

TABLES

Table 1.1: Current Approvals, Permits and Authorizations - 2024

Permit or Licence No.	Licence Name	Status Update for 2024	Expiry
Nunavut Impact Review Board			
No. 005	Project Certificate - Amendment No. 5	All works and activities have been screened by the Nunavut Impact Review Board (NIRB) and have been considered in the Project Certificate amendments issued by the NIRB in May 2014 (ERP) and October 2018 (Production Increase). An Annual Report is submitted to NIRB each year that summarizes the status of the Project relative to the conditions outlined in the Project Certificate. The most recent amendment (No. 5) extended the Production Increase to the end of 2024.	N/A
Nunavut Water Board			
2AM-MRY1325	Type 'A' Water Licence – Amendment No. 1	In good standing; no amendments were issued by the NWB in 2024.	10-Jun-25
2BE-MRY2131	Type 'B' Water Licence	In good standing; no amendments were issued by the NWB in 2024.	16-Apr-31
Qikiqtani Inuit Association			
Q13C301	Inuit Owned Land Commercial Lease	Compliance with the lease is outlined in the <i>QIA and NWB Annual Reports</i> submitted by March 31 st of each year.	31-Dec-43
-	Inuit Impact and Benefit Agreement (IIBA)	Compliance with the agreement is outlined in the Annual IIBA Implementation Report submitted by March 31 st of each year.	N/A
Crown Land Use Permits and Quarry Permits			
47H16-1-2 Lease Amendment 47H/16-1-5	Foreshore Area for Milne Port Ore Dock Lease	In good standing.	30-Jun-35
N2019Q0011	Tote Road and Borrow Area Land Use Permit	In good standing, new LUP issued in 2019, replaces prior permit N2014Q0016. LUP renewed by CIRNAC until 2026.	29-Jun-26
N2019C0009	Steensby Land Use Permit	In good standing, new LUP issued in 2019, replaces prior permit N2014C0013. LUP renewed by CIRNAC until 2026.	29-Jun-26
N2019J0010	Bruce Head Land Use Permit	In good standing, new LUP issued in 2019, replaces prior permit N2014J0011. LUP renewed by CIRNAC until 2026.	29-Jun-26
Authorizations under the Fisheries Act			
06-HCAA-CA7-0084	Crossings along the Milne Inlet Tote Road Authorization	The authorization remains valid and has been amended over the years.	N/A
NU-06-0084	Fisheries Authorization – Tote Road		N/A
18-HCAA-00160	Fisheries Authorization – Freight Dock	The Year 2 monitoring report for the Milne Port Freight Dock was submitted to DFO on March 18, 2022, in accordance with regulated timelines. A revised amendment application for the Freight Dock was also submitted by Baffinland on March 3, 2023.	N/A
Various Letter of Advice	Project crossings along Tote Road and at quarries, culvert extensions and replacements.	-	N/A
Approvals under the Navigable Waters Protection Act (Transport Canada)			
8200-07-10273, 10267, 10269, 10268, 10274, 10272, 10266, 10271	Construction of Watercourse Crossings (Bridges and Culverts)	In good standing, no changes from previous year.	Until complete
Licence under the Explosives Act			
F76068/E	Division 1 Factor Licence	Held by explosives contractor for the Project.	N/A

Table 2.1: Summary of Project Activities, Modifications and Infrastructure Changes - 2024

Work Plan Item No.	Property Section	Land Use Area	Length (m) or Area (m ²)	Approximate Location (UTM NAD83 Zone 17W)		Description	Annual Work Plan Comparison	Supporting Documentation
				Easting	Northing			
2024-1	Mine Site	Impact Area	788 m	559301	7914067	Fencing at Mary River Aerodrome (788m length)	Construction in progress.	N/A
2024-2	Mine Site	Impact Area	5,300 m ²	560092	7914196	QMR2 Quarry Sedimentation Pond (5,300 m ²)	Not constructed in 2024, deferred to 2025.	N/A
2024-3	Mine Site	Impact Area	-	563475	7916397	Leveling and grading within footprint of future Waste Rock Facility expansion to support geotechnical investigation work	Not constructed in 2024, deferred.	N/A
2024-4	Mine Site	Impact Area	25,000 m ²	561097	7912927	Additional snow stockpiling area	Not constructed in 2024, deferred to 2026.	N/A
2024-5	Mine Site	Impact Area	13,552 m ²	562064	7912823	Development of a laydown area at the Mine Site for temporary storage of equipment and materials (13,552 m ²)	Not constructed in 2024, deferred to 2025.	N/A
2024-6-A	Mine Site	Impact Area	28,270 m ²	559393	7913989	Expansion of the Mary River Warehouse laydown area by 28,270 m ² .	Constructed in 2024.	As-Built
2024-6-B	Mine Site	Impact Area		559591	7913991		Constructed in 2024.	As-Built
2024-6-C	Mine Site	Impact Area		559716	7913888		Constructed in 2024.	As-Built
2023-1	Mine Site	Impact Area	-	562483	7912740	Water treatment plant for km 105 sedimentation pond	Construction in progress.	N/A
2023-2	Mine Site	Impact Area	2,000 m ²	563603	7913149	Expansion of KM 106 stockpile pad to increase road width to accommodate water truck loading area	Not constructed in 2024, deferred.	N/A
2023-3	Mine Site	Impact Area	-	558333	7914362	Lined containment berm and 15,000 L Jet A Tank at the weatherhaven.	Not constructed in 2024, deferred to 2026.	N/A
2023-4	Tote Road	Impact Area	-	-	-	Replacement of culverts at fish-bearing streams along the Milne Inlet Tote Road to designs exceeding those in the 2013 ERP design.	Construction in progress.	CSR
2022-1-B	Mine Site	Impact Area	1,288 m ²	560724	7912733	Expansion of Landfill Cell 3 (1,288 m ²).	Not constructed in 2024, deferred.	N/A
2022-2	Mine Site	Impact Area	114,847 m ²	5630983	7912959	Ore stockpiling area at KM 105.5 (114,847 m ²)	Construction began in 2024.	N/A
2022-4	Mine Site	Impact Area	14,108 m ²	561423	7913097	Mobile equipment laydown and tire facility (14,108 m ²).	Not constructed in 2024, deferred to 2026.	N/A
2022-6-B	Mine Site	Impact Area	2,429 m ²	563981	7914082	Construction of 470 Hillside Road (2,429 m ²)	Construcion began in 2023 - Finalized in 2024.	As-Built
2022-10	Mine Site	Impact Area	-	558050	7914460	15,000 L bulk diesel storage at Weatherhaven to support drilling operations	Not constructed in 2024, deferred to 2025.	N/A
2022-11	Mine Site	Impact Area	500 m	563242	7915411	Installation of power distribution cabling from the new KM110 building to the mine water treatment facility (500m)	Not constructed in 2024, deferred.	N/A
2022-12	Mine Site	Impact Area	79,002 m ²	561074	7913182	Construction of new Sedimentation Pond SDLT-1 - 20678 m ² (lined), 58324 m ² (unlined)	Not constructed in 2024, deferred to 2026.	N/A
2022-13	Mine Site	Impact Area	-	563934	7914459	Communication tower KM 108	Completed.	N/A
2022-15	Mine Site	Impact Area	878 m ²	561516	7913226	New building and expansion of Mary River HD Maintenance Shop (878 m ²)	Not constructed in 2024, deferred to 2025.	N/A
2022-19	Milne Port	Impact Area	-	503688	7976055	Installation of power distribution cabling and distribution equipment for a new service from the Port Power house area to CV-001 on the shiploader	Not constructed in 2024, deferred to 2026.	N/A
2021-1-A	Mine Site	Impact Area	500 m	561233	7913234	Installation of power distribution cabling at the Mine Site and Milne Port facilities, including; a) Mary River Powerhouse to Dyno Nobel explosives facility (500 m) b) Mary River E-House 3 to KM 104 laydown (300 m) c) Milne Port 'Steensby Camp' power line (100 m)	Not constructed in 2024, deferred/cancelled.	N/A
2021-1-B	Mine Site	Impact Area	300 m	561547	7913358		Completed in 2024.	N/A
2021-1-C	Milne Port	Impact Area	100 m	-	-		Installation completed.	N/A
2021-8	Milne Port	Impact Area	1,250 m ²	503420	7975343	New thaw and wash bay facility for mobile vehicle maintenance. Footprint of 1,250 m ² .	Not constructed in 2024, deferred to 2026.	N/A
2021-10	Mine Site	Impact Area	-	560965	7912392	Development of Landfill Cell #4	Not constructed in 2024, deferred.	N/A
2021-15-A	Mine Site	Impact Area	104 to MSC - 19,424 m ²	561706	7913312	Expansion of the area east of the Mine Site workshops and crushing area for improved traffic management - 104 to MSC (19,424 m2), 104.5 to Crusher (18,308 m2).	Not constructed in 2024, deferred to 2026.	N/A
2021-15-B	Mine Site	Impact Area	104.5 to Crusher - 18,308 m ²	562191	7912874		Not constructed in 2024, deferred to 2026.	N/A

Table 2.1: Summary of Project Activities, Modifications and Infrastructure Changes - 2024

Work Plan Item No.	Property Section	Land Use Area	Length (m) or Area (m ²)	Approximate Location (UTM NAD83 Zone 17W)		Description	Annual Work Plan Comparison	Supporting Documentation
				Easting	Northing			
2021-17-A	Mine Site	Impact Area	KM 106 - 4,843 m ²	563838	7913688	Construction of three (3) laydown areas for road aggregate storage on the mine haul road 106 Km (4,843 m2), 107 Km (2,159 m2), 108 Km (3,703 m2).	Not constructed in 2024, deferred.	N/A
2021-17-B	Mine Site	Impact Area	KM 107 - 2,159 m ²	564237	7914037		Not constructed in 2024, deferred.	N/A
2021-17-C	Mine Site	Impact Area	KM 108 - 3,703 m ²	564377	7914863		Installation completed.	N/A
2021-19	Mine Site	Impact Area	20,000 m ²	564180	7915574	Explosives plant secondary storage location TBD (20,000 m ² - laydown grade and recontour)	Not constructed in 2024, deferred.	N/A
2020-3-A	Mine Site	Impact Area	-	558420	7914780	Installation of two (2) new waste incineration units; one (1) at the Mine Site, one (1) at Milne Port	Not constructed in 2024, deferred.	N/A
2020-3-B	Milne Port	Impact Area	-	503774	7975973		Not constructed in 2024, deferred.	N/A
2020-4	Mine Site	Impact Area	3,000 m ²	563228	7916744	Expansion of the Waste Rock Facility Water Treatment Plant to include an additional geotube settling containment area. Total footprint of new lined area is 3,000 m ³ .	Not constructed in 2024, deferred.	N/A
2020-8-A	Mine Site	Impact Area	72 m ²	561467	7913209	Construction of a waste containment cells exterior to workshop facilities, for temporary storage of materials prior to longer term storage in the Hazardous Waste Berms and eventual backhaul. HD Shop - 72 m ² MR Shop - 120 m ² Wash Bay - 120 m ² 110 Laydown - 144 m ²	Not constructed in 2024, deferred.	N/A
2020-8-B	Mine Site	Impact Area	120 m ²	5612525	7913295		Not constructed in 2024, deferred.	N/A
2020-8-C	Mine Site	Impact Area	120 m ²	561645	7913213		Not constructed in 2024, deferred.	N/A
2020-8-D	Mine Site	Impact Area	144 m ²	563454	7915177		Not constructed in 2024, deferred.	N/A
2020-10	Mine Site	Impact Area	3,200 m ²	559584	7914047	Expansion of the warehouse laydown area for additional storage of seacans and equipment. Total area of 3,200 m ² .	Constructed in 2024.	As-Built
2020-13	Northern Transportation Corridor	Impact Area	-	-	-	Continued work to repair and replace culverts along the Tote Road, including those with identified fish passage issues. All culverts will be repaired or replaced to the 2013 Hatch design.	Construction in progress.	N/A
2020-14-A	Northern Transportation Corridor	Impact Area	KM 26	518576	7959689	Addition of washroom facilities/refuge stations at KM26 and KM80 IT Towers.	Not constructed in 2024, deferred.	N/A
2020-14-B	Northern Transportation Corridor	Impact Area	KM 80	542130	7922308		Not constructed in 2024, deferred.	N/A
2019-9	Milne Port	Impact Area	2,700 m ²	503779	7975481	New contaminated water/snow containment pond adjacent to existing pond at Milne Port	Not constructed in 2024, deferred.	N/A
2019-11-A	Milne Port	Impact Area	360 m ²	558503	7914691	Construction of new hazardous waste berm at the Mine site and at Milne Port. Decommissioning of select existing berms to consolidate waste management.	Not constructed in 2024, deferred.	N/A
2019-11-B	Mine Site	Impact Area	360 m ²	503874	7976251		Not constructed in 2024, deferred.	N/A
2019-15	Mine Site	Impact Area	-	558150	7914500	Decommissioning and repurposing of Weatherhaven structures for storage and workspace.	Construction in progress.	N/A
2019-16	Mine Site	Impact Area	12,000 m ²	560450	7913450	Expansion of the 800 person camp pad to the north by approximately 12,000 m ² to accommodate additional support offices and buildings.	Not constructed in 2024, deferred.	N/A
2019-17	Mine Site	Impact Area	925 m ²	560450	7913450	Addition of offices/trailers/buildings at the 800p Camp. Total footprint is 925 m ² , including approximately 500 m ² for a new fire hall and emergency response building.	Not constructed in 2024, deferred.	N/A
2019-20	Mine Site	Impact Area	-	561080	7913446	Construction of one (1) arctic diesel fuel tank (Tk6) with 15ML capacity, and associated fuel piping. The fuel tank will be constructed on a pad within the existing Mine Site fuel storage facility.	Not constructed in 2024, deferred.	N/A
2018-27	Milne Port	Impact Area	-	504119	7976483	Relocation of effluent discharge point to barge offload area	Not constructed in 2024, deferred.	N/A

Table 2.2: Type 'A' Water Licence Modifications Summary and Approvals Status

Modification No. ^a	Description of Modification	Approvals Status
1	Expansion of the Mine Site Crusher Facility's footprint to increase ore stockpile capacity.	Approved by the NWB on May 26, 2017 (Motion No. 2017-A1-007).
2	Expansion of the Milne Port Bulk Fuel Storage Facility's fuel capacity by installing three additional fuel tanks (0.75 ML, 3 ML and 15 ML) within the Facility's existing secondary containment berm.	Approval for the construction and installation of the 0.75 ML and 3 ML tanks issued by the NWB on September 14, 2017 (Motion No. 2017-10-02). ^a
3a	Construction of a surface water diversion ditch around the 380-Person Camp pad, as per CIRNAC Inspection Direction issued to Baffinland on June 9, 2017.	Approved by the NWB on September 8, 2017 (Motion No. 2017-10-01).
3b	Construction of a new 380-Person Camp and associated support infrastructure to upgrade and expand accommodations at Milne Port.	Approved by the NWB on January 18, 2019 (Motion No. 2018-A1-024).
4	Construction of a new 800-Person Camp and associated support infrastructure to upgrade and expand accommodations at the Mine Site.	Approved by the NWB on September 20, 2017 (Motion No. 2017-10-03).
5	Expansion of the Mine Site Crusher Facility Pond to accommodate the Facility's previous pad expansion (Modification No. 1).	Approved by the NWB on August 16, 2018 (Motion No. 2018-A1-013).
6	Construction of a new 280-Person Camp and associated support infrastructure to upgrade and expand accommodations at Milne Port, install an additional 15 ML fuel tank at the Milne Port Bulk Fuel Storage Facility and implement upgrades to the Tote Road to address road safety and operational concerns.	Not approved by the NWB. Application withdrawn by Baffinland on December 15, 2018.
7	Construction of new infrastructure at the Mine Site and Milne Port, included in the 2018 Work Plan and 2018 Work Plan Addendum, to improve site water management and operational capabilities. Key activities within the application included the Waste Rock Facility Water Treatment Plant, Mine Haul Road upgrades, the addition of new Milne Port laydowns, and new maintenance shops at the Mine Site and Milne Port.	Approved by the NWB on August 10, 2018 (Motion No. 2018-A1-010).
8	Expansion of the Waste Rock Facility to address operational requirements and concerns identified in 2017 regarding the Facility's Pond.	Approved by the NWB on September 12, 2018 (Motion No. 2018-A1- 015).
9	Expansion of the Milne Port Ore Stockpile Facility's footprint and associated surface water management ponds.	Approved by the NWB on September 5, 2018 (Motion No. 2018-A1-014).
10	Upgrades to Mine Site infrastructure, including the installation of a direct effluent discharge line from the new 800-Person Camp (Sailiivik Camp) STP and the expansion of the Landfill Facility.	Approved by the NWB on October 16, 2018 (Motion No. 2018-13- P4-03).
11	Installation of an Incineration Unit at Milne Port's 380-Person Camp	Approved by the NWB on April 3, 2019.
12	Milne Port Ore Stockpile #1 and Water Management Expansion	Approved by the NWB on August 2, 2019 (Motion No. 2019-A1-005).
13	Construction of water management structures at the Mine Site including sedimentation ponds and conveyance/ diversion ditches and berms.	Approved by the NWB on August 16, 2021. (Motion No. 2021-A1-04).

Notes
^a As defined by the Nunavut Water Board (NWB).

Table 2.3: Modification No. 13 Implementation Schedule

Facility Description	Station	Phase	Status	Target Completion Date
SDLT-1 Pond Ore Stockpile Stormwater	MS-10	Operation	Not Constructed	Engineering – 2024 and 2025 - Construction 2026
KM105 Sedimentation Pond	MS-11	Operation	Constructed	2022
Weatherhaven Erosion Control Measures	MS-12	Operation	Constructed	2022
Explosives Magazine Pond (if constructed)	MS-13	Operation	No Longer Required ¹	N/A
Quarry QMR2 Erosion Control Measures	MS-14	Operation	Not Constructed	Engineering - 2024 Construction - 2025
Mine Haul Road Ditch Upgrades	N/A	Operation	Partially Constructed ²	Partial Construction - 2024. Remainder under review.

Notes:
¹Water is diverted away from this location through blocking culverts and re-routing of water to KM 105 Sedimentation Pond.

²Final design as submitted under review to assess operational practicality.

Table 2.4: Equipment and Materials Shipped off the Property - 2024

Property Section	Equipment/ Material Item	Owner	Annual Amount of Equipment and Material (metric tonnes) ^e	Annual Amount of Equipment and Material (m3)
Project-Wide	Non-Hazardous Waste Materials ^{a,b,c,d}	Baffinland	2,763.6	13,376.7
Project-Wide	Hazardous Waste (DG) Materials ^{a,c,d}	Baffinland	0.0	0.0
Project-Wide	Miscellaneous Equipment and Materials	Baffinland & Third Party	6,647.2	44,277.5
TOTAL			9,410.8	57,654.2

Notes

^a Assumes tare weight of a 20' shipping container to be 2.3 metric tonnes.

^b Assumes tare weight of a 40' shipping container to be 3.75 metric tonnes.

^c Assumes external volume of a 20' shipping container to be 38.5 m³.

^d Assumes external volume of a 40' shipping container to be 77 m³.

^e Includes weight of shipping containers/materials.

Table 2.5: Equipment and Materials Shipped to and Stored on the Property - 2024

Property Section	Equipment/Material Item	Owner	Annual Amount of Equipment and Material (metric tonnes) ^f
Project-Wide	Arctic Diesel ^a	Baffinland	46,770
Project-Wide	Jet-A1 ^b	Baffinland	1,211
Project-Wide	Pre-Packaged Explosives ^{c,d,f}	Explosives Contractor	116
Project-Wide	Explosives ^{d,e,f}	Explosives Contractor	7,235
Project-Wide	Foodstuffs ^{d,f}	Baffinland	886
Project-Wide	Miscellaneous Equipment and Materials ^{d,f}	Baffinland & Third Party	8,530
TOTAL			64,748

Notes

^a Assumes a density for Arctic Diesel of 0.832 kg/L.

^b Assumes a density of Jet-A1 of 0.804 kg/L.

^c Includes detonators and other explosives accessories.

^d Assumes external volume of a 20' shipping container to be 38.5 m³.

^e Includes ammonia nitrate prill as well as materials required for on site explosives/emulsion manufacturing.

^f Includes weight of shipping containers/materials.

Table 3.1: Monthly and Annual Quantities of Ore Generated by the Project - 2024

Month	Quantity of Ore Generated ¹ (Wet Metric Tonnes)	
	Lump	Fines
January	171,836	490,698
February	164,439	393,195
March	216,877	406,943
April	195,399	269,107
May	191,559	298,627
June	203,777	348,011
July	153,556	297,049
August	60,187	377,363
September	155,593	80,734
October	270,390	126,240
November	167,533	318,146
December	163,609	460,247
SUB-TOTAL	2,114,755	3,866,360
TOTAL	5,981,115	

¹Tonnes rounded to the nearest tenth

Table 3.2: Annual Quantities of Ore Shipped by the Project - 2024

Month	Lump Shipped (Wet Metric Tonnes)		Fines Shipped (Wet Metric Tonnes)		Total Shipped (Wet Metric Tonnes)	
	Milne Inlet	Steensby Inlet	Milne Inlet	Steensby Inlet	Milne Inlet	Steensby Inlet
January	0	0	0	0	0	0
February	0	0	0	0	0	0
March	0	0	0	0	0	0
April	0	0	0	0	0	0
May	0	0	0	0	0	0
June	0	0	0	0	0	0
July	0	0	330,110	0	330,110	0
August	714,752	0	1,855,073	0	2,569,825	0
September	487,075	0	1,457,394	0	1,944,469	0
October	1,000,885	0	216,561	0	1,217,446	0
November	0	0	0	0	0	0
December	0	0	0	0	0	0
SUB-TOTAL	2,202,712	0	3,859,138	0	6,061,850	0
TOTAL	2,202,712		3,859,138		6,061,850	

Table 3.3: Quantities¹ of Specified Substances Removed from Borrows and Quarries (BCMs) by Quarter - October 1, 2023 to September 30, 2024 Reporting Period²

Quarter	Quarry QMR2			Survey Dates		Notes
	Rock	Unconsolidated Material	Organics	Start	End	
Oct-Dec 2023	-	-	-	October 1, 2023	December 31, 2023	No activity in the quarry.
Jan-March 2024	-	-	-	-	-	No activity in the quarry.
April-June 2024	-	-	-	-	-	No activity in the quarry.
July-Sept 2024	-	-	-	-	-	No activity in the quarry.
TOTAL	0	0	0			

Quarter	Quarry Q01			Survey Dates		Notes
	Rock	Unconsolidated Material	Organics	Start	End	
Oct-Dec 2023	11,906	-	-	September 30, 2023	December 31, 2023	The volume reported for Q4, 2023 includes snow accumulation and therefore is subject to the skewing factor resultant of quarterly seasonal differences during the winter months .
Jan-March 2024	-86,087	-	-	December 31, 2023	March 29, 2024	The volume reported for Q1, 2024 includes snow accumulation and therefore is subject to the skewing factor resultant of quarterly seasonal differences during the winter months .
April-June 2024	0	-	-	-	-	No activity in the quarry.
July-Sept 2024	137,002	-	-	March 29, 2024	September 29, 2024	The volume reported for Q3 includes snowmelt and therefore is subject to the skewing factor resultant of quarterly seasonal differences.
TOTAL	62,821	0	0			62,821 m3 of material was removed from Q01 between September 30, 2023 and September 29, 2024.

Quarter	Borrow Source KM 97			Survey Dates		Notes
	Rock	Unconsolidated Material	Organics	Start	End	
July-Sept 2023	-	-	-	July 10, 2023	-	See note below ³
Oct-Dec 2023	-	3,811	-	-	-	
Jan-March 2024	-	3,811	-	-	-	
April-June 2024	-	3,811	-	-	-	
July-Sept 2024	-	3,811	-	-	-	
TOTAL	0	15,243	0	-	September 27, 2024	

Notes:
¹ Volumes based on a comparison between survey surfaces. Volumes removed expressed in Banked Cubic Metres (BCMs).

² Reporting period presented is from Q3 2023 to Q3 2024 to remain consistent with Quarry Concession Reporting requiring accuracy of snow free surveys to calculate actual volumes of material removed.

³ Between snow-free periods of July 10, 2023 and September 27, 2024, 15,243m³ of material was removed from the KM97 borrow, which represents the closest timeframe that surveys existed to support consistent dates for snow free evaluation to produce accurate data.

Table 3.4: Quantities of Specified Substances Removed from Borrows and Quarries (BCMs) October 1, 2023 to September 30, 2024
Reporting Period

Specified Substances	Quarry QMR2	Quarry Q01	Borrow Source KM 97	Total All Quarry and Borrow Sources
Rock	0	62,821	0	62,821
Unconsolidated Material	0	0	15,243	15,243
Organics	0	0	0	0
TOTAL	0	62,821	15,243	78,064

Notes:

Annual volumes calculated using the following equation:

Annual Volume Removed (Oct. 1, 2023 to Sept. 30, 2024) = Q4 2023 + Q1 2024 + Q2 2024 + Q3 2024.

Volumes expressed in Banked Cubic Metres (BCMs).

Table 4.1: Annual Volumes of Water Used for Project Activities on Inuit-Owned and Crowns Lands by Source - 2024

Property Section	Water Source ID	Water Source Location (UTM NAD83 Zone 17W)		Annual Volume Used (m ³) ^a	Percent of Total Annual Volume Used (%)
		Easting	Northing		
Mine Site	Camp Lake (MS-MRY-1) ^b	557779	7914722	57,294	44.3%
Milne Inlet	Phillips Creek (MP-MRY-2)	514503	7964579	0	0.0%
Milne Inlet	Km 32 Lake (MP-MRY-3) ^c	521547	7953735	43,790	33.8%
Tote Road	CV128 (Km 17)	513556	7965889	10,114	7.8%
Tote Road	Katiktok Lake (Km 52 - 58)	526749	7935027	5,087	3.9%
Tote Road	BG50 (Km 62)	529294	7926852	2,483	1.9%
Tote Road	BG32 (Km 78)	540729	7921597	0	0.0%
Tote Road	CV217 (Km 80)	542321	7922189	3,664	2.8%
Tote Road	Muriel Lake	542441	7922109	7,025	5.4%
Tote Road	CV233 (Km 97)	555751	7914736	0	0.0%
TOTAL				129,457	100%

Notes

^a Refer to Tables 4.2 and 4.3 for the 2024 daily and monthly volumes withdrawn by water source.

^b Includes all volumes withdrawn from Camp Lake during 2024 for domestic, industrial and dust suppression purposes.

^c Includes all volumes withdrawn from Km 32 Lake during 2024 for domestic, industrial and dust suppression purposes.

Table 4.2 Daily, Monthly, and Annual Volumes of Water Used for Domestic and Industrial Purposes on Inuit-Owned Land and Crown Lands - 2024

Day	January						February						March					
	MS-MRY-1 ^a		TOTAL	MP-MRY-3		TOTAL	MS-MRY-1 ^a		TOTAL	MP-MRY-3		TOTAL	MS-MRY-1 ^a		TOTAL	MP-MRY-3		TOTAL
	D	I		D	I		D	I		D	I ^b		D	I		D	I ^b	
1	109.9	22.3	132.2	44.8	0.0	44.8	161.9	80.8	242.7	60.0	0.0	60.0	127.3	49.9	177.2	55.2	0.0	55.2
2	154.8	0.5	155.3	43.4	0.0	43.4	114.7	112.2	226.8	65.5	0.0	65.5	122.4	40.8	163.1	73.7	25.0	98.7
3	118.9	21.0	139.9	48.0	0.0	48.0	118.5	90.1	208.6	45.9	0.0	45.9	94.4	58.2	152.6	50.3	2.0	52.3
4	171.4	0.0	171.4	41.9	0.0	41.9	100.3	116.6	216.9	56.9	35.3	92.3	109.7	38.4	148.1	62.3	0.0	62.3
5	126.3	54.1	180.3	70.4	0.0	70.4	122.7	116.5	239.2	45.7	22.0	67.7	127.2	20.5	147.7	70.8	2.0	72.8
6	162.4	59.5	221.9	60.1	2.0	62.1	123.2	5.9	129.1	58.0	0.0	58.0	131.1	69.6	200.6	56.1	0.0	56.1
7	160.0	132.3	292.3	56.4	0.0	56.4	123.6	74.0	197.6	57.8	45.0	102.8	123.8	28.8	152.6	74.1	0.0	74.1
8	128.2	89.9	218.1	46.0	0.0	46.0	139.0	120.8	259.8	54.2	44.0	98.2	129.3	54.2	183.5	70.1	0.0	70.1
9	103.6	151.0	254.6	26.9	0.0	26.9	133.9	94.6	228.5	58.7	22.5	81.2	105.9	21.9	127.8	71.5	0.0	71.5
10	167.8	62.9	230.7	33.2	0.0	33.2	125.8	129.7	255.5	55.1	4.4	59.5	119.0	25.9	145.0	55.2	0.0	55.2
11	122.3	26.3	148.6	68.8	0.0	68.8	126.0	113.5	239.5	48.5	2.0	50.5	134.9	9.4	144.3	59.5	0.0	59.5
12	126.8	22.1	148.9	55.9	0.0	55.9	142.4	44.9	187.3	67.1	0.0	67.1	134.3	45.1	179.4	60.3	0.0	60.3
13	110.6	23.9	134.5	44.5	0.0	44.5	123.6	8.5	132.1	58.9	0.0	58.9	138.0	10.6	148.6	80.6	0.0	80.6
14	112.0	25.6	137.5	56.8	0.0	56.8	152.9	0.0	152.9	57.8	0.0	57.8	121.1	16.7	137.8	69.7	0.0	69.7
15	116.4	26.6	143.0	56.8	0.0	56.8	137.6	0.0	137.6	66.4	0.0	66.4	131.5	83.0	214.5	66.0	0.0	66.0
16	109.3	33.3	142.5	48.1	0.0	48.1	130.1	16.2	146.3	55.4	0.0	55.4	113.7	34.9	148.6	65.3	0.0	65.3
17	117.7	40.7	158.4	62.0	0.0	62.0	115.8	23.5	139.3	52.4	0.0	52.4	98.4	45.5	143.9	60.1	0.0	60.1
18	110.1	47.0	157.1	40.3	0.0	40.3	132.7	31.7	164.4	74.6	4.4	79.0	114.7	27.1	141.8	64.4	0.0	64.4
19	114.2	59.5	173.7	60.9	0.0	60.9	122.7	48.1	170.8	41.8	44.0	85.8	132.5	45.9	178.4	80.1	0.0	80.1
20	91.9	59.2	151.1	60.8	0.0	60.8	129.3	15.4	144.7	76.7	0.0	76.7	150.9	13.4	164.3	54.2	0.0	54.2
21	112.0	74.8	186.8	37.6	0.0	37.6	142.7	25.4	168.1	103.3	0.0	103.3	134.2	44.1	178.2	72.7	0.0	72.7
22	110.0	68.5	178.5	45.2	0.0	45.2	112.3	35.8	148.1	67.2	0.0	67.2	136.0	62.1	198.1	90.2	0.0	90.2
23	105.0	67.7	172.8	70.8	0.0	70.8	98.1	35.6	133.7	59.7	0.0	59.7	121.2	48.2	169.4	46.8	0.0	46.8
24	115.4	58.4	173.8	47.6	2.0	49.6	158.3	40.5	198.8	68.7	53.0	121.7	117.2	98.3	215.6	66.0	0.0	66.0
25	115.1	79.6	194.7	44.4	0.0	44.4	125.3	49.0	174.4	68.7	0.0	68.7	135.7	30.8	166.5	57.1	25.0	82.1
26	111.5	46.5	158.0	54.6	0.0	54.6	111.4	79.3	190.7	61.8	2.0	63.8	121.8	69.3	191.1	65.3	14.5	79.8
27	104.4	72.1	176.4	35.2	0.0	35.2	159.5	74.6	234.1	68.5	0.0	68.5	145.8	32.0	177.9	96.4	12.5	108.9
28	74.1	60.1	134.2	67.5	0.0	67.5	135.3	65.7	201.0	53.8	12.5	66.3	148.0	6.7	154.7	65.3	25.0	90.3
29	133.7	49.4	183.2	53.5	0.0	53.5	113.0	68.7	181.7	100.7	25.0	125.7	135.9	21.2	157.2	55.0	0.0	55.0
30	125.2	20.4	145.6	47.7	0.0	47.7	-	-	-	-	-	-	131.2	19.2	150.4	67.7	2.0	69.7
31	106.0	55.2	161.2	64.1	0.0	64.1	-	-	-	-	-	-	130.8	38.1	168.9	58.8	0.0	58.8
TOTAL	3,746.8	1,610.4	5,357.2	1,594.5	4.0	1,598.5	3,732.7	1,717.7	5,450.4	1,809.4	316.1	2,125.6	3,918.0	1,209.9	5,127.9	2,040.9	108.0	2,148.9

Table 4.2 Daily, Monthly, and Annual Volumes of Water Used for Domestic and Industrial Purposes on Inuit-Owned Land and Crown Lands - 2024

Day	April						May						June					
	MS-MRY-1 ^a		TOTAL	MP-MRY-3		TOTAL	MS-MRY-1 ^a		TOTAL	MP-MRY-3		TOTAL	MS-MRY-1 ^a		TOTAL	MP-MRY-3		TOTAL
	D	I		D	I		D	I		D	I		D	I		D	I ^b	
1	140.2	53.0	193.2	51.9	0.0	51.9	122.3	38.1	160.4	50.4	41.5	91.9	127.7	33.3	160.9	64.1	0.0	64.1
2	159.4	38.6	198.0	60.6	0.0	60.6	132.3	51.0	183.3	30.3	37.5	67.8	113.9	24.3	138.2	63.3	2.0	65.3
3	140.7	29.9	170.7	47.2	0.0	47.2	113.8	95.7	209.5	52.0	37.5	89.5	114.6	19.4	133.9	90.4	0.0	90.4
4	164.4	28.1	192.5	52.8	0.0	52.8	137.6	27.6	165.2	55.9	0.0	55.9	151.7	29.1	180.8	47.7	0.0	47.7
5	136.8	39.7	176.6	57.2	0.0	57.2	135.6	51.1	186.7	47.6	10.0	57.6	132.7	30.9	163.6	84.3	0.0	84.3
6	119.4	30.7	150.1	58.0	0.0	58.0	119.3	36.8	156.1	70.9	41.0	111.9	116.1	22.6	138.8	65.6	4.0	69.6
7	148.3	30.0	178.3	49.3	37.5	86.8	149.1	21.9	170.9	48.4	8.0	56.4	102.7	36.8	139.5	68.0	0.0	68.0
8	139.1	57.8	196.9	42.4	37.5	79.9	128.4	45.7	174.2	76.6	17.0	93.6	143.7	34.6	178.3	70.2	0.0	70.2
9	127.3	39.3	166.6	53.5	0.0	53.5	170.8	29.8	200.7	53.8	37.5	91.3	132.9	24.5	157.4	68.3	0.0	68.3
10	144.9	70.1	215.0	49.3	37.5	86.8	142.0	34.4	176.4	57.2	37.5	94.7	110.5	55.5	165.9	71.5	2.0	73.5
11	111.9	74.3	186.2	61.9	56.3	118.2	164.6	49.1	213.6	47.9	25.0	72.9	152.3	31.1	183.4	59.8	0.0	59.8
12	120.5	75.8	196.2	48.0	26.0	74.0	141.8	11.6	153.5	47.8	25.0	72.8	141.4	35.4	176.8	105.4	0.0	105.4
13	115.7	54.6	170.3	44.9	37.5	82.4	130.4	34.9	165.3	57.1	0.0	57.1	133.7	13.6	147.3	66.7	0.0	66.7
14	120.3	55.2	175.5	48.6	38.5	87.1	136.8	30.2	167.0	46.3	8.0	54.3	132.8	20.2	153.0	70.2	0.0	70.2
15	127.2	58.7	185.8	41.5	25.0	66.5	157.1	33.0	190.1	50.9	0.0	50.9	137.7	24.5	162.2	84.0	0.0	84.0
16	129.5	62.4	191.9	45.7	38.5	84.2	159.6	18.1	177.7	53.4	0.0	53.4	122.0	27.2	149.2	84.1	0.0	84.1
17	125.6	20.9	146.5	43.9	0.0	43.9	147.0	5.6	152.6	49.6	0.0	49.6	141.1	23.8	164.9	45.6	0.0	45.6
18	150.3	43.9	194.2	51.9	25.0	76.9	138.8	39.6	178.3	51.5	0.0	51.5	150.0	8.1	158.1	72.1	0.0	72.1
19	109.1	51.5	160.6	57.1	0.0	57.1	129.5	23.8	153.3	46.9	0.0	46.9	158.6	8.3	166.9	79.9	0.0	79.9
20	133.2	43.4	176.7	42.6	50.0	92.6	147.7	31.4	179.2	59.3	0.0	59.3	127.2	18.8	146.0	88.7	2.0	90.7
21	144.6	51.4	196.0	49.5	0.0	49.5	140.4	29.7	170.1	50.8	4.0	54.8	158.0	20.3	178.3	77.7	0.0	77.7
22	123.1	60.3	183.4	57.2	0.0	57.2	165.3	16.0	181.3	43.0	16.0	59.0	166.3	9.5	175.8	88.9	0.0	88.9
23	138.3	61.0	199.3	113.2	51.0	164.2	158.1	37.3	195.4	53.2	8.0	61.2	151.6	21.4	172.9	91.1	8.0	99.1
24	154.2	50.2	204.4	78.6	0.0	78.6	151.2	28.5	179.7	39.3	0.0	39.3	144.9	22.2	167.1	78.0	0.0	78.0
25	146.0	44.8	190.8	84.8	25.0	109.8	136.7	33.7	170.5	39.2	0.0	39.2	175.1	25.3	200.4	98.8	2.0	100.8
26	129.8	70.4	200.2	61.9	25.0	86.9	129.2	31.7	160.9	42.5	0.0	42.5	192.1	15.1	207.2	92.0	0.0	92.0
27	112.5	40.1	152.6	69.2	25.0	94.2	148.3	64.5	212.8	65.2	0.0	65.2	171.4	24.4	195.8	80.0	0.0	80.0
28	139.2	45.1	184.2	61.8	0.0	61.8	173.5	24.2	197.7	46.4	0.0	46.4	199.7	0.0	199.7	102.6	0.0	102.6
29	125.8	40.3	166.1	61.0	0.0	61.0	158.2	30.1	188.3	56.5	0.0	56.5	160.3	19.6	179.9	95.6	0.0	95.6
30	133.4	42.1	175.5	42.5	25.0	67.5	125.1	56.3	181.4	51.7	0.0	51.7	165.1	1.1	166.2	85.3	0.0	85.3
31	-	-	-	-	-	-	138.9	42.8	181.6	62.1	4.0	66.1	-	-	-	-	-	-
TOTAL	4,010.6	1,463.9	5,474.4	1,688.2	560.3	2,248.5	4,429.5	1,104.4	5,533.8	1,603.9	357.5	1,961.4	4,327.6	680.9	5,008.5	2,340.0	20.0	2,360.0

Table 4.2 Daily, Monthly, and Annual Volumes of Water Used for Domestic and Industrial Purposes on Inuit-Owned Land and Crown Lands - 2024

Day	July						August						September					
	MS-MRY-1 ^a		TOTAL	MP-MRY-3		TOTAL	MS-MRY-1 ^a		TOTAL	MP-MRY-3		TOTAL	MS-MRY-1 ^a		TOTAL	MP-MRY-3		TOTAL
	D	I		D	I		D	I		D	I		D	I		D	I	
1	151.0	10.6	161.6	80.1	0.0	80.1	104.8	29.2	134.0	66.1	0.0	66.1	129.9	0.0	129.9	64.0	0.0	64.0
2	158.4	12.0	170.4	86.0	0.0	86.0	114.5	18.2	132.7	60.7	0.0	60.7	127.4	0.0	127.4	57.6	0.0	57.6
3	168.8	2.8	171.6	87.5	0.0	87.5	111.7	23.3	135.0	62.4	0.0	62.4	154.0	0.0	154.0	64.3	2.0	66.3
4	157.3	3.3	160.5	64.0	0.0	64.0	126.9	23.0	149.9	71.3	0.0	71.3	145.8	2.4	148.2	81.5	0.0	81.5
5	156.3	34.5	190.9	99.7	0.0	99.7	114.5	29.4	144.0	65.4	1.0	66.4	129.5	10.3	139.8	65.3	0.0	65.3
6	133.3	6.8	140.1	84.2	2.0	86.2	123.1	11.1	134.2	50.2	0.0	50.2	140.0	1.1	141.1	64.1	0.0	64.1
7	132.7	28.6	161.4	93.1	4.0	97.1	133.6	27.5	161.1	56.9	0.0	56.9	116.9	14.2	131.1	59.5	0.0	59.5
8	146.9	22.5	169.4	50.9	0.0	50.9	116.5	26.8	143.3	39.3	0.0	39.3	118.1	6.7	124.8	91.7	0.0	91.7
9	154.2	25.0	179.3	61.7	0.0	61.7	122.1	20.7	142.8	85.5	0.0	85.5	122.2	18.9	141.1	73.0	0.0	73.0
10	148.9	6.5	155.4	48.2	0.0	48.2	120.3	20.2	140.5	47.1	0.0	47.1	129.2	17.7	146.9	70.3	0.0	70.3
11	148.8	14.6	163.5	97.0	0.0	97.0	123.7	16.9	140.6	84.1	0.0	84.1	123.0	26.7	149.7	91.2	0.0	91.2
12	153.6	10.7	164.3	77.2	0.0	77.2	104.8	28.0	132.8	65.4	0.0	65.4	121.3	5.8	127.1	70.7	0.0	70.7
13	119.1	22.6	141.6	79.7	2.0	81.7	116.8	25.8	142.6	62.7	2.0	64.7	133.9	19.4	153.2	73.3	0.0	73.3
14	147.6	26.5	174.1	50.1	0.0	50.1	129.3	17.7	147.0	67.2	0.0	67.2	128.0	36.2	164.2	66.2	0.0	66.2
15	111.0	9.3	120.3	53.4	0.0	53.4	120.2	19.6	139.8	73.5	0.0	73.5	138.0	0.0	138.0	71.9	0.0	71.9
16	135.4	21.4	156.9	46.9	0.0	46.9	114.9	40.4	155.4	60.5	0.0	60.5	125.2	12.4	137.5	66.8	0.0	66.8
17	126.3	23.5	149.7	67.5	0.0	67.5	122.6	29.1	151.7	48.0	0.0	48.0	132.0	12.8	144.8	63.9	0.0	63.9
18	115.9	22.3	138.2	47.1	2.0	49.1	103.3	41.3	144.7	72.5	0.0	72.5	141.3	8.6	149.8	63.3	0.0	63.3
19	115.5	20.4	135.9	52.9	0.0	52.9	117.7	2.2	119.9	63.8	5.0	68.8	151.5	11.1	162.6	89.9	0.0	89.9
20	96.6	29.9	126.5	74.3	0.0	74.3	124.0	23.3	147.3	61.7	0.0	61.7	128.5	14.9	143.4	47.8	0.0	47.8
21	119.9	14.4	134.3	51.7	8.0	59.7	132.0	18.3	150.3	46.3	0.0	46.3	142.5	16.6	159.1	77.2	0.0	77.2
22	120.4	15.8	136.1	48.8	0.0	48.8	118.3	9.2	127.5	59.3	0.0	59.3	138.6	13.0	151.6	76.5	0.0	76.5
23	131.2	24.9	156.0	49.7	0.0	49.7	133.9	1.3	135.2	74.8	0.0	74.8	113.3	27.2	140.6	68.7	0.0	68.7
24	135.0	7.0	142.0	69.9	0.0	69.9	109.5	35.0	144.5	79.7	0.0	79.7	127.2	1.0	128.2	77.9	0.0	77.9
25	119.3	16.8	136.1	66.3	0.0	66.3	122.0	14.5	136.5	65.2	0.0	65.2	118.5	25.7	144.3	101.9	0.0	101.9
26	128.2	7.0	135.2	64.0	0.0	64.0	116.0	23.1	139.1	62.7	2.0	64.7	143.9	15.5	159.5	62.4	0.0	62.4
27	116.4	16.5	132.9	44.2	0.0	44.2	136.0	29.1	165.1	31.9	0.0	31.9	120.2	0.7	120.8	68.2	0.0	68.2
28	126.2	4.1	130.3	70.6	0.0	70.6	115.2	20.8	136.0	97.8	0.0	97.8	118.6	21.1	139.6	71.0	0.0	71.0
29	125.0	29.1	154.2	67.4	0.0	67.4	142.1	4.2	146.3	85.3	0.0	85.3	112.0	22.9	134.9	63.8	0.0	63.8
30	122.6	22.3	145.0	66.7	4.0	70.7	138.0	12.0	150.0	77.2	0.0	77.2	105.0	31.5	136.5	89.2	0.0	89.2
31	119.5	23.8	143.3	55.3	0.0	55.3	125.2	6.5	131.7	65.0	0.0	65.0	-	-	-	-	-	-
TOTAL	4,141.4	535.4	4,676.8	2,056.0	22.0	2,078.0	3,753.6	647.7	4,401.3	2,009.6	10.0	2,019.6	3,875.6	394.5	4,270.0	2,153.0	2.0	2,155.0

Table 4.2 Daily, Monthly, and Annual Volumes of Water Used for Domestic and Industrial Purposes on Inuit-Owned Land and Crown Lands - 2024

Day	October						November						December					
	MS-MRY-1 ^a		TOTAL	MP-MRY-3		TOTAL	MS-MRY-1 ^a		TOTAL	MP-MRY-3		TOTAL	MS-MRY-1 ^a		TOTAL	MP-MRY-3		TOTAL
	D	I		D	I		D	I		D	I		D	I		D	I	
1	116.2	0.0	116.2	102.6	0.0	102.6	153.5	0.0	153.5	80.6	0.0	80.6	114.5	6.8	121.3	52.1	0.0	52.1
2	150.2	16.9	167.0	111.8	0.0	111.8	125.3	34.5	159.8	45.2	0.0	45.2	130.4	5.6	136.0	42.3	0.0	42.3
3	118.8	12.5	131.3	98.6	0.0	98.6	137.7	7.9	145.6	52.2	8.0	60.2	132.9	0.0	132.9	61.6	0.0	61.6
4	90.2	9.6	99.8	108.8	1.0	109.8	129.5	14.3	143.8	52.0	0.0	52.0	138.2	4.5	142.7	39.7	0.0	39.7
5	96.4	15.8	112.2	102.5	2.5	105.0	138.6	23.7	162.4	60.3	0.0	60.3	137.1	4.5	141.6	60.7	0.0	60.7
6	112.3	10.8	123.2	97.5	6.0	103.5	133.0	11.7	144.7	53.4	0.0	53.4	128.6	4.5	133.1	45.2	0.0	45.2
7	111.4	11.3	122.8	108.8	0.0	108.8	98.7	24.4	123.1	43.0	0.0	43.0	132.0	21.3	153.2	43.0	0.0	43.0
8	106.1	8.9	115.0	95.0	0.0	95.0	104.3	23.8	128.1	75.6	0.0	75.6	118.5	14.5	133.0	44.4	0.0	44.4
9	132.5	20.7	153.3	131.8	2.0	133.8	114.2	17.5	131.7	80.2	0.0	80.2	109.1	2.3	111.4	56.7	0.0	56.7
10	149.3	12.5	161.8	108.6	0.0	108.6	83.7	26.1	109.8	84.6	0.0	84.6	125.0	7.6	132.6	47.1	0.0	47.1
11	117.8	11.2	129.0	104.6	2.0	106.6	106.8	23.6	130.4	36.7	0.0	36.7	115.3	16.0	131.3	55.9	0.0	55.9
12	118.4	12.7	131.2	94.1	0.0	94.1	97.9	18.9	116.9	60.4	0.0	60.4	114.2	15.2	129.4	43.5	0.0	43.5
13	123.8	14.0	137.8	110.4	3.0	113.4	100.5	56.3	156.9	61.2	0.0	61.2	90.4	14.6	105.0	57.4	2.0	59.4
14	98.1	16.2	114.3	77.5	2.0	79.5	100.5	18.8	119.2	40.5	0.0	40.5	128.1	7.2	135.3	43.0	0.0	43.0
15	122.9	17.4	140.2	60.4	0.0	60.4	94.2	15.2	109.4	52.6	3.0	55.6	115.5	2.3	117.8	54.9	0.0	54.9
16	126.5	4.5	131.0	88.1	2.0	90.1	103.6	11.4	115.0	48.0	0.0	48.0	106.9	0.0	106.9	45.9	0.0	45.9
17	107.7	15.5	123.2	86.4	0.0	86.4	98.0	12.4	110.4	46.6	0.0	46.6	120.1	17.0	137.1	43.3	0.0	43.3
18	108.6	3.3	112.0	75.9	0.0	75.9	79.8	28.5	108.2	52.3	0.0	52.3	130.9	2.3	133.1	36.4	0.0	36.4
19	116.6	13.8	130.4	72.9	2.0	74.9	104.0	26.6	130.6	43.9	0.0	43.9	119.2	12.8	132.0	73.4	0.0	73.4
20	104.5	18.9	123.4	86.3	2.0	88.3	88.8	14.3	103.1	51.1	0.0	51.1	135.9	1.1	137.0	39.3	0.0	39.3
21	111.8	26.4	138.2	64.5	1.0	65.5	109.7	19.7	129.4	44.1	0.0	44.1	132.6	3.4	135.9	53.7	0.0	53.7
22	99.3	7.8	107.2	61.6	0.0	61.6	116.2	20.0	136.3	56.9	0.0	56.9	120.6	1.1	121.7	50.3	0.0	50.3
23	126.5	3.3	129.8	79.3	0.0	79.3	114.4	10.6	125.0	43.7	0.0	43.7	128.1	2.3	130.4	47.6	0.0	47.6
24	120.3	2.8	123.1	64.7	0.0	64.7	137.8	20.0	157.8	48.3	0.0	48.3	188.9	1.1	190.0	42.9	0.0	42.9
25	112.3	22.4	134.7	67.5	0.0	67.5	143.1	18.0	161.1	29.9	0.0	29.9	118.2	16.6	134.8	43.9	0.0	43.9
26	98.1	18.4	116.5	61.3	0.0	61.3	127.0	8.6	135.6	54.6	0.0	54.6	114.5	1.1	115.6	45.9	0.0	45.9
27	126.4	3.7	130.1	56.6	0.0	56.6	118.5	17.4	135.9	51.9	0.0	51.9	95.1	6.8	101.8	45.8	0.0	45.8
28	116.4	8.2	124.6	54.7	0.0	54.7	132.2	2.3	134.5	43.2	0.0	43.2	93.7	6.8	100.4	34.9	0.0	34.9
29	119.9	2.8	122.6	87.5	0.0	87.5	99.9	2.3	102.1	40.9	0.0	40.9	98.1	0.0	98.1	41.1	0.0	41.1
30	164.7	0.0	164.7	104.5	0.0	104.5	115.2	0.0	115.2	33.3	0.0	33.3	136.1	1.1	137.2	44.8	2.0	46.8
31	142.9	15.0	157.8	76.8	0.0	76.8	-	-	-	-	-	-	130.6	3.4	134.0	60.8	0.0	60.8
TOTAL	3,667.0	357.3	4,024.3	2,701.2	25.5	2,726.7	3,406.8	528.6	3,935.5	1,567.3	11.0	1,578.3	3,798.9	203.5	4,002.4	1,497.6	4.0	1,501.6

Table 4.2 Daily, Monthly, and Annual Volumes of Water Used for Domestic and Industrial Purposes on Inuit-Owned Land and Crown Lands - 2024

Month	2024					
	MS-MRY-1		TOTAL	MP-MRY-3		TOTAL
	D	I		D	I	
January	3,747	1,610	5,357	1,594	4	1,598
February	3,733	1,718	5,450	1,809	316	2,126
March	3,918	1,210	5,128	2,041	108	2,149
April	4,011	1,464	5,474	1,688	560	2,248
May	4,429	1,104	5,534	1,604	358	1,961
June	4,328	681	5,009	2,340	20	2,360
July	4,141	535	4,677	2,056	22	2,078
August	3,754	648	4,401	2,010	10	2,020
September	3,876	394	4,270	2,153	2	2,155
October	3,667	357	4,024	2,701	26	2,727
November	3,407	529	3,935	1,567	11	1,578
December	3,799	204	4,002	1,498	4	1,502
TOTAL	46,808	10,454	57,263	23,062	1,440	24,502

Notes:
All volumes in cubic metres (m³)
MS-MRY-1 - Camp Lake; MP-MRY-3 - Km 32 Lake
D - Domestic/Camp Purposes; I - Industrial Purposes
Bold values indicate daily volumes that exceeded the source use specific daily withdrawal limit stipulated by Table 3 of the Type 'A' Water Licence
^a 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.
^b Values updated since submission of monthly water licence report.

Table 4.3: Daily, Monthly, and Annual Volumes of Water Used for Dust Suppression Purposes on Inuit-Owned and Crown Lands - 2024

Date ^a	Camp Lake	Approved Source ^b									Recycled Water ^c													
		CV128 (Km 17)	Km 32 Lake	BG50 (Km 62)	BG32 (Km 78)	CV217 (Km 80)	Muriel Lake (Km 81)	Katikok Lake	CV233 (Tom River Km 97)	Daily Total ^d	KM 97 Borrow Pond (TR-BP-01)	KM 57 Borrow Pond (TR-BP-02)	Q1 Quarry (MP-Q1-P1)	Flight Ops Pond (MS-RW-01)	Airstrip Pond (MS-RW-03)	Warehouse Pond (MS-RW-04)	Mag Road Pond (HR-CD-05)	Crusher Facility Pond (MS-06)	KM106 ROM Pond (MS-07)	Waste Rock Facility Pond (MS-08)	MP-RW-01	MS-DEP1	Matrix Ditch	380 Camp
Daily Limit (m³)	86	579.5	364	150	120	130	212	318	135	2,094.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
29-May-24	0.0	0.0	121.1	0.0	0.0	0.0	0.0	0.0	0.0	121.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30-May-24	0.0	0.0	333.1	0.0	0.0	0.0	0.0	0.0	0.0	333.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31-May-24	0.0	0.0	363.4	0.0	0.0	0.0	0.0	0.0	0.0	363.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
01-Jun-24	0.0	0.0	363.4	0.0	0.0	0.0	0.0	0.0	0.0	363.4	0.0	0.0	0.0	30.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
02-Jun-24	4.0	0.0	302.8	0.0	0.0	0.0	0.0	0.0	0.0	306.8	121.1	0.0	0.0	72.1	90.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
03-Jun-24	25.0	0.0	363.4	0.0	0.0	0.0	0.0	0.0	0.0	388.4	484.5	212.0	0.0	235.1	60.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
04-Jun-24	0.0	0.0	363.4	0.0	0.0	0.0	0.0	0.0	0.0	363.4	227.1	454.2	0.0	492.1	30.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
05-Jun-24	0.0	0.0	363.4	0.0	0.0	0.0	0.0	0.0	0.0	363.4	333.1	333.1	0.0	0.0	30.3	227.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
06-Jun-24	0.0	0.0	363.4	0.0	0.0	0.0	0.0	0.0	0.0	363.4	423.9	333.1	0.0	0.0	0.0	340.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
07-Jun-24	0.0	0.0	363.4	0.0	0.0	0.0	0.0	0.0	0.0	363.4	514.8	242.2	0.0	0.0	0.0	567.8	0.0	0.0	0.0	0.0	212.0	0.0	0.0	0.0
08-Jun-24	0.0	0.0	302.8	0.0	0.0	0.0	0.0	0.0	0.0	302.8	817.6	454.2	0.0	0.0	0.0	681.3	0.0	0.0	0.0	0.0	302.8	0.0	0.0	0.0
09-Jun-24	0.0	0.0	363.4	0.0	0.0	0.0	0.0	0.0	0.0	363.4	514.8	272.5	0.0	0.0	0.0	113.6	0.0	0.0	0.0	0.0	363.4	0.0	0.0	0.0
10-Jun-24	0.0	0.0	181.7	0.0	0.0	0.0	0.0	0.0	0.0	181.7	121.1	151.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.6	0.0	0.0	0.0
11-Jun-24	0.0	0.0	151.4	0.0	0.0	0.0	0.0	0.0	0.0	151.4	30.3	333.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	151.4	0.0	0.0	0.0
12-Jun-24	0.0	0.0	272.5	0.0	0.0	0.0	0.0	0.0	0.0	272.5	0.0	272.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.6	0.0	0.0	0.0
13-Jun-24	0.0	0.0	212.0	0.0	0.0	0.0	0.0	0.0	0.0	212.0	181.7	363.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14-Jun-24	0.0	0.0	242.2	0.0	0.0	0.0	0.0	0.0	0.0	242.2	545.0	514.8	60.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.8	0.0	0.0	0.0
15-Jun-24	0.0	0.0	302.8	0.0	0.0	0.0	0.0	0.0	0.0	302.8	90.8	30.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	121.1	0.0	0.0	0.0
16-Jun-24	0.0	0.0	121.1	0.0	0.0	90.8	0.0	0.0	0.0	212.0	212.0	181.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	121.1	0.0	0.0	0.0
17-Jun-24	0.0	0.0	151.4	60.6	0.0	121.1	0.0	0.0	0.0	333.1	514.8	333.1	60.6	0.0	0.0	306.6	0.0	0.0	0.0	0.0	212.0	0.0	0.0	0.0
18-Jun-24	0.0	30.3	272.5	30.3	0.0	121.1	0.0	0.0	0.0	454.2	484.5	363.4	90.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.3	0.0	0.0	0.0
19-Jun-24	0.0	60.6	272.5	30.3	0.0	121.1	0.0	0.0	0.0	484.5	393.6	272.5	242.2	0.0	136.3	106.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20-Jun-24	0.0	90.8	302.8	0.0	0.0	121.1	0.0	0.0	0.0	514.8	242.2	242.2	181.7	0.0	151.4	529.9	0.0	151.4	0.0	0.0	0.0	0.0	0.0	0.0
21-Jun-24	0.0	90.8	363.4	60.6	0.0	121.1	0.0	0.0	0.0	635.9	90.8	242.2	181.7	0.0	30.3	741.9	0.0	212.0	0.0	0.0	0.0	0.0	0.0	0.0
22-Jun-24	0.0	60.6	212.0	60.6	0.0	121.1	30.3	0.0	0.0	484.5	121.1	151.4	60.6	60.6	0.0	212.0	0.0	242.2	0.0	0.0	30.3	0.0	0.0	0.0
23-Jun-24	0.0	121.1	333.1	90.8	0.0	60.6	212.0	0.0	0.0	817.6	242.2	121.1	60.6	121.1	0.0	212.0	0.0	151.4	0.0	0.0	60.6	0.0	0.0	0.0
24-Jun-24	0.0	90.8	363.4	60.6	0.0	121.1	121.1	0.0	0.0	757.0	333.1	363.4	60.6	121.1	0.0	529.9	0.0	302.8	30.3	0.0	0.0	0.0	0.0	0.0
25-Jun-24	0.0	30.3	363.4	90.8	0.0	121.1	0.0	0.0	0.0	605.6	363.4	212.0	0.0	0.0	0.0	0.0	0.0	181.7	60.6	0.0	121.1	0.0	0.0	0.0
26-Jun-24	0.0	181.7	272.5	90.8	0.0	121.1	121.1	0.0	0.0	787.3	302.8	0.0	0.0	0.0	0.0	529.9	0.0	30.3	363.4	0.0	181.7	0.0	0.0	0.0
27-Jun-24	0.0	151.4	181.7	30.3	0.0	121.1	121.1	0.0	0.0	605.6	484.5	212.0	0.0	0.0	0.0	635.9	0.0	60.6	363.4	0.0	0.0	0.0	0.0	0.0
28-Jun-24	0.0	363.4	242.2	90.8	0.0	121.1	30.3	0.0	0.0	847.8	242.2	333.1	60.6	0.0	0.0	423.9	0.0	212.0	60.6	0.0	0.0	0.0	0.0	0.0
29-Jun-24	0.0	484.5	302.8	30.3	0.0	121.1	0.0	0.0	0.0	938.7	151.4	181.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30-Jun-24	0.0	454.2	333.1	60.6	0.0	60.6	0.0	0.0	0.0	908.4	90.8	212.0	0.0	317.9	0.0	0.0	0.0	30.3	30.3	0.0	0.0	0.0	0.0	0.0
01-Jul-24	0.0	302.8	363.4	60.6	0.0	0.0	0.0	0.0	0.0	726.7	181.7	151.4	0.0	106.0	0.0	0.0	0.0	30.3	0.0	0.0	181.7	181.7	0.0	0.0
02-Jul-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
03-Jul-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
04-Jul-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
05-Jul-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.9	0.0	0.0
06-Jul-24	0.0	212.0	272.5	90.8	0.0	0.0	90.8	0.0	0.0	666.2	121.1	212.0	60.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.6			

Table 4.3: Daily, Monthly, and Annual Volumes of Water Used for Dust Suppression Purposes on Inuit-Owned and Crown Lands - 2024

Date ^a	Camp Lake	Approved Source ^b									Recycled Water ^c													
		CV128 (Km 17)	Km 32 Lake	BG50 (Km 62)	BG32 (Km 78)	CV217 (Km 80)	Muriel Lake (Km 81)	Katikok Lake	CV233 (Tom River Km 97)	Daily Total ^d	KM 97 Borrow Pond (TR-BP-01)	KM 57 Borrow Pond (TR-BP-02)	Q1 Quarry (MP-Q1-P1)	Flight Ops Pond (MS-RW-01)	Airstrip Pond (MS-RW-03)	Warehouse Pond (MS-RW-04)	Mag Road Pond (HR-CD-05)	Crusher Facility Pond (MS-06)	KM106 ROM Pond (MS-07)	Waste Rock Facility Pond (MS-08)	MP-RW-01	MS-DEP1	Matrix Ditch	380 Camp
Daily Limit (m³)	86	579.5	364	150	120	130	212	318	135	2,094.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
01-Aug-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
02-Aug-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
03-Aug-24	0.0	30.3	90.8	0.0	0.0	0.0	121.1	0.0	0.0	242.2	60.6	0.0	30.3	210.0	0.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
04-Aug-24	0.0	151.4	212.0	0.0	0.0	90.8	181.7	60.6	0.0	696.4	181.7	0.0	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	30.3	0.0	0.0	0.0
05-Aug-24	0.0	30.3	333.1	0.0	0.0	0.0	212.0	302.8	0.0	878.1	333.1	0.0	0.0	6.0	0.0	0.0	0.0	0.0	0.0	151.4	90.8	0.0	0.0	0.0
06-Aug-24	0.0	302.8	151.4	0.0	0.0	0.0	212.0	212.0	0.0	878.1	333.1	0.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0	363.4	121.1	0.0	0.0	0.0
07-Aug-24	0.0	181.7	151.4	0.0	0.0	60.6	181.7	212.0	0.0	787.3	212.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	181.7	0.0	0.0	0.0	0.0
08-Aug-24	0.0	484.5	242.2	0.0	0.0	121.1	121.1	181.7	0.0	1150.6	181.7	0.0	0.0	0.0	0.0	180.0	0.0	0.0	0.0	75.7	0.0	0.0	0.0	0.0
09-Aug-24	0.0	272.5	333.1	0.0	0.0	90.8	121.1	0.0	0.0	817.6	302.8	0.0	0.0	0.0	0.0	30.0	0.0	0.0	0.0	605.6	0.0	0.0	0.0	0.0
10-Aug-24	0.0	423.9	302.8	0.0	0.0	121.1	181.7	181.7	0.0	1211.2	272.5	0.0	0.0	0.0	0.0	60.0	0.0	0.0	0.0	302.8	121.1	0.0	0.0	0.0
11-Aug-24	0.0	393.6	363.4	0.0	0.0	121.1	212.0	181.7	0.0	1271.8	302.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75.7	454.2	181.7	0.0	0.0	0.0
12-Aug-24	0.0	212.0	151.4	0.0	0.0	60.6	30.3	181.7	0.0	635.9	181.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.8	0.0	0.0	0.0
13-Aug-24	0.0	0.0	30.3	0.0	0.0	0.0	60.6	60.6	0.0	151.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14-Aug-24	0.0	60.6	272.5	0.0	0.0	30.3	0.0	121.1	0.0	484.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.3	0.0	0.0	0.0
15-Aug-24	0.0	121.1	121.1	0.0	0.0	60.6	60.6	90.8	0.0	454.2	181.7	0.0	90.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.3	0.0	0.0	0.0
16-Aug-24	0.0	212.0	302.8	0.0	0.0	90.8	151.4	121.1	0.0	878.1	181.7	0.0	121.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.6	0.0	0.0	0.0
17-Aug-24	0.0	151.4																						

Notes:

All volumes in cubic metres (m³).

^a No volumes withdrawn during dates not listed.

^b Dust suppression water sources as shown in Table 2-3 of the Type 'A' Water Licence.

^c Pooling road runoff along length of the Tote Road; recycled water from Surface Water Management Ponds (MS-06, MS-07 and MS-08), and Milne Port 380 Camp WWTP Effluent

^d Values updated since submission of monthly water licence report: June water use for dust suppression from authorized sources included volumes taken from all sources (authorized water sources and recycled water sources) and was corrected to remove recycled water sources. Additional daily volume entries were also added for June following submission of the monthly water licence report.

Highlighted values indicate daily volumes that exceeded the source-specific daily withdrawal limit stipulated by Table 2-3 of the Type 'A' Water Licence.

Table 5.1: Daily and Monthly Quantities - Sewage Management - 2024

Day	Treated Sewage Effluent											
	January				February				March			
	MS-01 ^a	MS-01B ^a	MP-01 ^b	MP-01B ^b	MS-01 ^a	MS-01B ^a	MP-01 ^b	MP-01B ^b	MS-01 ^a	MS-01B ^a	MP-01 ^b	MP-01B ^b
1	0.0	129.1	24.0	25.5	0.0	130.9	24.0	23.9	0.0	117.1	24.0	29.0
2	0.0	132.3	20.0	20.6	0.0	116.8	20.0	27.0	0.0	115.3	21.0	28.8
3	0.0	108.0	17.0	21.2	0.0	104.9	18.0	21.7	0.0	110.5	18.0	32.2
4	0.0	130.2	15.0	21.9	0.0	103.1	14.0	21.7	0.0	104.3	19.0	25.9
5	0.0	137.0	18.0	18.9	0.0	100.7	10.0	21.2	0.0	110.1	21.0	24.5
6	0.0	119.0	21.0	20.4	0.0	104.5	22.0	20.4	0.0	125.9	20.0	35.2
7	0.0	125.2	24.0	18.7	0.0	86.0	24.0	26.5	0.0	124.6	16.0	29.7
8	0.0	124.7	24.0	25.0	0.0	68.5	20.0	24.9	0.0	117.8	23.0	28.7
9	0.0	111.1	24.0	22.4	0.0	124.4	20.0	24.4	0.0	105.7	24.0	26.0
10	0.0	122.7	19.0	22.3	0.0	129.9	19.0	21.9	0.0	101.3	23.0	23.5
11	0.0	138.3	23.0	27.6	0.0	124.1	22.0	22.0	0.0	106.9	22.0	23.1
12	0.0	127.0	24.0	21.8	0.0	89.1	20.0	24.7	0.0	113.3	21.0	31.6
13	0.0	120.3	17.0	27.0	0.0	110.5	13.0	20.5	0.0	113.4	22.0	26.2
14	0.0	128.5	21.0	24.3	0.0	87.7	20.0	24.0	0.0	130.9	24.0	27.8
15	0.0	117.5	24.0	25.8	0.0	105.5	24.0	21.6	0.0	120.8	23.0	24.5
16	0.0	110.8	22.0	20.6	0.0	103.4	19.0	21.5	0.0	100.7	24.0	23.4
17	0.0	122.3	20.0	34.2	0.0	110.8	18.0	22.1	0.0	104.7	24.0	29.4
18	0.0	122.0	19.0	25.9	0.0	96.4	18.0	37.5	0.0	108.5	24.0	20.9
19	0.0	123.7	19.0	22.5	0.0	103.8	10.0	32.2	0.0	132.8	20.0	23.4
20	0.0	104.0	19.0	28.9	0.0	108.8	17.0	24.7	0.0	111.5	23.0	31.1
21	0.0	93.7	20.0	27.7	0.0	131.5	26.0	43.0	0.0	135.8	21.0	26.8
22	0.0	95.8	17.0	31.7	0.0	112.3	25.0	38.7	0.0	126.0	23.0	14.3
23	0.0	95.0	15.0	13.0	0.0	122.8	24.0	29.7	0.0	71.5	28.0	11.3
24	0.0	112.2	24.0	38.9	0.0	107.4	20.0	30.6	0.0	88.0	24.0	16.5
25	0.0	103.7	16.0	19.8	0.0	105.2	17.0	20.8	0.0	82.9	22.0	17.0
26	0.0	59.2	19.0	25.6	0.0	115.4	23.0	24.7	0.0	76.3	24.0	15.6
27	0.0	95.7	9.0	23.0	0.0	112.6	19.0	23.7	10.0	73.0	30.0	22.8
28	0.0	106.2	7.0	36.2	0.0	117.9	17.0	38.0	75.0	70.9	25.0	19.9
29	0.0	102.7	7.0	25.5	0.0	119.2	24.0	21.6	45.0	77.7	24.0	13.7
30	0.0	119.1	9.0	21.5	-	-	-	-	60.0	85.0	24.0	14.5
31	0.0	136.8	24.0	33.4	-	-	-	-	66.0	75.0	24.0	14.2
Monthly Total	0.0	3,573.8	581.0	771.9	0.0	3,154.1	567.0	755.3	256.0	3,238.2	705.0	731.3

Table 5.1: Daily and Monthly Quantities - Sewage Management - 2024

Day	Treated Sewage Effluent											
	April				May				June			
	MS-01 ^a	MS-01B ^a	MP-01 ^b	MP-01B ^b	MS-01 ^a	MS-01B ^a	MP-01 ^b	MP-01B ^b	MS-01 ^a	MS-01B ^a	MP-01 ^b	MP-01B ^b
1	43.0	67.3	21.0	17.2	32.0	119.6	24.0	26.0	33.0	131.8	23.0	32.5
2	55.0	79.8	22.0	19.3	18.0	119.8	24.0	29.3	16.0	128.9	22.0	35.9
3	54.0	129.4	25.0	29.2	24.0	112.1	24.0	28.5	8.0	132.0	24.0	30.1
4	33.0	110.7	24.0	32.9	20.0	111.2	24.0	28.1	1.0	121.8	26.0	29.1
5	32.0	114.2	24.0	30.0	31.0	111.8	24.0	26.1	29.0	128.4	29.0	31.0
6	13.0	100.4	21.0	29.4	23.0	110.0	24.0	28.5	29.2	123.7	27.0	29.5
7	24.0	122.5	23.0	12.2	38.0	108.3	27.0	25.6	28.8	113.5	24.0	26.1
8	20.0	115.4	20.0	33.9	48.0	109.9	28.0	42.7	28.2	119.9	24.0	27.1
9	26.0	121.2	19.0	25.2	44.0	108.6	24.0	36.2	28.1	108.2	24.0	24.4
10	30.0	122.2	21.0	25.7	48.0	107.7	25.0	37.0	20.7	111.6	24.0	27.2
11	31.0	117.1	19.0	25.5	48.0	105.6	26.0	27.8	21.1	119.1	23.0	21.8
12	27.0	108.6	24.0	27.3	45.0	105.7	25.0	29.1	26.2	117.8	24.0	26.3
13	25.0	106.7	20.0	29.0	42.0	104.1	24.0	31.8	5.3	121.3	24.0	33.7
14	21.0	107.7	18.0	26.4	45.0	104.0	18.0	33.8	3.4	114.6	24.0	27.9
15	26.0	113.5	19.0	31.5	45.0	99.7	24.0	35.0	17.5	135.0	24.0	31.1
16	28.0	120.6	23.0	18.0	46.0	103.9	27.0	34.1	15.5	118.6	22.0	21.1
17	27.0	119.9	23.0	31.9	38.0	104.5	25.0	31.9	13.2	115.3	25.0	28.6
18	25.0	117.0	17.0	25.5	41.0	103.3	19.0	25.9	13.4	107.9	24.0	28.6
19	25.0	112.7	12.0	34.9	38.0	73.6	24.0	38.9	14.4	123.5	29.0	27.6
20	29.0	112.0	20.0	31.5	28.0	90.1	24.0	25.8	21.3	129.0	29.0	38.6
21	25.0	117.1	13.0	26.7	27.0	61.7	22.0	30.6	20.4	126.7	29.0	40.7
22	26.0	122.1	23.0	31.9	34.0	121.0	21.0	33.2	19.7	116.8	29.0	27.3
23	31.0	120.8	22.0	29.1	35.0	124.3	24.0	31.6	24.5	134.2	29.0	25.8
24	32.0	125.5	19.0	37.6	43.0	114.0	24.0	26.2	21.7	131.8	27.0	25.5
25	32.0	126.2	30.0	31.2	34.0	114.4	24.0	42.9	14.9	120.5	28.0	24.0
26	26.0	120.4	27.0	25.5	29.0	43.9	20.0	36.1	19.0	141.8	26.0	28.4
27	25.0	120.6	24.0	26.3	32.0	129.5	24.0	29.7	24.0	163.6	30.0	36.1
28	35.0	117.4	25.0	27.6	36.0	160.4	24.0	28.3	23.0	161.8	29.0	28.8
29	29.0	117.6	25.0	26.5	35.0	173.7	24.0	43.3	30.0	161.5	29.0	26.5
30	25.0	119.2	25.0	33.8	35.0	173.7	19.0	44.9	26.0	152.6	21.0	37.1
31	-	-	-	-	36.0	126.0	20.0	37.6	-	-	-	-
Monthly Total	880.0	3,425.8	648.0	832.6	1,118.0	3,456.1	730.0	1,006.8	596.4	3,833.2	772.0	878.5

Table 5.1: Daily and Monthly Quantities - Sewage Management - 2024

Day	Treated Sewage Effluent											
	July				August				September			
	MS-01 ^a	MS-01B ^a	MP-01 ^b	MP-01B ^b	MS-01 ^a	MS-01B ^a	MP-01 ^b	MP-01B ^b	MS-01 ^a	MS-01B ^a	MP-01 ^b	MP-01B ^b
1	34.0	151.3	27.0	26.0	32.0	115.5	24.0	35.5	25.0	122.5	29.0	42.6
2	28.0	98.9	24.0	28.8	30.0	122.8	24.0	44.0	26.0	118.2	25.0	37.5
3	27.0	107.0	29.0	33.9	17.0	131.7	24.0	38.2	25.0	104.7	24.0	39.0
4	29.0	139.9	28.0	38.8	27.0	128.6	24.0	40.1	15.0	131.6	26.0	44.1
5	34.0	134.8	21.0	35.4	26.0	141.8	24.0	44.7	3.0	121.7	26.0	39.8
6	29.0	126.1	24.0	32.6	25.0	132.3	24.0	39.5	17.0	112.2	24.0	45.5
7	35.0	137.9	24.0	31.4	25.0	124.3	24.0	44.0	28.0	115.2	24.0	53.0
8	34.0	126.4	23.0	35.9	21.0	147.3	24.0	42.8	28.0	119.9	24.0	37.2
9	39.0	141.8	19.0	29.4	28.0	139.6	24.0	39.0	25.0	114.6	24.0	41.1
10	35.0	152.0	21.0	40.6	30.0	130.0	24.0	41.6	21.0	118.0	24.0	38.3
11	34.0	146.7	18.0	38.9	32.0	126.6	24.0	38.5	21.0	126.4	24.0	46.9
12	29.0	131.7	24.0	41.2	33.0	124.6	24.0	47.6	22.0	133.8	35.0	36.8
13	36.0	138.4	24.0	31.5	32.0	127.3	21.0	34.9	21.0	137.4	32.0	43.5
14	37.0	127.5	23.0	34.3	29.0	129.2	21.0	50.6	21.0	126.6	24.0	41.3
15	42.0	131.5	23.0	29.5	31.0	128.0	20.0	50.5	21.0	65.5	24.0	41.2
16	38.0	114.7	20.0	34.1	28.0	115.4	24.0	42.9	21.0	113.7	28.0	39.4
17	35.0	125.3	24.0	39.2	25.0	127.8	24.0	47.2	22.0	118.7	25.0	38.8
18	40.0	119.4	20.0	35.4	25.0	125.6	24.0	47.7	17.0	129.8	24.0	38.4
19	30.0	110.3	24.0	33.3	25.0	123.6	24.0	45.5	12.0	144.4	24.0	44.2
20	30.0	117.7	24.0	37.8	25.0	116.3	19.0	36.4	21.0	131.4	24.0	41.7
21	30.0	104.9	23.0	35.7	23.0	127.8	20.0	62.2	25.0	120.6	24.0	44.5
22	21.0	115.5	22.0	30.4	26.0	133.2	20.0	54.8	25.0	107.2	24.0	46.2
23	36.0	122.2	19.0	29.3	28.0	133.1	20.0	38.4	25.0	68.9	23.0	32.9
24	31.0	131.0	21.0	39.4	25.0	125.1	30.0	47.6	25.0	96.6	24.0	40.4
25	29.0	117.1	24.0	47.9	32.0	114.7	32.0	39.6	25.0	119.3	24.0	37.2
26	29.0	129.9	24.0	43.5	28.0	120.8	21.0	45.2	24.0	126.1	24.0	44.5
27	31.0	111.2	24.0	36.5	27.0	116.9	24.0	29.4	23.0	121.7	24.0	49.5
28	30.0	111.2	24.0	36.8	28.0	121.8	24.0	44.8	23.0	111.6	24.0	44.4
29	19.0	122.1	28.0	34.6	29.0	128.7	18.0	48.5	24.0	118.3	23.0	43.7
30	32.0	128.3	27.0	45.0	27.0	128.1	27.0	36.1	20.0	105.8	23.0	27.7
31	33.0	126.2	27.0	42.1	22.0	118.8	29.0	40.6	-	-	-	-
Monthly Total	996.0	3,898.9	727.0	1,108.9	841.0	3,927.3	730.0	1,338.4	651.0	3,502.4	751.0	1,241.4

Table 5.1: Daily and Monthly Quantities - Sewage Management - 2024

Day	Treated Sewage Effluent											
	October				November				December			
	MS-01 ^a	MS-01B ^{a,c}	MP-01 ^b	MP-01B ^b	MS-01 ^a	MS-01B ^a	MP-01 ^b	MP-01B ^b	MS-01 ^a	MS-01B ^a	MP-01 ^b	MP-01B ^b
1	8.0	90.5	23.0	49.3	18.0	135.9	54.0	30.0	11.0	91.9	15.0	19.3
2	14.0	106.3	24.0	41.4	14.0	150.3	25.0	39.5	11.0	108.9	22.0	21.5
3	26.0	122.5	26.0	48.2	18.0	129.2	21.0	35.4	17.0	115.8	14.0	17.8
4	27.0	108.5	36.0	43.1	18.0	131.7	19.0	13.7	16.0	121.9	19.0	29.6
5	26.0	101.4	40.0	46.1	18.0	125.4	16.0	30.1	16.0	126.9	24.0	23.9
6	25.0	107.6	35.0	39.7	18.0	130.9	17.0	30.8	17.0	119.3	17.0	23.7
7	27.0	116.6	26.0	38.0	18.0	137.1	19.0	32.1	18.0	116.9	18.0	20.5
8	24.0	117.3	24.0	35.5	18.0	98.8	15.0	28.4	17.0	128.8	17.0	21.6
9	26.0	119.9	30.0	53.0	12.0	100.3	19.0	23.9	10.0	115.3	18.0	28.9
10	25.0	127.2	28.0	47.5	11.0	114.3	17.0	23.6	18.0	73.9	17.0	21.1
11	25.0	141.6	25.0	40.7	13.0	93.3	17.0	26.3	18.0	109.4	20.0	29.4
12	25.0	116.1	24.0	40.0	7.0	98.6	20.0	20.9	17.0	125.6	17.0	25.0
13	17.0	123.1	24.0	38.7	10.0	108.7	15.0	31.7	18.0	108.0	15.0	25.9
14	18.0	123.9	24.0	40.4	17.0	98.2	21.0	30.6	16.0	94.3	17.0	19.0
15	17.0	102.1	30.0	37.3	7.0	88.7	16.0	16.1	17.0	107.5	20.0	28.4
16	22.0	110.6	32.0	40.7	16.0	96.4	18.0	20.0	17.0	109.2	17.0	25.2
17	18.0	120.5	33.0	39.9	10.0	99.0	17.0	33.9	7.0	84.0	20.0	16.3
18	19.0	113.7	31.0	39.9	5.0	86.4	16.0	27.6	13.0	106.7	26.0	0.0
19	20.0	105.5	16.0	37.8	14.0	96.2	19.0	21.6	12.0	111.6	42.0	0.0
20	21.0	111.7	23.0	41.3	18.0	100.4	24.0	26.1	12.0	112.3	34.0	24.0
21	17.0	101.4	15.0	33.6	3.0	100.1	13.0	36.2	13.0	106.6	22.0	20.1
22	18.0	101.2	20.0	27.1	11.0	107.2	23.0	22.2	12.0	126.3	18.0	24.7
23	18.0	92.5	16.0	42.6	12.0	112.7	14.0	22.1	11.0	115.5	16.0	23.8
24	19.0	108.7	17.0	40.9	13.0	116.3	19.0	35.1	0.0	106.4	18.0	27.7
25	18.0	119.0	16.0	45.9	10.0	131.6	16.0	17.7	0.0	125.3	17.0	22.1
26	18.0	100.4	17.0	32.9	17.0	142.6	21.0	27.1	0.0	116.2	15.0	21.3
27	18.0	107.8	12.0	26.5	6.0	121.0	18.0	21.4	0.0	109.2	16.0	9.3
28	18.0	111.8	19.0	37.7	11.0	123.9	20.0	18.5	0.0	89.1	11.0	20.2
29	18.0	107.8	20.0	35.6	17.0	117.2	18.0	28.1	0.0	75.9	16.0	24.1
30	18.0	53.0	28.0	39.9	12.0	102.8	18.0	16.0	0.0	94.6	14.0	18.0
31	18.0	98.6	47.0	37.8	-	-	-	-	0.0	104.3	15.0	29.7
Monthly Total	628.0	3,388.8	781.0	1,239.2	392.0	3,395.2	585.0	787.0	334.0	3,357.6	587.0	662.0

2024	Treated Sewage Effluent			
	MS-01 ^a	MS-01B ^a	MP-01 ^b	MP-01B ^b
Annual Total	6,692	42,151	8,164	11,353

Notes:

All volumes in cubic metres (m³)

^a Compliant treated effluent from MS-01 and MS-01B (Mine Site STPs) discharged to approved location near Mary River.

^b Compliant treated effluent from MP-01 and MP-01B (Milne Port STPs) discharged to approved location near Milne Inlet.

Table 5.1: Daily and Monthly Quantities - Sewage Management - 2024

No discharge occurred from MP-01A (Milne Port Polishing Waste Stabilization Pond (PWSP)) or MS-MRY-04A, B, C (Mine Site PWSPs) in 2024. Sewage sludge/off-spec effluent from these ponds was reprocessed through the WWTPs if/as required to maintain pond capacity.

Table 5.2: Monthly and Annual Quantities - Sewage Sludge Management - 2024

Month	Sludge Cake from MS-01 STP ^a	Sludge Cake from MS-01B STP ^a	Sludge from MS-01 STP to PWSPs ^b	Sludge from MS-01B STP to PWSPs ^c	Sludge from Mine Site Lift Stations to PWSPs ^d	Sludge Cake from MP-01 STP ^a	Sludge Cake from MP-01B STP ^a	Sludge from MP-01 STP to PWSP (m ³) ^e	Sludge from MP-01B STP to PWSP (m ³) ^f	Sludge from Milne Port Lift Stations to PWSP ^g
January	0.0	25.7	0.0	63.0	0.0	6.4	8.1	0.0	0.0	5.7
February	0.0	7.4	0.0	0.0	9.0	3.5	6.0	0.0	0.0	5.7
March	0.0	18.2	582.0	30.0	3.0	1.3	5.3	0.0	0.0	0.0
April	5.3	24.7	51.0	0.0	84.0	1.1	3.8	1.0	0.0	0.0
May	2.9	25.7	0.0	24.0	192.0	1.6	6.3	0.0	0.0	5.7
June	3.1	24.3	0.0	13.0	22.0	2.1	6.2	0.0	9.0	0.0
July	5.7	19.9	0.0	0.0	0.0	1.6	6.6	0.0	0.0	0.0
August	6.6	25.8	4.0	0.0	4.0	1.7	3.6	0.0	9.0	5.7
September	5.4	12.0	11.0	74.0	80.0	1.9	0.0	5.0	21.0	0.0
October	3.5	15.2	0.0	0.0	55.0	2.5	1.5	0.0	14.0	4.0
November	5.8	32.1	11.0	0.0	4.0	1.5	0.0	1.0	25.0	1.0
December	1.9	24.7	47.0	0.0	8.0	1.3	0.0	0.0	20.0	5.7
TOTAL	40.3	255.8	706.0	204.0	461.0	26.5	47.4	7.0	98.0	33.4

Notes:

All volumes in cubic metres (m³)

^a Sludge generated by STPs pressed into cake and disposed using site incinerators or backhauled for off-site disposal

^b Sewage sludge removed from MS-01 STP to Mine Site PWSP.

^c Sewage sludge removed from MS-01B STP to Mine Site PWSPs

^d Sewage sludge removed from Mine Site lift stations to Mine Site PWSPs

^e Sewage sludge removed from MP-01 STP to Milne Port PWSP

^f Sewage sludge removed from MP-01B STP to Milne Port PWSP

^g Sewage sludge removed from Milne Port lift stations to Milne Port PWSP

Table 5.3: Daily, Monthly, and Annual Quantities of Discharge Stormwater - Containment Areas - 2024

Day	June	August	September	
	MP-03 ^{a,d}	MS-03B ^b	MP-03 ^a	MP-04 ^c
1	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	243.2
17	0.0	0.0	0.0	221.8
18	157.6	0.0	248.9	357.8
19	209.3	0.0	331.9	0.0
20	56.4	0.0	44.2	0.0
21	0.0	0.0	67.2	0.0
22	0.1	0.0	501.5	0.0
23	0.0	0.0	0.0	0.0
24	0.0	0.0	147.2	0.0
25	0.0	321.0	0.0	0.0
26	0.0	562.0	7.7	0.0
27	0.0	797.0	0.0	0.0
28	0.0	63.0	114.4	0.0
29	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0
31	-	0.0	-	-
Monthly Total	423.4	1743.0	1462.9	822.8

2024	MP-03 ^a	MS-03B ^b	MP-04 ^c	MS Total	MP Total	Combined Total
Annual Total	1,886.3	1,743	823	1743	2,709	4,452

Notes:

- All volumes in cubic metres (m³).
- ^a Effluent from MP-03 (Milne Port Bulk Fuel Storage Facility) discharged to ditch near Milne Inlet.
- ^b Effluent from MS-03B (Mine Site Bulk Fuel Storage Facility) discharged to adjacent tundra near Sheardown Lake NW.
- ^c Effluent from MP-04 (Milne Port Soil Landfarm) discharged to adjacent tundra.
- ^d Values updated since submission of monthly water licence report.

Table 5.4: Daily, Monthly, and Annual Quantities of Discharge Stormwater - Surface Water Management Ponds - 2024

Day	May	June		July			August			September						October					
	KM105 Pond ^a	MS-08 ^{b,c}	KM105 Pond ^{a,d}	MS-08 ^{b,c}	KM105 Pond ^{a,e}	MP-06 ^{f,g}	MS-08 ^{b,c}	KM105 Pond ^{a,e}	MP-06 ^f	MS-06 ^h	MS-07 ^{i,j}	MS-08 ^b	KM105 Pond ^{a,e}	MP-05 ^f	MP-06 ^f	MS-06 ^h	MS-07 ^{i,j}	MS-08 ^b	KM105 Pond ^{a,e,k}	MP-05 ^f	MP-06 ^f
1	0.0	0.0	604.8	4,655.0	1,702.2	0.0	2,479.0	6,079.1	0.0	0.0	0.0	0.0	3,115.9	0.0	0.0	75.1	0.0	1,807.6	10,948.4	0.0	406.0
2	0.0	0.0	6,998.4	5,202.0	2,874.8	0.0	965.0	12,201.7	0.0	0.0	0.0	0.0	2,728.8	0.0	1,941.0	0.0	0.0	3,514.0	9,364.4	93.4	81.0
3	0.0	0.0	27,561.6	4,845.0	4,767.8	0.0	1,401.0	10,167.7	0.0	34.7	981.5	0.0	2,645.7	0.0	20.1	73.3	0.0	3,514.0	8,508.0	47.4	5.0
4	0.0	0.0	0.0	3,372.0	7,617.9	0.0	1,421.0	6,395.0	0.0	237.9	1,812.0	0.0	3,426.8	0.0	20.1	61.5	0.0	3514.0	8,436.4	0.0	450.0
5	0.0	0.0	6,891.3	0.0	13,261.6	0.0	2,189.0	4,830.7	0.0	229.4	1,020.7	0.0	2,955.4	0.0	494.3	0.0	0.0	3514.0	8,179.8	0.0	0.0
6	0.0	0.0	2,655.5	5,067.0	9,815.5	0.0	3,477.0	4,055.5	0.0	223.9	0.0	0.0	2,477.8	0.0	494.3	0.0	0.0	0.0	7,519.4	0.0	0.0
7	0.0	0.0	3,599.4	5,108.0	6,896.4	0.0	2,707.0	3,610.3	0.0	251.3	0.0	0.0	2,724.2	0.0	494.3	0.0	0.0	0.0	6,302.0	0.0	0.0
8	0.0	0.0	5,631.6	869.0	5,807.6	117.0	1,344.0	3,352.6	0.0	290.7	0.0	0.0	3,839.5	0.0	494.3	0.0	1,003.2	0.0	5,425.6	0.0	0.0
9	0.0	0.0	0.0	4,895.0	4,510.3	42.0	1,786.0	3,041.3	0.0	0.0	0.0	0.0	6,503.4	0.0	0.0	0.0	1,296.3	0.0	4,129.0	0.0	0.0
10	0.0	0.0	0.0	3,398.0	3,923.5	0.0	2,396.0	2,515.6	0.0	0.0	0.0	0.0	8,026.5	0.0	1,083.6	0.0	0.0	0.0	4,220.7	0.0	468.0
11	0.0	0.0	0.0	5,519.0	3,005.2	0.0	1,493.0	1,645.8	0.0	0.0	0.0	0.0	6,285.7	0.0	0.0	0.0	0.0	0.0	4,150.5	0.0	1,599.5
12	0.0	0.0	0.0	3,135.0	2,478.7	0.0	2,168.0	1,211.1	0.0	0.0	0.0	18.8	5,105.6	0.0	0.0	150.7	0.0	0.0	5,181.2	0.0	1,599.5
13	0.0	0.0	0.0	4,211.0	2,223.7	0.0	2,111.0	1,213.9	0.0	0.0	0.0	1170.2	4,843.6	0.0	0.0	199.2	0.0	0.0	0.0	0.0	416.0
14	0.0	0.0	0.0	2,441.0	1,755.7	0.0	1,572.0	1,322.9	0.0	7.3	0.0	1705.0	4,779.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	307.0
15	0.0	0.0	0.0	342.0	1,565	602.0	2,151.0	1,698.0	622.0	0.0	0.0	2962.0	4,992.9	0.0	0.0	210.0	0.0	0.0	0.0	0.0	3.0
16	0.0	0.0	0.0	2,897.0	2,740.1	1302.2	2,747.0	1,930.1	874.5	0.0	0.0	3448.0	4,245.2	0.0	0.0	203.2	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	2,738.7	1302.2	1,502.0	1,513.8	923.1	0.0	0.0	3301.0	3,733.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	2,847.0	6,971.0	2,010.9	1302.2	1,758.0	1,143.4	894.7	0.0	0.0	2678.0	3,343.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	6,480.2	3,249.0	1,638.2	0.0	2,130.0	835.2	547.9	0.0	0.0	2624.0	2,885.9	0.0	398.2	0.0	0.0	0.0	0.0	0.0	0.0
20	13737.6	0.0	6,332.0	7,683.0	1,478.3	0.0	1,422.0	660.9	0.0	0.0	0.0	0.0	4,221.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	19353.6	600.0	5,170.3	1,651.0	1,718.2	0.0	1,333.0	661.1	0.0	0.0	0.0	2170.0	25,527.7	0.0	1,001.1	0.0	0.0	0.0	0.0	0.0	0.0
22	17366.4	3,500.0	3,619.0	4,716.0	1,442.8	0.0	615.0	2,326.6	0.0	0.0	0.0	3857.0	26,756.1	1,439.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	20044.8	3,500.0	2,683.1	3,759.0	1,646.2	367.6	1,845.0	6,181.5	88.8	0.0	0.0	3244.0	20,132.6	0.0	283.1	0.0	0.0	0.0	0.0	0.0	0.0
24	6912.0	13,000.0	3,058.8	3,000.0	1,967.2	0.0	2,253.0	8,485.2	0.0	0.0	0.0	0.0	15,301.3	0.0	559.9	0.0	0.0	0.0	0.0	0.0	0.0
25	2160.0	4,700.0	2,687.3	2,793.0	1,627.6	0.0	1,305.0	8,253.5	1,387.0	65.0	0.0	0.0	11,433.5	0.0	697.4	0.0	0.0	0.0	0.0	0.0	0.0
26	2764.8	5,900.0	1,846.5	2,227.0	2,785.8	0.0	2,459.0	8,219.8	2,324.1	64.9	0.0	517.0	9,062.3	0.0	81.3	0.0	0.0	0.0	0.0	0.0	0.0
27	5097.6	5,000.0	1,842.4	3,538.0	2,994.1	0.0	1,979.0	6,224.5	410.8	64.9	0.0	2745.0	9,599.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	5270.4	6,200.0	1,855.7	1,692.0	3,534.6	0.0	2,511.0	5,216.8	0.0	64.9	0.0	3674.0	9,052.8	0.0	330.5	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	3,800.0	1,133.6	2,101.0	5,263.9	0.0	904.0	4,389.8	847.3	91.6	0.0	5218.0	9,752.6	0.0	740.4	0.0	0.0	0.0	0.0	0.0	0.0
30	5702.4	5,937.0	794.5	2,220.0	5,375.6	0.0	0.0	3,973.1	2,694.1	146.8	0.0	4504.4	11,005.3	0.0	231.2	0.0	0.0	0.0	0.0	0.0	0.0
31	777.6	-	-	1,809.0	4,544.7	0.0	0.0	3,527.0	0.0	-	-	-	-	-	-	0	0	0	0.0	0.0	0.0
Sub-Total	99,187.2	52,137.0	94,292.9	103,365.0	115,712.2	5,035.2	54,423.0	126,883.4	11,614.3	1,773.5	3,814.1	43,836.4	230,505.0	1,439.0	9,364.9	973.0	2,299.5	15,863.6	82,365.5	140.8	5,335.0
Monthly Total	99,187.2	146,429.9		224,112.4			192,920.7			290,732.8						106,977					

2024	MS-06 ^e	MS-07 ^{f,g}	MS-08 ^{b,h}	KM105-SWMP SEEP03/4 ^{a,e,k}	MP-05 ^f	MP-06 ^f	MS Total	MP Total	Combined Total
Annual Total	2,746	6,114	269,625	748,946	1,580	31,349	1,027,431	32,929	1,060,360

Notes:

All volumes in cubic meters (m³).

^a Effluent from KM105 Surface Water Management Pond (KM1-5 Pond) was discharged at a location near Sheardown Lake Tributary-1 (SDLT-1). Following a controlled discharge on May 20, 2024 from the seepage collection sump, discharge quantity was estimated through daily flow measurements at the seepage location. Following the onset of consistent warmer temperatures and ice free conditions in June, pressure transducers were installed at the downstream hydrology station for estimating discharge volumes.

^b Effluent from MS-08 (Mine Site Waste Rock Facility Pond) was discharged/treated using a water treatment plant and discharged to the catchment of Mary River Tributary F.

^c MS-08 discharge data for June, July and August was corrected following submission of the June, July and August monthly water licence reports.

^d Discharge quantity at KM105 Pond was estimated through daily flow measurement at the seepage location. Due to unsafe conditions, no flow measurements were recorded on June 4. Flow measurements were stopped on June 8 due to construction of a culvert at the FDP. On June 18, pressure transducers were installed at a downstream hydrology station to estimate discharge volumes.

^e KM105 Pond volume estimated from hydrology station at MS-C-A/B

^f Effluent from MP-05 and MP-06 (East and West Milne Port Ore Stockpile Ponds) was discharged to Milne Inlet.

^g Updated July 8 and July 9 daily volumes which did not reflect a change to the reported total volume for July.

^h Effluent from MS-06 (Crusher Facility Pond) was discharged at a location near the Mary River.

ⁱ Effluent from MS-07 (KM106 ROM Ore Stockpile Pond) was discharged at a location near the Mary River.

^j MS-07 discharge data for September and October was corrected following submission of the September and October monthly water licence reports.

^k Hydrology station MS-C-A/B decommissioned on October 12 due to the onset of ice conditions in the stream in the vicinity the pressure transducer.

Table 5.5: Locations of Temporary and Permanent Storage Areas for Wastes - 2024

Description	Location (UTM NAD83 Zone 17 W)		Location	
	Easting	Northing	Latitude	Longitude
Milne Port				
MP-HWB-1	503878	7976292	71° 53' 11.9"	80° 53' 17.6"
MP-HWB-2 ¹	503730	7975972	71° 53' 01.6"	80° 53' 33.1"
MP-HWB-3	503562	7975961	71° 53' 01.2"	80° 53' 50.5"
MP-HWB-4	503569	7975954	71° 53' 01.0"	80° 53' 49.8"
Milne Port Landfarm Facility (MP-04; including Contaminated Snow Containment Berm; MP-04A)	503751	7975570	71° 52' 48.6"	80° 53' 30.9"
Milne Port Polishing Waste Stabilization Pond (PWSP - MP-01A)	503625	7976015	71° 53' 03.0"	80° 53' 44.0"
Milne Port Open Burn Location	504455	7973669	71° 51' 47.2"	80° 52' 18.4"
Milne Port Waste Management Building	503762	7975981	71° 53' 01.9"	80° 53' 29.8"
Mine Site				
MS-HWB-1	558161	7914571	71° 19' 34.6"	79° 22' 20.2"
MS-HWB-2	558189	7914564	71° 19' 34.3"	79° 22' 17.4"
MS-HWB-3	558279	7914539	71° 19' 33.5"	79° 22' 08.4"
MS-HWB-4	558290	7914529	71° 19' 33.2"	79° 22' 07.3"
MS-HWB-5	558154	7914554	71° 19' 34.1"	79° 22' 20.9"
MS-HWB-6	558512	7914710	71° 19' 38.8"	79° 21' 44.5"
MS-HWB-7	558300	7914478	71° 19' 31.5"	79° 22' 06.5"
Mine Site Landfarm Facility	560819	7912715	71° 18' 32.4"	79° 17' 57.8"
Mine Site Non-Hazardous Waste Landfill Facility	560879	7912513	71° 18' 25.9"	79° 17' 51.8"
Exploration Camp Polishing Waste Stabilization Pond 1 (PWSP - MS-MRY-4A)	558521	7914116	71° 19' 19.6"	79° 21' 45.2"
Exploration Camp Polishing Waste Stabilization Pond 2 (PWSP - MS-MRY-4B)	558448	7914275	71° 19' 24.8"	79° 21' 52.1"
Exploration Camp Polishing Waste Stabilization Pond 3 (PWSP - MS-MRY-4C)	558499	7914245	71° 19' 23.8"	79° 21' 47.1"
Mine Site Open Burn Location	556815	7915193	71° 19' 55.9"	79° 24' 34.1"
Mine Site Waste Management Building	558430	7914773	71° 19' 40.9"	79° 21' 52.6"
Mid-Rail				
Temporary hazardous waste and barrel fuel storage area	595660	7876369	70° 58' 19"	78° 22' 13"
Steensby Port				
Temporary hazardous waste and barrel fuel storage area	594679	7800514	70° 17' 35"	78° 29' 01"

Note:

¹ MP-HWB-02 is no longer used to store hazardous waste materials.

Refer to Figures 3, 5, 6 and 7 for locations of waste storage areas at Milne Port, the Mine Site, Mid-Rail Camp and Steensby Port.

Table 5.6: Monthly and Annual Quantities of Waste Deposited - Landfill Facility - 2024

Quarter	Month	Volume of Waste Deposited in Landfill ¹	Comments
Q1, 2024	January	3170	The large volume reported during Q1 includes snow accumulation resultant of quarterly seasonal differences during the winter months.
	February	3170	
	March	3170	
Q2, 2024	April	-4,409	The negative volume reported during Q2 accounts for snowmelt resultant of quarterly seasonal differences during the winter months.
	May	-4,409	
	June	-4,409	
Q3, 2024	July	600	
	August	600	
	September	600	
Q4, 2024	October	1,763	The large volume reported during Q4 includes snow accumulation resultant of quarterly seasonal differences during the winter months.
	November	1,763	
	December	1,763	
TOTAL (BCMs)		3,373	

Notes:

Volumes in Banked Cubic Meters (BCMs)

¹ Monthly volumes are estimated from the quarterly survey volumes.

Table 5.7: Monthly and Annual Quantities of Hydrocarbon Impacted Soil, Water, and Snow Deposited - Landfarm Facilities - 2024

Quarter	Month	Soil Deposited in Milne Port Landfarm ¹ (m ³)	Soil Deposited in Mary River Landfarm ² (m ³)	Milne Port Water Deposited in Contaminated Snow Containment Berm (m ³) ³
Q1	January	0	32	0
	February	0	32	0
	March	0	32	0
Q2	April	0	32	0
	May	0	32	0
	June	0	32	0
Q3	July	0	32	0
	August	0	32	0
	September	0	32	0
Q4	October	0	3	0
	November	0	3	0
	December	0	3	0
TOTAL		0	292	0

Notes:

¹ The Milne Port Landfarm Facility reached capacity at the end of 2019; therefore, there was no contaminated soil deposited in the Milne Port landfarm in 2024. All contaminated soil was transferred to the Landfarm Facility at Mary River for treatment.

² Monthly volumes for Q1, Q2, and Q3 2024 are an estimate based off of an accurate annual evaluation of material placed between July 10, 2023 (the previous snow-free survey) to September 27, 2024. Monthly volumes for Q4 are estimated from the quarterly Q4 survey volume.

³ Contaminated snow and water generated in 2024 were placed in seacans or staged in Hazardous Waste Berms (HWBs) to be shipped offsite for disposal.

Table 5.8: Monthly and Annual Quantities - Deposit No. 1 Waste Rock Management - 2024

Month	Total Non-AG Waste Rock Used for Construction Purposes (EX-PIT)	Total Non-AG Waste Rock Deposited in Waste Rock Facility	Total PAG Waste Rock Deposited in Waste Rock Facility	Total Waste Rock Generated
January	272,619	87,099	38,255	397,973
February	67,056	344,681	16,430	428,167
March	7,931	203,961	51,429	263,320
April	156,303	216,876	62,166	435,345
May	103,009	493,772	64,144	660,925
June	3,494	481,608	74,204	559,307
July	169,755	264,110	23,056	456,920
August	28,309	420,676	83,580	532,566
September	15,652	315,585	20,435	351,672
October	0	119,819	108,264	228,083
November	48,932	147,637	50,619	247,188
December	148,221	278,964	12,959	440,144
TOTAL	1,021,281	3,374,789	605,541	5,001,610

Notes:

All quantities in wet metric tonnes.

Non-AG - Non-Acid Generating Waste Rock, PAG - Potentially Acid Generating Waste Rock.

Table 6.1: Summary of Reported Spills and Unauthorized Discharges by Project Area and Product - 2024

Product	Number of 2024 Reported Spills by Location		
	Mine Site	Tote Road	Milne Port
Effluent (Compliant)	1	0	1
Sediment/Sediment-laden Water	1	1 ^a	1
Contact Water	2	0	0
Sewage (Untreated) ^b	0	0	3
Sewage (Partially Treated)	1	0	1
Oil (Hydraulic Oil, Engine Oil)	2	0	0
Sub-Total	7	1	6
ANNUAL TOTAL	14		

Notes:

^a NT-NU spill #2024-478 reported multiple spill locations on the Tote Road and at the Mine Site.

^b NT-NU spill #2024-462 is included in the four (4) sewage (untreated) spills at Milne Port. The product spilled was partially treated sewage.

Table 6.2: List of Reported Spills and Unauthorized Discharges - 2024

Date	NT-NU Spill Reporting Number	Quantity (L)	Material Spilled	Specific Location	Proximity to Waterbody (m)	Occurred within Engineered Lined Facility?	Corrective Actions
4-Feb-2024	2024-041	1500	Sewage - Untreated	Milne Port PSC Waste Water Treatment Plant (WWTP)	370	No	The release originated from the PSC untreated sewage influent line; where the influent line, located between the PSC WWTP and drainage ditch, is re-directed north via a 90° elbow fitting. The failed fitting was replaced and the PSC WWTP influent line put back into service. The long-term corrective action to prevent a similar reoccurrence is removal of the repaired 90° elbow fitting and replacement with two 45° fittings and a short length of pipe to reduce mechanical stress on the connection. The PSC WWTP influent line and the repaired connection will continue to be inspected daily until the long-term corrective measures are implemented.
29-Feb-2024	2024-058	400	Sewage - Untreated	Milne Port PSC Dorm B/D Lift Stations	350	No	A discharge elbow for the lift stations cracked causing the joint to fail. The failed elbow and joint were replaced and the lift stations were put back into service. Corrective actions implemented include an increased frequency of bump tests for sewage lift stations, inclusion of visual inspections of all feed and discharge piping during daily inspections, and scheduling yearly inspections where the insulation is removed and an in-depth integrity inspection is completed of the outdoor sewage piping systems.
19-Apr-2024	2024-113	116	Sewage - Untreated	Milne Port PSC Laundry Room Lift Station	318	No	The industrial laundry room lift station at the PSC overflowed when sewage sludge accumulated around the float inside the lift station, which prevented the lift station pumps from engaging as per design, when the high level was reached. Accumulated material was removed from the affected lift station float, the lift station pumps were tested and reengaged, and the PSC laundry room lift station was returned to service. Corrective actions implemented to prevent a similar reoccurrence include an increased frequency of manual testing of sewage lift station floats to ensure the system functions as intended. Visual inspections of lift station floats will also be incorporated into routine daily inspections. Sewage sludge will be removed from the lift stations at an increased frequency and as required to ensure sludge accumulation does not affect lift station pump and float operations. Corrective actions have been scheduled on an automatic recurring basis into the Operators’ workflow at the required frequency.
9-May-2024	2024-149	5000	Sewage - Partially Treated(Screened Sewage Effluent)	Mine Site MSC WWTP	250	No	The screen tank was overtopped when the high-level float was not placed at the correct height and thus did not function as expected resulting in the overtopping of the tank and subsequent release. In response, the high-level float was set at the correct height and plant operations were resumed. Corrective actions implemented include modifications and improvements to prevent any movement of the high-level floats, an inspection of all WWTP tanks and floats to ensure they are set to the correct height and operating as designed, updated WWTP procedures that reflect any modifications made to the plant, and ensuring the maintenance schedule is representative of all modifications made to the WWTPs.

Table 6.2: List of Reported Spills and Unauthorized Discharges - 2024

Date	NT-NU Spill Reporting Number	Quantity (L)	Material Spilled	Specific Location	Proximity to Waterbody (m)	Occurred within Engineered Lined Facility?	Corrective Actions
10-May-2024	2024-151	748,946,200 L Discharge quantity estimated through daily flow measurements at seepage location, then pressure transducers installed at the downstream hydrology station on June 18. No data June 4, and June 9 - June 17.	Contact Water	KM 105 Dam	500	No	On May 10, an uncontrolled release from the KM 105 Pond of seepage originated from a discrete location upstream of the northwest embankment. The downstream receiving environment was frozen at the time of the release, preventing the seepage from migrating to the receiving environment. A previously constructed earthen berm was reinforced to create a collection area at the seepage location, and pumps were installed to transfer the water back into the pond. Other treatment and mitigation options implemented included installation of a pre-treatment system for the addition of flocculant, ferric sulfate, and lime to control pH and promote settling of suspended solids, installation of a silt curtain upstream of the dam, and placement of floc blocks within the drainage ditch inflow to the pond. On May 20, a controlled discharge was initiated from the seepage collection sump at the toe of the pond due to the seepage rate exceeding the pumping capacity and the inability of the newly installed grout curtain to retain water within the northwest embankment. Water also continued to be pumped back into the pond to minimize the volume of discharge to the environment. Modifications were also made to the Geotube® and seepage collection area to enhance containment and reduce further seepage. KM 105 Pond water treatment via pre-dosing the pond inflow continued through the open water season, with an operator monitoring water quality and manually adjusting the chemical dosing system at the pond’s inflow. Following the establishment of these structures, efforts continued towards the commissioning of a two-stage polishing system consisting of a clarification stage and a multimedia filtration stage to reduce TSS in the collected seepage. Additionally, if necessary, any excess collected seepage or treated effluent was planned to be managed through the Geotube® filtration system, installed at the close of the 2023 open water season. During the commissioning phase of the water treatment system, however, thawing of the temporary retention berms occurred, leading to the migration of water through the berms. This thawing compromised the ability to consistently supply ponded water to the water treatment system or Geotube® filtration system. The current water management plan is to improve sediment control measures for the runoff flowing from the valley infrastructure which will involve two processes for sediment removal: filtration and settling, both enhanced with chemical addition at the inflow. The surface water runoff flowing into the KM 105 Pond will be treated using a chemical dosing system. The flocs generated by this chemical treatment will be retained by a rock filter berm constructed within the KM 105 Pond containment, allowing for enhanced settling within the pond and filtration through the berm. The treated water will then flow into the existing downstream pond of the KM 105 dam. This pond will function as a polishing pond, enhanced with silt curtains to facilitate the settling of any remaining fine sediment. Finally, the effluent from the polishing pond will flow through an engineered structure as the final control point, where flows and water quality will be recorded. Due to winter construction constraints, some of these features will be installed following 2025 freshet, but all construction is planned to be completed prior to the end of hte 2025 open water season.

Table 6.2: List of Reported Spills and Unauthorized Discharges - 2024

Date	NT-NU Spill Reporting Number	Quantity (L)	Material Spilled	Specific Location	Proximity to Waterbody (m)	Occurred within Engineered Lined Facility?	Corrective Actions
22-May-2024	2024-180	Unquantified	Sediment-laden Water	Sheardown Lake Tributary (SDLT), Camp Lake Tributary (CLT), Landfill Gate tributary (LDFG), and Camp Lake Sedimentation Ponds (CLSP)	0	No	Warming temperatures resulted in snowmelt runoff containing sediment-laden water to enter the affected watercourses over a short period of time. ESC measures were assessed and installed where applicable, in accordance with Baffinland's Surface Water Aquatic Effects Management Plan (SWAEMP), and maintained and adjusted as required. At LDFG, a spring berm was installed across the stream to help alleviate the amount of sediment flowing into the watercourse. Floc blocs implemented in 2023 continued to be utilized to promote settling of solids prior to the water entering Sheardown Lake. Ground conditions continued to be monitored for feasibility and suitability of additional ESC measures throughout the duration of the open-water season.
26-May-2024	2024-199	Unquantified	Sediment-laden Water	MP-C-B	0	No	Warming temperatures resulted in snowmelt runoff containing sediment-laden water to enter the watercourse at the sampling location. The various inputs to the stream were assessed, and an ESC plan was developed and implemented at locations where increased TSS was entering the channel in accordance with Baffinland's SWAEMP, and maintained and adjusted as required. On May 22, , a spring berm and a coir log were installed upstream of MP-C-B. On May 26, additional ESC measures including the installation of floc blocs and an additional spring berm were implemented to promote settling of solids and to reduce the amount of sediment reporting to MP-C-B. To reinforce the stream bank and prevent further stream bank erosion in a localized area, sand bags were placed along the stream bank in that area.
27-May-2024	2024-193	Unquantified	Contact Water	Crusher Pad Perimeter Ditch	700	No	Seepage was observed entering the crusher pad perimeter ditch through the embankment berm at the northeast corner of the Crusher Facility and releasing onto the tundra. In preparation for freshet 2024, actions were implemented, including additional embankment berm maintenance and drainage improvements, to prevent runoff water from entering the perimeter ditch. Upon completion of the plan, water was successfully diverted directly to the MS-06 Pond when thawing conditions occurred, as planned, via a temporary sump and pumping system. However, some water entered the perimeter ditch beneath the embankment berm in a localized area and was subsequently released onto the tundra. The embankment berm was installed in 2020 to capture contact water runoff and isolate the perimeter ditch from Crusher Facility water management infrastructure following the identification of integrity issues with the perimeter ditch network in 2020. Water management at the Crusher Facility has subsequently involved the use of active pumping of contact water from the pad directly to the MS-06 Pond. Snow in the vicinity of Crusher Facility drainage infrastructure was removed to reduce the presence of melting water in the area. Water inputs were contained at the Crusher Facility through the construction of a berm and subsequently transferred by pump directly to the MS-06 Pond. The embankment berm was repaired, re-isolating the perimeter ditch from additional water inputs and preventing further seepage to the tundra. Regular inspections for water management in the area continue to be completed to ensure corrective actions remain effective, and that all water reports to the MS-06 Pond as designed. Relocation of the snow stockpile in the area has occurred to minimize the presence of melting water reporting to Crusher Facility drainage infrastructure. Annual maintenance and inspection of the diversion berm will be completed. Long-term water management measures for the Crusher Facility are being addressed as part of the ongoing implementation of Baffinland's Long Term Water Management Plan.
24-Jun-2024	2024-239	20,600	Compliant Effluent	Mine Site Waste Rock Facility (WRF) Pond (MS-08)	1,900	No	Rising temperatures and rapid snowmelt resulted in the Waste Rock Facility (WRF) pond water levels rising significantly over a short period. A controlled discharge was initiated through the Final Discharge Point (FDP) MS-08 on June 21. On June 23 despite continued discharge, water levels continued to rise. Three (3) additional pumps were added to lower the level in the pond and pumping commenced over the spillway onto frozen ground, adjacent to the WRF on June 24. Effluent was discharged via pumping over the spill way for a total of seven (7) days, at which point it was confirmed that water levels had dropped sufficiently and that the WRF pond level was within predicted operating levels with discharge occurring through the FDP as per design. Effluent discharged over the spillway flowed over frozen tundra into the Camp Lake watershed. Down stream samples were taken at K0-01 and L0-01 on June 25, based on field reconnaissance that indicated the flow path of the water discharged over the spillway. Results from downstream sampling locations confirm no impact to downstream environment from the over land discharge. Corrective measures include evaluating the water balance and existing pump infrastructure to ensure it is fit for purpose to accommodate the freshet flow by pumping water to the approved FDP.

Table 6.2: List of Reported Spills and Unauthorized Discharges - 2024

Date	NT-NU Spill Reporting Number	Quantity (L)	Material Spilled	Specific Location	Proximity to Waterbody (m)	Occurred within Engineered Lined Facility?	Corrective Actions
11-Jul-2024	2024-266	280	Hydraulic Oil	Crusher Facility Pad	500	No	A hydraulic hose on a loader failed during routine operations due to stress from contact with another hose. The hose fitting was the main component of failure. The failed hydraulic hose was replaced, and positioned to ensure no risk of stress contact with other hoses or components. A post installation inspection was completed to verify hydraulic hose condition and ensure quality control of hose routing and separation. Pre-release procedures for visible leaks/damage and hose routing will be reviewed and updated. A review of PM check sheets to better identify all housing condition, routing, and/or protection where necessary is in progress.
31-Aug-2024	2024-329	250	Hydraulic Oil	Mary River Toromont Shop	200	No	A partially full tote of new hydraulic oil was released when the valve on the tote was partially opened while the tote was being moved with a skid steer by a maintenance technician. During investigation, it was identified that the Safe Work Instruction (SWI) for the task (SWI#MMSWIMH002; Moving Totes Around in the Workshop) was not followed correctly by the technician. Part of the safe work instruction is a check before transportation of a tote, which includes ensuring the valve is in the closed position. A review of the SWI by all maintenance crews was completed. Mobile Maintenance has adjusted their procedure SWI#MMSWIMH002, to include a requirement to lock out the valves and re-install factory caps before movement.
22-Sep-2024	2024-367/478	Unquantified	Sediment-laden Water	Tote Road and Mine Site SNP Sites MS-C-A, MS-C-B, MS-C-C, MS-C-D, MS-C-E, MS-C-F. Also Km 67, Km 72, Km 87, Km 63.5, Km 64, and Km 51 (Do not have coordinates for the KM Locations)	0	No	Unprecedented high flows in watercourses resulted in overland flooding, and significant erosion occurring along the Tote Road between kilometres 50 and 87.5. In addition, elevated levels of TSS were observed across site from natural sedimentation events and Project-related run-off associated with a severe rainfall event. Road Maintenance crews commenced initial remediation of flood-related damage as it was encountered to re-establish safe passage along the entire Tote Road to facilitate access of emergency vehicles, critical fuel supplies and resources, and for transportation of staff between sites for the upcoming shift change flights. Initial remediation at KM 87, KM 72, KM 67, and KM 51 included clearing debris from the road, aggregate replacement and road surface construction, and grading and restoration. Re-construction work was completed at KM 64. Re-construction work was also completed at KM 63.5, which included removal of old culverts from the crossing area. In-stream turbidity monitoring and fish surveys were completed during this in-stream work. Environmental monitoring was conducted throughout the initial emergency measures work, including assessing and installing ESC measures as needed in accordance with Baffinland's SWAEMP. ESC measures implemented during the initial remediation work included: adding aggregate and grading low areas on site roadways to prevent water pooling; limiting traffic on saturated roadways until conditions improved; installing coir logs, silt curtains, silt fence, floc blocks, spring berms, check dams, water diversion swales, ditching, and berms to reduce elevated TSS and turbidity within watercourses; and inspecting and maintaining existing ESC measures. Environmental monitoring during emergency measures road work also included construction water quality monitoring upstream and downstream of work areas. Culvert crossing CV-49 was successfully re-instated and disturbance to the streambed was minimized by surveying the streambed to ensure the culvert placement aligned with the watercourse and maintained the natural gradient of the watercourse slope, removing only high spots of streambed substrate along the culvert footprint to ensure a flush fit between the culvert and streambed, and tying the culvert into natural watercourse features to retain fish resting areas and ensuring culvert alignment with the natural watercourse wetted width. Major Tote Road construction work was subsequently completed at KM 64, KM 63.5, and KM 51 under the Tote Road Recovery Plan to fully repair damage from the rain event. A plan to retrieve scattered culverts at KM 63.5 was developed and completed following the onset of winter conditions when the stream and tundra were fully frozen to facilitate travel by an excavator without damaging sensitive tundra and streambed. At the Mine Site, ESC measures were assessed and installed where applicable in accordance with the SWAEMP and maintained and adjusted as required. These locations have had various ESC measures installed and maintained in the past. These existing measures were assessed, modified and maintained following the precipitation event. At MS-C-D, additional ESC measures were implemented: two (2) lines of spring berms were installed, approximately 17.5 meters upstream of the monitoring location. A set of floc blocs were deployed approximately 3 meters upstream from the spring berms. Due to the nature of the elevated TSS caused by an unprecedented amount of precipitation, ESC measures were difficult to implement. On-going precipitation resulted in localized overland flooding in the monitoring area and the movement of sediment laden water. Follow up monitoring demonstrated elevated TSS concentrations associated with the rainfall event returned to levels below applicable water licence guidelines.

Table 6.2: List of Reported Spills and Unauthorized Discharges - 2024

Date	NT-NU Spill Reporting Number	Quantity (L)	Material Spilled	Specific Location	Proximity to Waterbody (m)	Occurred within Engineered Lined Facility?	Corrective Actions
22-Sep-2024	2024-366	Unquantified Volume Overtopped MP-05 1,439,000 via Controlled Discharge	Compliant Effluent	Milne Port Ore Stockpile Sedimentation Pond (East) (MP-05)	35	No	An uncontrolled release of surface water stored within the water management infrastructure that was minor in nature occurred on September 22 from 08:00 to 16:00 during the significant September rainfall event. The sedimentation pond experienced the release of water at the Northwest corner of the pond berm as well as the engineered spillway. Transfer of water from MP-05 to MP-06 was occurring throughout August and September which managed water levels within Milne Port Ore Stockpile Sedimentation Ponds diligently. Additional transfer pumps were established at MP-05 on September 21 in response to continued rainfall and rising pond levels. Aggregate was placed along the toe of the down-gradient berm to reinforce the berm around the Northwest corner, and sandbags were placed at the crest of the berm, to increase available pond storage capacity. When water contained within MP-05 was observed to overtop the Northwest corner and engineered spillway, all available pumps were deployed to establish a controlled discharge from MP-05 directly to Milne Inlet, concurrent with the ongoing transfer of water to MP-06; eliminating further overflow from the pond at. Pond levels were returned to normal operating levels through the increased pumping capacity and the controlled discharge was subsequently discontinued. During the event, ESC measures were assessed in accordance with Baffinland’s SWAEMP. Erosion down-gradient of the Northwest corner of the pond was limited and was repaired shortly following the release. Flows from the engineered spillway caused erosion of the area down-gradient of the pond below the engineered spillway. Remediation efforts commenced and this area will continue to be monitored during next open water season.
12-Dec-2024	2024-462	600	(Partially) Treated Sewage	Milne Port 380 Camp WWTP	350	No	Aerobic sludge from an aeration tank was transferred to a tote using a waste-activated sludge (WAS) transfer pump, as part of routine WWTP operations. After the tote was filled approximately halfway and the WAS transfer pump was shut-off the tote was found to have overflowed as a result of a siphoning effect which occurred between the aeration tank and the tote due to the transfer line remaining submerged. On discovery of the release, a valve on the tote’s intake line was closed. The valve was left open to prevent treated sewage from hardening within the pipes. It was presumed only the remaining sewage within the pipe would transfer to the tote, and a siphon effect would not occur. Corrective actions include installation of a shutoff valve close to the WAS pump, which isolates the pump from the discharge pipe. A Safe Work Instruction (SWI) was also created for transferring from the aeration tank to a tote, which indicates the requirement to close the valve on the line filling the tote to ensure a siphoning effect between the aeration tank and the tote does not occur.

Table 6.3: List of Reported Health & Safety Incidents - 2024

Incident Report Description	Incident Type	Date of Incident
Sea can door contacted IP's head	MAI ¹	2-Jan-24
IP struck finger with hammer	MAI ¹	10-Jan-24
IP struck in eye by ratchet	MAI ¹	9-Feb-24
LDR029 engulfed in flames	Dangerous Occurrence	12-Mar-24
Hole drilled within 1 m of a bootleg	Dangerous Occurrence	15-Mar-24
Thumb laceration	MAI ¹	27-Mar-24
OHT 035 fire at the 76 KM	Dangerous Occurrence	1-Apr-24
Hole drilled within 1.0 m of a bootleg	Dangerous Occurrence	25-Apr-24
Thumb injury water treatment	LTI ²	5-Jun-24
Medical aid - trip & fall - laceration	MAI ¹	14-Jun-24
IP's hand caught between sea container doors	MAI ¹	11-Jul-24
IP struck forehead on front glass of loader	MAI ¹	11-Jul-24
IP lost footing while packing sea can	MAI ¹	16-Jul-24
Torque wrench slipped and IP rolled ankle	LTI ²	28-Jul-24
KM 110 generator thermal event	Dangerous Occurrence	20-Aug-24
Frozen tonneau cover incident	MAI ¹	5-Oct-24
Laceration to left arm using utility knife	MAI ¹	11-Oct-24
Knee lightly struck by light plant	MAI ¹	21-Oct-24
Operator slipped off excavator	LTI ²	14-Dec-24
OHT059 leaves roadway at KM 99 southbound	Dangerous Occurrence/MAI ¹	18-Dec-24

Notes:

¹ Medical Aid Incident

² Loss Time Incident

Table 7.1: Water Quality Monitoring Locations - 2024

Monitoring Program	Monitoring Station	Description	Location (UTM NAD83 Zone 17 W)		Location		Status in 2024
			Easting	Northing	Latitude	Longitude	
Milne Port							
SNP	MP-01	Milne Port Sewage Treatment Plant (STP)	503807	7975982	71° 53' 01.9" N	-80° 53' 25.1" W	Active
SNP	MP-01A	Milne Port Polishing Waste Stabilization Pond (PWSP)	503625	7976015	71° 53' 02.9" N	-80° 53' 43.9" W	Active ¹
SNP	MP-01B	Milne Port 380 Person Sewage Treatment Plant (STP)	503368	7975186	71° 52' 36.2" N	-80° 54' 10.8" W	Active
SNP	MP-02	Milne Port Maintenance Shop (Oily Water)	503785	7976209	71° 53' 09.2" N	-80° 53' 27.3" W	Not Constructed
SNP	MP-03	Milne Port Bulk Fuel Storage Facility (Stormwater)	503638	7976272	71° 53' 11.3" N	-80° 53' 42.6" W	Active
SNP	MP-04	Milne Port Landfarm Facility	503751	7975570	71° 52' 48.6" N	-80° 53' 31.1" W	Active
SNP	MP-04A	Milne Port Landfarm Facility (Contaminated Snow Containment Berm)	503862	7975482	71° 52' 45.8" N	-80° 53' 19.5" W	Active ⁶
SNP	MP-05	Milne Port Ore Stockpile Facility - East Surface Water Management Pond	503469	7976383	71° 53' 14.9" N	-80° 54' 00.1" W	Active
SNP	MP-06	Milne Port Ore Stockpile Facility - West Surface Water Management Pond	503125	7976364	71° 53' 14.3" N	-80° 54' 35.8" W	Active
SNP	MP-C-A	Surface Water Drainage Downstream of Milne Port Infrastructure	503214	7976483	71° 53' 18.1" N	-80° 54' 26.5" W	Active ¹
SNP	MP-C-B ⁸		502844	7975741	71° 52' 54.2" N	-80° 55' 05.0" W	Active
SNP	MP-C-K ⁸		502982	7975333	71° 52' 41.0" N	-80° 54' 50.8" W	Active
SNP	MP-C-D		503651	7976363	71° 53' 14.2" N	-80° 53' 41.2" W	Active ¹
SNP	MP-C-E		503736	7976346	71° 53' 13.7" N	-80° 53' 32.4" W	Active ¹
SNP	MP-C-F		503922	7976304	71° 53' 12.3" N	-80° 53' 13.1" W	Active ¹
SNP	MP-C-H ⁸		504113	7976509	71° 53' 18.9" N	-80° 52' 53.2" W	Active
SNP	MP-C-J ⁸		502940	7974760	71° 52' 22.5" N	-80° 54' 55.2" W	Active
SNP	MP-MRY-2	Fresh Water Intake at Phillips Creek	514503	7964579	71° 46' 52.4" N	-80° 35' 03.8" W	Active ²
SNP	MP-MRY-3	Fresh Water Intake at Km 32 Lake	521547	7953735	71° 41' 00.4" N	-80° 23' 08.5" W	Active
SNP	MP-Q1-01	Surface Water Drainage Downstream of the Q1 Quarry	503839	7974467	71° 52' 13.0" N	-80° 53' 22.1" W	Active
SNP	MP-Q1-02		503828	7975396	71° 52' 43.0" N	-80° 53' 23.0" W	Active
Recycled Water	MP-RW-01	LP2 Pond	503603	7975901	71° 52' 59.3" N	-80 53' 46.2" W	Active ⁹
Recycled Water	Matrix Ditch	Matrix Ditch	503557	7975928	71° 53' 00.2" N	-80 53' 51.0" W	Active ⁹
Recycled Water	MP-Q1-P1	Milne Port Q1 Quarry Recycled Water for Dust Suppression	503822	7974661	71° 52' 19.3" N	-80° 53' 23.8" W	Active ⁹

Notes:

¹ Monitoring station active but there was no surface water flow through the monitoring station/discharge from facility in 2024.

² Monitoring station active but there was no water withdrawal (intake) for domestic/industrial/dust suppression use through the monitoring station in 2024.

³ Tote Road Water Crossings CV-154-A and CV-072-C are replacements for CV-162 and CV-071, respectively, that were originally listed in the Roads Management Plan (BIM-5200-PLA-0027) that are still representative of the appropriate watershed.

⁴ Exploration Phase infrastructure decommissioned.

⁵ Culvert was replaced during the fall/winter of 2023/2024 and monitored as part of the TRMP program to fulfill post construction requirements as per the Roads Management Plan (BIM-5200-PLA-0027).

⁶ Effluent was not discharged from the Milne Port Contaminated Snow Containment Facility (MP-04A) in 2024; however, cell to cell transfer of contained effluent occurred from MP-04A to MP-04.

⁷ Mine Site KM 105 Pond (MS-11) was sampled at seepage locations KM105-SWMP-SEEP03/04 in 2024.

⁸ Also a monitoring station under the Milne Port Freshet Monitoring Program.

⁹ Recycled water locations not sampled in 2024; sites were used for dust suppression purposes with no applicable water licence criteria.

SNP - Surveillance Network Program; TRMP - Tote Road Monitoring Program; SSPM - Snow Stockpile Program Monitoring

Table 7.1: Water Quality Monitoring Locations - 2024

Monitoring Program	Monitoring Station	Description	Location (UTM NAD83 Zone 17 W)		Location		Status in 2024
			Easting	Northing	Latitude	Longitude	
Mine Site							
SNP	MQ-C-A	Surface Water Drainage Downstream of QMR2 Quarry	559489	7914408	71° 19' 28.2" N	-79° 20' 06.9" W	Active
SNP	MQ-C-B		560076	7913888	71° 19' 10.9" N	-79° 19' 09.3" W	Active
SNP	MQ-C-D		559422	7914223	71° 19' 22.3" N	-79° 20' 14.2" W	Active
SNP	MS-01	Mine Site Sewage Treatment Plant No. 1	561322	7913257	71° 18' 49.4" N	-79° 17' 05.7" W	Active
SNP	MS-01A	Mine Site Polishing Waste Stabilization Pond (PWSP)	-	-	-	-	Not Constructed
SNP	MS-01B	Mine Site Sewage Treatment Plant No. 2	560798	7913291	71° 18'51.0" N	-79° 17' 58.3" W	Active
SNP	MS-02	Mine Site Mobile Maintenance Buildings (Meltwater)	561638	7913222	71° 18' 48.0" N	-79° 16' 34.0" W	Not Constructed
SNP	MS-03	Mine Site Bulk Fuel Storage Facility (Stormwater)	561258	7913304	71° 18' 51.0" N	-79° 17' 12.0" W	Active ¹
SNP	MS-03B	Mine Site Bulk Fuel Storage Facility (Stormwater)	560980	7913568	71° 18' 59.7" N	-79° 17' 39.2" W	Active
SNP	MS-04	Mine Site Fuel Unloading Station (Stormwater)	-	-	-	-	Not Constructed
SNP	MS-05	Mine Site Landfarm Facility (Stormwater)	560828	7912726	71° 18' 32.7" N	-79° 17' 56.9" W	Active ¹
SNP	MS-06	Mine Site Crusher Facility - Surface Water Management Pond	561475	7913000	71° 18' 41.0" N	-79° 16' 51.0" W	Active
SNP	MS-07	Mine Site Run of Mine (ROM) Ore Stockpile Pond - Surface Water Management Pond	563583	7913074	71° 18' 41.4" N	-79° 13' 18.7" W	Active
SNP	MS-08	Mine Site Waste Rock Facility (WRF) - Surface Water Management Pond	563218	7916802	71° 20' 24.7" N	-79° 13' 18.3" W	Active
SNP	MS-09	Waste Rock Stockpile - East Pond	-	-	-	-	Not Constructed
SNP	MS-10	Mine Site SDLT-1 Pond Ore Stockpile (Stormwater)	-	-	-	-	Not Constructed
SNP	MS-11 ⁷	Mine Site KM105 Pond (Stormwater)	562171	7913159	71°18'45.5" N	- 79° 15'40.5" W	Active
SNP	MS-12	Mine Site Weatherhaven Camp (Stormwater)	-	-	-	-	Not Constructed
SNP	MS-13	Mine Site Explosives Magazine Pond	-	-	-	-	Not Constructed
SNP	MS-14	Mine Site Quarry QMR2 Pond/Sump	-	-	-	-	Not Constructed
SNP	MS-C-A	Surface Water Drainage Downstream of Mine Site Infrastructure	561263	7913571	71° 18' 59.6" N	-79° 17' 10.7" W	Active
SNP	MS-C-B		561454	7913537	71° 18' 58.3" N	-79° 16' 51.6" W	Active
SNP	MS-C-C		561117	7913196	71° 18' 47.6" N	-79° 17' 26.5" W	Active
SNP	MS-C-D		561008	7913280	71° 18' 50.5" N	-79° 17' 37.2" W	Active
SNP	MS-C-E		560980	7913388	71° 18' 54.0" N	-79° 17' 39.7" W	Active
SNP	MS-C-F		561797	7913278	71° 18' 49.7" N	-79° 16' 17.8" W	Active
SNP	MS-C-G		561813	7911830	71° 18' 02.9" N	-79° 16' 20.3" W	Active
SNP	MS-C-H	Mine Site Freshet locations	561162	7912067	71° 18' 11.2" N	-79° 17' 25.1" W	Active
Freshet	LDFG-OUT		561018	7912968	71° 18'40.4" N	-79° 17' 37.1" W	Active
Freshet	SDLT-OUT		560332	7913519	71° 18' 58.8" N	- 79° 18' 44.5" W	Active
Freshet	CLSP-OUT		557805	7914795	71° 19' 42.2" N	- 79° 22' 55.4" W	Active
Freshet	CLT-OUT		557686	7914947	71° 19' 47.2" N	- 79° 23' 07.0" W	Active
Recycled Water	MS-RW-04	Mine Site Pond North of Laydown 2 (Pond 4) Recycled Water for Dust Suppression	559807	7913868	71° 19' 10.5" N	- 79° 19' 36.4" W	Active ⁹
Recycled Water	MS-Dep-1	Mine Site 570 Sump Recycled Water for Dust Suppression	563226	7914443	71° 19' 25.9" N	- 79° 13' 50.6" W	Active ⁹
Recycled Water	HR-CD-05	Mine Site Haul Road KM105 Pond Recycled Water for Dust Suppression	563812	7913140	71° 18' 43.3" N	-79° 12' 55.4" W	Active ⁹
Recycled Water	MS-RW-01	Mine Site Flight Ops Pond (Pond 1) Recycled Water for Dust Suppression	559348	7914222	71° 19' 22.3" N	-79° 20' 21.6" W	Active ⁹
Recycled Water	MS-RW-02	Mine Site Warehouse Pond (Pond 2) Recycled Water for Dust Suppression	559555	7913950	71° 19' 13.4" N	-79° 20' 01.6" W	Active ⁹
Recycled Water	MS-RW-03	Mine Site Flight Ops Pond (Pond 3) Recycled Water for Dust Suppression	559225	7914167	71° 19' 20.7"N	-79° 20' 34.2"W	Active ⁹

Table 7.1: Water Quality Monitoring Locations - 2024

Monitoring Program	Monitoring Station	Description	Location (UTM NAD83 Zone 17 W)		Location		Status in 2024
			Easting	Northing	Latitude	Longitude	
SNP	MS-MRY-1	Fresh Water Intake at Camp Lake	557779	7914722	71° 19' 39.8" N	-79° 22' 58.2" W	Active
SNP	MS-MRY-04	Mine Site Exploration Camp Sewage Treatment Plant	558134	7914459	71° 19' 31.0" N	-79° 22' 23.2" W	Inactive ⁴
SNP	MS-MRY-04A	Mine Site Polishing Waste Stabilization Pond (PWSP)	558492	7914118	71° 19' 19.7" N	-79° 21' 48.1" W	Active ¹
SNP	MS-MRY-04B	Mine Site Polishing Waste Stabilization Pond (PWSP)	558438	7914310	71° 19' 26.0" N	-79° 21' 53.0" W	Active ¹
SNP	MS-MRY-04C	Mine Site Polishing Waste Stabilization Pond (PWSP)	558489	7914271	71° 19' 24.7" N	-79° 21' 48.0" W	Active ¹
SNP	MS-MRY-06	Hazardous Materials Storage Area (MS-HWB-7) (Stormwater)	558284	7914449	71° 19' 30.6" N	-79° 22' 08.1" W	Active ¹
SNP	MS-MRY-09	Mine Site Deposit No.1 - Surface Water Drainage	561083	7915084	71° 19' 48.5" N	-79° 17' 24.5" W	Active
SNP	MS-MRY-13A	Mine Site Non-Hazardous Waste Landfill Facility (Surface Water Drainage)	560754	7912484	71° 18' 25.0" N	-79° 18' 05.0" W	Active
SNP	MS-MRY-13B	Mine Site Non-Hazardous Waste Landfill Facility (Surface Water Drainage)	560642	7912527	71° 18' 26.5" N	-79° 18' 16.1" W	Active
SSPM	MS-SN-01	Mine Site Weatherhaven Snow Stockpile	558052	7914303	71° 19' 26.1" N	79° 22' 31.9" W	Active
SSPM	MS-SN-02	Mine Site Landfill Access Road Snow Stockpile	561097	7912884	71° 18' 37.6" N	79° 17' 29.4" W	Active
SSPM	MS-SN-03	Mine Site Warehouse Snow Stockpile	559803	7913756	71° 19' 06.9" N	79° 19' 37.1" W	Active ¹

Notes:

¹ Monitoring station active but there was no surface water flow through the monitoring station/discharge from facility in 2024.

² Monitoring station active but there was no water withdrawal (intake) for domestic/industrial/dust suppression use through the monitoring station in 2024.

³ Tote Road Water Crossings CV-154-A and CV-072-C are replacements for CV-162 and CV-071, respectively, that were originally listed in the Roads Management Plan (BIM-5200-PLA-0027) that are still representative of the appropriate watershed.

⁴ Exploration Phase infrastructure decommissioned.

⁵ Culvert was replaced during the fall/winter of 2023/2024 and monitored as part of the TRMP program to fulfill post construction requirements as per the Roads Management Plan (BIM-5200-PLA-0027).

⁶ Effluent was not discharged from the Milne Port Contaminated Snow Containment Facility (MP-04A) in 2024; however, cell to cell transfer of contained effluent occurred from MP-04A to MP-04.

⁷ Mine Site KM 105 Pond (MS-11) was sampled at seepage locations KM105-SWMP-SEEP03/04 in 2024.

⁸ Also a monitoring station under the Milne Port Freshet Monitoring Program.

⁹ Recycled water locations not sampled in 2024; sites were used for dust suppression purposes with no applicable water licence criteria.

SNP - Surveillance Network Program; TRMP - Tote Road Monitoring Program; SSPM - Snow Stockpile Program Monitoring

Table 7.1: Water Quality Monitoring Locations - 2024

Monitoring Program	Monitoring Station	Description	Location (UTM NAD83 Zone 17 W)		Location		Status in 2024
			Easting	Northing	Latitude	Longitude	
Tote Road							
SSPM	TR-SN-01	Tote Road Snow Stockpile KM37	521593	7949160	71° 38' 32.8" N	-80° 23' 08.6" W	Active
SSPM	TR-SN-02	Tote Road Snow Stockpile KM63	529344	7926819	71° 26' 28.8" N	-80° 10' 26.1" W	Active
SSPM	TR-SN-04	Tote Road Snow Stockpile KM86	546478	7919895	71° 22' 35.57" N	-79° 41' 45.28" W	Active
SSPM	TR-SN-05	Tote Road Snow Stockpile KM92	551307	7916785	71° 20' 51.7" N	-79° 33' 45.2" W	Active ¹
SSPM	TR-SN-06	Tote Road Snow Stockpile KM97	554983	7914446	71° 19' 34.8" N	-79° 27' 18.3" W	Active
SSPM	TR-SN-07	Tote Road Snow Stockpile KM75	537466	7920200	71° 22' 51.1" N	-79° 56' 54.8" W	Active
Recycled Water	TR-BP-01	Tote Road KM97 Borrow Pond Recycled Water for Dust Suppression	556021	7914684	71° 19' 40.1" N	-79° 25' 55.4" W	Active ⁹
Recycled Water	TR-BP-02	Tote Road KM57 Borrow Pond Recycled Water for Dust Suppression	527171	7932085	71° 29' 19.6" N	-80° 13' 59.6" W	Active ⁹
TRMP	CV-167	Approximately located at KM6	505538	7972370	71° 51' 05.2" N	-80° 50' 26.5" W	Active
TRMP	CV-154-A ³	Approximately located at KM9.5	507629	7970074	71° 49' 51.0" N	-80° 46' 50.9" W	Active
TRMP	CV-128	Approximately located at KM17	513556	7965889	71° 47' 34.9"N	-80° 36' 40.6"W	Active
TRMP	CV-129	Approximately located at KM15	512381	7966783	71° 48' 03.9"N	-80° 38' 41.3"W	Active
TRMP	CV-115	Approximately located at KM28	519222	7958135	71° 43' 23.2"N	-80° 27' 03.0"W	Active
TRMP	CV-112	Approximately located at KM31	521033	7954935	71° 41' 39.3"N	-80° 24' 00.0"W	Active
TRMP	CV-106	Approximately located at KM33	521663	7953392	71° 40' 49.3"N	-80° 22' 57.0"W	Active
TRMP	CV-102 ⁵	Approximately located at KM36	521936	7950591	71° 39' 18.8" N	-80° 22' 31.9"W	Active
TRMP	CV-099	Approximately located at KM37	521886	7948843	71° 38' 22.4"N	-80° 22' 38.9"W	Active
TRMP	CV-093	Approximately located at KM42	522927	7945093	71° 36' 21.1"N	-80° 20' 56.4"W	Active
TRMP	CV-078	Approximately located at KM51	525852	7936787	71° 31' 51.9"N	-80° 16' 07.8"W	Active
TRMP	CV-072-C ³	Approximately located at KM54	526897	7934576	71° 30' 40.1"N	-80° 14' 24.2"W	Active
TRMP	CV-060	Approximately located at KM58	527622	7930342	71° 28' 23.2"N	-80° 13' 16.0"W	Active
TRMP	CV-059 ⁵	Approximately located at KM59.5	528094	7929349	71° 27' 51.0"N	- 80° 12' 29.4"W	Active
TRMP	CV-057 ⁵	Approximately located at KM60.5	528378	7928659	71° 27' 28.6"N	- 80° 12' 01.5"W	Active
TRMP	BG-50	Approximately located at KM63	529294	7926852	71° 26' 29.8"N	-80° 10' 31.1"W	Active
TRMP	CV-040	Approximately located at KM71.5	535168	7920326	71° 22' 56.4"N	-80° 00' 46.7"W	Active
TRMP	BG-32	Approximately located at KM78	540729	7921597	71° 23' 34.2"N	-79° 51' 22.6"W	Active
TRMP	CV-217	Approximately located at KM80	542321	7922189	71° 23' 52.4"N	-79° 48' 40.5"W	Active
TRMP	CV-216 ⁵	Approximately located at KM80.5	542763	7921726	71° 23' 37.1"N	-79° 47' 56.7"W	Active
TRMP	BG-30	Approximately located at KM84.5	546070	7919844	71° 22' 34.2"N	-79° 42' 26.6"W	Active
TRMP	BG-24	Approximately located at KM88	548766	7918878	71° 22' 01.1"N	-79° 37' 56.6"W	Active
TRMP	BG-04 ⁵	Approximately located at KM94	553250	7915102	71° 19' 55.9"N	- 79° 30' 33.4"W	Active
TRMP	CV-001	Approximately located at KM94.1	553544	7914897	71° 19' 49.0"N	-79° 30' 04.3"W	Active
TRMP	CV-223	Approximately located at KM97.5	555705	7914676	71° 19' 40.1"N	-79° 26' 27.3"W	Active

Notes:

¹ Monitoring station active but there was no surface water flow through the monitoring station/discharge from facility in 2024.

² Monitoring station active but there was no water withdrawal (intake) for domestic/industrial/dust suppression use through the monitoring station in 2024.

³ Tote Road Water Crossings CV-154-A and CV-072-C are replacements for CV-162 and CV-071, respectively, that were originally listed in the Roads Management Plan (BIM-5200-PLA-0027) that are still representative of the appropriate watershed.

⁴ Exploration Phase infrastructure decommissioned.

⁵ Culvert was replaced during the fall/winter of 2023/2024 and monitored as part of the TRMP program to fulfill post construction requirements as per the Roads Management Plan (BIM-5200-PLA-0027).

⁶ Effluent was not discharged from the Milne Port Contaminated Snow Containment Facility (MP-04A) in 2024; however, cell to cell transfer of contained effluent occurred from MP-04A to MP-04.

⁷ Mine Site KM 105 Pond (MS-11) was sampled at seepage locations KM105-SWMP-SEEP03/04 in 2024.

⁸ Also a monitoring station under the Milne Port Freshet Monitoring Program.

⁹ Recycled water locations not sampled in 2024; sites were used for dust suppression purposes with no applicable water licence criteria.

SNP - Surveillance Network Program; TRMP - Tote Road Monitoring Program; SSPM - Snow Stockpile Program Monitoring

Table 7.2.1: Water Quality Results for Water Licence Monitoring Location - MP-01

Sample ID			MP-01	MP-01	MP-01	MP-01	MP-01	MP-01	MP-01	MP-01
ALS Laboratory Work Order			WT2400074	WT2402873	WT2405709	WT2407619	WT2412202	WT2415658	WT2418654	WT2422478
Sample Date & Time			2024-01-02 13:30	2024-02-07 13:10	2024-03-12 13:10	2024-04-03 14:45	2024-05-14 14:50	2024-06-11 13:45	2024-07-04 13:10	2024-08-06 12:50
Analyte	Units	Water Licence Criteria ¹								
pH, Lab	pH units	6.0-9.5	7.8	7.9	7.7	7.8	7.9	7.7	7.8	7.9
Total Suspended Solids	mg/L	120	2	2	3	2	4	3	6	< 1
Total Dissolved Solids	mg/L	-	986	966	954	814	887	790	815	942
Turbidity	NTU	-	0.68	0.77	1.42	0.58	1.51	1.03	2.22	0.50
Alkalinity, Total	mg/L	-	121	121	108	95.5	79.4	65.6	72.6	72.3
Ammonia, Total (as N)	mg/L	-	0.0385	0.0406	0.0713	0.0302	0.0588	0.0514	0.0571	0.0310
Total Kjeldahl Nitrogen	mg/L	-	< 0.05	0.960	0.611	0.566	1.09	4.47	1.94	< 0.050
Fecal Coliforms	CFU/100mL	10000	37	< 1	< 1	< 1	< 1	< 1	< 1	< 1
BOD	mg/L	100	< 2	< 2	< 2	< 2	< 2	< 3	< 2	< 2
Phosphorus, Nutrient	mg/L	-	8.63	7.87	7.41	6.43	6.45	5.00	6.42	7.06
Oil and Grease, Total	mg/L	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality ^{2,3}	N/A	Not Acutely Toxic	-	-	Not Acutely Toxic	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 5.

² Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14) .

³ Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

Table 7.2.1: Water Quality Results for Water Licence Monitoring Location - MP-01

Sample ID			MP-01	MP-01	MP-01	MP-01
ALS Laboratory Work Order			WT2426795	WT2430940	WT2433232	WT2436671
Sample Date & Time			2024-09-10 14:15	2024-10-16 13:45	2024-11-05 14:00	2024-12-10 13:30
Analyte	Units	Water Licence Criteria ¹				
pH, Lab	pH units	6.0-9.5	7.8	8.0	7.8	7.7
Total Suspended Solids	mg/L	120	3	1	2	2
Total Dissolved Solids	mg/L	-	1040	853	920	877
Turbidity	NTU	-	1.27	0.44	0.95	0.83
Alkalinity, Total	mg/L	-	89.9	99.2	74.2	72.9
Ammonia, Total (as N)	mg/L	-	0.0283	0.0323	0.0552	0.0659
Total Kjeldahl Nitrogen	mg/L	-	1.17	1.20	0.783	0.147
Fecal Coliforms	CFU/100mL	10000	1	< 1	< 1	8
BOD	mg/L	100	< 2	< 2	< 2	< 2
Phosphorus, Nutrient	mg/L	-	6.79	4.80	6.08	5.26
Oil and Grease, Total	mg/L	-	< 5.0	< 5.0	< 5.0	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality ^{2,3}	N/A	Not Acutely Toxic	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 5.
² Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14) .
³ Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

Table 7.2.2: Water Quality Results for Water Licence Monitoring Location - MP-01B

Sample ID			MP-01B	MP-01B	MP-01B	MP-01B	MP-01B	MP-01B	MP-01B	MP-01B
ALS Laboratory Work Order			WT2400072	WT2402881	WT2405709	WT2407619	WT2412202	WT2415658	WT2418654	WT2422478
Sample Date & Time			2024-01-02 13:30	2024-02-07 13:20	2024-03-12 13:00	2024-04-03 13:20	2024-05-14 14:50	2024-06-11 13:40	2024-07-04 13:00	2024-08-06 13:30
Analyte	Units	Water Licence Criteria ¹								
pH, Lab	pH units	6.0-9.5	7.39	7.53	6.97	7.85	6.79	7.27	7.56	6.51
Total Suspended Solids	mg/L	120	< 1.0	1.2	1.2	< 1.0	< 1.0	4.4	< 1.0	< 1.0
Total Dissolved Solids	mg/L	-	594	634	696	691	540	694	596	582
Turbidity	NTU	-	< 0.10	0.44	0.25	< 0.10	0.19	< 0.10	0.12	< 0.10
Alkalinity, Total	mg/L	-	56.8	60.3	26.4	95.1	12.2	40.8	42.6	10.1
Ammonia, Total (as N)	mg/L	-	0.0160	0.0179	0.0697	0.0184	0.0182	0.0218	0.0192	0.0195
Total Kjeldahl Nitrogen	mg/L	-	0.494	0.753	1.02	1.08	1.08	0.673	1.16	1.21
Fecal Coliforms	CFU/100mL	10000	< 1	< 1	4	48	4	10	< 1	2
BOD	mg/L	100	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 3.0	< 2.0	< 2.0
Phosphorus, Nutrient	mg/L	-	8.05	7.57	9.39	8.10	6.92	8.04	8.39	8.44
Oil and Grease, Total	mg/L	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality ^{2,3}	N/A	Not Acutely Toxic	-	-	Not Acutely Toxic	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 5.

² Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14) .

³ Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

Table 7.2.2: Water Quality Results for Water Licence Monitoring Location - MP-01B

Sample ID			MP-01B	MP-01B	MP-01B	MP-01B
ALS Laboratory Work Order			WT2426795	WT2430940	WT2433232	WT2436671
Sample Date & Time			2024-09-10 13:20	2024-10-16 13:45	2024-11-05 13:30	2024-12-10 13:20
Analyte	Units	Water Licence Criteria ¹				
pH, Lab	pH units	6.0-9.5	6.87	7.90	8.13	7.56
Total Suspended Solids	mg/L	120	< 1.5	< 1.0	< 1.0	< 1.0
Total Dissolved Solids	mg/L	-	730	685	684	505
Turbidity	NTU	-	0.15	0.12	0.19	0.11
Alkalinity, Total	mg/L	-	24.3	86.0	107	73.8
Ammonia, Total (as N)	mg/L	-	0.0386	0.0280	0.0219	0.0354
Total Kjeldahl Nitrogen	mg/L	-	1.26	1.16	1.12	0.906
Fecal Coliforms	CFU/100mL	10000	7	2	1	3
BOD	mg/L	100	< 2.0	< 2.0	< 2.0	< 2.0
Phosphorus, Nutrient	mg/L	-	10.4	8.46	12.0	8.03
Oil and Grease, Total	mg/L	-	< 5.0	< 5.0	< 5.0	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality ^{2,3}	N/A	Not Acutely Toxic	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 5.
² Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14) .
³ Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

Table 7.2.3: Water Quality Results for Water Licence Monitoring Location - MP-03

Sample ID			MP-03	MP-03
ALS Laboratory Work Order			WT2416705	BF2400346
Sample Date & Time			2024-06-18 11:10	2024-09-18 12:05
Analyte	Units	Water Licence Criteria ¹		
pH, Lab	pH units	-	8.03	8.04
Total Suspended Solids	mg/L	-	4.4	12.1
Total Dissolved Solids	mg/L	-	218	246
Turbidity	NTU	-	5.82	22.3
Ammonia, Total (as N)	mg/L	-	0.113	0.0099
Arsenic - Total	mg/L	-	0.00032	< 0.00100
Copper - Total	mg/L	-	0.00190	< 0.00500
Lead - Total	mg/L	0.001	0.0005	0.0012
Nickel - Total	mg/L	-	0.00074	< 0.00500
Zinc - Total	mg/L	-	0.0059	< 0.0300
Phosphorus, Nutrient	mg/L	-	0.0072	0.0090
Benzene	ug/L	590	< 0.50	< 0.50
Ethylbenzene	ug/L	70	< 0.50	< 0.50
Toluene	ug/L	30	< 0.50	< 0.50
Total Xylenes	ug/L	70	< 0.50	< 0.50
m+p-Xylenes	ug/L	70	< 0.40	< 0.40
o-Xylene	ug/L	70	< 0.30	< 0.30
F1-BTEX	ug/L	-	< 25	32
F1 (C6-C10)	ug/L	-	< 25	32
F2 (C10-C16)	ug/L	-	< 100	< 100
F3 (C16-C34)	ug/L	-	< 250	< 250
F4 (C34-C50)	ug/L	-	< 250	< 250
Total Petroleum Hydrocarbons (C6-C50)	ug/L	-	< 370	< 370
Oil and Grease, Total	mg/L	15	< 5	< 5
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 8

Table 7.2.4: Water Quality Results for Water Licence Monitoring Location - MP-04

Sample ID			MP-04
ALS Laboratory Work Order			WT2427670
Sample Date & Time			2024-09-16 17:00
Analyte	Units	Water Licence Criteria ¹	
pH, Lab	pH units	6.0-9.0	8.40
Total Suspended Solids	mg/L	15	1.6
Total Dissolved Solids	mg/L	-	481
Turbidity	NTU	-	5.46
Lead - Total	mg/L	0.001	0.000213
Benzene	ug/L	590 ²	< 0.50
Ethylbenzene	ug/L	70	< 0.50
Toluene	ug/L	30	< 0.50
Total Xylenes	ug/L	70	< 0.50
m+p-Xylenes	ug/L	70	< 0.40
o-Xylene	ug/L	70	< 0.30
F1-BTEX	ug/L	-	< 25
F1 (C6-C10)	ug/L	-	< 25
F2 (C10-C16)	ug/L	-	1320
F3 (C16-C34)	ug/L	-	< 250
F4 (C34-C50)	ug/L	-	< 250
Total Petroleum Hydrocarbons (C6-C50)	ug/L	-	1320
Oil and Grease, Total	mg/L	15	< 5
	-	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 9

² BTEX results compared to FEQG criteria as requested by ECCC during water licence renewal process

Table 7.2.5: Water Quality Results for Water Licence Monitoring Location - MP-05

Sample ID			MP-05	MP-05
ALS Laboratory Work Order			BF2400355	BF2400370
Sample Date & Time			2024-09-23 15:30	2024-10-02 12:00
Analyte	Units	Water Licence Criteria ¹		
pH, Field	pH units	-	8.00	8.23
Specific Conductivity, Field	us/cm	-	601	813
Temperature, Field	deg C	-	7.9	1.8
Turbidity, Field	NTU	-	26.81	9.22
Hardness	mg/L	-	262	327
pH, Lab	pH units	6.0-9.5	8.18	8.23
Total Suspended Solids	mg/L	Grab 30, Average 15	5.5	4.3
Total Dissolved Solids	mg/L	-	390	490
Turbidity	NTU	-	20.3	6.64
Alkalinity, Total	mg/L	-	157	173
Ammonia, Total (as N)	mg/L	-	0.0739	0.0766
Chloride	mg/L	-	60.5	82.4
Fluoride	mg/L	-	0.179	0.179
Nitrate	mg/L	-	2.11	3.46
Total Kjeldahl Nitrogen	mg/L	-	0.478	0.574
Sulfate	mg/L	-	73.1	118
Dissolved Organic Carbon	mg/L	-	6.15	5.22
Total Organic Carbon	mg/L	-	5.81	5.3
Aluminum - Total	mg/L	-	0.279	0.0682
Antimony - Total	mg/L	-	< 0.00100	0.00012
Arsenic - Total	mg/L	-	< 0.00100	0.00026
Barium - Total	mg/L	-	0.014	0.0129
Cadmium - Total	mg/L	-	< 0.0000500	< 0.000050
Calcium - Total	mg/L	-	59.4	67.8
Chromium - Total	mg/L	-	< 0.00500	< 0.00050
Cobalt - Total	mg/L	-	< 0.00100	0.00056
Copper - Total	mg/L	-	< 0.00500	0.00162
Iron - Total	mg/L	-	0.342	0.135
Lead - Total	mg/L	-	0.000665	0.000186
Lithium - Total	mg/L	-	< 0.0100	0.0115
Magnesium - Total	mg/L	-	27.6	38.3
Manganese - Total	mg/L	-	0.204	0.335
Mercury - Total	mg/L	-	< 0.0000050	< 0.0000050
Molybdenum - Total	mg/L	-	0.00442	0.00524
Nickel - Total	mg/L	-	< 0.00500	0.00156
Phosphorus, Total	mg/L	-	< 0.500	< 0.050
Potassium - Total	mg/L	-	5.45	6.2
Selenium - Total	mg/L	-	< 0.000500	0.000193
Sodium - Total	mg/L	-	27.5	37.2
Strontium - Total	mg/L	-	0.135	0.172
Thallium - Total	mg/L	-	< 0.000100	0.000011
Tin - Total	mg/L	-	< 0.00100	< 0.00010
Titanium - Total	mg/L	-	0.00861	< 0.00300
Uranium - Total	mg/L	-	0.151	0.14
Vanadium - Total	mg/L	-	< 0.00500	< 0.00050
Zinc - Total	mg/L	-	< 0.0300	0.0052
Aluminum - Dissolved	mg/L	-	0.0134	0.0387
Arsenic - Dissolved	mg/L	-	0.00027	0.00023
Cadmium - Dissolved	mg/L	-	0.0000051	0.0000067
Calcium - Dissolved	mg/L	-	54.4	68.5
Copper - Dissolved	mg/L	-	0.00136	0.00147
Iron - Dissolved	mg/L	-	0.02	0.06
Lead - Dissolved	mg/L	-	< 0.000050	0.00009
Magnesium - Dissolved	mg/L	-	26.9	39.1
Manganese - Dissolved	mg/L	-	0.187	0.328
Mercury - Dissolved	mg/L	-	< 0.0000050	< 0.0000050
Molybdenum - Dissolved	mg/L	-	0.00474	0.00504
Nickel - Dissolved	mg/L	-	0.00105	0.00121
Potassium - Dissolved	mg/L	-	5.45	6.06
Selenium - Dissolved	mg/L	-	0.000138	0.000196
Sodium - Dissolved	mg/L	-	27.5	37
Thallium - Dissolved	mg/L	-	0.000011	0.000011
Uranium - Dissolved	mg/L	-	0.142	0.142
Zinc - Dissolved	mg/L	-	0.0022	0.0046
Phosphorus, Nutrient	mg/L	-	0.0074	0.0046
Phenols	ug/L	-	< 1.0	< 1.0
Oil and Grease, Total	-	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality ^{2,3}	N/A	-	-	Not Acutely Toxic

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

² Acute lethality to *Daphnia magna* (as per Environment Canada Method EPS/1/RM/14).

³ Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

Table 7.2.6: Water Quality Results for Water Licence Monitoring Location - MP-06

Sample ID			MP-06	MP-06	MP-06	MP-06	MP-06
ALS Laboratory Work Order			WT2418957	BF2400260	WT2426250	BF2400370	BF2400395
Sample Date & Time			2024-07-08 10:00	2024-08-15 07:30	2024-09-04 15:00	2024-10-02 11:00	2024-10-10 14:40
Analyte	Units	Water Licence Criteria ¹					
pH, Field	pH units	-	8.1	8.26	8.08	8.18	8.19
Specific Conductivity, Field	us/cm	-	499.3	794	766	817	804
Temperature, Field	deg C	-	11	8.1	5.3	1.3	1.4
Turbidity, Field	NTU	-	11.5	7.63	12.26	37.12	6.87
Hardness	mg/L	-	173	336	328	331	344
pH, Lab	pH units	6.0-9.5	8.20	8.23	8.26	8.20	8.10
Total Suspended Solids	mg/L	Grab 30, Average 15	1.4	< 1.0	1.2	17.6	< 1.0
Total Dissolved Solids	mg/L	-	267	505	496	515	517
Turbidity	NTU	-	6.78	6.22	3.05	25.3	6.13
Alkalinity, Total	mg/L	-	75.8	162	106	159	175
Ammonia, Total (as N)	mg/L	-	0.0375	0.0360	0.126	0.206	0.221
Chloride	mg/L	-	75.4	105	69.9	81.8	81.7
Fluoride	mg/L	-	0.128	0.196	0.137	0.164	0.186
Nitrate	mg/L	-	0.846	3.28	6.22	3.22	3.85
Total Kjeldahl Nitrogen	mg/L	-	0.225	0.497	0.737	0.706	0.531
Sulfate	mg/L	-	57.4	86.1	166	137	119
Dissolved Organic Carbon	mg/L	-	4.32	4.58	2.91	5.03	6.84
Total Organic Carbon	mg/L	-	3.82	4.66	2.97	4.66	4.53
Aluminum - Total	mg/L	-	0.0567	0.0443	0.0674	0.194	0.0648
Antimony - Total	mg/L	-	0.00014	< 0.00100	< 0.00100	0.00013	< 0.00100
Arsenic - Total	mg/L	-	0.00019	< 0.00100	< 0.00100	0.00027	< 0.00100
Barium - Total	mg/L	-	0.0105	0.0161	0.0125	0.0146	0.0122
Cadmium - Total	mg/L	-	< 0.0000500	< 0.0000500	< 0.0000500	0.0000066	< 0.0000500
Calcium - Total	mg/L	-	36.6	73.1	58.6	65.8	71.6
Chromium - Total	mg/L	-	< 0.00050	< 0.00500	< 0.00500	< 0.00050	< 0.00500
Cobalt - Total	mg/L	-	0.00037	< 0.00100	0.00135	0.00115	< 0.00100
Copper - Total	mg/L	-	0.00076	< 0.00500	< 0.00500	0.00173	< 0.00500
Iron - Total	mg/L	-	0.085	0.103	< 0.100	0.316	0.124
Lead - Total	mg/L	-	< 0.000050	< 0.000500	< 0.000500	0.000395	< 0.000500
Lithium - Total	mg/L	-	0.0107	0.0138	0.0112	0.0126	0.0118
Magnesium - Total	mg/L	-	19.8	37.2	44	40.5	40.0
Manganese - Total	mg/L	-	0.0436	0.0191	0.642	0.466	0.512
Mercury - Total	mg/L	-	< 0.0000050	< 0.0000050	< 0.0000050	< 0.0000050	< 0.0000050
Molybdenum - Total	mg/L	-	0.00357	0.00493	0.00364	0.00429	0.00518
Nickel - Total	mg/L	-	0.00067	< 0.00500	< 0.00500	0.00159	< 0.00500
Phosphorus, Total	mg/L	-	< 0.050	< 0.500	< 0.500	< 0.050	< 0.500
Potassium - Total	mg/L	-	4.65	8.06	6.14	6.25	6.18
Selenium - Total	mg/L	-	0.000151	< 0.000500	< 0.000500	0.000251	< 0.000500
Sodium - Total	mg/L	-	31.1	43.4	36.2	35.3	37.2
Strontium - Total	mg/L	-	0.13	0.208	0.167	0.173	0.165
Thallium - Total	mg/L	-	0.000019	< 0.0001	< 0.000100	0.000018	< 0.000100
Tin - Total	mg/L	-	< 0.00010	< 0.00100	< 0.00100	0.00013	< 0.00100
Titanium - Total	mg/L	-	< 0.00090	< 0.00300	< 0.00300	0.00582	< 0.00300
Uranium - Total	mg/L	-	0.0446	0.144	0.110	0.114	0.149
Vanadium - Total	mg/L	-	< 0.00050	< 0.00500	< 0.00500	< 0.00050	< 0.00500
Zinc - Total	mg/L	-	< 0.0030	< 0.0300	< 0.0300	0.0054	< 0.0300
Aluminum - Dissolved	mg/L	-	0.0159	0.021	0.0078	0.0117	0.0635
Arsenic - Dissolved	mg/L	-	0.00017	< 0.00100	0.00019	0.00018	< 0.00100
Cadmium - Dissolved	mg/L	-	< 0.0000050	< 0.0000050	< 0.0000050	0.0000063	< 0.0000050
Calcium - Dissolved	mg/L	-	37.4	70.7	58.0	67.1	67.4
Copper - Dissolved	mg/L	-	0.00067	< 0.00200	0.00071	0.00148	< 0.00200
Iron - Dissolved	mg/L	-	< 0.010	< 0.100	< 0.010	< 0.010	< 0.100
Lead - Dissolved	mg/L	-	< 0.000050	< 0.000500	< 0.000050	< 0.000050	< 0.000500
Magnesium - Dissolved	mg/L	-	19.6	36.2	40.4	41.3	39.3
Manganese - Dissolved	mg/L	-	0.0303	0.0122	0.626	0.457	0.497
Mercury - Dissolved	mg/L	-	< 0.0000050	< 0.0000050	< 0.0000050	< 0.0000050	< 0.0000050
Molybdenum - Dissolved	mg/L	-	0.00366	0.00466	0.00376	0.00434	0.00482
Nickel - Dissolved	mg/L	-	0.00052	< 0.00500	0.00102	0.00129	< 0.00500
Potassium - Dissolved	mg/L	-	4.66	7.72	6.01	6.30	6.16
Selenium - Dissolved	mg/L	-	0.000166	< 0.000500	0.000436	0.000305	< 0.000500
Sodium - Dissolved	mg/L	-	30.6	42.5	31.6	35.4	36.8
Thallium - Dissolved	mg/L	-	0.000017	< 0.000100	0.000039	0.000017	< 0.000100
Uranium - Dissolved	mg/L	-	0.0416	0.138	0.104	0.116	0.141
Zinc - Dissolved	mg/L	-	0.0022	< 0.0100	0.0010	0.0034	0.0111
Phosphorus, Nutrient	mg/L	-	0.0032	0.0049	0.0036	0.0076	0.0041
Phenols	ug/L	-	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Oil and Grease, Total	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality ^{2,3}	N/A	-	Not Acutely Toxic	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

¹ Type A Water Licence (ZAM-MRY1325 - Amend. 1) - Table 11

² Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

³ Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)

Table 7.2.7: Water Quality Results for Water Licence Monitoring Location - MP-C-B

Sample ID			MP-C-B	MP-C-B	MP-C-B	MP-C-B	MP-C-B	MP-C-B	MP-C-B	MP-C-B
ALS Laboratory Work Order			BF2400025	BF2400037	BF2400068	BF2400103	BF2400119	BF2400133	BF2400148	WT2418945
Sample Date & Time			2024-05-22 11:25	2024-05-26 16:45	2024-06-02 14:00	2024-06-11 09:20	2024-06-17 10:00	2024-06-23 07:45	2024-06-30 13:25	2024-07-08 09:25
Analyte	Units	Water Licence Criteria ¹								
Conductivity	umhos/cm	-	420	-	515	-	-	-	-	326
pH, Lab	pH units	6.0-9.5	7.79	7.81	7.93	7.69	7.97	7.94	8.09	8.33
Total Suspended Solids ²	mg/L	Grab 30, Average 15	16.9	36.5	15.2	18.9	13.5	10.8	4.2	2.1
Total Dissolved Solids	mg/L	-	278	252	270	196	152	137	145	175
Turbidity	NTU	-	101	56.5	42.7	28.3	30.3	34.6	8.07	4.98
Ammonia, Total (as N)	mg/L	-	0.654	-	0.219	-	-	-	-	0.137
Nitrate	mg/L	-	0.668	-	0.598	-	-	-	-	3.22
Oil and Grease, Total	mg/L	-	< 5.0	-	< 5.0	-	-	-	-	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11
² Average TSS for May exceeded maximum average TSS concentration discharge limits.

Table 7.2.7: Water Quality Results for Water Licence Monitoring Location - MP-C-B

Sample ID			MP-C-B	MP-C-B	MP-C-B	MP-C-B	MP-C-B	MP-C-B	MP-C-B	MP-C-B
ALS Laboratory Work Order			BF2400187	BF2400201	BF2400211	WT2422925	BF2400244	BF2400269	BF2400292	BF2400306
Sample Date & Time			2024-07-15 14:10	2024-07-22 16:35	2024-07-29 13:55	2024-08-04 14:15	2024-08-11 07:45	2024-08-18 08:50	2024-08-26 13:30	2024-09-01 09:30
Analyte	Units	Water Licence Criteria ¹								
Conductivity	umhos/cm	-	-	-	-	555	-	-	-	509
pH, Lab	pH units	6.0-9.5	8.28	7.95	8.21	8.50	8.20	8.08	8.05	8.02
Total Suspended Solids ²	mg/L	Grab 30, Average 15	6.0	5.8	4.7	2.4	1.2	< 1.0	2.2	< 1.0
Total Dissolved Solids	mg/L	-	267	548	333	310	330	342	272	256
Turbidity	NTU	-	10.0	0.42	8.65	2.50	3.31	2.86	8.98	3.10
Ammonia, Total (as N)	mg/L	-	-	-	-	< 0.0050	-	-	-	0.0932
Nitrate	mg/L	-	-	-	-	3.92	-	-	-	2.18
Oil and Grease, Total	mg/L	-	-	-	-	< 5.0	-	-	-	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11
² Average TSS for May exceeded maximum average TSS concentration discharge limits.

Table 7.2.7: Water Quality Results for Water Licence Monitoring Location - MP-C-B

Sample ID			MP-C-B	MP-C-B	MP-C-B	MP-C-B	MP-C-B	MP-C-B
ALS Laboratory Work Order			BF2400331	WT2427676	BF2400354	BF2400366	BF2400383	BF2400400
Sample Date & Time			2024-09-08 10:30	2024-09-15 15:40	2024-09-23 09:30	2024-10-01 11:00	2024-10-06 09:55	2024-10-14 09:45
Analyte	Units	Water Licence Criteria ¹						
Conductivity	umhos/cm	-	-	-	-	-	502	-
pH, Lab	pH units	6.0-9.5	8.20	8.41	8.02	8.04	8.06	7.66
Total Suspended Solids ²	mg/L	Grab 30, Average 15	5.9	1.9	4.5	11.7	5.8	< 1.0
Total Dissolved Solids	mg/L	-	344	335	278	300	302	392
Turbidity	NTU	-	8.27	1.49	13.1	47.4	25.7	2.97
Ammonia, Total (as N)	mg/L	-	-	-	-	-	0.197	-
Nitrate	mg/L	-	-	-	-	-	2.56	-
Oil and Grease, Total	mg/L	-	-	-	-	-	< 5.0	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11
² Average TSS for May exceeded maximum average TSS concentration discharge limits.

Table 7.2.8: Water Quality Results for Water Licence Monitoring Location - MP-C-H

Sample ID			MP-C-H	MP-C-H	MP-C-H	MP-C-H	MP-C-H	MP-C-H	MP-C-H	MP-C-H	MP-C-H	MP-C-H	MP-C-H	MP-C-H
ALS Laboratory Work Order			BF2400080	BF2400097	BF2400119	BF2400133	BF2400148	WT2418945	BF2400187	BF2400201	BF2400211	WT2422925	BF2400244	BF2400269
Sample Date & Time			2024-06-05 08:30	2024-06-09 11:25	2024-06-17 10:40	2024-06-23 07:05	2024-06-30 12:45	2024-07-08 08:35	2024-07-15 10:35	2024-07-22 17:15	2024-07-29 08:15	2024-08-04 10:15	2024-08-11 07:00	2024-08-18 08:05
Analyte	Units	Water Licence Criteria ¹												
Conductivity	umhos/cm	-	-	357	-	-	-	193	-	-	-	282	-	-
pH, Lab	pH units	6.0-9.5	8.09	7.61	7.82	7.97	7.66	8.31	8.10	8.24	8.05	8.38	8.21	8.03
Total Suspended Solids	mg/L	Grab 30, Average 15	16.8	2.9	25.4	<1.0	<1.0	1.7	< 1.0	2.5	< 1.0	< 1.0	< 1.0	< 1.0
Total Dissolved Solids	mg/L	-	325	210	70	71	79	90	137	291	154	144	185	188
Turbidity	NTU	-	34.7	5.42	3.69	0.43	0.31	0.18	0.43	3.61	0.70	0.14	0.16	0.27
Ammonia, Total (as N)	mg/L	-	-	0.0058	-	-	-	<0.0050	-	-	-	< 0.0050	-	-
Nitrate	mg/L	-	-	0.111	-	-	-	0.047	-	-	-	0.065	-	-
Oil and Grease, Total	mg/L	-	-	< 5	-	-	-	<5.0	-	-	-	< 5.0	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

Table 7.2.8: Water Quality Results for Water Licence Monitoring Location - MP-C-H

Sample ID			MP-C-H	MP-C-H	MP-C-H	MP-C-H	MP-C-H	MP-C-H	MP-C-H
ALS Laboratory Work Order			BF2400292	BF2400306	BF2400331	WT2427676	BF2400354	BF2400366	BF2400383
Sample Date & Time			2024-08-26 11:00	2024-09-01 10:40	2024-09-08 11:00	2024-09-15 16:00	2024-09-23 08:40	2024-09-30 14:25	2024-10-06 09:15
Analyte	Units	Water Licence Criteria ¹							
Conductivity	umhos/cm	-	-	351	-	-	-	-	267
pH, Lab	pH units	6.0-9.5	7.93	8.15	8.21	8.40	7.99	7.98	8.13
Total Suspended Solids	mg/L	Grab 30, Average 15	< 1.2	1.4	< 1.0	< 1.0	< 1.2	< 1.5	< 1.0
Total Dissolved Solids	mg/L	-	160	176	166	166	148	150	132
Turbidity	NTU	-	0.50	2.35	0.25	< 0.10	0.70	0.17	0.50
Ammonia, Total (as N)	mg/L	-	-	0.0091	-	-	-	-	< 0.0050
Nitrate	mg/L	-	-	0.977	-	-	-	-	0.050
Oil and Grease, Total	mg/L	-	-	< 5.0	-	-	-	-	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

Table 7.2.9: Water Quality Results for Water Licence Monitoring Location - MP-C-J

Sample ID			MP-C-J	MP-C-J	MP-C-J	MP-C-J	MP-C-J	MP-C-J	MP-C-J	MP-C-J	MP-C-J	MP-C-J	MP-C-J
ALS Laboratory Work Order			BF2400097	BF2400119	BF2400133	BF2400148	WT2418945	BF2400187	BF2400201	BF2400211	WT2422925	BF2400244	BF2400269
Sample Date & Time			2024-06-09 10:10	2024-06-17 09:20	2024-06-23 09:00	2024-06-30 13:50	2024-07-08 10:25	2024-07-15 12:25	2024-07-22 15:50	2024-07-29 15:00	2024-08-04 13:25	2024-08-11 08:00	2024-08-18 11:50
Analyte	Units	Water Licence Criteria ¹											
Conductivity	umhos/cm	-	252	-	-	-	356	-	-	-	423	-	-
pH, Lab	pH units	6.0-9.5	7.57	7.99	7.92	7.89	8.45	7.92	7.72	7.83	8.35	7.96	7.89
Total Suspended Solids	mg/L	Grab 30, Average 15	1.6	<1.0	<1.0	<1.0	<1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Dissolved Solids	mg/L	-	157	165	178	200	183	209	231	226	217	244	240
Turbidity	NTU	-	4.94	0.46	0.28	0.16	0.25	0.70	< 0.10	0.77	0.14	0.26	0.46
Ammonia, Total (as N)	mg/L	-	< 0.005	-	-	-	0.0072	-	-	-	0.0713	-	-
Nitrate	mg/L	-	< 0.02	-	-	-	0.041	-	-	-	0.065	-	-
Oil and Grease, Total	mg/L	-	< 5.0	-	-	-	<5.0	-	-	-	< 5.0	-	-
	-	No Visible Sheen	No Visible Sheen	Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

Table 7.2.9: Water Quality Results for Water Licence Monitoring Location - MP-C-J

Sample ID			MP-C-J	MP-C-J	MP-C-J	MP-C-J	MP-C-J	MP-C-J	MP-C-J
ALS Laboratory Work Order			BF2400292	BF2400306	BF2400331	WT2427676	BF2400354	BF2400366	BF2400383
Sample Date & Time			2024-08-26 12:50	2024-09-01 08:55	2024-09-08 09:50	2024-09-15 09:50	2024-09-23 11:45	2024-09-30 16:00	2024-10-06 10:50
Analyte	Units	Water Licence Criteria ¹							
Conductivity	umhos/cm	-	-	427	-	-	-	-	391
pH, Lab	pH units	6.0-9.5	7.98	7.77	7.79	8.16	8.05	8.01	7.99
Total Suspended Solids	mg/L	Grab 30, Average 15	< 1.0	< 1.0	< 1.0	< 1.0	1.4	< 1.0	< 1.0
Total Dissolved Solids	mg/L	-	219	213	244	237	236	214	235
Turbidity	NTU	-	0.51	0.31	< 0.10	0.17	2.40	0.46	0.35
Ammonia, Total (as N)	mg/L	-	-	0.007	-	-	-	-	0.0152
Nitrate	mg/L	-	-	0.06	-	-	-	-	0.049
Oil and Grease, Total	mg/L	-	-	< 5.0	-	-	-	-	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

Table 7.2.10: Water Quality Results for Water Licence Monitoring Location - MP-C-K

Sample ID			MP-C-K	MP-C-K	MP-C-K	MP-C-K	MP-C-K	MP-C-K	MP-C-K	MP-C-K	MP-C-K	MP-C-K
ALS Laboratory Work Order			WT2414190	BF2400068	BF2400097	BF2400119	BF2400133	BF2400148	WT2418945	BF2400187	BF2400201	BF2400211
Sample Date & Time			2024-05-28 09:30	2024-06-02 14:40	2024-06-09 10:30	2024-06-17 09:35	2024-06-23 09:15	2024-06-30 13:35	2024-07-08 10:05	2024-07-15 12:35	2024-07-22 16:05	2024-07-29 15:20
Analyte	Units	Water Licence Criteria ¹										
Conductivity	umhos/cm	-	364	332	-	-	-	-	542	-	-	-
pH, Lab	pH units	6.0-9.5	8.13	7.97	7.73	8.05	8.08	8.11	8.25	8.11	8.11	8.01
Total Suspended Solids	mg/L	Grab 30, Average 15	8.8	1.5	2.1	1.7	<1.0	<1.0	1.4	<1.0	< 1.0	< 1.0
Total Dissolved Solids	mg/L	-	207	181	198	172	200	235	361	477	150	522
Turbidity	NTU	-	17.6	9.76	8.48	5.93	1.84	1.15	0.54	0.60	0.19	1.81
Ammonia, Total (as N)	mg/L	-	0.134	0.0098	-	-	-	-	0.506	-	-	-
Nitrate	mg/L	-	0.285	0.2	-	-	-	-	1.01	-	-	-
Oil and Grease, Total	mg/L	-	< 5.0	<5.0	-	-	-	-	<5.0	-	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

Table 7.2.10: Water Quality Results for Water Licence Monitoring Location - MP-C-K

Sample ID			MP-C-K		MP-C-K		MP-C-K		MP-C-K		MP-C-K		MP-C-K		MP-C-K	
ALS Laboratory Work Order			WT2422925		BF2400244		BF2400269		BF2400292		BF2400306		BF2400331		WT2427676	
Sample Date & Time			2024-08-04 13:55		2024-08-11 08:20		2024-08-18 09:55		2024-08-26 13:10		2024-09-01 10:10		2024-09-08 10:10		2024-09-15 10:05	
Analyte	Units	Water Licence Criteria ¹														
Conductivity	umhos/cm	-	786	-	-	-	952	-	-	-	-	-	-	-	-	1050
pH, Lab	pH units	6.0-9.5	8.32	8.06	8.01	7.97	8.01	8.07	8.20	8.01	8.02	7.97				
Total Suspended Solids	mg/L	Grab 30, Average 15	1.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0				
Total Dissolved Solids	mg/L	-	483	524	502	726	575	821	781	778	712	705				
Turbidity	NTU	-	0.28	0.55	0.53	0.81	0.32	0.42	0.12	1.13	0.40	1.02				
Ammonia, Total (as N)	mg/L	-	0.490	-	-	-	0.0127	-	-	-	-	0.0120				
Nitrate	mg/L	-	1.21	-	-	-	0.456	-	-	-	-	2.91				
Oil and Grease, Total	mg/L	-	< 5.0	-	-	-	< 5.0	-	-	-	-	< 5.0				
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen				

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

Table 7.2.10: Water Quality Results for Water Licence Monitoring Location - MP-C-K

		Sample ID	MP-C-K
		ALS Laboratory Work Order	BF2400400
		Sample Date & Time	2024-10-14 09:30
Analyte	Units	Water Licence Criteria ¹	
Conductivity	umhos/cm	-	-
pH, Lab	pH units	6.0-9.5	7.61
Total Suspended Solids	mg/L	Grab 30, Average 15	< 1.3
Total Dissolved Solids	mg/L	-	730
Turbidity	NTU	-	0.14
Ammonia, Total (as N)	mg/L	-	-
Nitrate	mg/L	-	-
Oil and Grease, Total	mg/L	-	-
	-	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

Table 7.2.11: Water Quality Results for Water Licence Monitoring Location - MP-Q1-01

Sample ID			MP-Q1-01	MP-Q1-01	MP-Q1-01	MP-Q1-01	MP-Q1-01	MP-Q1-01	MP-Q1-01	MP-Q1-01
ALS Laboratory Work Order			BF2400068	BF2400097	BF2400119	BF2400133	BF2400148	WT2418945	BF2400187	BF2400201
Sample Date & Time			2024-06-02 15:35	2024-06-09 12:20	2024-06-17 08:40	2024-06-23 08:10	2024-06-30 14:10	2024-07-08 10:50	2024-07-15 12:05	2024-07-22 15:25
Analyte	Units	Water Licence Criteria ¹								
Conductivity	umhos/cm	-	109	-	-	-	-	204	-	-
pH, Lab	pH units	6.0-9.5	7.50	7.38	8.19	7.73	7.89	8.12	8.00	7.88
Total Suspended Solids	mg/L	Grab 30, Average 15	14.0	3.4	1.5	< 1.0	< 1.0	1.4	< 1.0	< 1.0
Total Dissolved Solids	mg/L	-	72	68	66	66	90	92	105	119
Turbidity	NTU	-	38.1	6.10	3.74	5.91	2.71	3.20	2.85	2.51
Ammonia, Total (as N)	mg/L	-	0.0496	-	-	-	-	0.0116	-	-
Nitrate	mg/L	-	0.217	-	-	-	-	0.295	-	-
Oil and Grease, Total	mg/L	-	< 5.0	-	-	-	-	< 5.0	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality ^{2,3}	N/A	Not Acutely Toxic	Not Acutely Toxic	-	-	-	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11
² Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14) .
³ Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

Table 7.2.11: Water Quality Results for Water Licence Monitoring Location - MP-Q1-01

Sample ID			MP-Q1-01	MP-Q1-01	MP-Q1-01	MP-Q1-01	MP-Q1-01	MP-Q1-01	MP-Q1-01
ALS Laboratory Work Order			BF2400211	WT2422925	BF2400244	BF2400292	BF2400354	BF2400366	BF2400383
Sample Date & Time			2024-07-29 14:15	2024-08-05 08:15	2024-08-11 08:40	2024-08-26 14:25	2024-09-23 14:30	2024-09-30 16:30	2024-10-06 11:20
Analyte	Units	Water Licence Criteria ¹							
Conductivity	umhos/cm	-	-	282	-	-	172	-	166
pH, Lab	pH units	6.0-9.5	7.92	8.34	8.02	7.87	7.92	7.92	7.95
Total Suspended Solids	mg/L	Grab 30, Average 15	< 1.0	1.4	< 1.0	< 1.0	< 1.0	1.0	< 1.0
Total Dissolved Solids	mg/L	-	111	149	124	102	107	102	122
Turbidity	NTU	-	3.54	1.07	2.61	5.37	4.99	7.37	4.58
Ammonia, Total (as N)	mg/L	-	-	0.0413	-	-	< 0.0050	-	< 0.0050
Nitrate	mg/L	-	-	0.363	-	-	0.210	-	0.242
Oil and Grease, Total	mg/L	-	-	< 5.0	-	-	< 5.0	-	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality ^{2,3}	N/A	Not Acutely Toxic	-	Not Acutely Toxic	-	-	-	-	Not Acutely Toxic

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

² Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14) .

³ Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

Table 7.2.12: Water Quality Results for Water Licence Monitoring Location - MP-Q1-02

Sample ID			MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02
ALS Laboratory Work Order			BF2400097	BF2400119	BF2400133	BF2400148	WT2418945	BF2400187	BF2400201	BF2400211
Sample Date & Time			2024-06-09 11:55	2024-06-17 08:55	2024-06-23 08:40	2024-06-30 14:30	2024-07-08 11:20	2024-07-15 11:15	2024-07-22 15:00	2024-07-29 14:40
Analyte	Units	Water Licence Criteria ¹								
Conductivity	umhos/cm	-	198	-	-	-	360	-	-	-
pH, Lab	pH units	6.0-9.5	7.41	7.90	7.75	7.85	8.27	8.02	7.89	7.86
Total Suspended Solids	mg/L	Grab 30, Average 15	14.7	2.5	2.2	1.5	< 1.0	1.0	< 1.0	< 1.0
Total Dissolved Solids	mg/L	-	122	150	129	178	224	262	295	317
Turbidity	NTU	-	24.5	8.62	8.69	5.37	1.25	1.85	0.80	1.36
Ammonia, Total (as N)	mg/L	-	0.0194	-	-	-	0.501	-	-	-
Nitrate	mg/L	-	0.839	-	-	-	10.0	-	-	-
Oil and Grease, Total	mg/L	-	< 5.0	-	-	-	< 5.0	-	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality ^{2,3}	N/A	Not Acutely Toxic	-	-	-	-	Not Acutely Toxic	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.

¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

² Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14) .

³ Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

Table 7.2.12: Water Quality Results for Water Licence Monitoring Location - MP-Q1-02

Sample ID			MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02
ALS Laboratory Work Order			WT2422925	BF2400244	BF2400269	BF2400292	BF2400306	BF2400331	WT2427676	BF2400354
Sample Date & Time			2024-08-04 15:30	2024-08-11 09:00	2024-08-18 11:05	2024-08-26 14:10	2024-09-01 14:50	2024-09-08 11:40	2024-09-15 09:35	2024-09-23 13:30
Analyte	Units	Water Licence Criteria ¹								
Conductivity	umhos/cm	-	527	-	-	-	504	-	-	-
pH, Lab	pH units	6.0-9.5	8.32	8.04	7.91	7.89	7.92	8.16	8.40	7.88
Total Suspended Solids	mg/L	Grab 30, Average 15	2.1	< 1.0	< 1.0	1.2	< 1.0	2.9	1.0	6.8
Total Dissolved Solids	mg/L	-	303	364	322	251	291	291	284	270
Turbidity	NTU	-	1.54	1.22	0.61	3.18	0.96	2.81	0.96	9.14
Ammonia, Total (as N)	mg/L	-	0.164	-	-	-	0.546	-	-	-
Nitrate	mg/L	-	17.5	-	-	-	15.6	-	-	-
Oil and Grease, Total	mg/L	-	< 5.0	-	-	-	< 5.0	-	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality ^{2,3}	N/A	Not Acutely Toxic	-	-	-	-	Not Acutely Toxic	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.

¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

² Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14) .

³ Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

Table 7.2.12: Water Quality Results for Water Licence Monitoring Location - MP-Q1-02

Sample ID			MP-Q1-02	MP-Q1-02
ALS Laboratory Work Order			BF2400366	BF2400383
Sample Date & Time			2024-09-30 16:20	2024-10-06 11:45
Analyte	Units	Water Licence Criteria ¹		
Conductivity	umhos/cm	-	-	480
pH, Lab	pH units	6.0-9.5	7.89	7.88
Total Suspended Solids	mg/L	Grab 30, Average 15	2.3	< 1.0
Total Dissolved Solids	mg/L	-	308	228
Turbidity	NTU	-	7.28	2.64
Ammonia, Total (as N)	mg/L	-	-	0.264
Nitrate	mg/L	-	-	14.3
Oil and Grease, Total	mg/L	-	-	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality ^{2,3}	N/A	Not Acutely Toxic	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11
² Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14) .
³ Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

Table 7.3.1: Water Quality Results for Water Licence Monitoring Location - MS-01

Sample ID			MS-01	MS-01	MS-01	MS-01	MS-01	MS-01	MS-01	MS-01	MS-01	MS-01
ALS Laboratory Work Order			WT2407031	WT2408384	WT2412206	BF2400102	WT2418566	WT2422480	WT2426793	WT2430950	WT2433250	WT2436802
Sample Date & Time			2024-03-27 16:00	2024-04-09 14:30	2024-05-14 13:25	2024-06-11 13:40	2024-07-04 13:00	2024-08-06 14:10	2024-09-10 10:05	2024-10-16 12:50	2024-11-05 14:20	2024-12-10 14:30
Analyte	Units	Water Licence Criteria ¹										
pH, Lab	pH units	6.0-9.5	7.73	8.18	8.84	7.18	8.51	8.41	7.21	8.38	8.34	8.00
Total Suspended Solids	mg/L	35	< 1.0	1.6	1.8	4.9	1.5	1.2	1.8	4.8	2.9	9.9
Total Dissolved Solids	mg/L	-	1090	2190	1860	2700	2360	2530	1690	2370	3380	3070
Turbidity	NTU	-	0.30	0.46	0.35	1.85	0.76	0.86	0.76	1.58	1.17	3.49
Alkalinity, Total	mg/L	-	124	172	673	19.4	268	249	25.0	261	233.0	145
Ammonia, Total (as N)	mg/L	4	0.0423	0.0697	0.151	2.18	0.0411	0.0495	0.0639	0.0406	0.047	0.121
Total Kjeldahl Nitrogen	mg/L	-	1.15	4.98	4.57	6.78	8.85	< 0.050	< 0.050	4.13	3.5	4.06
Fecal Coliforms	CFU/100mL	1000	250	< 1	2	< 1	1	< 1	1	< 1	< 1	NR ⁴
BOD	mg/L	30	< 2.0	< 2.0	< 2.0	< 3.0	< 3.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Phosphorus, Nutrient	mg/L	4	0.154	0.308	1.32	0.190	0.564	0.344	0.255	0.353	0.366	0.479
Oil and Grease, Total	mg/L	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality ^{2,3}	N/A	Not Acutely Toxic	-	-	Not Acutely Toxic	-	-	-	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹ Type A Water Licence (ZAM-MRY1325 - Amend. 1) - Table 5.
² Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)
³ Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)

Table 7.3.2: Water Quality Results for Water Licence Monitoring Location - MS-01B

Sample ID			MS-01B	MS-01B	MS-01B	MS-01B	MS-01B	MS-01B	MS-01B	MS-01B
ALS Laboratory Work Order			WT2400075	WT2402855	WT2405565	WT2408384	WT2412206	BF2400102	WT2418566	WT2422480
Sample Date & Time			2024-01-02 15:30	2024-02-07 11:15	2024-03-12 14:00	2024-04-09 14:00	2024-05-14 14:25	2024-06-11 13:05	2024-07-04 13:25	2024-08-06 14:30
Analyte	Units	Water Licence Criteria ¹								
pH, Lab	pH units	6.0-9.5	8.14	8.77	8.18	8.38	8.27	7.68	8.34	8.20
Total Suspended Solids	mg/L	35	1.7	< 1	1.5	1.5	2.1	3.2	< 1.0	2.6
Total Dissolved Solids	mg/L	-	561	2440	748	816	814	585	474	578
Turbidity	NTU	-	0.27	< 0.1	0.47	0.27	0.19	0.26	0.18	0.66
Alkalinity, Total	mg/L	-	212	773	254	267	165	140	196	222
Ammonia, Total (as N)	mg/L	4	0.242	0.0474	0.0402	0.0292	0.0319	0.0648	0.390	0.0483
Total Kjeldahl Nitrogen	mg/L	-	1.3	0.834	0.83	0.583	0.421	1.46	1.72	1.26
Fecal Coliforms	CFU/100mL	1000	98	< 1	< 1	< 1	90	14	12	3
BOD	mg/L	30	< 2	< 2	< 2	< 2.0	< 2.0	< 3.0	< 3.0	< 2.0
Phosphorus, Nutrient	mg/L	4	0.867	0.291	1.04	0.0575	0.0411	0.121	0.178	0.324
Oil and Grease, Total	mg/L	-	< 5	< 5	< 5	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality ^{2,3}	N/A	Not Acutely Toxic	-	-	Not Acutely Toxic	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 4.

² Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

³ Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)

Table 7.3.2: Water Quality Results for Water Licence Monitoring Location - MS-01B

Sample ID			MS-01B	MS-01B	MS-01B	MS-01B
ALS Laboratory Work Order			WT2426793	WT2430950	WT2433250	WT2436802
Sample Date & Time			2024-09-10 08:20	2024-10-16 12:00	2024-11-05 14:45	2024-12-10 15:15
Analyte	Units	Water Licence Criteria ¹				
pH, Lab	pH units	6.0-9.5	8.33	8.34	8.29	7.96
Total Suspended Solids	mg/L	35	< 1.0	< 1.0	1.2	2.8
Total Dissolved Solids	mg/L	-	595	549	600	682
Turbidity	NTU	-	0.19	0.17	0.19	0.19
Alkalinity, Total	mg/L	-	203	156	202	126
Ammonia, Total (as N)	mg/L	4	0.0794	0.0290	0.0291	0.0218
Total Kjeldahl Nitrogen	mg/L	-	0.731	1.20	0.937	2.88
Fecal Coliforms	CFU/100mL	1000	2	< 1	< 1	< 1
BOD	mg/L	30	< 2.0	< 2.0	< 2.0	< 2.0
Phosphorus, Nutrient	mg/L	-	0.217	0.793	0.139	0.0868
Oil and Grease, Total	mg/L	-	< 5.0	< 5.0	< 5.0	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality ^{2,3}	N/A	Not Acutely Toxic	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 4.
² Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14) .
³ Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

Table 7.3.3: Water Quality Results for Water Licence Monitoring Location - MS-03B

Sample ID			MS-03B
ALS Laboratory Work Order			BF2400287
Sample Date & Time			2024-08-25 11:45
Analyte	Units	Water Licence Criteria ¹	
pH, Lab	pH units	6.0 - 9.5	8.00
Total Suspended Solids	mg/L	-	2.8
Total Dissolved Solids	mg/L	-	178
Turbidity	NTU	-	6.13
Lead - Total	mg/L	0.001	< 0.000500
Benzene	ug/L	590	< 0.50
Ethylbenzene	ug/L	70	< 0.50
Toluene	ug/L	30	< 0.50
Total Xylenes	ug/L	70	< 0.50
m+p-Xylenes	ug/L	70	< 0.40
o-Xylene	ug/L	70	< 0.3
F1-BTEX	ug/L	-	< 25
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
Oil and Grease, Total	mg/L	15	< 5.0
	-	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 8

Table 7.3.4: Water Quality Results for Water Licence Monitoring Location - MS-06

Sample ID				MS-06	MS-06	MS-06	MS-06
ALS Laboratory Work Order				BF2400311	BF2400367	BF2400396	BF2400397
Sample Date & Time				2024-09-03 12:40	2024-10-01 20:20	2024-10-12 11:20	2024-10-13 13:15
Analyte	Units	Water Licence Criteria ¹	MDMER Criteria ²				
pH, Field	pH units	-	-	7.52	7.32	7.32	7.32
Specific Conductivity, Field	us/cm	-	-	1794	1315	1903	1971
Temperature, Field	deg C	-	-	6.30	2.90	2.30	1.40
Turbidity, Field	NTU	-	-	7.85	60.56	14.18	18.58
Hardness	mg/L	-	-	978	599	-	-
Conductivity	umhos/cm	-	-	1760	1460	1900	1920
pH, Lab	pH units	6.0-9.5	6.0-9.5	7.39	7.35	6.94	6.91
Total Suspended Solids	mg/L	Grab 30, Average 15	30 (Grab)	< 1.0	27.4	< 1.0	< 1.0
Total Dissolved Solids	mg/L	-	-	1400	1040	1550	1520
Turbidity	NTU	-	-	6.69	64.4	7.97	5.68
Alkalinity, Total	mg/L	-	-	34.6	18.9	-	-
Ammonia, Total (as N)	mg/L	-	-	1.49	6.27	12.0	13.0
Chloride	mg/L	-	-	85.9	83.6	-	-
Fluoride	mg/L	-	-	< 0.100	< 0.100	-	-
Nitrate	mg/L	-	-	16.6	14.0	-	-
Total Kjeldahl Nitrogen	mg/L	-	-	1.73	7.88	-	-
Sulfate	mg/L	-	-	799	530	-	-
Dissolved Organic Carbon	mg/L	-	-	2.30	1.84	-	-
Total Organic Carbon	mg/L	-	-	2.61	2.34	-	-
Phosphorus, Nutrient	mg/L	-	-	< 0.0100	< 0.0040	-	-
Aluminum - Total	mg/L	-	-	0.0357	0.427	0.0302	< 0.0300
Antimony - Total	mg/L	-	-	< 0.00100	< 0.00100	< 0.00100	< 0.00100
Arsenic - Total	mg/L	-	0.60	< 0.00100	< 0.00100	< 0.00100	< 0.00100
Barium - Total	mg/L	-	-	0.0232	0.0230	0.0188	0.0189
Cadmium - Total	mg/L	-	-	0.000101	0.000104	0.000135	0.000142
Calcium - Total	mg/L	-	-	80.9	40.8	52.5	53.3
Chromium - Total	mg/L	-	-	< 0.00500	< 0.00500	< 0.00500	< 0.00500
Cobalt - Total	mg/L	-	-	0.0329	0.0586	0.102	0.105
Copper - Total	mg/L	-	0.60	< 0.00500	< 0.00500	< 0.00500	< 0.00500
Iron - Total	mg/L	-	-	0.194	1.10	0.110	< 0.100
Lead - Total	mg/L	-	0.20	< 0.000500	< 0.000500	< 0.000500	< 0.000500
Lithium - Total	mg/L	-	-	0.0445	0.0309	0.0550	0.0560
Magnesium - Total	mg/L	-	-	193	123	188	191
Manganese - Total	mg/L	-	-	17.5	17.0	25.9	26.8
Mercury - Total	mg/L	-	-	< 0.0000050	< 0.00000500	-	-
Molybdenum - Total	mg/L	-	-	0.00176	0.00135	0.00111	0.00110
Nickel - Total	mg/L	-	1.00	0.0230	0.0348	0.0594	0.0625
Phosphorus, Total	mg/L	-	-	< 0.500	< 0.500	< 0.500	< 0.500
Potassium - Total	mg/L	-	-	14.9	7.91	8.27	8.46
Selenium - Total	mg/L	-	-	0.00200	0.00130	0.00208	0.00237
Sodium - Total	mg/L	-	-	31.8	37.0	62.6	63.8
Strontium - Total	mg/L	-	-	0.180	0.0916	0.109	0.110
Thallium - Total	mg/L	-	-	0.000159	0.000220	0.000368	0.000395
Tin - Total	mg/L	-	-	< 0.00100	< 0.00100	< 0.00100	< 0.00100
Titanium - Total	mg/L	-	-	< 0.00300	< 0.0200	< 0.003	< 0.00300
Uranium - Total	mg/L	-	-	0.00137	0.000357	< 0.000100	< 0.000100
Vanadium - Total	mg/L	-	-	< 0.005	< 0.00500	< 0.00500	< 0.00500
Zinc - Total	mg/L	-	1.00	< 0.0300	< 0.0300	< 0.0300	< 0.0300
Aluminum - Dissolved	mg/L	-	-	< 0.0100	< 0.0100	-	-
Arsenic - Dissolved	mg/L	-	-	< 0.00100	< 0.00100	-	-
Cadmium - Dissolved	mg/L	-	-	0.000103	0.0000896	-	-
Calcium - Dissolved	mg/L	-	-	79.8	40.2	-	-
Copper - Dissolved	mg/L	-	-	< 0.00200	< 0.00200	-	-
Iron - Dissolved	mg/L	-	-	< 0.100	< 0.100	-	-
Lead - Dissolved	mg/L	-	-	< 0.000500	< 0.000500	-	-
Magnesium - Dissolved	mg/L	-	-	189	121	-	-
Manganese - Dissolved	mg/L	-	-	17.0	15.6	-	-
Mercury - Dissolved	mg/L	-	-	< 0.0000050	< 0.0000050	-	-
Molybdenum - Dissolved	mg/L	-	-	0.00153	0.00142	-	-
Nickel - Dissolved	mg/L	-	-	0.0224	0.0322	-	-
Potassium - Dissolved	mg/L	-	-	13.1	8.07	-	-
Selenium - Dissolved	mg/L	-	-	0.00191	0.00128	-	-
Sodium - Dissolved	mg/L	-	-	32.3	36.0	-	-
Thallium - Dissolved	mg/L	-	-	0.000151	0.000227	-	-
Uranium - Dissolved	mg/L	-	-	0.00126	0.000275	-	-
Zinc - Dissolved	mg/L	-	-	< 0.0100	< 0.0100	-	-
Oil and Grease, Total	-	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality ^{3,4}	N/A	-	Not Acutely Toxic	Not Acutely Toxic	Not Acutely Toxic	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

² Metal and Daimond Mining Effluent Regulations (MDMER) June 10, 2021, Schedule 4, Table 2.

³ Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

⁴ Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)

Table 7.3.5: Water Quality Results for Water Licence Monitoring Location - MS-07

Sample ID				MS-07	MS-07
ALS Laboratory Work Order				BF2400312	BF2400388
Sample Date & Time				2024-09-03 11:30	2024-10-08 12:50
Analyte	Units	Water Licence Criteria ¹	MDMER Criteria ²		
pH, Field	pH units	-	-	7.82	7.43
Specific Conductivity, Field	us/cm	-	-	328.2	261.1
Temperature, Field	deg C	-	-	4.70	2.70
Turbidity, Field	NTU	-	-	4.14	11.53
Hardness	mg/L	-	-	158	114
Conductivity	umhos/cm	-	-	336	268
pH, Lab	pH units	6.0-9.5	6.0-9.5	7.74	7.54
Total Suspended Solids	mg/L	Grab 30, Average 15	30 (Grab)	1.2	2.5
Total Dissolved Solids	mg/L	-	-	188	168
Turbidity	NTU	-	-	3.26	9.46
Alkalinity, Total	mg/L	-	-	54.5	23.6
Ammonia, Total (as N)	mg/L	-	-	0.0252	0.184
Chloride	mg/L	-	-	8.95	5.18
Fluoride	mg/L	-	-	0.074	0.043
Nitrate	mg/L	-	-	4.79	5.52
Total Kjeldahl Nitrogen	mg/L	-	-	0.424	0.492
Sulfate	mg/L	-	-	80.0	72.8
Dissolved Organic Carbon	mg/L	-	-	1.90	1.31
Total Organic Carbon	mg/L	-	-	2.09	1.05
Phosphorus, Nutrient	mg/L	-	-	0.0040	0.0046
Aluminum - Total	mg/L	-	-	0.0698	0.158
Antimony - Total	mg/L	-	-	< 0.00010	< 0.00010
Arsenic - Total	mg/L	-	0.60	< 0.00010	< 0.00010
Barium - Total	mg/L	-	-	0.0146	0.0109
Cadmium - Total	mg/L	-	-	0.0000139	0.0000455
Calcium - Total	mg/L	-	-	23.3	14.4
Chromium - Total	mg/L	-	-	< 0.00050	0.00062
Cobalt - Total	mg/L	-	-	0.00034	0.00170
Copper - Total	mg/L	-	0.60	0.00072	0.00102
Iron - Total	mg/L	-	-	0.090	0.236
Lead - Total	mg/L	-	0.20	0.000168	0.000258
Lithium - Total	mg/L	-	-	0.0033	0.0029
Magnesium - Total	mg/L	-	-	22.6	19.4
Manganese - Total	mg/L	-	-	0.00387	0.328
Mercury - Total	mg/L	-	-	< 0.0000050	< 0.0000050
Molybdenum - Total	mg/L	-	-	0.00400	0.00247
Nickel - Total	mg/L	-	1.00	< 0.00050	0.00137
Phosphorus, Total	mg/L	-	-	< 0.050	< 0.050
Potassium - Total	mg/L	-	-	6.11	3.93
Selenium - Total	mg/L	-	-	0.000398	0.000673
Sodium - Total	mg/L	-	-	2.80	1.77
Strontium - Total	mg/L	-	-	0.0484	0.0223
Thallium - Total	mg/L	-	-	0.000012	0.000016
Tin - Total	mg/L	-	-	< 0.0001	< 0.00010
Titanium - Total	mg/L	-	-	0.00250	0.00663
Uranium - Total	mg/L	-	-	0.00337	0.000937
Vanadium - Total	mg/L	-	-	< 0.00050	< 0.00050
Zinc - Total	mg/L	-	1.00	< 0.0030	< 0.0030
Aluminum - Dissolved	mg/L	-	-	0.0130	0.0030
Arsenic - Dissolved	mg/L	-	-	< 0.00010	< 0.00010
Cadmium - Dissolved	mg/L	-	-	0.0000104	0.0000402
Calcium - Dissolved	mg/L	-	-	24.7	13.3
Copper - Dissolved	mg/L	-	-	0.00053	0.00036
Iron - Dissolved	mg/L	-	-	< 0.010	< 0.010
Lead - Dissolved	mg/L	-	-	0.000057	< 0.000050
Magnesium - Dissolved	mg/L	-	-	23.4	19.7
Manganese - Dissolved	mg/L	-	-	0.00122	0.327
Mercury - Dissolved	mg/L	-	-	< 0.0000050	< 0.0000050
Molybdenum - Dissolved	mg/L	-	-	0.00385	0.00258
Nickel - Dissolved	mg/L	-	-	< 0.00050	0.00087
Potassium - Dissolved	mg/L	-	-	6.21	3.86
Selenium - Dissolved	mg/L	-	-	0.000429	0.000616
Sodium - Dissolved	mg/L	-	-	2.95	1.83
Thallium - Dissolved	mg/L	-	-	0.000011	0.000012
Uranium - Dissolved	mg/L	-	-	0.00322	0.000818
Zinc - Dissolved	mg/L	-	-	< 0.0010	< 0.0010
Oil and Grease, Total	-	No Visible Sheen	-	No Visible Sheen	No Visible Sheen
Acute Lethality ^{3,4}	N/A	-	Not Acutely Toxic	Not Acutely Toxic	Not Acutely Toxic

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

² Metal and Daimond Mining Effluent Regulations (MDMER) June 10, 2021, Schedule 4, Table 2.

³ Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

⁴ Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)

Table 7.3.6: Water Quality Results for Water Licence Monitoring Location - MS-08

Sample ID				MS-08	MS-08	MS-08	MS-08	MS-08	MS-08
ALS Laboratory Work Order				BF2400129	WT2417334	BF2400177	BF2400227	YL2401496	WT2429212
Sample Date & Time				2024-06-21 23:55	2024-06-25 09:40	2024-07-09 11:05	2024-08-06 09:25	2024-09-12 15:00	2024-10-01 10:00
Analyte	Units	Water Licence Criteria ¹	MDMER Criteria ²						
pH, Field	pH units	-	-	6.42	6.69	7.38	7.17	7.36	-
Specific Conductivity, Field	us/cm	-	-	107.5	118	208.9	690	964	-
Temperature, Field	deg C	-	-	0.80	3.30	9.50	9.70	1.00	-
Turbidity, Field	NTU	-	-	32.84	35.05	13.2	2.54	7.18	-
Hardness	mg/L	-	-	44.4	49.2	94.6	352	531	463
Conductivity	umhos/cm	-	-	111	118	218	697	950	926
pH, Lab	pH units	6.0-9.5	6.0-9.5	6.38	7.05	7.20	7.32	7.32	7.96
Total Suspended Solids	mg/L	Grab 30, Average 15	30 (Grab)	8.3	8.0	7.8	1.7	2.0	1.5
Total Dissolved Solids	mg/L	-	-	21	78	140	491	739	683
Turbidity	NTU	-	-	36.2	25.6	13.7	3.98	2.67	2.13
Alkalinity, Total	mg/L	-	-	7.1	7.0	12.3	21.3	18.6	35.2
Ammonia, Total (as N)	mg/L	-	-	0.169	0.182	0.184	0.569	0.734	1.22
Chloride	mg/L	-	-	1.32	1.23	1.94	5.45	8.38	16.2
Fluoride	mg/L	-	-	< 0.020	0.029	0.040	0.078	< 0.100	0.086
Nitrate	mg/L	-	-	1.03	1.22	2.95	10.4	16.5	27.5
Total Kjeldahl Nitrogen	mg/L	-	-	0.302	0.340	0.419	1.05	1.28	1.90
Sulfate	mg/L	-	-	35.3	37.4	71.1	278	396	319
Dissolved Organic Carbon	mg/L	-	-	0.72	1.51	1.01	1.52	0.87	1.45
Total Organic Carbon	mg/L	-	-	0.93	1.87	1.00	1.11	0.94	1.47
Phosphorus, Nutrient	mg/L	-	-	0.0135	0.0147	0.0070	< 0.0040	< 0.0020	< 0.002
Aluminum - Total	mg/L	-	-	1.01	0.855	0.378	0.0325	0.0506	0.112
Antimony - Total	mg/L	-	-	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00100
Arsenic - Total	mg/L	-	0.60	0.00018	0.00015	< 0.00010	< 0.00010	< 0.00010	< 0.00100
Barium - Total	mg/L	-	-	0.00531	0.00545	0.00629	0.0134	0.0186	0.0163
Cadmium - Total	mg/L	-	-	0.0000213	0.0000202	0.0000212	0.0000539	0.000115	< 0.0000500
Calcium - Total	mg/L	-	-	3.36	3.56	6.89	24.2	39.5	28.4
Chromium - Total	mg/L	-	-	0.00278	0.00237	0.00105	< 0.00050	< 0.00050	< 0.00500
Cobalt - Total	mg/L	-	-	0.00316	0.00304	0.00418	0.0173	0.0349	0.0055
Copper - Total	mg/L	-	0.60	0.00244	0.00246	0.00149	0.00189	0.00396	< 0.00500
Iron - Total	mg/L	-	-	1.69	1.39	0.614	0.380	0.398	0.169
Lead - Total	mg/L	-	0.20	0.000450	0.000442	0.000269	< 0.000050	< 0.000050	< 0.000500
Lithium - Total	mg/L	-	-	0.0031	0.0029	0.0028	0.0078	0.0117	< 0.01
Magnesium - Total	mg/L	-	-	10.0	11.0	20.4	71.1	106	103
Manganese - Total	mg/L	-	-	0.225	0.220	0.336	1.47	3.10	0.908
Mercury - Total	mg/L	-	-	< 0.0000050	< 0.0000050	< 0.0000050	< 0.0000050	< 0.0000050	< 0.0000050
Molybdenum - Total	mg/L	-	-	0.00208	0.00213	0.00286	0.00436	0.00252	0.00936
Nickel - Total	mg/L	-	1.00	0.00601	0.00541	0.00534	0.0276	0.0553	0.00520
Phosphorus, Total	mg/L	-	-	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.500
Potassium - Total	mg/L	-	-	1.30	1.33	1.73	4.54	5.87	4.52
Selenium - Total	mg/L	-	-	0.000716	0.000774	0.00135	0.00408	0.00580	0.00789
Sodium - Total	mg/L	-	-	0.552	0.551	0.831	2.17	3.33	4.70
Strontium - Total	mg/L	-	-	0.00659	0.00662	0.0116	0.0385	0.0510	0.0501
Thallium - Total	mg/L	-	-	0.000014	0.000018	0.000013	0.000050	0.000080	< 0.000100
Tin - Total	mg/L	-	-	< 0.00010	< 0.00010	< 0.0001	< 0.00010	< 0.00010	< 0.00100
Titanium - Total	mg/L	-	-	0.0207	0.0205	0.0122	< 0.00150	0.00171	< 0.00400
Uranium - Total	mg/L	-	-	0.000220	0.000199	0.000283	0.000471	0.000775	0.00206
Vanadium - Total	mg/L	-	-	0.00120	0.00110	0.00057	0.00064	< 0.00050	< 0.00500
Zinc - Total	mg/L	-	1.00	< 0.0030	< 0.0030	< 0.0030	< 0.0030	0.0068	< 0.0300
Aluminum - Dissolved	mg/L	-	-	0.149	0.0047	0.0033	0.0036	0.0021	0.0039
Arsenic - Dissolved	mg/L	-	-	< 0.00100	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Cadmium - Dissolved	mg/L	-	-	< 0.0000500	0.0000160	0.0000183	0.0000465	0.000120	0.0000335

Table 7.3.6: Water Quality Results for Water Licence Monitoring Location - MS-08

Sample ID				MS-08	MS-08	MS-08	MS-08	MS-08	MS-08
ALS Laboratory Work Order				BF2400129	WT2417334	BF2400177	BF2400227	YL2401496	WT2429212
Sample Date & Time				2024-06-21 23:55	2024-06-25 09:40	2024-07-09 11:05	2024-08-06 09:25	2024-09-12 15:00	2024-10-01 10:00
Analyte	Units	Water Licence Criteria ¹	MDMER Criteria ²						
Calcium - Dissolved	mg/L	-	-	3.28	3.61	6.74	23.7	37.7	27.3
Copper - Dissolved	mg/L	-	-	< 0.00200	0.00027	0.00033	0.00055	0.00184	0.00093
Iron - Dissolved	mg/L	-	-	0.197	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Lead - Dissolved	mg/L	-	-	< 0.0000500	< 0.000050	< 0.000050	< 0.000050	< 0.000050	< 0.000050
Magnesium - Dissolved	mg/L	-	-	8.80	9.76	18.9	71.1	106	95.8
Manganese - Dissolved	mg/L	-	-	0.204	0.192	0.299	1.44	3.08	0.869
Mercury - Dissolved	mg/L	-	-	< 0.0000050	< 0.0000050	< 0.0000050	< 0.0000050	< 0.0000050	< 0.0000050
Molybdenum - Dissolved	mg/L	-	-	0.00217	0.00217	0.00300	0.00411	0.00224	0.00922
Nickel - Dissolved	mg/L	-	-	< 0.00500	0.00269	0.00423	0.0262	0.0547	0.00484
Potassium - Dissolved	mg/L	-	-	1.16	1.08	1.70	4.60	5.80	4.81
Selenium - Dissolved	mg/L	-	-	0.000907	0.000801	0.00160	0.00449	0.00646	0.00908
Sodium - Dissolved	mg/L	-	-	0.554	0.513	0.772	2.18	3.24	4.59
Thallium - Dissolved	mg/L	-	-	< 0.000100	< 0.000010	< 0.000010	0.000049	0.000079	0.000021
Uranium - Dissolved	mg/L	-	-	< 0.000100	0.000042	0.000154	0.000306	0.000602	0.00212
Zinc - Dissolved	mg/L	-	-	< 0.0100	< 0.0010	0.0013	0.0020	0.0068	< 0.0010
Oil and Grease, Total	-	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-
Acute Lethality ^{3, 4}	N/A	-	Not Acutely Toxic	Not Acutely Toxic	-	Not Acutely Toxic	Not Acutely Toxic	Not Acutely Toxic	Not Acutely Toxic

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11
² Metal and Daimond Mining Effluent Regulations (MDMER) June 10, 2021, Schedule 4, Table 2.
³ Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)
⁴ Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)

Sample ID				KM105-SWMP-SEEP-03	KM105-SWMP-SEEP-03	KM105-SWMP-SEEP-03	KM105-SWMP-SEEP-03	KM105-SWMP-SEEP-03	KM105-SWMP-SEEP-03	KM105-SWMP-SEEP-03	KM105-SWMP-SEEP-03	KM105-SWMP-SEEP-03	KM105-SWMP-SEEP-03	KM105-SWMP-SEEP-03	KM105-SWMP-SEEP-03	KM105-SWMP-SEEP-03	KM105-SWMP-SEEP-03
ALS Laboratory Work Order				2024-05-10 17:00	2024-05-11	2024-05-15 00:00	2024-05-19 16:45	2024-05-20 16:00	2024-05-20 17:45	2024-05-21 17:15	2024-05-22 11:15	2024-05-23 17:35	2024-05-24 13:15	2024-05-25 11:05	2024-05-26 14:10	2024-05-27 11:30	2024-05-28 13:10
Sample Date & Time				BF2400011	BF2400012	BF2400013	BF2400016	BF2400019	BF2400021	BF2400024	BF2400029	BF2400031	BF2400032	BF2400034	BF2400035	BF2400041	BF2400046
Analyte	Units	Water Licence Criteria ¹	MDMER Criteria ²														
Hardness	mg/L	-	-														
Conductivity	umhos/cm	-	-														
pH, Lab	pH units	6.0-9.5	6.0-9.5	11.7	11.5	11.3	8.94	8.89	9.1	7.52	6.85	6.62	6.08	6.79	7.17	7.91	7.81
Total Suspended Solids ⁵	mg/L	Grab 30, Average 15	30 (Grab)	48.8	50.4	7	103	352	388	442	192	284	75.6	71.6	51.3	32.6	40.3
Total Dissolved Solids	mg/L	-	-	1060	711	1310	261	215	218	169	150	112	129	180	183	150	128
Turbidity	NTU	-	-	1.25	12.6	3.36	148	346	301	243	123	140	66.3	60.3	64.2	75.3	73.4
Conductivity	us/cm	-	-	1490	-	-	-	-	322	-	-	-	-	267	-	212	-
Alkalinity, Total	mg/L	-	-	130	-	-	-	-	36.3	-	-	-	-	-	-	-	-
Hardness	mg/L	-	1	606	-	-	-	-	120	-	-	-	-	-	-	-	-
Chloride	mg/L	-	-	209	-	-	-	-	22.2	-	-	-	-	-	-	-	-
Fluoride	mg/L	-	-	0.332	-	-	-	-	0.102	-	-	-	-	-	-	-	-
Nitrate	mg/L	-	-	27.4	-	-	-	-	6.01	-	-	-	-	2.73	-	-	-
Sulfate	mg/L	-	-	113	-	-	-	-	54	-	-	-	-	-	-	-	-
Ammonia, Total (as N)	mg/L	-	-	0.851	-	-	-	-	0.984	-	-	-	-	0.498	-	0.314	-
Ammonia, Un-ionized	mg/L	-	-	0.843	-	-	-	-	0.208	-	-	-	-	-	-	0.0065	-
Total Organic Carbon	mg/L	-	-	28.3	-	-	-	-	8.53	-	-	-	-	-	-	-	-
Dissolved Organic Carbon	mg/L	-	-	27.4	-	-	-	-	5.3	-	-	-	-	-	-	-	-
Total Kjeldahl Nitrogen	mg/L	-	-	4.47	-	-	-	-	3.77	-	-	-	-	-	-	-	-
Phosphorus, Nutrient	mg/L	-	-	0.0177	-	-	-	-	0.257	-	-	-	-	-	-	-	-
Aluminum - Total	mg/L	-	0.60	0.0048	-	-	-	-	16.8	-	-	-	-	2.75	-	3.14	-
Antimony - Total	mg/L	-	-	< 0.00010	-	-	-	-	< 0.00100	-	-	-	-	< 0.00010	-	< 0.00100	-
Arsenic - Total	mg/L	-	-	0.00015	-	-	-	-	0.00123	-	-	-	-	0.00029	-	< 0.00100	-
Barium - Total	mg/L	-	-	0.134	-	-	-	-	0.0908	-	-	-	-	0.0261	-	0.0218	-
Cadmium - Total	mg/L	-	-	0.0000283	-	-	-	-	0.000427	-	-	-	-	0.000234	-	0.0000744	-
Calcium - Total	mg/L	-	-	250	-	-	-	-	30	-	-	-	-	21.3	-	20.4	-
Chromium - Total	mg/L	-	0.60	0.102	-	-	-	-	0.0334	-	-	-	-	0.00512	-	0.00887	-
Cobalt - Total	mg/L	-	-	0.00038	-	-	-	-	0.01	-	-	-	-	0.00286	-	0.00214	-
Copper - Total	mg/L	-	0.20	0.00502	-	-	-	-	0.0396	-	-	-	-	0.00893	-	0.0068	-
Iron - Total	mg/L	-	-	0.027	-	-	-	-	23.3	-	-	-	-	4.3	-	4.52	-
Lead - Total	mg/L	-	-	< 0.000050	-	-	-	-	0.0145	-	-	-	-	0.00212	-	0.00213	-
Lithium - Total	mg/L	-	-	0.0384	-	-	-	-	0.0257	-	-	-	-	0.0078	-	0.0101	-
Magnesium - Total	mg/L	-	-	1.47	-	-	-	-	31.8	-	-	-	-	13.3	-	11.5	-
Manganese - Total	mg/L	-	-	0.00157	-	-	-	-	0.367	-	-	-	-	0.136	-	0.0843	-
Mercury - Total	mg/L	-	1.00	0.000016	-	-	-	-	< 0.0000050	-	-	-	-	-	-	-	-
Molybdenum - Total	mg/L	-	-	0.0384	-	-	-	-	0.00818	-	-	-	-	0.00245	-	0.0052	-
Nickel - Total	mg/L	-	-	< 0.00050	-	-	-	-	0.0317	-	-	-	-	0.00899	-	0.00907	-
Phosphorus, Total	mg/L	-	-	< 0.050	-	-	-	-	< 0.500	-	-	-	-	0.057	-	< 0.500	-
Potassium - Total	mg/L	-	-	64.9	-	-	-	-	12.5	-	-	-	-	6.39	-	5.12	-
Selenium - Total	mg/L	-	-	0.000798	-	-	-	-	0.000524	-	-	-	-	0.000249	-	< 0.000500	-
Sodium - Total	mg/L	-	-	27.5	-	-	-	-	4.07	-	-	-	-	2.08	-	1.42	-
Strontium - Total	mg/L	-	-	1.51	-	-	-	-	0.143	-	-	-	-	0.099	-	0.0796	-
Thallium - Total	mg/L	-	-	0.000017	-	-	-	-	0.000193	-	-	-	-	0.000038	-	< 0.000100	-
Tin - Total	mg/L	-	-	< 0.00010	-	-	-	-	< 0.00100	-	-	-	-	0.00018	-	< 0.00100	-
Titanium - Total	mg/L	-	-	< 0.00030	-	-	-	-	0.607	-	-	-	-	0.0794	-	0.0916	-
Uranium - Total	mg/L	-	1.00	0.000156	-	-	-	-	0.00893	-	-	-	-	0.00179	-	0.00281	-
Vanadium - Total	mg/L	-	-	0.00446	-	-	-	-	0.0263	-	-	-	-	0.00408	-	< 0.00500	-
Zinc - Total	mg/L	-	-	< 0.0030	-	-	-	-	0.0667	-	-	-	-	0.0111	-	< 0.0300	-
Aluminum - Dissolved	mg/L	-	-	< 0.0010	-	-	-	-	0.0367	-	-	-	-	-	-	-	-
Arsenic - Dissolved	mg/L	-	-	0.0001	-	-	-	-	< 0.00010	-	-	-	-	-	-	-	-
Cadmium - Dissolved	mg/L	-	-	0.0000258	-	-	-	-	0.0000102	-	-	-	-	-	-	-	-
Calcium - Dissolved	mg/L	-	-	241	-	-	-	-	26.4	-	-	-	-	-	-	-	-
Copper - Dissolved	mg/L	-	-	0.00475	-	-	-	-	0.00218	-	-	-	-	-	-	-	-
Iron - Dissolved	mg/L	-	-	0.018	-	-	-	-	0.012	-	-	-	-	-	-	-	-
Lead - Dissolved	mg/L	-	-	< 0.000050	-	-	-	-	< 0.000050	-	-	-	-	-	-	-	-
Magnesium - Dissolved	mg/L	-	-	1.12	-	-	-	-	13.1	-	-	-	-	-	-	-	-
Manganese - Dissolved	mg/L	-	-	< 0.00010	-	-	-	-	0.0117	-	-	-	-	-	-	-	-
Mercury - Dissolved	mg/L	-	-	0.0000129	-	-	-	-	< 0.0000050	-	-	-	-	-	-	-	-
Molybdenum - Dissolved	mg/L	-	-	0.0362	-	-	-	-	0.00912	-	-	-	-	-	-	-	-
Nickel - Dissolved	mg/L	-	-	< 0.00050	-	-	-	-	< 0.00050	-	-	-	-	-	-	-	-
Potassium - Dissolved	mg/L	-	-	62.2	-	-	-	-	8.92	-	-	-	-	-	-	-	-
Selenium - Dissolved	mg/L	-	-	0.000759	-	-	-	-	0.000395	-	-	-	-	-	-	-	-
Sodium - Dissolved	mg/L	-	-	26.2	-	-	-	-	3.52	-	-	-	-	-	-	-	-
Thallium - Dissolved	mg/L	-	-	0.000015	-	-	-	-	0.000011	-	-	-	-	-	-	-	-
Uranium - Dissolved	mg/L	-	-	0.000076	-	-	-	-	0.00418	-	-	-	-	-	-	-	-
Zinc - Dissolved	mg/L	-	-	< 0.0010	-	-	-	-	< 0.0010	-	-	-	-	-	-	-	-
Radium-226	Bq/L	-	1.11	0.08	-	-	-	-	0.0991	-	-	-	-	-	-	-	-
Oil and Grease, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	< 5.0	-	-	-
Visible Sheen	None	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
¹ Mean Mortality to Daphnia magna	%	-	Not Acutely Toxic	-	-	-	-	-	-	-	-	-	-	-	-	-	-
⁴ Mean Mortality to Rainbow Trou	%	-	Not Acutely Toxic	-	-	-	-	-	Not Acutely Toxic	-	-	-	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

² Metal and Daimond Mining Effluent Regulations (MDMER) June 10, 2021, Schedule 4, Table 2.

³ Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

⁴ Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)

⁵ Average Monthly TSS for May, June, July, August, September and October exceeded the maximum average TSS concentration discharge limits.

Table 7.3.7: Water Quality Results for Water Licence Monitoring Location - KM105-SWMP-SEEP

2024 QIA and NWB Annual Report for Operations

Sample ID				KM105-SWMP-SEEP-03	KM105-SWMP-SEEP-03	KM105-SWMP-SEEP-03	KM105-SWMP-SEEP-03	KM105-SWMP-SEEP-03	KM105-SWMP-SEEP-03	KM105-SWMP-SEEP-03	KM105-SWMP-SEEP-03	KM105-SWMP-SEEP-03	KM105-SWMP-SEEP-03	KM105-SWMP-SEEP-03	KM105-SWMP-SEEP-03	KM105-SWMP-SEEP-03	KM105-SWMP-SEEP-03	KM105-SWMP-SEEP-04
ALS Laboratory Work Order				2024-05-29 16:30	2024-05-30 10:05	2024-05-31 14:45	2024-06-01 11:00	2024-06-02 09:05	2024-06-03 16:30	2024-06-05 11:20	2024-06-06 15:25	2024-06-07 08:50	2024-06-08 10:50	2024-06-10 16:00	2024-06-12 10:15	2024-06-14 10:30	2024-06-15 15:10	2024-06-17 09:05
Sample Date & Time				BF2400049	BF2400058	BF2400054	BF2400062	BF2400064	BF2400066	BF2400078	BF2400084	BF2400085	BF2400088	BF2400100	BF2400105	BF2400109		BF2400116
Analyte	Units	Water Licence Criteria ¹	MDMER Criteria ²															
Hardness	mg/L	-	-				-	-	-	75.8	-	-	-	-	-	-	-	-
Conductivity	umhos/cm	-	-				-	-	-	192	-	-	-	263	-	-	-	-
pH, Lab	pH units	6.0-9.5	6.0-9.5	8.36	8.43	8.87	8.96	8.34	8.3	8.47	8.71	8.68	8.5	8.86	9.04	9.09	-	9.16
Total Suspended Solids ⁵	mg/L	Grab 30, Average 15	30	67.1	21.8	14.4	14.4	18.1	21.4	24.1	16.4	19.8	12.5	58	17.1	12.2	-	16.9
Total Dissolved Solids	mg/L	-	-	145	117	154	161	123	116	100	120	128	141	143	176	182	-	142
Turbidity	NTU	-	-	146	53	26.8	24.3	34.3	33.7	45.2	22.2	25.8	15.8	21.8	14.1	14	-	22.2
Conductivity	us/cm	-	-	-	-	-	-	-	-	192	-	-	-	263	-	-	-	-
Alkalinity, Total	mg/L	-	-	-	-	-	-	-	-	29.4	-	-	-	-	-	-	-	-
Hardness	mg/L	-	1	-	-	-	-	-	-	75.8	-	-	-	-	-	-	-	-
Chloride	mg/L	-	-	-	-	-	-	-	-	6	-	-	-	-	-	-	-	-
Fluoride	mg/L	-	-	-	-	-	-	-	-	0.062	-	-	-	-	-	-	-	-
Nitrate	mg/L	-	-	-	-	-	-	-	-	1.12	-	-	-	-	-	-	-	-
Sulfate	mg/L	-	-	-	-	-	-	-	-	42.4	-	-	-	-	-	-	-	-
Ammonia, Total (as N)	mg/L	-	-	-	-	-	-	-	-	0.201	-	-	-	0.242	-	-	-	-
Ammonia, Un-ionized	mg/L	-	-	-	-	-	-	-	-	0.0058	-	-	-	-	-	-	-	-
Total Organic Carbon	mg/L	-	-	-	-	-	-	-	-	1.66	-	-	-	-	-	-	-	-
Dissolved Organic Carbon	mg/L	-	-	-	-	-	-	-	-	1.79	-	-	-	-	-	-	-	-
Total Kjeldahl Nitrogen	mg/L	-	-	-	-	-	-	-	-	0.39	-	-	-	-	-	-	-	-
Phosphorus, Nutrient	mg/L	-	-	-	-	-	-	-	-	0.0238	-	-	-	-	-	-	-	-
Aluminum - Total	mg/L	-	0.60	-	-	-	-	-	-	1.75	-	-	-	2.06	-	-	-	-
Antimony - Total	mg/L	-	-	-	-	-	-	-	-	< 0.00100	-	-	-	< 0.00100	-	-	-	-
Arsenic - Total	mg/L	-	-	-	-	-	-	-	-	< 0.00100	-	-	-	< 0.00100	-	-	-	-
Barium - Total	mg/L	-	-	-	-	-	-	-	-	0.0143	-	-	-	0.0201	-	-	-	-
Cadmium - Total	mg/L	-	-	-	-	-	-	-	-	0.0000667	-	-	-	< 0.0000500	-	-	-	-
Calcium - Total	mg/L	-	-	-	-	-	-	-	-	16.6	-	-	-	28.1	-	-	-	-
Chromium - Total	mg/L	-	0.60	-	-	-	-	-	-	< 0.00500	-	-	-	< 0.00500	-	-	-	-
Cobalt - Total	mg/L	-	-	-	-	-	-	-	-	0.00125	-	-	-	0.00146	-	-	-	-
Copper - Total	mg/L	-	0.20	-	-	-	-	-	-	< 0.00500	-	-	-	< 0.00500	-	-	-	-
Iron - Total	mg/L	-	-	-	-	-	-	-	-	2.47	-	-	-	3.04	-	-	-	-
Lead - Total	mg/L	-	-	-	-	-	-	-	-	0.00134	-	-	-	0.00123	-	-	-	-
Lithium - Total	mg/L	-	-	-	-	-	-	-	-	< 0.0100	-	-	-	< 0.0100	-	-	-	-
Magnesium - Total	mg/L	-	-	-	-	-	-	-	-	8.73	-	-	-	11.8	-	-	-	-
Manganese - Total	mg/L	-	-	-	-	-	-	-	-	0.0532	-	-	-	0.0639	-	-	-	-
Mercury - Total	mg/L	-	1.00	-	-	-	-	-	-	< 0.0000050	-	-	-	-	-	-	-	-
Molybdenum - Total	mg/L	-	-	-	-	-	-	-	-	0.00364	-	-	-	0.00529	-	-	-	-
Nickel - Total	mg/L	-	-	-	-	-	-	-	-	< 0.00500	-	-	-	< 0.00500	-	-	-	-
Phosphorus, Total	mg/L	-	-	-	-	-	-	-	-	< 0.500	-	-	-	< 0.500	-	-	-	-
Potassium - Total	mg/L	-	-	-	-	-	-	-	-	4.27	-	-	-	5.5	-	-	-	-
Selenium - Total	mg/L	-	-	-	-	-	-	-	-	< 0.000500	-	-	-	< 0.000500	-	-	-	-
Sodium - Total	mg/L	-	-	-	-	-	-	-	-	1.34	-	-	-	1.96	-	-	-	-
Strontium - Total	mg/L	-	-	-	-	-	-	-	-	0.0617	-	-	-	0.104	-	-	-	-
Thallium - Total	mg/L	-	-	-	-	-	-	-	-	< 0.000100	-	-	-	< 0.000100	-	-	-	-
Tin - Total	mg/L	-	-	-	-	-	-	-	-	< 0.00100	-	-	-	< 0.00100	-	-	-	-
Titanium - Total	mg/L	-	-	-	-	-	-	-	-	0.053	-	-	-	0.0979	-	-	-	-
Uranium - Total	mg/L	-	1.00	-	-	-	-	-	-	0.00277	-	-	-	0.00456	-	-	-	-
Vanadium - Total	mg/L	-	-	-	-	-	-	-	-	< 0.00500	-	-	-	< 0.00500	-	-	-	-
Zinc - Total	mg/L	-	-	-	-	-	-	-	-	< 0.0300	-	-	-	< 0.0300	-	-	-	-
Aluminum - Dissolved	mg/L	-	-	-	-	-	-	-	-	0.0195	-	-	-	-	-	-	-	-
Arsenic - Dissolved	mg/L	-	-	-	-	-	-	-	-	< 0.00010	-	-	-	-	-	-	-	-
Cadmium - Dissolved	mg/L	-	-	-	-	-	-	-	-	0.0000227	-	-	-	-	-	-	-	-
Calcium - Dissolved	mg/L	-	-	-	-	-	-	-	-	17.7	-	-	-	-	-	-	-	-
Copper - Dissolved	mg/L	-	-	-	-	-	-	-	-	0.00051	-	-	-	-	-	-	-	-
Iron - Dissolved	mg/L	-	-	-	-	-	-	-	-	< 0.010	-	-	-	-	-	-	-	-
Lead - Dissolved	mg/L	-	-	-	-	-	-	-	-	< 0.000050	-	-	-	-	-	-	-	-
Magnesium - Dissolved	mg/L	-	-	-	-	-	-	-	-	7.68	-	-	-	-	-	-	-	-
Manganese - Dissolved	mg/L	-	-	-	-	-	-	-	-	0.0242	-	-	-	-	-	-	-	-
Mercury - Dissolved	mg/L	-	-	-	-	-	-	-	-	< 0.0000050	-	-	-	-	-	-	-	-
Molybdenum - Dissolved	mg/L	-	-	-	-	-	-	-	-	0.00385	-	-	-	-	-	-	-	-
Nickel - Dissolved	mg/L	-	-	-	-	-	-	-	-	< 0.00050	-	-	-	-	-	-	-	-
Potassium - Dissolved	mg/L	-	-	-	-	-	-	-	-	3.98	-	-	-	-	-	-	-	-
Selenium - Dissolved	mg/L	-	-	-	-	-	-	-	-	0.000195	-	-	-	-	-	-	-	-
Sodium - Dissolved	mg/L	-	-	-	-	-	-	-	-	1.34	-	-	-	-	-	-	-	-
Thallium - Dissolved	mg/L	-	-	-	-	-	-	-	-	< 0.000010	-	-	-	-	-	-	-	-
Uranium - Dissolved	mg/L	-	-	-	-	-	-	-	-	0.0022	-	-	-	-	-	-	-	-
Zinc - Dissolved	mg/L	-	-	-	-	-	-	-	-	< 0.0010	-	-	-	-	-	-	-	-
Radium-226	Bq/L	-	1.11	-	-	-	-	-	-	0.0774	-	-	-	0.0446	-	-	-	-
Oil and Grease, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Visible Sheen	None	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen
¹ Mean Mortality to Daphnia magn	%	-	Not Acutely Toxic	-	-	-	-	-	-	Not Acutely Toxic	-	-	-	-	-	-	-	-
⁴ Mean Mortality to Rainbow Trout	%	-	Not Acutely Toxic	-	-	-	-	-	-	Not Acutely Toxic	-	-	-	-	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11
² Metal and Daimond Mining Effluent Regulations (MDMER) June 10, 2021, Schedule 4, Table 2.
³ Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14) .
⁴ Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).
⁵ Average Monthly TSS for May, June, July, August, September and October exceeded the maximum average TSS concentration discharge limits.

Sample ID				KM105-SWMP-SEEP-04	KM105-SWMP-SEEP-04	KM105-SWMP-SEEP-04	KM105-SWMP-SEEP-04	KM105-SWMP-SEEP-04	KM105-SWMP-SEEP-04	KM105-SWMP-SEEP-04	KM105-SWMP-SEEP-04	KM105-SWMP-SEEP-04	KM105-SWMP-SEEP-04	KM105-SWMP-SEEP-04	KM105-SWMP-SEEP-04	KM105-SWMP-SEEP-04	KM105-SWMP-SEEP-04
ALS Laboratory Work Order				2024-06-18 16:10	2024-06-20 14:15	2024-06-22 15:10	2024-06-24 13:25	2024-06-25 10:00	2024-06-26 10:50	2024-06-28 07:55	2024-06-30 13:15	2024-07-02 11:15	2024-07-04 09:25	2024-07-06 11:45	2024-07-11 09:35	2024-07-13 10:30	2024-07-15 13:50
Sample Date & Time				BF2400118	BF2400126	BF2400140	BF2400135	WT2417332	WT2417934	BF2400143	BF2400151	BF2400157	BF2400160	BF2400169	BF2400180	BF2400182	BF2400183
Analyte	Units	Water Licence Criteria ¹	MDMER Criteria ²														
Hardness	mg/L	-	-	-	-	-	-	170	-	-	-	-	175	-	-	-	-
Conductivity	umhos/cm	-	-	259	-	-	-	409	-	-	-	-	396	-	-	-	-
pH, Lab	pH units	6.0-9.5	6.0-9.5	8.88	8.76	8.42	7.67	7.42	7.5	7.93	7.8	7.95	7.78	8.07	7.92	7.63	7.8
Total Suspended Solids ⁵	mg/L	Grab 30, Average 15	30	67.9	21.4	13.1	17.5	19.9	13.1	13.6	8.5	619	19.8	13.1	47.5	25	11.2
Total Dissolved Solids	mg/L	-	-	150	123	175	239	229	247	300	232	360	228	225	482	893	959
Turbidity	NTU	-	-	56	21.5	11.8	6.99	2.75	2.33	4.84	5.41	619	12.9	23.1	49.2	20.2	8.28
Conductivity	us/cm	-	-	259	-	-	-	409	-	-	-	-	396	-	-	-	-
Alkalinity, Total	mg/L	-	-	-	-	-	-	18.3	-	-	-	-	46.9	-	-	-	-
Hardness	mg/L	-	1	-	-	-	-	170	-	-	-	-	175	-	-	-	-
Chloride	mg/L	-	-	-	-	-	-	23	-	-	-	-	14.8	-	-	-	-
Fluoride	mg/L	-	-	-	-	-	-	0.098	-	-	-	-	0.09	-	-	-	-
Nitrate	mg/L	-	-	-	-	-	-	3.47	-	-	-	-	3.65	-	-	-	-
Sulfate	mg/L	-	-	-	-	-	-	116	-	-	-	-	108	-	-	-	-
Ammonia, Total (as N)	mg/L	-	-	0.307	-	-	-	0.287	-	-	-	-	0.189	-	-	-	-
Ammonia, Un-ionized	mg/L	-	-	-	-	-	-	0.0016	-	-	-	-	< 0.001	-	-	-	-
Total Organic Carbon	mg/L	-	-	-	-	-	-	1.45	-	-	-	-	1.59	-	-	-	-
Dissolved Organic Carbon	mg/L	-	-	-	-	-	-	1.73	-	-	-	-	1.96	-	-	-	-
Total Kjeldahl Nitrogen	mg/L	-	-	-	-	-	-	0.593	-	-	-	-	0.591	-	-	-	-
Phosphorus, Nutrient	mg/L	-	-	-	-	-	-	0.0102	-	-	-	-	0.0112	-	-	-	-
Aluminum - Total	mg/L	-	0.60	2.96	-	-	-	0.422	-	-	-	-	0.62	-	-	-	-
Antimony - Total	mg/L	-	-	< 0.00010	-	-	-	< 0.00010	-	-	-	-	< 0.00010	-	-	-	-
Arsenic - Total	mg/L	-	-	0.00031	-	-	-	< 0.00010	-	-	-	-	0.00011	-	-	-	-
Barium - Total	mg/L	-	-	0.0206	-	-	-	0.016	-	-	-	-	0.017	-	-	-	-
Cadmium - Total	mg/L	-	-	0.0000552	-	-	-	0.0000342	-	-	-	-	0.0000732	-	-	-	-
Calcium - Total	mg/L	-	-	23.9	-	-	-	36.4	-	-	-	-	33.4	-	-	-	-
Chromium - Total	mg/L	-	0.60	0.00653	-	-	-	0.00142	-	-	-	-	0.00173	-	-	-	-
Cobalt - Total	mg/L	-	-	0.00211	-	-	-	0.00105	-	-	-	-	0.0011	-	-	-	-
Copper - Total	mg/L	-	0.20	0.00624	-	-	-	0.00148	-	-	-	-	0.00174	-	-	-	-
Iron - Total	mg/L	-	-	4.55	-	-	-	1.13	-	-	-	-	0.969	-	-	-	-
Lead - Total	mg/L	-	-	0.00203	-	-	-	0.000254	-	-	-	-	0.000408	-	-	-	-
Lithium - Total	mg/L	-	-	0.0077	-	-	-	0.0068	-	-	-	-	0.0071	-	-	-	-
Magnesium - Total	mg/L	-	-	14.3	-	-	-	18.2	-	-	-	-	23.7	-	-	-	-
Manganese - Total	mg/L	-	-	0.0781	-	-	-	0.0594	-	-	-	-	0.0902	-	-	-	-
Mercury - Total	mg/L	-	1.00	-	-	-	-	< 0.0000050	-	-	-	-	< 0.0000050	-	-	-	-
Molybdenum - Total	mg/L	-	-	0.00777	-	-	-	0.0086	-	-	-	-	0.00796	-	-	-	-
Nickel - Total	mg/L	-	-	0.00703	-	-	-	0.00207	-	-	-	-	0.00245	-	-	-	-
Phosphorus, Total	mg/L	-	-	0.058	-	-	-	< 0.050	-	-	-	-	< 0.050	-	-	-	-
Potassium - Total	mg/L	-	-	6.42	-	-	-	7.63	-	-	-	-	8.26	-	-	-	-
Selenium - Total	mg/L	-	-	0.000237	-	-	-	0.000278	-	-	-	-	0.000582	-	-	-	-
Sodium - Total	mg/L	-	-	2.62	-	-	-	3.85	-	-	-	-	3.74	-	-	-	-
Strontium - Total	mg/L	-	-	0.104	-	-	-	0.175	-	-	-	-	0.145	-	-	-	-
Thallium - Total	mg/L	-	-	0.000039	-	-	-	0.000017	-	-	-	-	0.00002	-	-	-	-
Tin - Total	mg/L	-	-	0.00013	-	-	-	< 0.00010	-	-	-	-	< 0.00010	-	-	-	-
Titanium - Total	mg/L	-	-	0.113	-	-	-	0.019	-	-	-	-	0.0254	-	-	-	-
Uranium - Total	mg/L	-	1.00	0.00528	-	-	-	0.00679	-	-	-	-	0.00819	-	-	-	-
Vanadium - Total	mg/L	-	-	0.00553	-	-	-	0.00182	-	-	-	-	0.00115	-	-	-	-
Zinc - Total	mg/L	-	-	0.009	-	-	-	0.0088	-	-	-	-	< 0.0030	-	-	-	-
Aluminum - Dissolved	mg/L	-	-	-	-	-	-	0.0102	-	-	-	-	0.008	-	-	-	-
Arsenic - Dissolved	mg/L	-	-	-	-	-	-	< 0.00010	-	-	-	-	< 0.00010	-	-	-	-
Cadmium - Dissolved	mg/L	-	-	-	-	-	-	0.0000187	-	-	-	-	0.0000565	-	-	-	-
Calcium - Dissolved	mg/L	-	-	-	-	-	-	37.5	-	-	-	-	32.8	-	-	-	-
Copper - Dissolved	mg/L	-	-	-	-	-	-	0.00067	-	-	-	-	0.00071	-	-	-	-
Iron - Dissolved	mg/L	-	-	-	-	-	-	< 0.010	-	-	-	-	< 0.010	-	-	-	-
Lead - Dissolved	mg/L	-	-	-	-	-	-	< 0.000050	-	-	-	-	< 0.000050	-	-	-	-
Magnesium - Dissolved	mg/L	-	-	-	-	-	-	18.6	-	-	-	-	22.6	-	-	-	-
Manganese - Dissolved	mg/L	-	-	-	-	-	-	0.0507	-	-	-	-	0.076	-	-	-	-
Mercury - Dissolved	mg/L	-	-	-	-	-	-	< 0.0000050	-	-	-	-	< 0.0000050	-	-	-	-
Molybdenum - Dissolved	mg/L	-	-	-	-	-	-	0.00848	-	-	-	-	0.0079	-	-	-	-
Nickel - Dissolved	mg/L	-	-	-	-	-	-	0.00125	-	-	-	-	0.00119	-	-	-	-
Potassium - Dissolved	mg/L	-	-	-	-	-	-	7.71	-	-	-	-	8.01	-	-	-	-
Selenium - Dissolved	mg/L	-	-	-	-	-	-	0.000315	-	-	-	-	0.000678	-	-	-	-
Sodium - Dissolved	mg/L	-	-	-	-	-	-	3.88	-	-	-	-	3.57	-	-	-	-
Thallium - Dissolved	mg/L	-	-	-	-	-	-	0.000013	-	-	-	-	0.000013	-	-	-	-
Uranium - Dissolved	mg/L	-	-	-	-	-	-	0.00587	-	-	-	-	0.00775	-	-	-	-
Zinc - Dissolved	mg/L	-	-	-	-	-	-	0.0046	-	-	-	-	0.0019	-	-	-	-
Radium-226	Bq/L	-	1.11	0.0272	-	-	-	0.024	-	-	-	-	< 0.037	-	-	-	-
Oil and Grease, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Visible Sheen	None	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
¹ Mean Mortality to Daphnia magna	%	-	Not Acutely Toxic	-	-	-	-	-	-	-	-	-	-	-	-	-	-
⁴ Mean Mortality to Rainbow Trout	%	-	Not Acutely Toxic	-	-	-	-	-	-	-	-	-	Not Acutely Toxic	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

² Metal and Daimond Mining Effluent Regulations (MDMER) June 10, 2021, Schedule 4, Table 2.

³ Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14) .

⁴ Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

⁵ Average Monthly TSS for May, June, July, August, September and October exceeded the maximum average TSS concentration discharge limits.

Table 7.3.7: Water Quality Results for Water Licence Monitoring Location - KM105-SWMP-SEEP

2024 QIA and NWB Annual Report for Operations

Sample ID				KM105-SWMP-SEEP-04	KM105-SWMP-SEEP-04	KM105-SWMP-SEEP-04	KM105-SWMP-SEEP-04	KM105-SWMP-SEEP-04	KM105-SWMP-SEEP-04	KM105-SWMP-SEEP-04	KM105-SWMP-SEEP-04	KM105-SWMP-SEEP-04	KM105-SWMP-SEEP-04	KM105-SWMP-SEEP-04	KM105-SWMP-SEEP-04	KM105-SWMP-SEEP-04	KM105-SWMP-SEEP-04
ALS Laboratory Work Order				2024-07-17 09:25	2024-07-19 16:25	2024-07-21 11:45	2024-07-23 09:25	2024-07-25 12:40	2024-07-27 12:00	2024-07-29 09:15	2024-07-31 10:30	2024-08-03 10:10	2024-08-06 12:05	2024-08-08 17:30	2024-08-14 14:00	2024-08-20 14:50	2024-08-26 09:45
Sample Date & Time				BF2400190	BF2400194	BF2400196	BF2400202	BF2400204	BF2400206	BF2400208	BF2400220	BF2400221	BF2400233	BF2400239	BF2400257	BF2400277	BF2400289
Analyte	Units	Water Licence Criteria ¹	MDMER Criteria ²														
Hardness	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	336	-	-
Conductivity	umhos/cm	-	-	-	-	-	-	-	-	-	-	-	-	934	712	781	734
pH, Lab	pH units	6 - 9.5	6 - 9.5	7.52	7.6	7.52	7.44	7.71	6.1	7.69	7.4	7.32	7.68	7.61	7.93	7.86	7.65
Total Suspended Solids ⁵	mg/L	Grab 30, Average 15	30	20.7	23.1	17.2	145	25.7	75	62.1	67.6	26.5	108	59	3.7	63.3	131
Total Dissolved Solids	mg/L	-	-	668	808	925	796	622	636	480	526	443	605	682	480	517	521
Turbidity	NTU	-	-	18	26	13	180	25	68.2	75.8	66.3	32.7	134	59.8	7.24	106	181
Conductivity	us/cm	-	-	-	-	-	-	-	-	-	-	-	-	934	712	781	734
Alkalinity, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	88.9	-	-
Hardness	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	336	-	-
Chloride	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	33.4	-	-
Fluoride	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	0.114	-	-
Nitrate	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	7.52	-	-
Sulfate	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	192	-	-
Ammonia, Total (as N)	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	0.728	0.18	0.136	0.674
Ammonia, Un-ionized	mg/L	1	-	-	-	-	-	-	-	-	-	-	-	0.0029	0.0016	0.0017	0.0023
Total Organic Carbon	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	2.48	-	-
Dissolved Organic Carbon	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	2.71	-	-
Total Kjeldahl Nitrogen	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	0.644	-	-
Phosphorus, Nutrient	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.0020	-	-
Aluminum - Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	2.81	0.292	4.45	7.95
Antimony - Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	< 0.00100	< 0.00010	< 0.00100	< 0.00100
Arsenic - Total	mg/L	0.6	-	-	-	-	-	-	-	-	-	-	-	< 0.00100	0.00011	< 0.00100	< 0.00100
Barium - Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	0.0518	0.0276	0.0575	0.072
Cadmium - Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	0.00127	0.000494	0.000809	0.000852
Calcium - Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	73.6	55.7	66.8	54
Chromium - Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	0.0073	0.00109	0.0115	0.0184
Cobalt - Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	0.0181	0.00558	0.00908	0.0151
Copper - Total	mg/L	0.6	-	-	-	-	-	-	-	-	-	-	-	0.00632	0.00284	0.00989	0.0141
Iron - Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	6.69	0.49	9.12	12.5
Lead - Total	mg/L	0.2	-	-	-	-	-	-	-	-	-	-	-	0.00161	0.000287	0.00287	0.00383
Lithium - Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	0.0163	0.0117	0.0138	0.0207
Magnesium - Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	72.5	49.5	60.7	63.4
Manganese - Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	4.76	1.84	1.54	3.51
Mercury - Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.000050	-	-
Molybdenum - Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	0.0091	0.00977	0.00972	0.0112
Nickel - Total	mg/L	1	-	-	-	-	-	-	-	-	-	-	-	0.0148	0.00421	0.0161	0.0222
Phosphorus, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	< 0.500	< 0.050	< 0.500	< 0.500
Potassium - Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	8.66	7.6	9.24	8.4
Selenium - Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	0.00164	0.000853	0.00126	0.0016
Sodium - Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	10.6	8.42	9.42	8.06
Strontium - Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	0.195	0.184	0.238	0.137
Thallium - Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	< 0.000100	0.000028	< 0.000100	0.000128
Tin - Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	< 0.00100	< 0.00010	0.00209	< 0.00100
Titanium - Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	0.129	0.0127	0.204	0.342
Uranium - Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	0.00848	0.014	0.018	0.0106
Vanadium - Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	0.00876	0.00072	0.011	0.0125
Zinc - Total	mg/L	1	-	-	-	-	-	-	-	-	-	-	-	< 0.0300	0.0031	< 0.0300	< 0.0300
Aluminum - Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0042	-	-
Arsenic - Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.00010	-	-
Cadmium - Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	0.000496	-	-
Calcium - Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	56.4	-	-
Copper - Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00218	-	-
Iron - Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.010	-	-
Lead - Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.000050	-	-
Magnesium - Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	47.3	-	-
Manganese - Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	1.73	-	-
Mercury - Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.000050	-	-
Molybdenum - Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00981	-	-
Nickel - Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00344	-	-
Potassium - Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	7.37	-	-
Selenium - Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	0.000988	-	-
Sodium - Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	8.04	-	-
Thallium - Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	0.000023	-	-
Uranium - Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0135	-	-
Zinc - Dissolved	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0018	-	-
Radium-226	Bq/L	1.11	-	-	-	-	-	-	-	-	-	-	-	0.0438	0.0385	< 0.037	< 0.037
Oil and Grease, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Visible Sheen	None	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
¹ Mean Mortality to Daphnia magn	%	Not Acutely Toxic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
⁴ Mean Mortality to Rainbow Trout	%	Not Acutely Toxic	-	-	-	-	-	-	-	-	-	-	-	-	Not Acutely Toxic	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11
² Metal and Daimond Mining Effluent Regulations (MDMER) June 10, 2021, Schedule 4, Table 2.
³ Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14) .
⁴ Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).
⁵ Average Monthly TSS for May, June, July, August, September and October exceeded the maximum average TSS concentration discharge limits.

Table 7.3.7: Water Quality Results for Water Licence Monitoring Location - KM105-SWMP-SEEP

Sample ID				KM105-SWMP-SEEP-04	KM105-SWMP-SEEP-04	KM105-SWMP-SEEP-04	KM105-SWMP-SEEP-04	KM105-SWMP-SEEP-04	KM105-SWMP-SEEP-04
ALS Laboratory Work Order				2024-09-02 09:10	2024-09-20 16:35	2024-09-24 13:00	2024-10-01 10:00	2024-10-08 11:20	2024-10-15 15:30
Sample Date & Time				BF2400309	BF2400349	BF2400358	BF2400368	BF2400386	BF2400401
Analyte	Units	Water Licence Criteria ¹	MDMER Criteria ²						
Hardness	mg/L	-	-	367	168	-	268	-	-
Conductivity	umhos/cm	-	-	761	408	715	637	596	594
pH, Lab	pH units	6 - 9.5	6 - 9.5	7.66	8.03	7.54	7.81	7.78	7.67
Total Suspended Solids ⁵	mg/L	Grab 30, Average 15	30	24.2	9040	40	24.9	382	250
Total Dissolved Solids	mg/L	-	-	496	255	490	402	444	400
Turbidity	NTU	-	-	33.9	4000	57.2	40.3	428	309
Conductivity	us/cm	-	-	761	408	715	637	596	594
Alkalinity, Total	mg/L	-	-	100	103	-	66.3	-	-
Hardness	mg/L	-	-	367	168	-	268	-	-
Chloride	mg/L	-	-	31.5	14.3	-	13.2	-	-
Fluoride	mg/L	-	-	0.079	0.137	-	0.098	-	-
Nitrate	mg/L	-	-	10.7	4.85	-	12.6	-	-
Sulfate	mg/L	-	-	200	74.4	-	164	-	-
Ammonia, Total (as N)	mg/L	-	-	0.401	0.336	1.17	1.06	0.55	0.339
Ammonia, Un-ionized	mg/L	1	-	0.0026	0.0026	0.0055	0.0055	0.0022	0.0016
Total Organic Carbon	mg/L	-	-	2.35	< 50.0	-	2.1	-	-
Dissolved Organic Carbon	mg/L	-	-	2.52	3.19	-	1.86	-	-
Total Kjeldahl Nitrogen	mg/L	-	-	0.608	1.42	-	0.959	-	-
Phosphorus, Nutrient	mg/L	-	-	0.0102	7.26	-	0.0128	-	-
Aluminum - Total	mg/L	-	-	1.62	720	2.58	1.61	19.6	15.4
Antimony - Total	mg/L	-	-	< 0.00100	<0.020	< 0.00100	< 0.00010	< 0.00100	< 0.00100
Arsenic - Total	mg/L	0.6	-	< 0.00100	0.044	< 0.00100	0.00019	0.00163	0.00135
Barium - Total	mg/L	-	-	0.0393	4.46	0.04	0.0279	0.14	0.121
Cadmium - Total	mg/L	-	-	0.000989	0.004	0.000349	0.000437	0.000791	0.0006
Calcium - Total	mg/L	-	-	63.1	<100	41.9	40.4	53.3	53.3
Chromium - Total	mg/L	-	-	< 0.00500	1.75	0.00684	0.00415	0.0478	0.0374
Cobalt - Total	mg/L	-	-	0.0076	0.4	0.0108	0.00582	0.0157	0.0122
Copper - Total	mg/L	0.6	-	< 0.00500	0.95	0.00653	0.0042	0.0363	0.0285
Iron - Total	mg/L	-	-	2.67	1290	4.03	2.56	32.6	24.4
Lead - Total	mg/L	0.2	-	0.000958	0.267	0.00204	0.000742	0.0105	0.00881
Lithium - Total	mg/L	-	-	< 0.0100	0.52	< 0.0100	0.0087	0.0232	0.0215
Magnesium - Total	mg/L	-	-	57.2	740	64	43.3	66.2	54.2
Manganese - Total	mg/L	-	-	1.76	14	2.32	1.68	1.62	0.816
Mercury - Total	mg/L	-	-	< 0.0000050	< 0.0000050	-	< 0.0000050	-	-
Molybdenum - Total	mg/L	-	-	0.00818	0.095	0.0112	0.0126	0.00955	0.0094
Nickel - Total	mg/L	1	-	0.00765	1.33	0.0214	0.0085	0.0459	0.0374
Phosphorus, Total	mg/L	-	-	< 0.500	<10	< 0.500	< 0.050	< 0.500	< 0.500
Potassium - Total	mg/L	-	-	7.39	213	7.3	6.29	11.3	11
Selenium - Total	mg/L	-	-	0.00138	<0.010	0.00184	0.00125	0.00101	0.00101
Sodium - Total	mg/L	-	-	8.44	10	5.01	5.23	6.47	6.38
Strontium - Total	mg/L	-	-	0.186	0.212	0.106	0.101	0.117	0.141
Thallium - Total	mg/L	-	-	< 0.000100	0.0098	< 0.000100	0.000038	0.000259	0.000216
Tin - Total	mg/L	-	-	< 0.00100	0.03	< 0.00100	< 0.00010	< 0.00100	< 0.00100
Titanium - Total	mg/L	-	-	0.0699	30.4	0.114	0.0656	0.841	0.656
Uranium - Total	mg/L	-	-	0.0126	0.0768	0.00782	0.00707	0.0113	0.0134
Vanadium - Total	mg/L	-	-	< 0.00500	1.06	< 0.00500	0.00251	0.0298	0.0236
Zinc - Total	mg/L	1	-	< 0.0300	1.81	< 0.0300	0.0078	0.0586	0.0531
Aluminum - Dissolved	mg/L	-	-	0.0103	0.0263	-	0.0108	-	-
Arsenic - Dissolved	mg/L	-	-	< 0.00100	< 0.00010	-	< 0.00010	-	-
Cadmium - Dissolved	mg/L	-	-	0.000862	0.000026	-	0.000418	-	-
Calcium - Dissolved	mg/L	-	-	62	26.3	-	38.7	-	-
Copper - Dissolved	mg/L	-	-	< 0.00200	0.00069	-	0.00144	-	-
Iron - Dissolved	mg/L	-	-	< 0.100	< 0.010	-	0.024	-	-
Lead - Dissolved	mg/L	-	-	< 0.000500	< 0.000050	-	< 0.000050	-	-
Magnesium - Dissolved	mg/L	-	-	51.5	24.9	-	41.6	-	-
Manganese - Dissolved	mg/L	-	-	1.59	0.0986	-	1.53	-	-
Mercury - Dissolved	mg/L	-	-	< 0.0000050	< 0.0000050	-	< 0.0000050	-	-
Molybdenum - Dissolved	mg/L	-	-	0.00772	0.00709	-	0.0125	-	-
Nickel - Dissolved	mg/L	-	-	< 0.00500	0.00062	-	0.00511	-	-
Potassium - Dissolved	mg/L	-	-	6.08	9.76	-	5.97	-	-
Selenium - Dissolved	mg/L	-	-	0.00126	0.000704	-	0.00147	-	-
Sodium - Dissolved	mg/L	-	-	7.63	4.54	-	5.11	-	-
Thallium - Dissolved	mg/L	-	-	< 0.000100	0.000011	-	0.00002	-	-
Uranium - Dissolved	mg/L	-	-	0.012	0.00204	-	0.00655	-	-
Zinc - Dissolved	mg/L	-	-	0.0104	0.0031	-	0.0028	-	-
Radium-226	Bq/L	1.11	-	0.0515	0.404	< 0.037	< 0.037	0.0468	< 0.037
Oil and Grease, Total	mg/L	-	-	-	-	-	-	-	-
Visible Sheen	None	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
³ Mean Mortality to Daphnia magna	%	Not Acutely Toxic	-	Not Acutely Toxic	-	-	Not Acutely Toxic	-	-
⁴ Mean Mortality to Rainbow Trout	%	Not Acutely Toxic	-	Not Acutely Toxic	-	-	Not Acutely Toxic	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10

² Metal and Daimond Mining Effluent Regulations (MDMER) June 10, 2021, Schedule 4, Table 2.

³ Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14) .

⁴ Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

⁵ Average Monthly TSS for May, June, July, August, September and October exceeded the maximum average TSS concentration discharge limits.

Table 7.3.8: Water Quality Results for Water Licence Monitoring Location - MS-C-A

Sample ID			MS-C-A	MS-C-A	MS-C-A	MS-C-A	MS-C-A	MS-C-A	MS-C-A	MS-C-A
ALS Laboratory Work Order			BF2400052	BF2400070	BF2400096	BF2400114	WT2417954	BF2400155	BF2400173	BF2400185
Sample Date & Time			2024-05-30 11:00	2024-06-03 10:15	2024-06-09 13:55	2024-06-16 11:40	2024-06-26 09:30	2024-07-01 13:10	2024-07-07 15:25	2024-07-14 11:50
Analyte	Units	Water Licence Criteria ¹								
Conductivity	umhos/cm	-	166	173	-	-	-	346	-	-
pH, Lab	pH units	6.0-9.5	7.26	7.35	7.21	7.65	7.76	7.80	7.83	7.76
Total Suspended Solids ²	mg/L	Grab 30, Average 15	6.5	3.0	6.1	3.2	< 1.0	1.5	6.5	< 1.0
Total Dissolved Solids	mg/L	-	105	105	126	168	164	196	198	375
Turbidity	NTU	-	23.6	13.1	8.02	6.81	1.88	1.62	11.1	1.05
Ammonia, Total (as N)	mg/L	-	0.157	0.156	-	-	-	0.0270	-	-
Nitrate	mg/L	-	1.21	1.24	-	-	-	2.79	-	-
Oil and Grease, Total	mg/L	-	< 5.0	< 5.0	-	-	-	< 5.0	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11
² Average Monthly TSS for September exceeded maximum average TSS concentration discharge limits.

Table 7.3.8: Water Quality Results for Water Licence Monitoring Location - MS-C-A

Sample ID			MS-C-A	MS-C-A	MS-C-A	MS-C-A	MS-C-A	MS-C-A	MS-C-A	MS-C-A
ALS Laboratory Work Order			BF2400199	BF2400207	BF2400228	BF2400247	BF2400270	BF2400291	BF2400305	BF2400324
Sample Date & Time			2024-07-21 11:20	2024-07-28 10:05	2024-08-05 09:15	2024-08-11 14:20	2024-08-19 12:10	2024-08-25 13:20	2024-09-01 09:40	2024-09-09 09:00
Analyte	Units	Water Licence Criteria ¹								
Conductivity	umhos/cm	-	-	-	535	-	-	-	557	-
pH, Lab	pH units	6.0-9.5	7.53	7.50	7.50	7.81	7.72	7.68	7.82	7.84
Total Suspended Solids ²	mg/L	Grab 30, Average 15	< 1.0	1.2	< 1.2	< 1.0	< 1.0	1.2	< 1.0	5.3
Total Dissolved Solids	mg/L	-	496	480	325	368	383	350	331	327
Turbidity	NTU	-	0.50	0.92	2.34	0.50	0.34	2.90	0.87	7.10
Ammonia, Total (as N)	mg/L	-	-	-	0.0387	-	-	-	0.0429	-
Nitrate	mg/L	-	-	-	4.84	-	-	-	6.79	-
Oil and Grease, Total	mg/L	-	-	-	< 5.0	-	-	-	< 5.0	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11
² Average Monthly TSS for September exceeded maximum average TSS concentration discharge limits.

Table 7.3.8: Water Quality Results for Water Licence Monitoring Location - MS-C-A

Sample ID			MS-C-A	MS-C-A	MS-C-A	MS-C-A
ALS Laboratory Work Order			BF2400348	BF2400351	BF2400372	BF2400379
Sample Date & Time			2024-09-19 12:50	2024-09-22 15:20	2024-10-03 09:10	2024-10-06 15:00
Analyte	Units	Water Licence Criteria ¹				
Conductivity	umhos/cm	-	-	264	471	-
pH, Lab	pH units	6.0-9.5	7.90	7.84	7.75	7.75
Total Suspended Solids ²	mg/L	Grab 30, 15 Average	< 1.0	185	8.2	5.5
Total Dissolved Solids	mg/L	-	300	219	311	284
Turbidity	NTU	-	1.95	312	25.3	17.2
Ammonia, Total (as N)	mg/L	-	-	0.120	0.462	-
Nitrate	mg/L	-	-	3.38	8.50	-
Oil and Grease, Total	mg/L	-	-	< 5.0	< 5.0	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.

¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11
² Average Monthly TSS for September exceeded maximum average TSS concentration discharge limits.

Table 7.3.9: Water Quality Results for Water Licence Monitoring Location - MS-C-B

Sample ID			MS-C-B	MS-C-B	MS-C-B	MS-C-B	MS-C-B	MS-C-B	MS-C-B	MS-C-B
ALS Laboratory Work Order			BF2400052	BF2400070	BF2400096	BF2400114	BF2400137	BF2400155	BF2400173	BF2400185
Sample Date & Time			2024-05-30 11:15	2024-06-03 10:40	2024-06-09 14:05	2024-06-16 12:00	2024-06-24 12:20	2024-07-01 13:45	2024-07-07 15:50	2024-07-14 12:15
Analyte	Units	Water Licence Criteria ¹								
Conductivity	umhos/cm	-	168	175	-	-	-	354	-	-
pH, Lab	pH units	6.0-9.5	7.28	7.37	7.27	7.61	7.46	7.60	7.49	7.30
Total Suspended Solids ²	mg/L	Grab 30, 15 Average	6.2	1.8	4.3	19.5	1.3	3.5	1.8	< 1.0
Total Dissolved Solids	mg/L	-	95	114	136	177	171	202	200	386
Turbidity	NTU	-	24.6	12.8	9.02	13.3	4.33	1.84	7.78	0.78
Ammonia, Total (as N)	mg/L	-	0.163	0.161	-	-	-	0.0297	-	-
Nitrate	mg/L	-	1.24	1.25	-	-	-	2.84	-	-
Oil and Grease, Total	mg/L	-	< 5.0	< 5.0	-	-	-	< 5.0	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11
² Average Monthly TSS for September exceeded maximum average TSS concentration discharge limits.

Table 7.3.9: Water Quality Results for Water Licence Monitoring Location - MS-C-B

Sample ID			MS-C-B	MS-C-B	MS-C-B	MS-C-B	MS-C-B	MS-C-B	MS-C-B	MS-C-B
ALS Laboratory Work Order			BF2400199	BF2400207	BF2400228	BF2400247	BF2400270	BF2400291	BF2400305	BF2400324
Sample Date & Time			2024-07-21 12:05	2024-07-28 10:52	2024-08-05 09:50	2024-08-11 15:00	2024-08-19 12:50	2024-08-25 14:00	2024-09-01 10:25	2024-09-09 09:35
Analyte	Units	Water Licence Criteria ¹								
Conductivity	umhos/cm	-	-	-	545	-	-	-	571	-
pH, Lab	pH units	6.0-9.5	7.47	7.46	7.49	7.69	7.75	7.56	7.71	7.80
Total Suspended Solids ²	mg/L	Grab 30, 15 Average	< 1.0	< 1.0	1.0	< 1.0	< 1.0	1.3	< 1.0	4.8
Total Dissolved Solids	mg/L	-	502	489	330	372	377	360	352	320
Turbidity	NTU	-	0.65	1.37	2.35	0.56	0.33	3.96	1.04	8.84
Ammonia, Total (as N)	mg/L	-	-	-	0.0366	-	-	-	0.0434	-
Nitrate	mg/L	-	-	-	5.00	-	-	-	6.92	-
Oil and Grease, Total	mg/L	-	-	-	< 5.0	-	-	-	< 5.0	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11
² Average Monthly TSS for September exceeded maximum average TSS concentration discharge limits.

Table 7.3.9: Water Quality Results for Water Licence Monitoring Location - MS-C-B

Sample ID			MS-C-B	MS-C-B	MS-C-B	MS-C-B
ALS Laboratory Work Order			BF2400348	BF2400351	BF2400372	BF2400379
Sample Date & Time			2024-09-19 13:20	2024-09-22 15:45	2024-10-03 09:40	2024-10-06 15:20
Analyte	Units	Water Licence Criteria ¹				
Conductivity	umhos/cm	-	-	270	483	-
pH, Lab	pH units	6.0-9.5	7.82	7.80	7.72	7.72
Total Suspended Solids ²	mg/L	Grab 30, 15 Average	< 1.0	171	11.5	6.8
Total Dissolved Solids	mg/L	-	317	238	312	307
Turbidity	NTU	-	2.67	301	27.0	21.2
Ammonia, Total (as N)	mg/L	-	-	0.109	0.462	-
Nitrate	mg/L	-	-	3.39	8.64	-
Oil and Grease, Total	mg/L	-	-	< 5.0	< 5.0	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11
² Average Monthly TSS for September exceeded maximum average TSS concentration discharge limits.

Table 7.3.10: Water Quality Results for Water Licence Monitoring Location - MS-C-C

Sample ID			MS-C-C	MS-C-C	MS-C-C	MS-C-C	MS-C-C	MS-C-C	MS-C-C	MS-C-C
ALS Laboratory Work Order			BF2400052	BF2400070	BF2400096	BF2400155	BF2400173	BF2400185	BF2400199	BF2400207
Sample Date & Time			2024-05-30 13:30	2024-06-03 12:15	2024-06-09 11:00	2024-07-01 12:10	2024-07-07 12:00	2024-07-14 13:10	2024-07-21 16:50	2024-07-28 16:00
Analyte	Units	Water Licence Criteria ¹								
Conductivity	umhos/cm	-	673	748	-	850	-	-	-	-
pH, Lab	pH units	6.0-9.5	7.67	7.55	7.58	7.89	8.06	8.04	7.91	8.00
Total Suspended Solids ²	mg/L	Grab 30, 15 Average	24.1	8.0	2.9	3.5	2.0	4.5	1.2	3.1
Total Dissolved Solids	mg/L	-	384	438	393	540	468	554	567	496
Turbidity	NTU	-	41.6	10.5	8.09	2.11	4.69	6.61	2.64	9.22
Ammonia, Total (as N)	mg/L	-	4.52	2.69	-	0.0278	-	-	-	-
Nitrate	mg/L	-	2.74	1.22	-	3.86	-	-	-	-
Oil and Grease, Total	mg/L	-	< 5.0	< 5.0	-	< 5.0	-	-	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11
² Average Monthly TSS for September exceeded maximum average TSS concentration discharge limits.

Table 7.3.10: Water Quality Results for Water Licence Monitoring Location - MS-C-C

Sample ID			MS-C-C	MS-C-C	MS-C-C	MS-C-C	MS-C-C	MS-C-C	MS-C-C	MS-C-C
ALS Laboratory Work Order			BF2400228	BF2400247	BF2400270	BF2400291	BF2400305	BF2400324	BF2400348	BF2400351
Sample Date & Time			2024-08-05 08:45	2024-08-11 12:20	2024-08-19 17:00	2024-08-26 09:50	2024-09-01 13:35	2024-09-09 16:30	2024-09-19 11:50	2024-09-22 15:15
Analyte	Units	Water Licence Criteria ¹								
Conductivity	umhos/cm	-	791	-	-	-	818	-	-	634
pH, Lab	pH units	6.0-9.5	7.96	8.08	8.14	7.90	8.03	7.95	8.10	7.88
Total Suspended Solids ²	mg/L	Grab 30, 15 Average	2.3	1.2	< 1.0	3.2	6.4	13.1	1.2	73.1
Total Dissolved Solids	mg/L	-	483	505	531	486	504	454	529	425
Turbidity	NTU	-	4.29	2.64	2.87	17.4	22.2	41.9	6.10	219
Ammonia, Total (as N)	mg/L	-	0.0306	-	-	-	0.0081	-	-	0.260
Nitrate	mg/L	-	4.79	-	-	-	5.00	-	-	3.87
Oil and Grease, Total	mg/L	-	< 5.0	-	-	-	< 5.0	-	-	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11
² Average Monthly TSS for September exceeded maximum average TSS concentration discharge limits.

Table 7.3.10: Water Quality Results for Water Licence Monitoring Location - MS-C-C

Sample ID			MS-C-C	MS-C-C
ALS Laboratory Work Order			BF2400372	BF2400394
Sample Date & Time			2024-10-03 11:40	2024-10-09 13:45
Analyte	Units	Water Licence Criteria ¹		
Conductivity	umhos/cm	-	760	-
pH, Lab	pH units	6.0-9.5	8.04	7.59
Total Suspended Solids ²	mg/L	Grab 30, 15 Average	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	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11
² Average Monthly TSS for September exceeded maximum average TSS concentration discharge limits.

Table 7.3.11: Water Quality Results for Water Licence Monitoring Location - MS-C-D

Sample ID			MS-C-D	MS-C-D	MS-C-D	MS-C-D	MS-C-D	MS-C-D	MS-C-D	MS-C-D
ALS Laboratory Work Order			BF2400052	BF2400070	BF2400096	BF2400114	BF2400137	BF2400155	BF2400173	BF2400185
Sample Date & Time			2024-05-30 13:15	2024-06-03 16:00	2024-06-09 03:10	2024-06-16 10:40	2024-06-23 15:00	2024-07-01 11:55	2024-07-07 23:45	2024-07-14 13:00
Analyte	Units	Water Licence Criteria ¹								
Conductivity	umhos/cm	-	444	354	-	-	-	569	-	-
pH, Lab	pH units	6.0-9.5	7.78	7.85	7.71	7.81	8.29	8.36	8.24	8.40
Total Suspended Solids ²	mg/L	Grab 30, 15 Average	12.6	19.0	21.0	58.0	17.8	9.8	23.6	3.5
Total Dissolved Solids	mg/L	-	260	229	194	171	265	327	439	451
Turbidity	NTU	-	49.6	149	64.9	186	18.0	6.78	23.4	5.07
Ammonia, Total (as N)	mg/L	-	1.88	0.893	-	-	-	0.0456	-	-
Nitrate	mg/L	-	3.87	1.05	-	-	-	1.03	-	-
Oil and Grease, Total	mg/L	-	< 5.0	< 5.0	-	-	-	< 5.0	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11
² Average Monthly TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.3.11: Water Quality Results for Water Licence Monitoring Location - MS-C-D

Sample ID			MS-C-D	MS-C-D	MS-C-D	MS-C-D	MS-C-D	MS-C-D	MS-C-D	MS-C-D
ALS Laboratory Work Order			BF2400199	BF2400207	BF2400228	BF2400247	BF2400270	BF2400291	BF2400305	BF2400324
Sample Date & Time			2024-07-21 16:30	2024-07-28 15:45	2024-08-05 08:20	2024-08-11 12:40	2024-08-19 16:40	2024-08-26 09:40	2024-09-01 13:15	2024-09-08 13:00
Analyte	Units	Water Licence Criteria ¹								
Conductivity	umhos/cm	-	-	-	777	-	-	-	779	-
pH, Lab	pH units	6.0-9.5	8.18	8.22	8.16	8.31	8.39	8.11	8.23	8.19
Total Suspended Solids ²	mg/L	Grab 30, 15 Average	6.4	11.0	1.9	1.5	< 1.0	13.6	< 1	4.7
Total Dissolved Solids	mg/L	-	520	540	454	482	490	456	445	467
Turbidity	NTU	-	13.4	23.0	8.41	3.93	4.17	23.2	3.19	13.3
Ammonia, Total (as N)	mg/L	-	-	-	0.0119	-	-	-	0.0372	-
Nitrate	mg/L	-	-	-	3.47	-	-	-	3.54	-
Oil and Grease, Total	mg/L	-	-	-	< 5.0	-	-	-	< 5.0	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11
² Average Monthly TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.3.11: Water Quality Results for Water Licence Monitoring Location - MS-C-D

Sample ID			MS-C-D	MS-C-D	MS-C-D	MS-C-D
ALS Laboratory Work Order			BF2400348	BF2400351	BF2400372	BF2400394
Sample Date & Time			2024-09-19 11:30	2024-09-22 14:45	2024-10-03 11:15	2024-10-09 11:50
Analyte	Units	Water Licence Criteria ¹				
Conductivity	umhos/cm	-	-	607	703	-
pH, Lab	pH units	6.0-9.5	8.23	7.88	8.09	7.95
Total Suspended Solids ²	mg/L	Grab 30, 15 Average	2.5	26.7	10.3	3.5
Total Dissolved Solids	mg/L	-	471	374	454	452
Turbidity	NTU	-	11.2	178	42.1	6.82
Ammonia, Total (as N)	mg/L	-	-	0.325	0.0610	-
Nitrate	mg/L	-	-	3.46	3.98	-
Oil and Grease, Total	mg/L	-	-	< 5.0	< 5.0	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11
² Average Monthly TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.3.12: Water Quality Results for Water Licence Monitoring Location - MS-C-E

Sample ID			MS-C-E	MS-C-E	MS-C-E	MS-C-E	MS-C-E	MS-C-E	MS-C-E	MS-C-E
ALS Laboratory Work Order			BF2400052	BF2400070	BF2400096	BF2400114	BF2400137	BF2400173	BF2400185	BF2400199
Sample Date & Time			2024-05-30 13:00	2024-06-03 15:40	2024-06-09 10:25	2024-06-16 10:30	2024-06-23 14:40	2024-07-07 11:10	2024-07-14 12:45	2024-07-21 16:20
Analyte	Units	Water Licence Criteria ¹								
Conductivity	umhos/cm	-	164	205	-	-	-	628	-	-
pH, Lab	pH units	6.0-9.5	7.59	7.75	7.61	7.73	7.92	8.11	8.09	7.92
Total Suspended Solids ²	mg/L	Grab 30, 15 Average	3.8	61.0	7.7	18.6	1.2	19.4	6.0	1.2
Total Dissolved Solids	mg/L	-	111	142	166	218	377	383	448	515
Turbidity	NTU	-	36.9	206	22.9	68.8	4.10	36.8	5.89	3.36
Ammonia, Total (as N)	mg/L	-	0.107	0.171	-	-	-	0.0188	-	-
Nitrate	mg/L	-	0.434	0.434	-	-	-	2.80	-	-
Oil and Grease, Total	mg/L	-	< 5.0	< 5.0	-	-	-	< 5.0	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

² Average Monthly TSS for June and September exceeded maximum average TSS concentration discharge limits.

Table 7.3.12: Water Quality Results for Water Licence Monitoring Location - MS-C-E

Sample ID			MS-C-E	MS-C-E	MS-C-E	MS-C-E	MS-C-E	MS-C-E	MS-C-E	MS-C-E
ALS Laboratory Work Order			BF2400207	BF2400225	BF2400247	BF2400270	BF2400291	BF2400305	BF2400324	BF2400348
Sample Date & Time			2024-07-28 15:30	2024-08-04 11:20	2024-08-11 13:00	2024-08-19 16:30	2024-08-26 09:25	2024-09-01 13:00	2024-09-08 12:45	2024-09-19 11:20
Analyte	Units	Water Licence Criteria ¹								
Conductivity	umhos/cm	-	-	750	-	-	-	865	-	-
pH, Lab	pH units	6.0-9.5	8.09	8.01	8.10	8.16	7.97	7.98	8.02	8.03
Total Suspended Solids ²	mg/L	Grab 30, 15 Average	1.5	1.7	1.0	5.2	< 1.0	3.3	< 1.0	< 1.0
Total Dissolved Solids	mg/L	-	469	450	529	600	553	545	530	567
Turbidity	NTU	-	5.93	5.28	1.66	4.73	4.06	1.48	2.98	6.24
Ammonia, Total (as N)	mg/L	-	-	< 0.0050	-	-	-	0.0159	-	-
Nitrate	mg/L	-	-	3.71	-	-	-	4.82	-	-
Oil and Grease, Total	mg/L	-	-	< 5.0	-	-	-	< 5.0	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

² Average Monthly TSS for June and September exceeded maximum average TSS concentration discharge limits.

Table 7.3.12: Water Quality Results for Water Licence Monitoring Location - MS-C-E

Sample ID			MS-C-E	MS-C-E	MS-C-E	MS-C-E
ALS Laboratory Work Order			BF2400351	BF2400372	BF2400394	BF2400398
Sample Date & Time			2024-09-22 14:15	2024-10-03 10:20	2024-10-09 15:10	2024-10-13 11:00
Analyte	Units	Water Licence Criteria ¹				
Conductivity	umhos/cm	-	539	782	-	-
pH, Lab	pH units	6.0-9.5	7.80	7.97	7.75	7.47
Total Suspended Solids ²	mg/L	Grab 30, 15 Average	575	11.7	14.8	4.1
Total Dissolved Solids	mg/L	-	388	528	716	588
Turbidity	NTU	-	1220	43.9	31.1	9.64
Ammonia, Total (as N)	mg/L	-	0.257	0.415	-	-
Nitrate	mg/L	-	4.03	6.41	-	-
Oil and Grease, Total	mg/L	-	< 5.0	< 5.0	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

² Average Monthly TSS for June and September exceeded maximum average TSS concentration discharge limits.

Table 7.3.13: Water Quality Results for Water Licence Monitoring Location - MS-C-F

Sample ID			MS-C-F	MS-C-F	MS-C-F	MS-C-F	MS-C-F	MS-C-F	MS-C-F	MS-C-F
ALS Laboratory Work Order			BF2400071	BF2400096	BF2400114	BF2400137	BF2400155	BF2400173	BF2400185	BF2400199
Sample Date & Time			2024-06-03 17:10	2024-06-09 14:50	2024-06-17 08:40	2024-06-23 15:55	2024-07-01 14:00	2024-07-07 16:00	2024-07-14 12:30	2024-07-21 12:25
Analyte	Units	Water Licence Criteria ¹								
Conductivity	umhos/cm	-	185	-	-	-	398	-	-	-
pH, Lab	pH units	6.0-9.5	7.51	7.35	7.79	7.92	7.63	7.70	7.53	7.55
Total Suspended Solids ²	mg/L	Grab 30, 15 Average	11.3	7.9	13.0	1.8	4.7	8.8	4.0	2.4
Total Dissolved Solids	mg/L	-	118	139	168	164	230	217	509	688
Turbidity	NTU	-	27.1	15.3	23.9	6.94	5.05	16.9	5.04	3.93
Ammonia, Total (as N)	mg/L	-	0.175	-	-	-	0.173	-	-	-
Nitrate	mg/L	-	1.22	-	-	-	3.50	-	-	-
Oil and Grease, Total	mg/L	-	< 5.0	-	-	-	< 5.0	-	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

² Average Monthly TSS for September and October exceeded maximum average TSS concentration discharge limits.

Table 7.3.13: Water Quality Results for Water Licence Monitoring Location - MS-C-F

Sample ID			MS-C-F	MS-C-F	MS-C-F	MS-C-F	MS-C-F	MS-C-F	MS-C-F	MS-C-F
ALS Laboratory Work Order			BF2400207	BF2400225	BF2400247	BF2400270	BF2400291	BF2400305	BF2400324	BF2400348
Sample Date & Time			2024-07-28 11:40	2024-08-04 08:25	2024-08-11 13:30	2024-08-19 13:20	2024-08-25 14:25	2024-09-01 10:50	2024-09-08 17:30	2024-09-19 13:40
Analyte	Units	Water Licence Criteria ¹								
Conductivity	umhos/cm	-	-	616	-	-	-	656	-	-
pH, Lab	pH units	6.0-9.5	7.78	7.69	7.40	7.85	7.74	7.98	7.92	7.92
Total Suspended Solids ²	mg/L	Grab 30, 15 Average	6.4	12.9	3.0	1.2	13.8	6.2	144	47.2
Total Dissolved Solids	mg/L	-	570	376	472	500	386	386	370	374
Turbidity	NTU	-	12.1	25.4	9.61	4.04	27.0	9.85	162	78.2
Ammonia, Total (as N)	mg/L	-	-	0.319	-	-	-	0.353	-	-
Nitrate	mg/L	-	-	5.79	-	-	-	8.08	-	-
Oil and Grease, Total	mg/L	-	-	< 5.0	-	-	-	< 5.0	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

² Average Monthly TSS for September and October exceeded maximum average TSS concentration discharge limits.

Table 7.3.13: Water Quality Results for Water Licence Monitoring Location - MS-C-F

Sample ID			MS-C-F	MS-C-F	MS-C-F
ALS Laboratory Work Order			BF2400351	BF2400372	BF2400385
Sample Date & Time			2024-09-22 14:45	2024-10-02 17:00	2024-10-08 17:20
Analyte	Units	Water Licence Criteria ¹			
Conductivity	umhos/cm	-	299	540	-
pH, Lab	pH units	6.0-9.5	7.84	7.73	7.63
Total Suspended Solids ²	mg/L	Grab 30, 15 Average	214	85.3	9.9
Total Dissolved Solids	mg/L	-	234	352	348
Turbidity	NTU	-	339	120	25.6
Ammonia, Total (as N)	mg/L	-	0.220	0.914	-
Nitrate	mg/L	-	4.29	10.0	-
Oil and Grease, Total	mg/L	-	< 5.0	< 5.0	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

² Average TSS for September exceeded maximum average TSS concentration discharge limits.

² Average Monthly TSS for September and October exceeded maximum average TSS concentration discharge limits.

Table 7.3.14: Water Quality Results for Water Licence Monitoring Location - MS-C-G

Sample ID			MS-C-G	MS-C-G	MS-C-G	MS-C-G	MS-C-G	MS-C-G	MS-C-G	MS-C-G
ALS Laboratory Work Order			BF2400052	BF2400137	BF2400147	BF2400155	BF2400173	BF2400185	BF2400199	BF2400207
Sample Date & Time			2024-05-30 14:00	2024-06-23 12:15	2024-06-30 09:30	2024-07-01 09:40	2024-07-07 09:40	2024-07-14 13:55	2024-07-21 14:05	2024-07-28 13:45
Analyte	Units	Water Licence Criteria ¹								
Conductivity	umhos/cm	-	54.4	98.5	167	165	-	-	-	-
pH, Lab	pH units	6.0-9.5	7.51	7.19	7.73	7.69	7.85	7.80	7.58	7.72
Total Suspended Solids	mg/L	Grab 30, 15 Average	1.5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Dissolved Solids	mg/L	-	46	65	93	78	84	121	145	129
Turbidity	NTU	-	15.8	1.25	0.38	0.33	0.68	0.15	0.13	1.18
Ammonia, Total (as N)	mg/L	-	0.802	< 0.0050	0.0080	0.0071	-	-	-	-
Nitrate	mg/L	-	0.842	1.22	1.30	1.41	-	-	-	-
Oil and Grease, Total	mg/L	-	< 5.0	< 5.0	-	< 5.0	-	-	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

Table 7.3.14: Water Quality Results for Water Licence Monitoring Location - MS-C-G

Sample ID			MS-C-G	MS-C-G	MS-C-G	MS-C-G	MS-C-G	MS-C-G	MS-C-G	MS-C-G
ALS Laboratory Work Order			BF2400214	BF2400225	BF2400247	BF2400270	BF2400291	BF2400305	BF2400324	BF2400348
Sample Date & Time			2024-07-30 09:00	2024-08-04 10:48	2024-08-11 10:30	2024-08-19 14:05	2024-08-25 15:05	2024-09-01 11:35	2024-09-08 10:35	2024-09-19 10:45
Analyte	Units	Water Licence Criteria ¹								
Conductivity	umhos/cm	-	242	233	-	-	-	266	-	-
pH, Lab	pH units	6.0-9.5	7.44	7.73	7.61	7.55	7.76	7.76	7.97	7.69
Total Suspended Solids	mg/L	Grab 30, 15 Average	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.2
Total Dissolved Solids	mg/L	-	143	119	198	189	130	143	134	141
Turbidity	NTU	-	1.33	0.60	< 0.10	0.11	0.20	< 0.10	0.14	0.17
Ammonia, Total (as N)	mg/L	-	< 0.0050	0.0376	-	-	-	1.35	-	0.908
Nitrate	mg/L	-	8.12	6.53	-	-	-	7.90	-	5.81
Oil and Grease, Total	mg/L	-	-	< 5.0	-	-	-	< 5.0	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

Table 7.3.14: Water Quality Results for Water Licence Monitoring Location - MS-C-G

Sample ID			MS-C-G	MS-C-G	MS-C-G	MS-C-G
ALS Laboratory Work Order			BF2400356	BF2400372	BF2400379	BF2400398
Sample Date & Time			2024-09-25 14:45	2024-10-02 16:00	2024-10-06 13:30	2024-10-13 13:40
Analyte	Units	Water Licence Criteria ¹				
Conductivity	umhos/cm	-	-	211	-	-
pH, Lab	pH units	6.0-9.5	7.82	7.77	7.93	7.63
Total Suspended Solids	mg/L	Grab 30, 15 Average	< 1.0	< 1.0	< 1.0	< 1.0
Total Dissolved Solids	mg/L	-	113	100	154	137
Turbidity	NTU	-	0.51	0.34	0.36	0.24
Ammonia, Total (as N)	mg/L	-	-	0.303	-	-
Nitrate	mg/L	-	-	2.80	-	-
Oil and Grease, Total	mg/L	-	-	< 5.0	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

Table 7.3.15: Water Quality Results for Water Licence Monitoring Location - MS-C-H

Sample ID			MS-C-H	MS-C-H	MS-C-H	MS-C-H	MS-C-H	MS-C-H	MS-C-H	MS-C-H
ALS Laboratory Work Order			BF2400052	BF2400070	BF2400096	BF2400114	BF2400137	BF2400155	BF2400173	BF2400185
Sample Date & Time			2024-05-30 14:05	2024-06-03 09:30	2024-06-09 09:45	2024-06-16 09:45	2024-06-23 12:40	2024-07-01 09:15	2024-07-07 09:10	2024-07-14 14:50
Analyte	Units	Water Licence Criteria ¹								
Conductivity	umhos/cm	-	73.9	70.9	-	-	-	167	-	-
pH, Lab	pH units	6.0-9.5	7.50	7.38	7.27	7.38	7.68	7.68	7.95	7.95
Total Suspended Solids	mg/L	Grab 30, 15 Average	< 1.0	< 1.0	1.2	2.3	< 1.0	< 1.3	< 1.0	< 1.0
Total Dissolved Solids	mg/L	-	57	45	48	59	93	88	128	160
Turbidity	NTU	-	8.45	6.30	5.94	12.2	0.49	0.69	0.40	0.33
Ammonia, Total (as N)	mg/L	-	0.686	0.325	-	-	-	0.246	-	-
Nitrate	mg/L	-	1.16	0.654	-	-	-	1.88	-	-
Oil and Grease, Total	mg/L	-	< 5.0	< 5.0	-	-	-	< 5.0	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

Table 7.3.15: Water Quality Results for Water Licence Monitoring Location - MS-C-H

Sample ID			MS-C-H	MS-C-H	MS-C-H	MS-C-H	MS-C-H	MS-C-H	MS-C-H	MS-C-H
ALS Laboratory Work Order			BF2400199	BF2400207	BF2400225	BF2400247	BF2400270	BF2400291	BF2400305	BF2400324
Sample Date & Time			2024-07-21 14:50	2024-07-28 14:15	2024-08-04 11:20	2024-08-11 11:20	2024-08-19 14:45	2024-08-25 15:35	2024-09-01 12:15	2024-09-08 11:30
Analyte	Units	Water Licence Criteria ¹								
Conductivity	umhos/cm	-	-	-	281	-	-	-	277	-
pH, Lab	pH units	6.0-9.5	7.89	8.11	7.15	8.06	8.20	8.12	8.11	8.13
Total Suspended Solids	mg/L	Grab 30, 15 Average	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Dissolved Solids	mg/L	-	125	143	< 20	158	155	148	139	127
Turbidity	NTU	-	0.44	0.52	0.32	0.23	0.37	0.27	0.30	0.26
Ammonia, Total (as N)	mg/L	-	-	-	0.0103	-	-	-	0.0186	-
Nitrate	mg/L	-	-	-	2.42	-	-	-	1.00	-
Oil and Grease, Total	mg/L	-	-	-	< 5.0	-	-	-	< 5.0	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

Table 7.3.15: Water Quality Results for Water Licence Monitoring Location - MS-C-H

Sample ID			MS-C-H	MS-C-H	MS-C-H	MS-C-H
ALS Laboratory Work Order			BF2400348	BF2400356	BF2400372	BF2400379
Sample Date & Time			2024-09-19 14:20	2024-09-25 15:25	2024-10-02 16:30	2024-10-06 13:50
Analyte	Units	Water Licence Criteria ¹				
Conductivity	umhos/cm	-	-	-	213	-
pH, Lab	pH units	6.0-9.5	8.18	7.95	7.93	7.98
Total Suspended Solids	mg/L	Grab 30, 15 Average	< 1.0	< 1.0	< 1.0	< 1.0
Total Dissolved Solids	mg/L	-	151	130	82	112
Turbidity	NTU	-	0.32	0.28	0.53	0.43
Ammonia, Total (as N)	mg/L	-	0.0120	-	0.0134	-
Nitrate	mg/L	-	1.54	-	1.88	-
Oil and Grease, Total	mg/L	-	-	-	< 5.0	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

Table 7.3.16: Water Quality Results for Water Licence Monitoring Location - MS-MRY-09

Sample ID			MS-MRY-09	MS-MRY-09	MS-MRY-09	MS-MRY-09	MS-MRY-09	MS-MRY-09	MS-MRY-09	MS-MRY-09
ALS Laboratory Work Order			BF2400050	BF2400069	BF2400096	BF2400114	BF2400137	BF2400159	BF2400176	BF2400185
Sample Date & Time			2024-05-28 13:40	2024-06-04 11:05	2024-06-09 16:40	2024-06-16 10:15	2024-06-23 09:20	2024-07-04 11:00	2024-07-09 10:25	2024-07-14 09:30
Analyte	Units	Water Licence Criteria ¹								
pH, Field	pH units	-	7.50	7.12	7.85	7.42	7.43	7.48	7.50	7.19
Specific Conductivity, Field	us/cm	-	29.8	43.9	42.4	41.7	68.8	97.3	84.8	82
Temperature, Field	deg C	-	0.0	0.2	0.0	0.1	1.8	1.6	3.4	3.4
Turbidity, Field	NTU	-	-5.03	1.83	4.37	-3.84	-10.04	1.22	2.08	0.79
Hardness	mg/L	-	13.5	21.3	-	-	-	50	-	-
pH, Lab	pH units	6.0-9.5	7.48	7.19	7.19	7.43	7.34	7.99	7.46	7.78
Total Suspended Solids	mg/L	15	1.0	< 1.1	1.9	1.4	< 1.0	1.5	< 1.0	< 1.0
Total Dissolved Solids	mg/L	-	30	35	52	25	39	64	50	51
Turbidity	NTU	-	2.65	2.31	5.09	3.90	1.06	1.04	1.18	0.89
Alkalinity, Total	mg/L	-	12.7	22.4	-	-	-	39.5	-	-
Ammonia, Total (as N)	mg/L	-	0.0259	< 0.0050	-	-	-	< 0.0050	-	-
Chloride	mg/L	-	0.88	1.46	-	-	-	6.01	-	-
Fluoride	mg/L	-	< 0.020	< 0.020	-	-	-	< 0.020	-	-
Nitrate	mg/L	-	0.068	0.023	-	-	-	0.024	-	-
Total Kjeldahl Nitrogen	mg/L	-	0.140	0.143	-	-	-	0.059	-	-
Sulfate	mg/L	-	0.72	1.42	-	-	-	1.50	-	-
Dissolved Organic Carbon	mg/L	-	2.01	2.44	-	-	-	1.64	-	-
Total Organic Carbon	mg/L	-	2.41	2.84	-	-	-	2.03	-	-
Phosphorus, Nutrient	mg/L	-	0.0053	0.0072	-	-	-	0.0022	-	-
Phenols	ug/L	-	<0.0010	<0.0010	-	-	-	<0.0010	-	-
Aluminum - Total	mg/L	-	0.0517	0.0606	-	-	-	0.0481	-	-
Antimony - Total	mg/L	-	< 0.00010	< 0.00010	-	-	-	< 0.00010	-	-
Arsenic - Total	mg/L	0.5	< 0.00010	< 0.00010	-	-	-	< 0.00010	-	-
Barium - Total	mg/L	-	0.00268	0.00400	-	-	-	0.00649	-	-
Cadmium - Total	mg/L	-	0.0000078	0.0000051	-	-	-	< 0.0000050	-	-
Calcium - Total	mg/L	-	2.68	4.18	-	-	-	9.12	-	-
Chromium - Total	mg/L	-	< 0.00050	0.00152	-	-	-	< 0.00050	-	-
Cobalt - Total	mg/L	-	< 0.00010	< 0.00010	-	-	-	< 0.00010	-	-
Copper - Total	mg/L	0.3	0.00091	0.00089	-	-	-	0.00187	-	-
Iron - Total	mg/L	-	0.065	0.084	-	-	-	0.055	-	-
Lead - Total	mg/L	0.2	0.000055	0.000058	-	-	-	0.000066	-	-
Lithium - Total	mg/L	-	< 0.0010	< 0.0010	-	-	-	< 0.0010	-	-
Magnesium - Total	mg/L	-	1.66	2.64	-	-	-	6.60	-	-
Manganese - Total	mg/L	-	0.00336	0.00223	-	-	-	0.00105	-	-
Mercury - Total	mg/L	-	< 0.0000050	< 0.0000050	-	-	-	< 0.0000050	-	-
Molybdenum - Total	mg/L	-	0.000136	0.000229	-	-	-	0.000332	-	-
Nickel - Total	mg/L	0.5	< 0.00050	< 0.00050	-	-	-	< 0.00050	-	-
Phosphorus, Total	mg/L	-	< 0.050	< 0.050	-	-	-	< 0.050	-	-
Potassium - Total	mg/L	-	0.729	0.881	-	-	-	1.22	-	-
Selenium - Total	mg/L	-	< 0.000050	< 0.000050	-	-	-	< 0.000050	-	-
Sodium - Total	mg/L	-	0.337	0.340	-	-	-	0.450	-	-
Strontium - Total	mg/L	-	0.00163	0.00252	-	-	-	0.00577	-	-
Thallium - Total	mg/L	-	< 0.000010	< 0.000010	-	-	-	< 0.000010	-	-
Tin - Total	mg/L	-	< 0.00010	< 0.00010	-	-	-	< 0.00010	-	-
Titanium - Total	mg/L	-	0.00151	0.00189	-	-	-	0.00186	-	-
Uranium - Total	mg/L	-	0.000093	0.000097	-	-	-	0.000691	-	-
Vanadium - Total	mg/L	-	< 0.00050	< 0.00050	-	-	-	< 0.00050	-	-
Zinc - Total	mg/L	0.5	< 0.0030	< 0.0030	-	-	-	< 0.0030	-	-
Aluminum - Dissolved	mg/L	-	0.0113	0.0113	-	-	-	0.0087	-	-
Arsenic - Dissolved	mg/L	-	< 0.00010	< 0.00010	-	-	-	< 0.00010	-	-
Cadmium - Dissolved	mg/L	-	< 0.0000050	0.0000053	-	-	-	< 0.0000050	-	-
Calcium - Dissolved	mg/L	-	2.67	4.06	-	-	-	9.37	-	-
Copper - Dissolved	mg/L	-	0.00083	0.00076	-	-	-	0.00181	-	-
Iron - Dissolved	mg/L	-	0.011	0.010	-	-	-	< 0.010	-	-
Lead - Dissolved	mg/L	-	< 0.000050	< 0.000050	-	-	-	< 0.000050	-	-
Magnesium - Dissolved	mg/L	-	1.66	2.67	-	-	-	6.32	-	-
Manganese - Dissolved	mg/L	-	0.00235	0.00105	-	-	-	0.00018	-	-
Mercury - Dissolved	mg/L	-	0.0000055	< 0.0000050	-	-	-	< 0.0000050	-	-
Molybdenum - Dissolved	mg/L	-	0.000139	0.000120	-	-	-	0.000303	-	-
Nickel - Dissolved	mg/L	-	< 0.00050	< 0.00050	-	-	-	< 0.00050	-	-
Potassium - Dissolved	mg/L	-	0.747	0.878	-	-	-	1.20	-	-
Selenium - Dissolved	mg/L	-	< 0.000050	< 0.000050	-	-	-	< 0.000050	-	-
Sodium - Dissolved	mg/L	-	0.352	0.340	-	-	-	0.445	-	-
Thallium - Dissolved	mg/L	-	< 0.000010	< 0.000010	-	-	-	< 0.000010	-	-
Uranium - Dissolved	mg/L	-	0.000085	0.000076	-	-	-	0.000636	-	-
Zinc - Dissolved	mg/L	-	< 0.0010	< 0.0010	-	-	-	< 0.0010	-	-
Oil and Grease, Total	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality ^{2,3}	N/A	Not Acutely Toxic	-	-	-	-	-	Not Acutely Toxic	-	-

Notes:
 Bold highlight indicate results that exceeded the applicable water quality criteria.
¹ Type A Water Licence (ZAM-MRY1325 - Amend. 1) - Table 10
² Acute lethality to *Daphnia magna* (as per Environment Canada Method EPS1/RM/14)
³ Acute lethality to Rainbow trout (as per Environment Canada Method EPS1/RM/13)

Table 7.3.16: Water Quality Results for Water Licence Monitoring Location - MS-MRY-09

Sample ID			MS-MRY-09	MS-MRY-09	MS-MRY-09	MS-MRY-09	MS-MRY-09	MS-MRY-09	MS-MRY-09	MS-MRY-09
ALS Laboratory Work Order			BF2400199	BF2400207	BF2400228	BF2400254	BF2400274	BF2400291	BF2400305	BF2400341
Sample Date & Time			2024-07-20 14:40	2024-07-29 11:00	2024-08-05 11:40	2024-08-13 12:20	2024-08-20 09:40	2024-08-26 11:15	2024-09-01 11:40	2024-09-14 10:10
Analyte	Units	Water Licence Criteria ¹								
pH, Field	pH units	-	7.66	7.90	7.77	7.77	7.74	8.00	7.99	7.72
Specific Conductivity, Field	us/cm	-	93.8	124.6	141	142.8	155.1	163.5	167.7	172.7
Temperature, Field	deg C	-	3.8	2.00	3.6	2.6	1.6	2.0	1.2	1.0
Turbidity, Field	NTU	-	0.35	1.24	-0.11	0.13	0.18	1.05	0.65	0.1
Hardness	mg/L	-	-	-	-	71.6	-	-	83.3	-
pH, Lab	pH units	6.0-9.5	7.68	7.98	8.05	8.08	7.98	8.06	7.89	7.91
Total Suspended Solids	mg/L	15	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Dissolved Solids	mg/L	-	52	72	82	100	100	110	90	96
Turbidity	NTU	-	0.78	1.62	1.49	0.41	0.31	0.41	0.21	0.12
Alkalinity, Total	mg/L	-	-	-	-	60.9	-	-	72.8	-
Ammonia, Total (as N)	mg/L	-	-	-	-	< 0.0050	-	-	0.0146	-
Chloride	mg/L	-	-	-	-	6.70	-	-	17.9	-
Fluoride	mg/L	-	-	-	-	< 0.020	-	-	< 0.020	-
Nitrate	mg/L	-	-	-	-	0.070	-	-	0.050	-
Total Kjeldahl Nitrogen	mg/L	-	-	-	-	0.064	-	-	0.123	-
Sulfate	mg/L	-	-	-	-	2.40	-	-	2.95	-
Dissolved Organic Carbon	mg/L	-	-	-	-	2.11	-	-	2.44	-
Total Organic Carbon	mg/L	-	-	-	-	2.66	-	-	2.92	-
Phosphorus, Nutrient	mg/L	-	-	-	-	0.0029	-	-	0.0032	-
Phenols	ug/L	-	-	-	-	< 0.0010	-	-	< 0.0010	-
Aluminum - Total	mg/L	-	-	-	-	0.0149	-	-	0.0173	-
Antimony - Total	mg/L	-	-	-	-	< 0.00010	-	-	< 0.00010	-
Arsenic - Total	mg/L	0.5	-	-	-	< 0.0001	-	-	< 0.00010	-
Barium - Total	mg/L	-	-	-	-	0.00998	-	-	0.0114	-
Cadmium - Total	mg/L	-	-	-	-	< 0.0000050	-	-	< 0.0000050	-
Calcium - Total	mg/L	-	-	-	-	13.7	-	-	15.7	-
Chromium - Total	mg/L	-	-	-	-	< 0.00050	-	-	< 0.00050	-
Cobalt - Total	mg/L	-	-	-	-	< 0.00010	-	-	< 0.00010	-
Copper - Total	mg/L	0.3	-	-	-	0.00246	-	-	0.00225	-
Iron - Total	mg/L	-	-	-	-	0.017	-	-	0.020	-
Lead - Total	mg/L	0.2	-	-	-	< 0.000050	-	-	< 0.000050	-
Lithium - Total	mg/L	-	-	-	-	< 0.0010	-	-	< 0.0010	-
Magnesium - Total	mg/L	-	-	-	-	9.08	-	-	10.7	-
Manganese - Total	mg/L	-	-	-	-	0.00091	-	-	0.00070	-
Mercury - Total	mg/L	-	-	-	-	< 0.0000050	-	-	< 0.0000050	-
Molybdenum - Total	mg/L	-	-	-	-	0.00114	-	-	0.00114	-
Nickel - Total	mg/L	0.5	-	-	-	< 0.00050	-	-	< 0.00050	-
Phosphorus, Total	mg/L	-	-	-	-	< 0.050	-	-	< 0.050	-
Potassium - Total	mg/L	-	-	-	-	2.28	-	-	2.44	-
Selenium - Total	mg/L	-	-	-	-	0.000064	-	-	0.000059	-
Sodium - Total	mg/L	-	-	-	-	6.53	-	-	7.03	-
Strontium - Total	mg/L	-	-	-	-	0.0108	-	-	0.0138	-
Thallium - Total	mg/L	-	-	-	-	0.000015	-	-	0.000013	-
Tin - Total	mg/L	-	-	-	-	< 0.00010	-	-	< 0.00010	-
Titanium - Total	mg/L	-	-	-	-	0.00048	-	-	0.00080	-
Uranium - Total	mg/L	-	-	-	-	0.00307	-	-	0.00478	-
Vanadium - Total	mg/L	-	-	-	-	< 0.00050	-	-	0.00061	-
Zinc - Total	mg/L	0.5	-	-	-	< 0.0030	-	-	< 0.0030	-
Aluminum - Dissolved	mg/L	-	-	-	-	0.0061	-	-	0.0081	-
Arsenic - Dissolved	mg/L	-	-	-	-	< 0.00010	-	-	< 0.00010	-
Cadmium - Dissolved	mg/L	-	-	-	-	< 0.0000050	-	-	< 0.0000050	-
Calcium - Dissolved	mg/L	-	-	-	-	13.8	-	-	16.5	-
Copper - Dissolved	mg/L	-	-	-	-	0.00239	-	-	0.00223	-
Iron - Dissolved	mg/L	-	-	-	-	< 0.010	-	-	< 0.010	-
Lead - Dissolved	mg/L	-	-	-	-	< 0.000050	-	-	< 0.000050	-
Magnesium - Dissolved	mg/L	-	-	-	-	9.08	-	-	11.1	-
Manganese - Dissolved	mg/L	-	-	-	-	0.00065	-	-	0.00037	-
Mercury - Dissolved	mg/L	-	-	-	-	0	-	-	< 0.0000050	-
Molybdenum - Dissolved	mg/L	-	-	-	-	0.00109	-	-	0.00112	-
Nickel - Dissolved	mg/L	-	-	-	-	< 0.00050	-	-	< 0.00050	-
Potassium - Dissolved	mg/L	-	-	-	-	2.48	-	-	2.33	-
Selenium - Dissolved	mg/L	-	-	-	-	0.000075	-	-	0.000105	-
Sodium - Dissolved	mg/L	-	-	-	-	6.66	-	-	6.96	-
Thallium - Dissolved	mg/L	-	-	-	-	0.000013	-	-	0.000013	-
Uranium - Dissolved	mg/L	-	-	-	-	0.00324	-	-	0.00451	-
Zinc - Dissolved	mg/L	-	-	-	-	< 0.0010	-	-	< 0.0010	-
Oil and Grease, Total	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality ^{2,3}	N/A	Not Acutely Toxic	-	-	-	-	-	-	-	-

Notes:
 Bold highlight indicate results that exceeded the applicable water quality criteria.
¹ Type A Water Licence (ZAM-MRY1325 - Amend. 1) - Table 10
² Acute lethality to *Daphnia magna* (as per Environment Canada Method EPS/1/RM/14)
³ Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)

Table 7.3.16: Water Quality Results for Water Licence Monitoring Location - MS-MRY-09

Sample ID			MS-MRY-09	MS-MRY-09	MS-MRY-09	MS-MRY-09
ALS Laboratory Work Order			BF2400348	BF2400356	BF2400372	BF2400394
Sample Date & Time			2024-09-19 15:15	2024-09-25 10:15	2024-10-03 15:50	2024-10-10 12:30
Analyte	Units	Water Licence Criteria ¹				
pH, Field	pH units	-	8.02	7.73	7.87	7.85
Specific Conductivity, Field	us/cm	-	186.8	125.9	133.7	142.2
Temperature, Field	deg C	-	0.6	1.8	0.9	-0.2
Turbidity, Field	NTU	-	0.33	0.7	0.65	0.97
Hardness	mg/L	-	-	-	66.9	-
pH, Lab	pH units	6.0-9.5	8.02	7.53	7.98	7.89
Total Suspended Solids	mg/L	15	< 1.0	< 1.2	< 1.0	< 1.0
Total Dissolved Solids	mg/L	-	107	76	72	98
Turbidity	NTU	-	0.24	0.88	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	-
Phosphorus, Nutrient	mg/L	-	-	-	0.0029	-
Phenols	ug/L	-	-	-	<0.0010	-
Aluminum - Total	mg/L	-	-	-	0.0240	-
Antimony - Total	mg/L	-	-	-	< 0.00010	-
Arsenic - Total	mg/L	0.5	-	-	< 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	0.3	-	-	0.00230	-
Iron - Total	mg/L	-	-	-	0.026	-
Lead - Total	mg/L	0.2	-	-	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	0.5	-	-	< 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	-
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	0.5	-	-	< 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	-
Oil and Grease, Total	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality ^{2,3}	N/A	Not Acutely Toxic	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.

¹ Type A Water Licence (ZAM-MRY1325 - Amend. 1) - Table 10

² Acute lethality to *Daphnia magna* (as per Environment Canada Method EPS/1/RM/14)

³ Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)

Table 7.3.17: Water Quality Results for Water Licence Monitoring Location - MS-MRY-13A

Sample ID			MS-MRY-13A	MS-MRY-13A	MS-MRY-13A	MS-MRY-13A	MS-MRY-13A	MS-MRY-13A	MS-MRY-13A	MS-MRY-13A
ALS Laboratory Work Order			BF2400052	BF2400070	BF2400096	BF2400114	BF2400137	BF2400155	BF2400173	BF2400185
Sample Date & Time			2024-05-30 13:15	2024-06-03 08:30	2024-06-09 08:45	2024-06-17 08:05	2024-06-23 11:05	2024-07-01 10:50	2024-07-07 10:25	2024-07-14 15:55
Analyte	Units	Water Licence Criteria ¹								
Hardness	mg/L	-	-	-	-	-	-	-	-	-
Conductivity	umhos/cm	-	73.6	90.1	-	-	-	649	-	-
pH, Lab	pH units	6.0-9.5	7.81	7.39	7.37	7.99	8.05	7.98	8.00	8.18
Total Suspended Solids	mg/L	15	1.5	< 1.0	1.5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Dissolved Solids	mg/L	-	57	55	88	83	239	381	318	375
Turbidity	NTU	-	26.8	13.4	6.41	2.73	1.39	0.37	0.31	0.97
Alkalinity, Total	mg/L	-	29.8	36.9	-	-	-	160	-	-
Ammonia, Total (as N)	mg/L	-	-	-	-	-	-	-	-	-
Chloride	mg/L	-	-	-	-	-	-	-	-	-
Fluoride	mg/L	-	-	-	-	-	-	-	-	-
Nitrate	mg/L	-	-	-	-	-	-	-	-	-
Total Kjeldahl Nitrogen	mg/L	-	-	-	-	-	-	-	-	-
Sulfate	mg/L	-	-	-	-	-	-	-	-	-
Dissolved Organic Carbon	mg/L	-	2.90	1.99	-	-	-	4.69	-	-
Total Organic Carbon	mg/L	-	2.22	2.25	-	-	-	4.89	-	-
Phosphorus, Nutrient	mg/L	-	-	-	-	-	-	-	-	-
Phenols	ug/L	-	<0.0010	<0.0010	-	-	-	<0.0010	-	-
Aluminum - Total	mg/L	-	0.381	0.297	-	-	-	0.0066	-	-
Antimony - Total	mg/L	-	0.00014	0.00014	-	-	-	0.00012	-	-
Arsenic - Total	mg/L	0.5	0.00015	0.00012	-	-	-	0.00020	-	-
Barium - Total	mg/L	-	0.00752	0.00744	-	-	-	0.0431	-	-
Cadmium - Total	mg/L	-	0.0000077	0.0000055	-	-	-	0.0000115	-	-
Calcium - Total	mg/L	-	6.73	8.13	-	-	-	56.2	-	-
Chromium - Total	mg/L	-	0.00109	0.00072	-	-	-	0.00056	-	-
Cobalt - Total	mg/L	-	0.00044	0.00024	-	-	-	0.00019	-	-
Copper - Total	mg/L	0.3	0.00115	0.00081	-	-	-	0.00118	-	-
Iron - Total	mg/L	-	0.376	0.253	-	-	-	0.015	-	-
Lead - Total	mg/L	0.2	0.000229	0.000140	-	-	-	< 0.000050	-	-
Lithium - Total	mg/L	-	0.0027	0.0030	-	-	-	0.0327	-	-
Magnesium - Total	mg/L	-	4.49	5.10	-	-	-	39.2	-	-
Manganese - Total	mg/L	-	0.00797	0.00394	-	-	-	0.00946	-	-
Mercury - Total	mg/L	-	< 0.0000050	< 0.0000050	-	-	-	< 0.0000050	-	-
Molybdenum - Total	mg/L	-	0.000367	0.000407	-	-	-	0.000477	-	-
Nickel - Total	mg/L	0.5	0.00395	0.00378	-	-	-	0.0105	-	-
Phosphorus, Total	mg/L	-	< 0.050	< 0.050	-	-	-	< 0.050	-	-
Potassium - Total	mg/L	-	1.34	1.28	-	-	-	4.98	-	-
Selenium - Total	mg/L	-	< 0.000050	< 0.000050	-	-	-	< 0.000050	-	-
Sodium - Total	mg/L	-	0.847	1.16	-	-	-	18.9	-	-
Strontium - Total	mg/L	-	0.00633	0.00794	-	-	-	0.0560	-	-
Thallium - Total	mg/L	-	0.000012	< 0.000010	-	-	-	0.000018	-	-
Tin - Total	mg/L	-	< 0.00010	< 0.00010	-	-	-	< 0.00010	-	-
Titanium - Total	mg/L	-	0.0109	0.0071	-	-	-	< 0.00030	-	-
Uranium - Total	mg/L	-	0.000125	0.000121	-	-	-	0.00277	-	-

Table 7.3.17: Water Quality Results for Water Licence Monitoring Location - MS-MRY-13A

Sample ID			MS-MRY-13A	MS-MRY-13A	MS-MRY-13A	MS-MRY-13A	MS-MRY-13A	MS-MRY-13A	MS-MRY-13A	MS-MRY-13A
ALS Laboratory Work Order			BF2400052	BF2400070	BF2400096	BF2400114	BF2400137	BF2400155	BF2400173	BF2400185
Sample Date & Time			2024-05-30 13:15	2024-06-03 08:30	2024-06-09 08:45	2024-06-17 08:05	2024-06-23 11:05	2024-07-01 10:50	2024-07-07 10:25	2024-07-14 15:55
Analyte	Units	Water Licence Criteria ¹								
Vanadium - Total	mg/L	-	0.00063	< 0.00050	-	-	-	< 0.00050	-	-
Zinc - Total	mg/L	0.5	0.0041	< 0.0030	-	-	-	< 0.0030	-	-
Aluminum - Dissolved	mg/L	-	-	-	-	-	-	-	-	-
Arsenic - Dissolved	mg/L	-	-	-	-	-	-	-	-	-
Cadmium - Dissolved	mg/L	-	-	-	-	-	-	-	-	-
Calcium - Dissolved	mg/L	-	-	-	-	-	-	-	-	-
Copper - Dissolved	mg/L	-	-	-	-	-	-	-	-	-
Iron - Dissolved	mg/L	-	-	-	-	-	-	-	-	-
Lead - Dissolved	mg/L	-	-	-	-	-	-	-	-	-
Magnesium - Dissolved	mg/L	-	-	-	-	-	-	-	-	-
Manganese - Dissolved	mg/L	-	-	-	-	-	-	-	-	-
Mercury - Dissolved	mg/L	-	-	-	-	-	-	-	-	-
Molybdenum - Dissolved	mg/L	-	-	-	-	-	-	-	-	-
Nickel - Dissolved	mg/L	-	-	-	-	-	-	-	-	-
Potassium - Dissolved	mg/L	-	-	-	-	-	-	-	-	-
Selenium - Dissolved	mg/L	-	-	-	-	-	-	-	-	-
Sodium - Dissolved	mg/L	-	-	-	-	-	-	-	-	-
Thallium - Dissolved	mg/L	-	-	-	-	-	-	-	-	-
Uranium - Dissolved	mg/L	-	-	-	-	-	-	-	-	-
Zinc - Dissolved	mg/L	-	-	-	-	-	-	-	-	-
F1 (C6-C10)	ug/L	-	< 25	< 25	-	-	-	< 25	-	-
F2 (C10-C16)	ug/L	-	< 100	< 100	-	-	-	< 100	-	-
F3 (C16-C34)	ug/L	-	< 250	< 250	-	-	-	< 250	-	-
F4 (C34-C50)	ug/L	-	< 250	< 250	-	-	-	< 250	-	-
Total Petroleum Hydrocarbons (C6-C50)	ug/L	-	< 370	< 370	-	-	-	< 370	-	-
Oil and Grease, Total	mg/L	-	-	< 5.0	-	-	-	< 5.0	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 7

Table 7.3.17: Water Quality Results for Water Licence Monitoring Location - MS-MRY-13A

Sample ID			MS-MRY-13A	MS-MRY-13A	MS-MRY-13A	MS-MRY-13A	MS-MRY-13A
ALS Laboratory Work Order			BF2400207	BF2400225	BF2400356	BF2400372	BF2400379
Sample Date & Time			2024-07-28 15:00	2024-08-04 09:30	2024-09-25 16:35	2024-10-02 15:20	2024-10-06 13:00
Analyte	Units	Water Licence Criteria ¹					
Hardness	mg/L	-	-	377	-	-	-
Conductivity	umhos/cm	-	-	863	-	650	-
pH, Lab	pH units	6.0-9.5	8.05	7.94	7.92	7.83	7.94
Total Suspended Solids	mg/L	15	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Dissolved Solids	mg/L	-	500	495	421	375	402
Turbidity	NTU	-	0.62	1.48	0.26	0.19	0.17
Alkalinity, Total	mg/L	-	-	186	-	184	-
Ammonia, Total (as N)	mg/L	-	-	0.0213	-	-	-
Chloride	mg/L	-	-	87.1	-	-	-
Fluoride	mg/L	-	-	0.025	-	-	-
Nitrate	mg/L	-	-	2.08	-	-	-
Total Kjeldahl Nitrogen	mg/L	-	-	0.501	-	-	-
Sulfate	mg/L	-	-	109	-	-	-
Dissolved Organic Carbon	mg/L	-	-	12.0	-	6.41	-
Total Organic Carbon	mg/L	-	-	5.66	-	5.62	-
Phosphorus, Nutrient	mg/L	-	-	0.0183	-	-	-
Phenols	ug/L	-	-	<0.0010	-	<0.0010	-
Aluminum - Total	mg/L	-	-	0.0043	-	0.0060	-
Antimony - Total	mg/L	-	-	0.00013	-	0.00023	-
Arsenic - Total	mg/L	0.5	-	0.00021	-	0.00022	-
Barium - Total	mg/L	-	-	0.0468	-	0.0347	-
Cadmium - Total	mg/L	-	-	0.0000155	-	0.0000395	-
Calcium - Total	mg/L	-	-	66.3	-	56.5	-
Chromium - Total	mg/L	-	-	0.00062	-	0.00064	-
Cobalt - Total	mg/L	-	-	0.00020	-	0.00018	-
Copper - Total	mg/L	0.3	-	0.00142	-	0.00181	-
Iron - Total	mg/L	-	-	< 0.010	-	< 0.010	-
Lead - Total	mg/L	0.2	-	< 0.000050	-	0.000094	-
Lithium - Total	mg/L	-	-	0.0310	-	0.0444	-
Magnesium - Total	mg/L	-	-	51.4	-	38.7	-
Manganese - Total	mg/L	-	-	0.00148	-	0.00059	-
Mercury - Total	mg/L	-	-	< 0.0000050	-	< 0.0000050	-
Molybdenum - Total	mg/L	-	-	0.000555	-	0.00147	-
Nickel - Total	mg/L	0.5	-	0.0115	-	0.00993	-
Phosphorus, Total	mg/L	-	-	< 0.050	-	< 0.050	-
Potassium - Total	mg/L	-	-	4.60	-	5.43	-
Selenium - Total	mg/L	-	-	< 0.000050	-	0.000072	-
Sodium - Total	mg/L	-	-	23.0	-	26.8	-
Strontium - Total	mg/L	-	-	0.0603	-	0.0481	-
Thallium - Total	mg/L	-	-	0.000014	-	0.000016	-
Tin - Total	mg/L	-	-	< 0.00010	-	0.00016	-
Titanium - Total	mg/L	-	-	< 0.00030	-	< 0.00030	-
Uranium - Total	mg/L	-	-	0.00591	-	0.00572	-

Table 7.3.17: Water Quality Results for Water Licence Monitoring Location - MS-MRY-13A

Sample ID			MS-MRY-13A	MS-MRY-13A	MS-MRY-13A	MS-MRY-13A	MS-MRY-13A
ALS Laboratory Work Order			BF2400207	BF2400225	BF2400356	BF2400372	BF2400379
Sample Date & Time			2024-07-28 15:00	2024-08-04 09:30	2024-09-25 16:35	2024-10-02 15:20	2024-10-06 13:00
Analyte	Units	Water Licence Criteria ¹					
Vanadium - Total	mg/L	-	-	< 0.00050	-	< 0.00050	-
Zinc - Total	mg/L	0.5	-	< 0.0030	-	0.0040	-
Aluminum - Dissolved	mg/L	-	-	0.0019	-	-	-
Arsenic - Dissolved	mg/L	-	-	0.00018	-	-	-
Cadmium - Dissolved	mg/L	-	-	0.0000136	-	-	-
Calcium - Dissolved	mg/L	-	-	67.8	-	-	-
Copper - Dissolved	mg/L	-	-	0.00145	-	-	-
Iron - Dissolved	mg/L	-	-	< 0.010	-	-	-
Lead - Dissolved	mg/L	-	-	< 0.000050	-	-	-
Magnesium - Dissolved	mg/L	-	-	51.8	-	-	-
Manganese - Dissolved	mg/L	-	-	0.00079	-	-	-
Mercury - Dissolved	mg/L	-	-	< 0.0000050	-	-	-
Molybdenum - Dissolved	mg/L	-	-	0.000582	-	-	-
Nickel - Dissolved	mg/L	-	-	0.0115	-	-	-
Potassium - Dissolved	mg/L	-	-	4.68	-	-	-
Selenium - Dissolved	mg/L	-	-	< 0.000050	-	-	-
Sodium - Dissolved	mg/L	-	-	23.0	-	-	-
Thallium - Dissolved	mg/L	-	-	0.000014	-	-	-
Uranium - Dissolved	mg/L	-	-	0.00594	-	-	-
Zinc - Dissolved	mg/L	-	-	0.0024	-	-	-
F1 (C6-C10)	ug/L		-	< 25	-	< 25	-
F2 (C10-C16)	ug/L		-	< 100	-	< 100	-
F3 (C16-C34)	ug/L		-	< 250	-	< 250	-
F4 (C34-C50)	ug/L		-	< 250	-	< 250	-
Total Petroleum Hydrocarbons (C6-C50)	ug/L		-	< 370	-	< 370	-
Oil and Grease, Total	mg/L	-	-	< 5.0	-	< 5.0	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 7

Table 7.3.18: Water Quality Results for Water Licence Monitoring Location - MS-MRY-13B

Sample ID			MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B
ALS Laboratory Work Order			BF2400096	BF2400114	BF2400137	BF2400155	BF2400173	BF2400185	BF2400199	BF2400207
Sample Date & Time			2024-06-09 08:05	2024-06-17 07:50	2024-06-23 10:40	2024-07-01 10:30	2024-07-07 10:10	2024-07-14 15:30	2024-07-21 15:40	2024-07-28 14:45
Analyte	Units	Water Licence Criteria ¹								
Hardness	mg/L	-	-	-	-	-	-	-	-	-
Conductivity	umhos/cm	-	291	-	-	910	-	-	-	-
pH, Lab	pH units	6.0-9.5	7.32	8.00	7.74	7.97	8.04	8.12	7.94	8.07
Total Suspended Solids	mg/L	15	1.2	2.1	< 1.0	1.2	1.2	2.4	< 1.0	< 1.0
Total Dissolved Solids	mg/L	-	178	185	224	595	419	466	475	465
Turbidity	NTU	-	1.32	0.99	2.24	0.54	0.68	1.27	0.92	1.78
Alkalinity, Total	mg/L	-	79.1	-	-	193	-	-	-	-
Ammonia, Total (as N)	mg/L	-	-	-	-	-	-	-	-	-
Chloride	mg/L	-	-	-	-	-	-	-	-	-
Fluoride	mg/L	-	-	-	-	-	-	-	-	-
Nitrate	mg/L	-	-	-	-	-	-	-	-	-
Total Kjeldahl Nitrogen	mg/L	-	-	-	-	-	-	-	-	-
Sulfate	mg/L	-	-	-	-	-	-	-	-	-
Dissolved Organic Carbon	mg/L	-	3.17	-	-	6.81	-	-	-	-
Total Organic Carbon	mg/L	-	3.71	-	-	6.76	-	-	-	-
Phosphorus, Nutrient	mg/L	-	-	-	-	-	-	-	-	-
Phenols	ug/L	-	0.0010	-	-	<0.0010	-	-	-	-
Aluminum - Total	mg/L	-	0.0226	-	-	0.0186	-	-	-	-
Antimony - Total	mg/L	-	0.00014	-	-	0.00015	-	-	-	-
Arsenic - Total	mg/L	0.5	0.00013	-	-	0.00027	-	-	-	-
Barium - Total	mg/L	-	0.0159	-	-	0.0498	-	-	-	-
Cadmium - Total	mg/L	-	0.0000095	-	-	0.0000216	-	-	-	-
Calcium - Total	mg/L	-	28.9	-	-	95.7	-	-	-	-
Chromium - Total	mg/L	-	< 0.00050	-	-	0.00064	-	-	-	-
Cobalt - Total	mg/L	-	< 0.00010	-	-	0.00040	-	-	-	-
Copper - Total	mg/L	0.3	0.00104	-	-	0.00172	-	-	-	-
Iron - Total	mg/L	-	0.025	-	-	0.062	-	-	-	-
Lead - Total	mg/L	0.2	< 0.000050	-	-	< 0.000050	-	-	-	-
Lithium - Total	mg/L	-	0.0222	-	-	0.0908	-	-	-	-
Magnesium - Total	mg/L	-	12.1	-	-	47.2	-	-	-	-
Manganese - Total	mg/L	-	0.00164	-	-	0.0170	-	-	-	-
Mercury - Total	mg/L	-	< 0.0000050	-	-	< 0.0000050	-	-	-	-
Molybdenum - Total	mg/L	-	0.000599	-	-	0.000479	-	-	-	-
Nickel - Total	mg/L	0.5	0.00654	-	-	0.0144	-	-	-	-
Phosphorus, Total	mg/L	-	< 0.050	-	-	< 0.050	-	-	-	-
Potassium - Total	mg/L	-	2.39	-	-	6.64	-	-	-	-
Selenium - Total	mg/L	-	< 0.00005	-	-	0.000078	-	-	-	-
Sodium - Total	mg/L	-	6.55	-	-	32.9	-	-	-	-
Strontium - Total	mg/L	-	0.0424	-	-	0.138	-	-	-	-
Thallium - Total	mg/L	-	< 0.000010	-	-	0.000018	-	-	-	-
Tin - Total	mg/L	-	< 0.00010	-	-	< 0.00010	-	-	-	-
Titanium - Total	mg/L	-	< 0.00060	-	-	< 0.00090	-	-	-	-
Uranium - Total	mg/L	-	0.00191	-	-	0.0111	-	-	-	-
Vanadium - Total	mg/L	-	< 0.00050	-	-	< 0.00050	-	-	-	-
Zinc - Total	mg/L	0.5	< 0.0030	-	-	< 0.0030	-	-	-	-
Aluminum - Dissolved	mg/L	-	-	-	-	-	-	-	-	-
Arsenic - Dissolved	mg/L	-	-	-	-	-	-	-	-	-
Cadmium - Dissolved	mg/L	-	-	-	-	-	-	-	-	-
Calcium - Dissolved	mg/L	-	-	-	-	-	-	-	-	-
Copper - Dissolved	mg/L	-	-	-	-	-	-	-	-	-
Iron - Dissolved	mg/L	-	-	-	-	-	-	-	-	-
Lead - Dissolved	mg/L	-	-	-	-	-	-	-	-	-
Magnesium - Dissolved	mg/L	-	-	-	-	-	-	-	-	-
Manganese - Dissolved	mg/L	-	-	-	-	-	-	-	-	-
Mercury - Dissolved	mg/L	-	-	-	-	-	-	-	-	-
Molybdenum - Dissolved	mg/L	-	-	-	-	-	-	-	-	-

Table 7.3.18: Water Quality Results for Water Licence Monitoring Location - MS-MRY-13B

Sample ID			MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B
ALS Laboratory Work Order			BF2400096	BF2400114	BF2400137	BF2400155	BF2400173	BF2400185	BF2400199	BF2400207
Sample Date & Time			2024-06-09 08:05	2024-06-17 07:50	2024-06-23 10:40	2024-07-01 10:30	2024-07-07 10:10	2024-07-14 15:30	2024-07-21 15:40	2024-07-28 14:45
Analyte	Units	Water Licence Criteria ¹								
Nickel - Dissolved	mg/L	-	-	-	-	-	-	-	-	-
Potassium - Dissolved	mg/L	-	-	-	-	-	-	-	-	-
Selenium - Dissolved	mg/L	-	-	-	-	-	-	-	-	-
Sodium - Dissolved	mg/L	-	-	-	-	-	-	-	-	-
Thallium - Dissolved	mg/L	-	-	-	-	-	-	-	-	-
Uranium - Dissolved	mg/L	-	-	-	-	-	-	-	-	-
Zinc - Dissolved	mg/L	-	-	-	-	-	-	-	-	-
F1 (C6-C10)	ug/L	< 25	-	-	-	< 25	-	-	-	-
F2 (C10-C16)	ug/L	< 100	-	-	-	< 100	-	-	-	-
F3 (C16-C34)	ug/L	< 250	-	-	-	< 250	-	-	-	-
F4 (C34-C50)	ug/L	< 250	-	-	-	< 250	-	-	-	-
Total Petroleum Hydrocarbons (C6-C50)	ug/L	< 370	-	-	-	< 370	-	-	-	-
Oil and Grease, Total	mg/L	< 5.0	-	-	-	< 5.0	-	-	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 7

Table 7.3.18: Water Quality Results for Water Licence Monitoring Location - MS-MRY-13B

Sample ID			MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B
ALS Laboratory Work Order			BF2400225	BF2400247	BF2400270	BF2400291	BF2400305	BF2400324	BF2400348	BF2400356
Sample Date & Time			2024-08-04 08:45	2024-08-11 09:45	2024-08-19 15:40	2024-08-26 10:10	2024-09-01 08:45	2024-09-08 09:30	2024-09-19 10:45	2024-09-25 16:10
Analyte	Units	Water Licence Criteria ¹								
Hardness	mg/L	-	323	-	-	-	-	-	-	-
Conductivity	umhos/cm	-	762	-	-	-	1060	-	-	-
pH, Lab	pH units	6.0-9.5	7.89	7.98	8.11	7.97	7.93	8.12	8.02	7.97
Total Suspended Solids	mg/L	15	1.3	< 1.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Dissolved Solids	mg/L	-	464	540	674	698	748	704	738	357
Turbidity	NTU	-	1.42	0.21	0.38	0.17	0.10	< 0.10	0.22	0.24
Alkalinity, Total	mg/L	-	163	-	-	-	202	-	-	-
Ammonia, Total (as N)	mg/L	-	0.0230	-	-	-	-	-	-	-
Chloride	mg/L	-	48.4	-	-	-	-	-	-	-
Fluoride	mg/L	-	0.027	-	-	-	-	-	-	-
Nitrate	mg/L	-	1.44	-	-	-	-	-	-	-
Total Kjeldahl Nitrogen	mg/L	-	0.504	-	-	-	-	-	-	-
Sulfate	mg/L	-	142	-	-	-	-	-	-	-
Dissolved Organic Carbon	mg/L	-	7.37	-	-	-	19.8	-	-	-
Total Organic Carbon	mg/L	-	5.73	-	-	-	7.23	-	-	-
Phosphorus, Nutrient	mg/L	-	0.0105	-	-	-	-	-	-	-
Phenols	ug/L	-	< 0.0010	-	-	-	< 0.0010	-	-	-
Aluminum - Total	mg/L	-	0.0066	-	-	-	< 0.0300	-	-	-
Antimony - Total	mg/L	-	< 0.00010	-	-	-	< 0.00100	-	-	-
Arsenic - Total	mg/L	0.5	0.00017	-	-	-	< 0.00100	-	-	-
Barium - Total	mg/L	-	0.0358	-	-	-	0.0554	-	-	-
Cadmium - Total	mg/L	-	0.0000145	-	-	-	< 0.0000500	-	-	-
Calcium - Total	mg/L	-	70.4	-	-	-	125	-	-	-
Chromium - Total	mg/L	-	0.00093	-	-	-	< 0.00500	-	-	-
Cobalt - Total	mg/L	-	0.00024	-	-	-	< 0.00100	-	-	-
Copper - Total	mg/L	0.3	0.00168	-	-	-	< 0.00500	-	-	-
Iron - Total	mg/L	-	0.018	-	-	-	< 0.100	-	-	-
Lead - Total	mg/L	0.2	< 0.000050	-	-	-	< 0.000500	-	-	-
Lithium - Total	mg/L	-	0.0509	-	-	-	0.143	-	-	-
Magnesium - Total	mg/L	-	35.8	-	-	-	52.0	-	-	-
Manganese - Total	mg/L	-	0.00167	-	-	-	0.00166	-	-	-
Mercury - Total	mg/L	-	< 0.0000050	-	-	-	< 0.0000050	-	-	-
Molybdenum - Total	mg/L	-	0.000489	-	-	-	0.000601	-	-	-
Nickel - Total	mg/L	0.5	0.0102	-	-	-	0.0134	-	-	-
Phosphorus, Total	mg/L	-	< 0.050	-	-	-	< 0.500	-	-	-
Potassium - Total	mg/L	-	5.38	-	-	-	8.10	-	-	-
Selenium - Total	mg/L	-	0.000073	-	-	-	< 0.000500	-	-	-
Sodium - Total	mg/L	-	22.6	-	-	-	32.8	-	-	-
Strontium - Total	mg/L	-	0.112	-	-	-	0.215	-	-	-
Thallium - Total	mg/L	-	< 0.000010	-	-	-	< 0.000100	-	-	-
Tin - Total	mg/L	-	< 0.00010	-	-	-	< 0.00100	-	-	-
Titanium - Total	mg/L	-	< 0.00030	-	-	-	< 0.00300	-	-	-
Uranium - Total	mg/L	-	0.00708	-	-	-	0.0148	-	-	-
Vanadium - Total	mg/L	-	< 0.00050	-	-	-	< 0.00500	-	-	-
Zinc - Total	mg/L	0.5	< 0.0030	-	-	-	< 0.0300	-	-	-
Aluminum - Dissolved	mg/L	-	0.0023	-	-	-	-	-	-	-
Arsenic - Dissolved	mg/L	-	0.00017	-	-	-	-	-	-	-
Cadmium - Dissolved	mg/L	-	0.0000132	-	-	-	-	-	-	-
Calcium - Dissolved	mg/L	-	74.2	-	-	-	-	-	-	-
Copper - Dissolved	mg/L	-	0.00166	-	-	-	-	-	-	-
Iron - Dissolved	mg/L	-	< 0.010	-	-	-	-	-	-	-
Lead - Dissolved	mg/L	-	< 0.000050	-	-	-	-	-	-	-
Magnesium - Dissolved	mg/L	-	35.7	-	-	-	-	-	-	-
Manganese - Dissolved	mg/L	-	0.00100	-	-	-	-	-	-	-
Mercury - Dissolved	mg/L	-	< 0.0000050	-	-	-	-	-	-	-
Molybdenum - Dissolved	mg/L	-	0.000546	-	-	-	-	-	-	-

Table 7.3.18: Water Quality Results for Water Licence Monitoring Location - MS-MRY-13B

Sample ID			MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B
ALS Laboratory Work Order			BF2400225	BF2400247	BF2400270	BF2400291	BF2400305	BF2400324	BF2400348	BF2400356
Sample Date & Time			2024-08-04 08:45	2024-08-11 09:45	2024-08-19 15:40	2024-08-26 10:10	2024-09-01 08:45	2024-09-08 09:30	2024-09-19 10:45	2024-09-25 16:10
Analyte	Units	Water Licence Criteria ¹								
Nickel - Dissolved	mg/L	-	0.0102	-	-	-	-	-	-	-
Potassium - Dissolved	mg/L	-	5.63	-	-	-	-	-	-	-
Selenium - Dissolved	mg/L	-	0.000077	-	-	-	-	-	-	-
Sodium - Dissolved	mg/L	-	23.2	-	-	-	-	-	-	-
Thallium - Dissolved	mg/L	-	< 0.000010	-	-	-	-	-	-	-
Uranium - Dissolved	mg/L	-	0.00720	-	-	-	-	-	-	-
Zinc - Dissolved	mg/L	-	< 0.0010	-	-	-	-	-	-	-
F1 (C6-C10)	ug/L	-	< 25	-	-	-	< 25	-	-	-
F2 (C10-C16)	ug/L	-	< 100	-	-	-	< 100	-	-	-
F3 (C16-C34)	ug/L	-	< 250	-	-	-	< 250	-	-	-
F4 (C34-C50)	ug/L	-	< 250	-	-	-	< 250	-	-	-
Total Petroleum Hydrocarbons (C6-C50)	ug/L	-	< 370	-	-	-	< 370	-	-	-
Oil and Grease, Total	mg/L	-	< 5.0	-	-	-	< 5.0	-	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 7

Table 7.3.18: Water Quality Results for Water Licence Monitoring Location - MS-MRY-13B

Sample ID		MS-MRY-13B	MS-MRY-13B
ALS Laboratory Work Order		BF2400372	BF2400379
Sample Date & Time		2024-10-02 15:00	2024-10-06 12:50
Analyte	Units	Water Licence Criteria ¹	
Hardness	mg/L	-	-
Conductivity	umhos/cm	-	628
pH, Lab	pH units	6.0-9.5	7.64
Total Suspended Solids	mg/L	15	< 1.6
Total Dissolved Solids	mg/L	-	345
Turbidity	NTU	-	0.16
Alkalinity, Total	mg/L	-	143
Ammonia, Total (as N)	mg/L	-	-
Chloride	mg/L	-	-
Fluoride	mg/L	-	-
Nitrate	mg/L	-	-
Total Kjeldahl Nitrogen	mg/L	-	-
Sulfate	mg/L	-	-
Dissolved Organic Carbon	mg/L	-	5.77
Total Organic Carbon	mg/L	-	5.37
Phosphorus, Nutrient	mg/L	-	-
Phenols	ug/L	-	< 0.0010
Aluminum - Total	mg/L	-	0.0047
Antimony - Total	mg/L	-	0.00014
Arsenic - Total	mg/L	0.5	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	0.3	0.00170
Iron - Total	mg/L	-	0.012
Lead - Total	mg/L	0.2	< 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	0.5	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	0.5	< 0.0030
Aluminum - Dissolved	mg/L	-	-
Arsenic - Dissolved	mg/L	-	-
Cadmium - Dissolved	mg/L	-	-
Calcium - Dissolved	mg/L	-	-
Copper - Dissolved	mg/L	-	-
Iron - Dissolved	mg/L	-	-
Lead - Dissolved	mg/L	-	-
Magnesium - Dissolved	mg/L	-	-
Manganese - Dissolved	mg/L	-	-
Mercury - Dissolved	mg/L	-	-
Molybdenum - Dissolved	mg/L	-	-

Table 7.3.18: Water Quality Results for Water Licence Monitoring Location - MS-MRY-13B

Sample ID			MS-MRY-13B	MS-MRY-13B
ALS Laboratory Work Order			BF2400372	BF2400379
Sample Date & Time			2024-10-02 15:00	2024-10-06 12:50
Analyte	Units	Water Licence Criteria ¹		
Nickel - Dissolved	mg/L	-	-	-
Potassium - Dissolved	mg/L	-	-	-
Selenium - Dissolved	mg/L	-	-	-
Sodium - Dissolved	mg/L	-	-	-
Thallium - Dissolved	mg/L	-	-	-
Uranium - Dissolved	mg/L	-	-	-
Zinc - Dissolved	mg/L	-	-	-
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	-
Oil and Grease, Total	mg/L	-	< 5.0	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 7

Table 7.3.19: Water Quality Results for Water Licence Monitoring Location - MQ-C-A

Sample ID			MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A
ALS Laboratory Work Order			BF2400052	BF2400070	BF2400096	BF2400114	BF2400137	BF2400155	BF2400173	BF2400185
Sample Date & Time			2024-05-30 09:25	2024-06-03 08:20	2024-06-09 13:00	2024-06-16 14:05	2024-06-24 14:55	2024-07-01 14:40	2024-07-07 14:00	2024-07-14 11:20
Analyte	Units	Water Licence Criteria ¹								
Conductivity	umhos/cm	-	72.9	68.6	-	-	-	96.9	-	-
pH, Lab	pH units	6.0-9.5	7.32	7.33	7.17	7.66	7.20	7.79	8.16	8.02
Total Suspended Solids	mg/L	Grab 30, Average 15	< 1.5	3.5	< 1.0	1.0	1.3	< 1.0	< 1.0	< 1.0
Total Dissolved Solids	mg/L	-	53	41	43	40	40	50	114	121
Turbidity	NTU	-	3.85	3.95	5.38	5.29	17.3	5.73	0.79	0.29
Ammonia, Total (as N)	mg/L	-	< 0.0050	< 0.0050	-	-	-	< 0.0050	-	-
Nitrate	mg/L	-	0.028	< 0.020	-	-	-	0.020	-	-
Oil and Grease, Total	mg/L	-	< 5.0	< 5.0	-	-	-	< 5.0	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality ^{2,3}	N/A	Not Acutely Toxic	Not Acutely Toxic	-	-	-	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11
² Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)
³ Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)

Table 7.3.19: Water Quality Results for Water Licence Monitoring Location - MQ-C-A

Sample ID			MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A
ALS Laboratory Work Order			BF2400199	BF2400207	BF2400225	BF2400247	BF2400270	BF2400291	BF2400305	BF2400324
Sample Date & Time			2024-07-21 09:45	2024-07-28 16:40	2024-08-04 09:20	2024-08-12 09:30	2024-08-19 09:40	2024-08-25 09:40	2024-09-01 09:30	2024-09-08 14:15
Analyte	Units	Water Licence Criteria ¹								
Conductivity	umhos/cm	-	-	-	289	316	329	-	316	-
pH, Lab	pH units	6.0-9.5	7.95	8.09	8.02	8.07	7.92	8.05	8.07	8.10
Total Suspended Solids	mg/L	Grab 30, Average 15	< 1.0	< 1.0	< 1.0	< 1.0	< 1.2	1.8	< 1.0	< 1.0
Total Dissolved Solids	mg/L	-	137	156	136	186	185	169	167	186
Turbidity	NTU	-	0.39	1.30	1.04	0.35	0.20	0.24	0.12	0.18
Ammonia, Total (as N)	mg/L	-	-	-	< 0.0050	0.0163	< 0.0050	-	< 0.0050	-
Nitrate	mg/L	-	-	-	< 0.020	< 0.020	< 0.020	-	< 0.020	-
Oil and Grease, Total	mg/L	-	-	-	< 5.0	< 5.0	< 5.0	-	< 5.0	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality ^{2,3}	N/A	Not Acutely Toxic	-	-	-	-	Not Acutely Toxic	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 9 and Table 11
² Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)
³ Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)

Sample ID			MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A
ALS Laboratory Work Order			BF2400348	BF2400356	BF2400375	BF2400379	BF2400398
Sample Date & Time			2024-09-19 16:15	2024-09-25 11:40	2024-10-04 09:30	2024-10-06 11:10	2024-10-13 10:05
Analyte	Units	Water Licence Criteria ¹					
Conductivity	umhos/cm	-	-	-	258	-	-
pH, Lab	pH units	6.0-9.5	8.15	7.92	7.98	8.02	7.76
Total Suspended Solids	mg/L	Grab 30, Average 15	< 1.0	< 1.0	7.4	< 2.1	< 1.0
Total Dissolved Solids	mg/L	-	180	133	136	148	169
Turbidity	NTU	-	0.14	0.38	0.20	0.46	0.22
Ammonia, Total (as N)	mg/L	-	-	-	< 0.0050	-	-
Nitrate	mg/L	-	-	-	< 0.020	-	-
Oil and Grease, Total	mg/L	-	-	-	< 5.0	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality ^{2,3}	N/A	Not Acutely Toxic	-	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11
² Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)
³ Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)

Table 7.3.20: Water Quality Results for Water Licence Monitoring Location - MQ-C-B

Sample ID			MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B
ALS Laboratory Work Order			BF2400052	BF2400070	BF2400096	BF2400114	BF2400137	BF2400155	BF2400173	BF2400185
Sample Date & Time			2024-05-30 10:30	2024-06-03 12:00	2024-06-10 07:00	2024-06-16 13:25	2024-06-24 13:50	2024-07-01 15:40	2024-07-07 14:55	2024-07-14 12:30
Analyte	Units	Water Licence Criteria ¹								
Conductivity	umhos/cm	-	74.4	80.9	82.7	-	-	178	-	-
pH, Lab	pH units	6.0-9.5	7.35	7.45	7.34	7.73	7.77	7.93	8.08	7.84
Total Suspended Solids ²	mg/L	Grab 30, Average 15	2.7	4.2	9.4	13.3	3.0	< 1.0	2.2	5.3
Total Dissolved Solids	mg/L	-	53	45	41	80	96	95	127	163
Turbidity	NTU	-	14.6	12.7	21.1	38.1	28.4	0.88	9.58	13.2
Ammonia, Total (as N)	mg/L	-	0.0069	0.0117	0.0060	-	-	0.0216	-	-
Nitrate	mg/L	-	0.031	< 0.020	< 0.020	-	-	< 0.020	-	-
Oil and Grease, Total	mg/L	-	< 5.0	< 5.0	< 5.0	-	-	< 5.0	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality ^{2,3}	N/A	Not Acutely Toxic	-	-	Not Acutely Toxic	-	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11
² Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)
³ Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)

Table 7.3.20: Water Quality Results for Water Licence Monitoring Location - MQ-C-B

Sample ID			MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B
ALS Laboratory Work Order			BF2400199	BF2400207	BF2400225	BF2400247	BF2400270	BF2400291	BF2400305	BF2400324
Sample Date & Time			2024-07-21 10:50	2024-07-28 17:15	2024-08-04 10:45	2024-08-11 15:20	2024-08-19 11:15	2024-08-25 16:30	2024-09-01 10:25	2024-09-08 15:45
Analyte	Units	Water Licence Criteria ¹								
Conductivity	umhos/cm	-	-	-	264	-	-	-	295	-
pH, Lab	pH units	6.0-9.5	7.86	8.08	8.08	8.17	7.96	8.05	7.99	8.05
Total Suspended Solids	mg/L	Grab 30, Average 15	3.2	1.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	27.2
Total Dissolved Solids	mg/L	-	188	141	140	178	186	166	148	177
Turbidity	NTU	-	13.5	4.65	2.37	1.55	2.09	1.83	0.46	42.7
Ammonia, Total (as N)	mg/L	-	-	-	< 0.0050	-	-	-	0.0079	-
Nitrate	mg/L	-	-	-	0.034	-	-	-	0.040	-
Oil and Grease, Total	mg/L	-	-	-	< 5.0	-	-	-	< 5.0	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality ^{2,3}	N/A	Not Acutely Toxic	-	-	-	-	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.

¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

² Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

³ Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)

Table 7.3.20: Water Quality Results for Water Licence Monitoring Location - MQ-C-B

Sample ID			MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B
ALS Laboratory Work Order			BF2400348	BF2400356	BF2400375	BF2400379	BF2400398
Sample Date & Time			2024-09-19 16:30	2024-09-25 13:10	2024-10-04 10:00	2024-10-06 12:20	2024-10-13 10:45
Analyte	Units	Water Licence Criteria ¹					
Conductivity	umhos/cm	-	-	-	-	257	-
pH, Lab	pH units	6.0-9.5	8.16	7.92	8.02	7.96	7.61
Total Suspended Solids	mg/L	Grab 30, Average 15	< 1.0	2.0	< 1.0	14.1	2.7
Total Dissolved Solids	mg/L	-	178	146	130	155	183
Turbidity	NTU	-	0.74	9.78	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	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality ^{2,3}	N/A	Not Acutely Toxic	-	-	-	Not Acutely Toxic	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) -Table 11

² Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

³ Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)

Table 7.3.21: Water Quality Results for Water Licence Monitoring Location - MQ-C-D

Sample ID			MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D
ALS Laboratory Work Order			BF2400051	BF2400070	BF2400096	BF2400114	BF2400137	BF2400155	BF2400173	BF2400185
Sample Date & Time			2024-05-29 14:45	2024-06-03 08:35	2024-06-09 13:15	2024-06-16 14:30	2024-06-24 14:25	2024-07-01 15:10	2024-07-07 14:15	2024-07-14 11:45
Analyte	Units	Water Licence Criteria ¹								
Conductivity	umhos/cm	-	81.0	83.8	-	-	-	231	225	-
pH, Lab	pH units	6.0-9.5	7.45	7.41	7.37	8.08	8.00	8.01	8.10	8.09
Total Suspended Solids ²	mg/L	Grab 30, Average 15	9.4	4.0	8.9	6.8	2.2	5.9	3.0	3.8
Total Dissolved Solids	mg/L	-	68	56	73	183	131	131	122	161
Turbidity	NTU	-	51.7	34.3	35.1	18.2	12.5	12.0	10.8	8.52
Ammonia, Total (as N)	mg/L	-	0.0242	0.0127	-	-	-	0.0685	0.0238	-
Nitrate	mg/L	-	0.064	0.069	-	-	-	0.633	0.351	-
Oil and Grease, Total	mg/L	-	< 5.0	< 5.0	-	-	-	< 5.0	< 5.0	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality ^{2,3}	N/A	Not Acutely Toxic	-	-	-	-	-	-	Not Acutely Toxic	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11
² Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)
³ Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)

Table 7.3.21: Water Quality Results for Water Licence Monitoring Location - MQ-C-D

Sample ID			MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D
ALS Laboratory Work Order			BF2400199	BF2400207	BF2400225	BF2400247	BF2400270	BF2400291	BF2400305	BF2400324
Sample Date & Time			2024-07-21 10:10	2024-07-28 16:50	2024-08-04 09:45	2024-08-11 15:50	2024-08-19 10:25	2024-08-25 10:05	2024-09-01 09:45	2024-09-08 14:25
Analyte	Units	Water Licence Criteria ¹								
Conductivity	umhos/cm	-	-	-	280	-	-	-	317	-
pH, Lab	pH units	6.0-9.5	8.02	8.13	8.12	8.05	8.05	7.93	8.00	8.13
Total Suspended Solids	mg/L	Grab 30, Average 15	1.8	3.5	3.3	4.8	2.2	3.2	2.7	< 1.0
Total Dissolved Solids	mg/L	-	148	143	135	167	182	172	156	174
Turbidity	NTU	-	4.14	6.78	5.15	3.16	4.04	5.47	2.48	3.21
Ammonia, Total (as N)	mg/L	-	-	-	< 0.0050	-	-	-	0.0254	-
Nitrate	mg/L	-	-	-	0.280	-	-	-	0.460	-
Oil and Grease, Total	mg/L	-	-	-	< 5.0	-	-	-	< 5.0	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality ^{2,3}	N/A	Not Acutely Toxic	-	-	-	-	-	-	Not Acutely Toxic	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.

¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

² Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14) .

³ Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

Table 7.3.21: Water Quality Results for Water Licence Monitoring Location - MQ-C-D

Sample ID			MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D
ALS Laboratory Work Order			BF2400348	BF2400356	BF2400375	BF2400379	BF2400398
Sample Date & Time			2024-09-19 16:30	2024-09-25 12:10	2024-10-04 09:40	2024-10-06 11:40	2024-10-13 10:30
Analyte	Units	Water Licence Criteria ¹					
Conductivity	umhos/cm	-	-	-	275	-	-
pH, Lab	pH units	6.0-9.5	8.16	7.88	8.00	7.99	7.70
Total Suspended Solids	mg/L	Grab 30, Average 15	1.0	6.3	3.9	5.8	< 1.2
Total Dissolved Solids	mg/L	-	195	166	152	170	173
Turbidity	NTU	-	3.00	30.5	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	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality ^{2,3}	N/A	Not Acutely Toxic	-	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.

¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

² Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14) .

³ Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

Table 7.4.1: Water Quality Results for Water Licence Monitoring Location - BG-04-DS

Sample ID				BG-04-DS	BG-04-DS	BG-04-DS	BG-04-DS	BG-04-DS	BG-04-DS	BG-04-DS	BG-04-DS
ALS Laboratory Sample ID				BF2400113	WT2417938	BF2400154	BF2400178	BF2400212	BF2400280	BF2400344	BF2400389
Sample Date & Time				2024-06-17 14:15	2024-06-24 13:15	2024-07-01 11:15	2024-07-08 12:45	2024-07-29 14:45	2024-08-20 11:25	2024-09-17 10:50	2024-10-07 11:35
Analyte	Units	Water Licence Criteria	Screening Criteria								
pH, Lab	pH units	9.5	6.0-9.5	7.30	7.74	7.61	7.68	7.99	7.93	7.81	7.43
Total Dissolved Solids	mg/L	-	-	17	41	< 19	43	59	56	82	74
Total Suspended Solids	mg/L	30	See note ¹	1.0	1.6	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Turbidity	NTU	-	-	1.29	0.86	1.42	0.66	1.16	1.40	1.54	2.06

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.2: Water Quality Results for Water Licence Monitoring Location - BG-04-US

Sample ID				BG-04-US	BG-04-US	BG-04-US	BG-04-US	BG-04-US	BG-04-US	BG-04-US	BG-04-US
ALS Laboratory Sample ID				BF2400113	WT2417938	BF2400154	BF2400178	BF2400212	BF2400280	BF2400344	BF2400389
Sample Date & Time				2024-06-17 14:25	2024-06-24 13:25	2024-07-01 11:30	2024-07-08 12:50	2024-07-29 15:00	2024-08-20 11:40	2024-09-17 10:55	2024-10-07 11:45
Analyte	Units	Water Licence Criteria	Screening Criteria								
pH, Lab	pH units	9.5	6.0-9.5	7.29	7.55	7.53	7.66	7.85	7.81	7.84	7.38
Total Dissolved Solids	mg/L	-	-	45	40	< 19	46	57	67	78	71
Total Suspended Solids	mg/L	30	See note ¹	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.2	< 1.0	< 1.0
Turbidity	NTU	-	-	1.14	0.49	0.46	0.47	1.33	0.93	1.19	1.98

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.3: Water Quality Results for Water Licence Monitoring Location - BG-24-DS

Sample ID				BG-24-DS	BG-24-DS	BG-24-DS	BG-24-DS	BG-24-DS	BG-24-DS	BG-24-DS	BG-24-DS
ALS Laboratory Sample ID				BF2400072	BF2400099	BF2400113	BF2400131	BF2400154	BF2400178	BF2400212	BF2400267
Sample Date & Time				2024-06-02 15:35	2024-06-09 15:10	2024-06-17 13:45	2024-06-23 16:30	2024-07-01 12:00	2024-07-08 13:10	2024-07-29 14:20	2024-08-18 14:00
Analyte	Units	Water Licence Criteria	Screening Criteria								
pH, Lab	pH units	9.5	6.0-9.5	7.62	7.52	7.52	7.29	7.86	7.98	8.05	8.27
Total Dissolved Solids	mg/L	-	-	83	75	30	40	75	98	118	176
Total Suspended Solids	mg/L	30	See note ¹	40.2	53.6	6.0	23.2	< 1.0	< 1.0	< 1.0	< 1.0
Turbidity	NTU	-	-	70.7	43.0	3.41	2.11	0.43	0.68	1.17	0.94

Notes:
Bold highlight indicate results that were greater than the applicable water quality screening criteria.
¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.
Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.3: Water Quality Results for Water Licence Monitoring Location - BG-24-DS

Sample ID				BG-24-DS	BG-24-DS
ALS Laboratory Sample ID				WT2427689	BF2400389
Sample Date & Time				2024-09-16 14:45	2024-10-07 12:30
Analyte	Units	Water Licence Criteria	Screening Criteria		
pH, Lab	pH units	9.5	6.0-9.5	8.33	7.84
Total Dissolved Solids	mg/L	-	-	119	135
Total Suspended Solids	mg/L	30	See note ¹	< 1.0	2.8
Turbidity	NTU	-	-	0.37	2.10

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.4: Water Quality Results for Water Licence Monitoring Location - BG-24-US

Sample ID				BG-24-US	BG-24-US	BG-24-US	BG-24-US	BG-24-US	BG-24-US	BG-24-US	BG-24-US	BG-24-US
ALS Laboratory Sample ID				BF2400072	BF2400099	BF2400113	BF2400131	BF2400154	BF2400178	BF2400212	BF2400267	WT2427689
Sample Date & Time				2024-06-02 15:45	2024-06-09 15:20	2024-06-17 13:55	2024-06-23 16:45	2024-07-01 12:10	2024-07-08 13:20	2024-07-29 14:30	2024-08-18 14:30	2024-09-16 14:50
Analyte	Units	Water Licence Criteria	Screening Criteria									
pH, Lab	pH units	9.5	6.0-9.5	7.34	7.35	7.39	7.31	7.83	7.98	8.08	8.32	8.36
Total Dissolved Solids	mg/L	-	-	50	50	35	40	60	100	121	163	121
Total Suspended Solids	mg/L	30	See note ¹	3.8	6.6	5.4	8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Turbidity	NTU	-	-	8.48	5.40	2.81	1.36	0.38	0.45	1.05	0.16	0.29

Notes:
Bold highlight indicate results that were greater than the applicable water quality screening criteria.
¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.
Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.4: Water Quality Results for Water Licence Monitoring Location - BG-24-US

Sample ID				BG-24-US
ALS Laboratory Sample ID				BF2400389
Sample Date & Time				2024-10-07 12:40
Analyte	Units	Water Licence Criteria	Screening Criteria	
pH, Lab	pH units	9.5	6.0-9.5	7.8
Total Dissolved Solids	mg/L	-	-	145
Total Suspended Solids	mg/L	30	See note ¹	59.6
Turbidity	NTU	-	-	7.05

Notes:
Bold highlight indicate results that were greater than the applicable water quality screening criteria.
¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.
Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.5: Water Quality Results for Water Licence Monitoring Location - BG-30-DS

Sample ID				BG-30-DS	BG-30-DS	BG-30-DS	BG-30-DS	BG-30-DS	BG-30-DS
ALS Laboratory Sample ID				BF2400154	BF2400178	BF2400212	BF2400280	BF2400344	BF2400389
Sample Date & Time				2024-07-01 12:35	2024-07-08 13:35	2024-07-29 13:50	2024-08-20 10:50	2024-09-17 10:00	2024-10-08 14:25
Analyte	Units	Water Licence Criteria	Screening Criteria						
pH, Lab	pH units	9.5	6.0-9.5	7.79	8.17	8.22	8.22	8.00	7.89
Total Dissolved Solids	mg/L	-	-	83	145	173	155	167	158
Total Suspended Solids	mg/L	30	See note ¹	2.8	< 1.0	1.6	< 1.0	< 1.0	2.4
Turbidity	NTU	-	-	3.21	0.37	1.98	0.88	1.61	7.76

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.6: Water Quality Results for Water Licence Monitoring Location - BG-30-US

Sample ID				BG-30-US	BG-30-US	BG-30-US	BG-30-US	BG-30-US	BG-30-US
ALS Laboratory Sample ID				BF2400154	BF2400178	BF2400212	BF2400280	BF2400344	BF2400389
Sample Date & Time				2024-07-01 12:50	2024-07-08 13:45	2024-07-29 14:00	2024-08-20 11:00	2024-09-17 10:10	2024-10-08 14:35
Analyte	Units	Water Licence Criteria	Screening Criteria						
pH, Lab	pH units	9.5	6.0-9.5	7.84	8.16	7.98	8.06	7.98	7.85
Total Dissolved Solids	mg/L	-	-	70	149	148	141	169	156
Total Suspended Solids	mg/L	30	See note ¹	< 1.0	20.8	< 1.0	< 1.0	< 1.0	1.6
Turbidity	NTU	-	-	1.21	3.72	2.57	1.07	1.52	3.34

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.7: Water Quality Results for Water Licence Monitoring Location - BG-32-DS

Sample ID				BG-32-DS	BG-32-DS	BG-32-DS	BG-32-DS	BG-32-DS	BG-32-DS	BG-32-DS	BG-32-DS	BG-32-DS	BG-32-DS
ALS Laboratory Sample ID				BF2400072	BF2400106	BF2400113	WT2417938	BF2400154	BF2400178	BF2400212	BF2400280	WT2427679	BF2400389
Sample Date & Time				2024-06-02 14:20	2024-06-10 13:05	2024-06-17 11:50	2024-06-24 16:05	2024-07-01 14:50	2024-07-08 14:50	2024-07-29 11:30	2024-08-19 14:15	2024-09-16 12:40	2024-10-07 14:35
Analyte	Units	Water Licence Criteria	Screening Criteria										
pH, Lab	pH units	9.5	6.0-9.5	7.57	7.30	7.37	8.05	7.94	7.85	8.09	8.06	8.36	7.90
Total Dissolved Solids	mg/L	-	-	78	125	67	92	110	116	179	191	171	165
Total Suspended Solids	mg/L	30	See note ¹	56.0	5.0	3.9	10.3	1.2	< 1.0	< 1.0	< 1.0	< 1.0	1.2
Turbidity	NTU	-	-	88.0	2.98	1.72	4.68	1.43	0.73	1.74	0.81	0.45	2.04

Notes:
Bold highlight indicate results that were greater than the applicable water quality screening criteria.

¹When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.8: Water Quality Results for Water Licence Monitoring Location - BG-32-US

Sample ID				BG-32-US	BG-32-US	BG-32-US	BG-32-US	BG-32-US	BG-32-US	BG-32-US	BG-32-US	BG-32-US
ALS Laboratory Sample ID				BF2400072	BF2400106	BF2400113	WT2417938	BF2400154	BF2400178	BF2400212	BF2400280	WT2427679
Sample Date & Time				2024-06-02 14:40	2024-06-10 13:30	2024-06-17 12:00	2024-06-24 16:15	2024-07-01 15:00	2024-07-08 15:00	2024-07-29 11:45	2024-08-19 14:20	2024-09-16 12:50
Analyte	Units	Water Licence Criteria	Screening Criteria									
pH, Lab	pH units	9.5	6.0-9.5	7.33	7.27	7.42	8.01	7.94	7.88	8.01	8.06	8.35
Total Dissolved Solids	mg/L	-	-	60	124	74	98	142	131	188	208	173
Total Suspended Solids	mg/L	30	See note ¹	7.0	1.8	1.4	11.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Turbidity	NTU	-	-	12.3	2.07	1.61	3.51	1.27	0.98	1.77	0.69	0.38

Notes:
Bold highlight indicate results that were greater than the applicable water quality screening criteria.
¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.
Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.8: Water Quality Results for Water Licence Monitoring Location - BG-32-US

Sample ID	Sample ID	Sample ID	Sample ID	BG-32-US
ALS Laboratory Sample ID	Sample ID	atory Sample ID	tory Sample ID	BF2400389
Sample Date & Time	e & Time	ple Date & Time	le Date & Time	2024-10-07 14:45
Analyte	Units	Water Licence Criteria	Screening Criteria	
pH, Lab	pH units	9.5	6.0-9.5	8.0
Total Dissolved Solids	mg/L	-	-	161
Total Suspended Solids	mg/L	30	See note ¹	< 1.0
Turbidity	NTU	-	-	0.90

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.9: Water Quality Results for Water Licence Monitoring Location - BG-50-DS

Sample ID				BG-50-DS	BG-50-DS	BG-50-DS	BG-50-DS	BG-50-DS	BG-50-DS	BG-50-DS	BG-50-DS
ALS Laboratory Sample ID				BF2400113	BF2400131	BF2400154	BF2400178	BF2400212	BF2400267	WT2427689	BF2400389
Sample Date & Time				2024-06-17 10:20	2024-06-23 13:40	2024-07-01 15:50	2024-07-08 15:45	2024-07-29 10:28	2024-08-18 11:00	2024-09-16 11:30	2024-10-08 13:25
Analyte	Units	Water Licence Criteria	Screening Criteria								
pH, Lab	pH units	9.5	6.0-9.5	7.54	7.68	7.85	8.19	8.08	8.21	8.33	7.82
Total Dissolved Solids	mg/L	-	-	67	54	40	52	90	90	72	94
Total Suspended Solids	mg/L	30	See note ¹	52.5	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.2
Turbidity	NTU	-	-	17.1	0.98	0.49	0.54	1.49	0.26	0.16	1.47

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.10: Water Quality Results for Water Licence Monitoring Location - BG-50-US

Sample ID				BG-50-US	BG-50-US	BG-50-US	BG-50-US	BG-50-US	BG-50-US	BG-50-US	BG-50-US
ALS Laboratory Sample ID				BF2400113	BF2400131	BF2400154	BF2400178	BF2400212	BF2400267	WT2427689	BF2400389
Sample Date & Time				2024-06-17 10:30	2024-06-23 13:55	2024-07-01 16:00	2024-07-08 15:55	2024-07-29 10:40	2024-08-18 11:25	2024-09-16 11:40	2024-10-08 13:30
Analyte	Units	Water Licence Criteria	Screening Criteria								
pH, Lab	pH units	9.5	6.0-9.5	7.49	7.62	8.18	7.70	8.01	8.14	7.86	7.82
Total Dissolved Solids	mg/L	-	-	46	52	54	42	100	78	80	55
Total Suspended Solids	mg/L	30	See note ¹	3.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Turbidity	NTU	-	-	1.21	0.49	0.38	0.23	0.89	0.28	0.17	1.29

Notes:
Bold highlight indicate results that were greater than the applicable water quality screening criteria.
¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.
Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.11: Water Quality Results for Water Licence Monitoring Location - CV-001-DS

Sample ID				CV-001-DS	CV-001-DS	CV-001-DS	CV-001-DS	CV-001-DS	CV-001-DS	CV-001-DS	CV-001-DS	CV-001-DS	CV-001-DS
ALS Laboratory Sample ID				BF2400072	BF2400099	BF2400113	WT2417938	BF2400154	BF2400178	BF2400212	BF2400280	BF2400344	BF2400389
Sample Date & Time				2024-06-03 13:00	2024-06-09 14:00	2024-06-17 14:30	2024-06-24 12:55	2024-07-01 10:40	2024-07-08 12:10	2024-07-29 15:10	2024-08-20 12:00	2024-09-17 11:05	2024-10-07 11:15
Analyte	Units	Water Licence Criteria	Screening Criteria										
pH, Lab	pH units	9.5	6.0-9.5	7.17	7.60	7.32	8.01	7.51	7.47	7.66	7.84	7.61	7.13
Total Dissolved Solids	mg/L	-	-	57	38	37	61	51	84	90	85	88	69
Total Suspended Solids	mg/L	30	See note ¹	30.5	10.3	6.2	2.1	< 1.0	< 1.0	< 1.0	1.0	< 1.0	< 1.0
Turbidity	NTU	-	-	48.9	12.0	3.22	0.90	1.27	1.18	3.23	3.72	1.81	2.51

Notes:
Bold highlight indicate results that were greater than the applicable water quality screening criteria.
¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.
Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.12: Water Quality Results for Water Licence Monitoring Location - CV-001-US

Sample ID				CV-001-US	CV-001-US	CV-001-US	CV-001-US	CV-001-US	CV-001-US	CV-001-US	CV-001-US	CV-001-US	CV-001-US
ALS Laboratory Sample ID				BF2400072	BF2400099	BF2400113	WT2417938	BF2400154	BF2400178	BF2400212	BF2400280	BF2400344	BF2400389
Sample Date & Time				2024-06-03 13:10	2024-06-09 14:10	2024-06-17 14:50	2024-06-24 13:00	2024-07-01 10:55	2024-07-08 12:20	2024-07-29 15:20	2024-08-20 12:05	2024-09-17 11:10	2024-10-07 11:25
Analyte	Units	Water Licence Criteria	Screening Criteria										
pH, Lab	pH units	9.5	6.0-9.5	7.11	7.39	7.16	7.89	7.60	7.63	7.67	7.71	7.56	7.31
Total Dissolved Solids	mg/L	-	-	60	36	41	62	38	74	93	100	94	81
Total Suspended Solids	mg/L	30	See note ¹	43.5	22.1	16.7	< 1.0	< 1.0	< 1.0	< 1.0	1.5	< 1.0	1.4
Turbidity	NTU	-	-	56.8	18.5	2.93	0.62	0.98	0.81	2.95	3.55	2.10	2.74

Notes:
Bold highlight indicate results that were greater than the applicable water quality screening criteria.
¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.
Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.13: Water Quality Results for Water Licence Monitoring Location - CV-040-DS

Sample ID				CV-040-DS	CV-040-DS	CV-040-DS	CV-040-DS	CV-040-DS	CV-040-DS	CV-040-DS	CV-040-DS	CV-040-DS
ALS Laboratory Sample ID				BF2400106	BF2400113	BF2400131	BF2400154	BF2400178	BF2400212	BF2400267	WT2427689	BF2400389
Sample Date & Time				2024-06-10 14:00	2024-06-17 11:05	2024-06-23 14:45	2024-07-01 15:15	2024-07-08 15:15	2024-07-29 11:00	2024-08-18 12:30	2024-09-16 12:10	2024-10-08 13:50
Analyte	Units	Water Licence Criteria	Screening Criteria									
pH, Lab	pH units	9.5	6.0-9.5	7.47	7.43	7.18	8.05	8.27	8.30	8.40	8.39	8.06
Total Dissolved Solids	mg/L	-	-	95	42	50	76	116	177	204	188	145
Total Suspended Solids	mg/L	30	See note ¹	19.8	36.3	4.0	< 1.0	< 1.0	1.2	< 1.0	< 1.0	1.3
Turbidity	NTU	-	-	18.0	13.1	1.39	0.34	0.24	1.24	0.32	< 0.10	0.83

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.14: Water Quality Results for Water Licence Monitoring Location - CV-040-US

Sample ID				CV-040-US	CV-040-US	CV-040-US	CV-040-US	CV-040-US	CV-040-US	CV-040-US	CV-040-US	CV-040-US
ALS Laboratory Sample ID				BF2400106	BF2400113	BF2400131	BF2400154	BF2400178	BF2400212	BF2400267	WT2427689	BF2400389
Sample Date & Time				2024-06-10 13:40	2024-06-17 11:20	2024-06-23 15:00	2024-07-01 15:25	2024-07-08 15:25	2024-07-29 11:10	2024-08-18 12:45	2024-09-16 12:20	2024-10-08 14:00
Analyte	Units	Water Licence Criteria	Screening Criteria									
pH, Lab	pH units	9.5	6.0-9.5	7.52	6.95	7.27	8.08	8.33	8.28	8.40	8.43	8.10
Total Dissolved Solids	mg/L	-	-	54	21	36	83	107	186	207	179	188
Total Suspended Solids	mg/L	30	See note ¹	6.9	25.6	10.0	< 1.0	< 1.0	1.0	< 1.0	< 1.0	< 1.0
Turbidity	NTU	-	-	9.66	9.06	1.81	0.31	0.29	0.91	0.18	< 0.10	0.32

Notes:
Bold highlight indicate results that were greater than the applicable water quality screening criteria.

¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.15: Water Quality Results for Water Licence Monitoring Location - CV-057-DS

Sample ID				CV-057-DS	CV-057-DS	CV-057-DS	CV-057-DS	CV-057-DS	CV-057-DS	CV-057-DS	CV-057-DS	CV-057-DS
ALS Laboratory Sample ID				BF2400106	BF2400113	WT2417938	BF2400154	BF2400178	BF2400215	BF2400280	WT2427679	BF2400389
Sample Date & Time				2024-06-10 15:00	2024-06-17 08:55	2024-06-25 13:00	2024-07-01 16:10	2024-07-09 13:25	2024-07-30 11:10	2024-08-19 13:00	2024-09-16 11:05	2024-10-08 13:10
Analyte	Units	Water Licence Criteria	Screening Criteria									
pH, Lab	pH units	9.5	6.0-9.5	7.53	7.80	8.26	8.18	8.11	7.97	8.15	8.31	7.72
Total Dissolved Solids	mg/L	-	-	102	63	104	136	164	190	218	241	164
Total Suspended Solids	mg/L	30	See note ¹	3.6	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Turbidity	NTU	-	-	4.82	0.48	0.34	0.8	1.81	5.16	6.33	2.04	1.8

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.16: Water Quality Results for Water Licence Monitoring Location - CV-057-US

Sample ID				CV-057-US	CV-057-US	CV-057-US	CV-057-US	CV-057-US	CV-057-US	CV-057-US	CV-057-US	CV-057-US
ALS Laboratory Sample ID				BF2400106	BF2400113	WT2417938	BF2400154	BF2400178	BF2400215	BF2400280	WT2427679	BF2400389
Sample Date & Time				2024-06-10 15:10	2024-06-17 09:15	2024-06-25 13:10	2024-07-01 16:15	2024-07-09 13:30	2024-07-30 11:20	2024-08-19 13:05	2024-09-16 11:15	2024-10-08 13:15
Analyte	Units	Water Licence Criteria	Screening Criteria									
pH, Lab	pH units	9.5	6.0-9.5	7.54	7.57	8.26	8.14	8.08	7.99	7.95	8.29	7.70
Total Dissolved Solids	mg/L	-	-	102	83	98	118	157	191	202	228	202
Total Suspended Solids	mg/L	30	See note ¹	4.5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Turbidity	NTU	-	-	5.65	0.44	0.35	0.6	1.06	3.25	5.91	1.53	1.61

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.17: Water Quality Results for Water Licence Monitoring Location - CV-059-DS

Sample ID				CV-059-DS	CV-059-DS	CV-059-DS	CV-059-DS	CV-059-DS	CV-059-DS	CV-059-DS	CV-059-DS	CV-059-DS
ALS Laboratory Sample ID				BF2400106	BF2400124	WT2417938	BF2400163	BF2400178	BF2400215	BF2400280	WT2427679	BF2400389
Sample Date & Time				2024-06-10 15:40	2024-06-18 11:05	2024-06-25 12:20	2024-07-05 08:30	2024-07-09 13:10	2024-07-30 11:35	2024-08-19 12:00	2024-09-16 10:35	2024-10-08 12:25
Analyte	Units	Water Licence Criteria	Screening Criteria									
pH, Lab	pH units	9.5	6.0-9.5	7.52	7.36	8.06	8.05	8.06	8.05	8.10	8.34	7.88
Total Dissolved Solids	mg/L	-	-	80	38	47	100	103	130	160	163	90
Total Suspended Solids	mg/L	30	See note ¹	4.4	3.2	1.5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Turbidity	NTU	-	-	9.26	2.12	0.47	1.31	0.51	1.20	0.40	0.14	0.44

Notes:
Bold highlight indicate results that were greater than the applicable water quality screening criteria.

¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.18: Water Quality Results for Water Licence Monitoring Location - CV-059-US

Sample ID				CV-059-US	CV-059-US	CV-059-US	CV-059-US	CV-059-US	CV-059-US	CV-059-US	CV-059-US	CV-059-US
ALS Laboratory Sample ID				BF2400106	BF2400124	WT2417938	BF2400163	BF2400178	BF2400215	BF2400280	WT2427679	BF2400389
Sample Date & Time				2024-06-10 15:50	2024-06-18 11:15	2024-06-25 12:30	2024-07-05 08:40	2024-07-09 13:15	2024-07-30 11:45	2024-08-19 12:05	2024-09-16 10:40	2024-10-08 12:30
Analyte	Units	Water Licence Criteria	Screening Criteria									
pH, Lab	pH units	9.5	6.0-9.5	7.50	7.26	7.97	8.00	8.01	8.03	7.99	8.35	7.87
Total Dissolved Solids	mg/L	-	-	66	55	65	90	100	136	151	151	143
Total Suspended Solids	mg/L	30	See note ¹	1.8	1.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Turbidity	NTU	-	-	1.50	1.53	0.35	0.88	0.30	0.58	0.37	0.12	0.39

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.19: Water Quality Results for Water Licence Monitoring Location - CV-060-DS

Sample ID				CV-060-DS	CV-060-DS	CV-060-DS	CV-060-DS	CV-060-DS	CV-060-DS	CV-060-DS	CV-060-DS ^a	CV-060-DS ^a
ALS Laboratory Sample ID				BF2400106	BF2400124	WT2417938	BF2400163	BF2400178	BF2400215	BF2400280	WT2427679	BF240034
Sample Date & Time				2024-06-10 16:10	2024-06-18 11:45	2024-06-25 12:00	2024-07-05 08:50	2024-07-09 12:50	2024-07-30 12:05	2024-08-19 11:40	2024-09-16 10:15	2024-09-19 09:45
Analyte	Units	Water Licence Criteria	Screening Criteria									
pH, Lab	pH units	9.5	6.0-9.5	7.58	7.75	8.04	8.05	8.13	8.07	8.21	8.30	7.75
Total Dissolved Solids	mg/L	-	-	89	64	77	105	117	147	167	161	168
Total Suspended Solids	mg/L	30	See note ¹	4.8	1.9	< 1.0	< 1.0	< 1.0	< 1.0	2.0	< 1.0	< 1.0
Turbidity	NTU	-	-	7.24	0.29	< 0.10	0.32	0.23	1.35	0.69	0.21	0.48

Notes:
Bold highlight indicate results that were greater than the applicable water quality screening criteria.

¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BIM-5200-PLA-0027)

^a A second sample was grabbed at CV-060 on September 19th due to a logistic issue. In order to ensure a sample not exceeding the hold time was collected, a second sample was taken on September 19th. However once we received the Sample Receipt Notification for both samples there was no indication of hold time exceedances. Therefore both samples were included in this table.

Table 7.4.19: Water Quality Results for Water Licence Monitoring Location - CV-060-DS

Sample ID				CV-060-DS
ALS Laboratory Sample ID				BF2400389
Sample Date & Time				2024-10-08 12:10
Analyte	Units	Water Licence Criteria	Screening Criteria	
pH, Lab	pH units	9.5	6.0-9.5	7.92
Total Dissolved Solids	mg/L	-	-	138
Total Suspended Solids	mg/L	30	See note ¹	< 1.0
Turbidity	NTU	-	-	0.35

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.20: Water Quality Results for Water Licence Monitoring Location - CV-060-US

Sample ID				CV-060-US	CV-060-US	CV-060-US	CV-060-US	CV-060-US	CV-060-US	CV-060-US	CV-060-US ^a	CV-060-US ^a
ALS Laboratory Sample ID				BF2400106	BF2400124	WT2417938	BF2400163	BF2400178	BF2400215	BF2400280	WT2427679	BF2400345
Sample Date & Time				2024-06-10 16:20	2024-06-18 11:55	2024-06-25 12:10	2024-07-05 09:00	2024-07-09 12:55	2024-07-30 12:10	2024-08-19 11:45	2024-09-16 10:20	2024-09-19 09:55
Analyte	Units	Water Licence Criteria	Screening Criteria									
pH, Lab	pH units	9.5	6.0-9.5	7.59	7.72	8.13	8.05	8.12	8.08	8.18	8.32	7.86
Total Dissolved Solids	mg/L	-	-	74	54	74	107	122	150	160	151	175
Total Suspended Solids	mg/L	30	See note ¹	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Turbidity	NTU	-	-	1.97	0.29	< 0.10	0.14	0.16	1.36	0.67	0.15	0.48

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BIM-5200-PLA-0027)

^a A second sample was grabbed at CV-060 on September 19th due to a logistic issue. In order to ensure a sample not exceeding the hold time was collected, a second sample was taken on September 19th. However once we received the Sample Receipt Notification for both samples there was no indication of hold time exceedances. Therefore both samples were included in this table.

Table 7.4.20: Water Quality Results for Water Licence Monitoring Location - CV-060-US

Sample ID				CV-060-US
ALS Laboratory Sample ID				BF2400389
Sample Date & Time				2024-10-08 12:15
Analyte	Units	Water Licence Criteria	Screening Criteria	
pH, Lab	pH units	9.5	6.0-9.5	7.88
Total Dissolved Solids	mg/L	-	-	138
Total Suspended Solids	mg/L	30	See note ¹	< 1.0
Turbidity	NTU	-	-	0.13

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

¹When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.21: Water Quality Results for Water Licence Monitoring Location - CV-072-C-DS

Sample ID				CV-072-C-DS	CV-072-C-DS	CV-072-C-DS	CV-072-C-DS	CV-072-C-DS	CV-072-C-DS
ALS Laboratory Sample ID				BF2400106	WT2417938	BF2400163	BF2400178	BF2400215	WT2427679
Sample Date & Time				2024-06-11 09:50	2024-06-25 11:30	2024-07-05 09:40	2024-07-09 12:30	2024-07-30 12:55	2024-09-16 09:55
Analyte	Units	Water Licence Criteria	Screening Criteria						
pH, Lab	pH units	9.5	6.0-9.5	7.62	7.69	8.03	8.11	8.11	8.25
Total Dissolved Solids	mg/L	-	-	54	46	84	77	102	129
Total Suspended Solids	mg/L	30	See note ¹	< 1.0	1.0	1.2	2.0	< 1.0	< 1.0
Turbidity	NTU	-	-	1.31	0.45	1.18	0.35	2.12	< 0.10

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.22: Water Quality Results for Water Licence Monitoring Location - CV-072-C-US

Sample ID				CV-072-C-US	CV-072-C-US	CV-072-C-US	CV-072-C-US	CV-072-C-US	CV-072-C-US
ALS Laboratory Sample ID				BF2400106	WT2417938	BF2400163	BF2400178	BF2400215	WT2427679
Sample Date & Time				2024-06-11 09:30	2024-06-25 11:40	2024-07-05 09:50	2024-07-09 12:35	2024-07-30 13:05	2024-09-16 10:00
Analyte	Units	Water Licence Criteria	Screening Criteria						
pH, Lab	pH units	9.5	6.0-9.5	7.53	7.84	7.99	8.04	8.15	8.41
Total Dissolved Solids	mg/L	-	-	52	44	88	78	111	135
Total Suspended Solids	mg/L	30	See note ¹	< 1.0	1.2	1.0	< 1.0	< 1.0	< 1.0
Turbidity	NTU	-	-	1.65	0.54	1.03	0.19	7.19	< 0.10

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.23: Water Quality Results for Water Licence Monitoring Location - CV-078-DS

Sample ID				CV-078-DS	CV-078-DS	CV-078-DS	CV-078-DS	CV-078-DS	CV-078-DS	CV-078-DS	CV-078-DS	CV-078-DS
ALS Laboratory Sample ID				BF2400106	BF2400124	BF2400131	BF2400163	BF2400178	BF2400215	BF2400267	WT2427689	BF2400389
Sample Date & Time				2024-06-11 10:25	2024-06-18 12:25	2024-06-23 12:00	2024-07-05 10:05	2024-07-09 12:10	2024-07-30 13:15	2024-08-18 09:50	2024-09-15 16:00	2024-10-08 11:25
Analyte	Units	Water Licence Criteria	Screening Criteria									
pH, Lab	pH units	9.5	6.0-9.5	7.75	7.69	7.91	8.08	8.19	8.20	8.29	8.48	8.10
Total Dissolved Solids	mg/L	-	-	64	44	49	98	111	139	164	142	137
Total Suspended Solids	mg/L	30	See note ¹	1.2	5.9	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Turbidity	NTU	-	-	2.67	2.02	0.59	0.17	0.12	0.95	< 0.10	< 0.10	0.14

Notes:
Bold highlight indicate results that were greater than the applicable water quality screening criteria.
¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration.
Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream
Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.24: Water Quality Results for Water Licence Monitoring Location - CV-078-US

Sample ID				CV-078-US	CV-078-US	CV-078-US	CV-078-US	CV-078-US	CV-078-US	CV-078-US	CV-078-US	CV-078-US
ALS Laboratory Sample ID				BF2400106	BF2400124	BF2400131	BF2400163	BF2400178	BF2400215	BF2400267	WT2427689	BF2400389
Sample Date & Time				2024-06-11 10:40	2024-06-18 12:30	2024-06-23 12:20	2024-07-05 10:15	2024-07-09 12:20	2024-07-30 13:25	2024-08-18 10:15	2024-09-15 16:10	2024-10-08 11:35
Analyte	Units	Water Licence Criteria	Screening Criteria									
pH, Lab	pH units	9.5	6.0-9.5	7.69	7.54	7.76	8.10	8.13	8.21	8.28	8.48	8.11
Total Dissolved Solids	mg/L	-	-	58	33	50	95	100	140	164	143	110
Total Suspended Solids	mg/L	30	See note ¹	< 1.0	2.1	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Turbidity	NTU	-	-	1.61	1.25	0.51	0.18	< 0.10	1.12	0.24	< 0.10	< 0.10

Notes:
Bold highlight indicate results that were greater than the applicable water quality screening criteria.
¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.
Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.25: Water Quality Results for Water Licence Monitoring Location - CV-093-DS

Sample ID				CV-093-DS	CV-093-DS	CV-093-DS	CV-093-DS
ALS Laboratory Sample ID				BF2400106	BF2400124	BF2400131	BF2400163
Sample Date & Time				2024-06-11 11:20	2024-06-18 13:25	2024-06-23 10:40	2024-07-05 10:35
Analyte	Units	Water Licence Criteria	Screening Criteria				
pH, Lab	pH units	9.5	6.0-9.5	7.83	7.88	7.85	8.09
Total Dissolved Solids	mg/L	-	-	86	96	105	125
Total Suspended Solids	mg/L	30	See note ¹	10.3	3.1	6.8	2.0
Turbidity	NTU	-	-	8.73	1.99	3.14	0.97

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.26: Water Quality Results for Water Licence Monitoring Location - CV-093-US

Sample ID				CV-093-US	CV-093-US	CV-093-US	CV-093-US
ALS Laboratory Sample ID				BF2400106	BF2400124	BF2400131	BF2400163
Sample Date & Time				2024-06-11 11:30	2024-06-18 13:30	2024-06-23 11:05	2024-07-05 10:45
Analyte	Units	Water Licence Criteria	Screening Criteria				
pH, Lab	pH units	9.5	6.0-9.5	7.77	7.92	7.98	8.11
Total Dissolved Solids	mg/L	-	-	74	100	102	123
Total Suspended Solids	mg/L	30	See note ¹	7.7	2.2	3.5	< 1.0
Turbidity	NTU	-	-	4.71	0.81	0.28	0.30

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.27: Water Quality Results for Water Licence Monitoring Location - CV-099-DS

Sample ID				CV-099-DS	CV-099-DS	CV-099-DS	CV-099-DS	CV-099-DS	CV-099-DS	CV-099-DS	CV-099-DS	CV-099-DS
ALS Laboratory Sample ID				BF2400106	BF2400124	BF2400131	BF2400163	BF2400178	BF2400215	BF2400267	WT2427689	BF2400389
Sample Date & Time				2024-06-11 12:05	2024-06-18 13:55	2024-06-23 09:45	2024-07-05 11:35	2024-07-09 11:10	2024-07-30 14:00	2024-08-18 08:30	2024-09-15 14:50	2024-10-08 10:45
Analyte	Units	Water Licence Criteria	Screening Criteria									
pH, Lab	pH units	9.5	6.0-9.5	7.81	7.67	7.50	8.09	8.16	8.24	8.30	8.50	8.16
Total Dissolved Solids	mg/L	-	-	75	60	40	105	83	148	171	155	145
Total Suspended Solids	mg/L	30	See note ¹	20.6	5.8	2.8	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Turbidity	NTU	-	-	21.9	2.20	0.96	0.67	0.18	1.29	0.13	< 0.10	0.19

Notes:
Bold highlight indicate results that were greater than the applicable water quality screening criteria.
¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.
Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.28: Water Quality Results for Water Licence Monitoring Location - CV-099-US

Sample ID				CV-099-US	CV-099-US	CV-099-US	CV-099-US	CV-099-US	CV-099-US	CV-099-US	CV-099-US	CV-099-US
ALS Laboratory Sample ID				BF2400106	BF2400124	BF2400131	BF2400163	BF2400178	BF2400215	BF2400267	WT2427689	BF2400389
Sample Date & Time				2024-06-11 12:25	2024-06-18 14:00	2024-06-23 10:05	2024-07-05 11:50	2024-07-09 11:25	2024-07-30 14:15	2024-08-18 08:50	2024-09-15 15:00	2024-10-08 10:55
Analyte	Units	Water Licence Criteria	Screening Criteria									
pH, Lab	pH units	9.5	6.0-9.5	7.61	7.61	7.03	8.12	8.14	8.28	8.34	8.46	8.16
Total Dissolved Solids	mg/L	-	-	74	64	39	105	90	146	162	159	138
Total Suspended Solids	mg/L	30	See note ¹	1.0	5.7	2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Turbidity	NTU	-	-	4.93	2.26	0.88	0.46	0.26	1.05	< 0.10	< 0.10	< 0.10

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.29: Water Quality Results for Water Licence Monitoring Location - CV-102-DS

Sample ID				CV-102-DS	CV-102-DS	CV-102-DS	CV-102-DS	CV-102-DS	CV-102-DS	CV-102-DS	CV-102-DS	CV-102-DS
ALS Laboratory Sample ID				BF2400106	BF2400124	WT2417938	BF2400163	BF2400178	BF2400215	BF2400280	WT2427679	BF240038
Sample Date & Time				2024-06-11 14:45	2024-06-18 14:30	2024-06-25 10:30	2024-07-05 12:20	2024-07-09 10:45	2024-07-31 13:25	2024-08-19 10:30	2024-09-15 14:20	2024-10-08 10:20
Analyte	Units	Water Licence Criteria	Screening Criteria									
pH, Lab	pH units	9.5	6.0-9.5	7.73	7.90	8.33	8.20	8.23	8.18	8.23	8.49	8.09
Total Dissolved Solids	mg/L	-	-	84	84	98	140	140	209	207	177	158
Total Suspended Solids	mg/L	30	See note ¹	3.1	1.2	< 1.0	< 1.0	< 1.0	< 1.0	1.0	< 1.0	< 1.0
Turbidity	NTU	-	-	2.90	0.77	0.33	0.35	0.35	1.48	0.18	< 0.10	0.15

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.30: Water Quality Results for Water Licence Monitoring Location - CV-102-DS

Sample ID				CV-102-US	CV-102-US	CV-102-US	CV-102-US	CV-102-US	CV-102-US	CV-102-US	CV-102-US	CV-102-US
ALS Laboratory Sample ID				BF2400106	BF2400124	WT2417938	BF2400163	BF2400178	BF2400215	BF2400280	WT2427679	BF2400389
Sample Date & Time				2024-06-11 14:55	2024-06-18 14:35	2024-06-25 10:40	2024-07-05 12:30	2024-07-09 10:55	2024-07-31 13:30	2024-08-19 10:40	2024-09-15 14:30	2024-10-08 10:30
Analyte	Units	Water Licence Criteria	Screening Criteria									
pH, Lab	pH units	9.5	6.0-9.5	7.78	7.97	8.42	8.19	8.15	8.20	8.21	8.46	8.06
Total Dissolved Solids	mg/L	-	-	82	112	126	132	124	163	193	182	150
Total Suspended Solids	mg/L	30	See note ¹	1.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	3.2	< 1.0	< 1.0
Turbidity	NTU	-	-	2.95	0.35	0.12	0.20	0.24	0.87	1.21	< 0.10	< 0.10

Notes:
Bold highlight indicate results that were greater than the applicable water quality screening criteria.
¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.
Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.31: Water Quality Results for Water Licence Monitoring Location - CV-106-DS

Sample ID				CV-106-DS	CV-106-DS	CV-106-DS	CV-106-DS	CV-106-DS
ALS Laboratory Sample ID				BF2400106	BF2400124	WT2417938	BF2400163	BF2400178
Sample Date & Time				2024-06-11 13:20	2024-06-18 15:15	2024-06-25 10:05	2024-07-05 12:40	2024-07-09 10:15
Analyte	Units	Water Licence Criteria	Screening Criteria					
pH, Lab	pH units	9.5	6.0-9.5	7.53	7.65	8.16	8.11	8.05
Total Dissolved Solids	mg/L	-	-	81	61	68	124	128
Total Suspended Solids	mg/L	30	See note ¹	3.3	< 1.0	2.9	1.5	< 1.0
Turbidity	NTU	-	-	6.26	2.69	4.30	2.04	0.93

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.32: Water Quality Results for Water Licence Monitoring Location - CV-106-US

Sample ID				CV-106-US	CV-106-US	CV-106-US	CV-106-US	CV-106-US
ALS Laboratory Sample ID				BF2400106	BF2400124	WT2417938	BF2400163	BF2400178
Sample Date & Time				2024-06-11 13:10	2024-06-18 15:20	2024-06-25 10:10	2024-07-05 12:50	2024-07-09 10:25
Analyte	Units	Water Licence Criteria	Screening Criteria					
pH, Lab	pH units	9.5	6.0-9.5	7.15	7.37	8.25	7.99	7.99
Total Dissolved Solids	mg/L	-	-	46	43	84	102	98
Total Suspended Solids	mg/L	30	See note ¹	1.5	< 1.0	< 1.0	< 1.0	< 1.0
Turbidity	NTU	-	-	1.92	1.15	0.14	0.56	0.22

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.33: Water Quality Results for Water Licence Monitoring Location - CV-112-DS

Sample ID				CV-112-DS	CV-112-DS	CV-112-DS	CV-112-DS	CV-112-DS	CV-112-DS	CV-112-DS	CV-112-DS	CV-112-DS
ALS Laboratory Sample ID				BF2400106	BF2400124	WT2417938	BF2400163	BF2400178	BF2400215	BF2400280	WT2427679	BF2400389
Sample Date & Time				2024-06-11 13:40	2024-06-18 16:00	2024-06-25 09:45	2024-07-05 13:15	2024-07-09 10:00	2024-07-31 12:15	2024-08-19 09:30	2024-09-15 12:50	2024-10-08 09:35
Analyte	Units	Water Licence Criteria	Screening Criteria									
pH, Lab	pH units	9.5	6.0-9.5	7.60	7.58	8.08	8.15	8.19	8.24	8.29	8.50	8.12
Total Dissolved Solids	mg/L	-	-	65	44	55	130	116	158	177	188	179
Total Suspended Solids	mg/L	30	See note ¹	21.2	15.3	< 1.0	< 1.0	< 1.0	1.0	< 1.0	< 1.0	< 1.0
Turbidity	NTU	-	-	28.3	5.58	0.56	0.57	0.23	2.13	0.24	< 0.10	0.26

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.34: Water Quality Results for Water Licence Monitoring Location - CV-112-US

Sample ID				CV-112-US	CV-112-US	CV-112-US	CV-112-US	CV-112-US	CV-112-US	CV-112-US	CV-112-US	CV-112-US
ALS Laboratory Sample ID				BF2400106	BF2400124	WT2417938	BF2400163	BF2400178	BF2400215	BF2400280	WT2427679	BF2400389
Sample Date & Time				2024-06-11 14:00	2024-06-18 16:15	2024-06-25 09:50	2024-07-05 13:30	2024-07-09 10:05	2024-07-31 12:25	2024-08-19 09:35	2024-09-15 13:00	2024-10-08 09:45
Analyte	Units	Water Licence Criteria	Screening Criteria									
pH, Lab	pH units	9.5	6.0-9.5	7.44	7.52	8.07	8.18	8.15	8.27	8.33	8.50	8.12
Total Dissolved Solids	mg/L	-	-	60	41	52	125	114	159	188	187	178
Total Suspended Solids	mg/L	30	See note ¹	8.5	13.9	< 1.0	< 1.0	< 1.0	< 1.0	3.3	< 1.0	< 1.0
Turbidity	NTU	-	-	12.6	3.99	0.54	0.56	0.16	0.73	0.37	< 0.10	< 0.10

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.35: Water Quality Results for Water Licence Monitoring Location - CV-115-DS

Sample ID				CV-115-DS	CV-115-DS	CV-115-DS	CV-115-DS	CV-115-DS	CV-115-DS	CV-115-DS	CV-115-DS	CV-115-DS
ALS Laboratory Sample ID				BF2400072	BF2400106	BF2400124	BF2400163	BF2400178	BF2400215	BF2400280	WT2427679	BF2400389
Sample Date & Time				2024-06-02 10:00	2024-06-11 15:20	2024-06-18 16:45	2024-07-05 13:50	2024-07-09 09:30	2024-07-31 13:00	2024-08-19 09:00	2024-09-15 12:20	2024-10-08 09:15
Analyte	Units	Water Licence Criteria	Screening Criteria									
pH, Lab	pH units	9.5	6.0-9.5	7.91	7.75	7.85	8.25	8.28	8.21	8.28	8.46	8.04
Total Dissolved Solids	mg/L	-	-	114	70	89	174	248	222	226	212	126
Total Suspended Solids	mg/L	30	See note ¹	11.6	5.8	2.9	< 1.0	11.0	13.5	1.0	< 1.0	< 1.0
Turbidity	NTU	-	-	18.3	4.46	1.20	0.79	3.64	16.7	1.24	0.14	0.14

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.36: Water Quality Results for Water Licence Monitoring Location - CV-115-US

Sample ID				CV-115-US	CV-115-US	CV-115-US	CV-115-US	CV-115-US	CV-115-US	CV-115-US	CV-115-US	CV-115-US
ALS Laboratory Sample ID				BF2400072	BF2400106	BF2400124	BF2400163	BF2400178	BF2400215	BF2400280	WT2427679	BF2400389
Sample Date & Time				2024-06-02 10:10	2024-06-11 15:30	2024-06-18 16:50	2024-07-05 14:00	2024-07-09 09:45	2024-07-31 11:35	2024-08-19 09:05	2024-09-15 12:30	2024-10-08 09:20
Analyte	Units	Water Licence Criteria	Screening Criteria									
pH, Lab	pH units	9.5	6.0-9.5	8.03	7.59	7.74	8.07	7.99	7.95	8.23	8.40	7.95
Total Dissolved Solids	mg/L	-	-	100	66	85	150	163	160	215	193	193
Total Suspended Solids	mg/L	30	See note ¹	8.0	< 1.0	1.7	< 1.0	< 1.0	1.7	< 1.0	< 1.0	< 1.0
Turbidity	NTU	-	-	19.8	0.53	0.17	0.17	0.24	1.88	0.38	0.14	0.16

Notes:
Bold highlight indicate results that were greater than the applicable water quality screening criteria.
¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.
Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.37: Water Quality Results for Water Licence Monitoring Location - CV-128-DS

Sample ID				CV-128-DS	CV-128-DS	CV-128-DS	CV-128-DS	CV-128-DS	CV-128-DS	CV-128-DS	CV-128-DS
ALS Laboratory Sample ID				BF2400124	BF2400131	BF2400163	BF2400178	BF2400215	BF2400267	WT2427689	BF2400389
Sample Date & Time				2024-06-19 14:50	2024-06-23 08:45	2024-07-05 14:50	2024-07-09 09:00	2024-07-31 10:55	2024-08-18 07:30	2024-09-15 11:30	2024-10-08 08:50
Analyte	Units	Water Licence Criteria	Screening Criteria								
pH, Lab	pH units	9.5	6.0-9.5	7.73	7.47	7.96	8.01	8.02	8.06	8.34	7.79
Total Dissolved Solids	mg/L	-	-	78	50	51	41	66	77	93	72
Total Suspended Solids	mg/L	30	See note ¹	8.0	2.5	8.2	1.2	< 1.0	< 1.0	< 1.0	< 1.0
Turbidity	NTU	-	-	1.98	1.25	5.19	0.92	0.71	0.30	0.16	2.58

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.38: Water Quality Results for Water Licence Monitoring Location - CV-128-US

Sample ID				CV-128-US	CV-128-US	CV-128-US	CV-128-US	CV-128-US	CV-128-US	CV-128-US	CV-128-US
ALS Laboratory Sample ID				BF2400124	BF2400130	BF2400163	BF2400178	BF2400215	BF2400267	WT2427689	BF2400389
Sample Date & Time				2024-06-19 15:25	2024-06-23 09:00	2024-07-05 15:00	2024-07-09 09:10	2024-07-31 11:05	2024-08-18 07:50	2024-09-15 11:35	2024-10-08 08:55
Analyte	Units	Water Licence Criteria	Screening Criteria								
pH, Lab	pH units	9.5	6.0-9.5	7.75	7.35	7.87	7.90	7.97	8.07	8.32	7.84
Total Dissolved Solids	mg/L	-	-	76	58	71	45	59	78	92	64
Total Suspended Solids	mg/L	30	See note ¹	8.0	1.4	5.0	< 1.0	< 1.0	< 1.0	< 1.0	1.2
Turbidity	NTU	-	-	2.34	1.38	4.84	0.93	0.69	0.29	0.21	2.74

Notes:
Bold highlight indicate results that were greater than the applicable water quality screening criteria.
¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.
Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.39: Water Quality Results for Water Licence Monitoring Location - CV-129-DS

Sample ID				CV-129-DS	CV-129-DS	CV-129-DS	CV-129-DS	CV-129-DS	CV-129-DS	CV-129-DS	CV-129-DS	CV-129-DS
ALS Laboratory Sample ID				BF2400106	BF2400124	WT2417938	BF2400163	BF2400178	BF2400215	BF2400280	WT2427679	BF2400389
Sample Date & Time				2024-06-11 16:30	2024-06-19 15:50	2024-06-25 08:55	2024-07-05 15:20	2024-07-09 08:30	2024-07-31 10:25	2024-08-19 08:25	2024-09-15 10:40	2024-10-08 08:30
Analyte	Units	Water Licence Criteria	Screening Criteria									
pH, Lab	pH units	9.5	6.0-9.5	7.41	7.34	7.91	8.02	8.09	8.11	8.20	8.40	8.04
Total Dissolved Solids	mg/L	-	-	52	62	60	89	79	93	121	129	145
Total Suspended Solids	mg/L	30	See note ¹	4.7	2.3	< 1.0	< 1.0	< 1.0	11.3	< 1.0	< 1.0	< 1.0
Turbidity	NTU	-	-	2.78	1.11	0.15	0.31	0.21	12.7	0.16	< 0.10	< 0.10

Notes:
Bold highlight indicate results that were greater than the applicable water quality screening criteria.
¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.
Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.40: Water Quality Results for Water Licence Monitoring Location - CV-129-US

Sample ID				CV-129-US	CV-129-US	CV-129-US	CV-129-US	CV-129-US	CV-129-US	CV-129-US	CV-129-US	CV-129-US
ALS Laboratory Sample ID				BF2400106	BF2400124	WT2417938	BF2400163	BF2400178	BF2400215	BF2400280	WT2427679	BF2400389
Sample Date & Time				2024-06-11 16:45	2024-06-19 16:00	2024-06-25 09:05	2024-07-05 15:30	2024-07-09 08:40	2024-07-31 10:30	2024-08-19 08:30	2024-09-15 10:55	2024-10-08 08:35
Analyte	Units	Water Licence Criteria	Screening Criteria									
pH, Lab	pH units	9.5	6.0-9.5	7.40	7.39	7.87	8.05	8.08	8.08	8.19	8.40	8.02
Total Dissolved Solids	mg/L	-	-	26	50	52	88	80	100	121	127	125
Total Suspended Solids	mg/L	30	See note ¹	1.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Turbidity	NTU	-	-	1.45	0.30	0.12	0.23	< 0.10	0.62	0.12	< 0.10	< 0.10

Notes:
Bold highlight indicate results that were greater than the applicable water quality screening criteria.
¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.
Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.41: Water Quality Results for Water Licence Monitoring Location - CV-154-A-DS

Sample ID				CV-154-A-DS	CV-154-A-DS	CV-154-A-DS	CV-154-A-DS	CV-154-A-DS	CV-154-A-DS	CV-154-A-DS	CV-154-A-DS	CV-154-A-DS	CV-154-A-DS
ALS Laboratory Sample ID				BF2400072	BF2400106	BF2400124	WT2417938	BF2400163	BF2400178	BF2400215	BF2400280	WT2427679	BF2400389
Sample Date & Time				2024-06-02 08:50	2024-06-11 17:10	2024-06-19 16:20	2024-06-25 08:30	2024-07-06 07:30	2024-07-09 08:10	2024-07-31 09:55	2024-08-19 08:00	2024-09-15 10:15	2024-10-08 08:05
Analyte	Units	Water Licence Criteria	Screening Criteria										
pH, Lab	pH units	9.5	6.0-9.5	7.78	7.59	7.65	8.11	8.13	8.08	8.10	8.12	8.39	8.02
Total Dissolved Solids	mg/L	-	-	110	52	68	95	140	121	155	189	189	174
Total Suspended Solids	mg/L	30	See note ¹	21.5	22.9	10.2	1.5	4.5	< 1.0	9.2	< 1.0	< 1.0	< 1.0
Turbidity	NTU	-	-	73.8	13.6	3.72	1.63	7.55	1.92	17.1	0.67	0.36	0.83

Notes:
Bold highlight indicate results that were greater than the applicable water quality screening criteria.
¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.
Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.42: Water Quality Results for Water Licence Monitoring Location - CV-154-A-US

Sample ID				CV-154-A-US	CV-154-A-US	CV-154-A-US	CV-154-A-US	CV-154-A-US	CV-154-A-US	CV-154-A-US	CV-154-A-US	CV-154-A-US	CV-154-A-US
ALS Laboratory Sample ID				BF2400072	BF2400106	BF2400124	WT2417938	BF2400163	BF2400178	BF2400215	BF2400280	WT2427679	BF2400389
Sample Date & Time				2024-06-02 09:05	2024-06-11 17:20	2024-06-19 16:30	2024-06-25 08:40	2024-07-06 07:40	2024-07-09 08:20	2024-07-31 10:00	2024-08-19 08:05	2024-09-15 10:05	2024-10-08 08:10
Analyte	Units	Water Licence Criteria	Screening Criteria										
pH, Lab	pH units	9.5	6.0-9.5	7.67	7.56	7.67	8.04	8.15	8.11	8.17	8.28	8.44	8.08
Total Dissolved Solids	mg/L	-	-	95	68	85	81	139	130	167	170	175	163
Total Suspended Solids	mg/L	30	See note ¹	13.1	7.9	5.9	1.2	5.7	1.2	3.5	< 1.0	< 1.0	< 1.0
Turbidity	NTU	-	-	64.5	5.35	2.51	1.37	9.17	2.96	6.70	1.11	0.59	0.88

Notes:
Bold highlight indicate results that were greater than the applicable water quality screening criteria.
¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.
Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.43: Water Quality Results for Water Licence Monitoring Location - CV-167-DS

Sample ID				CV-167-DS	CV-167-DS	CV-167-DS	CV-167-DS	CV-167-DS	CV-167-DS	CV-167-DS	CV-167-DS	CV-167-DS
ALS Laboratory Sample ID				BF2400106	BF2400124	WT2417938	BF2400163	BF2400178	BF2400215	BF2400280	WT2427679	BF2400389
Sample Date & Time				2024-06-11 17:50	2024-06-19 16:50	2024-06-25 08:05	2024-07-05 17:00	2024-07-09 07:50	2024-07-31 09:05	2024-08-19 07:35	2024-09-15 09:30	2024-10-08 07:40
Analyte	Units	Water Licence Criteria	Screening Criteria									
pH, Lab	pH units	9.5	6.0-9.5	7.60	7.71	8.10	7.99	7.98	8.09	8.02	8.34	7.89
Total Dissolved Solids	mg/L	-	-	63	73	82	120	110	158	205	212	176
Total Suspended Solids	mg/L	30	See note ¹	12.2	10.1	2.5	2.5	1.5	12.3	< 1.0	< 1.0	< 1.0
Turbidity	NTU	-	-	21.6	7.91	1.57	3.78	1.66	17.1	2.48	0.36	0.52

Notes:
Bold highlight indicate results that were greater than the applicable water quality screening criteria.
¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.
Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.44: Water Quality Results for Water Licence Monitoring Location - CV-167-US

Sample ID				CV-167-US	CV-167-US	CV-167-US	CV-167-US	CV-167-US	CV-167-US	CV-167-US	CV-167-US	CV-167-US
ALS Laboratory Sample ID				BF2400106	BF2400124	WT2417938	BF2400163	BF2400178	BF2400215	BF2400280	WT2427679	BF2400389
Sample Date & Time				2024-06-11 17:55	2024-06-19 17:00	2024-06-25 08:15	2024-07-05 17:05	2024-07-09 08:00	2024-07-31 09:15	2024-08-19 07:45	2024-09-15 09:40	2024-10-08 07:50
Analyte	Units	Water Licence Criteria	Screening Criteria									
pH, Lab	pH units	9.5	6.0-9.5	7.57	7.69	8.08	8.00	8.06	8.13	8.03	8.33	7.89
Total Dissolved Solids	mg/L	-	-	48	77	54	109	93	156	204	213	180
Total Suspended Solids	mg/L	30	See note ¹	4.5	< 1.0	1.3	< 1.0	< 1.0	3.1	2.8	1.3	< 1.0
Turbidity	NTU	-	-	9.71	1.28	1.43	3.12	1.34	4.43	2.13	0.32	0.40

Notes:
Bold highlight indicate results that were greater than the applicable water quality screening criteria.
¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.
Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.45: Water Quality Results for Water Licence Monitoring Location - CV-216-DS

Sample ID				CV-216-DS	CV-216-DS	CV-216-DS	CV-216-DS	CV-216-DS	CV-216-DS	CV-216-DS	CV-216-DS	CV-216-DS
ALS Laboratory Sample ID				BF2400106	BF2400113	WT2417938	BF2400154	BF2400178	BF2400212	BF2400280	WT2427679	BF2400389
Sample Date & Time				2024-06-10 11:25	2024-06-17 13:00	2024-06-24 15:20	2024-07-01 13:10	2024-07-08 14:00	2024-07-29 13:25	2024-08-20 10:15	2024-09-16 13:35	2024-10-07 13:50
Analyte	Units	Water Licence Criteria	Screening Criteria									
pH, Lab	pH units	9.5	6.0-9.5	7.29	7.43	7.74	8.06	8.22	8.13	7.94	8.27	7.80
Total Dissolved Solids	mg/L	-	-	339	164	82	416	424	1010	2780	1920	1020
Total Suspended Solids	mg/L	30	See note ¹	3.3	7.1	3.8	1.2	< 1.0	< 1.0	< 1.0	< 1.0	14.2
Turbidity	NTU	-	-	4.70	7.97	3.42	2.19	1.12	1.93	0.87	0.45	1.02

Notes:
Bold highlight indicate results that were greater than the applicable water quality screening criteria.
¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.
Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.46: Water Quality Results for Water Licence Monitoring Location - CV-216-US

Sample ID				CV-216-US	CV-216-US	CV-216-US	CV-216-US	CV-216-US	CV-216-US	CV-216-US	CV-216-US	CV-216-US
ALS Laboratory Sample ID				BF2400106	BF2400113	WT2417938	BF2400154	BF2400178	BF2400212	BF2400280	WT2427679	BF2400389
Sample Date & Time				2024-06-10 11:40	2024-06-17 13:15	2024-06-24 15:30	2024-07-01 13:25	2024-07-08 14:15	2024-07-29 13:35	2024-08-20 10:20	2024-09-16 14:08	2024-10-07 14:00
Analyte	Units	Water Licence Criteria	Screening Criteria									
pH, Lab	pH units	9.5	6.0-9.5	7.21	7.49	8.04	8.12	8.31	8.16	7.90	8.29	7.78
Total Dissolved Solids	mg/L	-	-	257	181	238	419	407	959	2510	1890	933
Total Suspended Solids	mg/L	30	See note ¹	12.7	15.0	4.0	3.0	< 1.0	1.7	1.2	1.2	5.3
Turbidity	NTU	-	-	3.57	7.48	4.58	5.37	0.81	1.46	1.69	0.50	1.31

Notes:
Bold highlight indicate results that were greater than the applicable water quality screening criteria.
¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.
Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.47: Water Quality Results for Water Licence Monitoring Location - CV-217-DS

Sample ID				CV-217-DS	CV-217-DS	CV-217-DS	CV-217-DS	CV-217-DS	CV-217-DS	CV-217-DS	CV-217-DS
ALS Laboratory Sample ID				BF2400113	BF2400130	BF2400154	BF2400178	BF2400212	BF2400267	WT2427689	BF2400389
Sample Date & Time				2024-06-17 12:40	2024-06-23 15:40	2024-07-01 14:20	2024-07-08 14:25	2024-07-29 12:10	2024-08-18 13:20	2024-09-16 13:05	2024-10-07 14:15
Analyte	Units	Water Licence Criteria	Screening Criteria								
pH, Lab	pH units	9.5	6.0-9.5	7.34	7.30	7.82	7.77	7.74	7.98	7.82	7.78
Total Dissolved Solids	mg/L	-	-	31	43	55	36	59	51	38	22
Total Suspended Solids	mg/L	30	See note ¹	1.0	2.7	< 1.0	< 1.0	1.0	< 1.0	1.1	5.4
Turbidity	NTU	-	-	0.62	4.57	0.89	0.66	2.70	1.09	0.49	4.04

Notes:
Bold highlight indicate results that were greater than the applicable water quality screening criteria.
¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.
Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.48: Water Quality Results for Water Licence Monitoring Location - CV-217-US

Sample ID				CV-217-US	CV-217-US	CV-217-US	CV-217-US	CV-217-US	CV-217-US	CV-217-US	CV-217-US
ALS Laboratory Sample ID				BF2400113	BF2400130	BF2400154	BF2400178	BF2400212	BF2400267	WT2427689	BF2400389
Sample Date & Time				2024-06-17 12:50	2024-06-23 15:55	2024-07-01 14:30	2024-07-08 14:35	2024-07-29 12:00	2024-08-18 13:30	2024-09-16 13:10	2024-10-07 14:20
Analyte	Units	Water Licence Criteria	Screening Criteria								
pH, Lab	pH units	9.5	6.0-9.5	7.29	7.22	7.72	7.65	7.82	7.89	7.83	7.69
Total Dissolved Solids	mg/L	-	-	17	38	62	36	64	55	33	57
Total Suspended Solids	mg/L	30	See note ¹	< 1.0	27.3	< 1.0	< 1.0	< 1.0	< 1.0	1.8	3.2
Turbidity	NTU	-	-	0.96	5.23	0.82	0.69	1.17	0.65	1.03	3.98

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.49: Water Quality Results for Water Licence Monitoring Location - CV-223-DS

Sample ID				CV-223-DS	CV-223-DS	CV-223-DS	CV-223-DS	CV-223-DS	CV-223-DS	CV-223-DS	CV-223-DS
ALS Laboratory Sample ID				BF2400072	BF2400113	WT2417938	BF2400154	BF2400178	BF2400212	BF2400280	BF2400344
Sample Date & Time				2024-06-03 14:05	2024-06-17 15:10	2024-06-24 12:15	2024-07-01 10:05	2024-07-08 11:45	2024-07-29 16:00	2024-08-20 12:35	2024-09-17 11:25
Analyte	Units	Water Licence Criteria	Screening Criteria								
pH, Lab	pH units	9.5	6.0-9.5	7.30	7.18	7.57	7.16	7.53	7.94	8.06	7.84
Total Dissolved Solids	mg/L	-	-	56	25	20	19	44	67	81	83
Total Suspended Solids	mg/L	30	See note ¹	15.3	13.9	2.8	< 1.0	< 1	< 1.0	< 1.0	< 1.0
Turbidity	NTU	-	-	25.8	11.3	1.54	1.31	1.24	1.10	0.32	1.93

Notes:
Bold highlight indicate results that were greater than the applicable water quality screening criteria.
¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.
Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.4.50: Water Quality Results for Water Licence Monitoring Location - CV-223-US

Sample ID				CV-223-US	CV-223-US	CV-223-US	CV-223-US	CV-223-US	CV-223-US	CV-223-US	CV-223-US
ALS Laboratory Sample ID				BF2400072	BF2400113	WT2417938	BF2400154	BF2400178	BF2400212	BF2400280	BF2400344
Sample Date & Time				2024-06-03 14:15	2024-06-17 15:30	2024-06-24 12:25	2024-07-01 10:15	2024-07-08 11:55	2024-07-29 15:50	2024-08-20 12:40	2024-09-17 11:30
Analyte	Units	Water Licence Criteria	Screening Criteria								
pH, Lab	pH units	9.5	6.0-9.5	7.69	7.13	7.43	7.25	7.57	7.96	8.09	7.99
Total Dissolved Solids	mg/L	-	-	70	27	21	< 20	46	80	81	85
Total Suspended Solids	mg/L	30	See note ¹	12.8	4.2	3.5	1.2	< 1.0	1.0	< 1.0	2.1
Turbidity	NTU	-	-	14.8	2.98	1.30	1.59	1.20	1.69	0.33	1.63

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

¹ When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BIM-5200-PLA-0027)

Table 7.5.1: Water Quality Results for Water Licence Monitoring Location - MS-SN-01

Sample ID			MS-SN-01	MS-SN-01	MS-SN-01	MS-SN-01	MS-SN-01	MS-SN-01	MS-SN-01	MS-SN-01
ALS Laboratory Sample ID			BF2400055	BF2400077	BF2400094	BF2400117	BF2400138	BF2400167	BF2400219	BF2400328
Sample Date & Time			2024-05-31 15:45	2024-06-05 09:40	2024-06-09 11:50	2024-06-17 11:05	2024-06-24 16:00	2024-07-05 13:00	2024-08-01 09:00	2024-09-10 12:30
Analyte	Units	Criteria ¹								
Conductivity	umhos/cm	-	77.6	94.4	-	-	-	222	278	285
pH, Lab	pH units	6.0 - 9.5	7.51	7.56	7.72	7.83	7.95	8.20	7.98	8.07
Total Suspended Solids ²	mg/L	Grab 30, Average 15	8.1	8.8	36.4	19.0	1.5	4.0	1.3	< 1.0
Total Dissolved Solids	mg/L	-	45	55	76	85	124	118	152	167
Turbidity	NTU	-	22.2	34.3	38.7	24.0	3.41	5.74	1.31	1.03
Ammonia, Total (as N)	mg/L	-	0.0094	0.0258	-	-	-	0.0144	0.0054	< 0.0050
Nitrate	mg/L	-	0.023	< 0.020	-	-	-	0.036	0.108	0.081
Oil and Grease, Total	mg/L	-	< 5.0	< 5.0	-	-	-	< 5.0	< 5.0	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlighted values indicate results that exceeded the applicable water quality criteria.
¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.
² Average Monthly TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.5.2: Water Quality Results for Water Licence Monitoring Location - MS-SN-02

Sample ID			MS-SN-02	MS-SN-02	MS-SN-02	MS-SN-02	MS-SN-02	MS-SN-02	MS-SN-02	MS-SN-02
ALS Laboratory Sample ID			BF2400055	BF2400077	BF2400094	BF2400117	BF2400138	BF2400167	BF2400219	BF2400328
Sample Date & Time			2024-05-31 14:35	2024-06-05 14:25	2024-06-09 11:20	2024-06-17 12:55	2024-06-24 15:15	2024-07-04 15:15	2024-08-01 09:40	2024-09-09 12:00
Analyte	Units	Criteria ¹								
Conductivity	umhos/cm	-	86.2	99.3	-	-	-	231	310	302
pH, Lab	pH units	6.0 - 9.5	7.57	7.44	7.65	7.89	7.87	8.17	8.01	7.92
Total Suspended Solids	mg/L	Grab 30, Average 15	3.8	7.2	1.9	2.5	< 1.0	< 1.0	6.4	< 1.0
Total Dissolved Solids	mg/L	-	42	70	78	100	132	130	157	154
Turbidity	NTU	-	16.5	34.0	10.7	13.1	0.59	3.98	3.03	2.70
Ammonia, Total (as N)	mg/L	-	0.0316	0.0152	-	-	-	0.0065	< 0.0050	< 0.0050
Nitrate	mg/L	-	0.200	0.139	-	-	-	0.084	0.127	0.256
Oil and Grease, Total	mg/L	-	< 5.0	< 5.0	-	-	-	< 5.0	< 5.0	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlighted values indicate results that exceeded the applicable water quality criteria.
¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.5.3: Water Quality Results for Water Licence Monitoring Location - TR-SN-01

Sample ID			TR-SN-01	TR-SN-01	TR-SN-01	TR-SN-01	TR-SN-01
ALS Laboratory Sample ID			BF2400108	BF2400123	BF2400145	BF2400168	BF2400189
Sample Date & Time			2024-06-13 09:20	2024-06-20 09:00	2024-06-30 08:20	2024-07-07 08:55	2024-07-16 10:20
Analyte	Units	Criteria ¹					
Conductivity	umhos/cm	-	248	-	-	162	-
pH, Lab	pH units	6.0 - 9.5	7.79	7.58	7.72	8.16	8.21
Total Suspended Solids	mg/L	Grab 30, Average 15	3.3	3.0	< 1.3	< 1.0	< 1.0
Total Dissolved Solids	mg/L	-	152	31	70	91	95
Turbidity	NTU	-	0.66	1.79	0.27	0.36	0.30
Ammonia, Total (as N)	mg/L	-	0.0147	-	-	0.0069	-
Nitrate	mg/L	-	0.102	-	-	< 0.020	-
Oil and Grease, Total	mg/L	-	< 5.0	-	-	< 5.0	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlighted values indicate results that exceeded the applicable water quality criteria.

¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.5.4: Water Quality Results for Water Licence Monitoring Location - TR-SN-02

Sample ID			TR-SN-02	TR-SN-02	TR-SN-02	TR-SN-02	TR-SN-02
ALS Laboratory Sample ID			BF2400123	WT2417929	BF2400145	BF2400168	BF2400189
Sample Date & Time			2024-06-20 10:50	2024-06-25 13:30	2024-06-30 10:00	2024-07-07 10:00	2024-07-16 11:25
Analyte	Units	Criteria ¹					
Conductivity	umhos/cm	-	108	-	-	110	-
pH, Lab	pH units	6.0 - 9.5	7.57	7.83	7.55	8.09	8.14
Total Suspended Solids ²	mg/L	Grab 30, Average 15	5.8	1.1	< 1.0	1.0	< 1.0
Total Dissolved Solids	mg/L	-	57	49	73	63	74
Turbidity	NTU	-	2.78	0.70	0.82	0.82	0.43
Ammonia, Total (as N)	mg/L	-	< 0.0050	-	-	0.0052	-
Nitrate	mg/L	-	< 0.020	-	-	< 0.020	-
Oil and Grease, Total	mg/L	-	< 5.0	-	-	< 5.0	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlighted values indicate results that exceeded the applicable water quality criteria.

¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.5.5: Water Quality Results for Water Licence Monitoring Location - TR-SN-04

Sample ID			TR-SN-04	TR-SN-04	TR-SN-04	TR-SN-04	TR-SN-04	TR-SN-04	TR-SN-04
ALS Laboratory Sample ID			BF2400108	WT2417929	BF2400145	BF2400168	BF2400189	BF2400223	BF2400308
Sample Date & Time			2024-06-13 11:50	2024-06-25 14:40	2024-06-30 11:30	2024-07-07 15:10	2024-07-16 12:30	2024-08-04 10:35	2024-09-02 11:35
Analyte	Units	Criteria ¹							
Conductivity	umhos/cm	-	64.3	-	-	147	-	185	202
pH, Lab	pH units	6.0 - 9.5	7.02	8.01	7.91	7.69	7.78	7.64	7.45
Total Suspended Solids	mg/L	Grab 30, Average 15	7.2	5.7	1.2	2.5	15.9	1.2	< 1.0
Total Dissolved Solids	mg/L	-	43	66	88	100	129	94	107
Turbidity	NTU	-	10.5	11.1	6.21	20.5	108	6.39	5.31
Ammonia, Total (as N)	mg/L	-	0.0138	-	-	0.0088	-	0.0118	0.0180
Nitrate	mg/L	-	< 0.020	-	-	0.022	-	< 0.020	0.034
Oil and Grease, Total	mg/L	-	< 5.0	-	-	< 5.0	-	< 5.0	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlighted values indicate results that exceeded the applicable water quality criteria.
¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.5.6: Water Quality Results for Water Licence Monitoring Location - TR-SN-06

Sample ID			TR-SN-06	TR-SN-06	TR-SN-06	TR-SN-06
ALS Laboratory Sample ID			BF2400123	WT2417929	BF2400145	BF2400168
Sample Date & Time			2024-06-20 13:25	2024-06-25 16:50	2024-06-30 12:30	2024-07-07 12:25
Analyte	Units	Criteria ¹				
Conductivity	umhos/cm	-	27.9	-	-	49.6
pH, Lab	pH units	6.0 - 9.5	7.70	7.35	7.72	7.97
Total Suspended Solids	mg/L	Grab 30, Average 15	6.6	6.2	13.2	1.0
Total Dissolved Solids	mg/L	-	22	16	26	23
Turbidity	NTU	-	3.59	1.43	2.97	2.77
Ammonia, Total (as N)	mg/L	-	0.0145	-	-	0.0057
Nitrate	mg/L	-	0.03	-	-	< 0.020
Oil and Grease, Total	mg/L	-	< 5.0	-	-	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlighted values indicate results that exceeded the applicable water quality criteria.

¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.5.7: Water Quality Results for Water Licence Monitoring Location - TR-SN-07

Sample ID			TR-SN-07	TR-SN-07	TR-SN-07	TR-SN-07	TR-SN-07
ALS Laboratory Sample ID			BF2400108	BF2400123	WT2417929	BF2400145	BF2400168
Sample Date & Time			2024-06-13 11:00	2024-06-20 11:30	2024-06-25 14:10	2024-06-30 10:40	2024-07-07 10:35
Analyte	Units	Criteria ¹					
Conductivity	umhos/cm	-	149	-	-	-	275
pH, Lab	pH units	6.0 - 9.5	7.72	7.71	8.10	8.05	8.16
Total Suspended Solids	mg/L	Grab 30, Average 15	29.2	4.5	3.0	< 1.0	< 1.0
Total Dissolved Solids	mg/L	-	100	75	103	140	165
Turbidity	NTU	-	35.3	2.12	2.73	0.91	1.11
Ammonia, Total (as N)	mg/L	-	0.0062	-	-	-	0.0100
Nitrate	mg/L	-	< 0.020	-	-	-	< 0.020
Oil and Grease, Total	mg/L	-	< 5.0	-	-	-	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlighted values indicate results that exceeded the applicable water quality criteria.

¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.6.1: Water Quality Results for Water Licence Monitoring Location - MS-06

Location Name			MS-06	MS-06	MS-06	MS-06	MS-06
ALS Laboratory Work Order			BF2400074	BF2400089	BF2400112	BF2400127	BF2400153
Sample Date			2024-06-04 16:30	2024-06-08 10:50	2024-06-15 15:45	2024-06-21 15:20	2024-07-01 08:10
Analyte	Units	Water Licence Criteria ¹					
pH, Lab	pH units	6.0 - 9.5	6.91	7.22	7.31	7.87	7.83
Total Suspended Solids	mg/L	-	2.5	5.9	5.7	2.7	4.5
Oil & Grease, Total	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.6.2: Water Quality Results for Water Licence Monitoring Location - MS-07

Location Name			MS-07	MS-07	MS-07-RW	MS-07	MS-07	MS-07	MS-07	MS-07
ALS Laboratory Work Order			BF2400091	BF2400110	BF2400115	WT2417882	BF2400166	BF2400181	BF2400205	BF2400217
Sample Date			2024-06-08 12:15	2024-06-16 11:50	2024-06-16 16:00	2024-06-26 12:00	2024-07-05 09:55	2024-07-11 13:30	2024-07-25 11:00	2024-07-31 13:00
Analyte	Units	Water Licence Criteria ¹								
pH, Lab	pH units	6.0 - 9.5	7.19	6.99	7.38	7.81	7.82	7.67	7.93	7.88
Total Suspended Solids	mg/L	-	23.6	17.0	25.2	3.6	3.0	2.0	2.7	1.0
Oil & Grease, Total	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.6.2: Water Quality Results for Water Licence Monitoring Location - MS-07

Location Name			MS-07
ALS Laboratory Work Order			BF2400263
Sample Date			2024-08-16 16:45
Analyte	Units	Water Licence Criteria ¹	
pH, Lab	pH units	6.0 - 9.5	7.99
Total Suspended Solids	mg/L	-	1.8
Oil & Grease, Total	-	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.6.3: Water Quality Results for Water Licence Monitoring Location - CLSP-OUT

Location Name			CLSP-OUT	CLSP-OUT	CLSP-OUT	CLSP-OUT
ALS Laboratory Sample ID			BF2400067	BF2400075	BF2400076	BF2400104
Sample Date & Time			2024-06-03 16:30	2024-06-04 10:30	2024-06-05 16:15	2024-06-12 11:20
Analyte	Units	Water License Criteria ¹				
pH, Lab	pH units	6.0 - 9.5	7.58	7.62	7.66	7.46
Total Dissolved Solids	mg/L	-	156	139	142	124
Total Suspended Solids ²	mg/L	Grab 30, Average 15	433	206	234	337
Turbidity	NTU	-	545	275	244	420

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

² Average Monthly TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.6.4: Water Quality Results for Water Licence Monitoring Location - CLT-OUT

Location Name			CLT-OUT	CLT-OUT	CLT-OUT	CLT-OUT	CLT-OUT	CLT-OUT	CLT-OUT
ALS Laboratory Sample ID			BF2400018	BF2400030	BF2400036	BF2400057	BF2400056	BF2400067	BF2400075
Sample Date & Time			2024-05-21 17:20	2024-05-23 15:15	2024-05-26 17:34	2024-05-29 11:45	2024-05-30 16:00	2024-06-03 16:45	2024-06-04 10:40
Analyte	Units	Water License Criteria ¹							
pH, Lab	pH units	6.0 - 9.5	7.41	7.01	7.20	7.40	7.40	7.30	7.31
Total Dissolved Solids	mg/L	-	98	46	59	65	38	< 18	< 20
Total Suspended Solids ²	mg/L	Grab 30, Average 15	204	6.4	59.4	60.5	23.3	62.1	9.2
Turbidity	NTU	-	207	19.1	73.7	98.6	23.3	33.1	13.1

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

² Average Monthly TSS for May and June exceeded maximum average TSS concentration discharge limits.

Table 7.6.4: Water Quality Results for Water Licence Monitoring Location - CLT-OUT

Location Name			CLT-OUT	CLT-OUT	CLT-OUT	CLT-OUT
ALS Laboratory Sample ID			BF2400076	BF2400104	BF2400121	BF2400142
Sample Date & Time			2024-06-05 16:35	2024-06-12 11:35	2024-06-19 16:40	2024-06-26 16:10
Analyte	Units	Water License Criteria ¹				
pH, Lab	pH units	6.0 - 9.5	7.44	7.52	7.61	7.79
Total Dissolved Solids	mg/L	-	31	43	36	68
Total Suspended Solids ²	mg/L	Grab 30, Average 15	9.0	2.7	2.2	< 1.0
Turbidity	NTU	-	12.1	6.12	2.74	2.84

Notes:

Bold highlight indicate results that exceeded the applicable water c

¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

² Average Monthly TSS for May and June exceeded maximum average TSS concentration discharge limits.

Table 7.6.5: Water Quality Results for Water Licence Monitoring Location - LDFG-OUT

Location Name			LDFG-OUT	LDFG-OUT	LDFG-OUT	LDFG-OUT	LDFG-OUT	LDFG-OUT	LDFG-OUT	LDFG-OUT	LDFG-OUT
ALS Laboratory Sample ID			BF2400018	BF2400030	BF2400036	BF2400057	BF2400056	BF2400067	BF2400076	BF2400083	BF2400093
Sample Date & Time			2024-05-21 16:20	2024-05-23 13:50	2024-05-26 16:10	2024-05-29 10:40	2024-05-30 14:30	2024-06-03 14:45	2024-06-05 14:10	2024-06-06 10:35	2024-06-09 13:50
Analyte	Units	Water License Criteria ¹									
pH, Lab	pH units	6.0 - 9.5	6.93	6.83	7.20	7.29	7.39	7.41	7.50	7.31	7.62
Total Dissolved Solids	mg/L	-	42	50	43	32	39	40	45	< 20	70
Total Suspended Solids ²	mg/L	Grab 30, Average 15	74.5	7.0	39.5	5.5	2.0	16.1	6.2	2.4	1.3
Turbidity	NTU	-	139	26.7	77.3	25.7	19.4	88.7	29.8	13.7	18.1

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria
¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11
² Average Monthly TSS for May exceeded maximum average TSS concentration discharge limits.

Table 7.6.5: Water Quality Results for Water Licence Monitoring Location - LDFG-OUT

Location Name			LDFG-OUT	LDFG-OUT	LDFG-OUT	LDFG-OUT
ALS Laboratory Sample ID			BF2400104	BF2400121	BF2400142	BF2400150
Sample Date & Time			2024-06-12 10:25	2024-06-19 15:30	2024-06-26 15:05	2024-07-01 09:20
Analyte	Units	Water License Criteria ¹				
pH, Lab	pH units	6.0 - 9.5	7.49	7.66	7.92	8.10
Total Dissolved Solids	mg/L	-	98	109	127	133
Total Suspended Solids ²	mg/L	Grab 30, Average 15	1.3	4.8	1.2	1.0
Turbidity	NTU	-	8.72	10.0	4.08	3.04

Notes:
Bold highlight indicate results that exceeded the applicable water qu
¹ Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11
² Average Monthly TSS for May exceeded maximum average TSS concentration discharge limits.

Table 7.6.6: Water Quality Results for Water Licence Monitoring Location - LDFG-OUT

Location Name			SDLT-OUT	SDLT-OUT	SDLT-OUT	SDLT-OUT	SDLT-OUT	SDLT-OUT	SDLT-OUT	SDLT-OUT	SDLT-OUT
ALS Laboratory Sample ID			BF2400017	BF2400018	BF2400033	BF2400036	BF2400057	BF2400056	BF2400067	BF2400076	BF2400104
Sample Date & Time			2024-05-20 11:35	2024-05-21 16:45	2024-05-24 11:35	2024-05-26 14:10	2024-05-29 11:10	2024-05-30 15:00	2024-06-03 14:00	2024-06-05 15:45	2024-06-12 10:55
Analyte	Units	Water License Criteria ¹									
pH, Lab	pH units	6.0 - 9.5	7.05	7.23	6.95	7.31	7.34	7.38	7.55	7.46	7.34
Total Dissolved Solids	mg/L	-	74	119	123	160	66	54	92	84	120
Total Suspended Solids ²	mg/L	Grab 30, Average 15	79.5	294	45.0	268	47.7	8.0	46.7	10.2	17.1
Turbidity	NTU	-	197	344	31.4	315	49.4	22.1	114	23.8	29.9

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria
¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11
² Average Monthly TSS for May and June exceeded maximum average TSS concentration discharge limits.

Table 7.6.6: Water Quality Results for Water Licence Monitoring Location - LDFG-OUT

Location Name			SDLT-OUT	SDLT-OUT
ALS Laboratory Sample ID			BF2400121	BF2400142
Sample Date & Time			2024-06-19 16:00	2024-06-26 14:40
Analyte	Units	Water License Criteria ¹		
pH, Lab	pH units	6.0 - 9.5	7.66	7.49
Total Dissolved Solids	mg/L	-	113	145
Total Suspended Solids ²	mg/L	Grab 30, Average 15	6.8	1.6
Turbidity	NTU	-	11.5	4.26

Notes:
Bold highlight indicate results that exceeded the applicable water quality
¹Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11
² Average Monthly TSS for May and June exceeded maximum average TSS concentration discharge limits.

Table 7.7.1: Field QA/QC Water Quality Data Analysis - Field Duplicates - MP-01

Parameter	Sample ID		MP-01	QV-CC2	Relative Percent Difference (RPD)	MP-01	QV-CC1	Relative Percent Difference (RPD)
	ALS Laboratory Sample ID		WT2400074-001	WT2400074-004		WT2433232-004	WT2433232-005	
	Sample Date & Time		2024-01-02 13:30	2024-01-02 13:30		2024-11-05 14:00	2024-11-05 14:00	
	QA/QC Sample Type		N/A	Field Duplicate		N/A	Field Duplicate	
	Units	LOR						
pH, Lab	pH units	0.1	7.82	7.93	1.40%	7.81	7.85	0.51%
Total Suspended Solids	mg/L	1	1.5	2.8	60.50%	2	1.1	58.10%
Ammonia, Total (as N), T	mg/L	0.005	0.0385	0.0328	16.00%	0.0552	0.0635	14.00%
Total Kjeldahl Nitrogen	mg/L	0.05	<0.025	1.38	192.88%	0.783	1.05	29.10%
Phosphorus, Nutrient, T	mg/L	0.02	8.63	8.57	0.70%	6.08	6.1	0.30%
Fecal Coliforms	CFU/100 mL	1	37	45	19.50%	<0.5	<0.5	0.00%
BOD	mg/L	2	<1.0	2.5	50.00%	<1.0	<1	0.00%
Oil and Grease, Total	mg/L	5	<2.5	<2.5	0.00%	<2.5	<2.5	0.00%

Note:

Relative Percent Difference (RPD) for a parameter is calculated by dividing the absolute analytical result difference between the sample and its duplicate by the average of the two samples, and multiplying by 100.

Calculations of results below detection limits used the value of the detection limit.

RPD values exceeding 20% and greater than 10x LOR are bolded.

Table 7.7.2: Field QA/QC Water Quality Data Analysis - Field Duplicates - MP-01B

Parameter	Sample ID		MP-01B	QV-CC3	Relative Percent Difference (RPD)	MP-01B	QV-CC2	Relative Percent Difference (RPD)
	ALS Laboratory Sample ID		WT2400072-001	WT2400072-003		WT2433232-001	WT2433232-002	
	Sample Date & Time		2024-01-02 13:30	2024-01-02 13:30		2024-11-05 13:30	2024-11-05 13:30	
	QA/QC Sample Type		N/A	Field Duplicate		N/A	Field Duplicate	
	Units	LOR						
pH, Lab	pH units	0.1	7.39	7.24	2.05%	8.13	8.07	0.74%
Total Suspended Solids	mg/L	1	<0.50	<0.70	33.33%	<0.50	<0.5	0.00%
Ammonia, Total (as N), T	mg/L	0.005	0.016	0.0215	29.33%	0.0219	0.0272	21.59%
Total Kjeldahl Nitrogen	mg/L	0.05	0.494	0.498	0.81%	1.12	1.04	7.41%
Phosphorus, Nutrient, T	mg/L	0.02	8.05	8.05	0.00%	12	12	0.00%
Fecal Coliforms	CFU/100 mL	1	<0.5	<0.5	0.00%	1	1	0.00%
BOD	mg/L	2	<1.0	<1	0.00%	<1.0	<1	0.00%
Oil and Grease, Total	mg/L	5	<2.5	<2.5	0.00%	<2.5	<2.5	0.00%

Note:

Relative Percent Difference (RPD) for a parameter is calculated by dividing the absolute analytical result difference between the sample and its duplicate by the average of the two samples, and multiplying by 100.

Calculations of results below detection limits used the value of the detection limit.

RPD values exceeding 20% and greater than 10x LOR are bolded.

Table 7.7.3: Field QA/QC Water Quality Data Analysis - Field Duplicates - MP-03

Parameter	Sample ID		MP-03	QW-CC2	Relative Percent Difference (RPD)
	ALS Laboratory Sample ID		WT2416705-001	WT2416705-002	
	Sample Date & Time		2024-06-18 11:10	2024-06-18 11:10	
	QA/QC Sample Type		N/A	Field Duplicate	
	Units	LOR			
pH, Lab	pH units	0.1	8.03	8.18	1.85%
Total Suspended Solids	mg/L	1	4.4	3.7	17.28%
Ammonia, Total (as N), T	mg/L	0.005	0.113	0.113	0.00%
Phosphorus, Nutrient, T	mg/L	0.002	0.0072	0.007	2.82%
Arsenic - Total, T	mg/L	0.001	0.00032	0.00033	3.08%
Copper - Total, T	mg/L	0.005	0.0019	0.00198	4.12%
Lead - Total, T	mg/L	0.0005	0.0005	0.000504	0.80%
Nickel - Total, T	mg/L	0.005	0.00074	0.00067	9.93%
Zinc - Total, T	mg/L	0.03	0.0059	0.0058	1.71%
Oil and Grease, Total	mg/L	5	<2.5	<2.5	0.00%
Benzene	ug/L	0.5	<0.25	<0.25	0.00%
Ethylbenzene	ug/L	0.5	<0.25	<0.25	0.00%
Toluene	ug/L	0.5	<0.25	<0.25	0.00%
Total Xylenes	ug/L	0.5	<0.25	<0.25	0.00%
m+p-Xylenes	ug/L	0.4	<0.20	<0.2	0.00%
o-Xylene	ug/L	0.3	<0.15	<0.15	0.00%
F1-BTEX	ug/L	25	<13	<13	0.00%
F1 (C6-C10)	ug/L	25	<13	<13	0.00%
F2 (C10-C16)	ug/L	100	<50	<50	0.00%
F3 (C16-C34)	ug/L	250	<130	<130	0.00%
F4 (C34-C50)	ug/L	250	<130	<130	0.00%
Total Petroleum Hydrocarbons (C6-C50)	ug/L	370	<190	<190	0.00%

Note:

Relative Percent Difference (RPD) for a parameter is calculated by dividing the absolute analytical result difference between the sample and its duplicate by the average of the two samples, and multiplying by 100.

Calculations of results below detection limits used the value of the detection limit.

RPD values exceeding 20% and greater than 10x LOR are bolded.

Table 7.7.4: Field QA/QC Water Quality Data Analysis - Field Duplicates - MP-06

Parameter	Sample ID		MP-06	QP-CC2	Relative Percent Difference (RPD)
	ALS Laboratory Sample ID		WT2418957-001	WT2418957-002	
	Sample Date & Time		2024-07-08 10:00	2024-07-08 10:00	
	QA/QC Sample Type		N/A	Field Duplicate	
	Units	LOR			
Hardness (as CaCO3)	mg/L	0.50	173	173	0.00%
pH	pH units	0.10	8.20	8.06	1.72%
Total Suspended Solids	mg/L	1.0	1.4	1.0	33.33%
Total Dissolved Solids	mg/L	20	267	270	1.12%
Turbidity	NTU	0.10	6.78	6.55	3.45%
Alkalinity, Total (as CaCO3)	mg/L	1.0	76	75	0.66%
Ammonia, Total (as N)	mg/L	0.020	0.038	0.010	118.47%
Chloride (Cl)	mg/L	0.50	75	76	0.13%
Fluoride (F)	mg/L	0.020	0.128	0.129	0.78%
Nitrate (as N)	mg/L	0.020	0.85	0.82	2.76%
Total Kjeldahl Nitrogen	mg/L	0.050	0.23	0.24	6.87%
Phosphorus, Total	mg/L	0.0030	0.0032	0.0032	0.00%
Sulfate (SO4)	mg/L	0.30	57	58	0.17%
Dissolved Organic Carbon	mg/L	0.50	4.32	7.29	51.16%
Total Organic Carbon	mg/L	0.50	3.82	3.81	0.26%
Aluminum (Al)-Total	mg/L	0.0050	0.0567	0.0556	1.96%
Arsenic (As)-Total	mg/L	0.00010	0.00019	0.00019	0.00%
Cadmium (Cd)-Total	mg/L	0.0000050	<0.0000025	<0.0000025	0.00%
Calcium (Ca)-Total	mg/L	0.050	36.6	36.8	0.54%
Copper (Cu)-Total	mg/L	0.00050	0.00076	0.00078	2.60%
Iron (Fe)-Total	mg/L	0.010	0.085	0.084	1.18%
Lead (Pb)-Total	mg/L	0.000050	<0.000025	0.000051	68.42%
Magnesium (Mg)-Total	mg/L	0.0005	19.8	19.8	0.00%
Manganese (Mn)-Total	mg/L	0.00050	0.0	0.0	1.15%
Mercury (Hg)-Total	mg/L	0.0000050	<0.0000025	<0.0000025	0.00%
Molybdenum (Mo)-Total	mg/L	0.000050	0.00357	0.00376	5.18%
Nickel (Ni)-Total	mg/L	0.00050	0.00067	0.00083	21.33%
Potassium (K)-Total	mg/L	0.050	4.7	4.7	0.64%
Selenium (Se)-Total	mg/L	0.000050	0.000151	0.000147	2.68%
Sodium (Na)-Total	mg/L	0.050	31.1	31.0	0.32%
Thallium (Tl)-Total	mg/L	0.000010	0.000019	0.000018	5.41%
Uranium (U)-Total	mg/L	0.000010	0.045	0.044	2.27%
Zinc (Zn)-Total	mg/L	0.0030	<0.0015	0.0083	138.78%
Aluminum (Al)-Dissolved	mg/L	0.0050	0.0159	0.0163	2.48%
Arsenic (As)-Dissolved	mg/L	0.00010	0.00017	0.00019	11.11%
Cadmium (Cd)-Dissolved	mg/L	0.0000050	<0.0000025	<0.0000025	0.00%
Calcium (Ca)-Dissolved	mg/L	0.050	37.4	37.7	0.80%
Copper (Cu)-Dissolved	mg/L	0.00020	0.00067	0.00067	0.00%
Iron (Fe)-Dissolved	mg/L	0.010	<0.0050	<0.005	0.00%
Lead (Pb)-Dissolved	mg/L	0.000050	<0.000025	<0.000025	0.00%
Magnesium (Mg)-Dissolved	mg/L	0.0050	19.6	19.9	1.52%
Manganese (Mn)-Dissolved	mg/L	0.00050	0.0303	0.0312	2.93%
Mercury (Hg)-Dissolved	mg/L	0.0000050	<0.0000025	<0.0000025	0.00%
Molybdenum (Mo)-Dissolved	mg/L	0.000050	0.00366	0.00395	7.62%
Nickel (Ni)-Dissolved	mg/L	0.00050	0.00052	0.0007	29.51%
Potassium (K)-Dissolved	mg/L	0.050	4.7	4.8	2.12%
Selenium (Se)-Dissolved	mg/L	0.000050	0.000166	0.000144	14.19%
Sodium (Na)-Dissolved	mg/L	0.050	30.6	31.1	1.62%
Thallium (Tl)-Dissolved	mg/L	0.000010	0.000017	0.000017	0.00%
Uranium (U)-Dissolved	mg/L	0.000010	0.042	0.042	0.00%
Zinc (Zn)-Dissolved	mg/L	0.0010	0.0022	0.0078	112.00%
Oil and Grease, Total	mg/L	-	-	-	-

Note:
Relative Percent Difference (RPD) for a parameter is calculated by dividing the absolute analytical result difference between the sample and its duplicate by the average of the two samples, and multiplying by 100.
Calculations of results below detection limits used the value of the detection limit.
RPD values exceeding 20% and greater than 10x LOR are bolded.

Table 7.7.5: Field QA/QC Water Quality Data Analysis - Field Duplicates - MP-C-B

Parameter	Sample ID		MP-C-B	QD-CC8	Relative Percent Difference (RPD)	MP-C-B	QD-CC8	Relative Percent Difference (RPD)	MP-C-B	QD-CC8	Relative Percent Difference (RPD)
	ALS Laboratory Sample ID		BF2400025-001	BF2400025-002		BF2400037-001	BF2400037-002		WT2418945-002	WT2418945-003	
	Sample Date & Time		2024-05-22 11:25	2024-05-22 11:25		2024-05-26 16:45	2024-05-26 16:45		2024-07-08 09:25	2024-07-08 09:25	
	QA/QC Sample Type		N/A	Field Duplicate		N/A	Field Duplicate		N/A	Field Duplicate	
	Units	LOR									
Conductivity	umhos/cm	1	420	417	0.72%	-	-	-	326	327	0.31%
pH, Lab	pH units	0.1	7.79	7.82	0.38%	7.81	7.87	0.77%	8.33	8.34	0.12%
Total Suspended Solids	mg/L	1.5	16.9	16.3	3.61%	36.5	35.5	2.78%	2.1	3.2	41.51%
Total Dissolved Solids	mg/L	20	278	267	4.04%	252	253	0.40%	175	178	1.70%
Turbidity	NTU	0.1	101	99.5	1.50%	56.5	52.7	6.96%	4.98	5.97	18.08%
Ammonia, Total (as N), T	mg/L	0.01	0.654	0.684	4.48%	-	-	-	0.137	0.149	8.39%
Nitrate	mg/L	0.02	0.668	0.654	2.12%	-	-	-	3.22	3.25	0.93%
Oil and Grease, Total	mg/L	5	<2.5	<2.5	0.00%	-	-	-	<2.5	<2.5	0.00%

Note:

Relative Percent Difference (RPD) for a parameter is calculated by dividing the absolute analytical result difference between the sample and its duplicate by the average of the two samples, and multiplying by 100.

Calculations of results below detection limits used the value of the detection limit.

RPD values exceeding 20% and greater than 10x LOR are bolded.

Table 7.7.5: Field QA/QC Water Quality Data Analysis - Field Duplicates - MP-C-B

Parameter	Sample ID		MP-C-B	QD-CC3	Relative Percent Difference (RPD)	MP-C-B	QD-CC2	Relative Percent Difference (RPD)	MP-C-B	QD-CC8	Relative Percent Difference (RPD)
	ALS Laboratory Sample ID		BF2400292-005	BF2400292-002		BF2400354-003	BF2400354-004		BF2400383-002	BF2400383-003	
	Sample Date & Time		2024-08-26 13:30	2024-08-26 13:30		2024-09-23 09:30	2024-09-23 09:30		2024-10-06 09:55	2024-10-06 09:55	
	QA/QC Sample Type		N/A	Field Duplicate		N/A	Field Duplicate		N/A	Field Duplicate	
	Units	LOR									
Conductivity	umhos/cm	1	-	-	-	-	-	-	502	498	0.80%
pH, Lab	pH units	0.1	8.05	8.05	0.00%	8.02	8.08	0.75%	8.06	8.07	0.12%
Total Suspended Solids	mg/L	1.5	2.2	<0.5	125.93%	4.5	4.8	6.45%	5.8	7	18.75%
Total Dissolved Solids	mg/L	20	272	150	57.82%	278	283	1.78%	302	310	2.61%
Turbidity	NTU	0.1	8.98	0.48	179.70%	13.1	15.4	16.14%	25.7	24.9	3.16%
Ammonia, Total (as N), T	mg/L	0.01	-	-	-	-	-	-	0.197	0.195	1.02%
Nitrate	mg/L	0.02	-	-	-	-	-	-	2.56	2.57	0.39%
Oil and Grease, Total	mg/L	5	-	-	-	-	-	-	<2.5	<2.5	0.00%

Note:

Relative Percent Difference (RPD) for a parameter is calculated by dividing the absolute analytical result difference between the sample and its duplicate by the average of the two samples, and multiplying by 100.

Calculations of results below detection limits used the value of the detection limit.

RPD values exceeding 20% and greater than 10x LOR are bolded.

Table 7.7.6: Field QA/QC Water Quality Data Analysis - Field Duplicates - MP-C-H

Parameter	Sample ID		MP-C-H	QP-CC3	Relative Percent Difference (RPD)	MP-C-H	QP-CC3	Relative Percent Difference (RPD)	MP-C-H	QP-CC3	Relative Percent Difference (RPD)
	ALS Laboratory Sample ID		BF2400133-001	BF2400133-002		BF2400148-001	BF2400148-002		BF2400211-001	BF2400211-002	
	Sample Date & Time		2024-06-23 07:05	2024-06-23 07:05		2024-06-30 12:45	2024-06-30 12:45		2024-07-29 08:15	2024-07-29 08:15	
	QA/QC Sample Type		N/A	Field Duplicate		N/A	Field Duplicate		N/A	Field Duplicate	
	Units	LOR									
pH, Lab	pH units	0.1	7.97	7.83	1.77%	7.66	7.8	1.81%	8.05	8.06	0.12%
Total Suspended Solids	mg/L	1	<0.50	<0.5	0.00%	<0.50	<0.5	0.00%	<0.50	<0.5	0.00%
Total Dissolved Solids	mg/L	19	71	60	16.79%	79	71	10.67%	154	160	3.82%
Turbidity	NTU	0.1	0.43	0.43	0.00%	0.31	0.16	63.83%	0.7	0.7	0.00%

Note:
Relative Percent Difference (RPD) for a parameter is calculated by dividing the absolute analytical result difference between the sample and its duplicate by the average of the two samples, and multiplying by 100.
Calculations of results below detection limits used the value of the detection limit.
RPD values exceeding 20% and greater than 10x LOR are bolded.

Table 7.7.6: Field QA/QC Water Quality Data Analysis - Field Duplicates - MP-C-H

Parameter	Sample ID		MP-C-H	QP-CC3	Relative Percent Difference (RPD)
	ALS Laboratory Sample ID		BF2400269	BF2400269	
	Sample Date & Time		2024-08-18 08:05	2024-08-18 08:05	
	QA/QC Sample Type		N/A	Field Duplicate	
	Units	LOR			
pH, Lab	pH units	0.1	8.03	8.08	0.62%
Total Suspended Solids	mg/L	1	<0.50	<0.5	0.00%
Total Dissolved Solids	mg/L	19	188	190	1.06%
Turbidity	NTU	0.1	0.27	0.15	57.14%

Note:
Relative Percent Difference (RPD) for a parameter is calculated by dividing the absolute analytical result difference between the sample and its duplicate by the average of the two samples, and multiplying by 100.
Calculations of results below detection limits used the value of the detection limit.
RPD values exceeding 20% and greater than 10x LOR are bolded.

Table 7.7.7: Field QA/QC Water Quality Data Analysis - Field Duplicates - MP-C-J

Parameter	Sample ID		MP-C-J	QP-CC7	Relative Percent Difference (RPD)	MP-C-J	QP-CC3	Relative Percent Difference (RPD)
	ALS Laboratory Sample ID		WT2422925-002	WT2422925-003		BF2400366-003	BF2400366-004	
	Sample Date & Time		2024-08-04 13:25	2024-08-04 13:25		2024-09-30 16:00	2024-09-30 16:00	
	QA/QC Sample Type		N/A	Field Duplicate		N/A	Field Duplicate	
	Units	LOR						
Conductivity	umhos/cm	1	423	423	0.00%	-	-	-
pH, Lab	pH units	0.1	8.35	8.24	1.33%	8.01	7.97	0.50%
Total Suspended Solids	mg/L	1	<0.50	<0.5	0.00%	<0.50	<0.5	0.00%
Total Dissolved Solids	mg/L	20	217	210	3.28%	214	237	10.20%
Turbidity	NTU	0.1	0.14	0.16	13.33%	0.46	0.45	2.20%
Ammonia, Total (as N), T	mg/L	0.005	0.0713	0.0131	137.91%	-	-	-
Nitrate	mg/L	0.02	0.065	0.065	0.00%	-	-	-
Oil and Grease, Total	mg/L	5	<2.5	<2.5	0.00%	-	-	-

Note:

Relative Percent Difference (RPD) for a parameter is calculated by dividing the absolute analytical result difference between the sample and its duplicate by the average of the two samples, and multiplying by 100.

Calculations of results below detection limits used the value of the detection limit.

RPD values exceeding 20% and greater than 10x LOR are bolded.

Table 7.7.8: Field QA/QC Water Quality Data Analysis - Field Duplicates - MP-C-K

Parameter	Sample ID		MP-C-K	QW-CC1	Relative Percent Difference (RPD)	MP-C-K	QD-CC8	Relative Percent Difference (RPD)	MP-C-K	QP-CC3	Relative Percent Difference (RPD)
	ALS Laboratory Sample ID		WT2414190-001	WT2414190-002		BF2400068-002	BF2400068-003		BF2400119-004	BF2400119-005	
	Sample Date & Time		2024-05-28 09:30	2024-05-28 09:30		2024-06-02 14:40	2024-06-02 14:40		2024-06-17 09:35	2024-06-17 09:35	
	QA/QC Sample Type		N/A	Field Duplicate		N/A	Field Duplicate		N/A	Field Duplicate	
	Units	LOR									
Conductivity	umhos/cm	1	364	364	0	332	332	0.00%	-	-	-
pH, Lab	pH units	0.1	8.13	8.08	0.62%	7.97	7.97	0.00%	8.05	8.04	0.12%
Total Suspended Solids	mg/L	1	8.8	6.2	34.67%	1.5	1.8	18.18%	1.4	1.7	19.35%
Total Dissolved Solids	mg/L	17	207	211	1.91%	181	179	1.11%	172	176	2.30%
Turbidity	NTU	0.1	17.6	17.8	1.13%	9.76	10.1	3.42%	5.93	5.79	2.39%
Ammonia, Total (as N), T	mg/L	0.005	0.134	0.134	0	0.0098	0.0105	6.90%	-	-	-
Nitrate	mg/L	0.02	0.285	0.285	0	0.2	0.198	1.01%	-	-	-
Oil and Grease, Total	mg/L	5	<2.5	<2.5	0	<2.5	<2.5	0.00%	-	-	-

Note:
Relative Percent Difference (RPD) for a parameter is calculated by dividing the absolute analytical result difference between the sample and its duplicate by the average of the two samples, and multiplying by 100.
Calculations of results below detection limits used the value of the detection limit.
RPD values exceeding 20% and greater than 10x LOR are bolded.

Table 7.7.9: Field QA/QC Water Quality Data Analysis - Field Duplicates - MP-C-K

Parameter	Sample ID		MP-C-K	QP-CC3	Relative Percent Difference (RPD)
	ALS Laboratory Sample ID		BF2400331-002	BF2400331-003	
	Sample Date & Time		2024-09-08 10:10	2024-09-08 10:10	
	QA/QC Sample Type		N/A	Field Duplicate	
	Units	LOR			
Conductivity	umhos/cm	1	-	-	-
pH, Lab	pH units	0.1	8.07	8.09	0.25%
Total Suspended Solids	mg/L	1	<0.50	1	66.67%
Total Dissolved Solids	mg/L	17	821	820	0.12%
Turbidity	NTU	0.1	0.42	0.48	13.33%
Ammonia, Total (as N), T	mg/L	0.005	-	-	-
Nitrate	mg/L	0.02	-	-	-
Oil and Grease, Total	mg/L	5	-	-	-

Note:
Relative Percent Difference (RPD) for a parameter is calculated by dividing the absolute analytical result difference between the sample and its duplicate by the average of the two samples, and multiplying by 100.
Calculations of results below detection limits used the value of the detection limit.
RPD values exceeding 20% and greater than 10x LOR are bolded.

Table 7.7.9: Field QA/QC Water Quality Data Analysis - Field Duplicates - MP-Q1-01

Parameter	Sample ID		MP-Q1-01	QP-CC3	Relative Percent Difference (RPD)
	ALS Laboratory Sample ID		BF2400187-003	BF2400187-004	
	Sample Date & Time		2024-07-15 12:05	2024-07-15 12:05	
	QA/QC Sample Type		N/A	Field Duplicate	
	Units	LOR			
pH, Lab	pH units	0.1	8	7.92	1.01%
Total Suspended Solids	mg/L	1.6	<0.50	<0.5	0.00%
Total Dissolved Solids	mg/L	17	105	110	4.65%
Turbidity	NTU	0.1	2.85	2.9	1.74%

Note:

Relative Percent Difference (RPD) for a parameter is calculated by dividing the absolute analytical result difference between the sample and its duplicate by the average of the two samples, and multiplying by 100.

Calculations of results below detection limits used the value of the detection limit.

RPD values exceeding 20% and greater than 10x LOR are bolded.

Table 7.7.10: Field QA/QC Water Quality Data Analysis - Field Duplicates - MP-Q1-02

Parameter	Sample ID		MP-Q1-02	QP-CC3	Relative Percent Difference (RPD)	MP-Q1-02	QP-CC3	Relative Percent Difference (RPD)	MP-Q1-02	QP-CC3	Relative Percent Difference (RPD)
	ALS Laboratory Sample ID		BF2400201-001	BF2400201-002		BF2400244-006	BF2400244-007		WT2427676-001	WT2427676-002	
	Sample Date & Time		2024-07-22 15:00	2024-07-22 15:00		2024-08-11 09:00	2024-08-11 09:00		2024-09-15 09:35	2024-09-15 09:35	
	QA/QC Sample Type		N/A	Field Duplicate		N/A	Field Duplicate		N/A	Field Duplicate	
	Units	LOR									
pH, Lab	pH units	0.1	7.89	7.88	0.13%	8.04	8.07	0.37%	8.4	8.1	3.64%
Total Suspended Solids	mg/L	1.6	<0.50	<0.5	0.00%	<0.50	<0.5	0.00%	1	1.1	9.52%
Total Dissolved Solids	mg/L	20	295	338	13.59%	364	353	3.07%	284	285	0.35%
Turbidity	NTU	0.1	0.8	0.74	7.79%	1.22	1.24	1.63%	0.96	1.03	7.04%

Note:
Relative Percent Difference (RPD) for a parameter is calculated by dividing the absolute analytical result difference between the sample and its duplicate by the average of the two samples, and multiplying by 100.
Calculations of results below detection limits used the value of the detection limit.
RPD values exceeding 20% and greater than 10x LOR are bolded.

Table 7.7.11: Field QA/QC Water Quality Data Analysis - Field Duplicates - MS-01

Parameter	Sample ID		MS-01	QW-CC3	Relative Percent Difference (RPD)	MS-01	QW-CC1	Relative Percent Difference (RPD)
	ALS Laboratory Sample ID		BF2400102-007	BF2400102-008		WT2433250-001	WT2433250-002	
	Sample Date & Time		2024-06-11 13:40	2024-06-11 13:40		2024-11-05 14:20	2024-11-05 14:20	
	QA/QC Sample Type		N/A	Field Duplicate		N/A	Field Duplicate	
	Units	LOR						
pH, Lab	pH units	0.1	7.18	6.84	4.85%	8.34	8.24	1.21%
Total Suspended Solids	mg/L	1	4.9	3.7	27.91%	2.9	2.3	23.08%
Ammonia, Total (as N), T	mg/L	0.05	2.18	2.29	4.92%	0.047	0.0493	4.78%
Total Kjeldahl Nitrogen	mg/L	0.5	6.78	6.29	7.50%	3.5	0.322	166.30%
Phosphorus, Nutrient, T	mg/L	0.002	0.19	0.205	7.59%	0.366	0.366	0.00%
Fecal Coliforms	CFU/100 mL	1	<0.5	<0.5	0.00%	<0.5	1	66.67%
BOD	mg/L	2	<1.5	<1.5	0.00%	<1.0	<1	0.00%
Oil and Grease, Total	mg/L	5	<2.5	<2.5	0.00%	<2.5	<2.5	0.00%

Note:

Relative Percent Difference (RPD) for a parameter is calculated by dividing the absolute analytical result difference between the sample and its duplicate by the average of the two samples, and multiplying by 100.

Calculations of results below detection limits used the value of the detection limit.

RPD values exceeding 20% and greater than 10x LOR are bolded.

Table 7.7.12: Field QA/QC Water Quality Data Analysis - Field Duplicates - MS-01B

Parameter	Sample ID		MS-01B	QW-CC1	Relative Percent Difference (RPD)	MS-01B	QW-CC4	Relative Percent Difference (RPD)	MS-01B	QW-CC2	Relative Percent Difference (RPD)
	ALS Laboratory Sample ID		WT2400075-001	WT2400075-003		BF2400102-001	BF2400102-002		WT2433250-004	WT2433250-005	
	Sample Date & Time		2024-01-02 15:30	2024-01-02 15:30		2024-06-11 13:05	2024-06-11 13:05		2024-11-05 14:45	2024-11-05 14:45	
	QA/QC Sample Type		N/A	Field Duplicate		N/A	Field Duplicate		N/A	Field Duplicate	
	Units	LOR									
pH, Lab	pH units	0.1	8.14	8.04	1.24%	7.68	7.64	0.52%	8.29	8.29	0.00%
Total Suspended Solids	mg/L	1	1.7	1.7	0.00%	3.2	1.9	50.98%	1.2	1	18.18%
Ammonia, Total (as N), T	mg/L	0.005	0.242	0.249	2.85%	0.0648	0.0638	1.56%	0.0291	0.0161	57.52%
Total Kjeldahl Nitrogen	mg/L	0.05	1.3	1.18	9.68%	1.46	1.55	5.98%	0.937	0.89	5.15%
Phosphorus, Nutrient, T	mg/L	0.002	0.867	0.894	3.07%	14	17	19.35%	0.139	0.133	4.41%
Fecal Coliforms	CFU/100 mL	1	98	14	150.00%	<1.5	<1.5	0.00%	<0.5	<0.5	0.00%
BOD	mg/L	2	<1.0	<1	0.00%	<2.5	<2.5	0.00%	<1.0	<1	0.00%
Oil and Grease, Total	mg/L	5	<2.5	<2.5	0.00%	0.121	0.118	2.51%	<2.5	<2.5	0.00%

Note:

Relative Percent Difference (RPD) for a parameter is calculated by dividing the absolute analytical result difference between the sample and its duplicate by the average of the two samples, and multiplying by 100.

Calculations of results below detection limits used the value of the detection limit.

RPD values exceeding 20% and greater than 10x LOR are bolded.

Table 7.7.13: Field QA/QC Water Quality Data Analysis - Field Duplicates - MS-C-A

Parameter	Sample ID		MS-C-A	QD-CC7	Relative Percent Difference (RPD)
	ALS Laboratory Sample ID		BF2400155-007	BF2400155-008	
	Sample Date & Time		2024-07-01 13:10	2024-07-01 13:10	
	QA/QC Sample Type		N/A	Field Duplicate	
	Units	LOR			
Conductivity	umhos/cm	1	346	346	0.00%
pH, Lab	pH units	0.1	7.8	7.7	1.29%
Total Suspended Solids	mg/L	1	1.5	1.2	22.22%
Total Dissolved Solids	mg/L	18	196	200	2.02%
Turbidity	NTU	0.1	1.62	1.6	1.24%
Ammonia, Total (as N), T	mg/L	0.005	0.027	0.0276	2.20%
Nitrate	mg/L	0.02	2.79	2.83	1.42%
Oil and Grease, Total	mg/L	5	<2.5	<2.5	0.00%

Note:

Relative Percent Difference (RPD) for a parameter is calculated by dividing the absolute analytical result difference between the sample and its duplicate by the average of the two samples, and multiplying by 100.

Calculations of results below detection limits used the value of the detection limit.

RPD values exceeding 20% and greater than 10x LOR are bolded.

Table 7.7.14: Field QA/QC Water Quality Data Analysis - Field Duplicates - MS-C-B

Parameter	Sample ID		MS-C-B	QD-CC1	Relative Percent Difference (RPD)	MS-C-B	QD-CC1	Relative Percent Difference (RPD)
	ALS Laboratory Sample ID		BF2400114-006	BF2400114-007		BF2400324-011	BF2400324-012	
	Sample Date & Time		2024-06-16 12:00	2024-06-16 12:00		2024-09-09 09:35	2024-09-09 09:35	
	QA/QC Sample Type		N/A	Field Duplicate		N/A	Field Duplicate	
	Units	LOR						
pH, Lab	pH units	0.1	7.61	7.58	0.40%	7.8	7.76	0.51%
Total Suspended Solids	mg/L	1	19.5	37.4	62.92%	4.8	4.8	0.00%
Total Dissolved Solids	mg/L	14	177	172	2.87%	320	321	0.31%
Turbidity	NTU	0.1	13.3	28.8	73.63%	8.84	8.37	5.46%

Note:

Relative Percent Difference (RPD) for a parameter is calculated by dividing the absolute analytical result difference between the sample and its duplicate by the average of the two samples, and multiplying by 100.

Calculations of results below detection limits used the value of the detection limit.

RPD values exceeding 20% and greater than 10x LOR are bolded.

Table 7.7.15: Field QA/QC Water Quality Data Analysis - Field Duplicates - MS-C-C

Parameter	Sample ID		MS-C-C	QD-CC1	Relative Percent Difference (RPD)
	ALS Laboratory Sample ID		BF2400207-010	BF2400207-011	
	Sample Date & Time		2024-07-28 16:00	2024-07-28 16:00	
	QA/QC Sample Type		N/A	Field Duplicate	
	Units	LOR			
pH, Lab	pH units	0.1	8	7.98	0.25%
Total Suspended Solids	mg/L	1	3.1	3.5	12.12%
Total Dissolved Solids	mg/L	14	496	502	1.20%
Turbidity	NTU	0.1	9.22	9.74	5.49%

Note:

Relative Percent Difference (RPD) for a parameter is calculated by dividing the absolute analytical result difference between the sample and its duplicate by the average of the two samples, and multiplying by 100.

Calculations of results below detection limits used the value of the detection limit.

RPD values exceeding 20% and greater than 10x LOR are bolded.

Table 7.7.16: Field QA/QC Water Quality Data Analysis - Field Duplicates - MS-C-E

Parameter	Sample ID		MS-C-E	QD-CC7	Relative Percent Difference (RPD)
	ALS Laboratory Sample ID		BF2400052-006	BF2400052-007	
	Sample Date & Time		2024-05-30 13:00	2024-05-30 13:00	
	QA/QC Sample Type		N/A	Field Duplicate	
	Units	LOR			
Conductivity	umhos/cm	1	164	163	0.61%
pH, Lab	pH units	0.1	7.59	7.62	0.39%
Total Suspended Solids	mg/L	1	3.8	3.7	2.67%
Total Dissolved Solids	mg/L	20	111	104	6.51%
Turbidity	NTU	0.1	36.9	37	0.27%
Ammonia, Total (as N), T	mg/L	0.005	0.107	0.102	4.78%
Nitrate	mg/L	0.02	0.434	0.429	1.16%
Oil and Grease, Total	mg/L	5	<2.5	<2.5	0.00%

Note:

Relative Percent Difference (RPD) for a parameter is calculated by dividing the absolute analytical result difference between the sample and its duplicate by the average of the two samples, and multiplying by 100.

Calculations of results below detection limits used the value of the detection limit.

RPD values exceeding 20% and greater than 10x LOR are bolded.

Table 7.7.17: Field QA/QC Water Quality Data Analysis - Field Duplicates - MS-C-F

Parameter	Sample ID		MS-C-F	QD-CC1	Relative Percent Difference (RPD)
	ALS Laboratory Sample ID		BF2400137-008	BF2400137-009	
	Sample Date & Time		2024-06-23 15:55	2024-06-23 15:55	
	QA/QC Sample Type		N/A	Field Duplicate	
	Units	LOR			
pH, Lab	pH units	0.1	7.92	7.64	3.60%
Total Suspended Solids	mg/L	1	1.8	2.8	43.48%
Total Dissolved Solids	mg/L	19	164	167	1.81%
Turbidity	NTU	0.1	6.94	7.41	6.55%

Note:

Relative Percent Difference (RPD) for a parameter is calculated by dividing the absolute analytical result difference between the sample and its duplicate by the average of the two samples, and multiplying by 100.

Calculations of results below detection limits used the value of the detection limit.

RPD values exceeding 20% and greater than 10x LOR are bolded.

Table 7.7.18: Field QA/QC Water Quality Data Analysis - Field Duplicates - MS-C-G

Parameter	Sample ID		MS-C-G	QD-CC1	Relative Percent Difference (RPD)	MS-C-G	QD-CC1	Relative Percent Difference (RPD)
	ALS Laboratory Sample ID		BF2400185-013	BF2400185-014		BF2400270-007	BF2400270-008	
	Sample Date & Time		2024-07-14 13:55	2024-07-14 13:55		2024-08-19 14:05	2024-08-19 14:05	
	QA/QC Sample Type		N/A	Field Duplicate		N/A	Field Duplicate	
	Units	LOR						
pH, Lab	pH units	0.1	7.8	7.7	1.29%	7.55	7.75	2.61%
Total Suspended Solids	mg/L	1	<0.50	<0.50	0.00%	<0.50	<0.50	0.00%
Total Dissolved Solids	mg/L	21	121	121	0.00%	189	193	2.09%
Turbidity	NTU	0.1	0.15	<0.05	100.00%	0.11	<0.05	75.00%

Note:

Relative Percent Difference (RPD) for a parameter is calculated by dividing the absolute analytical result difference between the sample and its duplicate by the average of the two samples, and multiplying by 100.

Calculations of results below detection limits used the value of the detection limit.

RPD values exceeding 20% and greater than 10x LOR are bolded.

Table 7.7.19: Field QA/QC Water Quality Data Analysis - Field Duplicates - MS-C-H

Parameter	Sample ID		MS-C-H	QD-CC1	Relative Percent Difference (RPD)	MS-C-H	QD-CC1	Relative Percent Difference (RPD)
	ALS Laboratory Sample ID		BF2400096-004	BF2400096-005		BF2400247-004	BF2400247-005	
	Sample Date & Time		2024-06-09 09:45	2024-06-09 09:45		2024-08-11 11:20	2024-08-11 11:20	
	QA/QC Sample Type		N/A	Field Duplicate		N/A	Field Duplicate	
	Units	LOR						
pH, Lab	umhos/cm	0.1	7.27	7.25	0.28%	8.06	8.14	0.99%
Total Suspended Solids	pH units	1.4	1.2	1	18.18%	<0.50	<0.5	0.00%
Total Dissolved Solids	mg/L	19	48	62	25.45%	158	162	2.50%
Turbidity	mg/L	0.1	5.94	5.92	0.34%	0.23	0.2	13.95%

Note:
Relative Percent Difference (RPD) for a parameter is calculated by dividing the absolute analytical result difference between the sample and its duplicate by the average of the two samples, and multiplying by 100.
Calculations of results below detection limits used the value of the detection limit.
RPD values exceeding 20% and greater than 10x LOR are bolded.

Table 7.7.20: Field QA/QC Water Quality Data Analysis - Field Duplicates - MS-MRY-09

Parameter	Sample ID		MS-MRY-09	QD-CC8	Relative Percent Difference (RPD)
	ALS Laboratory Sample ID		BF2400069-001	BF2400069-002	
	Sample Date & Time		2024-06-04 11:05	2024-06-04 11:05	
	QA/QC Sample Type		N/A	Field Duplicate	
	Units	LOR			
Hardness	mg/L	0.5	21.3	21.4	0.47%
pH, Lab	pH units	0.1	7.19	7.23	0.55%
Total Suspended Solids	mg/L	1	<0.55	<0.5	9.52%
Total Dissolved Solids	mg/L	21	35	37	5.56%
Turbidity	NTU	0.1	2.31	2.3	0.43%
Alkalinity, Total	mg/L	2	22.4	22.8	1.77%
Ammonia, Total (as N), T	mg/L	0.005	<0.0025	<0.0025	0.00%
Chloride, D	mg/L	0.5	1.46	1.26	14.71%
Fluoride	mg/L	0.02	<0.010	<0.01	0.00%
Nitrate	mg/L	0.02	0.023	0.02	13.95%
Total Kjeldahl Nitrogen	mg/L	0.05	0.143	0.125	13.43%
Sulfate, D	mg/L	0.3	1.42	0.66	73.08%
Dissolved Organic Carbon, D	mg/L	0.5	2.44	2.12	14.04%
Total Organic Carbon, T	mg/L	0.5	2.84	2.77	2.50%
Phosphorus, Nutrient, T	mg/L	0.002	0.0072	0.0066	8.70%
Phenols	ug/L	1	<0.50	<0.5	0.00%
Aluminum - Total, T	mg/L	0.003	0.0606	0.0596	1.66%
Antimony - Total, T	mg/L	0.0001	<0.000050	<0.000050	0.00%
Arsenic - Total, T	mg/L	0.0001	<0.000050	<0.000050	0.00%
Barium - Total, T	mg/L	0.0001	0.004	0.00389	2.79%
Cadmium - Total, T	mg/L	0.000005	0.0000051	0.0000066	25.64%
Calcium - Total, T	mg/L	0.05	4.18	3.99	4.65%
Chromium - Total, T	mg/L	0.0005	0.00152	<0.00025	143.50%
Cobalt - Total, T	mg/L	0.0001	<0.000050	<5e-005	0.00%
Copper - Total, T	mg/L	0.0005	0.00089	0.00091	2.22%
Iron - Total, T	mg/L	0.01	0.084	0.075	11.32%
Lead - Total, T	mg/L	0.00005	0.000058	0.000056	3.51%
Lithium - Total, T	mg/L	0.001	<0.00050	<0.0005	0.00%
Magnesium - Total, T	mg/L	0.005	2.64	2.78	5.17%
Manganese - Total, T	mg/L	0.0001	0.00223	0.00222	0.45%
Mercury - Total, T	mg/L	0.000005	<0.0000025	<0.0000025	0.00%
Molybdenum - Total, T	mg/L	0.00005	0.000229	0.000151	41.05%
Nickel - Total, T	mg/L	0.0005	<0.00025	<0.00025	0.00%
Phosphorus, Total, T	mg/L	0.05	<0.025	<0.025	0.00%
Potassium - Total, T	mg/L	0.05	0.881	0.874	0.80%
Selenium - Total, T	mg/L	0.00005	<0.000025	<0.000025	0.00%
Sodium - Total, T	mg/L	0.05	0.34	0.329	3.29%
Strontium - Total, T	mg/L	0.0002	0.00252	0.00252	0.00%

Table 7.7.20: Field QA/QC Water Quality Data Analysis - Field Duplicates - MS-MRY-09

Parameter	Sample ID		MS-MRY-09	QD-CC8	Relative Percent Difference (RPD)
	ALS Laboratory Sample ID		BF2400069-001	BF2400069-002	
	Sample Date & Time		2024-06-04 11:05	2024-06-04 11:05	
	QA/QC Sample Type		N/A	Field Duplicate	
	Units	LOR			
Thallium - Total, T	mg/L	0.00001	<0.0000050	<0.0000050	0.00%
Tin - Total, T	mg/L	0.0001	<0.000050	<0.000050	0.00%
Titanium - Total, T	mg/L	0.0003	0.00189	0.00201	6.15%
Uranium - Total, T	mg/L	0.00001	0.000097	0.000095	2.08%
Vanadium - Total, T	mg/L	0.0005	<0.00025	<0.00025	0.00%
Zinc - Total, T	mg/L	0.003	<0.0015	<0.0015	0.00%
Aluminum - Dissolved, D	mg/L	0.001	0.0113	0.0107	5.45%
Arsenic - Dissolved, D	mg/L	0.0001	<0.000050	<0.000050	0.00%
Cadmium - Dissolved, D	mg/L	0.000005	0.0000053	0.0000052	1.90%
Calcium - Dissolved, D	mg/L	0.05	4.06	4.2	3.39%
Copper - Dissolved, D	mg/L	0.0002	0.00076	0.00076	0.00%
Iron - Dissolved, D	mg/L	0.01	0.01	<0.005	66.67%
Lead - Dissolved, D	mg/L	0.00005	<0.000025	<0.000025	0.00%
Magnesium - Dissolved, D	mg/L	0.005	2.67	2.69	0.75%
Manganese - Dissolved, D	mg/L	0.0001	0.00105	0.00099	5.88%
Mercury - Dissolved, D	mg/L	0.000005	<0.0000025	<0.0000025	0.00%
Molybdenum - Dissolved, D	mg/L	0.00005	0.00012	0.000128	6.45%
Nickel - Dissolved, D	mg/L	0.0005	<0.00025	<0.00025	0.00%
Potassium - Dissolved, D	mg/L	0.05	0.878	0.86	2.07%
Selenium - Dissolved, D	mg/L	0.00005	<0.000025	<0.000025	0.00%
Sodium - Dissolved, D	mg/L	0.05	0.34	0.329	3.29%
Thallium - Dissolved, D	mg/L	0.00001	<0.0000050	<0.0000050	0.00%
Uranium - Dissolved, D	mg/L	0.00001	0.000076	0.000076	0.00%
Zinc - Dissolved, D	mg/L	0.001	<0.00050	<0.0005	0.00%

Note:

Relative Percent Difference (RPD) for a parameter is calculated by dividing the absolute analytical result difference between the sample and its duplicate by the average of the two samples, and multiplying by 100.

Calculations of results below detection limits used the value of the detection limit.

RPD values exceeding 20% and greater than 10x LOR are bolded.

Table 7.7.21: Field QA/QC Water Quality Data Analysis - Field Duplicates - MS-MRY-13A

Parameter	Sample ID		MS-MRY-13A	QD-CC8	Relative Percent Difference (RPD)
	ALS Laboratory Sample ID		BF2400225-004	BF2400225-005	
	Sample Date & Time		2024-08-04 09:30	2024-08-04 09:30	
	QA/QC Sample Type		N/A	Field Duplicate	
	Units	LOR			
Thallium - Total, T	mg/L	0.00001	0.000014	0.000014	0.00%
Tin - Total, T	mg/L	0.0001	<0.000050	<0.000050	0.00%
Titanium - Total, T	mg/L	0.0006	<0.00015	<0.0003	66.67%
Uranium - Total, T	mg/L	0.00001	0.00591	0.00579	2.05%
Vanadium - Total, T	mg/L	0.0005	<0.00025	<0.00025	0.00%
Zinc - Total, T	mg/L	0.003	<0.0015	<0.0015	0.00%
Aluminum - Dissolved, D	mg/L	0.001	0.0019	0.0019	0.00%
Arsenic - Dissolved, D	mg/L	0.0001	0.00018	0.00018	0.00%
Cadmium - Dissolved, D	mg/L	0.000005	0.0000136	0.0000118	14.17%
Calcium - Dissolved, D	mg/L	0.05	67.8	69.3	2.19%
Copper - Dissolved, D	mg/L	0.0002	0.00145	0.00145	0.00%
Iron - Dissolved, D	mg/L	0.01	<0.0050	<0.005	0.00%
Lead - Dissolved, D	mg/L	0.00005	<0.000025	<0.000025	0.00%
Magnesium - Dissolved, D	mg/L	0.005	51.8	53.8	3.79%
Manganese - Dissolved, D	mg/L	0.0001	0.00079	0.00093	16.28%
Mercury - Dissolved, D	mg/L	0.000005	<0.0000025	<0.0000025	0.00%
Molybdenum - Dissolved, D	mg/L	0.00005	0.000582	0.000557	4.39%
Nickel - Dissolved, D	mg/L	0.0005	0.0115	0.0116	0.87%
Potassium - Dissolved, D	mg/L	0.05	4.68	4.81	2.74%
Selenium - Dissolved, D	mg/L	0.00005	<0.000025	<0.000025	75.00%
Sodium - Dissolved, D	mg/L	0.05	23	24	4.26%
Thallium - Dissolved, D	mg/L	0.00001	0.000014	0.000014	0.00%
Uranium - Dissolved, D	mg/L	0.00001	0.00594	0.00592	0.34%
Zinc - Dissolved, D	mg/L	0.001	0.0024	0.0026	8.00%
Oil and Grease, Total	mg/L	5	<2.5	<2.5	0.00%
Phenols	ug/L	1	<0.50	<0.5	0.00%
F1 (C6-C10)	ug/L	25	<13	<13	0.00%
F2 (C10-C16)	ug/L	100	<50	<50	0.00%
F3 (C16-C34)	ug/L	250	<130	<130	0.00%
F4 (C34-C50)	ug/L	250	<130	<130	0.00%
Total Petroleum Hydrocarbons (C6	ug/L	370	<190	<190	0.00%

Note:

Relative Percent Difference (RPD) for a parameter is calculated by dividing the absolute analytical result difference between the sample and its duplicate by the average of the two samples, and multiplying by 100.

Calculations of results below detection limits used the value of the detection limit.

RPD values exceeding 20% and greater than 10x LOR are bolded.

Table 7.7.21: Field QA/QC Water Quality Data Analysis - Field Duplicates - MS-MRY-13A

Parameter	Sample ID		MS-MRY-13A	QD-CC8	Relative Percent Difference (RPD)
	ALS Laboratory Sample ID		BF2400225-004	BF2400225-005	
	Sample Date & Time		2024-08-04 09:30	2024-08-04 09:30	
	QA/QC Sample Type		N/A	Field Duplicate	
	Units	LOR			
Hardness	mg/L	0.5	377	375	0.53%
Conductivity	umhos/cm	1	863	868	0.58%
pH, Lab	pH units	0.1	7.94	8	0.75%
Total Suspended Solids	mg/L	1	<0.50	<0.5	0.00%
Total Dissolved Solids	mg/L	19	495	498	0.60%
Turbidity	NTU	0.1	1.48	0.72	69.09%
Alkalinity, Total	mg/L	2	186	187	0.54%
Ammonia, Total (as N), T	mg/L	0.005	0.0213	0.0206	3.34%
Chloride, D	mg/L	0.5	87.1	88.2	1.25%
Fluoride	mg/L	0.02	0.025	0.025	0.00%
Nitrate	mg/L	0.02	2.08	2.12	1.90%
Total Kjeldahl Nitrogen	mg/L	0.05	0.501	0.508	1.39%
Sulfate, D	mg/L	0.3	109	110	0.91%
Dissolved Organic Carbon, D	mg/L	0.5	12	7.3	48.70%
Total Organic Carbon, T	mg/L	0.5	5.66	5.7	0.70%
Phosphorus, Nutrient, T	mg/L	0.002	0.0183	0.0185	1.09%
Aluminum - Total, T	mg/L	0.003	0.0043	0.0092	72.59%
Antimony - Total, T	mg/L	0.0001	0.00013	0.00012	8.00%
Arsenic - Total, T	mg/L	0.0001	0.00021	0.00017	21.05%
Barium - Total, T	mg/L	0.0001	0.0468	0.0454	3.04%
Cadmium - Total, T	mg/L	0.000005	0.0000155	0.0000137	12.33%
Calcium - Total, T	mg/L	0.05	66.3	67.4	1.65%
Chromium - Total, T	mg/L	0.0005	0.00062	0.00067	7.75%
Cobalt - Total, T	mg/L	0.0001	0.0002	0.0002	0.00%
Copper - Total, T	mg/L	0.0005	0.00142	0.00141	0.71%
Iron - Total, T	mg/L	0.01	<0.0050	0.015	100.00%
Lead - Total, T	mg/L	0.00005	<0.000025	<0.000025	0.00%
Lithium - Total, T	mg/L	0.001	0.031	0.0317	2.23%
Magnesium - Total, T	mg/L	0.005	51.4	50.3	2.16%
Manganese - Total, T	mg/L	0.0001	0.00148	0.00204	31.82%
Mercury - Total, T	mg/L	0.000005	<0.0000025	<0.0000025	0.00%
Molybdenum - Total, T	mg/L	0.00005	0.000555	0.000556	0.18%
Nickel - Total, T	mg/L	0.0005	0.0115	0.0115	0.00%
Phosphorus, Total, T	mg/L	0.05	<0.025	<0.025	0.00%
Potassium - Total, T	mg/L	0.05	4.6	4.5	2.20%
Selenium - Total, T	mg/L	0.00005	<0.000025	<0.000025	0.00%
Sodium - Total, T	mg/L	0.05	23	22.3	3.09%
Strontium - Total, T	mg/L	0.0002	0.0603	0.06	0.50%

Table 7.7.21: Field QA/QC Water Quality Data Analysis - Field Duplicates - MS-MRY-13A

Parameter	Sample ID		MS-MRY-13A	QD-CC8	Relative Percent Difference (RPD)
	ALS Laboratory Sample ID		BF2400225-004	BF2400225-005	
	Sample Date & Time		2024-08-04 09:30	2024-08-04 09:30	
	QA/QC Sample Type		N/A	Field Duplicate	
	Units	LOR			
Thallium - Total, T	mg/L	0.00001	0.000014	0.000014	0.00%
Tin - Total, T	mg/L	0.0001	<0.000050	<0.000050	0.00%
Titanium - Total, T	mg/L	0.0006	<0.00015	<0.0003	66.67%
Uranium - Total, T	mg/L	0.00001	0.00591	0.00579	2.05%
Vanadium - Total, T	mg/L	0.0005	<0.00025	<0.00025	0.00%
Zinc - Total, T	mg/L	0.003	<0.0015	<0.0015	0.00%
Aluminum - Dissolved, D	mg/L	0.001	0.0019	0.0019	0.00%
Arsenic - Dissolved, D	mg/L	0.0001	0.00018	0.00018	0.00%
Cadmium - Dissolved, D	mg/L	0.000005	0.0000136	0.0000118	14.17%
Calcium - Dissolved, D	mg/L	0.05	67.8	69.3	2.19%
Copper - Dissolved, D	mg/L	0.0002	0.00145	0.00145	0.00%
Iron - Dissolved, D	mg/L	0.01	<0.0050	<0.005	0.00%
Lead - Dissolved, D	mg/L	0.00005	<0.000025	<0.000025	0.00%
Magnesium - Dissolved, D	mg/L	0.005	51.8	53.8	3.79%
Manganese - Dissolved, D	mg/L	0.0001	0.00079	0.00093	16.28%
Mercury - Dissolved, D	mg/L	0.000005	<0.0000025	<0.0000025	0.00%
Molybdenum - Dissolved, D	mg/L	0.00005	0.000582	0.000557	4.39%
Nickel - Dissolved, D	mg/L	0.0005	0.0115	0.0116	0.87%
Potassium - Dissolved, D	mg/L	0.05	4.68	4.81	2.74%
Selenium - Dissolved, D	mg/L	0.00005	<0.000025	<0.000025	75.00%
Sodium - Dissolved, D	mg/L	0.05	23	24	4.26%
Thallium - Dissolved, D	mg/L	0.00001	0.000014	0.000014	0.00%
Uranium - Dissolved, D	mg/L	0.00001	0.00594	0.00592	0.34%
Zinc - Dissolved, D	mg/L	0.001	0.0024	0.0026	8.00%
Oil and Grease, Total	mg/L	5	<2.5	<2.5	0.00%
Phenols	ug/L	1	<0.50	<0.5	0.00%
F1 (C6-C10)	ug/L	25	<13	<13	0.00%
F2 (C10-C16)	ug/L	100	<50	<50	0.00%
F3 (C16-C34)	ug/L	250	<130	<130	0.00%
F4 (C34-C50)	ug/L	250	<130	<130	0.00%
Total Petroleum Hydrocarbons (C6	ug/L	370	<190	<190	0.00%

Note:

Relative Percent Difference (RPD) for a parameter is calculated by dividing the absolute analytical result difference between the sample and its duplicate by the average of the two samples, and multiplying by 100.

Calculations of results below detection limits used the value of the detection limit.

RPD values exceeding 20% and greater than 10x LOR are bolded.

Table 7.7.22: Field QA/QC Water Quality Data Analysis - Field Duplicates - MQ-C-A

Parameter	Sample ID		MQ-C-A	QD-CC1	Relative Percent Difference (RPD)	MQ-C-A	QD-CC1	Relative Percent Difference (RPD)
	ALS Laboratory Sample ID		BF2400173-007	BF2400173-008		BF2400379-001	BF2400379-010	
	Sample Date & Time		2024-07-07 14:00	2024-07-07 14:00		2024-10-06 11:10	2024-10-06 11:10	
	QA/QC Sample Type		N/A	Field Duplicate		N/A	Field Duplicate	
	Units	LOR						
pH, Lab	pH units	0.1	8.16	8.05	1.36%	8.02	8.08	0.75%
Total Suspended Solids	mg/L	1	<0.50	<0.5	0.00%	<1.1	<0.5	75.00%
Total Dissolved Solids	mg/L	17	114	100	13.08%	148	145	2.05%
Turbidity	NTU	0.1	0.79	1.24	44.33%	0.46	0.24	62.86%

Note:
Relative Percent Difference (RPD) for a parameter is calculated by dividing the absolute analytical result difference between the sample and its duplicate by the average of the two samples, and multiplying by 100.
Calculations of results below detection limits used the value of the detection limit.
RPD values exceeding 20% and greater than 10x LOR are bolded.

Table 7.7.23: Field QA/QC Water Quality Data Analysis - Field Duplicates - MQ-C-B

Parameter	Sample ID		MQ-C-B	QD-CC7	Relative Percent Difference (RPD)
	ALS Laboratory Sample ID		BF2400070-007	BF2400070-008	
	Sample Date & Time		2024-06-03 12:00	2024-06-03 12:00	
	QA/QC Sample Type		N/A	Field Duplicate	
	Units	LOR			
Conductivity	umhos/cm	1	80.9	81.5	0.74%
pH, Lab	pH units	0.1	7.45	7.46	0.13%
Total Suspended Solids	mg/L	1	4.2	4.2	0.00%
Total Dissolved Solids	mg/L	20	45	58	25.24%
Turbidity	NTU	0.1	12.7	11.5	9.92%
Ammonia, Total (as N), T	mg/L	0.005	0.0117	0.0149	24.06%
Nitrate	mg/L	0.02	<0.010	<0.01	0.00%
Oil and Grease, Total	mg/L	5	<2.5	<2.5	0.00%

Note:

Relative Percent Difference (RPD) for a parameter is calculated by dividing the absolute analytical result difference between the sample and its duplicate by the average of the two samples, and multiplying by 100.

Calculations of results below detection limits used the value of the detection limit.

RPD values exceeding 20% and greater than 10x LOR are bolded.

Table 7.8.1: Field QA/QC Water Quality Data Analysis - Field Blanks and Travel Blanks - MP-01

Location			MP-01	MP-01
ALS Laboratory Sample ID			WT2418654-004	WT2426795-001
Sample Date & Time			2024-07-04 1:10:00 PM	2024-09-08 2:15:00 PM
QAQC Sample Type			FB	TB
Analyte	Unit	Detection Limit		
pH, Lab	pH units	0.1	5.2	5.84
Total Suspended Solids	mg/L	1	< 1.0	< 1.0
Total Dissolved Solids	mg/L	10	< 10	< 10
Turbidity	NTU	0.1	< 0.10	< 0.10
Alkalinity, Total	mg/L	2	< 2.0	< 2.0
Ammonia, Total (as N)	mg/L	0.005	0.0058	< 0.0050
Total Kjeldahl Nitrogen	mg/L	0.05	< 0.050	< 0.050
Fecal Coliforms	CFU/100ml	1	< 1	< 1
BOD	mg/L	2	< 2.0	< 2.0
Oil and Grease, Total	mg/L	5	< 5.0	< 5.0
Phosphorus, Nutrient	mg/L	0.002	0.0033	< 0.0020

Notes:
Bold values indicate values greater than their respective parameter LOR but under 5 times the LOR value.

Table 7.8.2: Field QA/QC Water Quality Data Analysis - Field Blanks and Travel Blanks - MP-01B

Location			MP-01B	MP-01B
ALS Laboratory Sample ID			WT2418654-002	WT2426795-003
Sample Date & Time			2024-07-04 1:00:00 PM	2024-09-10 1:20:00 PM
QAQC Sample Type			FB	TB
Analyte	Unit	Detection Limit		
pH, Lab	pH units	0.1	5.3	5.76
Total Suspended Solids	mg/L	1	< 1.0	< 1.0
Total Dissolved Solids	mg/L	10-20	< 10	< 20
Turbidity	NTU	0.1	< 0.10	< 0.10
Alkalinity, Total	mg/L	2	< 2.0	< 2.0
Ammonia, Total (as N)	mg/L	0.005	0.026	0.0113
Total Kjeldahl Nitrogen	mg/L	0.05	< 0.050	< 0.050
Fecal Coliforms	CFU/100ml	1	< 1	< 1
BOD	mg/L	2	< 2.0	< 2.0
Oil and Grease, Total	mg/L	5	< 5.0	< 5.0
Phosphorus, Nutrient	mg/L	0.002	< 0.0020	< 0.0020

Notes:
Bold values indicate values greater than their respective parameter LOR but under 5 times the LOR value.
Bold and highlighted values indicate values greater than 5 times the LOR value.

Table 7.8.4: Field QA/QC Water Quality Data Analysis - Field Blanks and Travel Blanks - MP-C-H

Location			MP-C-H	MP-C-H
ALS Laboratory Sample ID			BF2400354-002	BF2400097-005
Sample Date & Time			2024-09-23 8:40:00 AM	2024-06-09 11:25:00 AM
QAQC Sample Type			FB	TB
Analyte	Unit	Detection Limit		
Conductivity	umhos/cm	1	-	1.3
pH, Lab	pH units	0.1	5.88	5.8
Total Suspended Solids	mg/L	1	< 1.0	< 1.0
Total Dissolved Solids	mg/L	19	19	< 19
Turbidity	NTU	0.1	< 0.10	< 0.10
Ammonia, Total (as N)	mg/L	0.005	-	< 0.0050
Nitrate	mg/L	0.02	-	< 0.020
Oil and Grease, Total	mg/L	5	-	< 5.0

Notes:
Bold values indicate values greater than their respective parameter LOR but under 5 times the LOR value.

Table 7.8.5: Field QA/QC Water Quality Data Analysis - Field Blanks and Travel Blanks - MP-C-J

Location			MP-C-J
ALS Laboratory Sample ID			BF2400306-002
Sample Date & Time			2024-09-01 8:55:00 AM
QAQC Sample Type			FB
Analyte	Unit	Detection Limit	
Conductivity	umhos/cm	1	< 1.0
pH, Lab	pH units	0.1	6.69
Total Suspended Solids	mg/L	1	< 1.0
Total Dissolved Solids	mg/L	18	< 18
Turbidity	NTU	0.1	< 0.10
Ammonia, Total (as N)	mg/L	0.005	0.0123
Nitrate	mg/L	0.02	< 0.020
Oil and Grease, Total	mg/L	5	< 5.0

Notes:

Bold values indicate values greater than their respective parameter LOR but under 5 times the LOR value.

Table 7.8.6: Field QA/QC Water Quality Data Analysis - Field Blanks and Travel Blanks - MP-C-K

Location			MP-C-K
ALS Laboratory Sample ID			BF2400354-006
Sample Date & Time			2024-09-23 11:30:00 AM
QAQC Sample Type			TB
Analyte	Unit	Detection Limit	
pH, Lab	pH units	0.1	6.23
Total Suspended Solids	mg/L	1	< 1.0
Total Dissolved Solids	mg/L	19	< 19
Turbidity	NTU	0.1	< 0.10

Notes:

Bold values indicate values greater than their respective parameter LOR but under 5 times the LOR value.

Table 7.8.7: Field QA/QC Water Quality Data Analysis - Field Blanks and Travel Blanks - MQ-C-A

Location			MQ-C-A
ALS Laboratory Sample ID			BF2400291-002
Sample Date & Time			2024-08-25 9:40:00 AM
QAQC Sample Type			TB
Analyte	Unit	Detection Limit	
pH, Lab	pH units	0.1	6.91
Total Suspended Solids	mg/L	1.6	< 1.0
Total Dissolved Solids	mg/L	17	< 17
Turbidity	NTU	0.1	< 0.10

Notes:

Bold values indicate values greater than their respective parameter LOR but under 5 times the LOR value.

Table 7.8.8: Field QA/QC Water Quality Data Analysis - Field Blanks and Travel Blanks - MQ-C-B

Location			MQ-C-B	MQ-C-B	MQ-C-B
ALS Laboratory Sample ID			BF2400155-014	BF2400185-009	BF2400052-003
Sample Date & Time			2024-07-01 3:40:00 PM	2024-07-14 12:30:00 PM	2024-05-30 10:30:00 AM
QAQC Sample Type			TB	TB	FB
Analyte	Unit	Detection Limit			
Conductivity	umhos/cm	1	2.5	-	1.1
pH, Lab	pH units	0.1	5.74	7.08	6.11
Total Suspended Solids	mg/L	1	< 1.0	< 1.0	< 1.0
Total Dissolved Solids	mg/L	19-22	< 22	22	< 19
Turbidity	NTU	0.1	< 0.10	< 0.10	< 0.10
Ammonia, Total (as N)	mg/L	0.005	0.0117	-	< 0.0050
Nitrate	mg/L	0.02	< 0.020	-	< 0.020
Oil and Grease, Total	mg/L	5	< 5.0	-	< 5.0

Notes:

Bold values indicate values greater than their respective parameter LOR but under 5 times the LOR value.

Table 7.8.9: Field QA/QC Water Quality Data Analysis - Field Blanks and Travel Blanks - MQ-C-D

Location			MQ-C-D
ALS Laboratory Sample ID			BF2400051-002
Sample Date & Time			2024-05-29 2:45:00 PM
QAQC Sample Type			TB
Analyte	Unit	Detection	
Conductivity	µmhos/cm	1	1.8
pH, Lab	pH units	0.1	5.62
Total Suspended Solids	mg/L	1	< 1.0
Total Dissolved Solids	mg/L	20	< 20
Turbidity	NTU	0.1	< 0.10
Ammonia, Total (as N)	mg/L	0.005	< 0.0050
Nitrate	mg/L	0.02	< 0.020
Oil and Grease, Total	mg/L	5	< 5.0

Notes:
Bold values indicate values greater than their respective parameter LOR but under 5 times the LOR value.

Table 7.8.10: Field QA/QC Water Quality Data Analysis - Field Blanks and Travel Blanks - MS-01

Location			MS-01	MS-01
ALS Laboratory Sample ID			WT2418566-001	WT2426793-006
Sample Date & Time			2024-07-04 12:50:00 PM	2024-09-10 12:00:00 PM
QAQC Sample Type			FB	TB
Analyte	Unit	Detection Limit		
pH, Lab	pH units	0.1	5.3	5.71
Total Suspended Solids	mg/L	1	< 1.0	< 1.0
Total Dissolved Solids	mg/L	10	< 10	< 10
Turbidity	NTU	0.1	< 0.10	< 0.10
Alkalinity, Total	mg/L	2	< 2.0	< 2.0
Ammonia, Total (as N)	mg/L	0.005	0.0066	< 0.0050
Total Kjeldahl Nitrogen	mg/L	0.05	0.051	< 0.050
Fecal Coliforms	CFU/100mL	1	< 1	< 1
BOD	mg/L	2-3	< 3.0	< 2.0
Oil and Grease, Total	mg/L	5	< 5.0	< 5.0
Phosphorus, Nutrient	mg/L	0.002	< 0.0020	< 0.0020

Notes:
Bold values indicate values greater than their respective parameter LOR but under 5 times the LOR value.

Table 7.8.11: Field QA/QC Water Quality Data Analysis - Field Blanks and Travel Blanks - MS-01B

Location			MS-01B	MS-01B
ALS Laboratory Sample ID			WT2418566-004	WT2426793-005
Sample Date & Time			2024-07-04 1:15:00 PM	2024-09-10 11:30:00 AM
QAQC Sample Type			FB	TB
Analyte	Unit	Detection Limit		
pH, Lab	pH units	0.1	5.32	5.79
Total Suspended Solids	mg/L	1	< 1.0	< 1.0
Total Dissolved Solids	mg/L	10	< 10	< 10
Turbidity	NTU	0.1	0.14	< 0.10
Alkalinity, Total	mg/L	2	< 2.0	< 2.0
Ammonia, Total (as N)	mg/L	0.005	0.0055	< 0.0050
Total Kjeldahl Nitrogen	mg/L	0.05	< 0.050	< 0.050
Fecal Coliforms	CFU/100mL	1	< 1	< 1
BOD	mg/L	2-3	< 3.0	< 2.0
Oil and Grease, Total	mg/L	5	< 5.0	< 5.0
Phosphorus, Nutrient	mg/L	0.002	0.0029	< 0.0020

Notes:
Bold values indicate values greater than their respective parameter LOR but under 5 times the LOR value.

Table 7.8.12: Field QA/QC Water Quality Data Analysis - Field Blanks and Travel Blanks - MS-C-A

Location			MS-C-A	MS-C-A	MS-C-A	MS-C-A	MS-C-A
ALS Laboratory Sample ID			BF2400348-008	BF2400173-012	BF2400185-005	BF2400291-005	BF2400305-015
Sample Date & Time			2024-09-19 12:50:00 PM	2024-07-07 3:25:00 PM	2024-07-14 11:50:00 AM	2024-08-25 1:20:00 PM	2024-09-01 9:40:00 PM
QAQC Sample Type			TB	FB	FB	FB	TB
Analyte	Unit	Detection Limit					
Conductivity	umhos/cm	1	-	-	-	-	< 1.0
pH, Lab	pH units	0.1	6.28	5.48	5.33	6.67	7.39
Total Suspended Solids	mg/L	1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Dissolved Solids	mg/L	18-21	21	< 18	< 20	< 18	< 18
Turbidity	NTU	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Ammonia, Total (as N)	mg/L	0.005	-	-	-	-	< 0.0050
Nitrate	mg/L	0.02	-	-	-	-	< 0.020
Oil and Grease, Total	mg/L	5	-	-	-	-	< 5.0

Notes:
Bold values indicate values greater than their respective parameter LOR but under 5 times the LOR value.

Table 7.8.13: Field QA/QC Water Quality Data Analysis - Field Blanks and Travel Blanks - MS-C-C

Location			MS-C-C
ALS Laboratory Sample ID			BF2400096-008
Sample Date & Time			2024-06-09 11:05:00 AM
QAQC Sample Type			FB
Analyte	Unit	Detection Limit	
pH, Lab	pH units	0.1	5.33
Total Suspended Solids	mg/L	1	< 1.0
Total Dissolved Solids	mg/L	17	< 17
Turbidity	NTU	0.1	0.13

Notes:

Bold values indicate values greater than their respective parameter LOR but under 5 times the LOR value.

Table 7.8.14: Field QA/QC Water Quality Data Analysis - Field Blanks and Travel Blanks - MS-C-D

Location			MS-C-D
ALS Laboratory Sample ID			BF2400394-002
Sample Date & Time			2024-10-09 11:50:00 AM
QAQC Sample Type			TB
Analyte	Unit	Detection Limit	
pH, Lab	pH units	0.1	6.83
Total Suspended Solids	mg/L	1	< 1.0
Total Dissolved Solids	mg/L	17	30
Turbidity	NTU	0.1	< 0.10

Notes:

Bold values indicate values greater than their respective parameter LOR but under 5 times the LOR value.

Table 7.8.15: Field QA/QC Water Quality Data Analysis - Field Blanks and Travel Blanks - MS-C-E

Location			MS-C-E
ALS Laboratory Sample ID			BF2400225-011
Sample Date & Time			2024-08-04 11:20:00 AM
QAQC Sample Type			FB
Analyte	Unit	Detection Limit	
Conductivity	umhos/cm	1	< 1.0
pH, Lab	pH units	0.1	8.09
Total Suspended Solids	mg/L	1	1.2
Total Dissolved Solids	mg/L	10	150
Turbidity	NTU	0.1	0.91
Ammonia, Total (as N)	mg/L	0.005	< 0.0050
Nitrate	mg/L	0.02	< 0.020
Oil and Grease, Total	mg/L	5	< 5.0

Notes:
Bold values indicate values greater than their respective parameter LOR but under 5 times the LOR value.
Bold and highlighted values indicate values greater than 5 times the LOR value.

Table 7.8.16: Field QA/QC Water Quality Data Analysis - Field Blanks and Travel Blanks - MS-C-G

Location			MS-C-G	MS-C-G
ALS Laboratory Sample ID			BF2400247-003	BF2400372-004
Sample Date & Time			2024-08-11 10:30:00 AM	2024-10-02 4:00:00 PM
QAQC Sample Type			FB	FB
Analyte	Unit	Detection Limit		
Conductivity	umhos/cm	1	-	< 1.0
pH, Lab	pH units	0.1	6.62	6.05
Total Suspended Solids	mg/L	1	< 1.0	< 1.0
Total Dissolved Solids	mg/L	18-21	< 21	< 18
Turbidity	NTU	0.1	< 0.10	< 0.10
Ammonia, Total (as N)	mg/L	0.005	-	< 0.0050
Nitrate	mg/L	0.02	-	< 0.020
Oil and Grease, Total	mg/L	5	-	< 5.0

Notes:

Bold values indicate values greater than their respective parameter LOR but under 5 times the LOR value.

Table 7.8.17: Field QA/QC Water Quality Data Analysis - Field Blanks and Travel Blanks - MS-C-H

Location			MS-C-H
ALS Laboratory Sample ID			BF2400372-006
Sample Date & Time			2024-10-02 4:30:00 PM
QAQC Sample Type			TB
Analyte	Unit	Detection Limit	
Conductivity	umhos/cm	1	< 1.0
pH, Lab	pH units	0.1	6.15
Total Suspended Solids	mg/L	1	< 1.0
Total Dissolved Solids	mg/L	21	< 21
Turbidity	NTU	0.1	< 0.10
Ammonia, Total (as N)	mg/L	0.005	< 0.0050
Nitrate	mg/L	0.02	< 0.020
Oil and Grease, Total	mg/L	5	< 5.0

Notes:

Bold values indicate values greater than their respective parameter LOR but under 5 times the LOR value.

Table 7.8.18: Field QA/QC Water Quality Data Analysis - Field Blanks and Travel Blanks - MS-MRY-09

Location			MS-MRY-09	MS-MRY-09
ALS Laboratory Sample ID			BF2400274-002	BF2400356-002
Sample Date & Time			2024-08-20 9:40:00 AM	2024-09-25 10:15:00 AM
QAQC Sample Type			FB	TB
Analyte	Unit	Detection Limit		
pH, Lab	pH units	0.1	6.7	6.04
Total Suspended Solids	mg/L	1	< 1.0	< 1.0
Total Dissolved Solids	mg/L	18-22	22	< 20
Turbidity	NTU	0.1	< 0.10	< 0.10

Notes:

Bold values indicate values greater than their respective parameter LOR but under 5 times the LOR value.

Table 7.8.19: Field QA/QC Water Quality Data Analysis - Field Blanks and Travel Blanks - MS-MRY-13B

Location			MS-MRY-13B	MS-MRY-13B	MS-MRY-13B
ALS Laboratory Sample ID			BF2400199-011	BF2400348-003	BF2400356-009
Sample Date & Time			2024-07-21 3:40:00 PM	2024-09-19 10:45:00 AM	2024-09-25 4:10:00 PM
QAQC Sample Type			TB	FB	FB
Analyte	Unit	Detection Limit			
pH, Lab	pH units	0.1	7.11	6.21	6.53
Total Suspended Solids	mg/L	1	< 1.2	< 1.0	< 1.0
Total Dissolved Solids	mg/L	19	< 18	< 18	< 19
Turbidity	NTU	0.1	0.12	< 0.10	< 0.10

Notes:

Bold values indicate values greater than their respective parameter LOR but under 5 times the LOR value.

Table 7.9: Summary - QA/QC Analysis of Duplicates with an RPD > 20% and greater than 10 times the LOR - 2024

Parent Sample ID	Duplicate Sample ID	Date & Time Sampled	Parameter	RPD (%) ¹
MP-01	QV-CC2	2024-01-02 13:30	Total Kjeldahl Nitrogen	192.88%
MP-01	QV-CC1	2024-11-05 14:00	Total Kjeldahl Nitrogen	29.10%
MP-06	QP-CC2	2024-07-08 10:00	Dissolved Organic Carbon	51.16%
MP-C-J	QP-CC7	2024-08-04 13:25	Ammonia, Total (as N)	137.91%
MS-01B	QW-CC1	2024-01-02 15:30	Fecal Coliforms	150.00%
MS-MRY-13A	QD-CC8	2024-08-04 09:30	Turbidity	69.09%
			Dissolved Organic Carbon	48.70%
			Manganese - Total	31.82%
MS-C-B	QD-CC1	2024-06-16 12:00	Total Suspended Solids	62.92%
			Turbidity	73.63%
MQ-C-A	QD-CC1	2024-07-07 14:00	Turbidity	44.33%

Notes

¹ Relative Percent Difference (RPD) for a parameter is calculated by dividing the absolute analytical result difference between the sample and its duplicate by the mean of the sample and duplicate, and multiplying by 100. RPD = |(Result2 - Result1)/ Mean| * 100.

Table 8.1: Reclamation Works Related to Project Operations on Inuit-Owned and Crown Lands - 2024

Property Section	Land Type / Parcel ID	Reclamation Objective	Reclamation Principle	Description of Reclamation Works	Regulatory Authority	Impact on Financial Security
Project-Wide	Inuit-Owned Lands - Surface and Subsurface (PI-16, PI-17,P1-19) Crown Lands (Tote Road - KM 59 to 63)	- Remaining area will be safe for humans and the receiving environment - Aesthetic conditions of the project areas are similar to surrounding natural conditions	Progressive Reclamation	Demobilization and backhaul of equipment and supplies not required for near term activities, including the current inventory of hazardous waste and other materials by means of sealifts from Milne Port.	QIA CIRNAC	No change in financial security held by the QIA or the Crown (CIRNAC). Annual demobilization and backhaul of wastes, materials and equipment not required by the Project for near term activities is taken into account during the Annual Security Review process.
Tote Road	Inuit-Owned Lands - Surface (PI-16)	- Drainage pathways for surface runoff are physically stable to limit risk to humans and receiving environment - Mine areas are physically stable for use by humans and receiving environment - Area facilitates the desired wildlife movement - Natural revegetation is promoted - Aesthetic conditions of the project areas are similar to surrounding natural conditions	Progressive Reclamation	Continued implementation of the reclamation plan for the historical Km 97 borrow areas detailed in the Project's Borrow Source Management Plan – KM 97 (BAF-PH1-830-P16-0032).	QIA	No impact on financial security held by the QIA. Reclamation works at the historical Km 97 borrow areas is ongoing.
Tote Road	Inuit-Owned Lands - Surface (PI-16, PI-17, PI-19)	- Drainage pathways for surface runoff are physically stable to limit risk to humans and receiving environment - Mine areas are physically stable for use by humans and receiving environment - Area facilitates the desired wildlife movement - Natural revegetation is promoted - Aesthetic conditions of the project areas are similar to surrounding natural conditions	Progressive Reclamation	Implementation of the action plan to address historical borrow sources within the Tote Road corridor. Work in 2024 included bulk fill and grading of the borrow sources at KM 52.2 and KM 57 along the Tote Road.	QIA	No current impact on financial security held by the QIA. Reclamation works at the historical Tote Road borrow areas initiated in 2019 and will be ongoing through 2025.
Mine Site	Inuit-Owned Lands - Surface and Subsurface (PI-16, PI-17)	- Chemically stable disturbed areas to limit risk impact to humans and receiving environment- Surface runoff and seepage water quality is safe for humans and receiving environment	Progressive Reclamation	On-going management of hydrocarbon impacted soils at the Mine Site Landfarm Facility generated from ongoing operations.	QIA	No impact on financial security held by the QIA. Continued remediation and treatment of soils held within the Landfarm Facility anticipated during 2025.
Milne Port	Inuit-Owned Lands - Surface (PI-19)	- Chemically stable disturbed areas to limit risk impact to humans and receiving environment- Surface runoff and seepage water quality is safe for humans and receiving environment	Progressive Reclamation	On-going management of hydrocarbon impacted soils at the Milne Port Landfarm Facility generated from historical decommissioning efforts and ongoing operations.	QIA	No impact on financial security held by the QIA. Continued remediation and treatment of soils held within the Landfarm Facility anticipated during 2025.

Table 8.2: Mary River Project Total Closure and Reclamation Security Summary - 2024 ^a

Authorization	Liability	Securities Held on January 1, 2024 (Actual) (\$)	Adjustment for 2024 (Actual) (\$)	Securities Held on December 31, 2024 (Actual) (\$)
Type 'A' Water Licence 2AM-MRY1325	IOL ^a	120,999,500	9,333,976	130,333,476
	Crown	2,788,000	663,009	3,451,009
Subtotal Type 'A' Water Licence		123,787,500	9,996,985	133,784,485
Type 'B' Water Licence 2BE-MRY1421	IOL ^a			-
	Crown	1,250,000	-	1,250,000
Subtotal Type 'B' Water Licence		1,250,000	-	1,250,000
GRAND TOTAL		125,037,500	9,996,985	135,034,485

Notes:

^a All security relating to Inuit-Owned Land (IOL) held by Qikiqtani Inuit Association (QIA) under Commercial Lease No. Q13C301.

Table 9.1: Management and Monitoring Plan Updates - 2024

Historic Reference No.	Current (New) Reference No.	Current Revision	Management Plan	Current Revision Date	Updated since 2023 QIA and NWB Annual Report for Operations?
BAF-PH1-830-P16-0047	BIM-5000-PLA-0003	7	MDMER Emergency Response Plan	15-Jul-2024	No
BAF-PH1-840-P16-0001	BIM-5000-PLA-0004	4	Crisis Management Plan	30-Mar-2024	Yes
BAF-PH1-840-P16-0002	BIM-5000-PLA-0005	8	Emergency Response Plan	13-Mar-2024	Yes
BAF-PH1-830-P16-0042	BIM-5000-PLA-0006	0	Spill at Sea Response Plan (SSRP)	15-Aug-2015	No
BAF-PH1-310-P16-0001	BIM-5100-PLA-0004	18	Milne Inlet Marine Facility Security Plan	11-Jan-2025	Yes
BAF-PH1-830-P16-0006	BIM-5200-PLA-0002	3	Cultural Heritage Resource Protection Plan	07-Mar-2016	No
BAF-PH1-830-P16-0008	BIM-5200-PLA-0003	2	Environmental Protection Plan	30-Apr-2021	No
BAF-PH1-830-P16-0001	BIM-5200-PLA-0004	6	Sampling Program - QAQC Plan	30-Mar-2023	No ¹
BAF-PH1-830-P16-0002	BIM-5200-PLA-0005	7	Air Quality and Noise Abatement Management Plan	30-Apr-2021	No ¹
BAF-PH1-300-P16-0002	BIM-5200-PLA-0006	7	Snow Management Plan	14-Feb-2024	No ¹
BAF-PH1-830-P16-0011	BIM-5200-PLA-0007	7	Hazardous Materials and Hazardous Waste Management Plan	30-Apr-2024	No
BAF-PH1-830-P16-0026	BIM-5200-PLA-0009	7	Surface Water and Aquatic Ecosystem Management Plan	31-Mar-2021	No ¹
BAF-PH1-830-P16-0027	BIM-5200-PLA-0010	1	Terrestrial Environment Mitigation and Monitoring Plan	14-Mar-2016	No
BAF-PH1-830-P16-0048	BIM-5200-PLA-0011	0	Milne Inlet Tote Road Quarry Borrow Source Plan	07-Mar-2019	No
BAF-PH1-830-P16-0036	BIM-5200-PLA-0012	6	Spill Contingency Plan	31-Jan-2021	No ¹
BAF-PH1-830-P16-0028	BIM-5200-PLA-0013	10	Waste Management Plan	31-Mar-2024	No
BAF-PH1-830-P16-0050	BIM-5200-PLA-0014	1	Ballast Water Management Plan	31-Mar-2019	No
BAF-PH1-830-P16-0058	BIM-5200-PLA-0015	4	Oil Pollution Prevention Plan (OPPP)	22-May-2024	Yes
BAF-PH1-830-P16-0046	BIM-5200-PLA-0016	0	Marine Environmental Effects Monitoring Plan	17-Mar-2016	No
BAF-PH1-830-P16-0056	BIM-5200-PLA-0017	0	Diesel E2 Plan - Milne Port	22-Feb-2020	No
BAF-PH1-830-P16-0024	BIM-5200-PLA-0018	9	Shipping and Marine Wildlife Management Plan	19-Jul-2022	No
BAF-PH1-830-P16-0057	BIM-5200-PLA-0019	0	Diesel E2 Plan - Mary River	22-Feb-2020	No
BAF-PH1-830-P16-0038	BIM-5200-PLA-0020	2	Exploration Closure and Reclamation Plan	25-Jan-2021	No
BAF-PH1-830-P16-0037	BIM-5200-PLA-0021	1	Exploration Spill Contingency Plan	25-Jan-2021	No
BAF-PH1-830-P16-0010	BIM-5200-PLA-0022	11	Fresh Water Supply, Sewage, and Wastewater Management Plan	30-Apr-2024	Yes
BAF-PH1-830-P16-0039	BIM-5200-PLA-0023	1	Aquatic Effects Monitoring Plan	30-Oct-2015	No ¹
BAF-PH1-830-P16-0004	BIM-5200-PLA-0025	0	Borrow Pit and Quarry Management Plan	20-Mar-2014	No

Table 9.1: Management and Monitoring Plan Updates - 2024

Historic Reference No.	Current (New) Reference No.	Current Revision	Management Plan	Current Revision Date	Updated since 2023 QIA and NWB Annual Report for Operations?
BAF-PH1-830-P16-0012	BIM-5200-PLA-0026	5	Interim Closure and Reclamation Plan	19-Oct-2018	No
BAF-PH1-830-P16-0023	BIM-5200-PLA-0027	7	Roads Management Plan	31-Mar-2019	No
BAF-PH1-830-P16-0013	BIM-5200-PLA-0028	11	Oil Pollution Emergency Plan - Milne Inlet (OPEP)	22-May-2024	Yes
BAF-PH1-830-P16-0029	BIM-5200-PLA-0029	4	Phase 1 Waste Rock Management Plan	02-Apr-2024	No ¹
BAF-PH1-830-P16-0031	BIM-5200-PLA-0030	0	Life-of-Mine Waste Rock Management Plan	30-Apr-2014	No
BAF-PH1-340-P16-0004	BIM-5200-PLA-0034	2	Waste Rock Facility QAQC Monitoring Plan	25-Mar-2024	No
Site Specific Quarry Management Plans					
BAF-PH1-830-P16-0030	BIM-5200-PLA-0024	0	Borrow Source Management Plan - KM 2	25-Oct-2014	No
BAF-PH1-830-P16-0032	BIM-5200-PLA-0031	0	Borrow Source Management Plan - KM 97	25-Oct-2014	No
BAF-PH1-830-P16-0035	BIM-5200-PLA-0032	0	Borrow Source Management Plan - KM 104	20-Mar-2014	No
BAF-PH1-830-P16-0017	n/a	3	Q1 Quarry Management Plan	25-Feb-2022	No
BAF-PH1-830-P16-0053	n/a	0	Q5 Quarry Management Plan	15-Dec-2020	No
BAF-PH1-830-P16-0040	BIM-5200-PLA-0033	3	QMR2 Quarry Management Plan	30-Jul-2021	No

Notes:

¹ Plan will be reviewed and revised if applicable in 2025

Table 9.2: Sample Results from Waste Rock Facility QA/QC Drilling Program - 2024

SAMPLE ID	Sulfur (%) by XRF	Carbon (%) by LECO	Sulfur (%) by LECO	Paste pH	Sampling Location (UTM NAD83 Zone 17W)		Sample Classification (Non-AG/PAG)	Waste Deposition Area
					Easting	Northing		
B644416	0.016	0.11	0.01	8.8	563227	7916355	Non-AG	Non-AG
B644417	0.005	0.06	<0.01	8.4	563227	7916275	Non-AG	Non-AG
B644418	0.034	0.07	0.03	8.1	563227	7916195	Non-AG	Non-AG
S665621	0.048	0.06	0.05	8.4	563067	7916195	Non-AG	Non-AG
S665622	0.041	0.04	0.03	8.2	563147	7916355	Non-AG	Non-AG
S665623	0.026	0.08	0.02	8.4	563067	7916355	Non-AG	Non-AG
S665624	0.029	0.06	0.03	7.9	563201	7916510	Non-AG	Non-AG
S665625	0.025	0.04	0.02	8.7	563147	7916515	Non-AG	Non-AG
S665626	0.036	0.11	0.04	8.3	563147	7916275	Non-AG	Non-AG
S665627	0.021	0.09	0.02	7.7	563004	7916036	Non-AG	Non-AG
S665628	0.026	0.06	0.02	8.5	563227	7916195	Non-AG	Non-AG
S665629	0.028	0.09	0.03	8.2	563227	7915715	Non-AG	Non-AG
S665630	0.031	0.17	0.03	8.3	563048	7916275	Non-AG	Non-AG
S665631	0.026	0.06	0.03	8.4	563067	7916435	Non-AG	Non-AG
S665632	0.112	0.06	0.10	8.3	563011	7916194	Non-AG	Non-AG
S665633	0.023	0.04	0.03	8.0	563163	7916434	Non-AG	Non-AG
S665634	0.082	0.09	0.08	7.0	563000	7916117	Non-AG	Non-AG
S665635	0.009	0.05	0.01	8.3	563067	7916515	Non-AG	Non-AG

Table 9.2: Sample Results from Waste Rock Facility QA/QC Drilling Program - 2024

SAMPLE ID	Sulfur (%) by XRF	Carbon (%) by LECO	Sulfur (%) by LECO	Paste pH	Sampling Location (UTM NAD83 Zone 17W)		Sample Classification (Non-AG/PAG)	Waste Deposition Area
					Easting	Northing		
S665636	0.039	0.05	0.03	7.7	562988	7915953	Non-AG	Non-AG
G955064	0.011	0.02	0.01	8.2	563307	7916034	Non-AG	Non-AG
G955065	0.036	0.03	0.03	8.6	563237	7915875	Non-AG	Non-AG
G955066	0.034	0.02	0.03	8.8	563227	7916034	Non-AG	Non-AG
G955067	0.030	0.01	0.03	8.2	563368	7915969	Non-AG	Non-AG
G955068	0.010	0.10	0.01	8.3	563067	7916595	Non-AG	Non-AG
G955069	0.023	0.03	0.03	8.9	563308	7915876	Non-AG	Non-AG
G955070	0.047	0.06	0.05	8.3	563307	7915953	Non-AG	Non-AG
G955071	0.016	0.02	0.02	9.0	563226	7916114	Non-AG	Non-AG
G955072	0.026	0.26	0.03	8.4	563388	7915865	Non-AG	Non-AG
G955073	0.020	0.05	0.03	8.7	563227	7915956	Non-AG	Non-AG
G955074	0.090	0.03	0.10	8.8	563300	7916180	Non-AG	Non-AG
G955075	0.119	0.07	0.12	8.5	563217	7915762	Non-AG	Non-AG
G955076	0.015	0.62	0.02	8.3	563227	7916435	Non-AG	Non-AG
M506028	0.170	0.04	0.18	8.1	563147	7915715	Non-AG	Non-AG
M506029	0.024	0.14	0.03	8.6	563067	7915715	Non-AG	Non-AG
M506030	0.045	0.11	0.06	8.9	563147	7915795	Non-AG	Non-AG
M506031	0.026	0.34	0.03	8.2	562987	7915795	Non-AG	Non-AG

Table 9.2: Sample Results from Waste Rock Facility QA/QC Drilling Program - 2024

SAMPLE ID	Sulfur (%) by XRF	Carbon (%) by LECO	Sulfur (%) by LECO	Paste pH	Sampling Location (UTM NAD83 Zone 17W)		Sample Classification (Non-AG/PAG)	Waste Deposition Area
					Easting	Northing		
M506032	0.033	0.08	0.04	8.2	563147	7915955	Non-AG	Non-AG
M506033	0.022	0.07	0.03	8.7	563067	7915955	Non-AG	Non-AG
M506034	0.060	0.07	0.07	8.4	563147	7916035	Non-AG	Non-AG
M506035	0.056	0.04	0.06	8.9	563067	7916035	Non-AG	Non-AG
M506036	0.024	0.06	0.03	8.9	563307	7916115	Non-AG	Non-AG
M506037	0.019	0.05	0.03	8.8	563147	7916195	Non-AG	Non-AG

Table 9.3: 2024 Non-AG Waste Rock Used for Construction Purposes (EX-PIT)

DESTINATION	TONNAGE	S (%) XRF	Paste pH
HILLSIDE ROAD	463,395	0.03	8.72
MINE HAUL ROAD	139,795	0.03	8.87
KM105 STOCKPILE	387,457	0.03	8.80
KM105 DAM	14,454	0.03	8.83
TOTE ROAD	16,180	0.06	8.74
TOTAL	1,021,281		

Table 10.1: Summary of Findings and Actions from Inspection/Compliance Reports - 2024

Inspection Date	Agency	Location	Feedback	Outcome
February 13 to 14, 2024	CIRNAC	Ore Hault Truck Wash Bay	During the inspection, CIRNAC Inspector identified a number of totes filled with waste oil outside the Ore Haul Truck (OHT) Wash Bay. These totes were not situated within secondary containment and are in non-compliance with Part H – Section 3 of the Water License. Part H – Section 3 states “The Licensee shall provide secondary containment for fuel and chemical storage as required by applicable standards and acceptable industry practice.”	All identified totes with waste oil and oily wastewater were removed from the OHT Washbay area and placed within secondary containment. See Photos 1 and 2.
		KM105 Surface Water Mangement Pond	At KM105, the Dam has been leaking causing sediment laden water to escape into the surrounding area. The Licensee has since put up mitigation measures to prevent the migration of the water.	Baffinland acknowledges the observation, and clarifies that conditions at the KM105 pond and dam are fully frozen, and there is currently no flow into or out of the pond. A geotechnical drilling program was completed in late 2023 to obtain detailed data relating to the subsurface conditions. This information has been used to develop a comprehensive remediation plan that involves installing a grout curtain to provide a seepage barrier to reduce seepage through the dam foundation. This remediation program has been initiated with an objective to be completed prior to Freshet 2024. The detailed remediation plan is included as Attachment 4 to this response, and will be emailed via KiteWorks due to file size.
April 3 to 5, 2024	CIRNAC	Landfill Fence	Once at the landfill area, the inspectors noted what appeared to be a significant fence damage. ACTION ITEM: Ensure that the fence has been repaired.	Baffinland is committed to repairing the fence around the landfill as soon as reasonably possible. Given the snow conditions and the accessibility of the damaged area, attempting a repair at this time would most likely result in further damage to the fence. Because the landfill is for inert waste only, Baffinland feels the damaged fence line currently exhibits very low risk. Therefore, the repair has been scheduled for completion once the area is snow-free and the ground beginning to thaw. A Work Order has been created for the repair to be completed by early June (WO# 4613938). See Photo #5 for a snip of the Work Order. Baffinland will provide photographic evidence of the repairs once completed.
		Secondary Containments not deployed where applicable	A generator was observed on the site near stacked sea cans with no secondary containment was deployed. ACTION ITEM: Ensure secondary containments are deployed at the locations named in this report.	The generator is an Allmand Night-Lite V-Series. The brand and model of the generator/light plant has a Fluid Containment System (FCS) that holds up 110% of the fuel and engine oil capacity. See Photos confirming the model of the generator/light plant. Also see attached Allmand Night-Lite V-Series Operator’s Manual Fluid Containment System Diagram (Photos 2, 3, and 4). The link outlining the features can be viewed on the company’s website at: https://www.allmand.com/na/en_us/product-catalog/light-towers/nightlite-vseries.html .
		Secondary Containments not deployed where applicable	At the Tote Road, inspectors noted ongoing work at KM 95’s location where culverts were being replaced by sub-contractor of Nuna Group of Companies, contracted by the Baffinland Iron Mine Corporation. Upon closer inspection of the location, the inspectors noted that no secondary containment was deployed under the generator used for lighting or nighttime work. ACTION ITEM: Ensure secondary containments are deployed at the locations named in this report.	The generator is an Allmand Night-Lite V-Series. The brand and model of the generator/light plant has a Fluid Containment System (FCS) that holds up 110% of the fuel and engine oil capacity. See Photos confirming the model of the generator/light plant. Also see attached Allmand Night-Lite V-Series Operator’s Manual Fluid Containment System Diagram (Photos 2, 3, and 4). The link outlining the features can be viewed on the company’s website at: https://www.allmand.com/na/en_us/product-catalog/light-towers/nightlite-vseries.html .

Table 10.1: Summary of Findings and Actions from Inspection/Compliance Reports - 2024

Inspection Date	Agency	Location	Feedback	Outcome
July 30 to August 1, 2024	CIRNAC	Secondary Containments not deployed where applicable (July Inspection)	A generator was observed on the site near stacked sea cans with no secondary containment was deployed. ACTION ITEM: Secure the loose objects/material within the grounds of the specified area.	The area was cleaned up and photos sent to the inspector at the time of signing of the report (Photos 1, 2, 3, 4, 5, and 6).
		Lanfill Fence (April Inspection)	Once at the landfill area, the inspectors noted what appeared to be a significant fence damage. ACTION ITEM: Ensure that the fence has been repaired.	Repairs were completed. (Photos 7, and 8)
		Caribou Observation Log	The inspector requested Baffinland to share a copy of the caribou sightings log to the end of July.	Caribou Sightings/Observations Log attached
		Port Landfarm	The inspector requested Baffinland secure the loose objects/material within the grounds of the specified area.	Debris removed
August 21 to 22, 2024	CIRNAC	Waste Rock Facility	Produce Modified Sobek lab test results, as referenced in the Q2 report, as soon as possible.	Lab results shared with the Inspector and also included in the Q3 Waste Rock Facility Report.
	CIRNAC	Waste Rock Facility	(As a result of heavy machinery use) - Ensure no waste rock is unintentionally stored outside the Waste Rock Facility perimeters.	As per the October 23rd CIRNAC inspection report, no loose rock was noted outside of the Waste Rock Facility parameters. Baffinland will continue to ensure no loose rock is stored outside the Waste Rock Facility parameters.
October 22 to 23, 2024	CIRNAC	Fuel Tank Farm	Cleanup of the area where hydrocarbon rugs/pads were observed	Fuel Mod area was cleaned up by collecting the used absorbent pads and disposing them in the appropriate waste bin for hydrocarbon impacted waste. Refer to the inspection report for photos.
	CIRNAC	Tote Road	Produce an action plan when and where damaged and replaced culverts will be removed from the current location(s).	A work plan was developed to retrieve the culverts that were washed-out and carried downstream of the CV-048 crossing at KM 63.5, during the September Rain Event. The plan incorporated best practices from the DFO Code of Practice: Temporary Fords (DFO, September 2022), to ensure measures were taken to protect fish and fish habitat. The work was completed on November 26, 2024, when the watercourse and surrounding tundra was snow covered and frozen. These conditions allowed heavy equipment to retrieve the culverts with neglibl disturbance to the natural environment.

Table 11.1: Pending and Completed Amendments to Provisions of the Commercial Lease - 2024

OEN / TRAN Title	Property Section	Location (UTM NAD83 Zone 17N)		Description of Activity	Supporting Documentation
		Easting	Northing		
Tote Road Adjustment Notification – 2022/2023 Tote Road Culvert Upgrades October 28, 2022	Tote Road (IOL Parcels PI-16, PI-17, PI-19)	Various	Various	Upgrades to culverts at selected fish-bearing crossing locations on the Tote Road. TRAN approved in 2023.	N/A
Option Exercise Notice - Mine Site Hazardous Waste Berm December 15, 2022	Mine Site (IOL Parcels PI-16, 19)	558228	7914539	Decommissioning of existing hazardous waste berm MS-HWB-06, construction of new hazardous waste berm. OEN not approved in 2023.	N/A - Not Completed
Option Exercise Notice - Extension of Commercial Lease Boundary at the Steensby Railway at Mary River December 1, 2023	Mine Site (IOL Parcels PI-16, 19)	562478	7911746	Realignment of future Steensby Railway alignment at Mary River. OEN approved in 2024.	N/A

Table 12.1: Public Meetings and Events – 2024

Engagement Date	Group Participants	Meeting Location	Description
January 05, 2024	Mayor of Pond Inlet	Phone	Tasiuqtiit Working Group
January 05, 2024	Mayor of Pond Inlet	In-Person	Update on Steensby
January 11, 2024	Canadian Northern Economic Development Agency	In-Person	Nunavut Planning Commission Amendment
January 12, 2024	Qikiqtani Inuit Association, Crown-Indigenous Relations and Northern Affairs Canada	Teleconference	2024 Work Plan and Security Estimate
January 13, 2024	Government of Nunavut	In-Person	Nunavut Planning Commission Amendment
January 15, 2024	Mayor of Pond Inlet	Phone	Update on Steensby
January 15, 2024	Natural Resources Canada	Teleconference	2024 Collaborative Dust Monitoring Program
January 16, 2024	Nunavut Tunngavik Inc.	In-Person	Mary River Operations including update on Steensby
January 18, 2024	Qikiqtani Inuit Association	Teleconference	IIBA Manager Updates
January 19, 2024	Miawpukek Horizon Maritime Services	Teleconference	Inuit Cadet program
January 22, 2024	Qikiqtani Inuit Association	Teleconference	Working Group Terms of Reference
January 29, 2024	Nunavut Tunngavik Inc.	Phone	Discussion on Nunavut Planning Commission Amendment
January 29, 2024	Natural Resources Canada	Teleconference	Program planning
January 30, 2024	Hamlet of Kinngait, Hunter Trappers Organization - Kinngait	In-Person	Continuation of the 2023 Steensby Engagement Community Tour, Steensby Update and Inuit Qaujimagatuqangit (IQ) integration
January 30, 2024	Qikiqtani Inuit Association	Teleconference	Joint Executive Committee Priorities AWP 2024/2025
January 30, 2024	Qikiqtani Inuit Association	Teleconference	JEC Annual Work Plan discussion
January 31, 2024	Community of Kinngait	RadioIn-Person	Radio show on the Steensby Component
January 31, 2024	Qikiqtani Inuit Association	In-Person	BIM-QIA quarterly meeting

Engagement Date	Group Participants	Meeting Location	Description
February 01, 2024	Crown-Indigenous Relations and Northern Affairs Canada	Teleconference	Discussion on 2024 Work Plan and Security Estimate
February 01, 2024	Qikiqtani Inuit Association	Teleconference	Confidential
February 02, 2024	Qikiqtani Inuit Association	Teleconference	Confidential
February 02, 2024	Government of Nunavut	Teleconference	Caribou monitoring
February 05, 2024	Makivvik Corporation	Teleconference	Steensby Component of the Project
February 05, 2024	Qikiqtani Inuit Association	Teleconference	Discussion on 2024 Work Plan and Security Estimate
February 06, 2024	Crown-Indigenous Relations and Northern Affairs Canada	Teleconference	Discussion on 2024 Work Plan and Security Estimate
February 06, 2024	Canadian Northern Economic Development Agency	In-Person	Update on Steensby and Mary River Operations
February 08, 2024	Dust Audit Committee	Teleconference	Steensby Update, NRCan dust monitoring update
February 09, 2024	Qikiqtani Inuit Association	Teleconference	Steensby Permitting Update
February 09, 2024	Crown-Indigenous Relations and Northern Affairs Canada	Teleconference	Discussion on 2024 Work Plan and Security Estimate
February 12, 2024	Natural Resources Canada	Teleconference	Planning of 2024 collaborative dust monitoring program
February 13, 2024	Crown-Indigenous Relations And Northern Affairs Canada; Department of Fisheries and Oceans; Environment and Climate Change Canada; Government of Nunavut; Health Canada; Impact Assessment Agency of Canada; Natural Resources Canada; Northern Project Management Office; Nunavut Impact Review Board; Qikiqtani Inuit Association; Transport Canada;	Teleconference	Sustaining Operations Proposal 2 (SOP2).

Engagement Date	Group Participants	Meeting Location	Description
	Canadian Northern Economic Development Agency		
February 14, 2024	Crown-Indigenous Relations and Northern Affairs Canada	In-Person	Quarterly water license inspection at Mary River
February 14, 2024	Qikiqtani Inuit Association	Teleconference	Discussion on 2024 Work Plan and Security Estimate
February 14, 2024	Government of Nunavut and Qikiqtani Inuit Association	In-Person	Tour of Mary River and Update on Steensby and Mary River Operations
February 19 & 20, 2024	Nunavut Impact Review Board, Qikiqtani Inuit Association, Government of Nunavut, Nunavut Tunngavik Inc., Crown-Indigenous Relations and Northern Affairs Canada, Canadian Transportation Agency, Transport Canada, Fisheries and Oceans Canada, Health Canada, Natural Resources Canada, Parks Canada, Environment and Climate Change Canada Justice Canada, Northern Projects Management Office, , Arctic Bay HTO, Clyde River HTO, Igloolik HTO,, Kinngait HTO, Kimmirut HTO, Pond Inlet HTO, Makivik, Qikiqtaaluk Wildlife Board Nunavut Planning Commission World Wildlife Fund, Ocean's North	In-Person	Cumulative Effects Workshop
February 21, 2024	Qikiqtani Inuit Association	In-Person/Teleconference	Bi-lateral meeting to discuss various operational matters
February 22, 2024	Fisheries and Oceans Canada	Teleconference	Freshwater FAA Application
February 22, 2024	Fisheries and Oceans Canada	Teleconference	Freshwater FAA

Engagement Date	Group Participants	Meeting Location	Description
February 23, 2024	Nunavut Chamber of Mines	In-Person	Update on Steensby and Mary River Operations
February 26, 2024	Qikiqtani Inuit Association	Teleconference	JEC Annual Work Plan discussion
February 26, 2024	Natural Resources Canada	Teleconference	Collaborative Dust Monitoring program planning
February 27, 2024	Canadian Northern Economic Development Agency	In-Person	Presentation on Leadership
February 27, 2024	Mayor of Pond Inlet	In-Person	Steensby discussion
March 01, 2024	Crown-Indigenous Relations and Northern Affairs Canada	Teleconference	Steensby Lease Application, Work Plan, Aerodrome Consultation Notice
March 04, 2024	Nunavut Tunngavik	In-Person	CEO speech
March 04, 2024	Nunavut Impact Review Board	In-Person	Introductions and updates
March 05, 2024	Qikiqtani Inuit Association	In-Person	2024 Work Plan, Annual Security Review, and Reclamation Security for Mary River Project
March 06, 2024	Qikiqtani Inuit Association	Teleconference	Employment Committee Activity Updates
March 11, 2024	Qikiqtani Inuit Association	Teleconference	2024-25 IIBA Annual Work Plan
March 11, 2024	Fisheries and Oceans Canada	Teleconference	Ballast Water Program
March 11, 2024	Natural Resources Canada	Teleconference	Collaborative Dust Monitoring program planning
March 12, 2024	Kimmirut Hunters and Trappers Organization and Hamlet	In-Person	Steensby and Inuit Qaujimajatuqangit
March 12, 2024	Qikiqtani Inuit Association Hamlet of Kimmirut, Hunters and Trappers Organization - Kimmirut	In-Person	Steensby Update
March 14, 2024	Dust Audit Committee	Teleconference	Recommendations and Observations
March 19, 2024	Hamlet of Igloolik	In-Person	Fisheries Act Authorization for Freshwater and Marine Offsetting
March 19, 2024	Members of the Public - Igloolik	In-Person	Contracting Information Session to Igloolik local businesses and aspiring entrepreneurs.
March 20, 2024	SAO Hamlet of Pond Inlet	Teleconference	Tasiuqtiit Working Group

Engagement Date	Group Participants	Meeting Location	Description
March 20, 2024	Qikiqtani Inuit Association, Members of the Public - Arctic Bay	In-Person	Contracting Committee together with the Qikiqtani Inuit Association provided a Contracting Information Session to Arctic Bay local businesses and aspiring entrepreneurs.
March 21, 2024	Fisheries and Oceans Canada	Teleconference	Marine FAA Application
March 21, 2024	Qikiqtani Inuit Association, Members of the Public - Pond Inlet	In-Person	The Baffinland Contracting Committee together with the Qikiqtani Inuit Association provided a Contracting Information Session to Pond Inlet local businesses and aspiring entrepreneurs.
March 22, 2024	Qikiqtani Inuit Association, Members of the Public - Clyde River	In-Person	The Baffinland Contracting Committee together with the Qikiqtani Inuit Association provided a Contracting Information Session to Clyde River local businesses and aspiring entrepreneurs.
March 22, 2024	Qikiqtani Inuit Association	Teleconference	Update on Steensby permitting
March 25, 2024	Natural Resources Canada	Teleconference	Collaborative Dust Monitoring project planning
March 26-27, 2024	Various	In-Person	Project Monitor Workshop
March 27, 2024	Qikiqtani Inuit Association	Teleconference	Working Group Terms of Reference
April 4, 2024	Qikiqtani Inuit Association	Teleconference	Working Group Terms of Reference
April 05, 2024	Canadian Northern Economic Developmental Agency	Teleconference	Confidential
April 08, 2024	Mittimatalik Hunters and Trappers Organization	In-Person	Environmental Monitoring, Hunting Cabins, Hunter & Visitor Access Procedures
April 09, 2024	Natural Resources Canada	Teleconference	Site visit schedule for Dust Monitoring Program
April 11, 2024	Qikiqtani Inuit Association	Teleconference	Qikiqtani Skills and Training for Employment Partnership (Q-Step)
April 11, 2024	Qikiqtani Inuit Association	Teleconference	Steensby Update
April 16, 2024	Fisheries and Oceans Canada	Teleconference	2024 DFO Ballast Water Program
April 17, 2024	Transport Canada	Teleconference	Steensby Railway and Port Update
April 17, 2024	Hunters and Trappers Organization - Ikajutit (Arctic Bay), Hunters and Trappers	Teleconference	Joint meeting for Marine and Terrestrial Environment Working Groups (TEWG) - Terms of Reference

Engagement Date	Group Participants	Meeting Location	Description
	Organization - Mittimatalik (Pond Inlet), Environment and Climate Change Canada, Fisheries and Oceans Canada, Government of Nunavut, Natural Resources Canada Hunters and Trappers Organization - Igloolik, Oceans North, Parks Canada, Qikiqtani Inuit Association, Transport Canada, Department of Justice		
April 18, 2024	Qikiqtani Inuit Association, Members of the Public - Sanirajak	In-Person	Contracting Information Session to Sanirajak local businesses and aspiring entrepreneurs.
April 22, 2024	Qikiqtani Inuit Association	Teleconference	Interim Closure and Reclamation Plan Update
April 23-26, 2024	Dust Audit Committee	In-Person	Site visit at Mary River
April 24-25, 2024	Nunavut Impact Review Board	In-Person	Spring site visit
April 24, 2024	Government of Nunavut	In-Person	Program Update
April 24, 2024	Qikiqtani Inuit Association	In-Person	Presidents meeting
April 25, 2024	Government of Nunavut	In-Person	Meeting Planning
April 26, 2024	Nunavut Chamber of Mines	In-Person	Legislative Assembly
April 30, 2024	Qikiqtani Inuit Association	Teleconference	Action Tracker Update
May 02, 2024	Qikiqtani Inuit Association	Teleconference	Employment Committee Activity Updates
May 02, 2024	Qikiqtani Inuit Association	In-Person	Interim Closure and Reclamation Plan (ICRP) for the Mary River Project.
May 06, 2024	Government of Nunavut	Teleconference	SOP 2
May 08, 2024	Qikiqtani Inuit Association	In-Person	SOP2, community engagement, CEA workshop, Steensby, IIBA, rent and security.
May 09, 2024	Fisheries and Oceans Canada	Teleconference	Ballast Water Program Planning
May 09, 2024	Qikiqtani Inuit Association	Teleconference	Annual Project Review Forum Working Group Meeting
May 10, 2024	Natural Resources Canada	Teleconference	Discussion and planning for NRCan Dust monitoring summer field program at Mary River

Engagement Date	Group Participants	Meeting Location	Description
May 10, 2024	Qikiqtani Inuit Association	Teleconference	Monthly Steensby permit update meeting with QIA
May 13, 14 2024	Igloolik HTA, Mittimatalik HTO, Environment and Climate Change Canada, Qikiqtani Inuit Association, Government of Nunavut, Parks Canada, Fisheries and Oceans Canada, Makivvik Corporation, World Wildlife Fund, Oceans North, Canadian Northern Economic Development Agency, Transport Canada, NPMO	Teleconference	MEWG meeting: 2023 program results, 5 year monitoring plan, survey averaging, tidal gauge monitoring
May 15, 2024	Transport Canada	Teleconference	Baffinland met with Transport Canada, Regional Environmental Response Program, to discuss Fuel Transfer Plans for Steensby Port
May 16, 2024	Crown-Indigenous Relations and Northern Affairs Canada, Qikiqtani Inuit Association	Teleconference	Work Plan and Security Update
May 21, 2024	Fisheries and Oceans Canada	Teleconference	Ballast Water Program Planning
May 22, 2024	Fisheries and Oceans Canada	Teleconference	Meeting discussing the progress of the DFO's technical review for BIM's freshwater and marine FAAs
May 22, 2024	Mittimatalik Hunters and Trappers Organization, Environment and Climate Change Canada, Qikiqtani Inuit Association, Government of Nunavut, Qikiqtani Inuit Association, Canadian Northern Economic Development Agency	Teleconference	Terrestrial Environment Working Group: 2023 Terrestrial Monitoring program, two QIA recommendations - on caribou collaring program in the Steensby RSA and TEWG redefinition of <i>Deflection</i> and an overview of the 2024 audit committee site visit.
May 26, 2024	Hunters Trappers Organization - Sanirajak, Hunters Trappers Organization - Igloolik	In-Person	Meeting to discuss SOP2 and updated baseline studies for Steensby

Engagement Date	Group Participants	Meeting Location	Description
June 04, 2024	Natural Resources Canada	Teleconference	Planning meeting for summer field program for Dust Monitoring
June 06, 2024	Fisheries and Oceans Canada	In-Person	Baffinland and DFO met to discuss Marine FAA application submitted in February
June 05, 2024	Mittimatalik HTO, Igloolik HTO, Sanirajak HTO, Environment and Climate Change Canada, Qikiqtani Inuit Association, World Wildlife Fund, Fisheries and Oceans Canada, Makivvik Corporation, Parks Canada, Oceans North, Transport Cnaada, Cnadian Northern Economic Development Agency	In-Person	In-Person and virtual MEWG meeting held in Ottawa. 2023 Monitoring results, Steensby Spill Modelling, 5Year plan Tidal Gauge Monitoring
June 06, 2024	Mittimatalik HTO, Igloolik HTO, Sanirajak HTO, Environment and Climate Change Canada, Qikiqtani Inuit Association, World Wildlife Fund, Fisheries and Oceans Canada, Makivvik Corporation, Parks Canada, Oceans North, Transport Canada, Canadian Northern Economic Development Agency	In-Person	In-Person and virtual MEWG meeting held in Ottawa. Ballast Water Monitoring, 2024 Shipping Season, Acoustic Monitoring by Ocean's North
June 07, 2024	Qikiqtani Inuit Association	Teleconference	Employment Committee
June 11, 2024	Canadian Transportation Agency	In-Person	Baffinland and the CTA met to discuss preliminary CTA questions regarding Baffinland's S.98 Application
June 13, 2024	Qikiqtani Inuit Association	Teleconference	MEWG Working group planning 2024/2025
June 17, 2024	Canadian Transportation Agency	Teleconference	S. 98 Application
June 18, 2024	Transport Canada	Teleconference	Steensby Navigation protection program application follow-up

Engagement Date	Group Participants	Meeting Location	Description
June 19, 2024	Qikiqtani Inuit Association	In-Person	Mary River Site Visit
June 20, 2024	Qikiqtani Inuit Association	Teleconference	Baffinland met with the Qikiqtani Inuit Association for the monthly Steensby permitting update meeting.
June 24, 2024	Government of Nunavut	In-Person	Confidential
June 25, 2024	Government of Nunavut	In-Person	Confidential
June 25, 2024	Nunavut Tunngavik Inc.	In-Person	Confidential
June 26, 2024	Qikiqtani Inuit Association	Teleconference	Interim Closure and Reclamation Plan Update and plans for in-person meeting and upcoming site visit
June 26, 2024	Government of Nunavut, Nunavut Tunngavik Inc.	In-Person	Confidential
June 27, 2024	Natural Resources Canada	Teleconference	Kick off meeting with finalization of plans for the commencement of the Dust Monitoring Program.
June 28, 2024	Canadian Northern Economic Development Agency	Teleconference	
July 02, 2024	Fisheries and Oceans Canada	Teleconference	Ballast Water Program Planning
July 02, 2024	Members of Public- Pond Inlet	Radio	Pre-shipping Radio Show
July 03, 2024	Government of Nunavut	In-Person	Caribou Collaring
July 03, 2024	Members of Public - Pond Inlet	In-Person	Community drop in at the Co-op on Steensby and Shipping
July 03, 2024	Mittimatalik HTO	In-Person	Pre-shipping meeting
July 04, 2024	Hamlet of Pond Inlet	In-Person	Pre-shipping meeting
July 05, 2024	Hamlet of Pond Inlet	In-Person	Steensby Component
July 05, 2024	RCMP Pond Inlet	In-Person	Socio-economic data sharing
July 09, 2024	Fisheries and Oceans Canada	Teleconference	Discussion on the status of the Freshwater FAA Application for Steensby Railway, discuss and DFO concerns and next steps for the application review
July 11, 2024	Qikiqtani Inuit Association	In-person	Interim Closure and Reclamation Plan review
July 15, 2024	Qikiqtani Inuit Association	Teleconference	Annual Project Review Forum Update

Engagement Date	Group Participants	Meeting Location	Description
July 17, 2024	Qikiqtani Inuit Association	Teleconference	SOP 2
July 18, 2024	Nunavut Impact Review Board	Teleconference	SOP 2
July 26, 2024	Canadian Northern Economic Development Agency	In-Person	Steensby Update
July 30, 2024	Canadian Northern Economic Development Agency	Teleconference	Steensby Update
July 30, 2024	Fisheries and Oceans Canada	Teleconference	Ballast Water Program
August 01, 2024	Nunavut Impact Review board	Teleconference	SOP2
August 06, 2024	Qikiqtani Inuit Association	Teleconference	Annual Project Review Forum Update
August 06, 2024	Hamlet of Sanirajak, Hamlet of Igloolik	Radio	Update on the Sustaining Operations Proposal 2 (SOP2).
August 07, 2024	Nunavut Water Board	Teleconference	Water License Renewal Application
August 08, 2024	Qikiqtani Inuit Association	Teleconference	Annual Project Review Forum Update
August 09, 2024	Qikiqtani Inuit Association	Teleconference	Employment Committee
August 15, 2024	Fisheries and Oceans Canada	Teleconference	Ballast Water Kickoff Meeting
August 14, 2024	Qikiqtani Inuit Association	Teleconference	Annual Project Review Forum Update
August 14, 2024	Canadian Transportation Agency	Teleconference	Steensby Section 98 Approval to Construct a Railway Application review
August 16, 2024	Fisheries and Oceans Canada	Teleconference	Steensby Fisheries Act Authorizations update and Milne Port Offsetting
August 21, 2024	Canadian Transportation Agency	Teleconference	Meeting between BIM and the CTA discussing the upcoming resubmission of the S98 application and the document structure changes
August 21, 2024	Qikiqtani Inuit Association	In-Person	Site Environment Audit
August 21, 2024	Qikiqtani Inuit Association, Government of Nunavut, Igloolik Hamlet, Igloolik community members, Sanirajak community members	In-Person	Elder visit to Ikpikitturjuaq, a site approximately 10km south the proposed Steensby Port site

Engagement Date	Group Participants	Meeting Location	Description
August 27, 2024	Fisheries and Oceans Canada	Teleconference	Ballast Water Program
September 04, 2024	Canadian Transportation Agency	Teleconference	Section 98 Application to the Elder's visit
September 04, 2024	Qikiqtani Inuit Association	In-Person	Baffinland hosted a site tour for the Qikiqtani Inuit Association
September 05, 2024	Fisheries and Oceans Canada	Teleconference	Fisheries Act Authorization
September 06, 2024	Qikiqtani Inuit Association	Teleconference	Annual Project Review Forum Update
September 09, 2024	Qikiqtani Inuit Association	Teleconference	Annual Project Review Forum September 9-13
September 09, 2024	Government of Nunavut	Virtual	Steensby Update
September 10-12, 2024	Qikiqtani Inuit Association, Members of the Public from Igloolik, Pond Inlet, Sanirajak	In-Person	Annual Project Review Forum Meeting in Igloolik
September 11, 2024	Government of Canada, Fisheries and Oceans Canada, Transport Canada, Health Canada, Natural Resources Canada, Crown- Indigenous Relations and Northern Affairs Canada, Environment Climate Change Canada, Cannor, Impact Assessment Canada	Teleconference	SOP2 FEIS Addendum Walk Through
September 13, 2024	Natural Resources Canada	Teleconference	Collaborative Dust Monitoring Project
September 16, 2024	Government of Nunavut	Phone	Socio-Economic Monitoring Working Group meeting date and Qikiqtaaluk Socio-Economic Monitoring Committee meeting timing.
September 17 - 19, 2024	Qikiqtani Inuit Association	In-Person	Quarterly Management Meeting
September 17-20	Nunavut Impact Review Board	In-Person	Fall Site Visit
September 18, 2024	Qikiqtani Inuit Association	Teleconference	Baffinland met with the Qikiqtani Inuit Association for the monthly Steensby permit update meeting.
September 23, 2024	Government of Nunavut	Teleconference	

Engagement Date	Group Participants	Meeting Location	Description
September 23, 2024	Canadian Northern Economic Development Agency	In-Person	
September 26, 2024	Qikiqtani Inuit Association	Teleconference	Contracting Committee
October 01, 2024	Fisheries and Oceans Canada	Teleconference	Tote Road
October 02, 2024	Canadian Transportation Agency	Teleconference	Steensby Section 98 Approval to Construct a Railway Application review
October 03, 2024	Qikiqtaaluk Corporation	Teleconference	
October 04, 2024	Government of Nunavut: Department of Economic Development and Transportation		
October 04, 2024	Nunavut Planning Commission		
October 05, 2024	Makivvik Corporation	In-Person	Southern Shipping Route and the Marine Land-use Plan for Nunavik
October 08, 2024	Fisheries and Oceans Canada	Teleconference	Ballast Water Program
October 08, 2024	Qikiqtani Inuit Association	Teleconference	Interim Closure and Reclamation Plan Review
October 09, 2024	Fisheries and Oceans Canada	Teleconference	Steensby Fisheries Act Authorization
October 09, 2024	Crown-Indigenous Relations and Northern Affairs Canada	Virtual	
October 09, 2024	Government of Nunavut	Phone	Baffinland phoned the Government of Nunavut Socio-Economic Monitoring Coordinator regarding planning of a Qikiqtaaluk Socio-Economic Monitoring Committee meeting.
October 10, 2024	Canadian Transportation Agency	Teleconference	Meeting set up at CTA's request as they want to share the Panel's feedback on the Section 98 Application.
October 10, 2024	Mittimatalik HTO, Clyde River HTO, Sanirajak HTA, Arctic Bay HTA, Environment and Climate HCange Canada, Qikiqtani Inuit Association, Government of	Teleconference	TEWG Meeting discussion focused around QIA recommendation on caribou collaring and the definition of deflection.

Engagement Date	Group Participants	Meeting Location	Description
	Nunavut, Natural Resources Canada, Canadian Northern Economic Development Agency, World Wildlife Fund,		
October 10, 2024	Government of Nunavut: Department of Economic Development and Transportation, Nunavut Land Use Plan	In-Person	Project update
October 10, 2024	Canadian Northern Economic Development Agency	In-Person	Catch Up with Udlu Hanson, VP, Community and Strategic Development
October 15, 2024	Qikiqtani Inuit Association	Teleconference	Interim Closure and Reclamation Plan Review
October 22, 2024	Qikiqtani Inuit Association	Teleconference	Baffinland met with the Qikiqtani Inuit Association to bi-laterally discuss the Terms of Reference for the Marine and Terrestrial Environment Working Groups to align on the legal interpretation of whether the working group can make binding recommendations on behalf of the Minister and to outline the next steps.
October 25, 2024	Canadian Transportation Agency, Nunavut Impact Review Board	Teleconference	CTA requested a meeting with NIRB and NIM to discuss the validity of the 2-12 FEIS for the Steensby component of the Mary River Project and the potential implications of the CEA Framework.
October 29, 2024	Hamlet of Clyde River , Nangmautak Hunters and Trappers Organization	In-Person	Hamlet of Clyde River and the Hunter and Trapper Association – Namautaq on SOP2 and Steensby.
October 29, 2024	Qikiqtani Inuit Association	Teleconference	
October 29, 2024	Government of Nunavut	Teleconference	Caribou Monitoring
October 30, 2024	Qikiqtani Inuit Association	In-Person	Steensby Monitoring & Environmental Management Systems
October 31, 2024	Dust Audit Committee	Teleconference	Validation of information for final report
November 04, 2024	Canadian Northern Economic Development Agency	Virtual	Update on Steensby
November 05, 2024	Iglolik Working Group	Teleconference	Update on Steensby

Engagement Date	Group Participants	Meeting Location	Description
November 06, 2024	Nunavut Impact Review Board	Teleconference	Introductions for staff
November 06, 2024	Mayor of Iqaluit	Teleconference	Mayor's meeting at Aqsarniit
November 07, 2024	Qikiqtani Inuit Association, Mayor of Arctic Bay, Mayor of Igloolik, SAO Igloolik, Igloolik Hamlet Councillor, Sanirajak Deputy Mayor, Sanirajak SAO, Mayor of Kimmirut, Mayor of Pond Inlet, Mayor of Kinngait	In-Person	Update on Steensby
November 08, 2024	Nunavut Department of Environment	In-Person	Meeting with Deputy Minister Paul Suvega
November 13, 2024	Government of Nunavut	Teleconference	Caribou Monitoring
November 14, 2024	Qikiqtani Inuit Association	Teleconference	
November 15, 2024	Government of Nunavut, Qikiqtani Inuit Association, Crown-Indigenous Relations And Northern Affairs Canada	Teleconference	Socio-Economic Working Group
November 15, 2024	Government of Nunavut, Office of the Minister	Teleconference	Update on Steensby
November 15, 2024	Qikiqtani Inuit Association	Teleconference	Interim Closure and Reclamation Plan Review
November 19, 2024	Crown-Indigenous Relations And Northern Affairs Canada	Call	Steensby Land Leases
November 19, 2024	Qikiqtani Inuit Association	Teleconference	Annual Project Review Forum Update
November 20, 2024	Hamlet of Pond Inlet	In-Person	BIM met with MHTO and Hamlet of Pond Inlet to provide an update on the Steensby component of the project.
November 20, 2024	Hamlet of Pond Inlet, Mittimatalik Hunters and Trappers Organization	In-Person	Post-shipping season meeting

Engagement Date	Group Participants	Meeting Location	Description
November 20, 2024	Canadian Transportation Agency	Teleconference	Steensby Approval to Construct a Railway Application discussion
November 21, 2024	Crown-Indigenous Relations and Northern Affairs	Teleconference	Water Licence Renewal Review
November 21, 2024	Fisheries and Oceans Canada	Teleconference	Water Licence Renewal Review
November 21, 2024	Environment Climate Change Canada	Teleconference	Water Licence Renewal Review
November 22, 2024	Qikiqtani Inuit Association	Teleconference	Interim Closure and Reclamation Plan Review
November 22, 2024	Qikiqtani Inuit Association	Teleconference	Water Licence Renewal Review
November 22, 2024	Crown-Indigenous Relations and Northern Affairs	Teleconference	Water Licence Renewal Follow-up
November 24, 2024	Community Members - Pond Inlet	Radio	Radio show on the Steensby Component and post-shipping season
November 24, 2024	Qikiqtani Inuit Association	Teleconference	MEWG Working group planning 2024/2025
November 24, 2024	Fisheries and Oceans Canada	Teleconference	Meeting to discuss the progress of the DFO's technical review for BIM's freshwater and marine FAAs
November 25-28	Qikiqtaaluk Wildlife Board	In-Person	QWL Annual General Meeting
November 25, 2024	Crown-Indigenous Relations and Northern Affairs	Teleconference	Security Management Agreement introduction
November 26, 2024	Members from Arctic Bay HTO, Clyde River HTO, Kimmirut HTO, Kinngait HTO, Mittimatalik HTO, Qikiqtaaluk Wildlife Board	In-Person	Steensby Component Update
November 26, 2024	Fisheries and Oceans Canada	Teleconference	Steensby Fisheries Act Authorization update
November 27, 2024	Fisheries and Oceans Canada	Teleconference	review 2024 DFO Ballast Water Program
November 28, 2024	Qikiqtani Inuit Association	Teleconference	Contracting Committee meeting
November 28, 2024	Qikiqtani Inuit Association	Teleconference	Water Licence Renewal technical discussion
November 29, 2024	Qikiqtani Inuit Association	Teleconference	Water Licence Renewal technical discussion

Engagement Date	Group Participants	Meeting Location	Description
November 29, 2024	Crown-Indigenous Relations and Northern Affairs	Teleconference	Water Licence Renewal technical discussion
December 02, 2024	Crown-Indigenous Relations and Northern Affairs	In-person	Water Licence Renewal technical discussion
December 03, 2024	Hunters and Trappers Organization - Igloolik	Teleconference	Community meeting held by NWB for BIM's Type A Water License Renewal.
December 03-04, 2024	Members from Arctic Bay, Clyde River, Igloolik, Sanirajak HTAs, Nunavut Water Board, Qikiqtani Inuit Association, Crown-Indigenous Relations and Northern Affairs Canada, Environment and Climate Change Canada, Fisheries and Oceans Canada,	In-Person & Tele-conference	Technical meeting held by NWB for BIM's Type A Water License renewal
December 04, 2024	Qikiqtani Inuit Association	Teleconference	Employment committee meeting discussing updates on the progress of the 2024/25 Annual Workplan priorities.
December 04, 2024	Crown-Indigenous Relations and Northern Affairs Canada	Teleconference	Technical meeting and pre-hearing Conference held by Nunavut Water Board for Baffinland's Type A Water License Renewal.
December 04, 2024	Qikiqtani Inuit Association	Teleconference	Employment Committee
December 05, 2024	Dust Audit Committee	Teleconference	Country Food Assessment presentation
December 09, 2024	Mittimatalik HTO, Hamlet of Pond Inlet, CanNor, Transport Canada, Fisheries and Oceans Canada, CIRNAC, CTA, NPMO, Qikiqtani Inuit Association	In-Person	Steensby Federal Tour
December 10, 2024	Sanirajak HTA, Hamlet of Sanirajak, General Public, CanNor, Transport Canada,	In-Person	Steensby Federal Tour

Engagement Date	Group Participants	Meeting Location	Description
	Fisheries and Oceans Canada, CIRNAC, CTA, NPMO		
December 11, 2024	Crown Indigenous Relations and Northern Affairs, Qikiqtani Inuit Association	Teleconference	Security Management Agreement Trilateral review and information session
December 11, 2024	Igloolik HTA, Hamlet of Igloolik, General Public, CanNor, Transport Canada, Fisheries and Oceans Canada, CIRNAC, CTA, NPMO	In-Person	Steensby Federal Tour
December 17, 2024	Hamlet of Kinnigait, Hunters and Trappers Organization - Kinngait	In-Person	Steensby Component update
December 17, 2024	Natural Resources Canada	Teleconference	2024 Lessons Learned

Table 12.2: Site Visits to the Mary River Project - 2024

Date	Agency
February 13 to 14, 2024	CIRNAC - Water Licence Inspection
April 3 to 5, 2024	CIRNAC - Water Licence Inspection
April 23 to 24, 2024	NIRB - Site Visit
April 22-25, 2024	DAC - Site Visit
April 30 to May 3, 2024	WSCC - Regulatory Inspection (Mine Health and Safety Act)
June 10 to 12, 2024	QIA - Regulatory Inspection - QIA conducted the inspection with technical support from LGL Limited (LGL), and Mining Impact Specialists Ltd. (MISL)
July 24 to 29, 2024	DFO - Inspection of Tote Road fish-bearing crossing locations
July 30 to August 1, 2024	CIRNAC - Water Licence Inspection
August 13 to 15, 2024	ECCC - Regulatory Inspection
August 20 to 23, 2024	QIA - Environmental Audit - QIA conducted an environmental audit with technical support from M.A. O'Kane Consultants Inc.
August 21 to 22, 2024	CIRNAC - Water Licence Inspection
September 3 to 5, 2024	QIA - Management Visit
September 10 to 13, 2024	QIA - Regulatory Inspection - QIA conducted the inspection with technical support from LGL Limited (LGL), and Mining Impact Specialists Ltd. (MISL)
September 17 to 22, 2024	NIRB - Site Visit
September 18 to 24, 2024	WSCC - Regulatory Inspection (Mine Health and Safety Act)
October 1 to 2, 2024	QIA - Unscheduled Environmental Inspection (LGL)
October 22 to 23, 2024	CIRNAC - Water Licence Inspection

Notes:

QIA - Qikiqtani Inuit Association

NIRB - Nunavut Impact Review Board

CIRNAC - Crown Indigenous Relations and Northern Affairs Canada

WSCC - Workers' Safety and Compensation Commission

ECCC - Environment and Climate Change Canada

DFO - Fisheries and Oceans Canada

DAC - Dust Audit Committee