	-	No Visible Sheen	No Visible Sheen
Mean Mortality to Daphnia magna	-	Not Acutely Toxic	Not Acutely Toxic
Mean Mortality to Rainbow Trout	-	Not Acutely Toxic	Not Acutely Toxic
Phosphorus, Nutrient	mg/L	-	0.0046

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			MS-08
			MS-08 FDP_2024-
			10-01
			WT2429212
			2024-10-01
			P
Analyte	Units	Table Criteria	
Hardness	mg/L	-	463
Conductivity	umhos/cm	-	926
pH, Lab	pH units	6.0-9.5	7.96
Total Suspended Solids	mg/L	30	1.5
Total Dissolved Solids	mg/L	-	683
Turbidity	NTU	-	2.13
Alkalinity, Total	mg/L	-	35.2
Ammonia, Total (as N)	mg/L	-	1.22
Chloride	mg/L	-	16.2
Fluoride	mg/L	-	0.086
Nitrate	mg/L	-	27.5
Total Kjeldahl Nitrogen	mg/L	-	1.90
Sulfate	mg/L	-	319
Dissolved Organic Carbon	mg/L	-	1.45
Total Organic Carbon	mg/L	-	1.47
Aluminum - Total	mg/L	-	0.112
Antimony - Total	mg/L	-	< 0.00100
Arsenic - Total	mg/L	-	< 0.00100
Barium - Total	mg/L	-	0.0163
Cadmium - Total	mg/L	-	< 0.0000500
Calcium - Total	mg/L	-	28.4
Chromium - Total	mg/L	-	< 0.00500
Cobalt - Total	mg/L	-	0.00550
Copper - Total	mg/L	-	< 0.00500
Iron - Total	mg/L	-	0.169
Lead - Total	mg/L	-	< 0.000500
Lithium - Total	mg/L	-	< 0.0100
Magnesium - Total	mg/L	-	103
Manganese - Total	mg/L	-	0.908
Mercury - Total	mg/L	-	< 0.0000050
Molybdenum - Total	mg/L	-	0.00936
Nickel - Total	mg/L	-	0.00520
Phosphorus, Total	mg/L	-	< 0.500
Potassium - Total	mg/L	-	4.52
Selenium - Total	mg/L	-	0.00789
Sodium - Total	mg/L	-	4.70

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**

Strontium - Total	mg/L	-	0.0501
Thallium - Total	mg/L	-	< 0.000100
Tin - Total	mg/L	-	< 0.00100
Titanium - Total	mg/L	-	< 0.00400
Uranium - Total	mg/L	-	0.00206
Vanadium - Total	mg/L	-	< 0.00500
Zinc - Total	mg/L	-	< 0.0300
Aluminum - Dissolved	mg/L	-	0.0039
Arsenic - Dissolved	mg/L	-	< 0.00010
Cadmium - Dissolved	mg/L	-	0.0000335
Calcium - Dissolved	mg/L	-	27.3
Copper - Dissolved	mg/L	-	0.00093
Iron - Dissolved	mg/L	-	< 0.010
Lead - Dissolved	mg/L	-	< 0.000050
Magnesium - Dissolved	mg/L	-	95.8
Manganese - Dissolved	mg/L	-	0.869
Mercury - Dissolved	mg/L	-	< 0.0000050
Molybdenum - Dissolved	mg/L	-	0.00922
Nickel - Dissolved	mg/L	-	0.00484
Potassium - Dissolved	mg/L	-	4.81
Selenium - Dissolved	mg/L	-	0.00908
Sodium - Dissolved	mg/L	-	4.59
Thallium - Dissolved	mg/L	-	0.000021
Uranium - Dissolved	mg/L	-	0.00212
Zinc - Dissolved	mg/L	-	< 0.0010
Visible Sheen	-	No Visible Sheen	No Visible Sheen
Mean Mortality to Daphnia magna	-	Not Acutely Toxic	Not Acutely Toxic
Mean Mortality to Rainbow Trout	-	Not Acutely Toxic	Not Acutely Toxic
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 - KM105-SWMP-SEEP-04

Location Name Field Sample ID Lab Work Order Sample Date Sample Date		KM105-SWMP-SEEP-04 ¹
		KM105-SWMP-SEEP-
		04_2024-10-01
		BF2400368
		2024-10-01
P		
Analyte	Unit	
Hardness	mg/L	268
Conductivity	umhos/cm	637
pH, Lab	pH units	7.81
Total Suspended Solids	mg/L	24.9
Total Dissolved Solids	mg/L	402
Turbidity	NTU	40.3
Alkalinity, Total	mg/L	66.3
Ammonia, Total (as N)	mg/L	1.06
Chloride	mg/L	13.2
Fluoride	mg/L	0.098
Nitrate	mg/L	12.6
Total Kjeldahl Nitrogen	mg/L	0.959
Sulfate	mg/L	164
Dissolved Organic Carbon	mg/L	1.86
Total Organic Carbon	mg/L	2.10
Aluminum - Total	mg/L	1.61
Antimony - Total	mg/L	< 0.00010
Arsenic - Total	mg/L	0.00019
Barium - Total	mg/L	0.0279
Cadmium - Total	mg/L	0.000437
Calcium - Total	mg/L	40.4
Chromium - Total	mg/L	0.00415
Cobalt - Total	mg/L	0.00582
Copper - Total	mg/L	0.00420
Iron - Total	mg/L	2.56
Lead - Total	mg/L	0.000742
Lithium - Total	mg/L	0.0087
Magnesium - Total	mg/L	43.3
Manganese - Total	mg/L	1.68
Mercury - Total	mg/L	< 0.0000050
Molybdenum - Total	mg/L	0.0126
Nickel - Total	mg/L	0.00850
Phosphorus, Total	mg/L	< 0.050
Potassium - Total	mg/L	6.29
Selenium - Total	mg/L	0.00125
Sodium - Total	mg/L	5.23
Strontium - Total	mg/L	0.101
Thallium - Total	mg/L	0.000038
Tin - Total	mg/L	< 0.00010
Titanium - Total	mg/L	0.0656
Uranium - Total	mg/L	0.00707
Vanadium - Total	mg/L	0.00251
Zinc - Total	mg/L	0.0078
Aluminum - Dissolved	mg/L	0.0108
Arsenic - Dissolved	mg/L	< 0.00010
Cadmium - Dissolved	mg/L	0.000418
Calcium - Dissolved	mg/L	38.7
Copper - Dissolved	mg/L	0.00144
Iron - Dissolved	mg/L	0.024
Lead - Dissolved	mg/L	< 0.000050

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
¹ Effluent from KM105 Surface Water Management Pond



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

Magnesium - Dissolved	mg/L	41.6
Manganese - Dissolved	mg/L	1.53
Mercury - Dissolved	mg/L	< 0.0000050
Molybdenum - Dissolved	mg/L	0.0125
Nickel - Dissolved	mg/L	0.00511
Potassium - Dissolved	mg/L	5.97
Selenium - Dissolved	mg/L	0.00147
Sodium - Dissolved	mg/L	5.11
Thallium - Dissolved	mg/L	0.000020
Uranium - Dissolved	mg/L	0.00655
Zinc - Dissolved	mg/L	0.0028
Visible Sheen	-	No Visible Sheen
Mean Mortality to Daphnia magna	-	Not Acutly Toxic
Mean Mortality to Rainbow Trout	-	Not Acutly Toxic
Phosphorus, Nutrient	mg/L	0.0128

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_2024-10-03	MS-MRY-09_2024-10-10
			BF2400372	BF2400394
			2024-10-03	2024-10-10
			P	P
Analyte	Units	Table Criteria		
Hardness	mg/L	-	66.9	-
pH, Lab	pH units	6.0-9.5	7.98	7.89
Total Suspended Solids	mg/L	15	< 1.0	< 1.0
Total Dissolved Solids	mg/L	-	72	98
Turbidity	NTU	-	0.57	0.51
Alkalinity, Total	mg/L	-	59.3	-
Ammonia, Total (as N)	mg/L	-	< 0.0050	-
Chloride	mg/L	-	7.58	-
Fluoride	mg/L	-	0.021	-
Nitrate	mg/L	-	0.030	-
Total Kjeldahl Nitrogen	mg/L	-	1.09	-
Sulfate	mg/L	-	2.99	-
Dissolved Organic Carbon	mg/L	-	2.40	-
Total Organic Carbon	mg/L	-	2.31	-
Aluminum - Total	mg/L	-	0.0240	-
Antimony - Total	mg/L	-	< 0.00010	-
Arsenic - Total	mg/L	0.50	< 0.00010	-
Barium - Total	mg/L	-	0.00853	-
Cadmium - Total	mg/L	-	< 0.0000050	-
Calcium - Total	mg/L	-	13.0	-
Chromium - Total	mg/L	-	< 0.00050	-
Cobalt - Total	mg/L	-	< 0.00010	-
Copper - Total	mg/L	0.30	0.00230	-
Iron - Total	mg/L	-	0.026	-
Lead - Total	mg/L	0.20	0.000052	-
Lithium - Total	mg/L	-	< 0.0010	-
Magnesium - Total	mg/L	-	8.37	-
Manganese - Total	mg/L	-	0.00056	-
Mercury - Total	mg/L	-	< 0.0000050	-
Molybdenum - Total	mg/L	-	0.00102	-
Nickel - Total	mg/L	0.50	< 0.00050	-
Phosphorus, Total	mg/L	-	< 0.050	-
Potassium - Total	mg/L	-	2.11	-
Selenium - Total	mg/L	-	0.000064	-
Sodium - Total	mg/L	-	0.630	-
Strontium - Total	mg/L	-	0.0107	-

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**

Thallium - Total	mg/L	-	0.000013	-
Tin - Total	mg/L	-	< 0.00010	-
Titanium - Total	mg/L	-	0.00089	-
Uranium - Total	mg/L	-	0.00360	-
Vanadium - Total	mg/L	-	0.00054	-
Zinc - Total	mg/L	0.50	< 0.0030	-
Aluminum - Dissolved	mg/L	-	0.0091	-
Arsenic - Dissolved	mg/L	-	< 0.00010	-
Cadmium - Dissolved	mg/L	-	< 0.0000050	-
Calcium - Dissolved	mg/L	-	12.2	-
Copper - Dissolved	mg/L	-	0.00209	-
Iron - Dissolved	mg/L	-	< 0.010	-
Lead - Dissolved	mg/L	-	< 0.000050	-
Magnesium - Dissolved	mg/L	-	7.89	-
Manganese - Dissolved	mg/L	-	0.00031	-
Mercury - Dissolved	mg/L	-	< 0.0000050	-
Molybdenum - Dissolved	mg/L	-	0.000876	-
Nickel - Dissolved	mg/L	-	< 0.00050	-
Potassium - Dissolved	mg/L	-	2.07	-
Selenium - Dissolved	mg/L	-	< 0.000050	-
Sodium - Dissolved	mg/L	-	0.587	-
Thallium - Dissolved	mg/L	-	< 0.000010	-
Uranium - Dissolved	mg/L	-	0.00331	-
Zinc - Dissolved	mg/L	-	< 0.0010	-
Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen
Phenols	ug/L	-	< 1.0	-
Phosphorus, Nutrient	mg/L	-	0.0029	-

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 Field Sample ID ALS Laboratory Work Order Sample Date Sample Type			MS-MRY-13A	MS-MRY-13A
			MS-MRY-13A_2024-10-02	MS-MRY-13A_2024-10-06
			BF2400372	BF2400379
			2024-10-02	2024-10-06
			P	P
Analyte	Units	Table Criteria		
Conductivity	umhos/cm		650	-
pH, Lab	pH units	6.0-9.0	7.83	7.94
Total Suspended Solids	mg/L	15	< 1.0	< 1.0
Total Dissolved Solids	mg/L	-	375	402
Turbidity	NTU	-	0.19	0.17
Alkalinity, Total	mg/L	-	184	-
Dissolved Organic Carbon	mg/L	-	6.41	-
Total Organic Carbon	mg/L	-	5.62	-
Aluminum - Total	mg/L	-	0.0060	-
Antimony - Total	mg/L	-	0.00023	-
Arsenic - Total	mg/L	0.50	0.00022	-
Barium - Total	mg/L	-	0.0347	-
Cadmium - Total	mg/L	-	0.0000395	-
Calcium - Total	mg/L	-	56.5	-
Chromium - Total	mg/L	-	0.00064	-
Cobalt - Total	mg/L	-	0.00018	-
Copper - Total	mg/L	0.30	0.00181	-
Iron - Total	mg/L	-	< 0.010	-
Lead - Total	mg/L	0.20	0.000094	-
Lithium - Total	mg/L	-	0.0444	-
Magnesium - Total	mg/L	-	38.7	-
Manganese - Total	mg/L	-	0.00059	-
Mercury - Total	mg/L	-	< 0.0000050	-
Molybdenum - Total	mg/L	-	0.00147	-
Nickel - Total	mg/L	0.50	0.00993	-
Phosphorus, Total	mg/L	-	< 0.050	-
Potassium - Total	mg/L	-	5.43	-
Selenium - Total	mg/L	-	0.000072	-
Sodium - Total	mg/L	-	26.8	-
Strontium - Total	mg/L	-	0.0481	-
Thallium - Total	mg/L	-	0.000016	-
Tin - Total	mg/L	-	0.00016	-
Titanium - Total	mg/L	-	< 0.00030	-
Uranium - Total	mg/L	-	0.00572	-
Vanadium - Total	mg/L	-	< 0.00050	-
Zinc - Total	mg/L	0.50	0.0040	-
Oil and Grease, Total	mg/L	-	<5.0	-

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-MRY-13A

Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen
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-MRY-13B**

Location Name Field Sample ID ALS Laboratory Work Order Sample Date Sample Type			MS-MRY-13B	MS-MRY-13B
			MS-MRY-13B_2024-10-02	MS-MRY-13B_2024-10-06
			BF2400372	BF2400379
			2024-10-02	2024-10-06
			P	P
Analyte	Units	Table Criteria		
Conductivity	umhos/cm	-	628	-
pH, Lab	pH units	6.0-9.5	7.64	7.95
Total Suspended Solids	mg/L	15	< 1.6	3.3
Total Dissolved Solids	mg/L	-	345	436
Turbidity	NTU	-	0.16	1.65
Alkalinity, Total	mg/L	-	143	-
Dissolved Organic Carbon	mg/L	-	5.77	-
Total Organic Carbon	mg/L	-	5.37	-
Aluminum - Total	mg/L	-	0.0047	-
Antimony - Total	mg/L	-	0.00014	-
Arsenic - Total	mg/L	0.50	0.00016	-
Barium - Total	mg/L	-	0.0284	-
Cadmium - Total	mg/L	-	0.0000209	-
Calcium - Total	mg/L	-	60.6	-
Chromium - Total	mg/L	-	0.00072	-
Cobalt - Total	mg/L	-	0.00017	-
Copper - Total	mg/L	0.30	0.00170	-
Iron - Total	mg/L	-	0.012	-
Lead - Total	mg/L	0.20	< 0.000050	-
Lithium - Total	mg/L	-	0.0473	-
Magnesium - Total	mg/L	-	26.0	-
Manganese - Total	mg/L	-	0.00070	-
Mercury - Total	mg/L	-	< 0.0000050	-
Molybdenum - Total	mg/L	-	0.000689	-
Nickel - Total	mg/L	0.50	0.00811	-
Phosphorus, Total	mg/L	-	< 0.050	-
Potassium - Total	mg/L	-	4.74	-
Selenium - Total	mg/L	-	0.000074	-
Sodium - Total	mg/L	-	17.2	-
Strontium - Total	mg/L	-	0.0925	-
Thallium - Total	mg/L	-	< 0.000010	-
Tin - Total	mg/L	-	< 0.00010	-
Titanium - Total	mg/L	-	< 0.00030	-
Uranium - Total	mg/L	-	0.00554	-
Vanadium - Total	mg/L	-	< 0.00050	-
Zinc - Total	mg/L	0.50	< 0.0030	-
Oil and Grease, Total	mg/L	-	<5.0	-

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-MRY-13B

Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen
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_2024-10-03	MS-C-A_2024-10-06
			BF2400372	BF2400379
			2024-10-03	2024-10-06
			P	P
Analyte	Units	Table Criteria		
Conductivity	umhos/cm	-	471	-
pH, Lab	pH units	6.0-9.5	7.75	7.75
Total Suspended Solids	mg/L	30	8.2	5.5
Total Dissolved Solids	mg/L	-	311	284
Turbidity	NTU	-	25.3	17.2
Ammonia, Total (as N)	mg/L	-	0.462	-
Nitrate	mg/L	-	8.50	-
Oil and Grease, Total	mg/L	-	<5.0	-
Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen

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_2024-10-03	MS-C-B_2024-10-06
			BF2400372	BF2400379
			2024-10-03	2024-10-06
			P	P
Analyte	Units	Table Criteria		
Conductivity	umhos/cm	-	483	-
pH, Lab	pH units	6.0-9.5	7.72	7.72
Total Suspended Solids	mg/L	30	11.5	6.8
Total Dissolved Solids	mg/L	-	312	307
Turbidity	NTU	-	27.0	21.2
Ammonia, Total (as N)	mg/L	-	0.462	-
Nitrate	mg/L	-	8.64	-
Oil and Grease, Total	mg/L	-	<5.0	-
Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen

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_2024-10-03	MS-C-C_2024-10-09
			BF2400372	BF2400394
			2024-10-03	2024-10-09
			P	P
Analyte	Units	Table Criteria		
Conductivity	umhos/cm	-	760	-
pH, Lab	pH units	6.0-9.5	8.04	7.59
Total Suspended Solids	mg/L	30	4.6	7.9
Total Dissolved Solids	mg/L	-	505	605
Turbidity	NTU	-	18.1	11.1
Ammonia, Total (as N)	mg/L	-	0.0364	-
Nitrate	mg/L	-	4.84	-
Oil and Grease, Total	mg/L	-	<5.0	-
Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen

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_2024-10-03	MS-C-D_2024-10-09	QD-BT1_2024-10-09
			BF2400372	BF2400394	BF2400394
			2024-10-03	2024-10-09	2024-10-09
			P	P	TB
Analyte	Units	Table Criteria			
Conductivity	umhos/cm	-	703	-	-
pH, Lab	pH units	6.0-9.5	8.09	7.95	6.83
Total Suspended Solids	mg/L	30	10.3	3.5	< 1.0
Total Dissolved Solids	mg/L	-	454	452	30
Turbidity	NTU	-	42.1	6.82	< 0.10
Ammonia, Total (as N)	mg/L	-	0.0610	-	-
Nitrate	mg/L	-	3.98	-	-
Oil and Grease, Total	mg/L	-	< 5.0	-	-
Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	-

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_2024-10-03	MS-C-E_2024-10-09	MS-C-E_2024-10-13
			BF2400372	BF2400394	BF2400398
			2024-10-03	2024-10-09	2024-10-13
			P	P	P
Analyte	Units	Table Criteria			
Conductivity	umhos/cm	-	782	-	-
pH, Lab	pH units	6.0-9.5	7.97	7.75	7.47
Total Suspended Solids	mg/L	30	11.7	14.8	4.1
Total Dissolved Solids	mg/L	-	528	716	588
Turbidity	NTU	-	43.9	31.1	9.64
Ammonia, Total (as N)	mg/L	-	0.415	-	-
Nitrate	mg/L	-	6.41	-	-
Oil and Grease, Total	mg/L	-	< 5.0	-	-
Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

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_2024-10-02	MS-C-F_2024-10-08
			BF2400372	BF2400385
			2024-10-02	2024-10-08
			P	P
Analyte	Units	Table Criteria		
Conductivity	umhos/cm	-	540	-
pH, Lab	pH units	6.0-9.5	7.73	7.63
Total Suspended Solids	mg/L	30	85.3	9.9
Total Dissolved Solids	mg/L	-	352	348
Turbidity	NTU	-	120	25.6
Ammonia, Total (as N)	mg/L	-	0.914	-
Nitrate	mg/L	-	10.0	-
Oil and Grease, Total	mg/L	-	< 5.0	-
Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen

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 Field Sample ID ALS Laboratory Work Order Sample Date Sample Type			MS-C-G	MS-C-G	MS-C-G	MS-C-G
			MS-C-G_2024-10-02	QD-BF7_2024-10-02	MS-C-G_2024-10-06	MS-C-G_2024-10-13
			BF2400372	BF2400372	BF2400379	BF2400398
			2024-10-02	2024-10-02	2024-10-06	2024-10-13
			P	FB	P	P
Analyte	Units	Table Criteria				
Conductivity	umhos/cm	-	211	< 1.0	-	-
pH, Lab	pH units	6.0-9.5	7.77	6.05	7.93	7.63
Total Suspended Solids	mg/L	30	< 1.0	< 1.0	< 1.0	< 1.0
Total Dissolved Solids	mg/L	-	100	< 18	154	137
Turbidity	NTU	-	0.34	< 0.10	0.36	0.24
Ammonia, Total (as N)	mg/L	-	0.303	< 0.0050	-	-
Nitrate	mg/L	-	2.80	< 0.020	-	-
Oil and Grease, Total	mg/L	-	< 5.0	< 5.0	-	-
Visible Sheen	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen

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_2024-10-02	QD-BT7_2024-10-02	MS-C-H_2024-10-06
			BF2400372	BF2400372	BF2400379
			2024-10-02	2024-10-02	2024-10-06
			P	TB	P
Analyte	Units	Table Criteria			
Conductivity	umhos/cm	-	213	< 1.0	-
pH, Lab	pH units	6.0-9.5	7.93	6.15	7.98
Total Suspended Solids	mg/L	30	< 1.0	< 1.0	< 1.0
Total Dissolved Solids	mg/L	-	82	< 21	112
Turbidity	NTU	-	0.53	< 0.10	0.43
Ammonia, Total (as N)	mg/L	-	0.0134	< 0.0050	-
Nitrate	mg/L	-	1.88	< 0.020	-
Oil and Grease, Total	mg/L	-	< 5.0	< 5.0	-
Visible Sheen	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen

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 Field Sample ID ALS Laboratory Work Order Sample Date Sample Type			MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A
			MQ-C-A_2024-10-04	MQ-C-A_2024-10-06	QD-CC1_2024-10-06	MQ-C-A_2024-10-13
			BF2400375	BF2400379	BF2400379	BF2400398
			2024-10-04	2024-10-06	2024-10-06	2024-10-13
			P	P	FD	P
Analyte	Units	Table Criteria				
Conductivity	umhos/cm	-	258	-	-	-
pH, Lab	pH units	6.0-9.5	7.98	8.02	8.08	7.76
Total Suspended Solids	mg/L	30	7.4	< 2.1	< 1.0	< 1.0
Total Dissolved Solids	mg/L	-	136	148	145	169
Turbidity	NTU	-	0.20	0.46	0.24	0.22
Ammonia, Total (as N)	mg/L	-	< 0.0050	-	-	-
Nitrate	mg/L	-	< 0.020	-	-	-
Oil and Grease, Total	mg/L	-	< 5.0	-	-	-
Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen

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_2024-10-04	MQ-C-B_2024-10-06	MQ-C-B_2024-10-13
			BF2400375	BF2400379	BF2400398
			2024-10-04	2024-10-06	2024-10-13
			P	P	P
Analyte	Units	Table Criteria			
Conductivity	umhos/cm	-	-	257	-
pH, Lab	pH units	6.0-9.5	8.02	7.96	7.61
Total Suspended Solids	mg/L	30	< 1.0	14.1	2.7
Total Dissolved Solids	mg/L	-	130	155	183
Turbidity	NTU	-	4.40	20.2	2.30
Ammonia, Total (as N)	mg/L	-	-	0.0077	-
Nitrate	mg/L	-	-	0.416	-
Oil and Grease, Total	mg/L	-	-	< 5.0	-
Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Mean Mortality to Daphnia magna	-	Not Acutly Toxic	-	Not Acutly Toxic	-
Mean Mortality to Rainbow Trout	-	Not Acutly Toxic	-	Not Acutly Toxic	-

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 Field Sample ID ALS Laboratory Work Order Sample Date Sample Type			MQ-C-D	MQ-C-D	MQ-C-D
			MQ-C-D_2024-10-04	MQ-C-D_2024-10-06	MQ-C-D_2024-10-13
			BF2400375	BF2400379	BF2400398
			2024-10-04	2024-10-06	2024-10-13
			P	P	P
Analyte	Units	Table Criteria			
Conductivity	umhos/cm	-	275	-	-
pH, Lab	pH units	6.0-9.5	8.00	7.99	7.70
Total Suspended Solids	mg/L	30	3.9	5.8	< 1.2
Total Dissolved Solids	mg/L	-	152	170	173
Turbidity	NTU	-	17.9	14.1	7.44
Ammonia, Total (as N)	mg/L	-	0.0571	-	-
Nitrate	mg/L	-	0.479	-	-
Oil and Grease, Total	mg/L	-	< 5.0	-	-
Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

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 - October 2024

DATE	Camp Lake Freshwater for Domestic Use - Daily Water MS-MRY-1 (m ³) ¹	Camp Lake Freshwater for Industrial Use - Daily Water MS-MRY-1 (m ³) ¹	Treated Sewage Effluent from MS-01 to Discharge Location #1 (m ³)	Treated Sewage Effluent from MS-01B to Discharge Location #1 (m ³) ²	Sewage Sludge Removed from Mine Site WWTPs to Incinerator or Disposal Offsite by Backhaul (m ³)	Sewage Sludge/Off- Spec Effluent Removed from Mine Site WWTPs to PWSP at Mine Site (m ³)	Sewage Sludge Removed from Lift Stations to PWSP at Mine Site (m ³)	Km 32 Lake Milne Port Camp Daily Water Use for Domestic Purposes MP- MRY-3 (m ³)	Km 32 Lake Milne Port Camp Daily Water Use for Industrial Purposes MP- MRY-3 (m ³)	Treated Sewage Effluent from MP-01 to Milne Inlet (m ³)	Treated Sewage Effluent from MP-01B to Milne Inlet (m ³)	Sewage Sludge Removed from Milne Port WWTPs to Incinerator or Disposal Offsite by Backhaul (m ³)	Sewage Sludge Removed from Lift Stations to PWSP at Milne Port (m ³)	Sludge Removed from Milne Port WWTPs/WTPs to PWSP at Milne Port (m ³)	Effluent Discharge from Mine Site Crusher Pad Sedimentation Pond (MS-06) (m ³)	Effluent Discharge from Mine Site Run of Mine Ore Stockpile Pond Stormwater (MS-07) (m ³)	Effluent Discharge from Mine Site Waste Rock Stockpile Pond (MS-08) (m ³)	Effluent from KM105 Surface Water Management Pond (m ³) ¹	Effluent Discharge from Milne Port Ore Stockpile Sedimentation Pond (East) to Milne Inlet (MP-05) (m ³)	Effluent Discharge from Milne Port Ore Stockpile Sedimentation Pond (West) to Milne Inlet (MP-06) (m ³)
1-Oct-24	116.2	0.0	8.0	90.5	0.9	0.0	0.0	102.6	0.0	23.0	49.3	0.1	0.0	0.0	75.1	0.0	1,807.6	10,948.4	0.0	406.0
2-Oct-24	150.2	16.9	14.0	106.3	0.0	0.0	0.0	111.8	0.0	24.0	41.4	0.1	0.0	0.0	0.0	0.0	3,514.0	9,364.4	93.4	81.0
3-Oct-24	118.8	12.5	26.0	122.5	0.0	0.0	0.0	98.6	0.0	26.0	48.2	0.1	0.0	0.0	73.3	0.0	3,514.0	8,508.0	47.4	5.0
4-Oct-24	90.2	9.6	27.0	108.5	1.0	0.0	0.0	108.8	1.0	36.0	43.1	0.1	0.0	0.0	61.5	0.0	3,514.0	8,436.4	0.0	450.0
5-Oct-24	96.4	15.8	26.0	101.4	0.9	0.0	0.0	102.5	2.5	40.0	46.1	0.1	0.0	0.0	0.0	0.0	3,514.0	8,179.8	0.0	0.0
6-Oct-24	112.3	10.8	25.0	107.6	0.9	0.0	0.0	97.5	6.0	35.0	39.7	0.1	0.0	0.0	0.0	0.0	0.0	7,519.4	0.0	0.0
7-Oct-24	111.4	11.3	27.0	116.6	0.6	0.0	0.0	108.8	0.0	26.0	38.0	0.1	0.0	9.0	0.0	0.0	0.0	6,302.0	0.0	0.0
8-Oct-24	106.1	8.9	24.0	117.3	0.9	0.0	0.0	95.0	0.0	24.0	35.5	0.1	0.0	0.0	0.0	2118.4	0.0	5,425.6	0.0	0.0
9-Oct-24	132.5	20.7	26.0	119.9	1.1	0.0	0.0	131.8	2.0	30.0	53.0	0.1	0.0	0.0	0.0	2296.5	0.0	4,129.0	0.0	0.0
10-Oct-24	149.3	12.5	25.0	127.2	0.9	0.0	0.0	108.6	0.0	28.0	47.5	0.1	0.0	0.0	0.0	0.0	0.0	4,220.7	0.0	468.0
11-Oct-24	117.8	11.2	25.0	141.6	0.4	0.0	0.0	104.6	2.0	25.0	40.7	0.1	0.0	0.0	0.0	0.0	0.0	4,150.5	0.0	1599.5
12-Oct-24	118.4	12.7	25.0	116.1	0.9	0.0	0.0	94.1	0.0	24.0	40.0	0.1	0.0	0.0	150.7	0.0	0.0	5,181.2	0.0	1599.5
13-Oct-24	123.8	14.0	17.0	123.1	0.6	0.0	0.0	110.4	3.0	24.0	38.7	0.1	0.0	0.0	199.2	0.0	0.0	0.0	0.0	416.0
14-Oct-24	98.1	16.2	18.0	123.9	0.0	0.0	0.0	77.5	2.0	24.0	40.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	307.0
15-Oct-24	122.9	17.4	17.0	102.1	0.0	0.0	0.0	60.4	0.0	30.0	37.3	0.3	0.0	0.0	210.0	0.0	0.0	0.0	0.0	3.0
16-Oct-24	126.5	4.5	22.0	110.6	0.0	0.0	0.0	88.1	2.0	32.0	40.7	0.4	0.0	0.0	203.2	0.0	0.0	0.0	0.0	0.0
17-Oct-24	107.7	15.5	18.0	120.5	1.0	0.0	0.0	86.4	0.0	33.0	39.9	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18-Oct-24	108.6	3.3	19.0	113.7	0.0	0.0	0.0	75.9	0.0	31.0	39.9	0.4	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19-Oct-24	116.6	13.8	20.0	105.5	0.0	0.0	0.0	72.9	2.0	16.0	37.8	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20-Oct-24	104.5	18.9	21.0	111.7	1.8	0.0	0.0	86.3	2.0	23.0	41.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21-Oct-24	111.8	26.4	17.0	101.4	0.6	0.0	0.0	64.5	1.0	15.0	33.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22-Oct-24	99.3	7.8	18.0	101.2	0.4	0.0	0.0	61.6	0.0	20.0	27.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23-Oct-24	126.5	3.3	18.0	92.5	0.0	0.0	0.0	79.3	0.0	16.0	42.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24-Oct-24	120.3	2.8	19.0	108.7	1.8	0.0	0.0	64.7	0.0	17.0	40.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25-Oct-24	112.3	22.4	18.0	119.0	0.4	0.0	0.0	67.5	0.0	16.0	45.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26-Oct-24	98.1	18.4	18.0	100.4	0.9	0.0	0.0	61.3	0.0	17.0	32.9	0.1	0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0
27-Oct-24	126.4	3.7	18.0	107.8	0.4	0.0	0.0	56.6	0.0	12.0	26.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28-Oct-24	116.4	8.2	18.0	111.8	0.0	0.0	0.0	54.7	0.0	19.0	37.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29-Oct-24	119.9	2.8	18.0	107.8	0.0	0.0	55.0	87.5	0.0	20.0	35.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30-Oct-24	164.7	0.0	18.0	53.0	0.9	0.0	0.0	104.5	0.0	28.0	39.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31-Oct-24	142.9	15.0	18.0	98.6	1.7	0.0	0.0	76.8	0.0	47.0	37.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	3,667.0	357.3	628.0	3,388.8	18.7	0.0	55.0	2,701.2	25.5	781.0	1,239.2	4.0	4.0	14.0	973.0	4,414.9	15,863.6	82,365.5	140.8	5,335.0

Notes:
WWTP - Waste Water Treatment Plant
PWSP - Polishing Waste Stabilization Pond
¹ Tracking may be influenced by reported data to the Pi data system; variances between reported domestic and industrial values have potential to occur. However, total daily withdrawal is not influenced by the tracking methodology.
² October 31 MS-01B treated sewage effluent daily total is an estimation due to a power outage impacting the data logger.