

APPENDIX E.14
MDMER Annual Reports

Mary River Mine Site - Annual effluent monitoring report - Version 1 - 2025

Report details	
Facility name	Mary River Mine Site
Reporting period	2025
Version	1
Status	Submitted
Last modified	2026/03/31 13:19 (EDT)
Submission date	2026/03/31 13:19 (EDT)

Parent company

Parent company	Physical address
Baffinland Iron Mines Corporation	300, 360 Oakville Place, Drive, Oakville, Ontario, L6H 6K8, Canada

History

Status	Version	Last modified	Submission date
Submitted	1	2026/03/31 13:19 (EDT)	2026/03/31 13:19 (EDT)

Identifying information

Reporting period	2025
Facility name	Mary River Mine Site
Facility physical address	
Operator name (required)	Baffinland Iron Mines Corporation
Operator telephone number	
Operator extension	
Operator e-mail address	

Note	Date	User name
No data available		

Test results

Final discharge point MS-08

Final discharge point latitude 71.34019

Final discharge point longitude -79.22178

Monthly mean concentrations, pH and volume of effluent

Month	As (mg/L)	Cu (mg/L)	CN (mg/L)	Pb (mg/L)	Ni (mg/L)	Zn (mg/L)	TSS (mg/L)	Ra-226 (Bq/L)	NH ₃ ¹ (mg/L expressed as nitrogen (N))	Lowest pH	Highest pH	Effluent volume (m ³)
Jan	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP
Feb	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP
Mar	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP
Apr	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP
May	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP
Jun	0.0001	0.0018	-	0.0003	0.0056	0.0015	3.475	0.004	0.0012	7.23	7.66	56170
Jul	0	0.0052	-	0.0001	0.0165	0.0025	3.4333	0.0038	0.0037	6.98	7.6	142507
Aug	0.0002	0.0043	-	0.0001	0.0271	0.0068	5.4	0.004	0.026	7.44	8.24	53682
Sep	0	0.0034	-	0	0.0486	0.007	3.3	0.009	0.0065	7.51	7.51	3922
Oct	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP
Nov	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP
Dec	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP

¹Note: The monthly mean concentration for un-ionized ammonia is calculated for collection dates as of June 1st, 2021.

Results of acute lethality tests

Date sample collected	Results for rainbow trout acute lethality tests (mean percentage mortality in 100% effluent test concentration)	Results for <i>Daphnia magna</i> monitoring / acute lethality tests (mean percentage mortality in 100% effluent test concentration)	Results for threespine stickleback acute lethality tests (mean percentage mortality in 100% effluent test concentration)
2025/06/03 12:25	0%	0%	
2025/06/17 08:05	0%	0%	
2025/07/07 10:25	0%	0%	

Date sample collected	Results for rainbow trout acute lethality tests (mean percentage mortality in 100% effluent test concentration)	Results for <i>Daphnia magna</i> monitoring / acute lethality tests (mean percentage mortality in 100% effluent test concentration)	Results for threespine stickleback acute lethality tests (mean percentage mortality in 100% effluent test concentration)
2025/08/09 10:00	0%	0%	
2025/09/05 08:40	0%	0%	

If effluent was non-compliant with the authorized limits set out in Schedule 4, or if the pH was less than 6.0 or greater than 9.5, or if effluent was determined to be acutely lethal, indicate the cause(s) of non-compliance and remedial measures that are planned or have been implemented.

Non-compliance information

Test results

Final discharge point	MS-06
Final discharge point latitude	71.31111
Final discharge point longitude	-79.27861

Monthly mean concentrations, pH and volume of effluent

Month	As (mg/L)	Cu (mg/L)	CN (mg/L)	Pb (mg/L)	Ni (mg/L)	Zn (mg/L)	TSS (mg/L)	Ra-226 (Bq/L)	NH ₃ ¹ (mg/L expressed as nitrogen (N))	Lowest pH	Highest pH	Effluent volume (m ³)
Jan	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP
Feb	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP
Mar	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP
Apr	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP
May	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP
Jun	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP
Jul	0.0005	0.0025	-	0.0005	0.0347	0.015	2.4667	0.0033	0.022	6.83	7.3	2493
Aug	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP
Sep	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP
Oct	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP
Nov	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP
Dec	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP

¹Note: The monthly mean concentration for un-ionized ammonia is calculated for collection dates as of June 1st, 2021.

Results of acute lethality tests

Date sample collected	Results for rainbow trout acute lethality tests (mean percentage mortality in 100% effluent test concentration)	Results for <i>Daphnia magna</i> monitoring / acute lethality tests (mean percentage mortality in 100% effluent test concentration)	Results for threespine stickleback acute lethality tests (mean percentage mortality in 100% effluent test concentration)
2025/07/16 12:30	0%	0%	

If effluent was non-compliant with the authorized limits set out in Schedule 4, or if the pH was less than 6.0 or greater than 9.5, or if effluent was determined to be acutely lethal, indicate the cause(s) of non-compliance and remedial measures that are planned or have been implemented.

Non-compliance information

Test results

Final discharge point MS-07

Final discharge point latitude 71.31150

Final discharge point longitude -79.22186

Monthly mean concentrations, pH and volume of effluent

Month	As (mg/L)	Cu (mg/L)	CN (mg/L)	Pb (mg/L)	Ni (mg/L)	Zn (mg/L)	TSS (mg/L)	Ra-226 (Bq/L)	NH ₃ ¹ (mg/L expressed as nitrogen (N))	Lowest pH	Highest pH	Effluent volume (m ³)
Jan	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP
Feb	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP
Mar	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP
Apr	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP
May	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP
Jun	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP
Jul	0.0001	0.0036	-	0.0008	0.0106	0.0046	10.95	0.0052	0.0092	7.29	7.44	1842
Aug	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP
Sep	0	0.0006	-	0.0002	0.0038	0.0015	9.4	0.0025	0.0012	7.38	7.38	2610
Oct	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP
Nov	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP
Dec	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP

¹Note: The monthly mean concentration for un-ionized ammonia is calculated for collection dates as of June 1st, 2021.

Results of acute lethality tests

Date sample collected	Results for rainbow trout acute lethality tests (mean percentage mortality in 100% effluent test concentration)	Results for <i>Daphnia magna</i> monitoring / acute lethality tests (mean percentage mortality in 100% effluent test concentration)	Results for threespine stickleback acute lethality tests (mean percentage mortality in 100% effluent test concentration)
2025/07/19 09:10	0%	0%	
2025/09/02 11:45	0%	0%	

was determined to be acutely lethal, indicate the cause(s) of non-compliance and remedial measures that are planned or have been implemented.

Non-compliance information

Test results

Final discharge point	MS-11
Final discharge point latitude	71.31264
Final discharge point longitude	-79.26125

Monthly mean concentrations, pH and volume of effluent

Month	As (mg/L)	Cu (mg/L)	CN (mg/L)	Pb (mg/L)	Ni (mg/L)	Zn (mg/L)	TSS (mg/L)	Ra-226 (Bq/L)	NH ₃ ¹ (mg/L expressed as nitrogen (N))	Lowest pH	Highest pH	Effluent volume (m ³)
Jan	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP
Feb	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP
Mar	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP
Apr	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP
May	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP
Jun	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP
Jul	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP
Aug	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP
Sep	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP
Oct	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP
Nov	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP
Dec	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP	NDEP

¹Note: The monthly mean concentration for un-ionized ammonia is calculated for collection dates as of June 1st, 2021.

Results of acute lethality tests

Date sample collected	Results for rainbow trout acute lethality tests (mean percentage mortality in 100% effluent test concentration)	Results for <i>Daphnia magna</i> monitoring / acute lethality tests (mean percentage mortality in 100% effluent test concentration)	Results for threespine stickleback acute lethality tests (mean percentage mortality in 100% effluent test concentration)
No data available			

If effluent was non-compliant with the authorized limits set out in Schedule 4, or if the pH was less than 6.0 or greater than 9.5, or if effluent was determined to be acutely lethal, indicate the cause(s) of non-compliance and remedial measures that are planned or have been implemented.

Non-compliance information

Mary River Mine Site - Information related to effluent and water quality monitoring studies - Version 1 - 2025

Report details	
Facility name	Mary River Mine Site
Reporting period	2025
Version	1
Status	Submitted
Last modified	2026/03/30 13:13 (EDT)
Submission date	2026/03/31 13:00 (EDT)

Parent company

Parent company	Physical address
Baffinland Iron Mines Corporation	300, 360 Oakville Place, Drive, Oakville, Ontario, L6H 6K8, Canada

History

Status	Version	Last modified	Submission date
Submitted	1	2026/03/30 13:13 (EDT)	2026/03/31 13:00 (EDT)

Effluent characterization

Final discharge point	Collection date
MS-08	2025/06/03
MS-08	2025/06/17
MS-08	2025/07/07
MS-08	2025/07/22
MS-08	2025/08/09
MS-08	2025/08/25
MS-08	2025/09/05
MS-07	2025/07/19
MS-07	2025/09/02
MS-06	2025/07/16

Effluent characterization — 2025 — Version 1

Facility name	Mary River Mine Site
* Final discharge point (required)	MS-08
* Collection date (required)	2025/06/03
* Collection method (required)	Grab
☐ Mercury concentration is less than 0.10 µg/L in 12 consecutive samples collected under MDMER Schedule 5 subsection 4(4).	

Required variables	<	Value	Method detection limit	Units
Alkalinity		49.5	2	mg/L as CaCO ₃
Electrical conductivity		1540	1	µS/cm
Hardness		884	0.5	mg/L as CaCO ₃
Temperature		2.2		°C

Required variables	<	Concentration	Method detection limit	Units
Aluminum		0.0952	0.003	mg/L
Cadmium		0.000078	0.000005	mg/L
Chloride		31.4	2.5	mg/L
Chromium	<		0.0005	mg/L
Cobalt		0.0083	0.0001	mg/L
Iron		0.174	0.01	mg/L
Manganese		1.4	0.0001	mg/L
Mercury ¹	<		0.000005	mg/L
Molybdenum		0.0102	0.00005	mg/L
Nitrate		54.1	0.1	mg/L expressed as nitrogen (N)
Phosphorus	<		0.004	mg/L as P
Selenium		0.0152	0.00005	mg/L
Sulphate		592	1.5	mg/L

Required variables	<	Concentration	Method detection limit	Units
Thallium		0.000031	0.00001	mg/L
Uranium		0.00336	0.00001	mg/L
Optional variables	<	Concentration	Method detection limit	Units
Calcium		51.3	0.05	mg/L
Dissolved organic carbon		1.61	0.5	mg/L
Fluoride	<		0.1	mg/L
Magnesium		178	0.005	mg/L
Potassium		8.91	0.05	mg/L
Sodium		8.79	0.05	mg/L
Total organic carbon		1.61	0.5	mg/L
Total thiosalts				mg/L

Please refer to the Methodologies & QA/QC measures and data (e.g., lab certificates) section in MERS to report description of the methodologies used to conduct effluent characterization, and to report QA/QC measures that were implemented and the data related to those measures, or provide description in the textbox provided.

QA/QC reports are uploaded with COAs The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by the US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to to the ALS Quality Control Interpretative Report (QCI) for applicable references and methodology summaries.

Note	Date	User name
No data available		

¹Note: If the facility fulfills the condition of subsection 4(4) of Schedule 5 of the MDMER, this field may be blank.

Effluent characterization — 2025 — Version 1

Facility name Mary River Mine Site

* Final discharge point (required) MS-08

* Collection date (required) 2025/06/17

* Collection method (required) Grab

☐ Mercury concentration is less than 0.10 µg/L in 12 consecutive samples collected under MDMER Schedule 5 subsection 4(4).

Required variables	<	Value	Method detection limit	Units
Alkalinity		19.6	2	mg/L as CaCO ₃
Electrical conductivity		517	1	µS/cm
Hardness		228	0.5	mg/L as CaCO ₃
Temperature		1.5		°C
Required variables	<	Concentration	Method detection limit	Units
Aluminum		0.157	0.003	mg/L
Cadmium		0.000034	0.000005	mg/L
Chloride		9.13	0.5	mg/L
Chromium	<		0.0005	mg/L
Cobalt		0.0023	0.0001	mg/L
Iron		0.232	0.01	mg/L
Manganese		0.364	0.0001	mg/L
Mercury ¹	<		0.000005	mg/L
Molybdenum		0.00441	0.00005	mg/L
Nitrate		14.2	0.02	mg/L expressed as nitrogen (N)
Phosphorus		0.0037	0.002	mg/L as P
Selenium		0.00367	0.00005	mg/L
Sulphate		167	0.3	mg/L

Required variables	<	Concentration	Method detection limit	Units
Thallium		0.000012	0.00001	mg/L
Uranium		0.000731	0.00001	mg/L
Optional variables	<	Concentration	Method detection limit	Units
Calcium		17.2	0.05	mg/L
Dissolved organic carbon		0.79	0.5	mg/L
Fluoride		0.065	0.02	mg/L
Magnesium		52	0.005	mg/L
Potassium		3.58	0.05	mg/L
Sodium		2.79	0.05	mg/L
Total organic carbon		1.05	0.5	mg/L
Total thiosalts				mg/L

Please refer to the Methodologies & QA/QC measures and data (e.g., lab certificates) section in MERS to report description of the methodologies used to conduct effluent characterization, and to report QA/QC measures that were implemented and the data related to those measures, or provide description in the textbox provided.

QA/QC reports are uploaded with COAs The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by the US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to to the ALS Quality Control Interpretative Report (QCI) for applicable references and methodology summaries.

Note	Date	User name
No data available		

¹Note: If the facility fulfills the condition of subsection 4(4) of Schedule 5 of the MDMER, this field may be blank.

Effluent characterization — 2025 — Version 1

Facility nameMary River Mine Site

* Final discharge point (required)MS-08

* Collection date (required)2025/07/07

* Collection method (required)Grab

☐ Mercury concentration is less than 0.10 µg/L in 12 consecutive samples collected under MDMER Schedule 5 subsection 4(4).

Required variables	<	Value	Method detection limit	Units
Alkalinity		8.3	2	mg/L as CaCO ₃
Electrical conductivity		319	1	µS/cm
Hardness		154	0.5	mg/L as CaCO ₃
Temperature		5.7		°C

Required variables	<	Concentration	Method detection limit	Units
Aluminum		0.113	0.003	mg/L
Cadmium		0.000046	0.000005	mg/L
Chloride		2.8	0.5	mg/L
Chromium		0.0008	0.0005	mg/L
Cobalt		0.00655	0.0001	mg/L
Iron		0.389	0.01	mg/L
Manganese		0.639	0.0001	mg/L
Mercury ¹	<		0.000005	mg/L
Molybdenum		0.00154	0.00005	mg/L
Nitrate		5.16	0.02	mg/L expressed as nitrogen (N)
Phosphorus		0.0022	0.002	mg/L as P
Selenium		0.00149	0.00005	mg/L
Sulphate		110	0.3	mg/L

Required variables	<	Concentration	Method detection limit	Units
Thallium		0.000032	0.00001	mg/L
Uranium		0.000224	0.00001	mg/L
Optional variables	<	Concentration	Method detection limit	Units
Calcium		9.17	0.05	mg/L
Dissolved organic carbon	<		0.5	mg/L
Fluoride		0.056	0.02	mg/L
Magnesium		28.4	0.005	mg/L
Potassium		2.4	0.05	mg/L
Sodium		1.17	0.05	mg/L
Total organic carbon		0.84	0.5	mg/L
Total thiosalts				mg/L

Please refer to the Methodologies & QA/QC measures and data (e.g., lab certificates) section in MERS to report description of the methodologies used to conduct effluent characterization, and to report QA/QC measures that were implemented and the data related to those measures, or provide description in the textbox provided.

QA/QC reports are uploaded with COAs The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by the US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to to the ALS Quality Control Interpretative Report (QCI) for applicable references and methodology summaries.

Note	Date	User name
No data available		

¹Note: If the facility fulfills the condition of subsection 4(4) of Schedule 5 of the MDMER, this field may be blank.

Effluent characterization — 2025 — Version 1

Facility name Mary River Mine Site

* Final discharge point (required) MS-08

* Collection date (required) 2025/07/22

* Collection method (required) Grab

☐ Mercury concentration is less than 0.10 µg/L in 12 consecutive samples collected under MDMER Schedule 5 subsection 4(4).

Required variables	<	Value	Method detection limit	Units
Alkalinity		13.6	2	mg/L as CaCO ₃
Electrical conductivity		651	1	µS/cm
Hardness		332	0.5	mg/L as CaCO ₃
Temperature		10.3		°C

Required variables	<	Concentration	Method detection limit	Units
Aluminum		0.191	0.003	mg/L
Cadmium		0.000094	0.000005	mg/L
Chloride		7.11	0.5	mg/L
Chromium	<		0.0005	mg/L
Cobalt		0.0154	0.0001	mg/L
Iron		1.58	0.01	mg/L
Manganese		1.56	0.0001	mg/L
Mercury ¹	<		0.000005	mg/L
Molybdenum		0.00352	0.00005	mg/L
Nitrate		14	0.02	mg/L expressed as nitrogen (N)
Phosphorus	<		0.002	mg/L as P
Selenium		0.00366	0.00005	mg/L
Sulphate		248	0.3	mg/L

Required variables	<	Concentration	Method detection limit	Units
Thallium		0.000047	0.00001	mg/L
Uranium		0.00121	0.00001	mg/L
Optional variables	<	Concentration	Method detection limit	Units
Calcium		20.1	0.05	mg/L
Dissolved organic carbon		1.1	0.5	mg/L
Fluoride		0.108	0.02	mg/L
Magnesium		67.4	0.005	mg/L
Potassium		4.43	0.05	mg/L
Sodium		2.9	0.05	mg/L
Total organic carbon		0.76	0.5	mg/L
Total thiosalts				mg/L

Please refer to the Methodologies & QA/QC measures and data (e.g., lab certificates) section in MERS to report description of the methodologies used to conduct effluent characterization, and to report QA/QC measures that were implemented and the data related to those measures, or provide description in the textbox provided.

QA/QC reports are uploaded with COAs The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by the US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to to the ALS Quality Control Interpretative Report (QCI) for applicable references and methodology summaries.

Note	Date	User name
No data available		

¹Note: If the facility fulfills the condition of subsection 4(4) of Schedule 5 of the MDMER, this field may be blank.

Effluent characterization — 2025 — Version 1

Facility name	Mary River Mine Site
* Final discharge point (required)	MS-08
* Collection date (required)	2025/08/09
* Collection method (required)	Grab
☐ Mercury concentration is less than 0.10 µg/L in 12 consecutive samples collected under MDMER Schedule 5 subsection 4(4).	

Required variables	<	Value	Method detection limit	Units
Alkalinity		28.2	2	mg/L as CaCO ₃
Electrical conductivity		829	1	µS/cm
Hardness		398	0.5	mg/L as CaCO ₃
Temperature		4		°C

Required variables	<	Concentration	Method detection limit	Units
Aluminum		0.123	0.003	mg/L
Cadmium		0.000061	0.000005	mg/L
Chloride		10.4	0.5	mg/L
Chromium	<		0.0005	mg/L
Cobalt		0.0102	0.0001	mg/L
Iron		0.225	0.01	mg/L
Manganese		1.29	0.0001	mg/L
Mercury ¹	<		0.000005	mg/L
Molybdenum		0.00366	0.00005	mg/L
Nitrate		22.1	0.02	mg/L expressed as nitrogen (N)
Phosphorus		0.0027	0.002	mg/L as P
Selenium		0.00488	0.00005	mg/L
Sulphate		295	0.3	mg/L

Required variables	<	Concentration	Method detection limit	Units
Thallium		0.000035	0.00001	mg/L
Uranium		0.00116	0.00001	mg/L
Optional variables	<	Concentration	Method detection limit	Units
Calcium		33.6	0.05	mg/L
Dissolved organic carbon		1.36	0.5	mg/L
Fluoride		0.087	0.02	mg/L
Magnesium		89.8	0.005	mg/L
Potassium		5.3	0.05	mg/L
Sodium		3.99	0.05	mg/L
Total organic carbon		1.98	0.5	mg/L
Total thiosalts				mg/L

Please refer to the Methodologies & QA/QC measures and data (e.g., lab certificates) section in MERS to report description of the methodologies used to conduct effluent characterization, and to report QA/QC measures that were implemented and the data related to those measures, or provide description in the textbox provided.

QA/QC reports are uploaded with COAs The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by the US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to to the ALS Quality Control Interpretative Report (QCI) for applicable references and methodology summaries.

Note	Date	User name
No data available		

¹Note: If the facility fulfills the condition of subsection 4(4) of Schedule 5 of the MDMER, this field may be blank.

Effluent characterization — 2025 — Version 1

Facility name Mary River Mine Site

* Final discharge point (required) MS-08

* Collection date (required) 2025/08/25

* Collection method (required) Grab

☐ Mercury concentration is less than 0.10 µg/L in 12 consecutive samples collected under MDMER Schedule 5 subsection 4(4).

Required variables	<	Value	Method detection limit	Units
Alkalinity		8.4	2	mg/L as CaCO ₃
Electrical conductivity		1190	2	µS/cm
Hardness		718	0.5	mg/L as CaCO ₃
Temperature		6.7		°C

Required variables	<	Concentration	Method detection limit	Units
Aluminum		0.0405	0.03	mg/L
Cadmium		0.000067	0.00005	mg/L
Chloride		11.6	2.5	mg/L
Chromium	<		0.005	mg/L
Cobalt		0.027	0.001	mg/L
Iron		3.02	0.1	mg/L
Manganese		3.48	0.001	mg/L
Mercury ¹	<		0.000005	mg/L
Molybdenum		0.000616	0.0005	mg/L
Nitrate		22.5	0.1	mg/L expressed as nitrogen (N)
Phosphorus	<		0.002	mg/L as P
Selenium		0.00543	0.0005	mg/L
Sulphate		565	1.5	mg/L

Required variables	<	Concentration	Method detection limit	Units
Thallium	<		0.0001	mg/L
Uranium		0.000373	0.0001	mg/L
Optional variables	<	Concentration	Method detection limit	Units
Calcium		41.6	0.5	mg/L
Dissolved organic carbon		1.72	0.5	mg/L
Fluoride	<		0.1	mg/L
Magnesium		137	0.05	mg/L
Potassium		5.45	0.5	mg/L
Sodium		4.36	0.5	mg/L
Total organic carbon		1.38	0.5	mg/L
Total thiosalts				mg/L

Please refer to the Methodologies & QA/QC measures and data (e.g., lab certificates) section in MERS to report description of the methodologies used to conduct effluent characterization, and to report QA/QC measures that were implemented and the data related to those measures, or provide description in the textbox provided.

QA/QC reports are uploaded with COAs The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by the US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to to the ALS Quality Control Interpretative Report (QCI) for applicable references and methodology summaries.

Note	Date	User name
No data available		

¹Note: If the facility fulfills the condition of subsection 4(4) of Schedule 5 of the MDMER, this field may be blank.

Effluent characterization — 2025 — Version 1

Facility name Mary River Mine Site

* Final discharge point (required) MS-08

* Collection date (required) 2025/09/05

* Collection method (required) Grab

☐ Mercury concentration is less than 0.10 µg/L in 12 consecutive samples collected under MDMER Schedule 5 subsection 4(4).

Required variables	<	Value	Method detection limit	Units
Alkalinity		3.1	2	mg/L as CaCO ₃
Electrical conductivity		1090	1	µS/cm
Hardness		616	0.5	mg/L as CaCO ₃
Temperature		2.2		°C

Required variables	<	Concentration	Method detection limit	Units
Aluminum		0.063	0.003	mg/L
Cadmium		0.000142	0.000005	mg/L
Chloride		13.8	2.5	mg/L
Chromium	<		0.0005	mg/L
Cobalt		0.0347	0.0001	mg/L
Iron		1.7	0.01	mg/L
Manganese		3.53	0.0001	mg/L
Mercury ¹	<		0.000005	mg/L
Molybdenum		0.000392	0.00005	mg/L
Nitrate		26.7	0.1	mg/L expressed as nitrogen (N)
Phosphorus	<		0.002	mg/L as P
Selenium		0.00608	0.00005	mg/L
Sulphate		569	1.5	mg/L

Required variables	<	Concentration	Method detection limit	Units
Thallium		0.000097	0.00001	mg/L
Uranium		0.000239	0.00001	mg/L
Optional variables	<	Concentration	Method detection limit	Units
Calcium		39.5	0.05	mg/L
Dissolved organic carbon		1.76	0.5	mg/L
Fluoride	<		0.1	mg/L
Magnesium		132	0.005	mg/L
Potassium		5.99	0.05	mg/L
Sodium		5.14	0.05	mg/L
Total organic carbon		1.55	0.5	mg/L
Total thiosalts				mg/L

Please refer to the Methodologies & QA/QC measures and data (e.g., lab certificates) section in MERS to report description of the methodologies used to conduct effluent characterization, and to report QA/QC measures that were implemented and the data related to those measures, or provide description in the textbox provided.

QA/QC reports are uploaded with COAs The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by the US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to to the ALS Quality Control Interpretative Report (QCI) for applicable references and methodology summaries.

Note	Date	User name
No data available		

¹Note: If the facility fulfills the condition of subsection 4(4) of Schedule 5 of the MDMER, this field may be blank.

Effluent characterization — 2025 — Version 1

Facility nameMary River Mine Site

* Final discharge point (required)MS-07

* Collection date (required)2025/07/19

* Collection method (required)Grab

☐ Mercury concentration is less than 0.10 µg/L in 12 consecutive samples collected under MDMER Schedule 5 subsection 4(4).

Required variables	<	Value	Method detection limit	Units
Alkalinity		33.1	2	mg/L as CaCO ₃
Electrical conductivity		862	1	µS/cm
Hardness		408	0.5	mg/L as CaCO ₃
Temperature		8.3		°C

Required variables	<	Concentration	Method detection limit	Units
Aluminum		0.341	0.003	mg/L
Cadmium		0.000222	0.000005	mg/L
Chloride		47.4	0.5	mg/L
Chromium		0.001	0.0005	mg/L
Cobalt		0.0151	0.0001	mg/L
Iron		0.557	0.01	mg/L
Manganese		7.14	0.0001	mg/L
Mercury ¹	<		0.000005	mg/L
Molybdenum		0.00159	0.00005	mg/L
Nitrate		11.5	0.02	mg/L expressed as nitrogen (N)
Phosphorus		0.0091	0.002	mg/L as P
Selenium		0.00106	0.00005	mg/L
Sulphate		352	0.3	mg/L

Required variables	<	Concentration	Method detection limit	Units
Thallium		0.00008	0.00001	mg/L
Uranium		0.00175	0.00001	mg/L
Optional variables	<	Concentration	Method detection limit	Units
Calcium		35.1	0.05	mg/L
Dissolved organic carbon		1.8	0.5	mg/L
Fluoride		0.046	0.02	mg/L
Magnesium		78.4	0.005	mg/L
Potassium		7.3	0.05	mg/L
Sodium		18.5	0.05	mg/L
Total organic carbon		2.03	0.5	mg/L
Total thiosalts				mg/L

Please refer to the Methodologies & QA/QC measures and data (e.g., lab certificates) section in MERS to report description of the methodologies used to conduct effluent characterization, and to report QA/QC measures that were implemented and the data related to those measures, or provide description in the textbox provided.

QA/QC reports are uploaded with COAs The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by the US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to to the ALS Quality Control Interpretative Report (QCI) for applicable references and methodology summaries.

Note	Date	User name
No data available		

¹Note: If the facility fulfills the condition of subsection 4(4) of Schedule 5 of the MDMER, this field may be blank.

Effluent characterization — 2025 — Version 1

Facility nameMary River Mine Site

* Final discharge point (required)MS-07

* Collection date (required)2025/09/02

* Collection method (required)Grab

☐ Mercury concentration is less than 0.10 µg/L in 12 consecutive samples collected under MDMER Schedule 5 subsection 4(4).

Required variables	<	Value	Method detection limit	Units
Alkalinity		17.4	2	mg/L as CaCO ₃
Electrical conductivity		644	1	µS/cm
Hardness		286	0.5	mg/L as CaCO ₃
Temperature		6.3		°C

Required variables	<	Concentration	Method detection limit	Units
Aluminum		0.0402	0.003	mg/L
Cadmium		0.000137	0.000005	mg/L
Chloride		25.3	0.5	mg/L
Chromium	<		0.0005	mg/L
Cobalt		0.00187	0.0001	mg/L
Iron		0.056	0.01	mg/L
Manganese		2.33	0.0001	mg/L
Mercury ¹	<		0.000005	mg/L
Molybdenum		0.00124	0.00005	mg/L
Nitrate		8.29	0.02	mg/L expressed as nitrogen (N)
Phosphorus	<		0.004	mg/L as P
Selenium		0.000667	0.00005	mg/L
Sulphate		221	0.3	mg/L

Required variables	<	Concentration	Method detection limit	Units
Thallium		0.000031	0.00001	mg/L
Uranium		0.000688	0.00001	mg/L
Optional variables	<	Concentration	Method detection limit	Units
Calcium		27.6	0.05	mg/L
Dissolved organic carbon		1.28	0.5	mg/L
Fluoride		0.046	0.02	mg/L
Magnesium		56.7	0.005	mg/L
Potassium		6.15	0.05	mg/L
Sodium		10.6	0.05	mg/L
Total organic carbon		1.26	0.5	mg/L
Total thiosalts				mg/L

Please refer to the Methodologies & QA/QC measures and data (e.g., lab certificates) section in MERS to report description of the methodologies used to conduct effluent characterization, and to report QA/QC measures that were implemented and the data related to those measures, or provide description in the textbox provided.

QA/QC reports are uploaded with COAs The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by the US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to to the ALS Quality Control Interpretative Report (QCI) for applicable references and methodology summaries.

Note	Date	User name
No data available		

¹Note: If the facility fulfills the condition of subsection 4(4) of Schedule 5 of the MDMER, this field may be blank.

Effluent characterization — 2025 — Version 1

Facility name Mary River Mine Site

* Final discharge point (required) MS-06

* Collection date (required) 2025/07/16

* Collection method (required) Grab

☐ Mercury concentration is less than 0.10 µg/L in 12 consecutive samples collected under MDMER Schedule 5 subsection 4(4).

Required variables	<	Value	Method detection limit	Units
Alkalinity		13.6	2	mg/L as CaCO ₃
Electrical conductivity		1900	1	µS/cm
Hardness		866	0.5	mg/L as CaCO ₃
Temperature		8		°C

Required variables	<	Concentration	Method detection limit	Units
Aluminum		0.147	0.03	mg/L
Cadmium		0.000221	0.00005	mg/L
Chloride		116	2.5	mg/L
Chromium	<		0.005	mg/L
Cobalt		0.0406	0.001	mg/L
Iron		0.47	0.1	mg/L
Manganese		18.4	0.001	mg/L
Mercury ¹	<		0.000005	mg/L
Molybdenum	<		0.0005	mg/L
Nitrate		23.7	0.1	mg/L expressed as nitrogen (N)
Phosphorus		0.0073	0.002	mg/L as P
Selenium		0.00204	0.0005	mg/L
Sulphate		739	1.5	mg/L

Required variables	<	Concentration	Method detection limit	Units
Thallium		0.00021	0.0001	mg/L
Uranium		0.000345	0.0001	mg/L
Optional variables	<	Concentration	Method detection limit	Units
Calcium		62.6	0.5	mg/L
Dissolved organic carbon		3.69	0.5	mg/L
Fluoride	<		0.1	mg/L
Magnesium		184	0.05	mg/L
Potassium		10.8	0.5	mg/L
Sodium		48.2	0.5	mg/L
Total organic carbon		4.18	0.5	mg/L
Total thiosalts				mg/L

Please refer to the Methodologies & QA/QC measures and data (e.g., lab certificates) section in MERS to report description of the methodologies used to conduct effluent characterization, and to report QA/QC measures that were implemented and the data related to those measures, or provide description in the textbox provided.

QA/QC reports are uploaded with COAs The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by the US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to to the ALS Quality Control Interpretative Report (QCI) for applicable references and methodology summaries.

Note	Date	User name
No data available		

¹Note: If the facility fulfills the condition of subsection 4(4) of Schedule 5 of the MDMER, this field may be blank.

Sublethal toxicity test LC₅₀

Final discharge point	Collection date	Species tested
No data available		

Sublethal toxicity test IC₂₅/EC₂₅

Final discharge point	Collection date	Species tested
MS-08	2025/06/17	Lemna minor - Growth (Frond Number)
MS-08	2025/07/22	Lemna minor - Growth (Frond Number)

Sublethal toxicity test IC₂₅/EC₂₅ — 2025 — Version 1

Facility name	Mary River Mine Site	
* Final discharge point (required)	MS-08	
* Collection date (required)	2025/06/17	
* Collection method (required)	Grab	
* Aquatic environment (required)	Fresh water	
* Species tested (required)	Lemna minor - Growth (Frond Number)	
* Quarterly testing frequency ¹ applies? (required)	Yes	
Test start date	2025/06/20	
Consultant laboratory	Nautilus Environmental Company Inc.	
* IC ₂₅ or EC ₂₅ flag (required)	>	
* IC ₂₅ or EC ₂₅ concentration (required)	97	%
* IC ₂₅ or EC ₂₅ lower 95% confidence limit (conditionally required)		%
* IC ₂₅ or EC ₂₅ upper 95% confidence limit (conditionally required)		%
* Was there statistical stimulation of any concentration? (required)	No	
Percent stimulation	Effluent concentration with stimulation	
No data available		

For the purpose of SLT, please indicate which data were used for determining the final discharge point that has potentially the most adverse environmental impact on the environment.

Please refer to the Methodologies & QA/QC measures and data (e.g., lab certificates) section in MERS to report QA/QC measures that were implemented and the data related to the implementation of those measures, or provide description in textbox provided

¹Note: This field refers to the testing frequency required under the MDMER Schedule 5 subsection 6(3).

Note	Date	User name
Noted Deviation: Due to a temperature system malfunction, the test temperature was outside the range of 23-27°C allowed by the test method, reaching 30/31°C, for an unknown length of time (but less than 15.5 hours), between 2025-06-23 and 2025-06-24. All test validity criteria were met, and the test is considered valid.	2026/03/06 14:20 (EST)	Emma Moffatt

Sublethal toxicity test IC₂₅/EC₂₅ — 2025 — Version 1

Facility name	Mary River Mine Site	
* Final discharge point (required)	MS-08	
* Collection date (required)	2025/07/22	
* Collection method (required)	Grab	
* Aquatic environment (required)	Fresh water	
* Species tested (required)	Lemna minor - Growth (Frond Number)	
* Quarterly testing frequency ¹ applies? (required)	Yes	
Test start date	2025/07/25	
Consultant laboratory	Nautilus Environmental Company Inc.	
* IC ₂₅ or EC ₂₅ flag (required)	=	
* IC ₂₅ or EC ₂₅ concentration (required)	62.6	%
* IC ₂₅ or EC ₂₅ lower 95% confidence limit (conditionally required)	47.7	%
* IC ₂₅ or EC ₂₅ upper 95% confidence limit (conditionally required)	82.5	%
* Was there statistical stimulation of any concentration? (required)	No	
Percent stimulation	Effluent concentration with stimulation	
No data available		

For the purpose of SLT, please indicate which data were used for determining the final discharge point that has potentially the most adverse environmental impact on the environment.

Please refer to the Methodologies & QA/QC measures and data (e.g., lab certificates) section in MERS to report QA/QC measures that were implemented and the data related to the implementation of those measures, or provide description in textbox provided

¹Note: This field refers to the testing frequency required under the MDMER Schedule 5 subsection 6(3).

Note	Date	User name
------	------	-----------

Note	Date	User name
No data available		

Water quality monitoring data for exposure area

Exposure area name	Collection date	Aquatic environment
MS-06-DS	2025/07/17	Fresh water
MS-07-DS	2025/07/19	Fresh water
MS-07-DS	2025/09/02	Fresh water
MS-08-DS	2025/06/17	Fresh water
MS-08-DS	2025/07/22	Fresh water
MS-08-DS	2025/08/25	Fresh water
MS-08-DS	2025/09/05	Fresh water

Water quality monitoring data for exposure area — 2025 — Version 1

Facility name	Mary River Mine Site
* Exposure area name (required)	MS-06-DS
* Latitude (required)	71.299020
* Longitude (required)	-79.257940
* Collection date (required)	2025/07/17
* Collection method (required)	Grab
* Aquatic environment (required)	Fresh water
☐ Mercury concentration is less than 0.10 µg/L in 12 consecutive samples collected under MDMER Schedule 5 subsection 4(4).	
☒ Cyanide has never been used as a process reagent within the operations area.	
☐ The mine is not a uranium mine and the concentration of radium 226 at that final discharge point has been below 0.037Bq/L for 10 consecutive weeks or more.	

Final discharge point

Name				
MS-06				
Required variables	<	Value	Method detection limit	Units
Hardness		33.6	0.5	mg/L as CaCO ₃
Alkalinity		33.6	2	mg/L
Electrical conductivity		74	1	µS/cm
Salinity				Parts per thousand
Water temperature		6.9		°C
Dissolved oxygen		11.86		mg/L
Required variables	<	Concentration	Method detection limit	Units
Aluminum		0.474	0.003	mg/L
Ammonia ⁴	<		0.005	mg/L expressed as nitrogen (N)
Un-ionized ammonia ⁵		0.001		mg/L expressed as nitrogen (N)

Required variables	<	Concentration	Method detection limit	Units
Cadmium	<		0.000005	mg/L
Chloride		0.73	0.5	mg/L
Chromium		0.00112	0.0005	mg/L
Cobalt		0.0002	0.0001	mg/L
Iron		0.445	0.01	mg/L
Manganese		0.0059	0.0001	mg/L
Mercury ¹	<		0.000005	mg/L
Molybdenum		0.000219	0.00005	mg/L
Nitrate		0.15	0.02	mg/L expressed as nitrogen (N)
Phosphorus		0.0105	0.002	mg/L as P
Selenium	<		0.00005	mg/L
Sulphate		1.76	0.3	mg/L
Thallium		0.000012	0.00001	mg/L
Uranium		0.000567	0.00001	mg/L
Required variables	<	Concentration	Method detection limit	Units
Arsenic		0.00011	0.0001	mg/L
Copper		0.00136	0.0005	mg/L
Cyanide ²				mg/L
Lead		0.000382	0.00005	mg/L
Nickel		0.00115	0.0005	mg/L
Zinc	<		0.003	mg/L
Total suspended solids		3.6	1	mg/L
Radium 226 ³	<		0.005	Bq/L
pH		7.73		

Optional variables	<	Concentration	Method detection limit	Units
Calcium		6.75	0.05	mg/L
Dissolved organic carbon		1.75	0.5	mg/L
Fluoride		0.025	0.02	mg/L
Magnesium		4.07	0.005	mg/L
Potassium		0.792	0.05	mg/L
Sodium		1.42	0.05	mg/L
Total organic carbon		2.17	0.5	mg/L
Total thiosalts				mg/L
Water depth				m

Please refer to the Methodologies & QA/QC measures and data (e.g., lab certificates) section in MERS to report QA/QC measures that were implemented and the data related to the implementation of those measures, or provide description in textbox provided.

QA/QC reports are uploaded with COAs. The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by the US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretative Report (QCI) for applicable references and methodology summaries.

Please refer to the Methodologies & QA/QC measures and data (e.g., lab certificates) section in MERS to report description of the methodologies used to conduct water quality monitoring, or provide description in the textbox provided.

Baffinland has developed a Sampling Program- Quality Assurance and Quality Control Plan following the general recommendations presented in the Guidance Document for the Sampling and Analysis of Metal Mines Effluents (ECCC, 2001). The Quality Assurance/ Quality Control (QA/QC) objectives of this plan are designed to provide general procedures for field staff to follow when labeling, collecting, preserving, storing and handling samples.

Note	Date	User name
No data available		

¹Note: If the facility fulfills the condition of subsection 4(4) of Schedule 5 of the MDMER, this field may be blank.

²Note: If the facility fulfills the condition of subparagraph 7(1)(d)(i) of Schedule 5 of the MDMER, this field may be blank.

³Note: If the facility fulfills the condition of subparagraph 7(1)(d)(ii) of Schedule 5 of the MDMER, this field may be blank.

⁴Note: The concentration and method detection limit fields for total ammonia are required for collection dates prior to **June 1st, 2021**. For samples collected on or after **June 1st, 2021**, only the method detection limit is required.

⁵Note: The concentration field for un-ionized ammonia is required for collection dates on or after **June 1st, 2021**.

Water quality monitoring data for exposure area — 2025 — Version 1

Facility name Mary River Mine Site

* Exposure area name (required) MS-07-DS

* Latitude (required) 71.306270

* Longitude (required) -79.239370

* Collection date (required) 2025/07/19

* Collection method (required) Grab

* Aquatic environment (required) Fresh water

- ☐ Mercury concentration is less than 0.10 µg/L in 12 consecutive samples collected under MDMER Schedule 5 subsection 4(4).
- ☒ Cyanide has never been used as a process reagent within the operations area.
- ☐ The mine is not a uranium mine and the concentration of radium 226 at that final discharge point has been below 0.037Bq/L for 10 consecutive weeks or more.

Final discharge point

Name

MS-07

Required variables	<	Value	Method detection limit	Units
Hardness		40.6	0.5	mg/L as CaCO ₃
Alkalinity		39.4	2	mg/L
Electrical conductivity		85.2	1	µS/cm
Salinity				Parts per thousand
Water temperature		8.9		°C
Dissolved oxygen		11.36		mg/L
Required variables	<	Concentration	Method detection limit	Units
Aluminum		0.492	0.003	mg/L
Ammonia ⁴			0.005	mg/L expressed as nitrogen (N)
Un-ionized ammonia ⁵		0.001		mg/L expressed as nitrogen (N)

Required variables	<	Concentration	Method detection limit	Units
Cadmium		0.000016	0.000005	mg/L
Chloride		1.06	0.5	mg/L
Chromium		0.00114	0.0005	mg/L
Cobalt		0.00022	0.0001	mg/L
Iron		0.467	0.01	mg/L
Manganese		0.015	0.0001	mg/L
Mercury ¹	<		0.000005	mg/L
Molybdenum		0.00023	0.00005	mg/L
Nitrate		0.135	0.02	mg/L expressed as nitrogen (N)
Phosphorus		0.0106	0.002	mg/L as P
Selenium	<		0.00005	mg/L
Sulphate		3.05	0.3	mg/L
Thallium		0.000012	0.00001	mg/L
Uranium		0.000673	0.00001	mg/L
Required variables	<	Concentration	Method detection limit	Units
Arsenic		0.00011	0.0001	mg/L
Copper		0.00142	0.0005	mg/L
Cyanide ²				mg/L
Lead		0.000521	0.00005	mg/L
Nickel		0.00103	0.0005	mg/L
Zinc	<		0.003	mg/L
Total suspended solids		2.3	1	mg/L
Radium 226 ³	<		0.005	Bq/L
pH		8.01		

Optional variables	<	Concentration	Method detection limit	Units
Calcium		7.71	0.05	mg/L
Dissolved organic carbon		2.18	0.5	mg/L
Fluoride		0.03	0.02	mg/L
Magnesium		5.18	0.005	mg/L
Potassium		0.92	0.05	mg/L
Sodium		1.07	0.05	mg/L
Total organic carbon		1.6	0.5	mg/L
Total thiosalts				mg/L
Water depth				m

Please refer to the Methodologies & QA/QC measures and data (e.g., lab certificates) section in MERS to report QA/QC measures that were implemented and the data related to the implementation of those measures, or provide description in textbox provided.

QA/QC reports are uploaded with COAs. The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by the US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretative Report (QCI) for applicable references and methodology summaries.

Please refer to the Methodologies & QA/QC measures and data (e.g., lab certificates) section in MERS to report description of the methodologies used to conduct water quality monitoring, or provide description in the textbox provided.

Baffinland has developed a Sampling Program- Quality Assurance and Quality Control Plan following the general recommendations presented in the Guidance Document for the Sampling and Analysis of Metal Mines Effluents (ECCC, 2001). The Quality Assurance/ Quality Control (QA/QC) objectives of this plan are designed to provide general procedures for field staff to follow when labeling, collecting, preserving, storing and handling samples.

Note	Date	User name
No data available		

¹Note: If the facility fulfills the condition of subsection 4(4) of Schedule 5 of the MDMER, this field may be blank.

²Note: If the facility fulfills the condition of subparagraph 7(1)(d)(i) of Schedule 5 of the MDMER, this field may be blank.

³Note: If the facility fulfills the condition of subparagraph 7(1)(d)(ii) of Schedule 5 of the MDMER, this field may be blank.

⁴Note: The concentration and method detection limit fields for total ammonia are required for collection dates prior to **June 1st, 2021**. For samples collected on or after **June 1st, 2021**, only the method detection limit is required.

⁵Note: The concentration field for un-ionized ammonia is required for collection dates on or after **June 1st, 2021**.

Water quality monitoring data for exposure area — 2025 — Version 1

Facility name Mary River Mine Site

* Exposure area name (required) MS-07-DS

* Latitude (required) 71.306270

* Longitude (required) -79.239370

* Collection date (required) 2025/09/02

* Collection method (required) Grab

* Aquatic environment (required) Fresh water

- ☐ Mercury concentration is less than 0.10 µg/L in 12 consecutive samples collected under MDMER Schedule 5 subsection 4(4).
- ☒ Cyanide has never been used as a process reagent within the operations area.
- ☐ The mine is not a uranium mine and the concentration of radium 226 at that final discharge point has been below 0.037Bq/L for 10 consecutive weeks or more.

Final discharge point

Name

MS-07

Required variables	<	Value	Method detection limit	Units
Hardness		90.6	0.5	mg/L as CaCO ₃
Alkalinity		85.9	2	mg/L
Electrical conductivity		187	1	µS/cm
Salinity				Parts per thousand
Water temperature		-0.3		°C
Dissolved oxygen		14.36		mg/L

Required variables	<	Concentration	Method detection limit	Units
Aluminum		0.0444	0.003	mg/L
Ammonia ⁴	<		0.005	mg/L expressed as nitrogen (N)
Un-ionized ammonia ⁵		0.001		mg/L expressed as nitrogen (N)

Required variables	<	Concentration	Method detection limit	Units
Cadmium	<		0.000005	mg/L
Chloride		4.81	0.5	mg/L
Chromium	<		0.0005	mg/L
Cobalt	<		0.0001	mg/L
Iron		0.044	0.01	mg/L
Manganese		0.00124	0.0001	mg/L
Mercury ¹	<		0.000005	mg/L
Molybdenum		0.00062	0.00005	mg/L
Nitrate		0.285	0.02	mg/L expressed as nitrogen (N)
Phosphorus		0.0022	0.002	mg/L as P
Selenium	<		0.00005	mg/L
Sulphate		4.93	0.3	mg/L
Thallium	<		0.00001	mg/L
Uranium		0.00401	0.00001	mg/L
Required variables	<	Concentration	Method detection limit	Units
Arsenic	<		0.0001	mg/L
Copper		0.00096	0.0005	mg/L
Cyanide ²				mg/L
Lead	<		0.00005	mg/L
Nickel		0.0007	0.0005	mg/L
Zinc	<		0.003	mg/L
Total suspended solids	<		1	mg/L
Radium 226 ³	<		0.005	Bq/L
pH		8.12		

Optional variables	<	Concentration	Method detection limit	Units
Calcium		18	0.05	mg/L
Dissolved organic carbon		1.12	0.5	mg/L
Fluoride		0.032	0.02	mg/L
Magnesium		11.1	0.005	mg/L
Potassium		1.21	0.05	mg/L
Sodium		2.94	0.05	mg/L
Total organic carbon		2.18	0.5	mg/L
Total thiosalts				mg/L
Water depth				m

Please refer to the Methodologies & QA/QC measures and data (e.g., lab certificates) section in MERS to report QA/QC measures that were implemented and the data related to the implementation of those measures, or provide description in textbox provided.

QA/QC reports are uploaded with COAs. The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by the US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretative Report (QCI) for applicable references and methodology summaries.

Please refer to the Methodologies & QA/QC measures and data (e.g., lab certificates) section in MERS to report description of the methodologies used to conduct water quality monitoring, or provide description in the textbox provided.

Baffinland has developed a Sampling Program- Quality Assurance and Quality Control Plan following the general recommendations presented in the Guidance Document for the Sampling and Analysis of Metal Mines Effluents (ECCC, 2001). The Quality Assurance/ Quality Control (QA/QC) objectives of this plan are designed to provide general procedures for field staff to follow when labeling, collecting, preserving, storing and handling samples.

Note	Date	User name
No data available		

¹Note: If the facility fulfills the condition of subsection 4(4) of Schedule 5 of the MDMER, this field may be blank.

²Note: If the facility fulfills the condition of subparagraph 7(1)(d)(i) of Schedule 5 of the MDMER, this field may be blank.

³Note: If the facility fulfills the condition of subparagraph 7(1)(d)(ii) of Schedule 5 of the MDMER, this field may be blank.

⁴Note: The concentration and method detection limit fields for total ammonia are required for collection dates prior to **June 1st, 2021**. For samples collected on or after **June 1st, 2021**, only the method detection limit is required.

⁵Note: The concentration field for un-ionized ammonia is required for collection dates on or after **June 1st, 2021**.

Water quality monitoring data for exposure area — 2025 — Version 1

Facility name Mary River Mine Site

* Exposure area name (required) MS-08-DS

* Latitude (required) 71.310800

* Longitude (required) -79.202620

* Collection date (required) 2025/06/17

* Collection method (required) Grab

* Aquatic environment (required) Fresh water

☐ Mercury concentration is less than 0.10 µg/L in 12 consecutive samples collected under MDMER Schedule 5 subsection 4(4).

☒ Cyanide has never been used as a process reagent within the operations area.

☐ The mine is not a uranium mine and the concentration of radium 226 at that final discharge point has been below 0.037Bq/L for 10 consecutive weeks or more.

Final discharge point

Name

MS-08

Required variables	<	Value	Method detection limit	Units
Hardness		20.7	0.5	mg/L as CaCO ₃
Alkalinity		21	2	mg/L
Electrical conductivity		43.8	1	µS/cm
Salinity				Parts per thousand
Water temperature		0.6		°C
Dissolved oxygen		13.58		mg/L
Required variables	<	Concentration	Method detection limit	Units
Aluminum		0.0889	0.003	mg/L
Ammonia ⁴			0.005	mg/L expressed as nitrogen (N)
Un-ionized ammonia ⁵		0.001		mg/L expressed as nitrogen (N)

Required variables	<	Concentration	Method detection limit	Units
Cadmium	<		0.000005	mg/L
Chloride		1.01	0.5	mg/L
Chromium	<		0.0005	mg/L
Cobalt	<		0.0001	mg/L
Iron		0.065	0.01	mg/L
Manganese		0.0015	0.0001	mg/L
Mercury ¹	<		0.000005	mg/L
Molybdenum		0.00008	0.00005	mg/L
Nitrate		0.026	0.02	mg/L expressed as nitrogen (N)
Phosphorus		0.0044	0.002	mg/L as P
Selenium	<		0.00005	mg/L
Sulphate		0.6	0.3	mg/L
Thallium	<		0.00001	mg/L
Uranium		0.000256	0.00001	mg/L
Required variables	<	Concentration	Method detection limit	Units
Arsenic	<		0.0001	mg/L
Copper		0.00069	0.0005	mg/L
Cyanide ²				mg/L
Lead		0.000063	0.00005	mg/L
Nickel		0.00053	0.0005	mg/L
Zinc	<		0.003	mg/L
Total suspended solids	<		1	mg/L
Radium 226 ³		0.005	0.005	Bq/L
pH		8.09		

Optional variables	<	Concentration	Method detection limit	Units
Calcium		4.17	0.05	mg/L
Dissolved organic carbon		2.42	0.5	mg/L
Fluoride	<		0.02	mg/L
Magnesium		2.5	0.005	mg/L
Potassium		0.442	0.05	mg/L
Sodium		0.664	0.05	mg/L
Total organic carbon		2.7	0.5	mg/L
Total thiosalts				mg/L
Water depth				m

Please refer to the Methodologies & QA/QC measures and data (e.g., lab certificates) section in MERS to report QA/QC measures that were implemented and the data related to the implementation of those measures, or provide description in textbox provided.

QA/QC reports are uploaded with COAs. The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by the US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretative Report (QCI) for applicable references and methodology summaries.

Please refer to the Methodologies & QA/QC measures and data (e.g., lab certificates) section in MERS to report description of the methodologies used to conduct water quality monitoring, or provide description in the textbox provided.

Baffinland has developed a Sampling Program- Quality Assurance and Quality Control Plan following the general recommendations presented in the Guidance Document for the Sampling and Analysis of Metal Mines Effluents (ECCC, 2001). The Quality Assurance/ Quality Control (QA/QC) objectives of this plan are designed to provide general procedures for field staff to follow when labeling, collecting, preserving, storing and handling samples.

Note	Date	User name
No data available		

¹Note: If the facility fulfills the condition of subsection 4(4) of Schedule 5 of the MDMER, this field may be blank.

²Note: If the facility fulfills the condition of subparagraph 7(1)(d)(i) of Schedule 5 of the MDMER, this field may be blank.

³Note: If the facility fulfills the condition of subparagraph 7(1)(d)(ii) of Schedule 5 of the MDMER, this field may be blank.

⁴Note: The concentration and method detection limit fields for total ammonia are required for collection dates prior to **June 1st, 2021**. For samples collected on or after **June 1st, 2021**, only the method detection limit is required.

⁵Note: The concentration field for un-ionized ammonia is required for collection dates on or after **June 1st, 2021**.

Water quality monitoring data for exposure area — 2025 — Version 1

Facility name	Mary River Mine Site
* Exposure area name (required)	MS-08-DS
* Latitude (required)	71.310800
* Longitude (required)	-79.202620
* Collection date (required)	2025/07/22
* Collection method (required)	Grab
* Aquatic environment (required)	Fresh water
☐ Mercury concentration is less than 0.10 µg/L in 12 consecutive samples collected under MDMER Schedule 5 subsection 4(4).	
☒ Cyanide has never been used as a process reagent within the operations area.	
☐ The mine is not a uranium mine and the concentration of radium 226 at that final discharge point has been below 0.037Bq/L for 10 consecutive weeks or more.	

Final discharge point

Name				
MS-08				
Required variables	<	Value	Method detection limit	Units
Hardness		43	0.5	mg/L as CaCO ₃
Alkalinity		39	2	mg/L
Electrical conductivity		87.3	1	µS/cm
Salinity				Parts per thousand
Water temperature		9.7		°C
Dissolved oxygen		10.85		mg/L
Required variables	<	Concentration	Method detection limit	Units
Aluminum		0.473	0.003	mg/L
Ammonia ⁴			0.005	mg/L expressed as nitrogen (N)
Un-ionized ammonia ⁵		0.001		mg/L expressed as nitrogen (N)

Required variables	<	Concentration	Method detection limit	Units
Cadmium	<		0.000005	mg/L
Chloride		0.92	0.5	mg/L
Chromium		0.00096	0.0005	mg/L
Cobalt		0.00018	0.0001	mg/L
Iron		0.412	0.01	mg/L
Manganese		0.00448	0.0001	mg/L
Mercury ¹	<		0.000005	mg/L
Molybdenum		0.000217	0.00005	mg/L
Nitrate		0.186	0.02	mg/L expressed as nitrogen (N)
Phosphorus		0.0112	0.002	mg/L as P
Selenium		0.000066	0.00005	mg/L
Sulphate		3.41	0.3	mg/L
Thallium		0.000012	0.00001	mg/L
Uranium		0.00076	0.00001	mg/L
Required variables	<	Concentration	Method detection limit	Units
Arsenic		0.00011	0.0001	mg/L
Copper		0.0014	0.0005	mg/L
Cyanide ²				mg/L
Lead		0.000361	0.00005	mg/L
Nickel		0.00077	0.0005	mg/L
Zinc	<		0.003	mg/L
Total suspended solids		1.4	1.2	mg/L
Radium 226 ³	<		0.005	Bq/L
pH		7.33		

Optional variables	<	Concentration	Method detection limit	Units
Calcium		8.21	0.05	mg/L
Dissolved organic carbon		2.18	0.5	mg/L
Fluoride		0.028	0.02	mg/L
Magnesium		5.47	0.005	mg/L
Potassium		0.965	0.05	mg/L
Sodium		1.25	0.05	mg/L
Total organic carbon		1.42	0.5	mg/L
Total thiosalts				mg/L
Water depth				m

Please refer to the Methodologies & QA/QC measures and data (e.g., lab certificates) section in MERS to report QA/QC measures that were implemented and the data related to the implementation of those measures, or provide description in textbox provided.

QA/QC reports are uploaded with COAs. The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by the US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretative Report (QCI) for applicable references and methodology summaries.

Please refer to the Methodologies & QA/QC measures and data (e.g., lab certificates) section in MERS to report description of the methodologies used to conduct water quality monitoring, or provide description in the textbox provided.

Baffinland has developed a Sampling Program- Quality Assurance and Quality Control Plan following the general recommendations presented in the Guidance Document for the Sampling and Analysis of Metal Mines Effluents (ECCC, 2001). The Quality Assurance/ Quality Control (QA/QC) objectives of this plan are designed to provide general procedures for field staff to follow when labeling, collecting, preserving, storing and handling samples.

Note	Date	User name
No data available		

¹Note: If the facility fulfills the condition of subsection 4(4) of Schedule 5 of the MDMER, this field may be blank.

²Note: If the facility fulfills the condition of subparagraph 7(1)(d)(i) of Schedule 5 of the MDMER, this field may be blank.

³Note: If the facility fulfills the condition of subparagraph 7(1)(d)(ii) of Schedule 5 of the MDMER, this field may be blank.

⁴Note: The concentration and method detection limit fields for total ammonia are required for collection dates prior to **June 1st, 2021**. For samples collected on or after **June 1st, 2021**, only the method detection limit is required.

⁵Note: The concentration field for un-ionized ammonia is required for collection dates on or after **June 1st, 2021**.

Water quality monitoring data for exposure area — 2025 — Version 1

Facility name	Mary River Mine Site
* Exposure area name (required)	MS-08-DS
* Latitude (required)	71.310800
* Longitude (required)	-79.202620
* Collection date (required)	2025/08/25
* Collection method (required)	Grab
* Aquatic environment (required)	Fresh water
☐ Mercury concentration is less than 0.10 µg/L in 12 consecutive samples collected under MDMER Schedule 5 subsection 4(4).	
☒ Cyanide has never been used as a process reagent within the operations area.	
☐ The mine is not a uranium mine and the concentration of radium 226 at that final discharge point has been below 0.037Bq/L for 10 consecutive weeks or more.	

Final discharge point

Name				
MS-08				
Required variables	<	Value	Method detection limit	Units
Hardness		74.9	0.5	mg/L as CaCO ₃
Alkalinity		72.2	2	mg/L
Electrical conductivity		156	1	µS/cm
Salinity				Parts per thousand
Water temperature		4		°C
Dissolved oxygen		11.57		mg/L
Required variables	<	Concentration	Method detection limit	Units
Aluminum		0.124	0.003	mg/L
Ammonia ⁴	<		0.005	mg/L expressed as nitrogen (N)
Un-ionized ammonia ⁵		0.001		mg/L expressed as nitrogen (N)

Required variables	<	Concentration	Method detection limit	Units
Cadmium	<		0.000005	mg/L
Chloride		3.75	0.5	mg/L
Chromium	<		0.0005	mg/L
Cobalt	<		0.0001	mg/L
Iron		0.103	0.01	mg/L
Manganese		0.00111	0.0001	mg/L
Mercury ¹	<		0.000005	mg/L
Molybdenum		0.000433	0.00005	mg/L
Nitrate	<		0.02	mg/L expressed as nitrogen (N)
Phosphorus		0.0029	0.002	mg/L as P
Selenium	<		0.00005	mg/L
Sulphate		2.63	0.3	mg/L
Thallium	<		0.00001	mg/L
Uranium		0.00336	0.00001	mg/L
Required variables	<	Concentration	Method detection limit	Units
Arsenic	<		0.0001	mg/L
Copper		0.00101	0.0005	mg/L
Cyanide ²				mg/L
Lead		0.000108	0.00005	mg/L
Nickel	<		0.0005	mg/L
Zinc	<		0.003	mg/L
Total suspended solids		1.1	1	mg/L
Radium 226 ³	<		0.005	Bq/L
pH		7.69		

Optional variables	<	Concentration	Method detection limit	Units
Calcium		15.1	0.05	mg/L
Dissolved organic carbon		1.57	0.5	mg/L
Fluoride		0.03	0.02	mg/L
Magnesium		9.04	0.005	mg/L
Potassium		1.2	0.05	mg/L
Sodium		2.83	0.05	mg/L
Total organic carbon		2.81	0.5	mg/L
Total thiosalts				mg/L
Water depth				m

Please refer to the Methodologies & QA/QC measures and data (e.g., lab certificates) section in MERS to report QA/QC measures that were implemented and the data related to the implementation of those measures, or provide description in textbox provided.

QA/QC reports are uploaded with COAs. The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by the US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretative Report (QCI) for applicable references and methodology summaries.

Please refer to the Methodologies & QA/QC measures and data (e.g., lab certificates) section in MERS to report description of the methodologies used to conduct water quality monitoring, or provide description in the textbox provided.

Baffinland has developed a Sampling Program- Quality Assurance and Quality Control Plan following the general recommendations presented in the Guidance Document for the Sampling and Analysis of Metal Mines Effluents (ECCC, 2001). The Quality Assurance/ Quality Control (QA/QC) objectives of this plan are designed to provide general procedures for field staff to follow when labeling, collecting, preserving, storing and handling samples.

Note	Date	User name
No data available		

¹Note: If the facility fulfills the condition of subsection 4(4) of Schedule 5 of the MDMER, this field may be blank.

²Note: If the facility fulfills the condition of subparagraph 7(1)(d)(i) of Schedule 5 of the MDMER, this field may be blank.

³Note: If the facility fulfills the condition of subparagraph 7(1)(d)(ii) of Schedule 5 of the MDMER, this field may be blank.

⁴Note: The concentration and method detection limit fields for total ammonia are required for collection dates prior to **June 1st, 2021**. For samples collected on or after **June 1st, 2021**, only the method detection limit is required.

⁵Note: The concentration field for un-ionized ammonia is required for collection dates on or after **June 1st, 2021**.

Water quality monitoring data for exposure area — 2025 — Version 1

Facility name Mary River Mine Site

* Exposure area name (required) MS-08-DS

* Latitude (required) 71.310800

* Longitude (required) -79.202620

* Collection date (required) 2025/09/05

* Collection method (required) Grab

* Aquatic environment (required) Fresh water

- ☐ Mercury concentration is less than 0.10 µg/L in 12 consecutive samples collected under MDMER Schedule 5 subsection 4(4).
- ☒ Cyanide has never been used as a process reagent within the operations area.
- ☐ The mine is not a uranium mine and the concentration of radium 226 at that final discharge point has been below 0.037Bq/L for 10 consecutive weeks or more.

Final discharge point

Name

MS-08

Required variables	<	Value	Method detection limit	Units
Hardness		85	0.5	mg/L as CaCO ₃
Alkalinity		87	2	mg/L
Electrical conductivity		165	1	µS/cm
Salinity				Parts per thousand
Water temperature		0.9		°C
Dissolved oxygen		13.67		mg/L
Required variables	<	Concentration	Method detection limit	Units
Aluminum		0.0447	0.003	mg/L
Ammonia ⁴	<		0.005	mg/L expressed as nitrogen (N)
Un-ionized ammonia ⁵		0.001		mg/L expressed as nitrogen (N)

Required variables	<	Concentration	Method detection limit	Units
Cadmium	<		0.000005	mg/L
Chloride		4.62	0.5	mg/L
Chromium	<		0.0005	mg/L
Cobalt	<		0.0001	mg/L
Iron		0.038	0.01	mg/L
Manganese		0.00057	0.0001	mg/L
Mercury ¹	<		0.000005	mg/L
Molybdenum		0.000435	0.00005	mg/L
Nitrate		0.036	0.02	mg/L expressed as nitrogen (N)
Phosphorus	<		0.002	mg/L as P
Selenium	<		0.00005	mg/L
Sulphate		3.3	0.3	mg/L
Thallium	<		0.00001	mg/L
Uranium		0.0039	0.00001	mg/L
Required variables	<	Concentration	Method detection limit	Units
Arsenic	<		0.0001	mg/L
Copper		0.00094	0.0005	mg/L
Cyanide ²				mg/L
Lead	<		0.00005	mg/L
Nickel		0.0005	0.0005	mg/L
Zinc	<		0.003	mg/L
Total suspended solids	<		1	mg/L
Radium 226 ³	<		0.005	Bq/L
pH		8.08		

Optional variables	<	Concentration	Method detection limit	Units
Calcium		17.2	0.05	mg/L
Dissolved organic carbon		2.11	0.5	mg/L
Fluoride		0.029	0.02	mg/L
Magnesium		10.2	0.005	mg/L
Potassium		1.12	0.05	mg/L
Sodium		2.78	0.05	mg/L
Total organic carbon		1.75	0.5	mg/L
Total thiosalts				mg/L
Water depth				m

Please refer to the Methodologies & QA/QC measures and data (e.g., lab certificates) section in MERS to report QA/QC measures that were implemented and the data related to the implementation of those measures, or provide description in textbox provided.

QA/QC reports are uploaded with COAs. The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by the US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretative Report (QCI) for applicable references and methodology summaries.

Please refer to the Methodologies & QA/QC measures and data (e.g., lab certificates) section in MERS to report description of the methodologies used to conduct water quality monitoring, or provide description in the textbox provided.

Baffinland has developed a Sampling Program- Quality Assurance and Quality Control Plan following the general recommendations presented in the Guidance Document for the Sampling and Analysis of Metal Mines Effluents (ECCC, 2001). The Quality Assurance/ Quality Control (QA/QC) objectives of this plan are designed to provide general procedures for field staff to follow when labeling, collecting, preserving, storing and handling samples.

Note	Date	User name
No data available		

¹Note: If the facility fulfills the condition of subsection 4(4) of Schedule 5 of the MDMER, this field may be blank.

²Note: If the facility fulfills the condition of subparagraph 7(1)(d)(i) of Schedule 5 of the MDMER, this field may be blank.

³Note: If the facility fulfills the condition of subparagraph 7(1)(d)(ii) of Schedule 5 of the MDMER, this field may be blank.

⁴Note: The concentration and method detection limit fields for total ammonia are required for collection dates prior to **June 1st, 2021**. For samples collected on or after **June 1st, 2021**, only the method detection limit is required.

⁵Note: The concentration field for un-ionized ammonia is required for collection dates on or after **June 1st, 2021**.

Water quality monitoring data for reference area

Reference area name	Collection date	Aquatic environment
MS-08-US	2025/06/17	Fresh water
MS-08-US	2025/07/17	Fresh water
MS-08-US	2025/07/19	Fresh water
MS-08-US	2025/07/22	Fresh water
MS-08-US	2025/08/25	Fresh water
MS-08-US	2025/09/02	Fresh water
MS-08-US	2025/09/05	Fresh water

Water quality monitoring data for reference area — 2025 — Version 1

Facility name	Mary River Mine Site
* Reference area name (required)	MS-08-US
* Latitude (required)	71.310500
* Longitude (required)	-79.187090
* Collection date (required)	2025/06/17
* Collection method (required)	Grab
* Aquatic environment (required)	Fresh water
☐ Mercury concentration is less than 0.10 µg/L in 12 consecutive samples collected under MDMER Schedule 5 subsection 4(4).	
☒ Cyanide has never been used as a process reagent within the operations area.	
☐ The mine is not a uranium mine and the concentration of radium 226 at that final discharge point has been below 0.037Bq/L for 10 consecutive weeks or more.	

Final discharge point

Name
MS-08

Required variables	<	Value	Method detection limit	Units
Hardness		21	0.5	mg/L as CaCO ₃
Alkalinity		20.1	2	mg/L
Electrical conductivity		42.9	1	µS/cm
Salinity				Parts per thousand
Water temperature		0.5		°C
Dissolved oxygen		13.37		mg/L

Required variables	<	Concentration	Method detection limit	Units
Aluminum		0.104	0.003	mg/L
Ammonia ⁴	<		0.005	mg/L expressed as nitrogen (N)
Un-ionized ammonia ⁵		0.001		mg/L expressed as nitrogen (N)

Required variables	<	Concentration	Method detection limit	Units
Cadmium	<		0.000005	mg/L
Chloride		1	0.5	mg/L
Chromium	<		0.0005	mg/L
Cobalt	<		0.0001	mg/L
Iron		0.078	0.01	mg/L
Manganese		0.00188	0.0001	mg/L
Mercury ¹	<		0.000005	mg/L
Molybdenum		0.00008	0.00005	mg/L
Nitrate		0.036	0.02	mg/L expressed as nitrogen (N)
Phosphorus		0.0043	0.002	mg/L as P
Selenium	<		0.00005	mg/L
Sulphate		0.54	0.3	mg/L
Thallium	<		0.00001	mg/L
Uranium		0.000283	0.00001	mg/L
Required variables	<	Concentration	Method detection limit	Units
Arsenic	<		0.0001	mg/L
Copper		0.00071	0.0005	mg/L
Cyanide ²				mg/L
Lead		0.000067	0.00005	mg/L
Nickel	<		0.0005	mg/L
Zinc	<		0.003	mg/L
Total suspended solids	<		1	mg/L
Radium 226 ³	<		0.005	Bq/L
pH		8.01		

Optional variables	<	Concentration	Method detection limit	Units
Calcium		4.14	0.05	mg/L
Dissolved organic carbon		2.36	0.5	mg/L
Fluoride	<		0.02	mg/L
Magnesium		2.6	0.005	mg/L
Potassium		0.424	0.05	mg/L
Sodium		0.695	0.05	mg/L
Total organic carbon		2.79	0.5	mg/L
Total thiosalts				mg/L
Water depth				m

Please refer to the Methodologies & QA/QC measures and data (e.g., lab certificates) section in MERS to report QA/QC measures that were implemented and the data related to the implementation of those measures, or provide description in textbox provided.

QA/QC reports are uploaded with COAs. The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by the US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretative Report (QCI) for applicable references and methodology summaries.

Please refer to the Methodologies & QA/QC measures and data (e.g., lab certificates) section in MERS to report description of the methodologies used to conduct water quality monitoring, or provide description in the textbox provided.

Baffinland has developed a Sampling Program- Quality Assurance and Quality Control Plan following the general recommendations presented in the Guidance Document for the Sampling and Analysis of Metal Mines Effluents (ECCC, 2001). The Quality Assurance/ Quality Control (QA/QC) objectives of this plan are designed to provide general procedures for field staff to follow when labeling, collecting, preserving, storing and handling samples.

Note	Date	User name
No data available		

¹Note: If the facility fulfills the condition of subsection 4(4) of Schedule 5 of the MDMER, this field may be blank.

²Note: If the facility fulfills the condition of subparagraph 7(1)(d)(i) of Schedule 5 of the MDMER, this field may be blank.

³Note: If the facility fulfills the condition of subparagraph 7(1)(d)(ii) of Schedule 5 of the MDMER, this field may be blank.

⁴Note: The concentration and method detection limit fields for total ammonia are required for collection dates prior to **June 1st, 2021**. For samples collected on or after **June 1st, 2021**, only the method detection limit is required.

⁵Note: The concentration field for un-ionized ammonia is required for collection dates on or after **June 1st, 2021**.

Water quality monitoring data for reference area — 2025 — Version 1

Facility name	Mary River Mine Site
* Reference area name (required)	MS-08-US
* Latitude (required)	71.310500
* Longitude (required)	-79.187090
* Collection date (required)	2025/07/17
* Collection method (required)	Grab
* Aquatic environment (required)	Fresh water
☐ Mercury concentration is less than 0.10 µg/L in 12 consecutive samples collected under MDMER Schedule 5 subsection 4(4).	
☒ Cyanide has never been used as a process reagent within the operations area.	
☐ The mine is not a uranium mine and the concentration of radium 226 at that final discharge point has been below 0.037Bq/L for 10 consecutive weeks or more.	

Final discharge point

Name
MS-06

Required variables	<	Value	Method detection limit	Units
Hardness		29.6	0.5	mg/L as CaCO ₃
Alkalinity		30.8	2	mg/L
Electrical conductivity		61.6	1	µS/cm
Salinity				Parts per thousand
Water temperature		5.9		°C
Dissolved oxygen		11.92		mg/L

Required variables	<	Concentration	Method detection limit	Units
Aluminum		0.478	0.003	mg/L
Ammonia ⁴			0.005	mg/L expressed as nitrogen (N)
Un-ionized ammonia ⁵		0.001		mg/L expressed as nitrogen (N)

Required variables	<	Concentration	Method detection limit	Units
Cadmium	<		0.000005	mg/L
Chloride		0.53	0.5	mg/L
Chromium		0.00107	0.0005	mg/L
Cobalt		0.00019	0.0001	mg/L
Iron		0.434	0.01	mg/L
Manganese		0.00526	0.0001	mg/L
Mercury ¹	<		0.000005	mg/L
Molybdenum		0.000149	0.00005	mg/L
Nitrate	<		0.02	mg/L expressed as nitrogen (N)
Phosphorus		0.0091	0.002	mg/L as P
Selenium	<		0.00005	mg/L
Sulphate		0.57	0.3	mg/L
Thallium		0.000012	0.00001	mg/L
Uranium		0.000493	0.00001	mg/L
Required variables	<	Concentration	Method detection limit	Units
Arsenic	<		0.0001	mg/L
Copper		0.00126	0.0005	mg/L
Cyanide ²				mg/L
Lead		0.000358	0.00005	mg/L
Nickel		0.00081	0.0005	mg/L
Zinc	<		0.003	mg/L
Total suspended solids		2.7	1.4	mg/L
Radium 226 ³	<		0.005	Bq/L
pH		7.93		

Optional variables	<	Concentration	Method detection limit	Units
Calcium		6.05	0.05	mg/L
Dissolved organic carbon		1.91	0.5	mg/L
Fluoride		0.025	0.02	mg/L
Magnesium		3.53	0.005	mg/L
Potassium		0.701	0.05	mg/L
Sodium		0.718	0.05	mg/L
Total organic carbon		1.73	0.5	mg/L
Total thiosalts				mg/L
Water depth				m

Please refer to the Methodologies & QA/QC measures and data (e.g., lab certificates) section in MERS to report QA/QC measures that were implemented and the data related to the implementation of those measures, or provide description in textbox provided.

QA/QC reports are uploaded with COAs. The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by the US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretative Report (QCI) for applicable references and methodology summaries.

Please refer to the Methodologies & QA/QC measures and data (e.g., lab certificates) section in MERS to report description of the methodologies used to conduct water quality monitoring, or provide description in the textbox provided.

Baffinland has developed a Sampling Program- Quality Assurance and Quality Control Plan following the general recommendations presented in the Guidance Document for the Sampling and Analysis of Metal Mines Effluents (ECCC, 2001). The Quality Assurance/ Quality Control (QA/QC) objectives of this plan are designed to provide general procedures for field staff to follow when labeling, collecting, preserving, storing and handling samples.

Note	Date	User name
No data available		

¹Note: If the facility fulfills the condition of subsection 4(4) of Schedule 5 of the MDMER, this field may be blank.

²Note: If the facility fulfills the condition of subparagraph 7(1)(d)(i) of Schedule 5 of the MDMER, this field may be blank.

³Note: If the facility fulfills the condition of subparagraph 7(1)(d)(ii) of Schedule 5 of the MDMER, this field may be blank.

⁴Note: The concentration and method detection limit fields for total ammonia are required for collection dates prior to **June 1st, 2021**. For samples collected on or after **June 1st, 2021**, only the method detection limit is required.

⁵Note: The concentration field for un-ionized ammonia is required for collection dates on or after **June 1st, 2021**.

Water quality monitoring data for reference area — 2025 — Version 1

Facility name	Mary River Mine Site
* Reference area name (required)	MS-08-US
* Latitude (required)	71.310500
* Longitude (required)	-79.187090
* Collection date (required)	2025/07/19
* Collection method (required)	Grab
* Aquatic environment (required)	Fresh water
☐ Mercury concentration is less than 0.10 µg/L in 12 consecutive samples collected under MDMER Schedule 5 subsection 4(4).	
☒ Cyanide has never been used as a process reagent within the operations area.	
☐ The mine is not a uranium mine and the concentration of radium 226 at that final discharge point has been below 0.037Bq/L for 10 consecutive weeks or more.	

Final discharge point

Name
MS-07

Required variables	<	Value	Method detection limit	Units
Hardness		36.6	0.5	mg/L as CaCO ₃
Alkalinity		38.6	2	mg/L
Electrical conductivity		76.1	1	µS/cm
Salinity				Parts per thousand
Water temperature		9		°C
Dissolved oxygen		11.2		mg/L

Required variables	<	Concentration	Method detection limit	Units
Aluminum		0.417	0.003	mg/L
Ammonia ⁴			0.005	mg/L expressed as nitrogen (N)
Un-ionized ammonia ⁵		0.001		mg/L expressed as nitrogen (N)

Required variables	<	Concentration	Method detection limit	Units
Cadmium	<		0.000005	mg/L
Chloride		0.79	0.5	mg/L
Chromium		0.0009	0.0005	mg/L
Cobalt		0.00016	0.0001	mg/L
Iron		0.382	0.01	mg/L
Manganese		0.00425	0.0001	mg/L
Mercury ¹	<		0.000005	mg/L
Molybdenum		0.000181	0.00005	mg/L
Nitrate	<		0.02	mg/L expressed as nitrogen (N)
Phosphorus		0.0088	0.002	mg/L as P
Selenium	<		0.00005	mg/L
Sulphate		0.69	0.3	mg/L
Thallium		0.00001	0.00001	mg/L
Uranium		0.00069	0.00001	mg/L
Required variables	<	Concentration	Method detection limit	Units
Arsenic	<		0.0001	mg/L
Copper		0.00128	0.0005	mg/L
Cyanide ²				mg/L
Lead		0.000304	0.00005	mg/L
Nickel		0.00068	0.0005	mg/L
Zinc	<		0.003	mg/L
Total suspended solids		1.7	1	mg/L
Radium 226 ³	<		0.005	Bq/L
pH		7.9		

Optional variables	<	Concentration	Method detection limit	Units
Calcium		7.25	0.05	mg/L
Dissolved organic carbon		23.5	2.5	mg/L
Fluoride		0.029	0.02	mg/L
Magnesium		4.5	0.005	mg/L
Potassium		0.839	0.05	mg/L
Sodium		1.05	0.05	mg/L
Total organic carbon		1.62	0.5	mg/L
Total thiosalts				mg/L
Water depth				m

Please refer to the Methodologies & QA/QC measures and data (e.g., lab certificates) section in MERS to report QA/QC measures that were implemented and the data related to the implementation of those measures, or provide description in textbox provided.

QA/QC reports are uploaded with COAs. The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by the US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretative Report (QCI) for applicable references and methodology summaries.

Please refer to the Methodologies & QA/QC measures and data (e.g., lab certificates) section in MERS to report description of the methodologies used to conduct water quality monitoring, or provide description in the textbox provided.

Baffinland has developed a Sampling Program- Quality Assurance and Quality Control Plan following the general recommendations presented in the Guidance Document for the Sampling and Analysis of Metal Mines Effluents (ECCC, 2001). The Quality Assurance/ Quality Control (QA/QC) objectives of this plan are designed to provide general procedures for field staff to follow when labeling, collecting, preserving, storing and handling samples.

Note	Date	User name
No data available		

¹Note: If the facility fulfills the condition of subsection 4(4) of Schedule 5 of the MDMER, this field may be blank.

²Note: If the facility fulfills the condition of subparagraph 7(1)(d)(i) of Schedule 5 of the MDMER, this field may be blank.

³Note: If the facility fulfills the condition of subparagraph 7(1)(d)(ii) of Schedule 5 of the MDMER, this field may be blank.

⁴Note: The concentration and method detection limit fields for total ammonia are required for collection dates prior to **June 1st, 2021**. For samples collected on or after **June 1st, 2021**, only the method detection limit is required.

⁵Note: The concentration field for un-ionized ammonia is required for collection dates on or after **June 1st, 2021**.

Water quality monitoring data for reference area — 2025 — Version 1

Facility name	Mary River Mine Site
* Reference area name (required)	MS-08-US
* Latitude (required)	71.310500
* Longitude (required)	-79.187090
* Collection date (required)	2025/07/22
* Collection method (required)	Grab
* Aquatic environment (required)	Fresh water
☐ Mercury concentration is less than 0.10 µg/L in 12 consecutive samples collected under MDMER Schedule 5 subsection 4(4).	
☒ Cyanide has never been used as a process reagent within the operations area.	
☐ The mine is not a uranium mine and the concentration of radium 226 at that final discharge point has been below 0.037Bq/L for 10 consecutive weeks or more.	

Final discharge point

Name
MS-08

Required variables	<	Value	Method detection limit	Units
Hardness		39.1	0.5	mg/L as CaCO ₃
Alkalinity		38.2	2	mg/L
Electrical conductivity		77.6	1	µS/cm
Salinity				Parts per thousand
Water temperature		9.9		°C
Dissolved oxygen		10.72		mg/L

Required variables	<	Concentration	Method detection limit	Units
Aluminum		0.641	0.003	mg/L
Ammonia ⁴			0.005	mg/L expressed as nitrogen (N)
Un-ionized ammonia ⁵		0.001		mg/L expressed as nitrogen (N)

Required variables	<	Concentration	Method detection limit	Units
Cadmium	<		0.000005	mg/L
Chloride		0.9	0.5	mg/L
Chromium		0.00127	0.0005	mg/L
Cobalt		0.00023	0.0001	mg/L
Iron		0.565	0.01	mg/L
Manganese		0.00626	0.0001	mg/L
Mercury ¹	<		0.000005	mg/L
Molybdenum		0.000214	0.00005	mg/L
Nitrate	<		0.02	mg/L expressed as nitrogen (N)
Phosphorus		0.0124	0.002	mg/L as P
Selenium	<		0.00005	mg/L
Sulphate		0.82	0.3	mg/L
Thallium		0.000014	0.00001	mg/L
Uranium		0.000788	0.00001	mg/L
Required variables	<	Concentration	Method detection limit	Units
Arsenic		0.00011	0.0001	mg/L
Copper		0.00151	0.0005	mg/L
Cyanide ²				mg/L
Lead		0.00046	0.00005	mg/L
Nickel		0.00092	0.0005	mg/L
Zinc	<		0.003	mg/L
Total suspended solids		4	1.2	mg/L
Radium 226 ³		0.008	0.005	Bq/L
pH		7.41		

Optional variables	<	Concentration	Method detection limit	Units
Calcium		7.62	0.05	mg/L
Dissolved organic carbon		2.68	0.5	mg/L
Fluoride		0.028	0.02	mg/L
Magnesium		4.88	0.005	mg/L
Potassium		1	0.05	mg/L
Sodium		1.28	0.05	mg/L
Total organic carbon		1.83	0.5	mg/L
Total thiosalts				mg/L
Water depth				m

Please refer to the Methodologies & QA/QC measures and data (e.g., lab certificates) section in MERS to report QA/QC measures that were implemented and the data related to the implementation of those measures, or provide description in textbox provided.

QA/QC reports are uploaded with COAs. The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by the US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretative Report (QCI) for applicable references and methodology summaries.

Please refer to the Methodologies & QA/QC measures and data (e.g., lab certificates) section in MERS to report description of the methodologies used to conduct water quality monitoring, or provide description in the textbox provided.

Baffinland has developed a Sampling Program- Quality Assurance and Quality Control Plan following the general recommendations presented in the Guidance Document for the Sampling and Analysis of Metal Mines Effluents (ECCC, 2001). The Quality Assurance/ Quality Control (QA/QC) objectives of this plan are designed to provide general procedures for field staff to follow when labeling, collecting, preserving, storing and handling samples.

Note	Date	User name
No data available		

¹Note: If the facility fulfills the condition of subsection 4(4) of Schedule 5 of the MDMER, this field may be blank.

²Note: If the facility fulfills the condition of subparagraph 7(1)(d)(i) of Schedule 5 of the MDMER, this field may be blank.

³Note: If the facility fulfills the condition of subparagraph 7(1)(d)(ii) of Schedule 5 of the MDMER, this field may be blank.

⁴Note: The concentration and method detection limit fields for total ammonia are required for collection dates prior to **June 1st, 2021**. For samples collected on or after **June 1st, 2021**, only the method detection limit is required.

⁵Note: The concentration field for un-ionized ammonia is required for collection dates on or after **June 1st, 2021**.

Water quality monitoring data for reference area — 2025 — Version 1

Facility name	Mary River Mine Site
* Reference area name (required)	MS-08-US
* Latitude (required)	71.310500
* Longitude (required)	-79.187090
* Collection date (required)	2025/08/25
* Collection method (required)	Grab
* Aquatic environment (required)	Fresh water
☐ Mercury concentration is less than 0.10 µg/L in 12 consecutive samples collected under MDMER Schedule 5 subsection 4(4).	
☒ Cyanide has never been used as a process reagent within the operations area.	
☐ The mine is not a uranium mine and the concentration of radium 226 at that final discharge point has been below 0.037Bq/L for 10 consecutive weeks or more.	

Final discharge point

Name
MS-08

Required variables	<	Value	Method detection limit	Units
Hardness		73.6	0.5	mg/L as CaCO ₃
Alkalinity		71.6	2	mg/L
Electrical conductivity		154	1	µS/cm
Salinity				Parts per thousand
Water temperature		6.5		°C
Dissolved oxygen		11.36		mg/L

Required variables	<	Concentration	Method detection limit	Units
Aluminum		0.128	0.003	mg/L
Ammonia ⁴	<		0.005	mg/L expressed as nitrogen (N)
Un-ionized ammonia ⁵		0.001		mg/L expressed as nitrogen (N)

Required variables	<	Concentration	Method detection limit	Units
Cadmium	<		0.000005	mg/L
Chloride		3.96	0.5	mg/L
Chromium	<		0.0005	mg/L
Cobalt	<		0.0001	mg/L
Iron		0.106	0.01	mg/L
Manganese		0.00124	0.0001	mg/L
Mercury ¹	<		0.000005	mg/L
Molybdenum		0.000435	0.00005	mg/L
Nitrate	<		0.02	mg/L expressed as nitrogen (N)
Phosphorus		0.0026	0.002	mg/L as P
Selenium	<		0.00005	mg/L
Sulphate		2.37	0.3	mg/L
Thallium	<		0.00001	mg/L
Uranium		0.00347	0.00001	mg/L
Required variables	<	Concentration	Method detection limit	Units
Arsenic	<		0.0001	mg/L
Copper		0.00102	0.0005	mg/L
Cyanide ²				mg/L
Lead		0.000108	0.00005	mg/L
Nickel	<		0.0005	mg/L
Zinc	<		0.003	mg/L
Total suspended solids	<		1	mg/L
Radium 226 ³	<		0.005	Bq/L
pH		7.86		

Optional variables	<	Concentration	Method detection limit	Units
Calcium		15.1	0.05	mg/L
Dissolved organic carbon		12.2	0.5	mg/L
Fluoride		0.031	0.02	mg/L
Magnesium		8.72	0.005	mg/L
Potassium		1.18	0.05	mg/L
Sodium		2.9	0.05	mg/L
Total organic carbon		2.83	0.5	mg/L
Total thiosalts				mg/L
Water depth				m

Please refer to the Methodologies & QA/QC measures and data (e.g., lab certificates) section in MERS to report QA/QC measures that were implemented and the data related to the implementation of those measures, or provide description in textbox provided.

QA/QC reports are uploaded with COAs. The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by the US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretative Report (QCI) for applicable references and methodology summaries.

Please refer to the Methodologies & QA/QC measures and data (e.g., lab certificates) section in MERS to report description of the methodologies used to conduct water quality monitoring, or provide description in the textbox provided.

Baffinland has developed a Sampling Program- Quality Assurance and Quality Control Plan following the general recommendations presented in the Guidance Document for the Sampling and Analysis of Metal Mines Effluents (ECCC, 2001). The Quality Assurance/ Quality Control (QA/QC) objectives of this plan are designed to provide general procedures for field staff to follow when labeling, collecting, preserving, storing and handling samples.

Note	Date	User name
No data available		

¹Note: If the facility fulfills the condition of subsection 4(4) of Schedule 5 of the MDMER, this field may be blank.

²Note: If the facility fulfills the condition of subparagraph 7(1)(d)(i) of Schedule 5 of the MDMER, this field may be blank.

³Note: If the facility fulfills the condition of subparagraph 7(1)(d)(ii) of Schedule 5 of the MDMER, this field may be blank.

⁴Note: The concentration and method detection limit fields for total ammonia are required for collection dates prior to **June 1st, 2021**. For samples collected on or after **June 1st, 2021**, only the method detection limit is required.

⁵Note: The concentration field for un-ionized ammonia is required for collection dates on or after **June 1st, 2021**.

Water quality monitoring data for reference area — 2025 — Version 1

Facility name	Mary River Mine Site
* Reference area name (required)	MS-08-US
* Latitude (required)	71.310500
* Longitude (required)	-79.187090
* Collection date (required)	2025/09/02
* Collection method (required)	Grab
* Aquatic environment (required)	Fresh water
☐ Mercury concentration is less than 0.10 µg/L in 12 consecutive samples collected under MDMER Schedule 5 subsection 4(4).	
☒ Cyanide has never been used as a process reagent within the operations area.	
☐ The mine is not a uranium mine and the concentration of radium 226 at that final discharge point has been below 0.037Bq/L for 10 consecutive weeks or more.	

Final discharge point

Name
MS-07

Required variables	<	Value	Method detection limit	Units
Hardness		91.1	0.5	mg/L as CaCO ₃
Alkalinity		89.4	2	mg/L
Electrical conductivity		188	1	µS/cm
Salinity				Parts per thousand
Water temperature		-0.1		°C
Dissolved oxygen		13.14		mg/L

Required variables	<	Concentration	Method detection limit	Units
Aluminum		0.0281	0.003	mg/L
Ammonia ⁴	<		0.005	mg/L expressed as nitrogen (N)
Un-ionized ammonia ⁵		0.001		mg/L expressed as nitrogen (N)

Required variables	<	Concentration	Method detection limit	Units
Cadmium	<		0.000005	mg/L
Chloride		4.9	0.5	mg/L
Chromium	<		0.0005	mg/L
Cobalt	<		0.0001	mg/L
Iron		0.026	0.01	mg/L
Manganese		0.00058	0.0001	mg/L
Mercury ¹	<		0.000005	mg/L
Molybdenum		0.000428	0.00005	mg/L
Nitrate		0.031	0.02	mg/L expressed as nitrogen (N)
Phosphorus	<		0.002	mg/L as P
Selenium	<		0.00005	mg/L
Sulphate		2.72	0.3	mg/L
Thallium	<		0.00001	mg/L
Uranium		0.0044	0.00001	mg/L
Required variables	<	Concentration	Method detection limit	Units
Arsenic	<		0.0001	mg/L
Copper		0.00108	0.0005	mg/L
Cyanide ²				mg/L
Lead	<		0.00005	mg/L
Nickel		0.0006	0.0005	mg/L
Zinc	<		0.003	mg/L
Total suspended solids	<		1	mg/L
Radium 226 ³	<		0.005	Bq/L
pH		7.86		

Optional variables	<	Concentration	Method detection limit	Units
Calcium		18.5	0.05	mg/L
Dissolved organic carbon		2.15	0.5	mg/L
Fluoride		0.037	0.02	mg/L
Magnesium		10.9	0.005	mg/L
Potassium		1.22	0.05	mg/L
Sodium		3.04	0.05	mg/L
Total organic carbon		2.38	0.5	mg/L
Total thiosalts				mg/L
Water depth				m

Please refer to the Methodologies & QA/QC measures and data (e.g., lab certificates) section in MERS to report QA/QC measures that were implemented and the data related to the implementation of those measures, or provide description in textbox provided.

QA/QC reports are uploaded with COAs. The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by the US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretative Report (QCI) for applicable references and methodology summaries.

Please refer to the Methodologies & QA/QC measures and data (e.g., lab certificates) section in MERS to report description of the methodologies used to conduct water quality monitoring, or provide description in the textbox provided.

Baffinland has developed a Sampling Program- Quality Assurance and Quality Control Plan following the general recommendations presented in the Guidance Document for the Sampling and Analysis of Metal Mines Effluents (ECCC, 2001). The Quality Assurance/ Quality Control (QA/QC) objectives of this plan are designed to provide general procedures for field staff to follow when labeling, collecting, preserving, storing and handling samples.

Note	Date	User name
No data available		

¹Note: If the facility fulfills the condition of subsection 4(4) of Schedule 5 of the MDMER, this field may be blank.

²Note: If the facility fulfills the condition of subparagraph 7(1)(d)(i) of Schedule 5 of the MDMER, this field may be blank.

³Note: If the facility fulfills the condition of subparagraph 7(1)(d)(ii) of Schedule 5 of the MDMER, this field may be blank.

⁴Note: The concentration and method detection limit fields for total ammonia are required for collection dates prior to **June 1st, 2021**. For samples collected on or after **June 1st, 2021**, only the method detection limit is required.

⁵Note: The concentration field for un-ionized ammonia is required for collection dates on or after **June 1st, 2021**.

Water quality monitoring data for reference area — 2025 — Version 1

Facility name	Mary River Mine Site
* Reference area name (required)	MS-08-US
* Latitude (required)	71.310500
* Longitude (required)	-79.187090
* Collection date (required)	2025/09/05
* Collection method (required)	Grab
* Aquatic environment (required)	Fresh water
☐ Mercury concentration is less than 0.10 µg/L in 12 consecutive samples collected under MDMER Schedule 5 subsection 4(4).	
☒ Cyanide has never been used as a process reagent within the operations area.	
☐ The mine is not a uranium mine and the concentration of radium 226 at that final discharge point has been below 0.037Bq/L for 10 consecutive weeks or more.	

Final discharge point

Name
MS-08

Required variables	<	Value	Method detection limit	Units
Hardness		88.2	0.5	mg/L as CaCO ₃
Alkalinity		87.9	2	mg/L
Electrical conductivity		168	1	µS/cm
Salinity				Parts per thousand
Water temperature		1		°C
Dissolved oxygen		13.47		mg/L

Required variables	<	Concentration	Method detection limit	Units
Aluminum		0.0636	0.003	mg/L
Ammonia ⁴	<		0.005	mg/L expressed as nitrogen (N)
Un-ionized ammonia ⁵		0.001		mg/L expressed as nitrogen (N)

Required variables	<	Concentration	Method detection limit	Units
Cadmium	<		0.000005	mg/L
Chloride		4.68	0.5	mg/L
Chromium	<		0.0005	mg/L
Cobalt	<		0.0001	mg/L
Iron		0.061	0.01	mg/L
Manganese		0.00088	0.0001	mg/L
Mercury ¹	<		0.000005	mg/L
Molybdenum		0.000442	0.00005	mg/L
Nitrate		0.046	0.02	mg/L expressed as nitrogen (N)
Phosphorus	<		0.002	mg/L as P
Selenium	<		0.00005	mg/L
Sulphate		2.84	0.3	mg/L
Thallium	<		0.00001	mg/L
Uranium		0.00416	0.00001	mg/L
Required variables	<	Concentration	Method detection limit	Units
Arsenic	<		0.0001	mg/L
Copper		0.00104	0.0005	mg/L
Cyanide ²				mg/L
Lead		0.000052	0.00005	mg/L
Nickel		0.00053	0.0005	mg/L
Zinc	<		0.003	mg/L
Total suspended solids	<		1	mg/L
Radium 226 ³	<		0.005	Bq/L
pH		8.18		

Optional variables	<	Concentration	Method detection limit	Units
Calcium		18	0.05	mg/L
Dissolved organic carbon		3.6	0.5	mg/L
Fluoride		0.03	0.02	mg/L
Magnesium		10.5	0.005	mg/L
Potassium		1.16	0.05	mg/L
Sodium		2.86	0.05	mg/L
Total organic carbon		1.82	0.5	mg/L
Total thiosalts				mg/L
Water depth				m

Please refer to the Methodologies & QA/QC measures and data (e.g., lab certificates) section in MERS to report QA/QC measures that were implemented and the data related to the implementation of those measures, or provide description in textbox provided.

QA/QC reports are uploaded with COAs. The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by the US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretative Report (QCI) for applicable references and methodology summaries.

Please refer to the Methodologies & QA/QC measures and data (e.g., lab certificates) section in MERS to report description of the methodologies used to conduct water quality monitoring, or provide description in the textbox provided.

Baffinland has developed a Sampling Program- Quality Assurance and Quality Control Plan following the general recommendations presented in the Guidance Document for the Sampling and Analysis of Metal Mines Effluents (ECCC, 2001). The Quality Assurance/ Quality Control (QA/QC) objectives of this plan are designed to provide general procedures for field staff to follow when labeling, collecting, preserving, storing and handling samples.

Note	Date	User name
No data available		

¹Note: If the facility fulfills the condition of subsection 4(4) of Schedule 5 of the MDMER, this field may be blank.

²Note: If the facility fulfills the condition of subparagraph 7(1)(d)(i) of Schedule 5 of the MDMER, this field may be blank.

³Note: If the facility fulfills the condition of subparagraph 7(1)(d)(ii) of Schedule 5 of the MDMER, this field may be blank.

⁴Note: The concentration and method detection limit fields for total ammonia are required for collection dates prior to **June 1st, 2021**. For samples collected on or after **June 1st, 2021**, only the method detection limit is required.

⁵Note: The concentration field for un-ionized ammonia is required for collection dates on or after **June 1st, 2021**.

Methodologies & QA/QC measures and data (e.g., lab certificates)

Effluent characterization

File name	Version	Date
25 09 05 - MDMER MS-08 FDP - BF2500320.pdf	1	1/17/2026
25 08 25 - MDMER MS-08 FDP - BF2500290.pdf	1	1/17/2026
25 08 09 - MDMER MS-08 FDP - BF2500248.pdf	1	1/17/2026
25 07 22 - MDMER MS-08 FDP & SUB - BF2500188.pdf	1	1/17/2026
25 07 07 - MDMER MS-08 FDP - BF2500139.pdf	1	1/17/2026
25 06 17 - MDMER MS-08 FDP & WQ - BF2500076.pdf	1	1/17/2026
25 06 03 - MDMER MS-08 FDP WT2513813.pdf	1	1/17/2026
25 09 02 - MDMER MS-07 FDP - BF2500312.pdf	1	1/17/2026
25 07 19 - MDMER MS-07 FDP - BF2500177.pdf	1	1/17/2026
25 07 16 - MDMER MS-06 FDP - BF2500163.pdf	1	1/17/2026

Sublethal toxicity test

File name	Version	Date
258416-87755.pdf	1	3/11/2026
258068-87287.pdf	1	3/6/2026
25 07 22 - MDMER MS-08 FDP & SUB - BF2500188.pdf	1	1/17/2026
25 06 17 - MDMER MS-08 WQ & SUB - BF2500076.pdf	1	1/17/2026

Water quality monitoring data

File name	Version	Date
25 09 05 - MDMER MS-08 WQ - BF2500321.pdf	1	1/17/2026
25 08 25 - MDMER MS-08 WQ - BF2500294.pdf	1	1/17/2026

File name	Version	Date
25 07 22 - MDMER MS-08 WQ - BF2500189.pdf	1	1/17/2026
25 06 17 - MDMER MS-08 WQ - BF2500076.pdf	1	1/17/2026
25 09 02 - MDMER MS-07 WQ - BF2500316.pdf	1	1/17/2026
25 07 19 - MDMER MS-07 WQ - BF2500179.pdf	1	1/17/2026
25 07 17 - MDMER MS-06 WQ - BF2500171.pdf	1	1/17/2026

