

APPENDIX E.8.3

2025 Initial and Follow-up Spill reports



March 2, 2025

Resource Management Officer
Nunavut Region
Crown Indigenous Relations and Northern Affairs Canada
Box 100
Iqaluit, NU X0A 0H0

Regulatory Manager
Qikiqtani Inuit Association
P.O. Box 219
Iqaluit, NU X0A 0H0

Re: Follow-Up to Spill #2025-091
Mary River Project - Water Licence No. 2AM-MRY1325

Summary:

On February 1, a spill of untreated sewage was discovered which resulted from an overflow from the sewage lift station of the Milne Port South Maintenance Shop. Initial investigation shows that the station was not emptied within the appropriate timeframe, which resulted in a spill of approximately 125 liters onto the ground. The station was emptied immediately to prevent further release. The spill was contained to the immediate area around and inside the lift station heated box and did not migrate. The total impacted area is estimated to be 3m². The spill location is approximately 580 meters away from Philips Creek, which is currently frozen.

Immediate and Follow-Up Action:

Upon discovery of the release by an Operator, the station was emptied to prevent further release. Cleanup was initiated utilizing a Skid steer and shovels to dispose of contaminated snow and ice into a quatrex bag which was brought to the Polishing Waste Stabilization Pond for future treatment during open water season in accordance with the Spill Contingency Plan (BIM-5200-PLA-0012) and the Fresh Water Supply, Sewage, and Wastewater Management Plan (BIM-5200-PLA-0022).

Upon further investigation, it was discovered that the water pump in the washroom had been replaced. During this replacement, the solenoid that closes the emergency water shut-off valve was disconnected to complete the pump replacement. However, this solenoid was never reconnected. This resulted in the emergency water shut-off valve not closing when the high-high level sewer tank float was activated.

Corrective actions implemented as a result of the incident include operating the vacuum truck to remove sewage from all lift stations on a daily basis until a process is implemented for tracking all daily and weekly essential services. Additionally, review and training for site services supervisors focusing on priority planning of essential services will take place. An inspection of all lift stations at Milne Port and Mary River, with a focus on visual alarms and automatic shut-off system functionality when high levels within the lift stations are reached, was completed. Finally, a standard will be created for all lift stations to conform to, which will address any deficiencies noted from the inspection. It will also include an update to the preventative maintenance schedule, resulting in service and repair changes being documented more diligently to ensure safety devices are active after any repairs.

Current Status:

The lift station solenoid has been reengaged and the lift station was put back into service. The area will be monitored closely in the spring and additional clean up activities will be conducted if required.

Should you require further information or clarification on the incident described above, please feel free to contact the undersigned at (647) 253-0596 (ext.6016).

Prepared by:

A handwritten signature in black ink, appearing to read "K Babin".

Katie Babin
Environmental Superintendent

Reviewed by:

A handwritten signature in blue ink, appearing to read "Sean Hudson".

Sean Hudson (Feb 28, 2025 16:23 EST)

Sean Hudson
Site Services Superintendent

Cc: Jeremy Fraser, Sean Noble-Nowdluk (CIRNAC)
Andrew Jaworenko, Amoudla Kootoo (QIA)
Megan Lord-Hoyle, Lou Kamermans, Francois Gaudreau, Paula Krats, Eli Iannelli, Norm Hilliard, William Bowden, Todd Swenson, Allison Parker, Shannon Mulhall, Irniq Lecompte (Baffinland)

Attachments:

Attachment 1: Photos
Attachment 2: Spill Location
Attachment 3: Baffinland NT-NU Spill Report #2025-091



Attachment 1: Photos

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Photo 1: Milne Port South Maintenance Shop Lift Station - Sewage Spilled onto Snow, February 1, 2024



Photo 2: Milne Port South Maintenance Shop Lift Station - Clean Potable water is visible February 27, 2024

Attachment 2: Spill Location


LEGEND

- Milne Port South Maintenance Shop Sewage Lift Station

Attachment 3: NT-NU Spill Report #2025-091



NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND
OTHER HAZARDOUS MATERIALS



Canada



NT-NU 24-HOUR SPILL REPORT LINE

Tel: (867) 920-8130 • Email: spills@gov.nt.ca

A	Report Date: 2 / 1 / 25	Report Time: 4:00 pm	☒ Original Spill Report	Report Number: 25-
B	Occurrence Date: 2 / 1 / 25	Occurrence Time: 9:45 am	☐ Update #. _____ to the Original Spill Report	
C	Land Use Permit Number (if applicable): IOL - Commercial Lease No.: Q13C301	Water Licence Number (if applicable): 2AM-MRY1325 Type "A"		
D	Geographic Place Name or Distance and Direction from the Named Location: Mary River Project Mine Site, Baffin Island, NU		Region: ☐ NT ☒ Nunavut ☐ Trans-boundary or Ocean	
E	Latitude: 71 Degrees 52 Minutes 40 Seconds		Longitude: -80 Degrees 54 Minutes 3 Seconds	
F	Responsible Party or Vessel Name: Baffinland Iron Mines Corp.		Responsible Party Address or Office Location: 380 Oakville Place Dr. Suite 300, Oakville, ON, Canada, L6H6K8	
G	Any Contractor Involved: N/A		Contractor Address or Office Location: N/A	
H	Product Spilled: ☐ Potential Spill Untreated sewage	Quantity in Litres, Kilograms or Cubic Metres: 125 L	U.N. Number: N/A	
I	Spill Source: Sewage Lift Station	Spill Cause: Overflow	Area of Contamination in Square Metres: 5.5	
J	Factors Affecting Spill or Recovery: N/A	Describe Any Assistance Required: N/A	Hazards to Persons, Property or Environment: N/A	
K	Summary of the spill incident and efforts / description of the incident: On February 01, 2025 at 9:45 am, the Vacuum Truck Operator discovered a spill of untreated sewage that was overflowing from the sewage lift station of the Milne Port South Maintenance Shop. Initial investigation shows that the station was not emptied within the appropriate time frame, which resulted in a spill of approximately 125 L of to the ground. The station was emptied immediately to prevent any further release. The spill was contained to the immediate area around and inside the lift station heated box and did not migrate. The closest water body is approx. 580 m away and is currently frozen. A skid-steer loader was used to remove the snow, ice, and ground material impacted by the spill. This spill is being reported as required by the conditions of Water License no. 2AM-MRY1325, Part H, item 9(b) pursuant to subsection 12(3) of the Nunavut Waters and Nunavut Surface Rights Tribunal Act			
L	Reported to Spill Line by: Todd Swenson	Position: Environmental Superintendent	Employer: Baffinland Iron Mines	Location Calling From: Mary River Mine (Ext. 8016)
M	Any Alternate Contact: William Bowden	Position: Environmental Manager	Employer: Baffinland Iron Mines	Alternate Contact Location: Mary River Mine (Ext. 6737)
	Telephone: (647) 253-0858			
	Alternate Telephone: (647) 253-0858			

REPORT LINE USE ONLY

N	Received at Spill Line by:	Position:	Employer:	Location Called:	Report Line Number:
	Lead Agency: ☐ EC ☐ CCG/TCMSS ☐ GNWT ☐ GN ☐ ILA ☐ CIRNAC ☐ CER	File Status: ☐ Open			
	☐ Other: _____	☐ Closed			
	Agency:	Contact Name:	Contact Time:	Remarks:	
	Lead Agency:				
	First Support Agency:				
	Second Support Agency:				
	Third Support Agency:				

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April 29, 2025

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Regulatory Manager
Qikiqtani Inuit Association
P.O. Box 219
Iqaluit, NU X0A 0H0

Re: Follow-Up to Spill #2025-145
Mary River Project - Water Licence No. 2AM-MRY1325

Summary:

While conducting scheduled inspections on March 29, a housing maintainer observed a flashing warning light signaling for the lift station at the Mine Site Complex (MSC) laundry room. Upon further investigation he discovered that the amperage overload breaker for the low-level pump had tripped, rendering the pump non-operational. The high-level pump was also found to be inactive, though it was noted that the fluid level was insufficient to trigger the high-level pump float. Following this, the maintainer observed frozen untreated sewage near the lift station, estimated to be 195 liters in volume. The maintainer activated both pumps to reduce the fluid level in the tank to prevent the potential for a similar occurrence. The spill was contained to an area approximately 12.2m², and was located approximately 550 meters away from the nearest water body, Sheardown Lake, which is currently frozen.

Immediate and Follow-Up Action:

Following discovery of the release, the station was emptied and cleaned to prevent further release. Further investigation revealed a crack in the lift station tank, which had been previously concealed by an accumulation of sediment and debris, explaining its failure to be detected during previous inspections. The sediment build-up resulted from the tank's design, which does not allow for the debris and material to be removed without entering the tank.

The immediate corrective actions implemented following the spill included cleaning and reactivating the pumps, as well as relocating the pump floats to a lower level to prevent fluid from rising to the height of the crack in the tank.

Long-term corrective actions implemented to address the root cause of the incident include the replacement of the damaged lift station with a new unit featuring an access port for a vacuum truck operator to remove silt and debris. This debris removal will be conducted on a bi-weekly basis for all lift station tanks across the Mine and Port sites. Additionally, the current weekly lift station inspections will be elevated to a daily task. Finally, a plan will be implemented to replace all lift station tanks that were originally installed in 2013 and 2014 respectively, by January 2026.

Current Status:

The lift station has been replaced and is back in service. Due to the nature of the location, equipment access to enter the contaminated area for cleanup is not feasible. Personnel access is also severely limited. The area will be monitored closely in the spring and clean up activities will be performed as required.

Should you require further information or clarification on the incident described above, please feel free to contact the undersigned at (647) 253-0596 (ext.6016).

Prepared by:

A handwritten signature in black ink, appearing to read "Todd Swenson".

Todd Swenson
Environmental Superintendent

Reviewed by:

A handwritten signature in black ink, appearing to read "Eli Iannelli".

Eli Iannelli
Site Services Superintendent

Cc: Jeremy Fraser, Sean Naullaq (CIRNAC)
Andrew Jaworenko, Amoudla Kootoo (QIA)
Megan Lord-Hoyle, Lou Kamermans, Francois Gaudreau, Paula Krats, Eli Iannelli, Norm Hilliard, William Bowden, Todd Swenson, Allison Parker, Shannon Mulhall, Irniq Lecompte (Baffinland)

Attachments:

Attachment 1: Photos
Attachment 2: Spill Location
Attachment 3: Baffinland NT-NU Spill Report #2025-145

Attachment 1: Photos



Photo 1: Mine Site Complex Laundry Lift Station Spill Location – Spilled Sewage Frozen on Ground - March 29, 2025



Photo 2: Mine Site Complex Laundry Lift Station Spill Location – Spilled Sewage Frozen on Ground - March 29, 2025



Photo 3: Mine Site Complex Laundry Lift Station Spill Location – Spilled Sewage Frozen on Ground Near Transformer - March 29, 2025

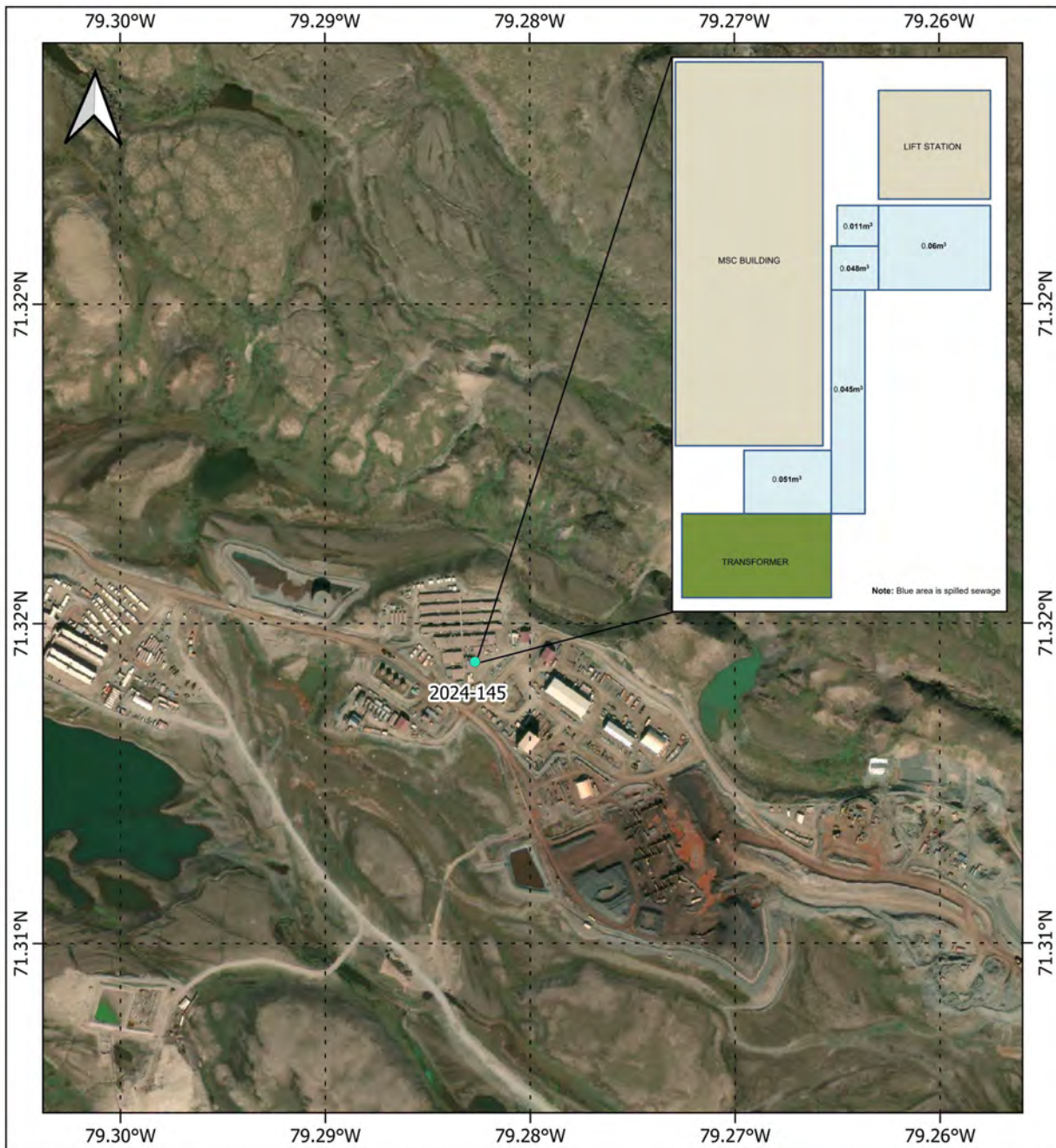


Photo 4: Mine Site Complex Laundry Lift Station - March 29, 2025



Photo 5: Mine Site Complex Laundry Lift Station – Crack in the tank - March 29, 2025

Attachment 2: Spill Location



LEGEND

- 2024-145
Mine Site Complex Lift Station

	
Date: 04/08/2025	NT-NU SPILL ID: 2024-145
Author: Jordan Siewnarine	
Office: Exploration	
Drawing:	
Scale: 1:9045.304	Projection: NAD 83/UTM Zone 17N
0 100 200 300 400 m 	

Attachment 3: NT-NU Spill Report #2025-145

NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND
OTHER HAZARDOUS MATERIALS



Canada



Inuvialuit Land Administration

NT-NU 24-HOUR SPILL REPORT LINE

Tel: (867) 920-8130 • Email: spills@gov.nt.ca

A	Report Date: 3 30 25	Report Time: 8:00 pm	☒ Original Spill Report OR ☐ Update # _____ to the Original Spill Report		Report Number: 25-
B	Occurrence Date: 3 29 25	Occurrence Time: 8:00 pm			
C	Land Use Permit Number (if applicable): IOL - Commercial Lease No.: Q13C301		Water Licence Number (if applicable): 2AM-MRY1325 Type "A"		
D	Geographic Place Name or Distance and Direction from the Named Location: Mary River Project Mine Site, Baffin Island, NU				Region: ☐ NT ☒ Nunavut ☐ Trans-boundary or Ocean
E	Latitude: 71 Degrees 18 Minutes 49 Seconds		Longitude: -79 Degrees 17 Minutes 6 Seconds		
F	Responsible Party or Vessel Name: Baffinland Iron Mines Corp.		Responsible Party Address or Office Location: 360 Oakville Place Dr. Suite 300, Oakville, ON, Canada, L6H6K8		
G	Any Contractor Involved: N/A		Contractor Address or Office Location: N/A		
H	Product Spilled: ☐ Potential Spill Untreated Sewage	Quantity in Litres, Kilograms or Cubic Metres: 195 L	U.N. Number: N/A		
I	Spill Source: Lift Station	Spill Cause: Overflow	Area of Contamination in Square Metres: 12		
J	Factors Affecting Spill or Recovery: N/A	Describe Any Assistance Required: N/A	Hazards to Persons, Property or Environment: N/A		
K	Summary of the spill incident and efforts / description of the incident: During the start of the night shift, the housing maintainer was performing inspections and discovered a spill at the MSC laundry room lift station. Upon inspection of the tank box, he found that the high-level pump was not operational. The spill has been stopped, and the material is contained to the frozen ground immediately adjacent to the lift station. Clean up efforts are currently underway. This spill is being reported as required by the conditions of Water License no. 2AM-MRY1325, Part H, item 9(b) pursuant to subsection 12(3) of the Nunavut Waters and Nunavut Surface Rights Tribunal Act				
L	Reported to Spill Line by: Katie Babin	Position: Environmental Superintendent	Employer: Baffinland Iron Mines	Location Calling From: Baffinland	Telephone: (647) 253-0956
M	Any Alternate Contact: William Bowden	Position: Environmental Manager	Employer: Baffinland Iron Mines	Alternate Contact Location: Baffinland	Alternate Telephone: (647) 253-0956

REPORT LINE USE ONLY

N	Received at Spill Line by:	Position:	Employer:	Location Called:	Report Line Number:
Lead Agency: ☐ EC ☐ CCG/TCMS ☐ GNWT ☐ GN ☐ ILA ☐ CIRNAC ☐ CER ☐ Other: _____				File Status: ☐ Open ☐ Closed	
Agency:	Contact Name:	Contact Time:	Remarks:		
Lead Agency:					
First Support Agency:					
Second Support Agency:					
Third Support Agency:					

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June 1, 2025

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Regulatory Manager
Qikiqtani Inuit Association
P.O. Box 219
Iqaluit, NU X0A 0H0

Re: Follow-Up to Spill #2025-202
Mary River Project - Water Licence No. 2AM-MRY1325

Summary:

On May 4th, an arctic diesel release occurred at the Milne Port Site Services laydown area from parked mobile fuel truck FLT020 when the main fuel product hose became dislodged from its fitting on the fuel truck. Approximately 1,850 liters of arctic diesel was released onto the ground in the immediate vicinity of the fuel truck. The spill was contained to an area of approximately 164.4m² on the laydown, located approximately 388m away from the nearest water body, Milne Inlet, which is currently frozen.

Immediate and Follow-Up Action:

Upon discovery of the release, the fuel truck operator promptly closed the emergency shut-off valve, stopping further release. Due to the volume of the release, the Emergency Response Team (ERT) was immediately notified and spill response equipment was deployed to the site. Spill pads and sorbent socks were used to absorb as much free product as possible, and a portable spill containment berm was placed beneath FLT020 to catch any residual spillage from the fuel hose and fuel storage tank. Contaminated response materials were collected in quatrex bags and transported to the hazardous waste berm facility for staging and eventual offsite disposal. The affected area was delineated, contaminated snow and ice was removed, and an excavator ripper tool was used to excavate frozen surface soil to a maximum depth of 12 inches. Affected snow & ice and approximately 60 m³ of impacted soil was transported to the Mary River landfarm for disposal.

Following collection and analysis of confirmatory floor sampling for Total Oil and Grease (TOC), to verify sufficient excavation, clean fill material was imported to restore the area, and the site was graded to align with existing road conditions. Fuel suction and pressure hoses attached to the fuel product pump on fuel truck FLT020 were replaced, and FLT020 was returned to service.

Corrective Actions:

Further investigation determined that a valve on the bottom of the fuel truck fuel tank (belly valve) was not closed between fuel deliveries, a factor which contributed to and could have reduced the release following failure of the hose. Current Standard Operating Procedure (SOP) requires this valve to be closed when the equipment is not in operation and during filling of fuel storage tanks; however, it does not address closure of the valve between fuel deliveries.

A Safe Work Instruction (SWI) is being developed for fuel truck FLT020, which will detail the instructions for closure of the belly valve between and after each fuel delivery. The SWI will be reviewed with all fuel truck operators following completion. In the interim, all fuel truck operators have been instructed to close the belly valve after each

fuel delivery, and the belly valve has been labelled with that instruction. In addition the failed hose was replaced and the fuel truck fleet on site is being checked for hose integrity issues at similar failure points.

Current Status:

Fuel hoses on FLT020 have been replaced and the fuel truck has been returned to service. Confirmatory sampling was conducted to ensure no additional clean up was required, and clean fill material was placed and graded to match the existing road conditions.

Should you require further information or clarification on the incident described above, please feel free to contact the undersigned at (647) 253-0596 (ext.6016).

Prepared by:

A handwritten signature in black ink, appearing to read "Sean", is written over a light blue horizontal line.

Environmental Superintendent

Reviewed by:

Sean Hudson

Digitally signed by Sean
Hudson
Date: 2025.05.25 18:14:38
-04'00'

Site Services Superintendent

Cc: Jeremy Fraser, Sean Naullaq (CIRNAC)
Andrew Jaworenko, Amoudla Kootoo (QIA)
Megan Lord-Hoyle, Lou Kamermans, Francois Gaudreau, Paula Krats, Eli Iannelli, Norm Hilliard, William Bowden, Todd Swenson, Katie Babin, Allison Parker, Shannon Mulhall, Irniq Lecompte (Baffinland)

Attachments:

Attachment 1: Photos

Attachment 2: Spill Location

Attachment 3: Baffinland NT-NU Spill Report #2025-202

Attachment 1: Photos

Photo 1: Initial Spill Response; Visible Diesel on Ground Being Absorbed By the Pads – May 4, 2025



Photo 2: Delineation of Contaminated Area Following Spill Response – May 4, 2025



Photo 3: Excavation of Contaminated Snow & Ice – May 4, 2025



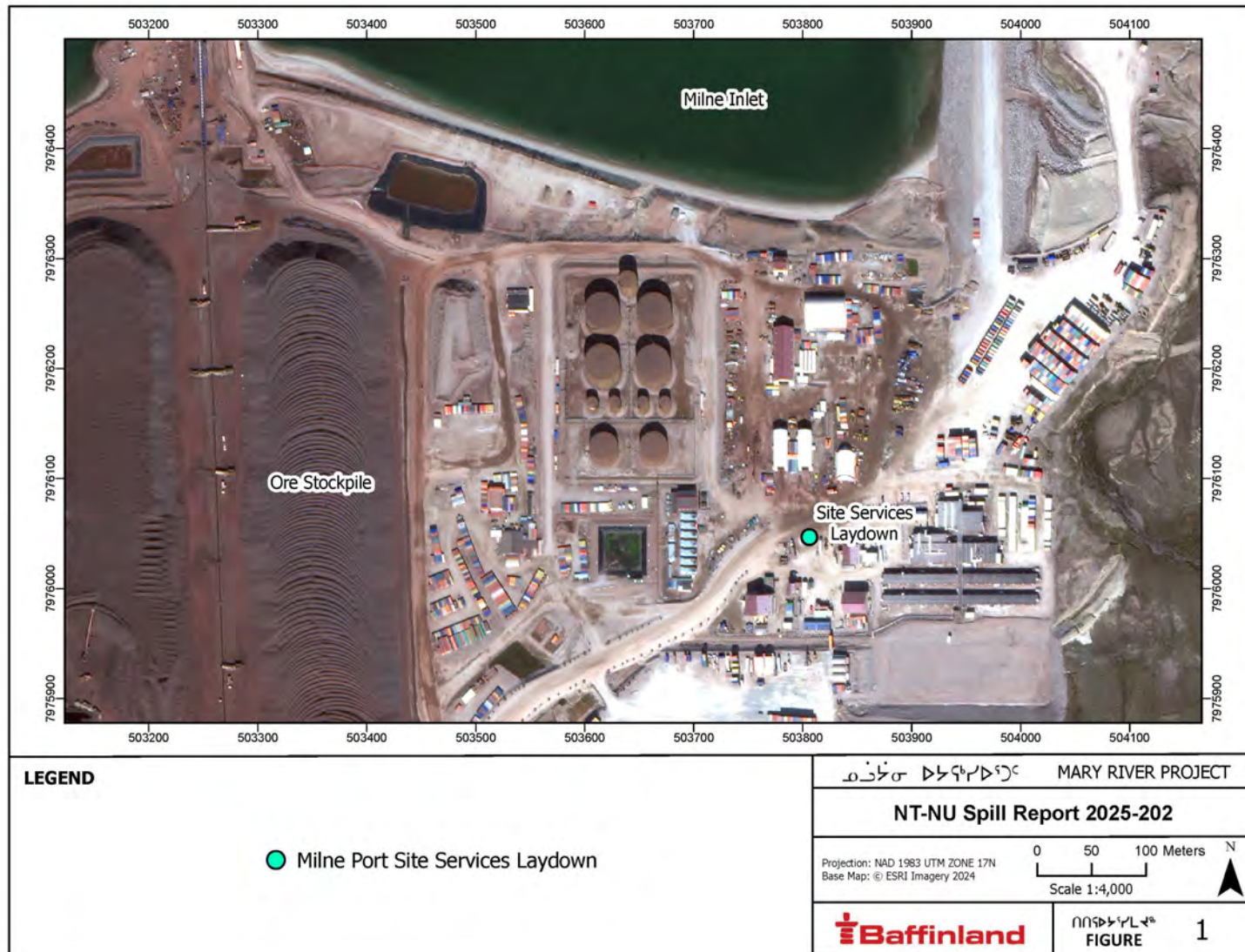
Photo 4: Excavation via Ripper of Contaminated Surface Soils – May 7, 2025



Photo 5: Clean Fill Material Placed and Area Regraded – May 12, 2025



Attachment 2: Spill Location



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Main: 416.364.8820 | Fax: 416.364.0193 | www.baffinland.com

Attachment 3: NT-NU Spill Report #2025-202

NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND
OTHER HAZARDOUS MATERIALS



NT-NU 24-HOUR SPILL REPORT LINE

Tel: (867) 920-8130 • Email: spills@gov.nt.ca

A	Report Date: 5 / 5 / 25	Report Time: 10:30 am	☒ Original Spill Report OR ☐ Update # _____ to the Original Spill Report		Report Number: 25 -
B	Occurrence Date: 5 / 4 / 25	Occurrence Time: 10:35 am			
C	Land Use Permit Number (if applicable): IOL - Commercial Lease NO.: Q13C301	Water Licence Number (if applicable): 2AM-MRY1325 Type "A"			
D	Geographic Place Name or Distance and Direction from the Named Location: Mary River Project Milne Port, Baffin Island, NU			Region: ☐ NT ☒ Nunavut ☐ Trans-boundary or Ocean	
E	Latitude: 71 Degrees 53 Minutes 4 Seconds		Longitude: 80 Degrees 53 Minutes 26 Seconds		
F	Responsible Party or Vessel Name: Baffinland Iron Mines Corp.		Responsible Party Address or Office Location: 360 Oakville Place Drive, Suite 300, Oakville, ON, Canada, L6H 6K8		
G	Any Contractor Involved: N/A		Contractor Address or Office Location: N/A		
H	Product Spilled: ☐ Potential Spill Arctic Diesel	Quantity in Litres, Kilograms or Cubic Metres: 1850 L	U.N. Number: 1202		
I	Spill Source: Fuel Truck	Spill Cause: Equipment Failure	Area of Contamination in Square Metres: 164.4		
J	Factors Affecting Spill or Recovery: N/A	Describe Any Assistance Required: N/A	Hazards to Persons, Property or Environment: N/A		
K	Summary of the spill incident and efforts / description of the incident: On May 4, 2025 at 10:35 am, a diesel release occurred in the Site Services laydown area, sourcing from a parked fuel truck. An initial investigation determined that a fuel hose had failed on the truck, leading to a spill of approximately 1,850 liters of arctic diesel onto the ground. Due to the volume of the spill, the Emergency Response Team (ERT) was deployed to contain and clean up the affected area. The spill was successfully contained within the Site Services laydown and did not migrate. The nearest body of water is approx. 388 m away and remains frozen at this time. An excavator was used on May 4 to remove ice and snow contaminated by the diesel and clean up continues. All contaminated material will be disposed of within lined containment according to Baffinland's Hazardous Materials and Hazardous Waste Management Plan. This spill is being reported as required by the conditions of Water License no. 2AM-MRY1325, Part H, item 9(b) pursuant to subsection 12(3) of the Nunavut Waters and Nunavut Surface Rights Tribunal Act.				
L	Reported to Spill Line by: Todd Swenson	Position: Environmental Superintendent	Employer: Baffinland Iron Mines	Location Calling From: Mary River Mine (Ext. 8016)	Telephone:
M	Any Alternate Contact: William Bowden	Position: Environmental Manager	Employer: Baffinland Iron Mines	Alternate Contact Location: Mary River Mine (Ext. 8737)	Alternate Telephone:

REPORT LINE USE ONLY

N	Received at Spill Line by:	Position:	Employer:	Location Called:	Report Line Number:
Lead Agency: ☐ EC ☐ CCG/TCMSS ☐ GNWT ☐ GN ☐ ILA ☐ CIRNAC ☐ CER ☐ Other: _____				File Status: ☐ Open ☐ Closed	
Agency:	Contact Name:	Contact Time:	Remarks:		
Lead Agency:					
First Support Agency:					
Second Support Agency:					
Third Support Agency:					

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June 23, 2024

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Enforcement Office
Environment and Climate Change Canada
933 Mivvik Street
Iqaluit, NU X0A 0H0

Re: Follow-up to Spill #2025-227
Mary River Project - Water Licence No. 2AM-MRY2540

Summary:

On May 23 and 24, 2025, as part of the Freshet Monitoring Program, water was observed flowing at Freshet outflow monitoring locations. Samples collected at the outfall locations of Sheardown Lake Tributary (SDLT), Camp Lake Settling Pond (CLSP), and Camp Lake Tributary (CLT) monitoring locations confirmed elevated concentrations of Total Suspended Solids (TSS). Samples for Landfill Gate tributary (LDFG) returned results that were not elevated and the sample site has been removed from the follow up report. During this period, warming temperatures resulted in snowmelt runoff containing sediment laden water to enter the affected watercourses over a brief period of time. In accordance with the Surface Water Aquatic Effects Management Plan and the Snow Management Plan, sedimentation mitigation measures were implemented to settle sediments prior to entering the receiving environment.

Monitoring of water quality and daily inspections, including YSI readings, of monitoring locations is conducted throughout freshet. Details of the CLT-OUT, SDLT-OUT, and CLSP-OUT sampling locations are provided in Table 1 and the Mine Site freshet monitoring locations figure in Attachment 2. TSS results for sampling conducted at SDLT-OUT, CLT-OUT, and CLSP-OUT are summarized in Table 2. Photos of the sampling locations are provided in Attachment 1. The sediment-laden water exceedances, reported to the NT-NU Spills Reporting Line as Spill #2025-227 on May 24 is provided in Attachment 3.

Table 1: Details for the Locations of Sampling Sites CLT-OUT, SDLT-OUT, and CLSP-OUT

Sample Location	Description	Location (UTM; NAD83 Zone 17W)	
		Easting	Northing
CLT-OUT	Camp Lake Tributary 1 Outlet (100 m upstream of Camp Lake outfall)	557686	7914947
SDLT-OUT	Sheardown Lake Tributary 1 Outlet (100 m upstream of Sheardown Lake outfall)	560332	7913519

CLSP-OUT	Camp Lake Settling Pond Outlet	557805	7914795
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Table 2: TSS Results for SDLT-OUT, CLT-OUT, and CLSP-OUT

Sample Date	Location Name	TSS Screening Criteria (mg/L)	TSS Concentration (mg/L)
May 23, 2025	SDLT-OUT	30	349
May 24, 2025	SDLT-OUT	30	16.1
May 25, 2025	SDLT-OUT	30	36.5
June 1, 2025	SDLT-OUT	30	12.5
June 8, 2025	SDLT-OUT	30	2.7
May 23, 2025	CLT-OUT	30	162
May 24, 2025	CLT-OUT	30	5.4
May 25, 2025	CLT-OUT	30	12.7
June 1, 2025	CLT-OUT	30	3.8
June 8, 2028	CLT-OUT	30	<1
May 24, 2025*	CLSP-OUT	30	84.2
May 30, 2025	CLSP-OUT	30	157

*Sampling did not occur on May 23 at CLSP-OUT due to unsafe conditions with regard to ice formations

The brief and transient nature of this event, confirmed through sampling, is expected to have minimal impact on the receiving waterbodies. Monitoring results showed that the main drainage channels (SDLT and CLT) sourcing from the Mine Site dramatically improved in water quality following May 23rd and represent an improvement in water quality monitored from previous years. This is attributed to the freshet planning and preparation process prior to the onset as well as mitigative measures installed during Freshet. Results for further subsequent sampling have demonstrated that there were no Project related changes to water quality as a result of the operation of site infrastructure. A representative water quality sample could not be collected at CLSP-OUT following May 30 due to the onset of low-flow to no flow conditions during subsequent scheduled sampling and there is potential the low flow conditions of the monitoring site contributed to elevated TSS results.

Immediate and Follow-Up Action:

Erosion and Sediment Control (ESC) measures were assessed and installed where applicable, in accordance with Baffinland's Surface Water Aquatic Effects Management Plan (SWAEMP), and maintained and adjusted as required. Snow management practices with the intent to reduce dust entrained snow from entering receiving environments were implemented prior and during Freshet. At the CLSP location, a spring berm and flocculent ("floc blocs") were deployed across the stream to reduce sediment transport within the watercourse. Additionally, the Camp Lake



settling pond, rip rap structures and silt fencing installed adjacent to the monitoring location remains in place and continues to limit sediment migration from snowmelt.

In anticipation of spring runoff at the Sheardown Lake Tributary (SDLT), three rock filter berms were installed in mid-April within non-fish-bearing channels. Furthermore, coir logs and spring berms were installed upstream of SDLT-OUT and CLT-OUT to enhance sediment control. The coir logs were installed near the MS-C-C, MS-C-D and MQ-C-D Surveillance Network Program (SNP) monitoring stations.

In addition to reduce sediment within SDLT, repairs and preparations to two silt curtains within the MS-C-F settling pond were completed on May 18 and an additional silt curtain, in conjunction with flocculent blocks, downstream of the Km 105 Pond and upstream of the discharge location was installed on May 23rd. Two water management filter berms originally installed in March to bolster settling capacity within the Km 105 Pond continued to effectively reduce TSS prior to the water reaching MS-11. Polymer treatment and dosing systems were also prepared for implementation prior to flow commencement to promote settling of TSS within the KM 105 Pond.

Following the observation of turbid flow at SDLT on May 23, coir logs were inspected and maintained. Supplementary floc blocs were installed at this time to enhance sediment capture. Furthermore, additional spring berms and corresponding floc blocs were deployed upstream of the previously installed filter berms to bolster overall sediment mitigation efforts. Rip rapped ditching was also installed adjacent to CV 186 to limit runoff interactions with the road and improve water quality at the crossing within SDLT on May 23rd.

Prior to the start of freshet 2025, excess snow was relocated from areas of concern around the Mine Site, including the inlets and outlets of select culvert locations that interact with SDLT, and CLT drainages. The snow removal focused on locations with dust entrained snow from areas that have the potential to directly interact with potential receiving environments. This snow was relocated to approved snow stockpile locations to reduce the volume of snowmelt and the amount of overland flow present to mobilize sediment. Continual snow removal on road surfaces was also ongoing prior to freshet, and culverts were steamed and cleared as necessary to ensure the effective flow of water, in accordance with Baffinland's Snow Management Plan (SMP).

Current Status:

Freshet water quality monitoring and inspections of sampling locations continue to be completed including at the Landfill Gate outfall location (LDFG-OUT) throughout freshet, when flowing water is present. Samples obtained at SDLT and CLT were compliant as of June 1, and May 24, respectively. Samples collected at LDFG have shown continual compliance with applicable Water Licence criteria throughout freshet. Due to low flow conditions at CLSP-OUT during subsequent scheduled sampling, no further samples have been collected at this monitoring location to date. Routine maintenance of ESC measures will be performed as necessary to ensure their ongoing effective operation.

Should you require further information or clarification on the incident described above, please feel free to contact the undersigned at (647) 253-0596 (ext.6016).

Prepared by:

William Bowden

William Bowden

Environmental Manager

Reviewed by:

Jacob Prince

Jacob Prince

Technical Services Superintendent

Cc: Jeremy Fraser, Sean Naullaq (CIRNAC)
Andrew Jaworenko, Amoudla Kootoo,(QIA)



Curtis Didham (ECCC)

Megan Lord-Hoyle, Lou Kamermans, Scot Klingman, Francois Gaudreau, Les Cook, Jacob Prince,, Todd Swenson, Katie Babin, Allison Parker, Shannon Mulhall, Irniq Lecompte (Baffinland)

Attachments

Attachment 1: Photos

Attachment 2: Mine Site Freshet Monitoring Locations

Attachment 3: Initial Spill Notification



Attachment 1 Photos

SDLT-OUT



Photo 1: SDLT-OUT Sample Location - May 23, 2025



Photo 2: SDLT-OUT Sample Location - June 1, 2025



Photo 3: Rock Filter Berm A Installed Within SDLT - April 18, 2025



Photo 4: Rock Filter Berm B Installed Within SDLT - April 18, 2025



Photo 5: Rock Filter Berm C Installed Within SDLT - April 18, 2025



Photo 6: Coir Logs Installed Upstream of SDLT-OUT near MS-C-C and MS-C-D - May 20, 2025



Photo 7: Water Management via Shallow Rip Rapped Ditch Installation to Direct Water Flow Towards Check Dam System at CV-186 Above SDLT - May 23, 2025



Photo 8: Filter Berm operating within Km 105 valley infrastructure above SDLT- May 23rd 2025



Photo 9: Silt Curtain Installed Within Km 105 Valley Infrastructure Above SDLT May 23 - 2025



Photo 10: Spring berms Installed Upstream of SDLT-OUT – May 26, 2025



Photo 11: Spring Berms Deployed Upstream of Filter Berm C With Additional Floc Blocs – May 26, 2025

CLT-OUT



Photo 12: CLT-OUT Sample Location May 23, 2025



Photo 13: CLT-OUT Sample Location May 24, 2025



Photo 14: Excavator clearing dust impacted snow from a culvert inlet May 11 2025



Photo 15: Upstream of monitoring location MQ-C-D, floc blocks installed, May 31, 2025

CLSP-OUT



Photo 16: CLSP-OUT Sample Location May 24, 2025



Photo 17: CLSP-OUT Sample Location with no flow – June 1, 2025



Photo 18: CLSP-OUT Spring berm and Floc Blocs Deployed in the Flow Path – May 26, 2025



Photo 19: CLSP-OUT Silt Fence Installed Adjacent to Sample Location Preventing Sediment from Snowmelt from Entering Camp Lake – May 24, 2025



Attachment 2

Mine Site Freshet Monitoring Locations





Attachment 3 NT-NU Spill Line Report

NT-NU SPILL REPORT

**OIL, GASOLINE, CHEMICALS AND
OTHER HAZARDOUS MATERIALS**



Canada



Inuvialuit Land Administration

NT-NU 24-HOUR SPILL REPORT LINE
Tel: (867) 920-8130 • Email: spills@gov.nt.ca

A	Report Date: 15 24 25	Report Time: 12:45 pm	☒ Original Spill Report OR ☐ Update # _____ to the Original Spill Report		Report Number:
B	Occurrence Date: 15 23 25	Occurrence Time: 3:00 pm			
C	Land Use Permit Number (if applicable): IOL - Commercial Lease No.: Q13C301	Water Licence Number (if applicable): 2AM-MRY1325 Type "A"			
D	Geographic Place Name or Distance and Direction from the Named Location: Mary River Project Mine Site, Baffin Island, NU		Region: ☐ NT ☒ Nunavut ☐ Trans-boundary or Ocean		
E	Latitude: 71 Degrees 18 Minutes 59 Seconds		Longitude: -79 Degrees 18 Minutes 42 Seconds		
F	Responsible Party or Vessel Name: Baffinland Iron Mines Corp.		Responsible Party Address or Office Location: 360 Oakville Place Dr, Suite 300, Oakville, ON, Canada, L6H6K8		
G	Any Contractor Involved: N/A		Contractor Address or Office Location: N/A		
H	Product Spilled: ☐ Potential Spill Sediment-laden water	Quantity in Litres, Kilograms or Cubic Metres: unquantified	U.N. Number: N/A		
I	Spill Source: snow melt, overland flow	Spill Cause: rapid melt	Area of Contamination in Square Metres: N/A		
J	Factors Affecting Spill or Recovery: Frozen conditions, high flow	Describe Any Assistance Required: N/A	Hazards to Persons, Property or Environment: N/A		
K	Summary of the spill incident and efforts / description of the incident: On May 23, 2025, as part of the Freshet Monitoring Program, water was observed flowing at Freshet outflow monitoring locations. Ice conditions precluded taking samples at The Landfill Gate (LDFG) and Camp Lake Settling Pond (CLSP) monitoring locations, however samples were taken from the Sheardown Lake Tributary (SDLT), and Camp Lake Tributary (CLT) monitoring locations. Field observations and lab results received May 24 2025 identified elevated Total Suspended Sediments (TSS). In accordance with the Surface Water Aquatic Effects Management Plan, snow management and sedimentation mitigations measures were implemented in an attempt to settle sediments prior to entering the receiving environment. With freshet conditions present, monitoring of the water quality is ongoing. These exceedances are being reported as required by the conditions of Water License no. 2AM-MRY1325, Part H, item 9 (b) pursuant to subsection 12(3) of the Nunavut Waters and Nunavut Surface Rights Tribunal Act and as required by subsection 38(5) of the Fisheries Act.				
L	Reported to Spill Line by: William Bowden	Position: Env. Manager	Employer: Baffinland	Location Calling From: Baffinland	Telephone:
M	Any Alternate Contact: Todd Swenson	Position: Env Superintendent	Employer: Baffinland	Alternate Contact Location: Baffinland	Alternate Telephone:

REPORT LINE USE ONLY

N	Received at Spill Line by:	Position:	Employer:	Location Called:	Report Line Number:
Lead Agency: ☐ EC ☐ CCG/TCMSS ☐ GNWT ☐ GN ☐ ILA ☐ CIRNAC ☐ CER ☐ Other: _____				File Status: ☐ Open ☐ Closed	
Agency:	Contact Name:	Contact Time:	Remarks:		
Lead Agency:					
First Support Agency:					
Second Support Agency:					
Third Support Agency:					

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June 23, 2025

Resource Management Officer
Nunavut Region
Crown Indigenous Relations and Northern Affairs Canada
Box 100
Iqaluit, NU X0A 0H0

Regulatory Manager
Qikiqtani Inuit Association
P.O. Box 219
Iqaluit, NU X0A 0H0

Enforcement Office
Environment and Climate Change Canada
933 Mivvik Street
Iqaluit, NU X0A 0H0

Re: Follow-Up to Spill #2025-226
Mary River Project - Water Licence No. 2AM-MRY2540

Summary:

On May 22, 2025, water was observed flowing at the proposed MS-11 discharge location (MS-11), situated downstream of the Km 105 valley water management infrastructure (KM105 Pond). In accordance with applicable monitoring requirements, effluent characterisation and acute lethality testing was conducted and submitted to an accredited third-party laboratory for analysis. Preliminary results identified elevated Total Suspended Solids (TSS), with a measured concentration of 31.2 mg/L on May 24th 2025. Further, on May 24th, in response to receiving the elevated TSS result, water quality characterization and an acute toxicity sample was taken at the downstream receiving location of D1-05; the water quality was not acutely toxic. The exceedance occurred on Inuit owned land approximately 350m from water quality station D1-05, the nearest fish bearing water.

Immediate and Follow-Up Action:

Prior to the observed flow at the MS-11, mitigation measures were actively implemented and maintained in alignment with best management practices. Notably, repairs and preparations to two silt curtains within the MS-C-F settling pond were completed on May 18. In addition, two water management filter berms originally installed in March to bolster settling capacity within the Km 105 Pond continued to effectively reduce TSS prior to the water reaching MS-11. Polymer treatment and dosing systems were also prepared for implementation prior to flow commencement to promote settling of TSS within the KM 105 Pond.

In response to the turbid water flowing through the MS-11 discharge point, additional treatment measures were investigated and promptly implemented. This included the installation of an additional silt curtain, in conjunction with flocculent blocks, downstream of the Km 105 Pond and upstream of the discharge location. Furthermore, the dosing system previously used was reactivated upon observing flows within the Km 105 Pond. This system doses water entering the KM105 Pond prior to the filter berms, with a polymer to enhance the settling of suspended solids prior to discharge.

Weekly follow up water quality monitoring was conducted (Attachment 3) at MS-11. Analytical results indicate TSS concentrations immediately returned below 30mg/l, below the applicable maximum concentration threshold. Water quality sampling continues to be conducted in accordance with the Water Licence and the Metal and Diamond Mining Effluent Regulations (MDMER) and no further exceedances for deleterious substance grab criteria have been

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received. The monthly mean TSS result of 23.9 mg/l at MS-11 exceeded 15mg/l. The current available water quality results at the MS-11 discharge location are presented in Attachment 3.

In addition, monitoring included a full suite of MDMER sampling plus acute lethality on May 24 at the downstream monitoring location D1-05 as per Baffinland's Metal and Diamond Mining Effluent Regulations Emergency Response Plan (BIM-5000-PLA-0003). The results of the acute lethality sample collected from the MS-11 discharge point on May 22, and the downstream monitoring location D1-05 on May 24, indicated that the release was not acutely lethal. The current available water quality results at D1-05 are presented in Attachment 3.

Daily monitoring has been completed since the start of the response to the observed flow and the results have been used to inform water treatment dosage requirements as water continues to flow.

Mitigation/Treatment

Baffinland continues to actively monitor MS-11 to assess both water quantity and quality. In addition, the dosing system at the inflow of the KM105 Pond is continuing to operate. Water quality and flow rate monitoring within the Km 105 Pond is utilised to adjust polymer dosing in real time to effectively control and reduce total suspended solids (TSS).

Furthermore, the previously mentioned Erosion and Sediment Control (ESC) measures—including silt curtains, floc blocs, and filter berms—remain in place and continue to demonstrate effectiveness in reducing sediment transport within the continuous discharge.

Current Status:

Regulatory monitoring under the MDMER and water licence will continue at MS-11. Baffinland will continue to collect monthly water licence and MDMER samples for the relevant parameters at MS-11.

Discharge continues at MS-11 and operation of the KM105 water management infrastructure remains active.

Baffinland is actively reviewing and advancing the design of additional improvements to the KM105 Pond with a focus on enhancing sediment control measures for runoff originating from the valley infrastructure. This process includes engagement with a third-party engineer and design consultant to progress the design on an engineered structure intended to serve as the final control point (FDP) for MS-11.

As per Section 31 of the Metal and Diamond Mining Effluent Regulations:

- a. Total Suspended Solids at a concentration of 31.2mg/L grab and 23.9 monthly mean at the proposed MS-11 discharge point.
- b. The estimated volume of discharge above 30mg/l is not known
- c. The release occurred at approximately 12:30 on May 22, 2025.
- d. N/A
- e. The quantity of TSS that flowed through the proposed MS-11 Final Discharge Point (FDP) is unknown.
- f. The incident occurred on IOL, located approximately 350m from D1-05 a sample site on Sheardown Lake Tributary-1, the nearest fish-bearing waters. The receiving body of water that MS-11 discharges into is Sheardown Lake.

- g. On May 22, acute toxicity samples were collected from the proposed MS-11 discharge point and on May 24, acute toxicity samples were collected at D1-05. The sample results indicate the discharge was not acutely lethal.
- h. See the summary above for the circumstances of the discharge release. Sedimentation mitigation measures installed prior to the discharge continue to operate and manual adjustments of the polymer treatment system at the inflow to the KM 105 Pond are ongoing to reduce and control TSS levels.
- i. See the summary above for the measure taken. A third part consultant has been contracted to design the KM105 Pond FDP and further design on filter berms.

Should you require further information or clarification on the above-noted spill, please feel free to contact the undersigned at (647) 253-0596 x6016

Prepared by:

William Bowden

William Bowden

Environmental Manager

Reviewed by:

Jacob Prince

Jacob Prince

Technical Services Superintendent

Cc: Jeremy Fraser, Sean Naullaq (CIRNAC)

Andrew Jaworenko, Amoudla Kootoo, (QIA)

Curtis Didham (ECCC)

Megan Lord-Hoyle, Lou Kamermans, Francois Gaudreau, Scot Klingman, Les Cook, Jacob Prince, Todd Swenson, Katie Babin, Allison Parker, Shannon Mulhall, Irniq Lecompte (Baffinland)

Attachments:

Attachment 1: Spill Location Map

Attachment 2: Photos

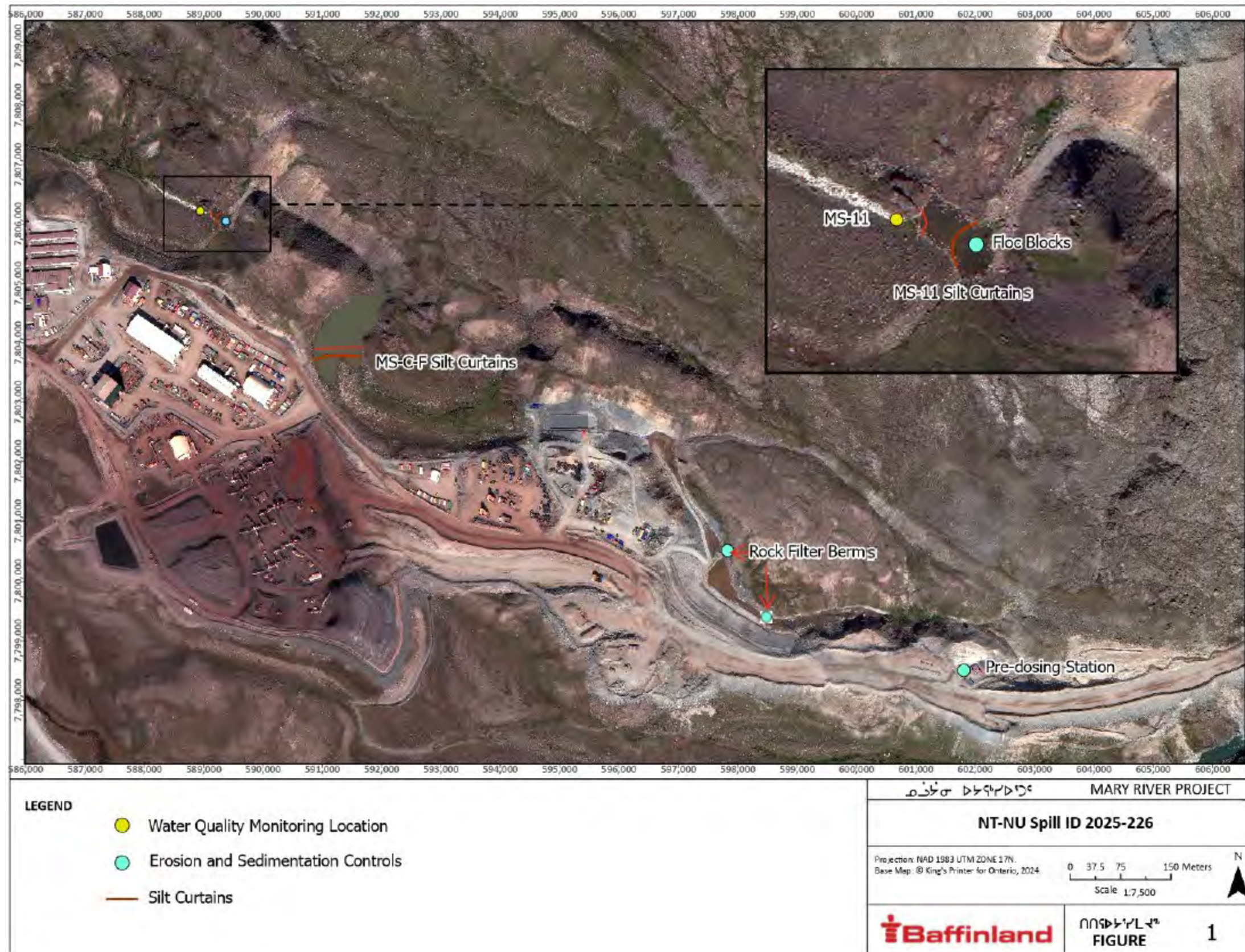
Attachment 3: Water Quality Results

Attachment 4: Baffinland NT-NU Spill Report #2025-226

Attachment 1 Spill Location Map

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Attachment 2 Photos

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Photo 1: Flowing Water at Proposed MS-11 Discharge Point - May 22, 2025



Photo 2: Flowing Water at Proposed MS-11 Discharge Point - May 24, 2025

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Photo 3: Flowing Water at Proposed MS-11 Discharge Point - June 17, 2025



Photo 4: Flowing Water at Downstream Monitoring Location D1-05 - May 24, 2025



Photo 5: Flowing Water at Downstream Monitoring Location D1-05 - June 8, 2025



Photo 6: Maintenance and Preparation of Silt Curtains at MS-C-F Settling Pond Downstream of the Dam - May 18, 2025



Photo 7: Filter Berm within KM 105 Valley Water Management Infrastructure - March 31, 2025



Photo 8: Installation of Silt Curtain Upstream of the Proposed MS-11 Discharge Location - May 23, 2025

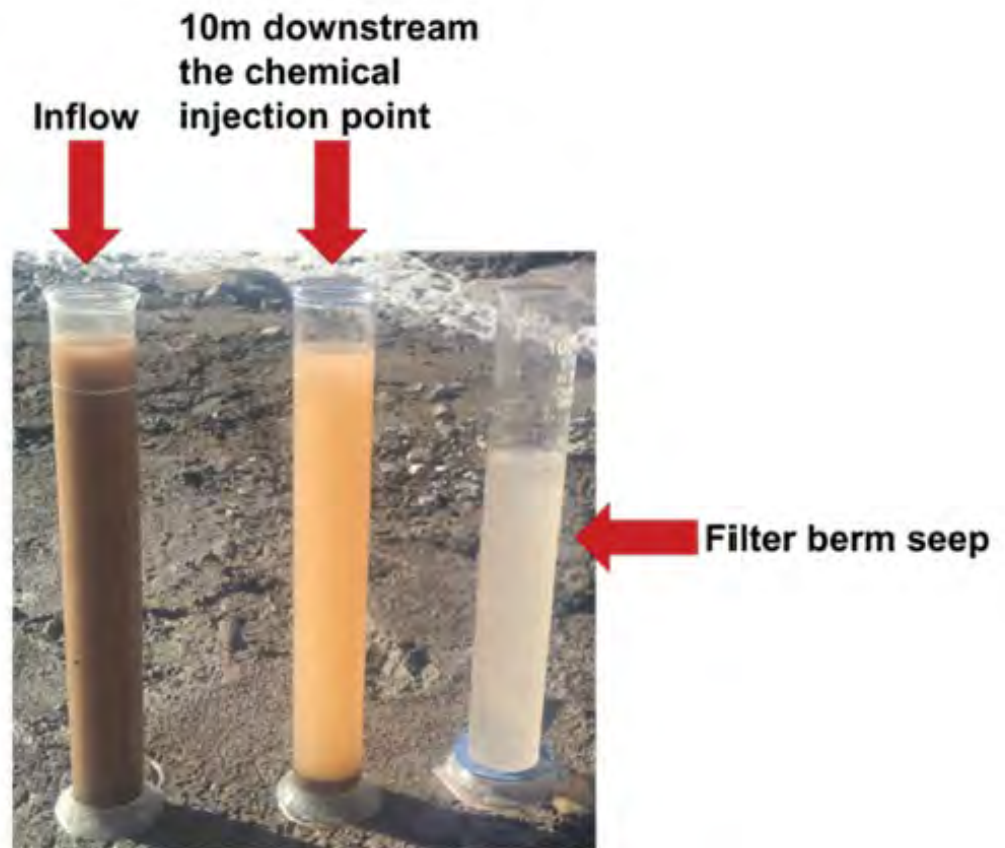


Photo 9: Polymer dosing mitigating sediment transport within the Km105 Valley Water Management infrastructure

Attachment 3 Water Quality Results

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Location Name			MS-11	MS-11	MS-11	MS-11
Sample Date & Time			2025-05-22 12:30	2025-05-24 23:55	2025-05-27 14:05	2025-06-02 8:50
ALS Laboratory Work Order			BF2500010	BF2500015	BF2500023	BF2500034
Sample Type			P	NP	P	P
Analyte	Units	Criteria Max Concentration				
pH, Field	pH units		7.83	7.47	7.64	7.55
Specific Conductivity, Field	us/cm		185.7	117.7	119.4	134.2
Temperature, Field	deg C		0.3	0	0.4	0.6
pH, Lab	pH units	6.0-9.5	7.41	7.4	7.46	7.49
Total Suspended Solids	mg/L	30	31.2	14	16.6	6.5
Turbidity, Field	NTU		118.87	75.12	71.25	13.15
Total Dissolved Solids	mg/L		131	91	82	88
Turbidity	NTU		98.8	81.7	80.2	17.4
Hardness	mg/L		69.7	-	-	-
Conductivity	umhos/cm		161	-	125	142
Alkalinity, Total	mg/L		33.7	-	-	-
Ammonia, Total (as N)	mg/L		0.196	-	0.119	-
Chloride	mg/L		6.69	-	-	-
Fluoride	mg/L		0.093	-	-	-
Nitrate	mg/L		2.16	-	-	-
Total Kjeldahl Nitrogen	mg/L		1.43	-	-	-
Sulfate	mg/L		33.3	-	-	-
Dissolved Organic Carbon	mg/L		5.84	-	-	-
Total Organic Carbon	mg/L		6.52	-	-	-
Aluminum - Total	mg/L		2.52	-	2.08	0.241
Antimony - Total	mg/L		< 0.0005	-	< 0.001	< 0.0001
Arsenic - Total	mg/L	0.6	< 0.0005	-	< 0.001	0.00011
Barium - Total	mg/L		0.0247	-	0.0181	0.00647
Cadmium - Total	mg/L		0.000107	-	0.000093	0.0000581
Calcium - Total	mg/L		12.5	-	8.06	9.84
Chromium - Total	mg/L		0.00565	-	< 0.005	0.00068
Cobalt - Total	mg/L		0.002	-	0.00148	0.00034
Copper - Total	mg/L	0.6	0.00714	-	0.00548	0.00202
Iron - Total	mg/L		3.71	-	2.93	0.314
Lead - Total	mg/L	0.2	0.00246	-	0.00162	0.00036
Lithium - Total	mg/L		0.0076	-	< 0.01	0.0032
Magnesium - Total	mg/L		12.1	-	8.3	9.35
Manganese - Total	mg/L		0.0989	-	0.0818	0.0426
Mercury - Total	mg/L		< 0.000005	-	-	-
Molybdenum - Total	mg/L		0.00524	-	0.00426	0.00362
Nickel - Total	mg/L	1	0.00639	-	0.00556	0.00125
Phosphorus, Total	mg/L		< 0.25	-	< 0.5	< 0.05
Potassium - Total	mg/L		6.08	-	4.48	3.33
Selenium - Total	mg/L		0.000434	-	< 0.0005	0.000204
Sodium - Total	mg/L		3.02	-	1.4	1.33
Strontium - Total	mg/L		0.0371	-	0.0202	0.0234
Thallium - Total	mg/L		0.000051	-	< 0.0001	0.00001
Tin - Total	mg/L		< 0.0005	-	< 0.001	< 0.0001
Titanium - Total	mg/L		0.0958	-	0.0691	0.00805
Uranium - Total	mg/L		0.00206	-	0.00117	0.00106
Vanadium - Total	mg/L		0.00375	-	< 0.005	< 0.0005
Zinc - Total	mg/L	1	< 0.015	-	< 0.03	< 0.003
Aluminum - Dissolved	mg/L		0.023	-	-	-
Arsenic - Dissolved	mg/L		< 0.0005	-	-	-
Cadmium - Dissolved	mg/L		0.0000426	-	-	-
Calcium - Dissolved	mg/L		12.1	-	-	-
Copper - Dissolved	mg/L		0.00219	-	-	-
Iron - Dissolved	mg/L		< 0.05	-	-	-
Lead - Dissolved	mg/L		< 0.00025	-	-	-
Magnesium - Dissolved	mg/L		9.6	-	-	-
Manganese - Dissolved	mg/L		0.025	-	-	-
Mercury - Dissolved	mg/L		< 0.000005	-	-	-
Molybdenum - Dissolved	mg/L		0.00596	-	-	-
Nickel - Dissolved	mg/L		< 0.0025	-	-	-
Potassium - Dissolved	mg/L		5.3	-	-	-
Selenium - Dissolved	mg/L		0.000389	-	-	-
Sodium - Dissolved	mg/L		2.92	-	-	-
Thallium - Dissolved	mg/L		< 0.00005	-	-	-
Uranium - Dissolved	mg/L		0.0014	-	-	-
Zinc - Dissolved	mg/L		< 0.005	-	-	-
Phosphorus, Nutrient	mg/L		0.0414	-	-	-
Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Mean Mortality - Daphnia magna	-	Not Acutely Toxic	Not Acutely Toxic	-	-	-
Mean Mortality - Rainbow Trout	-	Not Acutely Toxic	Not Acutely Toxic	-	-	-

Note:
Sample results are preliminary for sample taken on May 27
Sample results are preliminary for sample taken on June 2



Location Name		D1-05	D1-05
Sample Date & Time		2025-05-24 7:40	2025-06-08 15:25
ALS Laboratory Work Order		BF2500013	BF2500050
Sample Type		P	P
Analyte	Units		
pH, Field	pH units	7.79	7.73
Specific Conductivity, Field	us/cm	107.3	137.9
Temperature, Field	deg C	0.2	3.1
Turbidity, Field	NTU	43.11	7.43
pH, Lab	pH units	7.39	7.47
Total Suspended Solids	mg/L	17.9	2.5
Total Dissolved Solids	mg/L	64	67
Turbidity	NTU	50.2	7.49
Hardness	mg/L	43.4	-
Conductivity	umhos/cm	105	-
Alkalinity, Total	mg/L	30.4	-
Ammonia, Total (as N)	mg/L	0.131	-
Chloride	mg/L	2.53	-
Fluoride	mg/L	0.059	-
Nitrate	mg/L	1.02	-
Total Kjeldahl Nitrogen	mg/L	0.662	-
Sulfate	mg/L	15.4	-
Dissolved Organic Carbon	mg/L	4.49	-
Total Organic Carbon	mg/L	3.76	-
Aluminum - Total	mg/L	0.428	-
Antimony - Total	mg/L	< 0.0001	-
Arsenic - Total	mg/L	0.00011	-
Barium - Total	mg/L	0.00927	-
Cadmium - Total	mg/L	0.0000747	-
Calcium - Total	mg/L	6.73	-
Chromium - Total	mg/L	0.00088	-
Cobalt - Total	mg/L	0.0005	-
Copper - Total	mg/L	0.0029	-
Iron - Total	mg/L	0.539	-
Lead - Total	mg/L	0.000793	-
Lithium - Total	mg/L	0.003	-
Magnesium - Total	mg/L	6.46	-
Manganese - Total	mg/L	0.0374	-
Mercury - Total	mg/L	< 0.000005	-
Molybdenum - Total	mg/L	0.00323	-
Nickel - Total	mg/L	0.00162	-
Phosphorus, Total	mg/L	< 0.05	-
Potassium - Total	mg/L	3.97	-
Selenium - Total	mg/L	0.000138	-
Sodium - Total	mg/L	1.36	-
Strontium - Total	mg/L	0.0186	-
Thallium - Total	mg/L	0.000016	-
Tin - Total	mg/L	< 0.0001	-
Titanium - Total	mg/L	0.015	-
Uranium - Total	mg/L	0.00089	-
Vanadium - Total	mg/L	0.00073	-
Zinc - Total	mg/L	0.0034	-
Mercury - Dissolved	mg/L	< 0.000005	-
Phosphorus, Nutrient	mg/L	0.0256	-
Visible Sheen	-	No Visible Sheen	No Visible Sheen
Mean Mortality - Daphnia magna	-	Not Acutely Toxic	-
Mean Mortality - Rainbow Trout	-	Not Acutely Toxic	-

Note:
Sample results are preliminary for sample taken on June 8

Attachment 4 Baffinland NT-NU Spill Report #2025-226

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NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND
OTHER HAZARDOUS MATERIALS



Canada



Inuvialuit Land Administration

NT-NU 24-HOUR SPILL REPORT LINE
Tel: (867) 920-8130 • Email: spills@gov.nt.ca

A	Report Date: 15 24 25	Report Time: 12:00 pm	☒ Original Spill Report OR ☐ Update # _____ to the Original Spill Report	Report Number:
B	Occurrence Date: 15 22 25	Occurrence Time: 12:30 pm		
C	Land Use Permit Number (if applicable): IOL - Commercial Lease No.: Q13C301	Water Licence Number (if applicable): 2AM-MRY1325 Type "A"		
D	Geographic Place Name or Distance and Direction from the Named Location: Mary River Project Mine Site, Baffin Island, NU		Region: ☐ NT ☒ Nunavut ☐ Trans-boundary or Ocean	
E	Latitude: 71 Degrees 31 Minutes 55 Seconds		Longitude: 79 Degrees 27 Minutes 48 Seconds	
F	Responsible Party or Vessel Name: Baffinland Iron Mines Corp.		Responsible Party Address or Office Location: 360 Oakville Place Dr. Suite 300, Oakville, ON, Canada, L6H6K8	
G	Any Contractor Involved: N/A		Contractor Address or Office Location: N/A	
H	Product Spilled: ☐ Potential Spill Sediment-laden water	Quantity in Litres, Kilograms or Cubic Metres: unquantified	U.N. Number: N/A	
I	Spill Source: snow melt, overland flow	Spill Cause: rapid melt	Area of Contamination in Square Metres: N/A	
J	Factors Affecting Spill or Recovery: Frozen conditions, high flow	Describe Any Assistance Required: N/A	Hazards to Persons, Property or Environment: N/A	
K	Summary of the spill incident and efforts / description of the incident: On May 22, 2025 at 12:30 water was observed flowing at the new proposed MS-11 discharge point downstream of Km 105 valley infrastructure. The water was sampled as per monitoring requirements. Results for Total Suspended Solids (TSS) were received on May 24, 2025 and indicated a result of 31.2 mg/l. An effluent characterization and acute lethality sample was taken of the water on May 22, 2025 and will be reported on within the Follow Up report. Water management infrastructure and polymer dosing are being utilized to mitigate TSS within the continuous discharge. Monitoring of the water quality will continue. The incident occurred on IOL located approximately 350m from water quality station D1-05, the nearest fish bearing waters. This exceedance is being reported as required by the conditions of Water License no. 2AM-MRY1325, Part H, item 9 (b) pursuant to subsection 12(3) of the Nunavut Waters and Nunavut Surface Rights Tribunal Act and as section 31 of the MDMER under the Fisheries Act.			
L	Reported to Spill Line by: William Bowden	Position: Env. Manager	Employer: Baffinland	Location Calling From: Baffinland
M	Any Alternate Contact: Todd Swenson	Position: Env Superintendent	Employer: Baffinland	Alternate Contact Location: Baffinland

REPORT LINE USE ONLY

N	Received at Spill Line by:	Position:	Employer:	Location Called:	Report Line Number:
Lead Agency: ☐ EC ☐ CCG/TCMSS ☐ GNGT ☐ GN ☐ ILA ☐ CIRNAC ☐ CER ☐ Other: _____				File Status: ☐ Open ☐ Closed	
Agency:	Contact Name:	Contact Time:	Remarks:		
Lead Agency:					
First Support Agency:					
Second Support Agency:					
Third Support Agency:					

360 Oakville Place Drive, Suite 300 | Oakville, ON, Canada L6H 6K8

Main: 416.364.8820 | Fax: 416.364.0193 | www.baffinland.com



July 7, 2025

Resource Management Officer
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Regulatory Manager
Qikiqtani Inuit Association
P.O. Box 219
Iqaluit, NU X0A 0H0

Enforcement Office
Environment and Climate Change Canada
933 Mivvik Street
Iqaluit, NU X0A 0H0

Re: Follow-up to Spill #2025-248
Mary River Project - Water Licence No. 2AM-MRY2540

Summary:

On June 6, 2025, personnel conducting routine monitoring observed water from the Km 106 Ore Stockpile bypassing the diversion berm and seeping onto the facility road in between the Pond and Stockpile. Minor amounts of pooling water remainder from freshet flows and thawing ground was observed to result in saturated diversion berm conditions. Uneven gradient along the diversion berm resultant of thawing conditions allowed water to pool near the diversion berm, which contributed to the event. The seepage was not observed to migrate outside of the facility road in between the Pond and Stockpile and was characterised as shallow laminar flow. The flow was captured or redirected to the seepage collection swale/ditch and sump previously installed, and did not enter the receiving environment. Initial field readings of the release indicated elevated levels of Total Suspended Solids (TSS), however the low flow conditions and substrate of the road at the sample location resulted in poor sampling conditions and elevated TSS measurements from disturbance of the substrate during sampling that could not be mitigated by sampling technique. Nevertheless, water quality samples were collected on June 6 to characterize the water quality and potential lethality of the seepage, and were submitted to an external laboratory for analysis.

Sample Location	Description	Coordinates (Lat/Long)
MS-106OS-07	Seepage observed along the south face of the pad collected from the facility road.	N71° 18' 42" W79° 13' 20"

Results of toxicity samples documented that the water was not acutely lethal. The incident occurred on Inuit-Owned Land (IOL) located approximately 300 meters from Mary River, the nearest fish bearing waters. Photos and a map of the seepage location are provided in Attachment 1 and Attachment 2, respectively. The incident was reported to the NT-NU Spill Reporting Line on June 7, 2025. The NT-NU Spill Report (#2025-248) is included as Attachment 3. Analytical water quality results are provided in Attachment 4.

Immediate and Follow-Up Action:

Upon discovering the seepage, water quality samples were collected on June 6 at the seepage location and submitted for external analysis. Results of the water quality samples were compliant with all applicable water licence and MDMER criteria, including acute lethality, with the exception of TSS which measured 75 mg/L. However, the low laminar flow conditions and substrate of the road at the sample location resulted in poor sampling



conditions and elevated TSS measurements from disturbance of the substrate during sampling that could not be mitigated by sampling technique. The seepage monitored remained within the facility road in between the stockpile and pond.

In response to the seepage and in accordance with Baffinland's MDMER Emergency Response Plan, the water migrating on the road was intercepted and redirected to a seepage collection ditch and an existing containment sump. Recovered water was subsequently transferred by pump from the containment sump to the Km 106 Ore Stockpile Pond (MS-07).

Corrective Actions:

Corrective actions include establishing and resurfacing diversion berm gradient to ensure proper run-off of water to the lined spillway of the Km 106 Ore Stockpile pond; raising the Magazine road to maintain and bolster the secondary seepage collection ditch and containment sump; and installation of piping to transfer water from the containment sump to the Km 106 Ore Stockpile Pond if the containment sump is used for short-term interception and recovery of seepage. Corrective action implementation is ongoing.

Current Status:

No further seepage has been observed from the diversion berm and the secondary seepage collection ditch and containment sump remain in place to recover potential seepage from the diversion berm. Both features will be inspected on a regular basis and will remain in place. Corrective action implementation is ongoing.

As per Section 31 of the Metal and Diamond Mining Effluent Regulations (MDMER):

- a. Seepage from the Km 106 Ore Stockpile pad.
- b. Unknown quantity.
- c. The seepage was observed at approximately 12:45 on June 6, 2025.
- d. The quantity of surface water that migrated through the diversion berm is unknown, therefore; the quantity of deleterious substances cannot be determined. The location of the release is shown in Attachment 2.
- e. Not applicable as the seepage did not occur through the final discharge point (FDP).
- f. The incident occurred on IOL located approximately 300 meters from Mary River, the nearest fish bearing waters and did not migrate outside of the Facility road in between the Pond and Stockpile.
- g. Acute lethality samples collected June 6 indicated the seepage water was not acutely lethal.
- h. See the summary above for the circumstances of the seepage. As per Baffinland's MDMER Emergency Response Plan, water was intercepted via ditching and swales and redirected to an existing secondary containment sump to allow for the water to be pumped to the MS-07 Pond.
- i. Ditching and swales were employed to ensure potential seepage reports to the existing containment sump for pumping to the MS-07 Pond. Grading of the diversion berm will work to reduce the potential for pooling water adjacent to the berm. Inspections of the Km 106 Ore Stockpile facility continue on a regular basis and no additional seepage has been observed.



Should you require further information or clarification on the incident described above, please feel free to contact the undersigned at (647) 253-0596 (ext.6016).

Prepared by:

William Bowden

William Bowden
Environmental Manager

Reviewed by:

Les Cook

Digitally signed by
Les Cook
Date: 2025.07.07
10:28:41 -04'00'

Les Cook
Manager – Mine Operations

Cc: Jeremy Fraser, Sean Naullaq (CIRNAC)
Andrew Jaworenko, Amoudla Kootoo (QIA)
Curtis Didham (ECCC)
Megan Lord-Hoyle, Lou Kamermans, Francois Gaudreau, Scot Klingman, Trevor Fancy, Les Cook Jacob Prince, Pascal Poirier, Todd Swenson, Katie Babin, Allison Parker, Shannon Mulhall, Irniq Lecompte (Baffinland)

Attachments

Attachment 1: Photos
Attachment 2: Spill Location Map
Attachment 3: Baffinland NT-NU Spill Report #2025-248
Attachment 4: Analytical Water Quality Results



Attachment 1
Photos

MS-106OS-07



Photo 1: Water Pooling on the Upgradient Side of the Diversion Berm – June 6, 2025



Photo 2: Seepage Location, Adjacent to the MS-07 Containment Pond – June 6, 2025



Photo 3: End of Observed Flow of Seepage Water, Downgradient of MS-106OS-07 – June 6, 2025



Photo 4: Ditch Maintained to Intercept/Redirect Seepage to Existing Containment Sump – June 7, 2025



Photo 5: Existing Containment Sump, with Pump Infrastructure in Place to Transfer Water to the MS-07 Containment Pond – June 7, 2025



Photo 6: Conditions at MS-106OS-07 During Routine Monitoring Showing Secondary Seepage Collection Ditch Below Diversion Berm – June 18, 2025



Attachment 2
Spill Location Map



Attachment 3
Baffinland NT-NU Spill Report #2025-248



NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND
OTHER HAZARDOUS MATERIALS



NT-NU 24-HOUR SPILL REPORT LINE
Tel: (867) 920-8130 • Email: spills@gov.nt.ca

A	Report Date: 6 / 7 / 25	Report Time: 12:45 pm	☒ Original Spill Report OR ☐ Update # _____ to the Original Spill Report	Report Number: 25-
B	Occurrence Date: 6 / 6 / 25	Occurrence Time: 12:45 pm		
C	Land Use Permit Number (if applicable): IOL - Commercial Lease No.: Q13C301	Water Licence Number (if applicable): 2AM-MRY1325 Type "A"		
D	Geographic Place Name or Distance and Direction from the Named Location: Mary River Project Mine Site, Baffin Island, NU		Region: ☐ NT ☒ Nunavut ☐ Trans-boundary or Ocean	
E	Latitude: 71 Degrees 18 Minutes 42 Seconds		Longitude: 79 Degrees 13 Minutes 20 Seconds	
F	Responsible Party or Vessel Name: Baffinland Iron Mines Corp.		Responsible Party Address or Office Location: 360 Oakville Place Dr, Suite 300, Oakville, ON, Canada, L6H6K8	
G	Any Contractor Involved: N/A		Contractor Address or Office Location: N/A	
H	Product Spilled: ☐ Potential Spill Contact Water	Quantity in Litres, Kilograms or Cubic Metres: Unknown	U.N. Number: N/A	
I	Spill Source: Km 106 Ore Stockpile	Spill Cause: Seepage from Ore Stockpile	Area of Contamination in Square Metres: N/A	
J	Factors Affecting Spill or Recovery: Drainage to tundra	Describe Any Assistance Required: N/A	Hazards to Persons, Property or Environment: N/A	
K	Summary of the spill incident and efforts / description of the incident: On June 6th, 2025, at approximately 12:45pm, personnel observed contact water from the Km 106 Ore Stockpile bypassing the diversion berm and being released to the tundra. The water is now being redirected to a containment sump and is being transferred to the facilities containment area. Remedial actions to address the source are underway. The release did not migrate from the immediate vicinity downstream of the diversion berm, and has not entered the receiving environment. Initial field readings of the release indicate elevated levels of TSS in exceedance of the applicable water license and MDMER criteria. Water quality monitoring and corrective actions will be presented in the follow-up report. The incident occurred on IOL located approximately 300 meters from Mary River, the nearest fish bearing waters. This spill is being reported as required by the conditions of water license no. 2AM-MRY1325, Part H, item 9(b) and section 31 of the Metal and Diamond Mining Effluent Regulations under the Fisheries Act.			
L	Reported to Spill Line by: Todd Swenson	Position: Env. Superintendent	Employer: Baffinland	Location Calling From: ext. 6716
M	Any Alternate Contact: William Bowden	Position: Env. Manager	Employer: Baffinland	Alternate Contact Location: ext. _____
	Alternate Telephone: (647) 253-0596			

REPORT LINE USE ONLY

N	Received at Spill Line by:	Position:	Employer:	Location Called:	Report Line Number:
Lead Agency: ☐ EC ☐ CCG/TCMSS ☐ GNWT ☐ GN ☐ ILA ☐ CIRNAC ☐ CER ☐ Other: _____				File Status: ☐ Open ☐ Closed	
Agency:		Contact Name:	Contact Time:	Remarks:	
Lead Agency:					
First Support Agency:					
Second Support Agency:					
Third Support Agency:					

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Attachment 4
Analytical Water Quality Results

Location Name			MS-106OS-07
Sample Date & Time			2025-06-06 18:00
ALS Laboratory Work Order			BF2500041
Analyte	Units	NWB Table 10 Criteria	
Hardness	mg/L	-	80.2
Conductivity	umhos/cm	-	182
pH, Lab	pH units	6.0-9.5	7.13
Total Suspended Solids	mg/L	30	75
Total Dissolved Solids	mg/L	-	150
Turbidity	NTU	-	119
Alkalinity, Total	mg/L	-	34.2
Ammonia, Total (as N)	mg/L	-	0.0581
Chloride	mg/L	-	2.4
Fluoride	mg/L	-	0.078
Nitrate	mg/L	-	2.66
Phosphorus, Nutrient	mg/L	-	0.0671
Total Kjeldahl Nitrogen	mg/L	-	0.336
Sulfate	mg/L	-	45.1
Dissolved Organic Carbon	mg/L	-	< 0.5
Total Organic Carbon	mg/L	-	1.66
Aluminum - Total	mg/L	-	7.43
Antimony - Total	mg/L	-	< 0.0005
Arsenic - Total	mg/L	0.6	0.0009
Barium - Total	mg/L	-	0.0481
Cadmium - Total	mg/L	-	0.0000648
Calcium - Total	mg/L	-	15.2
Chromium - Total	mg/L	-	0.0163
Cobalt - Total	mg/L	-	0.00534
Copper - Total	mg/L	0.6	0.0141
Iron - Total	mg/L	-	10.5
Lead - Total	mg/L	0.2	0.0113
Lithium - Total	mg/L	-	0.0169
Magnesium - Total	mg/L	-	19.2
Manganese - Total	mg/L	-	0.214
Mercury - Total	mg/L	-	< 0.000005
Molybdenum - Total	mg/L	-	0.00253
Nickel - Total	mg/L	1	0.0161
Phosphorus, Total	mg/L	-	< 0.25
Potassium - Total	mg/L	-	6.68
Selenium - Total	mg/L	-	0.000357
Sodium - Total	mg/L	-	1.46
Strontium - Total	mg/L	-	0.0314
Thallium - Total	mg/L	-	0.000129
Tin - Total	mg/L	-	< 0.0005
Titanium - Total	mg/L	-	0.356
Uranium - Total	mg/L	-	0.00347



Vanadium - Total	mg/L	-	0.0109
Zinc - Total	mg/L	1	0.0201
Aluminum - Dissolved	mg/L	-	0.0143
Arsenic - Dissolved	mg/L	-	< 0.0001
Cadmium - Dissolved	mg/L	-	0.0000074
Calcium - Dissolved	mg/L	-	12.5
Copper - Dissolved	mg/L	-	0.00077
Iron - Dissolved	mg/L	-	0.01
Lead - Dissolved	mg/L	-	< 0.00005
Magnesium - Dissolved	mg/L	-	11.9
Manganese - Dissolved	mg/L	-	0.0089
Mercury - Dissolved	mg/L	-	< 0.000005
Molybdenum - Dissolved	mg/L	-	0.00345
Nickel - Dissolved	mg/L	-	< 0.0005
Potassium - Dissolved	mg/L	-	4.45
Selenium - Dissolved	mg/L	-	0.000381
Sodium - Dissolved	mg/L	-	1.45
Thallium - Dissolved	mg/L	-	< 0.00001
Uranium - Dissolved	mg/L	-	0.00179
Zinc - Dissolved	mg/L	-	< 0.001
Radium-226	Bq/L	-	0.03
Visible Sheen	None	No Visible Sheen	No Visible Sheen
Mean Morality - Daphnia magna	%v/v	Not Acutely Toxic	Not Acutely Toxic
Mean Morality - Rainbow Trout	%v/v	Not Acutely Toxic	Not Acutely Toxic



July 21, 2025

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Regulatory Manager
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Environment and Climate Change Canada
933 Mivvik Street
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Re: Follow-up to Spill #2025-264
Mary River Project - Water Licence No. 2AM-MRY2540

Summary:

On June 20, 2025, routine monitoring observed snow melt water within the Waste Rock Facility (WRF) West perimeter ditch seeping through a defined location of the ditch to the adjacent tundra. Upon aerial survey reconnaissance, the water was not observed to be entering potential down-gradient receiving water bodies and was confined to the tundra plateau adjacent to the WRF. The seepage was observed to be filtering through a previously installed coarse rock fill patch intended to repair road settlement. Upon discovery, the ditch was further cleared of snow from recent accumulation to improve freeboard and flow within the ditch and an impermeable repair patch was installed which fully stopped the seepage. Water quality samples collected on June 20 at the seepage location to characterize the water quality and potential lethality of the seepage indicated elevated levels of Total Suspended Solids (TSS). However, laminar flow and rocky ground likely impacted sampling conditions that could not be mitigated by sampling technique, potentially elevating TSS measurements during collection. Results of additional water quality samples collected on June 21 at down-gradient receiving environment monitoring station K0-01 indicated there was no potential impact to the downstream receiving environment from the seepage.

Sample Location	Description	Coordinates (Lat/Long)
MS-WRF-WEST-DITCH	Seepage observed downslope of WRF west perimeter ditch	N71° 20' 26" W-79° 14' 20"
K0-01	AEMP monitoring station down gradient of WRF, in the Camp Lake watershed	N71° 19' 50" W-79° 23' 36"

Results of toxicity samples indicated that the water was not acutely lethal.

The incident occurred on Inuit-Owned Land (IOL) located approximately 3 kilometers from the nearest fish bearing waters. Photos and a map of the seepage location are provided in Attachment 1 and Attachment 2, respectively. The incident was reported to the NT-NU Spill Reporting Line on June 21, 2025. The NT-NU Spill Report (#2025-264) is included as Attachment 3. Analytical water quality results are provided in Attachment 4.

Immediate and Follow-Up Action:

Upon discovering the seepage, water quality samples were collected on June 20 at the seepage location and submitted to an external laboratory for analysis. Preliminary results of the water quality samples were compliant



with all applicable water licence and MDMER criteria, including acute lethality, with the exception of TSS which measured 155 mg/L in the sample collected at the seepage location. Laminar flow and rocky ground likely impacted sampling conditions that could not be mitigated by sampling technique, potentially elevating TSS measurements during collection. Downstream samples were subsequently taken at station K0-01 on June 21, based on field reconnaissance that indicated the potential direction of flow of the seepage. K0-01 is an AEMP monitoring station in the Camp Lake watershed. Results from the downstream sampling location K0-01 confirm no impact to the downstream environment from the seepage. Results of toxicity samples collected at both the seepage location and K0-01 indicated that the water was not acutely lethal.

During follow-up investigation, it was found that the seepage occurred from an area where settlement along the west ditch access road had previously occurred, perpendicular to the roadway, and material had previously been placed to address the settlement. The repair runs directly across (perpendicular to) the roadway and intersects the slope of the perimeter ditch. When water levels in the west perimeter ditch rose above the intersection of the repair on the side slope of the west perimeter ditch, water was able to travel along the rock repair in the roadway base and flowed outside of the containment berm. In response to the seepage and in accordance with Baffinland's MDMER Emergency Response Plan, the perimeter ditch was cleared of residual recently accumulated snow to reduce the water elevation in the ditch, and restore the intended water flow along the ditch. The compromised area of the west ditch was then reinforced by packing fine impermeable material into the side of the ditch where the coarse rock fill patch intersects the ditch, fully arresting the seepage. The ditch clearing and repairs were completed without delay and by end of day, seepage was no longer observed from the West WRF ditch.

Corrective Actions:

The ditch continues to be regularly cleared of snow and the material placed to reinforce and seal the observed permeable location of the West WRF ditch continues to function without seepage. Further inspection of WRF access roads and a survey of the ditch gradient will be completed with the intent to identify areas where prior settlement of the road may have been repaired and may have potential for seepage. Findings will be used to develop a remedial plan to address any areas identified and a repair plan will be developed for any required re-grading of the ditch to ensure proper water drainage. Implementation of these corrective actions is ongoing.

Current Status:

The compromised area of the WRF west perimeter ditch was repaired and no further seepage has been observed from the perimeter ditch. Inspections and monitoring of the WRF will continue on a regular basis. Corrective action implementation is ongoing.

As per Section 31 of the Metal and Diamond Mining Effluent Regulations (MDMER):

- a. Snow melt water seepage from the WRF west perimeter ditch.
- b. Unknown quantity.
- c. The seepage was observed at approximately 15:30 on June 20, 2025.
- d. The quantity of surface water released through the west perimeter ditch is unknown, therefore; the quantity of deleterious substances cannot be determined. The location of the release is shown in Attachment 2.
- e. Not applicable as the seepage did not occur through the final discharge point (FDP).



- f. Camp Lake Tributary-2 (CLT-2) and Camp Lake are the potential receiving bodies of water. Seepage was released to the tundra adjacent to the WRF and surrounding tundra plateau, on IOL approximately 3 kilometers from CLT-2; the nearest fish bearing waters. Water was not observed to be entering down-gradient receiving water bodies, and it is not suspected that the released water travelled beyond the localized area.
- g. Acute lethality samples collected June 20 and June 21 indicated the seepage water was not acutely lethal.
- h. See the summary above for the circumstances of the seepage. As per Baffinland's MDMER Emergency Response Plan, snow was cleared from the WRF west perimeter ditch to improve ditch freeboard and water flow, and the compromised section of the west ditch was repaired with impermeable material, fully stopping the release.
- i. Evaluation of gradient in the west ditch will work to ensure proper water drainage through the ditch, reducing the potential for high water level conditions in the ditch. A survey of the permitter ditch will be completed and repair plan implemented for any sections requiring regrading. Additional work is planned to inspect WRF access roads previously repaired with rock fill patches to verify if further remedial repairs are required. Inspections of the WRF continue on a regular basis and no additional seepage has been observed.

Should you require further information or clarification on the incident described above, please feel free to contact the undersigned at (647) 253-0596 (ext.6016).

Prepared by:

A handwritten signature in black ink, appearing to read "Todd Swenson".

Todd Swenson
Environmental Superintendent

Reviewed by:

A handwritten signature in black ink, appearing to read "Trevor Fancy".

Trevor Fancy
Superintendent – Mine Operations

Cc: Jeremy Fraser, Sean Naullaq (CIRNAC)
Andrew Jaworenko (QIA)
Curtis Didham (ECCC)
Megan Lord-Hoyle, Lou Kamermans, Francois Gaudreau, Scot Klingman, Trevor Fancy, Les Cook, Jacob Prince, Pascal Poirier, William Bowden, Katie Babin, Allison Parker, Shannon Mulhall, Irniq Lecompte (Baffinland)

Attachments

Attachment 1: Photos
Attachment 2: Spill Location Map
Attachment 3: Baffinland NT-NU Spill Report #2025-264
Attachment 4: Analytical Water Quality Results



Attachment 1
Photos

MS-WRF-WEST-DITCH



Photo 1: Snow and High Water Level Conditions in WRF West Perimeter Ditch, June 20, 2025



Photo 2: Seepage Location, Adjacent to the WRF West Perimeter Ditch, June 20, 2025



Photo 3: Course Rock Fill Material Perpendicular to WRF Road Previously Placed to Repair Road Settlement



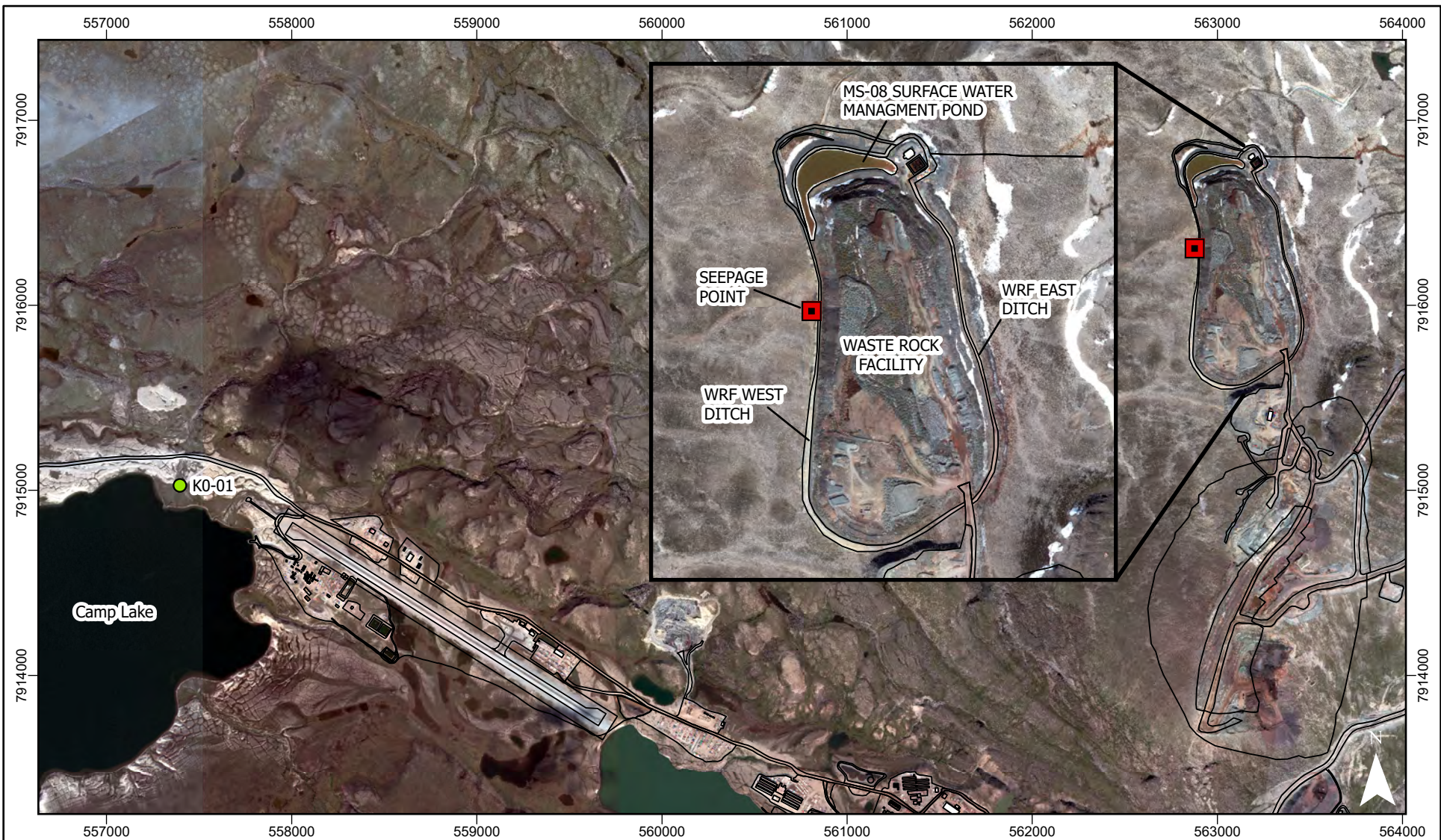
Photo 4: Snow Cleared from West Perimeter Ditch Restoring Proper Ditch Gradient and Improving Water Flow, June 21, 2025



Photo 5: Conditions at the Seepage Location Following West Ditch Clearing and Repair, June 21, 2025



Attachment 2
Spill Location Map



LEGEND

- Seepage Point
- K0-01 (AEMP Monitoring Location)

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NT-NU Spill Report 2025-264

Projection: NAD 1983 UTM ZONE 17N
Base Map: © ESRI Imagery 2024

0 0.5 1 km

Scale 1:30,000

Baffinland

ᑭᑎᑎᑦᑎᑦ ᑭᑎᑎᑦᑎᑦ
FIGURE

1



Attachment 3
Baffinland NT-NU Spill Report #2025-264



NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND
OTHER HAZARDOUS MATERIALS



Canada



NT-NU 24-HOUR SPILL REPORT LINE

Tel: (867) 920-8130 • Email: spills@gov.nt.ca

A	Report Date: June 21 25	Report Time: 2:30 pm	☒ Original Spill Report OR ☐ Update # _____ to the Original Spill Report	Report Number:
B	Occurrence Date: June 20 25	Occurrence Time: 3:30 pm		
C	Land Use Permit Number (if applicable): IOL - Commercial Lease No.: Q13C301	Water Licence Number (if applicable): 2AM-MRY2540 Type "A"		
D	Geographic Place Name or Distance and Direction from the Named Location: Mary River Project Mine Site, Baffin Island, NU		Region: ☐ NT ☒ Nunavut ☐ Trans-boundary or Ocean	
E	Latitude: 71 Degrees 34 Minutes 6 Seconds		Longitude: -79 Degrees 23 Minutes 89 Seconds	
F	Responsible Party or Vessel Name: Baffinland Iron Mines Corp.		Responsible Party Address or Office Location: 360 Oakville Place Dr. Suite 300, Oakville, ON, Canada, L6H6K8	
G	Any Contractor Involved: N/A		Contractor Address or Office Location: N/A	
H	Product Spilled: ☐ Potential Spill sediment laden water	Quantity in Litres, Kilograms or Cubic Metres: unknown	U.N. Number: N/A	
I	Spill Source: Waste Rock Facility Ditch	Spill Cause: Seepage from Waste Rock Facility Ditch	Area of Contamination in Square Metres:	
J	Factors Affecting Spill or Recovery: Laminar Flow Spread Across Tundra	Describe Any Assistance Required: Heavy Equipment	Hazards to Persons, Property or Environment: N/A	
K	Summary of the spill incident and efforts / description of the incident: On June 20, 2025 at 3:30pm snow melt water within the Waste Rock Facility ditching was observed to be potentially seeping through the perimeter ditch of the Facility reporting to the Tundra. The laminar flow on the tundra was observed adjacent to the Facility ditching and effluent quality and acute toxicity samples were taken. Upon survey, the water was not observed to be entering down gradient receiving water bodies. Immediate mitigative actions were taken and the seepage is no longer occurring. The incident occurred on IOL located approximately 3 km from the nearest fish bearing water. Water quality monitoring and corrective actions will be presented in the follow-up report. The release is being reported as required by the conditions of Water License no. 2AM-MRY2540, Part H, Item 9 (b) pursuant to subsection 12(3) of the Nunavut Waters and Nunavut Surface Rights Tribunal Act and as section 31 of the MDMER under the Fisheries Act.			
L	Reported to Spill Line by: William Bowden	Position: Env Manager	Employer: Baffinland	Location Calling From: Baffinland
M	Any Alternate Contact: Todd Swenson	Position: Env. Superintendent	Employer: Baffinland	Alternate Contact Location: Baffinland

REPORT LINE USE ONLY

N	Received at Spill Line by:	Position:	Employer:	Location Called:	Report Line Number:
Lead Agency: ☐ EC ☐ CCG/TCMSS ☐ GNWT ☐ GN ☐ ILA ☐ CIRNAC ☐ CER ☐ Other: _____				File Status: ☐ Open ☐ Closed	
Agency:	Contact Name:	Contact Time:	Remarks:		
Lead Agency:					
First Support Agency:					
Second Support Agency:					
Third Support Agency:					

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Attachment 4
Analytical Water Quality Results



Table 1 : Water Quality Results for Monitoring Locations - MS-WRF-WEST-DITCH and K0-01

Location Name				MS-WRF-WEST-DITCH	K0-01
Sample Date & Time				2025-06-20 18:50	2025-06-21 10:30
ALS Laboratory Work Order				BF2500084	BF2500085
Analyte	Units	MDMER Criteria	NWB Table 10 Criteria		
pH, Lab	pH units	6.0 - 9.5	6.0 - 9.5	6.89	7.52
Total Suspended Solids	mg/L	30	30	115	1.2
Total Dissolved Solids	mg/L	-	-	114	41
Conductivity, Lab	umhos/cm	-	-	158	79.7
Total Alkalinity	mg/L	-	-	9.3	34.6
Total Kjeldahl Nitrogen	mg/L	-	-	0.515	0.191
Nitrate	mg/L	-	-	2.68	0.22
Sulfate	mg/L	-	-	49.3	4.78
Fluoride	mg/L	-	-	0.055	< 0.02
Chloride	mg/L	-	-	1.65	0.78
Ammonia, Total	mg/L	-	-	0.116	< 0.005
Ammonia, Unionized	mg/L	1	-	< 0.001	< 0.001
Phosphorus, Nutrient	mg/L	-	-	0.122	0.0028
Aluminum, Total	mg/L	-	-	6.5	0.0243
Antimony, Total	mg/L	-	-	< 0.001	< 0.0001
Arsenic, Total	mg/L	0.6	0.6	0.00123	< 0.0001
Barium, Total	mg/L	-	-	0.0226	0.00451
Beryllium, Total	mg/L	-	-	0.00034	< 0.00002
Bismuth, Total	mg/L	-	-	< 0.0005	< 0.00005
Boron, Total	mg/L	-	-	< 0.1	< 0.01
Cadmium, Total	mg/L	-	-	< 0.00005	< 0.000005
Calcium, Total	mg/L	-	-	6.02	7.34
Cesium, Total	mg/L	-	-	0.00033	< 0.00001
Chromium, Total	mg/L	-	-	0.0157	< 0.0005
Cobalt, Total	mg/L	-	-	0.00834	< 0.0001
Copper, Total	mg/L	0.6	0.6	0.0235	0.00078
Iron, Total	mg/L	-	-	10.4	0.028
Lead, Total	mg/L	0.2	0.2	0.00318	< 0.00005
Lithium, Total	mg/L	-	-	0.0114	< 0.001
Magnesium, Total	mg/L	-	-	20.1	4.84
Manganese, Total	mg/L	-	-	0.344	0.00057
Mercury, Total	mg/L	-	-	< 0.000005	< 0.000005
Molybdenum, Total	mg/L	-	-	0.00171	0.000258
Nickel, Total	mg/L	1	1	0.0547	< 0.0005
Phosphorus, Total	mg/L	-	-	< 0.5	< 0.05
Potassium, Total	mg/L	-	-	2.63	0.8
Rubidium, Total	mg/L	-	-	0.00818	0.00148
Selenium, Total	mg/L	-	-	0.000886	0.000071
Silicon, Total	mg/L	-	-	10.6	0.44
Silver, Total	mg/L	-	-	< 0.0001	< 0.00001
Sodium, Total	mg/L	-	-	0.648	0.664
Strontium, Total	mg/L	-	-	0.00882	0.00495
Sulfur, Total	mg/L	-	-	16.6	1.79
Tellurium, Total	mg/L	-	-	< 0.002	< 0.0002
Thallium, Total	mg/L	-	-	< 0.0001	< 0.00001
Thorium, Total	mg/L	-	-	0.00159	< 0.0001
Tin, Total	mg/L	-	-	< 0.001	< 0.0001
Titanium, Total	mg/L	-	-	0.151	0.00102
Tungsten, Total	mg/L	-	-	< 0.001	< 0.0001
Uranium, Total	mg/L	-	-	0.00113	0.000173
Vanadium, Total	mg/L	-	-	0.00751	< 0.0005
Zinc, Total	mg/L	1	1	< 0.03	< 0.003
Zirconium, Total	mg/L	-	-	< 0.002	< 0.0002
Aluminum, Dissolved	mg/L	-	-	0.0098	0.0065
Antimony, Dissolved	mg/L	-	-	< 0.0001	< 0.0001
Arsenic, Dissolved	mg/L	-	-	< 0.0001	< 0.0001
Barium, Dissolved	mg/L	-	-	0.00258	0.00433
Beryllium, Dissolved	mg/L	-	-	< 0.00002	< 0.00002
Bismuth, Dissolved	mg/L	-	-	< 0.00005	< 0.00005
Boron, Dissolved	mg/L	-	-	< 0.01	< 0.01
Cadmium, Dissolved	mg/L	-	-	0.0000127	< 0.000005
Calcium, Dissolved	mg/L	-	-	5.32	6.9
Cesium, Dissolved	mg/L	-	-	< 0.00001	< 0.00001
Chromium, Dissolved	mg/L	-	-	< 0.0005	< 0.0005
Cobalt, Dissolved	mg/L	-	-	0.00175	< 0.0001
Copper, Dissolved	mg/L	-	-	0.00069	0.00064
Iron, Dissolved	mg/L	-	-	< 0.01	< 0.01
Lead, Dissolved	mg/L	-	-	< 0.00005	< 0.00005
Lithium, Dissolved	mg/L	-	-	0.0024	< 0.001
Manganese, Dissolved	mg/L	-	-	0.146	0.00016
Magnesium, Dissolved	mg/L	-	-	12.9	4.46
Mercury, Dissolved	mg/L	-	-	< 0.000005	< 0.000005
Molybdenum, Dissolved	mg/L	-	-	0.00208	0.000257
Nickel, Dissolved	mg/L	-	-	0.00227	< 0.0005
Phosphorus, Dissolved	mg/L	-	-	< 0.05	< 0.05
Potassium, Dissolved	mg/L	-	-	1.55	0.752
Rubidium, Dissolved	mg/L	-	-	0.0012	0.00146
Selenium, Dissolved	mg/L	-	-	0.000992	0.00006
Silver, Dissolved	mg/L	-	-	< 0.00001	< 0.00001
Silicon, Dissolved	mg/L	-	-	0.593	0.388
Sodium, Dissolved	mg/L	-	-	0.666	0.63
Strontium, Dissolved	mg/L	-	-	0.00732	0.00506
Sulfur, Dissolved	mg/L	-	-	16.7	1.68
Tellurium, Dissolved	mg/L	-	-	< 0.0002	< 0.0002
Thallium, Dissolved	mg/L	-	-	< 0.00001	< 0.00001
Thorium, Dissolved	mg/L	-	-	< 0.0001	< 0.0001
Tin, Dissolved	mg/L	-	-	< 0.0001	< 0.0001
Titanium, Dissolved	mg/L	-	-	< 0.0003	< 0.0003
Tungsten, Dissolved	mg/L	-	-	0.00065	< 0.0001
Uranium, Dissolved	mg/L	-	-	0.000083	0.000155
Vanadium, Dissolved	mg/L	-	-	< 0.0005	< 0.0005
Zirconium, Dissolved	mg/L	-	-	< 0.0003	< 0.0003
Zinc, Dissolved	mg/L	-	-	< 0.001	< 0.001
Radium-226	Bq/L	1.11	-	0.02	0.008
Mean Morality - Daphnia magna	%v/v	Not Acutely Toxic	Not Acutely Toxic	Not Acutely Toxic	Not Acutely Toxic
Mean Morality - Rainbow Trout	%v/v	Not Acutely Toxic	Not Acutely Toxic	Not Acutely Toxic	Not Acutely Toxic
Visible Sheen		-	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Highlight indicate result exceeded applicable criteria.
Half value used in monthly average when value is less than detection limit.

Work Order : 258158

Sample Number : 87407

SAMPLE IDENTIFICATION

Company :	ALS Laboratory Group, Waterloo		
Location :	Waterloo ON	Sampling Date :	2025-06-20
Job Number :	BF2500084	Sampling Time :	18:50
Substance :	MS-WRF-WEST-DITCH	Date Received :	2025-06-26
Sampling Method :	Grab	Time Received :	12:00
Sampled By :	J.J, R.R.	Temperature at Receipt :	21 °C
Sample Description :	Cloudy, red	Date Tested :	2025-06-26
Test Method :	Reference Method for Determining Acute Lethality of Effluents to <i>Daphnia magna</i> . Environment Canada EPS 1/RM/14 (Second Edition, December 2000, with February 2016 amendments).		

48-HOUR TEST RESULTS

Substance	Effect	Value
Control	Mean Immobility	0.0 %
	Mean Mortality	0.0 %
100%	Mean Immobility	0.0 %
	Mean Mortality	0.0 %

The results reported relate only to the sample tested and as received.

TEST ORGANISM

Species :	<i>Daphnia magna</i>	Time to First Brood :	9.0 days
Culture Mortality :	0.0% (prev. 7 days)	Mean Brood Size :	44.8 neonates

TEST CONDITIONS

Sample Treatment :	None	Number of Replicates :	3
pH Adjustment :	No	Organisms per Replicate :	10
Pre-aeration Rate :	28.3 ±2 mL/L/min	Organisms per Test Level :	30
Duration of Pre-Aeration :	30 minutes	Organism Loading Rate :	25.0 mL/organism
Test Aeration :	None	Impaired Control Organisms :	0.0%
Hardness Adjustment :	No	Test Method Deviation(s) :	Yes (see 'COMMENTS')

REFERENCE TOXICANT DATA

Toxicant :	Zinc	LC50 :	1.12 mg/L
Date Tested :	2025-06-16	95% Confidence Limits :	0.79 - 1.60 mg/L
Statistical Method :	Spearman-Kärber	Historical Mean LC50 :	1.18 mg/L
		Warning Limits (± 2SD) :	0.43 - 3.24 mg/L

COMMENTS
Noted Deviations:

The maximum sample holding time of 5 days allowed by the test method was exceeded. The sample was tested with the client's consent. There were no other unusual conditions, and the test result is considered to be valid.

The 100% sample was stored at 15 °C overnight on 2025-06-25, prior to test initiation. All test validity criteria was met, and the test is considered valid.

•All test validity criteria as specified in the test method were satisfied.

Approved By : _____
 Project Manager

Work Order : 258158

Sample Number : 87407

TEST DATA

	pH	Dissolved O ₂ (mg/L)	O ₂ Saturation (%)*	Conductivity (µmhos/cm)	Temperature (°C)	Hardness (as CaCO ₃)
Initial Chemistry (100%) :	7.3	9.7	109	181	21	68 mg/L

0 HOURS

Date & Time : 2025-06-26 15:25

Analyst(s) : DS/MB

Concentration (%)	Replicate	Dead	Immobile	pH	Dissolved O ₂	O ₂ Saturation [†]	Conductivity	Temperature	Hardness
100	A	0	0	7.4	9.2	104	192	21	68
100	B	0	0	7.4	9.2	104	192	21	
100	C	0	0	7.4	9.2	104	192	21	
Control	A	0	0	8.1	8.5	95	622	21	192
Control	B	0	0	8.1	8.5	95	622	21	
Control	C	0	0	8.1	8.5	95	622	21	

Notes:

24 HOURS

Date & Time : 2025-06-27 11:30

Analyst(s) : KF

Concentration (%)	Replicate	Dead	Immobile	pH	Dissolved O ₂	O ₂ Saturation [†]	Conductivity	Temperature
100	A	—	0	—	—	—	—	—
100	B	—	0	—	—	—	—	—
100	C	—	0	—	—	—	—	—
Control	A	—	0	—	—	—	—	—
Control	B	—	0	—	—	—	—	—
Control	C	—	0	—	—	—	—	—

Notes:

48 HOURS

Date & Time : 2025-06-28 14:55

Analyst(s) : MB

Concentration (%)	Replicate	Dead	Immobile	pH	Dissolved O ₂	O ₂ Saturation [†]	Conductivity	Temperature
100	A	0	0	7.4	8.3	93	209	21
100	B	0	0	7.4	8.4	94	197	20
100	C	0	0	7.4	8.2	92	196	20
Control	A	0	0	8.1	8.1	91	631	21
Control	B	0	0	8.1	8.3	93	624	21
Control	C	0	0	8.1	8.3	93	623	21

Notes:

Number immobile does not include number dead.

"—" = not measured/not required

* adjusted for temperature and barometric pressure

Test Data Reviewed By : JJ

Date : 2025-07-03

Work Order : 258158
Sample Number : 87407

SAMPLE IDENTIFICATION

Company :	ALS Laboratory Group, Waterloo		
Location :	Waterloo ON	Sampling Date :	2025-06-20
Job Number :	BF2500084	Sampling Time :	18:50
Substance :	MS-WRF-WEST-DITCH	Date Received :	2025-06-25
Sampling Method :	Grab	Time Received :	14:30
Sampled By :	J.J, R.R.	Temperature at Receipt :	5 °C
Sample Description :	Cloudy, red	Date Tested :	2025-06-26

Test Method(s) : Reference Method for Determining Acute Lethality of Liquid Effluents to Rainbow Trout.
Environment Canada, EPS 1/RM/13 (2nd Edition, December 2000, with May 2007, February 2016, and December 2023 amendments).

96-HOUR TEST RESULTS

Substance	Effect	Value
Control	Mean Impairment	0.0 %
	Mean Mortality	0.0 %
100%	Mean Impairment	0.0 %
	Mean Mortality	0.0 %

The results reported relate only to the sample tested and as received.

TEST ORGANISM

Test Organism :	<i>Oncorhynchus mykiss</i>	Mean Fork Length :	34.7 mm
Organism Batch :	T25-14	Range of Fork Lengths :	31 - 38 mm
Control Sample Size :	10	Mean Wet Weight :	0.3 g
Cumulative stock mortality rate :	0% (previous 7 days)	Organism Loading Rate :	0.2 g/L
Control organisms showing stress :	0 (at test completion)		

TEST CONDITIONS

Test Type :	Single concentration	Number of Replicates :	1
Sample pH Adjustment :	None	Organisms Per Replicate :	10
Sample Pre-aeration/Aeration Rate :	6.5 ± 1 mL/min/L	Organisms Per Test Level :	10
Duration of Sample Pre-Aeration :	120 minutes	Volume of Sample :	18 L
Control Pre-aeration/Aeration Rate :	6.5 ± 1 mL/min/L	Volume of Control :	18 L
Duration of Control Pre-aeration:	30 minutes	Test Method Deviation(s) :	None

REFERENCE TOXICANT DATA

Toxicant :	Potassium Chloride		
Organism Batch :	T25-14	LC50 :	3557 mg/L
Date Tested :	2025-06-11	95% Confidence Limits :	3157 - 4002 mg/L
Analyst(s) :	GF, NWP	Historical Mean LC50 :	4112 mg/L
Statistical Method :	Linear Regression (MLE)	Warning Limits (± 2SD) :	3088 - 5475 mg/L

COMMENTS

•All test validity criteria as specified in the test method were satisfied.

Approved By : _____
Project Manager

Work Order : 258158

Sample Number : 87407

TEST DATA

	pH	Dissolved O ₂ (mg/L)	Conductivity (µmhos/cm)	Temperature (°C)	O ₂ Saturation (%) ³
Initial Water Chemistry (100%) :	6.9	11.0	138	14	115
After 30 min pre-aeration :	7.0	10.6	138	14	111

0 HOURS

Date & Time	2025-06-26	12:45					
Analyst(s) :	NWP/JGR						
Concentration	Dead	Impaired	pH	Dissolved O ₂	Conductivity	Temperature	O ₂ Saturation ³
100%	0	0	7.1	10.1	139	14	104
Control	0	0	8.1	9.6	653	14	99

Notes:

24 HOURS

Date & Time	2025-06-27	10:45					
Analyst(s) :	GF (NWP)						
Concentration	Dead	Impaired	pH	Dissolved O ₂	Conductivity	Temperature	
100%	0	0	—	—	—	16	
Control	0	0	—	—	—	16	

Notes:

48 HOURS

Date & Time	2025-06-28	10:45					
Analyst(s) :	KP						
Concentration	Dead	Impaired	pH	Dissolved O ₂	Conductivity	Temperature	
100%	0	0	—	—	—	16	
Control	0	0	—	—	—	16	

Notes:

72 HOURS

Date & Time	2025-06-29	12:45					
Analyst(s) :	KP						
Concentration	Dead	Impaired	pH	Dissolved O ₂	Conductivity	Temperature	
100%	0	0	—	—	—	15	
Control	0	0	—	—	—	15	

Notes:

96 HOURS

Date & Time	2025-06-30	11:45					
Analyst(s) :	GF (NWP)						
Concentration	Dead	Impaired	pH	Dissolved O ₂	Conductivity	Temperature	
100%	0	0	7.1	9.8	142	15	
Control	0	0	8.0	9.9	627	15	

Notes:

"—" = not measured/not required

Number impaired does not include number dead.

³ adjusted for temperature and barometric pressure

Test Data Reviewed By : JL

Date : 2025-07-02



CHAIN OF CUSTODY RECORD

Nautilus Work Order No:

258158

Shipping Address: Nautilus Environmental Guelph,
B-11 Nicholas Beaver Road
Puslinch, Ontario Canada N0B 2J0

Voice: (519) 763-4412

Fax: (519) 763-4419

P.O. Number: 4500156571

Field Sampler Name (print): JJ RR

Signature:

Affiliation: Baffinland Iron Mine / ALS Environmental

Sample Storage (prior to shipping): Fridge

Custody Relinquished by: Rachel Noddle

Date/Time Shipped: 2025-06-20/20:20

Client: ALS Environmental c/o Baffinland Iron Mine

Quote # (2023): 162705399-23

Phone: (519) 886-6910

Fax: (519) 886-9047

Contact: Rick Hawthorne (ALS) / Martina Rendas (Nautilus)

Sample Identification					Analyses Requested										Sample Method and Volume	
Date Collected (yyyy-mm-dd)	Time Collected (e.g. 14:30, 24 hr clock)	Sample Name	Nautilus Sample Number	Temp. on arrival	Rainbow Trout Single Concentration	Rainbow Trout LC50	Daphnia magna Single Concentration	Daphnia magna LC50	Fathead Minnow Survival & Growth	Ceriodaphnia dubia Survival & Reproduction	Lemna minor Growth	Pseudokirchneriella subcapitata Growth	Microtox	Grab	Composite	# of Containers and Volume (eg. 2 x 1L, 3 x 10L, etc.)
2025-06-20	18:50	MS-WRF-WEST-DITCH	87407	5	✓		✓							✓		2 x 10L Carboy

For Lab Use Only

Received By:

Date:

Time:

Storage Location:

Storage Temp.(°C)

Please list any special requests or instructions:

Report Distribution: environment.labresults@baffinland.com,
rick.hawthorne@alsglobal.com, alswtpma@alsglobal.com



Chain of Custody
ALS Environmental - Baffin Island
Mary River, Qikqtani Region
Baffin Island NU Canada

87407
258158

258640



Destination Lab:	Nautilus Environmental Guelph
Address:	B-11 Nicholas Beaver Rd Puslinch ON Canada N0B 2J0
Work Order Number:	BF2500084
Original Receipt Date/Time	Instructions Received
20/06/2025 23:00	

Relinquished By
Date/Time
Received By
Date/Time
Receipt Temp

Return as Indicated: Results:	Invoice:	Electronic Data:
Attention: Rick Hawthorne		

ALS Sample ID	Client ID	Matrix	Container Type	Test Codes	Method Description	Due Date	Sampling Date and Time	Remarks
BF2500084-001	MS-WRF-WES T-DITCH_2025-06-20	Water	LDPE carboy			15-07-2025	20/06/2025 18:50	
BF2500084-001	MS-WRF-WES T-DITCH_2025-06-20	Water	LDPE carboy	DAP-SCR-48, TRT-SCR-96	Survival/Screening Daphnia Magna 48 hours, Survival/Screening Rainbow Trout (96 hours)	15-07-2025	20/06/2025 18:50	

Your samples have been received at Nautilus Environmental's sample reception at Point Edward and have now been issued an unique sample ID numbers.

Here are some details of your submission

Client Name : Nautilus Guelph
Sample Number : PE2425-0390
Sample Name : 87407 (WO#258158)
Sample collection date : 2025-06-20
Sample collection time : 6:50 PM
Sample receipt date : 2025-06-26
Sample receipt time : 12:00
Temperature upon arrival : 21
Container/Volume : 1x1L bottle

Analyses requested

DAS : 48-h D. magna single

Entry of your submission is based on information contained on your Chain of Custody. If you have any questions regarding this submission, kindly contact Nautilus Environmental, Point Edward by email using carol@nautilusenvironmental.ca.

704 Mara Street, Suite 122
Point Edward, Ontario, CA
N7V 1X4, Phone 519-339-8787

Work Order : 258157

Sample Number : 87406

SAMPLE IDENTIFICATION

Company :	ALS Laboratory Group, Waterloo		
Location :	Waterloo ON	Sampling Date :	2025-06-21
Job Number :	BF2500085	Sampling Time :	10:30
Substance :	K0-01	Date Received :	2025-06-26
Sampling Method :	Grab	Time Received :	12:00
Sampled By :	J.J, R.R.	Temperature at Receipt :	21 °C
Sample Description :	Clear, colourless	Date Tested :	2025-06-26
Test Method :	Reference Method for Determining Acute Lethality of Effluents to <i>Daphnia magna</i> . Environment Canada EPS 1/RM/14 (Second Edition, December 2000, with February 2016 amendments).		

48-HOUR TEST RESULTS

Substance	Effect	Value
Control	Mean Immobility	0.0 %
	Mean Mortality	0.0 %
100%	Mean Immobility	0.0 %
	Mean Mortality	0.0 %

The results reported relate only to the sample tested and as received.

TEST ORGANISM

Species :	<i>Daphnia magna</i>	Time to First Brood :	9.0 days
Culture Mortality :	0.0% (prev. 7 days)	Mean Brood Size :	44.8 neonates

TEST CONDITIONS

Sample Treatment :	None	Number of Replicates :	3
pH Adjustment :	No	Organisms per Replicate :	10
Pre-aeration Rate :	46.9 ±2 mL/L/min	Organisms per Test Level :	30
Duration of Pre-Aeration :	30 minutes	Organism Loading Rate :	25.0 mL/organism
Test Aeration :	None	Impaired Control Organisms :	0.0%
Hardness Adjustment :	No	Test Method Deviation(s) :	Yes (see 'COMMENTS')

REFERENCE TOXICANT DATA

Toxicant :	Zinc	LC50 :	1.12 mg/L
Date Tested :	2025-06-16	95% Confidence Limits :	0.79 - 1.60 mg/L
Statistical Method :	Spearman-Kärber	Historical Mean LC50 :	1.18 mg/L
		Warning Limits (± 2SD) :	0.43 - 3.24 mg/L

COMMENTS

Noted Deviation: The 100% sample was stored at 15 °C overnight on 2025-06-25, prior to test initiation. All test validity criteria was met, and the test is considered valid.

•All test validity criteria as specified in the test method were satisfied.

Approved By :

Project Manager

Work Order : 258157

Sample Number : 87406

TEST DATA

	pH	Dissolved O ₂ (mg/L)	O ₂ Saturation (%)*	Conductivity (µmhos/cm)	Temperature (°C)	Hardness (as CaCO ₃)
Initial Chemistry (100%) :	7.9	9.6	108	86	21	40 mg/L

0 HOURS

Date & Time : 2025-06-26 15:30

Analyst(s) : DS

Concentration (%)	Replicate	Dead	Immobile	pH	Dissolved O ₂	O ₂ Saturation [‡]	Conductivity	Temperature	Hardness
100	A	0	0	7.9	9.3	105	88	21	40
100	B	0	0	7.9	9.3	105	88	21	
100	C	0	0	7.9	9.3	105	88	21	
Control	A	0	0	8.1	8.5	95	622	21	192
Control	B	0	0	8.1	8.5	95	622	21	
Control	C	0	0	8.1	8.5	95	622	21	

Notes:

24 HOURS

Date & Time : 2025-06-27 11:30

Analyst(s) : KF

Concentration (%)	Replicate	Dead	Immobile	pH	Dissolved O ₂	O ₂ Saturation [‡]	Conductivity	Temperature
100	A	—	0	—	—	—	—	—
100	B	—	0	—	—	—	—	—
100	C	—	0	—	—	—	—	—
Control	A	—	0	—	—	—	—	—
Control	B	—	0	—	—	—	—	—
Control	C	—	0	—	—	—	—	—

Notes:

48 HOURS

Date & Time : 2025-06-28 15:00

Analyst(s) : MB

Concentration (%)	Replicate	Dead	Immobile	pH	Dissolved O ₂	O ₂ Saturation [‡]	Conductivity	Temperature
100	A	0	0	8.0	8.4	94	110	21
100	B	0	0	7.9	8.4	94	102	20
100	C	0	0	7.9	8.5	95	103	20
Control	A	0	0	8.1	8.4	95	626	21
Control	B	0	0	8.1	8.3	93	621	21
Control	C	0	0	8.1	8.2	92	621	21

Notes:

Number immobile does not include number dead.

"—" = not measured/not required

* adjusted for temperature and barometric pressure

Test Data Reviewed By : JJ

Date : 2025-07-03

Work Order : 258157
 Sample Number : 87406

SAMPLE IDENTIFICATION

Company :	ALS Laboratory Group, Waterloo		
Location :	Waterloo ON	Sampling Date :	2025-06-21
Job Number :	BF2500085	Sampling Time :	10:30
Substance :	K0-01	Date Received :	2025-06-25
Sampling Method :	Grab	Time Received :	14:30
Sampled By :	J.J, R.R.	Temperature at Receipt :	5 °C
Sample Description :	Clear, colourless	Date Tested :	2025-06-26

 Test Method(s) : Reference Method for Determining Acute Lethality of Liquid Effluents to Rainbow Trout.
 Environment Canada, EPS 1/RM/13 (2nd Edition, December 2000, with May 2007, February 2016, and December 2023 amendments).

96-HOUR TEST RESULTS

Substance	Effect	Value
Control	Mean Impairment	0.0 %
	Mean Mortality	0.0 %
100%	Mean Impairment	0.0 %
	Mean Mortality	0.0 %

The results reported relate only to the sample tested and as received.

TEST ORGANISM

Test Organism :	<i>Oncorhynchus mykiss</i>	Mean Fork Length :	34.7 mm
Organism Batch :	T25-14	Range of Fork Lengths :	31 - 38 mm
Control Sample Size :	10	Mean Wet Weight :	0.3 g
Cumulative stock mortality rate :	0% (previous 7 days)	Organism Loading Rate :	0.2 g/L
Control organisms showing stress :	0 (at test completion)		

TEST CONDITIONS

Test Type :	Single concentration	Number of Replicates :	1
Sample pH Adjustment :	None	Organisms Per Replicate :	10
Sample Pre-aeration/Aeration Rate :	6.5 ± 1 mL/min/L	Organisms Per Test Level :	10
Duration of Sample Pre-Aeration :	120 minutes	Volume of Sample :	18 L
Control Pre-aeration/Aeration Rate :	6.5 ± 1 mL/min/L	Volume of Control :	18 L
Duration of Control Pre-aeration:	30 minutes	Test Method Deviation(s) :	None

REFERENCE TOXICANT DATA

Toxicant :	Potassium Chloride		
Organism Batch :	T25-14	LC50 :	3557 mg/L
Date Tested :	2025-06-11	95% Confidence Limits :	3157 - 4002 mg/L
Analyst(s) :	GF, NWP	Historical Mean LC50 :	4112 mg/L
Statistical Method :	Linear Regression (MLE)	Warning Limits (± 2SD) :	3088 - 5475 mg/L

COMMENTS

•All test validity criteria as specified in the test method were satisfied.

Approved By :

Project Manager

Work Order : 258157

Sample Number : 87406

TEST DATA

	pH	Dissolved O ₂ (mg/L)	Conductivity (µmhos/cm)	Temperature (°C)	O ₂ Saturation (%) ³
Initial Water Chemistry (100%) :	7.5	11.0	71	14	111
After 30 min pre-aeration :	7.6	10.3	71	14	108

0 HOURS

Date & Time	2025-06-26	12:45					
Analyst(s) :	NWP/JGR						
Concentration	Dead	Impaired	pH	Dissolved O ₂	Conductivity	Temperature	O ₂ Saturation ³
100%	0	0	7.5	9.7	70	15	101
Control	0	0	8.1	9.6	653	14	99

Notes:

24 HOURS

Date & Time	2025-06-27	10:45					
Analyst(s) :	GF (NWP)						
Concentration	Dead	Impaired	pH	Dissolved O ₂	Conductivity	Temperature	
100%	0	0	—	—	—	16	
Control	0	0	—	—	—	16	

Notes:

48 HOURS

Date & Time	2025-06-28	10:45					
Analyst(s) :	KP						
Concentration	Dead	Impaired	pH	Dissolved O ₂	Conductivity	Temperature	
100%	0	0	—	—	—	16	
Control	0	0	—	—	—	16	

Notes:

72 HOURS

Date & Time	2025-06-29	12:45					
Analyst(s) :	KP						
Concentration	Dead	Impaired	pH	Dissolved O ₂	Conductivity	Temperature	
100%	0	0	—	—	—	15	
Control	0	0	—	—	—	15	

Notes:

96 HOURS

Date & Time	2025-06-30	11:45					
Analyst(s) :	GF (NWP)						
Concentration	Dead	Impaired	pH	Dissolved O ₂	Conductivity	Temperature	
100%	0	0	7.3	9.5	74	15	
Control	0	0	8.0	9.9	627	15	

Notes:

"—" = not measured/not required

Number impaired does not include number dead.

³ adjusted for temperature and barometric pressure

Test Data Reviewed By : JL

Date : 2025-07-02



CHAIN OF CUSTODY RECORD

Nautilus Work Order No:

258157

Shipping Address: Nautilus Environmental Guelph.
B-11 Nicholas Beaver Road
Puslinch, Ontario Canada N0B 2J0

Voice: (519) 763-4412

Fax: (519) 763-4419

P.O. Number: 4500156571

Field Sampler Name (print): JJ RR

Signature:

Affiliation: Baffinland Iron Mine / ALS Environmental

Sample Storage (prior to shipping): Fridge

Custody Relinquished by: Rachel Noddle

Date/Time Shipped:

Client: ALS Environmental c/o Baffinland Iron Mine

Quote # (2023): 162705399-23

Phone: (519) 886-6910

Fax: (519) 886-9047

Contact: Rick Hawthorne (ALS) / Martina Rendas (Nautilus)

Sample Identification					Analyses Requested										Sample Method and Volume	
Date Collected (yyyy-mm-dd)	Time Collected (e.g. 14:30, 24 hr clock)	Sample Name	Nautilus Sample Number	Temp. on arrival	Rainbow Trout Single Concentration	Rainbow Trout LC50	Daphnia magna Single Concentration	Daphnia magna LC50	Fathead Minnow Survival & Growth	Ceriodaphnia dubia Survival & Reproduction	Lemna minor Growth	Pseudokirchneriella subcapitata Growth	Microtox	Grab	Composite	# of Containers and Volume (eg. 2 x 1L, 3 x 10L, etc.)
2025-06-21	10:30	K0-01	87406	5	✓		✓							✓		2 x 10L Carboy

For Lab Use Only

Received By:

JF/NWP

Date:

2025-06-25

Time:

14:30

Storage Location:

Storage Temp.(°C)

Please list any special requests or instructions:

Report Distribution: environment.labresults@baffinland.com,
rick.hawthorne@alsglobal.com, alswtpma@alsglobal.com



Chain of Custody
ALS Environmental - Baffin Island
Mary River, Qikqtani Region
Baffin Island NU Canada

258637



Destination Lab:	Nautilus Environmental Guelph
Address:	B-11 Nicholas Beaver Rd Puslinch ON Canada N0B 2J0
Work Order Number:	BF2500085
Original Receipt Date/Time	Instructions Received
21/06/2025 17:29	

Relinquished By
Date/Time
Received By
Date/Time
Receipt Temp

Return as Indicated:	Results:	Invoice:	Electronic Data:
Attention: Rick Hawthorne			

ALS Sample ID	Client ID	Matrix	Container Type	Test Codes	Method Description	Due Date	Sampling Date and Time	Remarks
BF2500085-001	K0-01_2025-06-21	Water	LDPE carboy			02-07-2025	21/06/2025 10:30	
BF2500085-001	K0-01_2025-06-21	Water	LDPE carboy	DAP-SCR-48, TRT-SCR-96	Survival/Screening Daphnia Magna 48 hours, Survival/Screening Rainbow Trout (96 hours)	02-07-2025	21/06/2025 10:30	

Your samples have been received at Nautilus Environmental's sample reception at Point Edward and have now been issued an unique sample ID numbers.

Here are some details of your submission

Client Name : Nautilus Guelph
Sample Number : PE2425-0391
Sample Name : 87406 (WO#258157)
Sample collection date : 2025-06-21
Sample collection time : 10:30 AM
Sample receipt date : 2025-06-26
Sample receipt time : 12:00
Temperature upon arrival : 21
Container/Volume : 1x1L bottle

Analyses requested

DAS : 48-h D. magna single

Entry of your submission is based on information contained on your Chain of Custody. If you have any questions regarding this submission, kindly contact Nautilus Environmental, Point Edward by email using carol@nautilusenvironmental.ca.

704 Mara Street, Suite 122
Point Edward, Ontario, CA
N7V 1X4, Phone 519-339-8787



August 16, 2025

Resource Management Officer
Nunavut Region
Crown Indigenous Relations and Northern Affairs Canada
Box 100
Iqaluit, NU X0A 0H0

Regulatory Manager
Qikiqtani Inuit Association
P.O. Box 219
Iqaluit, NU X0A 0H0

Enforcement Office
Environment and Climate Change Canada
933 Mivvik Street
Iqaluit, NU X0A 0H0

Re: Follow-up to Spill #2025-294
Mary River Project - Water Licence No. 2AM-MRY2540

Summary:

Crusher Facility Sedimentation Pond MS-06 at Mary River was being closely monitored for freeboard during a prolonged rainfall event during the week of July 13, 2025. To ensure sufficient freeboard, on July 15, Operations initiated a pond-to-pond transfer from the MS-06 Pond to the Ore Stockpile Facility Sedimentation Pond; MS-07. A controlled discharge, along with continued transfer of compliant pond water, was subsequently initiated at approximately 13:00 hours on July 16 after initial field readings indicated the water was compliant with applicable water licence and MDMER criteria for Total Suspended Solids (TSS). However, inflows to the pond collection ditch exceeded the pond withdrawal rate, resulting in a slow release of compliant water over the lined emergency spillway at 18:09. The water was observed to be released into rip rap below the emergency spillway and no free-flowing water was observed on the adjacent tundra. Rate of release over the spillway was approximated at 1,800 litres per hour, resulting in a total approximate volume of 6.3m³ of compliant water released. Continued removal of water from the MS-06 pond, including increased transfer with water trucks, reduced the pond freeboard below the spillway ceasing the spillway release by 21:30.

Full-suite water quality samples collected on July 16 from the FDP and the release and on July 17 from the receiving environment to characterize the water quality and potential lethality were submitted to an external laboratory for analysis. The table below shows the coordinates of the water quality sample locations. Results were compliant with all applicable water licence and MDMER criteria, and results of the toxicity samples documented that the water was not acutely lethal.

Sample Location	Description	Coordinates (Lat/Long)
MS-06	Crusher Facility Sedimentation Pond	N71° 18' 42" W79° 16' 50"
MS-06 Spill	Location of the overflow from the MS-06Pond into the engineered spillway	N71° 18' 41" W79° 16' 50"
MS-06-DS	Downstream of the MS-06 outfall location	N71° 18' 01" W79° 15' 34"



The incident occurred on Inuit Owned Land (IOL) located greater than 500m from Sheardown Lake Tributary, the nearest fish bearing waters. Photos and a map of the overflow location are provided in Attachment 1 and Attachment 2, respectively. The incident was reported to the NT-NU Spill Reporting Line on July 17 and an updated Notification was provided on July 23 to correct the occurrence and report dates, which were inadvertently switched in the initial spill report, and update the time of the spill which was better established during the investigation. The NT-NU Spill Report (#2025-294) and Update report are included as Attachment 3. Analytical water quality results are provided in Attachment 4.

Immediate and Follow-Up Action:

Effluent characterization and deleterious substance water quality monitoring including acute lethality sampling was conducted on July 16 from the FDP after discharge commenced, and sampling for deleterious substances was collected from the pond to characterize water released over the emergency spillway. Downstream receiving environment water quality samples were subsequently collected on July 17. Laboratory results confirmed all water quality parameters were compliant with water licence and MDMER criteria, and the water was not acutely lethal and did not impact the downstream receiving environment.

A total of 302m³ of effluent was transferred from the MS-06 Pond to the MS-07 Pond on July 16 to mitigate freeboard conditions. Once internal water quality monitoring confirmed TSS below applicable water licence and MDMER limits discharge of the pond was initiated. Pond level was subsequently reduced to the lowest practicable level through continued discharge through the FDP and water transfers.

Corrective Actions

Investigation determined that a significant contributing factor of the release was that the inflow of water to the pond exceeded the discharge pumping capacity of existing infrastructure. The discharge line and pump capacity were undersized, thereby limiting the rate at which the pond could be discharged. In addition, retained surface water runoff from the MS-06 Pond was pumped through a discharge pipeline shared with the Mine Site wastewater treatment plants (WWTP), which created conflicting priorities regarding when each facility could discharge. A dedicated and larger discharge line has been installed for the MS-06 pond, to the existing outfall location, and the existing pump has been upgraded with a larger capacity diesel-powered pump.

Current Status:

The water level at the Crusher Pond is within predicted operating levels, and discharge is no longer occurring.

As per Section 31 of the Metal and Diamond Mining Effluent Regulations (MDMER):

- a. Compliant effluent deposited outside of the FDP.
- b. 6.3m³ of compliant effluent was deposited outside of the FDP via the lined emergency spillway into rip rap below the spillway. Volume released was estimated based on direct field measurements.
- c. The release was observed at approximately 18:09 on July 16, 2025 and ended the same day at approximately 21:30.



- d. The deleterious substances were below applicable MDMER criteria listed in Schedule 4, Table 2. The location of the release is shown in Attachment 2.
- e. Not applicable as the release did not occur through the final discharge point (FDP).
- f. The release of compliant effluent occurred on Inuit Owned Land (IOL) located greater than 500 m from Sheardown Lake Tributary, the nearest fish bearing waters, shown in Attachment 2. The water was observed entering the rip rap below the emergency spillway and was not observed to interact with the Sheardown Lake Tributary.
- g. Acute lethality samples collected on July 16 indicated the water was not acutely lethal.
- h. See the summary above for the circumstances of the release. As per Baffinland's MDMER Emergency Response Plan, pond freeboard was lowered through discharge through the approved FDP and pond-to-pond transfers. Samples of the effluent were taken to ensure the effluent was not acutely toxic and to characterize the effluent.
- i. A dedicated and larger discharge line was installed for the MS-06 Pond to the existing outfall location and the existing pump was replaced with a larger capacity pump to improve discharge capacity.

Should you require further information or clarification on the incident described above, please feel free to contact the undersigned at (647) 253-0596 (ext. 6016).

Prepared by:

William Bowden

William Bowden
Environmental Manager

Reviewed By:

Spencer Stinson

Digitally signed by Spencer
Stinson
Date: 2025.08.16 15:04:37 -04'00'

Spencer Stinson
Crusher Superintendent

Cc: Jeremy Fraser, Sean Naullaq (CIRNAC)
Andrew Jaworenko (QIA)
Curtis Didham (ECCC)
Megan Lord-Hoyle, Lou Kamermans, Francois Gaudreau, Spencer Stinson, Todd Swenson, Katie Babin, Allison Parker, Shannon Mulhall, Irniq Lecompte (Baffinland)

Attachments

Attachment 1: Photos
Attachment 2: Spill Location Map
Attachment 3: Baffinland NT-NU Spill Report #2025-294 (and amended report)
Attachment 4: Analytical Water Quality Results



Attachment 1
Photos



Photo 1: Effluent Emerging onto Emergency Spillway of MS-06 Pond at 19:30hrs – July 16, 2025



Photo 2: Tundra View of Slow Release into Rip Rap below the Emergency Spillway – July 16, 2025



Photo 3: Pond-to-Pond Effluent Transfers via Water Truck in Progress – July 16, 2025



Photo 4: Pond Level in MS-06 Reduced to Low Level – July 28, 2025



Photo 5: Dedicated Discharge Line Installed for the MS-06 Pond, Running Beside the WWTP Effluent Line to the Outfall Location – July 20, 2025



Attachment 2
Spill Location Map



LEGEND

- Water Quality Monitoring Locations
- Mine Site Infrastructure

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MARY RIVER PROJECT

NT-NU Spill # 2025-294

Projection: NAD 1983 UTM ZONE 17N.
Base Map: © King's Printer for Ontario, 2024.

0 15 30 60 Meters
Scale 1:3,000



Baffinland

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FIGURE

1



Attachment 3
Baffinland NT-NU Spill Report #2025-294



NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND
OTHER HAZARDOUS MATERIALS



NT-NU 24-HOUR SPILL REPORT LINE
Tel: (867) 920-8130 • Email: spills@gov.nt.ca

A	Report Date: 7 16 25	Report Time: 5:00 pm	☒ Original Spill Report OR ☐ Update # _____ to the Original Spill Report	Report Number: 25-
B	Occurrence Date: 7 17 25	Occurrence Time: 8:20 pm		
C	Land Use Permit Number (if applicable): IOL - Commercial Lease No.: Q13C301		Water Licence Number (if applicable): 2AM-MRY2540 Type "A"	
D	Geographic Place Name or Distance and Direction from the Named Location: Mary River Project Mine Site, Baffin Island, NU		Region: ☐ NT ☒ Nunavut ☐ Trans-boundary or Ocean	
E	Latitude: 71 Degrees 18 Minutes 40 Seconds		Longitude: 79 Degrees 16 Minutes 52 Seconds	
F	Responsible Party or Vessel Name: Baffinland Iron Mines Corp.		Responsible Party Address or Office Location: 360 Oakville Place Dr. Suite 300, Oakville, ON, Canada, L6H6K8	
G	Any Contractor Involved: N/A		Contractor Address or Office Location: N/A	
H	Product Spilled: ☐ Potential Spill Effluent	Quantity in Litres, Kilograms or Cubic Metres: Unquantified	U.N. Number: N/A	
I	Spill Source: MS-06, Runoff water	Spill Cause: Ongoing Precipitation	Area of Contamination in Square Metres: N/A	
J	Factors Affecting Spill or Recovery: Ongoing sustained precipitation	Describe Any Assistance Required: N/A	Hazards to Persons, Property or Environment: N/A	
K	Summary of the spill incident and efforts / description of the incident: Sedimentation Pond MS-06 at Mary River, was being closely monitored for freeboard during an prolonged rainfall event. On July 15th Operations initiated a pond to pond transfer to ensure sufficient freeboard could be maintained. A controlled discharge, along with continued transfer of compliant pond water was initiated at approximately 1:00 pm on July 16, however inflows to the Pond collection ditch exceeded the withdrawal rate, resulting in a slow release of compliant water over the emergency spillway at 18:20. The release over the spillway was approximated at 1,800 litres per hour. Continued removal via increased transfer with water trucks reduced the pond freeboard below the spill way and the uncontrolled release ceased by 21:30. Pond to pond transfer is ongoing. Samples to characterize the release were immediately collected and will be included in the follow up report. This spill is being reported as required by the conditions of Water License no. 2AM-MRY2540, Part H, item 9(b) pursuant to subsection 12(3) of the Nunavut Waters and Nunavut Surface Rights Tribunal Act and as required by subsection 38(5) of the Fisheries Act.			
L	Reported to Spill Line by: Todd Swenson	Position: Environmental Superintendent	Employer: Baffinland Iron Mine	Location Calling From: Baffinland Telephone: (647) 253-0506
M	Any Alternate Contact: William Bowden	Position: Environmental Manager	Employer: Baffinland Iron Mine	Alternate Contact Location: Baffinland Alternate Telephone: (647) 253-0506

REPORT LINE USE ONLY

N	Received at Spill Line by:	Position:	Employer:	Location Called:	Report Line Number:
Lead Agency: ☐ EC ☐ CCG/TCMSS ☐ GNWT ☐ GN ☐ ILA ☐ CIRNAC ☐ CER ☐ Other: _____				File Status: ☐ Open ☐ Closed	
Agency:		Contact Name:	Contact Time:	Remarks:	
Lead Agency:					
First Support Agency:					
Second Support Agency:					
Third Support Agency:					

360 Oakville Place Drive, Suite 300 | Oakville, ON, Canada L6H 6K8

Main: 416.364.8820 | Fax: 416.364.0193 | www.baffinland.com



NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND
OTHER HAZARDOUS MATERIALS



NT-NU 24-HOUR SPILL REPORT LINE
Tel: (867) 920-8130 • Email: spills@gov.nt.ca

A	Report Date: 7 / 17 / 25	Report Time: 5:00 pm	☐ Original Spill Report OR ☒ Update # 1 to the Original Spill Report	Report Number: 25-294
B	Occurrence Date: 7 / 16 / 25	Occurrence Time: 6:09 pm		
C	Land Use Permit Number (if applicable): IOL - Commercial Lease No.: Q13C301		Water Licence Number (if applicable): 2AM-MRY2540 Type "A"	
D	Geographic Place Name or Distance and Direction from the Named Location: Mary River Project Mine Site, Baffin Island, NU		Region: ☐ NT ☒ Nunavut ☐ Trans-boundary or Ocean	
E	Latitude: 71 Degrees 18 Minutes 40 Seconds		Longitude: 79 Degrees 16 Minutes 52 Seconds	
F	Responsible Party or Vessel Name: Baffinland Iron Mines Corp.		Responsible Party Address or Office Location: 360 Oakville Place Dr. Suite 300, Oakville, ON, Canada, L6H8K8	
G	Any Contractor Involved: N/A		Contractor Address or Office Location: N/A	
H	Product Spilled: ☐ Potential Spill Effluent	Quantity in Litres, Kilograms or Cubic Metres: 8.36 m3	U.N. Number: N/A	
I	Spill Source: MS-06, Runoff water	Spill Cause: Ongoing Precipitation	Area of Contamination in Square Metres: N/A	
J	Factors Affecting Spill or Recovery: Ongoing sustained precipitation	Describe Any Assistance Required: N/A	Hazards to Persons, Property or Environment: N/A	
K	Summary of the spill incident and efforts / description of the incident: Sedimentation Pond MS-06 at Mary River, was being closely monitored for freeboard during an prolonged rainfall event. On July 15th Operations initiated a pond to pond transfer to ensure sufficient freeboard could be maintained. A controlled discharge, along with continued transfer of compliant pond water was initiated at approximately 1:00 pm on July 16, however inflows to the Pond collection ditch exceeded the withdrawal rate, resulting in a slow release of compliant water over the emergency spillway at 18:09. The release over the spillway was approximated at 1,800 litres per hour. Continued removal via increased transfer with water trucks reduced the pond freeboard below the spill way and the uncontrolled release ceased by 21:30. Pond to pond transfer is ongoing. Samples to characterize the release were immediately collected and will be included in the follow up report. This spill is being reported as required by the conditions of Water License no. 2AM-MRY2540, Part H, item 9(b) pursuant to subsection 12(3) of the Nunavut Waters and Nunavut Surface Rights Tribunal Act and as required by subsection 38(5) of the Fisheries Act.			
L	Reported to Spill Line by: Todd Swenson	Position: Environmental Superintendent	Employer: Baffinland Iron Mine	Location Calling From: Baffinland Telephone: (647) 263-0598
M	Any Alternate Contact: William Bowden	Position: Environmental Manager	Employer: Baffinland Iron Mine	Alternate Contact Location: Baffinland Alternate Telephone: (647) 263-0598

REPORT LINE USE ONLY

N	Received at Spill Line by:	Position:	Employer:	Location Called:	Report Line Number:
Lead Agency: ☐ EC ☐ CCG/TCMSS ☐ GNWT ☐ GN ☐ ILA ☐ CIRNAC ☐ CER ☐ Other: _____				File Status: ☐ Open ☐ Closed	
Agency:		Contact Name:	Contact Time:	Remarks:	
Lead Agency:					
First Support Agency:					
Second Support Agency:					
Third Support Agency:					

360 Oakville Place Drive, Suite 300 | Oakville, ON, Canada L6H 6K8

Main: 416.364.8820 | Fax: 416.364.0193 | www.baffinland.com



Attachment 4
Analytical Water Quality Results



Location Name				MS-06	MS-06-SPILL	MS-06-DS
Sample Date & Time				2025-07-16 12:30	2025-07-16 18:30	2025-07-17 11:00
ALS Laboratory Work Order				BF2500163	BF2500167	BF2500171
Parameter	Unit	MDMER Criteria	NWB Table 10 Criteria			
pH, Field	pH units	-	-	7.13	6.98	7.73
Specific Conductivity, Field	us/cm	-	-	1852	1798	70.1
Temperature, Field	deg C	-	-	8	9.8	6.9
Turbidity, Field	NTU	-	-	48.9	20.33	13.4
pH, Lab	pH units	-	6.0 - 9.5	7.12	7.05	7.75
Total Suspended Solids	mg/L	30	30	5	2	3.6
Total Dissolved Solids	mg/L	-	-	1430	1460	38
Turbidity	NTU	-	-	34.9	9.75	14.6
Conductivity	us/cm	-	-	1900	1930	74
Alkalinity, Total	mg/L	-	-	13.6	-	33.6
Ammonia, Total (as N)	mg/L	-	-	7.85	7.94	< 0.005
Ammonia, Un-ionized	mg/L	1	-	0.0167	0.0138	< 0.001
Hardness	mg/L	-	-	866	-	33.6
Chloride	mg/L	-	-	116	-	0.73
Fluoride	mg/L	-	-	< 0.1	-	0.025
Nitrate	mg/L	-	-	23.7	-	0.15
Nitrite	mg/L	-	-	0.334	-	-
Phosphorus, Nutrient	mg/L	-	-	0.0073	-	0.0105
Total Kjeldahl Nitrogen	mg/L	-	-	15.2	-	0.108
Sulfate	mg/L	-	-	739	-	1.76
Dissolved Organic Carbon	mg/L	-	-	3.69	-	1.75
Total Organic Carbon	mg/L	-	-	4.18	-	2.17
Aluminum - Total	mg/L	-	-	0.147	0.0427	0.474
Antimony - Total	mg/L	-	-	< 0.001	< 0.001	< 0.0001
Arsenic - Total	mg/L	0.6	0.6	< 0.001	< 0.001	0.00011
Barium - Total	mg/L	-	-	0.0153	0.0151	0.00784
Cadmium - Total	mg/L	-	-	0.000221	0.000216	< 0.000005
Calcium - Total	mg/L	-	-	62.6	63.2	6.75
Chromium - Total	mg/L	-	-	< 0.005	< 0.005	0.00112
Cobalt - Total	mg/L	-	-	0.0406	0.0393	0.0002
Copper - Total	mg/L	0.6	0.6	< 0.005	< 0.005	0.00136
Iron - Total	mg/L	-	-	0.47	0.103	0.445
Lead - Total	mg/L	0.2	0.2	0.00089	< 0.0005	0.000382
Lithium - Total	mg/L	-	-	0.0456	0.0465	< 0.001
Magnesium - Total	mg/L	-	-	184	172	4.07
Manganese - Total	mg/L	-	-	18.4	17.9	0.0059
Mercury - Total	mg/L	-	-	< 0.000005	-	< 0.000005
Molybdenum - Total	mg/L	-	-	< 0.0005	0.000561	0.000219
Nickel - Total	mg/L	1	1	0.0335	0.0319	0.00115

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Phosphorus - Total	mg/L	-	-	< 0.5	< 0.5	< 0.05
Potassium - Total	mg/L	-	-	10.8	10.6	0.792
Selenium - Total	mg/L	-	-	0.00204	0.00196	< 0.00005
Sodium - Total	mg/L	-	-	48.2	44.7	1.42
Strontium - Total	mg/L	-	-	0.123	0.123	0.00696
Thallium - Total	mg/L	-	-	0.00021	0.000205	0.000012
Tin - Total	mg/L	-	-	< 0.001	< 0.001	< 0.0001
Titanium - Total	mg/L	-	-	< 0.003	< 0.003	0.0241
Uranium - Total	mg/L	-	-	0.000345	0.000338	0.000567
Vanadium - Total	mg/L	-	-	< 0.005	< 0.005	0.00091
Zinc - Total	mg/L	1	1	< 0.03	< 0.03	< 0.003
Aluminum - Dissolved	mg/L	-	-	< 0.01	-	-
Arsenic - Dissolved	mg/L	-	-	< 0.001	-	-
Cadmium - Dissolved	mg/L	-	-	0.000223	-	-
Calcium - Dissolved	mg/L	-	-	58.3	-	-
Copper - Dissolved	mg/L	-	-	< 0.002	-	-
Iron - Dissolved	mg/L	-	-	< 0.1	-	-
Lead - Dissolved	mg/L	-	-	< 0.0005	-	-
Magnesium - Dissolved	mg/L	-	-	175	-	-
Manganese - Dissolved	mg/L	-	-	17.8	-	-
Mercury - Dissolved	mg/L	-	-	< 0.000005	-	< 0.000005
Molybdenum - Dissolved	mg/L	-	-	< 0.0005	-	-
Nickel - Dissolved	mg/L	-	-	0.0308	-	-
Potassium - Dissolved	mg/L	-	-	10.1	-	-
Selenium - Dissolved	mg/L	-	-	0.0019	-	-
Sodium - Dissolved	mg/L	-	-	45.1	-	-
Thallium - Dissolved	mg/L	-	-	0.000221	-	-
Uranium - Dissolved	mg/L	-	-	0.000306	-	-
Zinc - Dissolved	mg/L	-	-	0.0167	-	-
Mean % Mortality - Daphnia magna	%v/v	Not Acutely Lethal	Not Acutely Lethal	Not Acutely Lethal	-	-
Mean % Mortality - Rainbow Trout	%v/v	Not Acutely Lethal	Not Acutely Lethal	Not Acutely Lethal	-	-
Visible Sheen	None	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Radium	Bq/L	1.11	-	0.005	<0.005	<0.005



August 16, 2025

Resource Management Officer
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Regulatory Manager
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Enforcement Office
Environment and Climate Change Canada
933 Mivvik Street
Iqaluit, NU X0A 0H0

Re: Follow-Up to Spill #2025-292
Mary River Project - Water Licence No. 2AM-MRY2540

Summary:

On July 16, a hydraulic fluid release occurred when a hydraulic hose failed on a mobile Dx-800 drill during work on the Tote Road at Km 80.5 to support a geotechnical investigation for crossing CV-216. Approximately 15 liters of hydraulic fluid was released from the drill, mainly onto the ground adjacent to the drill. Due to the proximity of the drill to the nearby watercourse, approximately 5 liters of the released hydraulic fluid interacted with the water via spray when the hydraulic hose initially failed. The incident occurred on Inuit Owned Land (IOL) along the Tote Road. CV-216 is a fish bearing crossing. Results of an acute lethality sample collected downstream indicated that the water was not acutely lethal. Photos and a map of the release are provided in Attachment 1 and Attachment 2, respectively. The incident was reported to the NT-NU Spill Reporting Line on July 17, 2025. The NT-NU Spill Report (#2025-292) is included as Attachment 3. Analytical water quality results are provided in Attachment 4.

Immediate and Follow-Up Action:

The operator promptly shut down the drill and placed spill pads on the ground and on the surface of the water to absorb the hydraulic fluid. Spill booms were also immediately deployed downstream of the culverts to contain and absorb any hydraulic fluid that interacted with the water. Additional booms were subsequently installed upstream around the unobstructed culverts to capture residual sheen. Four additional spill kits were delivered to the site to resource the mitigations installed. Impacted soil from the roadway and adjacent areas was removed and transported to the Mary River lined landfarm for disposal. Monitoring continued, with additional spill absorbents placed on the surface of the water on July 17, until no visible sheen was observed. Spill response material and equipment was fully removed from the watercourse on July 21.

Water quality samples were collected on July 16, including acute lethality, at the release location and submitted for external analysis. Results of the water quality samples indicated that the water was not acutely lethal and non detect for oil and grease.

Corrective Actions

The failed hydraulic hose on the Dx-800 drill was replaced and a full inspection of the drill was completed by a qualified drill mechanic.



Investigation identified that the driller completed a pre-op inspection and no indication of hose damage was reported. To improve drill operation pre-inspection procedures the requirement for hydraulic hoses to have 500 hrs inspection by a drill mechanic is being added to the PM for all Dx-800 drills that will be drilling over or near open-water.

Current Status:

The area where the incident occurred is no longer undergoing geotechnical investigation. The mobile Dx-800 drill was returned to service but is no longer required. The area was monitored for remaining visible sheen or hydrocarbons and none was observed. Impacted material was removed from the affected area and disposed of following Baffinland's hazardous waste disposal procedures.

Should you require further information or clarification on the above noted spill, please feel free to contact the undersigned or Todd Swenson at (647) 253-0596 x 6016.

Prepared by:

A handwritten signature in cursive script, reading "William Bowden".

William Bowden
Environmental Manager

Reviewed By:

A handwritten signature in cursive script, reading "Rudolf Dietrich".

Rudolf Dietrich
Deputy Project Director

Cc: Jeremy Fraser, Sean Naullaq (CIRNAC)
Andrew Jaworenko (QIA)
Curtis Didham (ECCC)
Megan Lord-Hoyle, Lou Kamermans, Francois Gaudreau, Jim Patterson, Rudolf Dietrich, Todd Swenson, Katie Babin, Allison Parker, Shannon Mulhall, Irniq Lecompte (Baffinland)

Attachments

Attachment 1: Photos
Attachment 2: Spill Location Map
Attachment 3: Baffinland NT-NU Spill Report #2025-292
Attachment 4: Analytical Water Quality Results



Attachment 1
Photos



Photo 1: Spill Pads Placed on Contaminated Soil and Surface of the Water Upstream of CV-216 – July 16, 2025



3

Photo 2: Spill Boom Placed Downstream – July 16, 2025



Photo 3: Spill Boom Placed Upstream Around Unobstructed Culverts – July 16, 2025



Photo 6: Upstream Conditions Prior to Removal of Spill Response Equipment – July 20, 2025



Photo 7: Downstream Conditions Prior to Removal of Spill Response Equipment – July 20, 2025



Attachment 2
Spill Location Map



LEGEND

● Stream Crossing CV-216

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NT-NU Spill # 2025-292

Projection: NAD 1983 UTM ZONE 17N.

Base Map: © King's Printer for Ontario, 2024.

0 0.5 1 2 Kilometers

Scale 1:92,000



Baffinland

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FIGURE

1



Attachment 3
Baffinland NT-NU Spill Report #2025-292



NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND
OTHER HAZARDOUS MATERIALS



Canada



NT-NU 24-HOUR SPILL REPORT LINE

Tel: (867) 920-8130 • Email: spills@gov.nt.ca

A	Report Date: 7 / 17 / 25	Report Time: 1:00 pm	☒ Original Spill Report OR ☐ Update #. _____ to the Original Spill Report	Report Number:
B	Occurrence Date: 7 / 18 / 25	Occurrence Time: 2:00 pm		
C	Land Use Permit Number (if applicable): IOL - Commercial Lease No.: Q13C301	Water Licence Number (if applicable): 2AM-MRY2540 Type "A"		
D	Geographic Place Name or Distance and Direction from the Named Location: Mary River Project Mine Site, Baffin Island, NU	Region: ☐ NT ☒ Nunavut ☐ Trans-boundary or Ocean		
E	Latitude: 71 Degrees 23 Minutes 37 Seconds	Longitude: 79 Degrees 47 Minutes 55 Seconds		
F	Responsible Party or Vessel Name: Baffinland Iron Mines Corp.	Responsible Party Address or Office Location: 380 Oakville Place Dr. Suite 300, Oakville, ON, Canada, L6H8K8		
G	Any Contractor Involved:	Contractor Address or Office Location:		
H	Product Spilled: ☐ Potential Spill Hydraulic Oil	Quantity in Litres, Kilograms or Cubic Metres: 15L	U.N. Number:	
I	Spill Source: Drill #	Spill Cause: Failed Hydraulic Hose	Area of Contamination in Square Metres: N/A	
J	Factors Affecting Spill or Recovery: N/A	Describe Any Assistance Required:	Hazards to Persons, Property or Environment:	
K	Summary of the spill incident and efforts / description of the incident: A mobile dx-80 drill was working on the slope of the road by CV-216 at km 81 when one of the hydraulic hoses failed. The operator quickly stopped the equipment and put spill pads down to contain the spill. Approximately 15 L of hydraulic fluids spilled from the drill. The majority of this soaked into the ground but some of the hydraulic fluid entered into the stream via spray from the hose. This was estimated to be approximately 5 L. Spill pads and booms were immediately deployed to minimize the spread. The impacts of this spill on the lake are expected to be negligible, as the spilled material was effectively contained by spill booms. This spill is being reported as required by the conditions of Water License no. 2AM-MRY2540, Part H, item 9(b) pursuant to subsection 12(3) of the Nunavut Waters and Nunavut Surface Rights Tribunal Act and as required by subsection 38(5) of the Fisheries Act.			
L	Reported to Spill Line by: Todd Swenson	Position: Env Superintendent	Employer: Baffinland	Location Calling From: Mary River Telephone: (647) 253-0566
M	Any Alternate Contact: William Bowden	Position: Env Manager	Employer: Baffinland	Alternate Contact Location: Mary River Alternate Telephone: (647) 253-0566

REPORT LINE USE ONLY

N	Received at Spill Line by:	Position:	Employer:	Location Called:	Report Line Number:
	Lead Agency: ☐ EC ☐ CCG/TCMSS ☐ GNWT ☐ GN ☐ ILA ☐ CIRNAC ☐ CER ☐ Other: _____			File Status: ☐ Open ☐ Closed	
	Agency:	Contact Name:	Contact Time:	Remarks:	
	Lead Agency:				
	First Support Agency:				
	Second Support Agency:				
	Third Support Agency:				



Attachment 4
Analytical Water Quality Results



Location Name		CV-216-SPILL_2025-07-16
Sample Date & Time		2025-07-16 15:15
ALS Laboratory Work Order		BF2500170-001
Parameter	Unit	
pH, Lab	pH units	7.98
Total Suspended Solids	mg/L	1.2
Total Dissolved Solids	mg/L	124
Turbidity	NTU	2.89
Conductivity	us/cm	235
Ammonia, Total (as N)	mg/L	0.0095
Nitrate (as N)	mg/L	0.07
Mean % Mortality - Daphnia magna	%v/v	Not acutely lethal
Mean % Mortality - Rainbow Trout	%v/v	Not acutely lethal
Oil & Grease	mg/L	<5.0



August 29, 2025

Resource Management Officer
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Regulatory Manager
Qikiqtani Inuit Association
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Re: Follow-Up to Spill #2025-309
Mary River Project - Water Licence No. 2AM-MRY2540

Summary:

On July 30, 2025, approximately 130 L of untreated sewage was released onto the ground when the lift station tank at the Mine Site Complex (MSC) overflowed. On investigation, sewage sludge had accumulated around pump components inside the lift station, preventing the lift station pumps from engaging when the high level was reached as per the design. Released sewage sludge was contained to an area approximately 8 m², immediately adjacent to the lift station, and did not migrate beyond the area of release. The location of the release is approximately 550 meters from Sheardown Lake, the nearest waterbody.

Immediate and Follow-Up Action:

Facilities at the MSC that drain to the affected lift station were taken out of service and water shut off. The pump intake of one of the affected lift station pumps was manually cleared and the pump was engaged to drain the tank and prevent any further flow from the lift station. A vacuum truck was subsequently mobilized to assist with removing remaining sludge from the tank. Accumulated sludge material was removed from around the affected pump components inside the lift station, and the lift station pumps were tested and reengaged, resuming lift station operation. Affected soil was removed from the ground using a skid steer, combined with manual excavation with a hand shovel. All impacted materials were transported to the Mary River landfarm for future remediation.

Corrective Actions:

Removal of sludge from MSC and Sailiivik Camp lift stations will be incorporated into the preventative maintenance (PM) plan for the Project's wastewater treatment facilities at the required frequency.

The MSC lift stations will be integrated into the PI system dashboard for real-time remote monitoring by Security and Operations.



Current Status:

Accumulated material was removed from the affected lift station components and the MSC lift station returned to service. Impacted ground was removed from the affected area and placed in the landfarm for subsequent remediation. Corrective actions are in progress to schedule lift station sludge removal on an automatic recurring basis into the Operators' workflow, and to update the PI system dashboard.

Should you require further information or clarification on the incident described above, please feel free to contact the undersigned at (647) 253-0596 (ext.6016).

Prepared by:

A handwritten signature in black ink, appearing to read "Todd Swenson".

Todd Swenson
Environmental Superintendent

Reviewed by:

A handwritten signature in black ink, appearing to read "James Macdougall".

James Macdougall (Aug 27, 2025 13:16:30 EDT)

James MacDougall
Accommodations/Essential Services Superintendent

Cc: Jeremy Fraser, Sean Naullaq (CIRNAC)
Andrew Jaworenko (QIA)
Megan Lord-Hoyle, Lou Kamermans, Francois Gaudreau, Paula Krats, Eli Iannelli, James MacDougall, William Bowden, Allison Parker, Shannon Mulhall, Irniq Lecompte (Baffinland)

Attachments:

Attachment 1: Photos
Attachment 2: Spill Location Map
Attachment 3: Baffinland NT-NU Spill Report #2025-309



Attachment 1

Photos

360 Oakville Place Drive, Suite 300 | Oakville, ON, Canada L6H 6K8

Main: 416.364.8820 | Fax: 416.364.0193 | www.baffinland.com



Photo 1: MSC Lift Station Release – July 30, 2025



Photo 2: MSC Lift Station Release Following Clean Up – August 14, 2025



Attachment 2
Spill Location Map

360 Oakville Place Drive, Suite 300 | Oakville, ON, Canada L6H 6K8

Main: 416.364.8820 | Fax: 416.364.0193 | www.baffinland.com



LEGEND

● Spill Location

ᓄᓕᓕᓕ ᐃᓕᓕᓕᓕᓕᓕ MARY RIVER PROJECT

NT-NU Spill # 2025-309

Projection: NAD 1983 UTM ZONE 17N.
Base Map: © King's Printer for Ontario, 2024.

0 15 30 60 Meters
Scale 1:3,000



Baffinland

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FIGURE

1



Attachment 3
Baffinland NT-NU Spill Report #2025-309

360 Oakville Place Drive, Suite 300 | Oakville, ON, Canada L6H 6K8

Main: 416.364.8820 | Fax: 416.364.0193 | www.baffinland.com



NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND
OTHER HAZARDOUS MATERIALS



Canada



NT-NU 24-HOUR SPILL REPORT LINE
Tel: (867) 920-8130 • Email: spills@gov.nt.ca

A	Report Date: 27 30 25	Report Time: 5:00 am	☒ Original Spill Report OR ☐ Update # _____ to the Original Spill Report		Report Number:
B	Occurrence Date: 27 30 25	Occurrence Time: 4:30 am			
C	Land Use Permit Number (if applicable): IOL - Commercial Lease No.: Q13C301	Water Licence Number (if applicable): 2AM-MRY2540 Type "A"			
D	Geographic Place Name or Distance and Direction from the Named Location: Mary River Project Mine Site, Baffin Island, NU		Region: ☐ NT ☒ Nunavut ☐ Trans-boundary or Ocean		
E	Latitude: 71 Degrees 18 Minutes 52 Seconds		Longitude: 79 Degrees 16 Minutes 59 Seconds		
F	Responsible Party or Vessel Name: Baffinland Iron Mines Corp.		Responsible Party Address or Office Location: 360 Oakville Place Dr, Suite 300, Oakville, ON, Canada, L6H6K8		
G	Any Contractor Involved: N/A		Contractor Address or Office Location: N/A		
H	Product Spilled: ☐ Potential Spill Grey water	Quantity in Litres, Kilograms or Cubic Metres: 100-130 L	U.N. Number: N/A		
I	Spill Source: Mine Site Complex-Dry lift station	Spill Cause: Pump failure	Area of Contamination in Square Metres: 8		
J	Factors Affecting Spill or Recovery: N/A	Describe Any Assistance Required: N/A	Hazards to Persons, Property or Environment: N/A		
K	Summary of the spill incident and efforts / description of the incident: On July 30, 2025 at 4:30 am, a building maintainer was completing their daily shift inspection of a lift station at the Mine Site Complex (MSC) and noticed water on the ground in the surrounding area. Upon further inspection of the holding tank, the high level pump within had failed to start, resulting in the overflow of grey water from the tank. A second pump was used to drain the holding tank. The facilities within the MSC that drain to this holding tank were taken out of service. Clean-up efforts are underway. This spill is being reported as required by the conditions of Water License no. 2AM-MRY2540, Part H, item 9(b) pursuant to subsection 12(3) of the Nunavut Waters and Nunavut Surface Rights Tribunal Act.				
L	Reported to Spill Line by: Shannon Mulhall	Position: Environmental Specialist	Employer: Baffinland Iron Mines	Location Calling From: Baffinland	Telephone: (647) 253-0956
M	Any Alternate Contact: William Bowden	Position: Environmental Manager	Employer: Baffinland Iron Mines	Alternate Contact Location: Baffinland	Alternate Telephone: (647) 253-0956

REPORT LINE USE ONLY

N	Received at Spill Line by:	Position:	Employer:	Location Called:	Report Line Number:
Lead Agency: ☐ EC ☐ CCG/TCMS ☐ GNWT ☐ GN ☐ ILA ☐ CIRNAC ☐ CER ☐ Other:				File Status: ☐ Open ☐ Closed	
Agency:	Contact Name:	Contact Time:	Remarks:		
Lead Agency:					
First Support Agency:					
Second Support Agency:					
Third Support Agency:					

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Enforcement Officer
Environment and Climate Change Canada
933 Mivvik Street
Iqaluit, NU X0A 0H0

Re: Follow-Up to Spill #2025-226

Mary River Project - Water Licence No. 2AM-MRY2540 – 2025 End of Year Summary

Summary/Background

The KM 105 Surface Water Management Pond (KM 105 Pond) was constructed as a key component of Baffinland's efforts to improve water management in accordance with Water Licence Modification No. 13, submitted to the Nunavut Water Board (NWB) on June 30, 2021. This modification aimed to address previous sedimentation issues observed at Deposit 1. Modification No. 13 was an adaptive management measure supported by a significant capital investment by Baffinland to better manage runoff from the Deposit, Mine Haul Road and surrounding hillside. Construction of the KM 105 Pond was completed in June 2022, and the facility was immediately commissioned to manage freshet runoff. However, the KM 105 Pond did not perform as expected and settling performance observed during 2022, 2023 and 2024 freshet periods did not meet the design intent. In response, Baffinland undertook a comprehensive evaluation of the KM 105 Pond's performance. From that evaluation, the treatment strategy for the KM 105 Facility was adjusted with the KM 105 Pond reconfigured in 2025 to function as a passive flow-through system in conjunction with the use of flocculent.

To support the new strategy, Baffinland included a SNP modification request with the submission of the 2024 QIA and NWB Annual Report for Operations on March 31, 2025 (Appendix E.12) to relocate the MS-11 monitoring location downstream of the surface water management pond. The purpose of the proposed relocation is to allow for the incorporation of additional mitigation measures to ensure water quality effluent limits are respected, and to relocate the monitoring location to an area which flows can be accurately monitored and is representative of effluent from the KM 105 valley water treatment infrastructure. A copy of that SNP modification request is included as Attachment 3.

This end of year report provides a full summary of KM 105 Facility historical operations, remediation and mitigation measures, as well as, 2025 water quality results and mitigation performance, and the proposed 2026 water management approach.

2022 Operations, Seepage and Remediation

On June 9, 2022, a controlled discharge was initiated from the KM 105 Pond through the permitted Final Discharge Point (FDP); MS-11, in accordance with Baffinland's Metal and Diamond Mining Effluent

Regulations (MDMER) Emergency Response Plan, to reduce the effluent level within the pond. The discharge was a result of a major snow event the previous week, an unexpected freeze up that limited settling, followed by an extreme pond melt, all of which affected the overall capacity of the pond.

In response to these challenges, Baffinland refined the operating strategy for the KM 105 Pond including implementing continued use of flocculants and coagulants to expedite settling times, an internal mixing system to speed up the reaction, as well as, the installation of two (2) silt curtains upstream of the intake pumps to provide additional polishing and aid in suspended solids management as water flowed into and through the pond.

Baffinland continued to discharge compliant effluent throughout the remainder of the 2022 freshet period and into the drier season of July, in compliance with all applicable requirements. By July 14, 2022, the pond had been pumped down to its minimum operating level. However, on the evening of July 14, the system control software recorded an unexpected decrease in the water level within the pond. A visual inspection conducted shortly thereafter confirmed seepage from the dam structure.

In response to the observed seepage, Baffinland engaged a third-party design consultant to evaluate potential remediation measures. Based on their analysis of site investigations and available data, the consultant determined that the seepage likely originated from the area immediately upstream of the northwest embankment geomembrane tie-in trench, where the trench transitions from the upstream embankment to the abutment slope.

The remediation plan recommended by the third-party consultant included the installation of a cut-off trench, with trench soils augmented by a bentonite mixture. This approach was designed to improve the existing anchor trenches at the toe and on the abutments by increasing the depth where no permafrost was present and/or extending their width, thereby decreasing the permeability of the fill material. In addition, an insulation cover was recommended to protect the permafrost during the melting season.

Remedial construction was completed in September 2022 to fully seal and patch the identified seepage area. This work was successfully completed and the area was effectively sealed, as understood at the time by the design consultant, Knight Piésold Ltd. and Baffinland.

2023 Operations, Seepage and Remediation

Observations in 2023 confirmed that remediation measures implemented to address the seepage that occurred in 2022 functioned as intended. During the 2023 freshet, initial flows into the KM 105 Pond were successfully retained by the dam structure. However, in May 2023, a new seep was identified. Upon investigation, it was determined the seepage was originating from an area up-gradient of the 2022 seepage site and appeared to be related to the native substrate material beneath the pond, allowing water to bypass the retention features of the dam structure. During the August 2024 annual geotechnical inspection, no concerns were identified with the structural integrity of the KM 105 dam as a result of observed seepage by the third-party geotechnical engineer.

At the direction of the Engineer of Record (EOR), multiple bentonite plugs were attempted to seal the seepage in the base of the KM 105 Pond; however, the attempts were unsuccessful. Additional remedial measures aimed at improving settling performance and mitigating further seepage issues were implemented and include:

- **Treatment of Influent Water:** Influent water was initially manually treated with ferric sulfate dosing and passive polymer flocculent block deployments to encourage faster settling of the particles within the pond. The process was later upgraded to an automated dosing system to enhance chemical dosing efficiency and precision. This pre-dosing system comprised of coagulants and flocculants and was used to passively remove solids from the water flowing into the KM 105 Pond from Deposit 1.
- **Installation of Sediment Curtains and Check Dams:** Sediment curtains were installed within the pond to promote settling of particulates prior to water reaching the seep location, helping to prevent suspended solids from bypassing the retention features. Check dams were also constructed within the pond to reduce water velocities and encourage settling of suspended solids in accordance with Baffinland's Surface Water and Aquatic Ecosystem Management Plan (SWAEMP) for sediment control.
- **Floating Silt Curtain:** A turbidity silt curtain was installed immediately downstream of the seep, in the nearest water body, to reduce the potential for increased TSS downstream in the Sheardown Lake Tributary-1 (SDLT-1) upper reach.
- **Construction of Aggregate Pad/Geotube® Filtration System:** An aggregate pad was constructed at the base of the KM 105 Pond spillway to facilitate the installation and operation of a Geotube® filtration system. The Geotube® filtration system was subsequently installed and tested prior to winter conditions for pump operations.
- **Engineering/Design/Procurement/Fabrication of Polishing Water Treatment System:** An engineering firm was engaged to design a water treatment system capable of polishing water within the pond with residual TSS to regulatory compliance limits. The chosen system consisted of a series of two clarifiers and two media filter banks that was intended to be employed to treat and release water within the pond with elevated TSS, if necessary. The water treatment system was designed, and parts procured in 2023, with construction beginning in 2023, and continuing into 2024. The water treatment system experienced difficulties operating resultant of pumps cavitating due to dam seepage.

A geotechnical drilling program in late 2023 was then completed to obtain detailed data relating to the subsurface conditions to support the design of a comprehensive remediation strategy for the KM 105 Pond. This information was used by the third-party engineering consultant to develop a detailed remediation plan. Borehole drilling results were used to design a grout curtain installation and establish grout injection volumes. A grout plant was commissioned on site, and the remediation strategy commenced up-gradient of the dam. Larger than anticipated grouting injection rates per hole were experienced. A second grout plant was locally mobilized however the volume of grout originally anticipated for this project and transported on the 2023 sealift was fully consumed prior to design objectives being achieved. Cement and bentonite were sourced locally to supplement.

The volume of grout injected at the KM 105 Dam Grout Curtain project well exceeded the engineered forecast (>500m³ actual vs. 48m³ forecast) due to encountering unexpectedly large and numerous formation voids. On May 20, 2024, the project was shut down due to melt conditions progressing.

In addition to the grout curtain installation, Baffinland inquired with the EOR to investigate the addition of a seepage collection system to capture any potential residual seepage at the toe of the dam structure,

with the intent to redirect water back to the dam.

2024 Operations, Seepage and Remediation

In May 2024, an uncontrolled release from the KM 105 Pond occurred due to seepage originating from a discrete location upstream of the northwest embankment, distinct from the seepage locations reported in 2022 and 2023.

Initial field readings showed elevated pH levels of 11.8 within the adjacent area down-gradient of the dam. The downstream receiving environment remained frozen at the time, preventing the water from migrating to the receiving environment and instead it pooled about 60 meters downstream of the toe of the northwest embankment.

Immediate containment actions were taken including reinforcing the existing earthen berm to create a collection area at the seepage location, and installing pumps to return water to the pond. Additional mitigation measures involved installation of a pre-treatment system for the addition of flocculant, lime, and/or ferrous sulfate to control pH and promote the settling of suspended solids, installation of a silt curtain upstream of the dam, and placement of floc blocks within the drainage ditch inflow to the pond.

On May 20, Baffinland initiated a controlled discharge from the seepage collection sump at the toe of the KM 105 Facility due to the seepage rate exceeding the pumping capacity and the inability of the newly installed grout curtain to retain water within the northwest embankment. Despite the discharge, water continued to be pumped back into the pond to minimize the volume of discharge to the environment. Modifications were also made to the Geotube® and seepage collection area to enhance containment and reduce further seepage.

KM 105 Pond water treatment via pre-dosing the pond inflow continued through the open water season, with an operator monitoring water quality and manually adjusting the chemical dosing system at the pond's inflow. At the effluent discharge location, a two-stage polishing system consisting of a clarification stage and a multimedia filtration stage was commissioned on June 12, 2024 to reduce TSS in the collected seepage. However, the water treatment plant experienced difficulties operating due to the pumps cavitating without sufficient water to draw from due to experienced seepage.

Additionally, if necessary, any excess collected seepage or treated effluent was planned to be managed through the Geotube® filtration system, installed at the close of the 2023 open water season. During the commissioning phase of the water treatment system, however, thawing of the temporary retention berms occurred, leading to the migration of water through the berms. This thawing compromised the ability to consistently supply ponded water to the water treatment system or Geotube® filtration system.

2025 Operations & Mitigations

The treatment strategy employed for 2025 effectively incorporated the installation of passive and active treatment systems that reduced reliance on “ponding” (retention-based settling) and reconfigured the KM 105 Pond to a flow-through multi-faceted water treatment facility (henceforth referred to as the KM

105 Facility). To support the new strategy, MS-11 was relocated to the proposed new monitoring location downstream of the KM 105 valley water management infrastructure where flow could reliably be monitored and effluent was representative of the KM 105 Facility. The relocation of the monitoring point was registered with the Nunavut Water Board on March 31st 2025. Engineering is ongoing to develop a Final Discharge Point with Environment and Climate Change Canada to meet MDMER requirements.

On May 22, 2025, flow was observed at the relocated MS-11 monitoring location. Prior to the onset of flow at MS-11, mitigation measures were in place and maintained in accordance with best management practices. Repairs and preparations to two (2) silt curtains within the MS-C-F pond (upstream of MS-11) were completed on May 18, 2025. In March 2025, in preparations for surface water flows, a filter berm was installed to increase flocculant retention capacity, slow velocity of surface water and filter suspended particles from the waters within the KM 105 Facility, reducing TSS before water reaches MS-11. In addition, the polymer treatment and dosing system at the KM 105 inflow was prepared in advance of flow initiation to promote floc formation and settling within the facility. The dosing system, in operation since 2024, produced notable water quality improvements in 2024. Floccs generated by polymer treatment are retained by the rock filter berm and Dam within the KM 105 Facility to enhance flocculant retention within the facility via filtration and settling.

Following confirmation of flow at MS-11, additional measures were implemented immediately to reinforce existing controls and further reduce TSS. These actions included installation of an additional silt curtain and deployment of flocculant blocks downstream of the KM 105 Facility and upstream of MS-11. The polymer dosing system was also activated upon observing flow within the KM 105 Facility. Water quality and flow monitoring within the facility were used to adjust polymer dosing in near real time to effectively manage and reduce TSS.

Erosion and sediment control measures implemented at the KM 105 Facility during the 2025 season are shown in Figure 1.

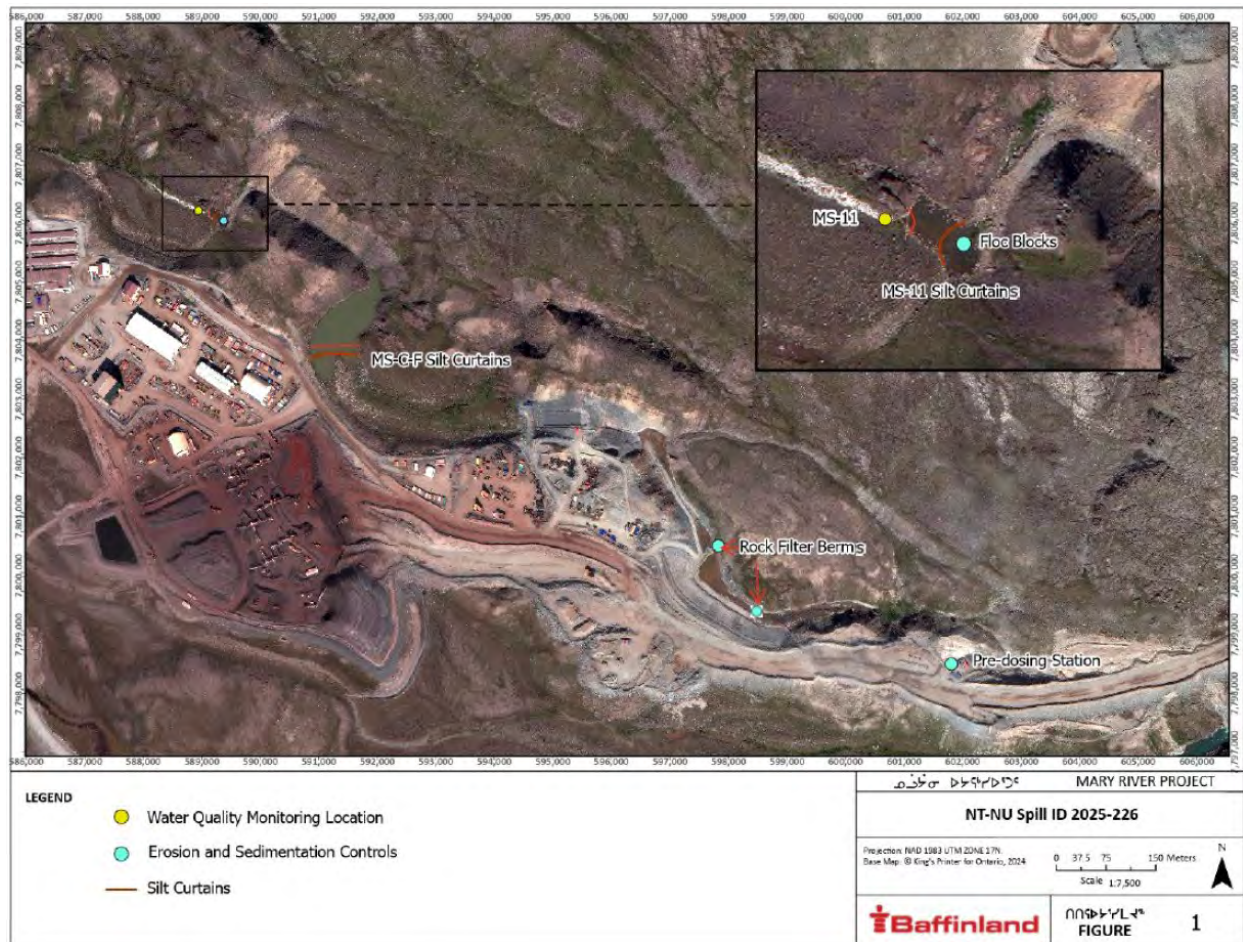


Figure 1 – Mitigations and Erosion and Sedimentation Controls at the KM 105 Pond in 2025

2025 Quantity and Water Quality

Water Quantity Monitoring:

Following the onset of flow through the proposed MS-11 monitoring location, discharge quantity was estimated through daily flow measurements at the MS-11 location. In June, once consistent warmer temperatures and ice-free conditions were established, pressure transducers were installed at the downstream hydrology station (MS-C-A/B) to support discharge volume estimation. With the onset of colder temperatures and snowfall in the region, the pressure transducers were removed on September 9, 2025. Following removal, weekly spot flow measurements were conducted to estimate discharge and were extrapolated to the corresponding week. Frozen conditions prevailed at MS-11 following the October 6, 2025 site visit.

Water Quality Monitoring and Performance:

Monthly Water Licence sampling continued at MS-11 when flowing water was present, consistent with the SNP Modification Request. Water quality monitoring was also conducted in accordance with the MDMER as a due diligence measure until the MS-11 Final Discharge Point (FDP) is constructed and the location can be re-registered with Environment and Climate Change Canada (ECCC). The following is a

summary of results of 2025 water quality sampling at MS-11 and downstream receiving environment monitoring station D1-05:

TSS Exceedance (MS-11): On May 22, 2025, a grab sample collected at MS-11 reported TSS of 31.2 mg/L, slightly above the 30 mg/L grab-sample criterion under the Water Licence and MDMER. Follow-up sampling on May 24, 2025 confirmed TSS concentrations were reduced to below 30 mg/L.

TSS Monthly Mean (MS-11): The May monthly mean TSS at MS-11 was 20.6 mg/L, which exceeded the Water Licence monthly mean maximum concentration of 15 mg/L. The May monthly mean is based on three (3) samples, including one non-permitted follow-up spill sample.

Downstream Receiving Environment (D1-05): Follow-up monitoring was completed at receiving environment monitoring station D1-05 on May 24, 2025, including the full suite of MDMER parameters and acute lethality testing. D1-05 is located approximately 300 m downstream of MS-11 on SLDT-1 and represents the nearest fish-bearing waters. All parameters analyzed at D1-05 were below applicable criteria. Figure 2 shows the results of TSS concentrations in water samples collected at D1-05 in 2025.

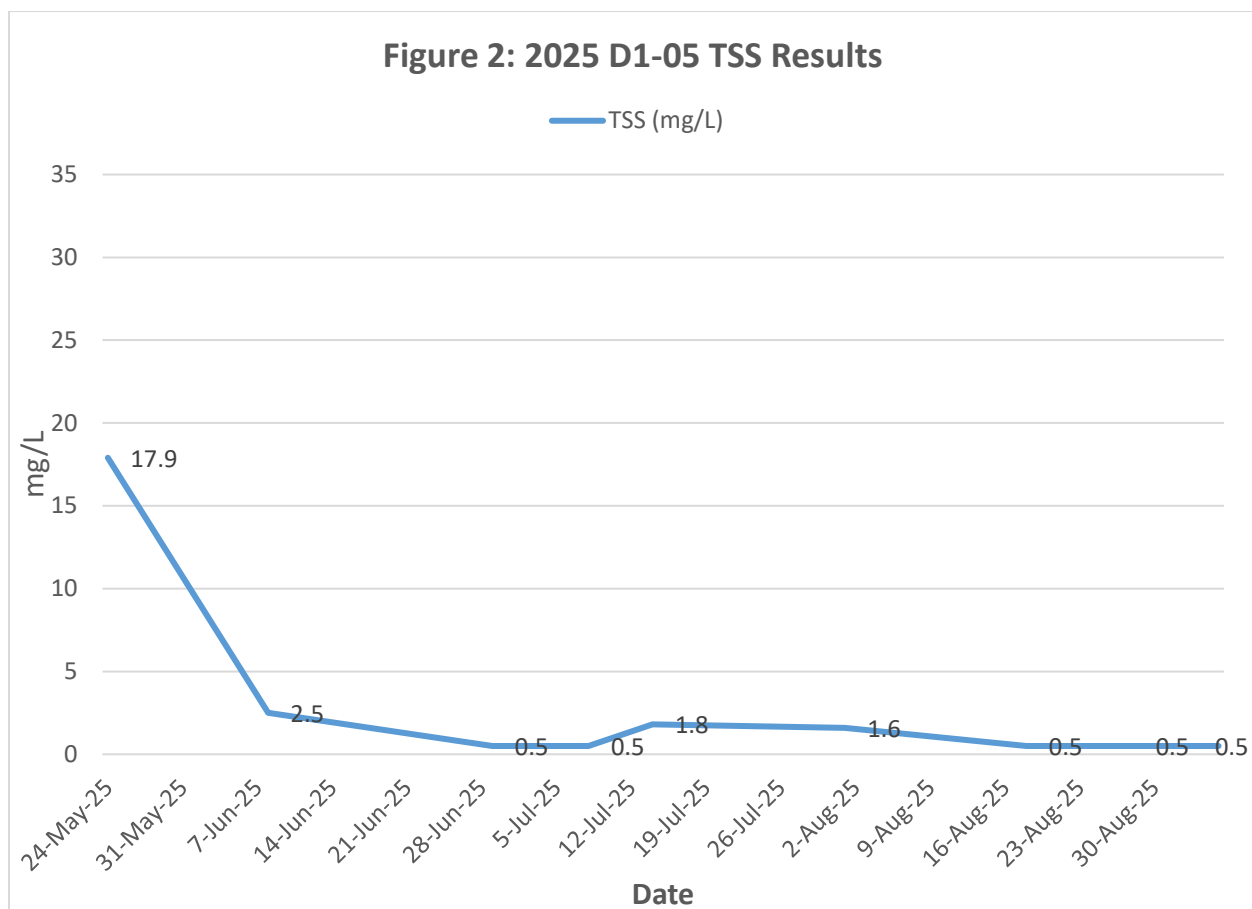


Figure 2 – TSS Concentrations in Water Quality Samples at D1-05 in 2025

Acute lethality: Acute lethality results from MS-11 on May 22 and D1-05 on May 24 indicated the discharge was not acutely lethal to aquatic life.

Effluent quality at MS-11 remained compliant for the remainder of the open-water season and through the end of the year when flow was present. Figure 3 shows the results of TSS concentrations in water samples collected at MS-11 in 2025.

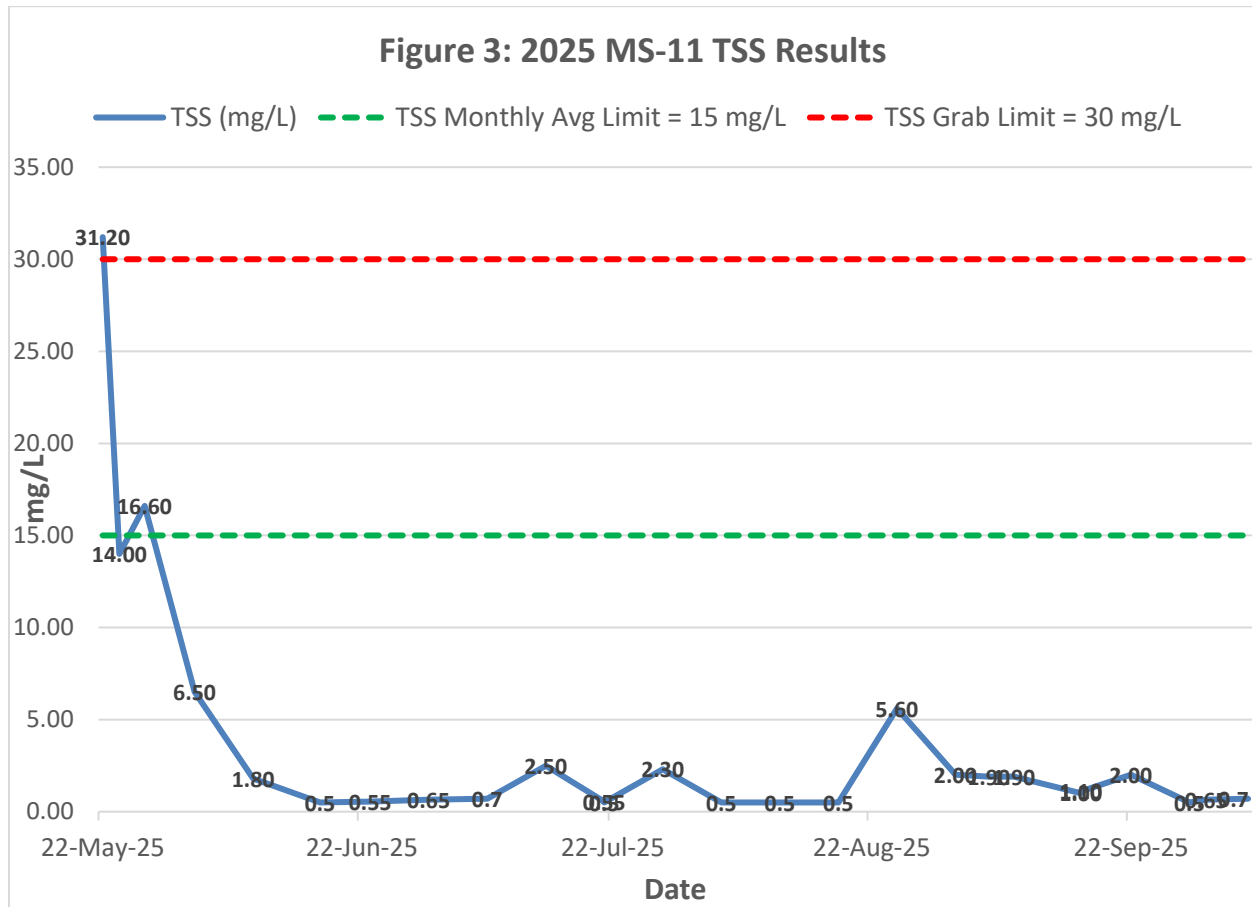


Figure 3 – TSS Concentrations in Water Quality Samples at MS-11 in 2025

Referenced water quality monitoring locations are shown in Figure 4. All analytical results collected under the Water Licence, including due diligence samples collected consistent with MDMER requirements, and any additional ad hoc spill follow-up samples are provided in Attachment 2. All samples were submitted to an accredited external laboratory for analysis.

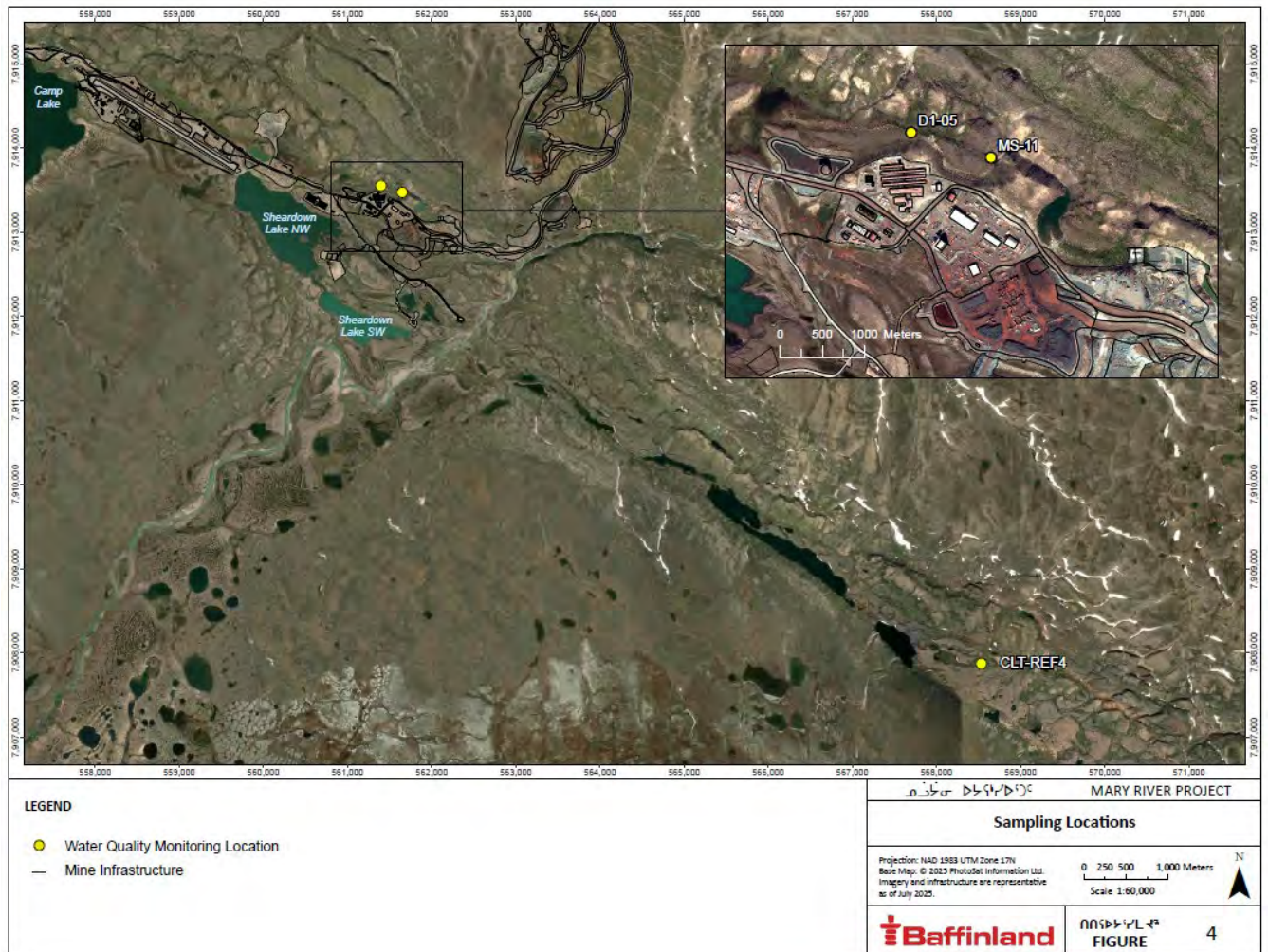


Figure 4 – Water Quality Monitoring Locations

2026 Water Management Planning

Baffinland continues to work with third-party specialist engineers to evaluate feasible water-management strategies for 2026 to manage surface water flows from the contributing catchment and site infrastructure that reports to the KM 105 Facility. The current design emphasizes a passive, flow-through treatment approach that can be supplemented, as needed, with flocculant dosing and filter berms. Continuous treatment of water as it moves through the system is intended to maintain through-flow while using the Facility’s water management features to slow velocities and promote the settling and filtration of suspended particles. This operating approach reduces the likelihood of downstream hydrograph alteration and associated effects such as channel scour, bed instability, fish stranding, and disturbance to juvenile rearing habitat in low-order fish-bearing reaches of the SLDT-1 system.

Baffinland considers this approach appropriate based on the 2025 season performance, during which only one (1) TSS exceedance was recorded and the exceedance was only marginally above the maximum allowable limit. In addition, observations supported this exceedance to be attributed to dust impacted snow melt and not effluent traveling through the Facility. Baffinland will continue to reinforce the existing

mitigations with targeted additional infrastructure in efforts to reliably maintain effluent quality below applicable limits.

The planned design additions being scoped during 2026 include: (1) an engineered filter berm within the KM 105 Facility, upstream of the dam structure, and downstream of the chemical injection point; and (2) an engineered FDP that provides a single controlled conveyance path for water sampling and flow measurement. The engineering is ongoing for both additions to the Facility and timing of construction will be dependent on completion of engineering and approvals from regulatory stakeholders.

Engineered Filter Berm:

Drawing from the performance of the prior non-engineered proof-of-concept berm within the KM 105 infrastructure, the engineered filter berm is intended to capture flocs for design event with a recurrence of 10-year and more. The berm location has been selected to support safe access for routine inspection, cleaning, and planned maintenance. The proposed filter berm system includes clean coarse and fine rockfill materials and a nonwoven geotextile liner. General seepage within the rock filter berm is expected to follow a controlled flow path through the granular material, promoting drainage toward the downstream toe.

Engineered FDP:

The engineered FDP will consolidate discharge to a single conveyance path, enabling representative effluent sampling and reliable measurement of total discharge volumes. The FDP will be designed to enable outflow measurement up to the 10-year flow, and to withstand the 200-year flow without structural failure.

This approach aligns with—and in some areas is intended to exceed—the principles and guidelines of the International Erosion Control Association (IECA). Detailed design elements are currently under review and may be refined as engineering advances toward final Issued-for-Construction (IFC) drawings for review and acceptance.

Figure 5 below outlines the components of the sediment control measures proposed. Exact locations and configurations of the infrastructure are still under evaluation by a third-party engineering consultant and will be field fitted during construction.



Figure 5 – Sediment Control Measures

Closure

This summary provides an overview of the work completed to date by Baffinland to address water management at the KM 105 Facility. Baffinland remains committed to adaptive management and proactive mitigation to protect the surrounding environment. As described above, the current 2026 mitigation approach includes additional controls proposed within the KM 105 Facility to support a passive, flow-through treatment approach, and an engineered FDP that provides a single controlled conveyance path for water exiting the MS-C-F Pond, and further downstream, in advance of fish-bearing reaches.

We trust this information adequately characterizes the actions completed to date and outlines the status of 2026 planning for management of runoff from the Deposit 1 catchment area.



March 31, 2026

Cc: Jeremy Fraser, Sean Naullaq, Darren Kennedy (CIRNAC)
Andrew Jaworenko, Amoudla Kootoo, (QIA)
Curtis Didham, Shauna Seeteenak, (ECCC)
Megan Lord-Hoyle, Lou Kamermans, Francois Gaudreau, Scot Klingman, Todd Swenson,
Laurence Serra, Allison Parker, Irniq Lecompte (Baffinland)

Attachments

Attachment 1: Baffinland Follow-up to Spill #2025-226
Attachment 2: 2025 Water Quality
Attachment 3: 2025 SNP Modification Request
Attachment 4: Photo Journal



March 31, 2026

Attachment 1
Baffinland Follow-up to Spill #2025-226

June 23, 2025

Resource Management Officer
Nunavut Region
Crown Indigenous Relations and Northern Affairs Canada
Box 100
Iqaluit, NU X0A 0H0

Regulatory Manager
Qikiqtani Inuit Association
P.O. Box 219
Iqaluit, NU X0A 0H0

Enforcement Office
Environment and Climate Change Canada
933 Mivvik Street
Iqaluit, NU X0A 0H0

Re: Follow-Up to Spill #2025-226
Mary River Project - Water Licence No. 2AM-MRY2540

Summary:

On May 22, 2025, water was observed flowing at the proposed MS-11 discharge location (MS-11), situated downstream of the Km 105 valley water management infrastructure (KM105 Pond). In accordance with applicable monitoring requirements, effluent characterisation and acute lethality testing was conducted and submitted to an accredited third-party laboratory for analysis. Preliminary results identified elevated Total Suspended Solids (TSS), with a measured concentration of 31.2 mg/L on May 24th 2025. Further, on May 24th, in response to receiving the elevated TSS result, water quality characterization and an acute toxicity sample was taken at the downstream receiving location of D1-05; the water quality was not acutely toxic. The exceedance occurred on Inuit owned land approximately 350m from water quality station D1-05, the nearest fish bearing water.

Immediate and Follow-Up Action:

Prior to the observed flow at the MS-11, mitigation measures were actively implemented and maintained in alignment with best management practices. Notably, repairs and preparations to two silt curtains within the MS-C-F settling pond were completed on May 18. In addition, two water management filter berms originally installed in March to bolster settling capacity within the Km 105 Pond continued to effectively reduce TSS prior to the water reaching MS-11. Polymer treatment and dosing systems were also prepared for implementation prior to flow commencement to promote settling of TSS within the KM 105 Pond.

In response to the turbid water flowing through the MS-11 discharge point, additional treatment measures were investigated and promptly implemented. This included the installation of an additional silt curtain, in conjunction with flocculent blocks, downstream of the Km 105 Pond and upstream of the discharge location. Furthermore, the dosing system previously used was reactivated upon observing flows within the Km 105 Pond. This system doses water entering the KM105 Pond prior to the filter berms, with a polymer to enhance the settling of suspended solids prior to discharge.

Weekly follow up water quality monitoring was conducted (Attachment 3) at MS-11. Analytical results indicate TSS concentrations immediately returned below 30mg/l, below the applicable maximum concentration threshold. Water quality sampling continues to be conducted in accordance with the Water Licence and the Metal and Diamond Mining Effluent Regulations (MDMER) and no further exceedances for deleterious substance grab criteria have been

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received. The monthly mean TSS result of 23.9 mg/l at MS-11 exceeded 15mg/l. The current available water quality results at the MS-11 discharge location are presented in Attachment 3.

In addition, monitoring included a full suite of MDMER sampling plus acute lethality on May 24 at the downstream monitoring location D1-05 as per Baffinland's Metal and Diamond Mining Effluent Regulations Emergency Response Plan (BIM-5000-PLA-0003). The results of the acute lethality sample collected from the MS-11 discharge point on May 22, and the downstream monitoring location D1-05 on May 24, indicated that the release was not acutely lethal. The current available water quality results at D1-05 are presented in Attachment 3.

Daily monitoring has been completed since the start of the response to the observed flow and the results have been used to inform water treatment dosage requirements as water continues to flow.

Mitigation/Treatment

Baffinland continues to actively monitor MS-11 to assess both water quantity and quality. In addition, the dosing system at the inflow of the KM105 Pond is continuing to operate. Water quality and flow rate monitoring within the Km 105 Pond is utilised to adjust polymer dosing in real time to effectively control and reduce total suspended solids (TSS).

Furthermore, the previously mentioned Erosion and Sediment Control (ESC) measures—including silt curtains, floc blocs, and filter berms—remain in place and continue to demonstrate effectiveness in reducing sediment transport within the continuous discharge.

Current Status:

Regulatory monitoring under the MDMER and water licence will continue at MS-11. Baffinland will continue to collect monthly water licence and MDMER samples for the relevant parameters at MS-11.

Discharge continues at MS-11 and operation of the KM105 water management infrastructure remains active.

Baffinland is actively reviewing and advancing the design of additional improvements to the KM105 Pond with a focus on enhancing sediment control measures for runoff originating from the valley infrastructure. This process includes engagement with a third-party engineer and design consultant to progress the design on an engineered structure intended to serve as the final control point (FDP) for MS-11.

As per Section 31 of the Metal and Diamond Mining Effluent Regulations:

- a. Total Suspended Solids at a concentration of 31.2mg/L grab and 23.9 monthly mean at the proposed MS-11 discharge point.
- b. The estimated volume of discharge above 30mg/l is not known
- c. The release occurred at approximately 12:30 on May 22, 2025.
- d. N/A
- e. The quantity of TSS that flowed through the proposed MS-11 Final Discharge Point (FDP) is unknown.
- f. The incident occurred on IOL, located approximately 350m from D1-05 a sample site on Sheardown Lake Tributary-1, the nearest fish-bearing waters. The receiving body of water that MS-11 discharges into is Sheardown Lake.

- g. On May 22, acute toxicity samples were collected from the proposed MS-11 discharge point and on May 24, acute toxicity samples were collected at D1-05. The sample results indicate the discharge was not acutely lethal.
- h. See the summary above for the circumstances of the discharge release. Sedimentation mitigation measures installed prior to the discharge continue to operate and manual adjustments of the polymer treatment system at the inflow to the KM 105 Pond are ongoing to reduce and control TSS levels.
- i. See the summary above for the measure taken. A third part consultant has been contracted to design the KM105 Pond FDP and further design on filter berms.

Should you require further information or clarification on the above-noted spill, please feel free to contact the undersigned at (647) 253-0596 x6016

Prepared by:

William Bowden

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Environmental Manager

Reviewed by:

Jacob Prince

Jacob Prince

Technical Services Superintendent

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Attachments:

Attachment 1: Spill Location Map

Attachment 2: Photos

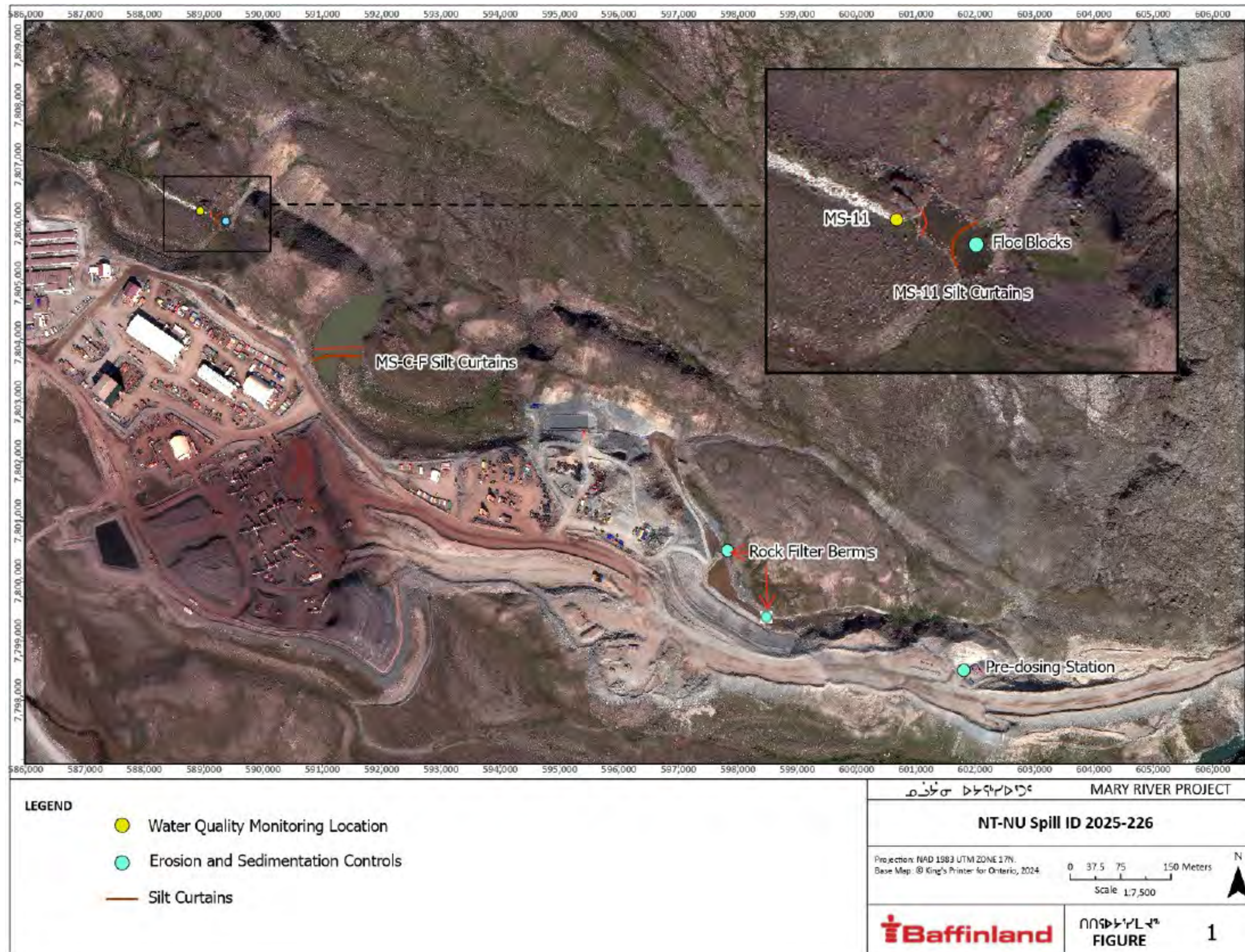
Attachment 3: Water Quality Results

Attachment 4: Baffinland NT-NU Spill Report #2025-226

Attachment 1 Spill Location Map

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Attachment 2 Photos

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Photo 1: Flowing Water at Proposed MS-11 Discharge Point - May 22, 2025



Photo 2: Flowing Water at Proposed MS-11 Discharge Point - May 24, 2025

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Photo 3: Flowing Water at Proposed MS-11 Discharge Point - June 17, 2025



Photo 4: Flowing Water at Downstream Monitoring Location D1-05 - May 24, 2025



Photo 5: Flowing Water at Downstream Monitoring Location D1-05 - June 8, 2025



Photo 6: Maintenance and Preparation of Silt Curtains at MS-C-F Settling Pond Downstream of the Dam - May 18, 2025



Photo 7: Filter Berm within KM 105 Valley Water Management Infrastructure - March 31, 2025



Photo 8: Installation of Silt Curtain Upstream of the Proposed MS-11 Discharge Location - May 23, 2025

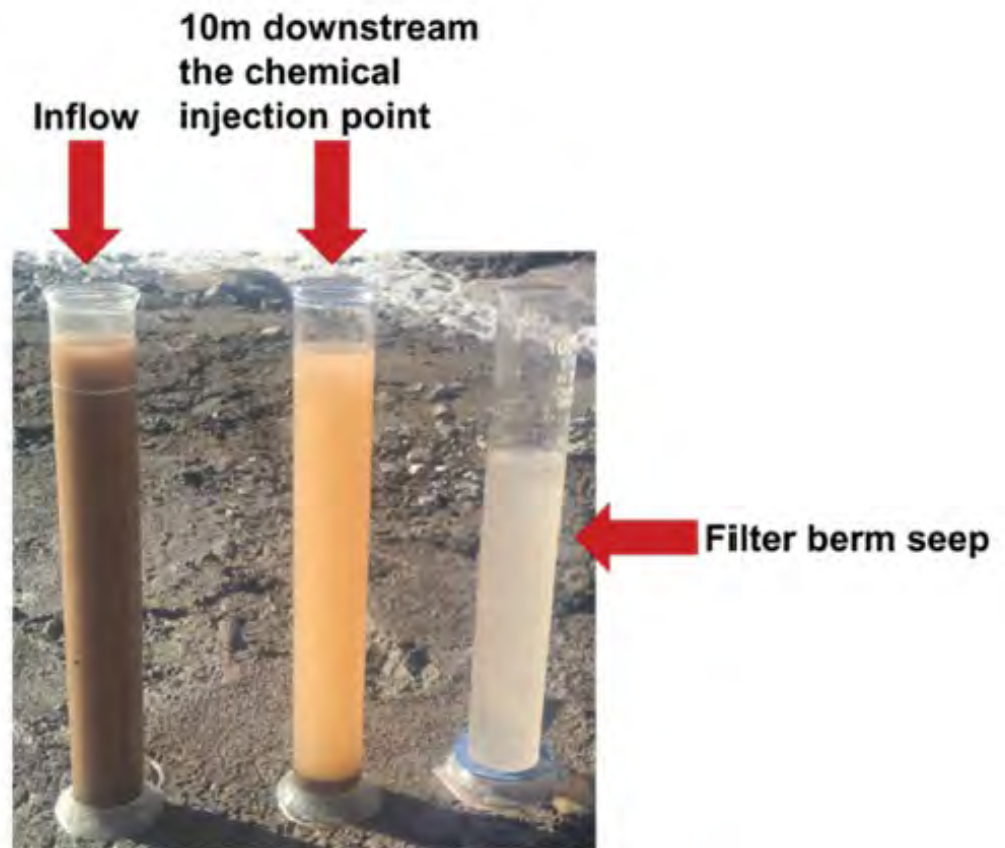


Photo 9: Polymer dosing mitigating sediment transport within the Km105 Valley Water Management infrastructure

Attachment 3 Water Quality Results

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Location Name			MS-11	MS-11	MS-11	MS-11
Sample Date & Time			2025-05-22 12:30	2025-05-24 23:55	2025-05-27 14:05	2025-06-02 8:50
ALS Laboratory Work Order			BF2500010	BF2500015	BF2500023	BF2500034
Sample Type			P	NP	P	P
Analyte	Units	Criteria Max Concentration				
pH, Field	pH units		7.83	7.47	7.64	7.55
Specific Conductivity, Field	us/cm		185.7	117.7	119.4	134.2
Temperature, Field	deg C		0.3	0	0.4	0.6
pH, Lab	pH units	6.0-9.5	7.41	7.4	7.46	7.49
Total Suspended Solids	mg/L	30	31.2	14	16.6	6.5
Turbidity, Field	NTU		118.87	75.12	71.25	13.15
Total Dissolved Solids	mg/L		131	91	82	88
Turbidity	NTU		98.8	81.7	80.2	17.4
Hardness	mg/L		69.7	-	-	-
Conductivity	umhos/cm		161	-	125	142
Alkalinity, Total	mg/L		33.7	-	-	-
Ammonia, Total (as N)	mg/L		0.196	-	0.119	-
Chloride	mg/L		6.69	-	-	-
Fluoride	mg/L		0.093	-	-	-
Nitrate	mg/L		2.16	-	-	-
Total Kjeldahl Nitrogen	mg/L		1.43	-	-	-
Sulfate	mg/L		33.3	-	-	-
Dissolved Organic Carbon	mg/L		5.84	-	-	-
Total Organic Carbon	mg/L		6.52	-	-	-
Aluminum - Total	mg/L		2.52	-	2.08	0.241
Antimony - Total	mg/L		< 0.0005	-	< 0.001	< 0.0001
Arsenic - Total	mg/L	0.6	< 0.0005	-	< 0.001	0.00011
Barium - Total	mg/L		0.0247	-	0.0181	0.00647
Cadmium - Total	mg/L		0.000107	-	0.000093	0.0000581
Calcium - Total	mg/L		12.5	-	8.06	9.84
Chromium - Total	mg/L		0.00565	-	< 0.005	0.00068
Cobalt - Total	mg/L		0.002	-	0.00148	0.00034
Copper - Total	mg/L	0.6	0.00714	-	0.00548	0.00202
Iron - Total	mg/L		3.71	-	2.93	0.314
Lead - Total	mg/L	0.2	0.00246	-	0.00162	0.00036
Lithium - Total	mg/L		0.0076	-	< 0.01	0.0032
Magnesium - Total	mg/L		12.1	-	8.3	9.35
Manganese - Total	mg/L		0.0989	-	0.0818	0.0426
Mercury - Total	mg/L		< 0.000005	-	-	-
Molybdenum - Total	mg/L		0.00524	-	0.00426	0.00362
Nickel - Total	mg/L	1	0.00639	-	0.00556	0.00125
Phosphorus, Total	mg/L		< 0.25	-	< 0.5	< 0.05
Potassium - Total	mg/L		6.08	-	4.48	3.33
Selenium - Total	mg/L		0.000434	-	< 0.0005	0.000204
Sodium - Total	mg/L		3.02	-	1.4	1.33
Strontium - Total	mg/L		0.0371	-	0.0202	0.0234
Thallium - Total	mg/L		0.000051	-	< 0.0001	0.00001
Tin - Total	mg/L		< 0.0005	-	< 0.001	< 0.0001
Titanium - Total	mg/L		0.0958	-	0.0691	0.00805
Uranium - Total	mg/L		0.00206	-	0.00117	0.00106
Vanadium - Total	mg/L		0.00375	-	< 0.005	< 0.0005
Zinc - Total	mg/L	1	< 0.015	-	< 0.03	< 0.003
Aluminum - Dissolved	mg/L		0.023	-	-	-
Arsenic - Dissolved	mg/L		< 0.0005	-	-	-
Cadmium - Dissolved	mg/L		0.0000426	-	-	-
Calcium - Dissolved	mg/L		12.1	-	-	-
Copper - Dissolved	mg/L		0.00219	-	-	-
Iron - Dissolved	mg/L		< 0.05	-	-	-
Lead - Dissolved	mg/L		< 0.00025	-	-	-
Magnesium - Dissolved	mg/L		9.6	-	-	-
Manganese - Dissolved	mg/L		0.025	-	-	-
Mercury - Dissolved	mg/L		< 0.000005	-	-	-
Molybdenum - Dissolved	mg/L		0.00596	-	-	-
Nickel - Dissolved	mg/L		< 0.0025	-	-	-
Potassium - Dissolved	mg/L		5.3	-	-	-
Selenium - Dissolved	mg/L		0.000389	-	-	-
Sodium - Dissolved	mg/L		2.92	-	-	-
Thallium - Dissolved	mg/L		< 0.00005	-	-	-
Uranium - Dissolved	mg/L		0.0014	-	-	-
Zinc - Dissolved	mg/L		< 0.005	-	-	-
Phosphorus, Nutrient	mg/L		0.0414	-	-	-
Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Mean Mortality - Daphnia magna	-	Not Acutely Toxic	Not Acutely Toxic	-	-	-
Mean Mortality - Rainbow Trout	-	Not Acutely Toxic	Not Acutely Toxic	-	-	-

Note:
Sample results are preliminary for sample taken on May 27
Sample results are preliminary for sample taken on June 2



Location Name		D1-05	D1-05
Sample Date & Time		2025-05-24 7:40	2025-06-08 15:25
ALS Laboratory Work Order		BF2500013	BF2500050
Sample Type		P	P
Analyte	Units		
pH, Field	pH units	7.79	7.73
Specific Conductivity, Field	us/cm	107.3	137.9
Temperature, Field	deg C	0.2	3.1
Turbidity, Field	NTU	43.11	7.43
pH, Lab	pH units	7.39	7.47
Total Suspended Solids	mg/L	17.9	2.5
Total Dissolved Solids	mg/L	64	67
Turbidity	NTU	50.2	7.49
Hardness	mg/L	43.4	-
Conductivity	umhos/cm	105	-
Alkalinity, Total	mg/L	30.4	-
Ammonia, Total (as N)	mg/L	0.131	-
Chloride	mg/L	2.53	-
Fluoride	mg/L	0.059	-
Nitrate	mg/L	1.02	-
Total Kjeldahl Nitrogen	mg/L	0.662	-
Sulfate	mg/L	15.4	-
Dissolved Organic Carbon	mg/L	4.49	-
Total Organic Carbon	mg/L	3.76	-
Aluminum - Total	mg/L	0.428	-
Antimony - Total	mg/L	< 0.0001	-
Arsenic - Total	mg/L	0.00011	-
Barium - Total	mg/L	0.00927	-
Cadmium - Total	mg/L	0.0000747	-
Calcium - Total	mg/L	6.73	-
Chromium - Total	mg/L	0.00088	-
Cobalt - Total	mg/L	0.0005	-
Copper - Total	mg/L	0.0029	-
Iron - Total	mg/L	0.539	-
Lead - Total	mg/L	0.000793	-
Lithium - Total	mg/L	0.003	-
Magnesium - Total	mg/L	6.46	-
Manganese - Total	mg/L	0.0374	-
Mercury - Total	mg/L	< 0.000005	-
Molybdenum - Total	mg/L	0.00323	-
Nickel - Total	mg/L	0.00162	-
Phosphorus, Total	mg/L	< 0.05	-
Potassium - Total	mg/L	3.97	-
Selenium - Total	mg/L	0.000138	-
Sodium - Total	mg/L	1.36	-
Strontium - Total	mg/L	0.0186	-
Thallium - Total	mg/L	0.000016	-
Tin - Total	mg/L	< 0.0001	-
Titanium - Total	mg/L	0.015	-
Uranium - Total	mg/L	0.00089	-
Vanadium - Total	mg/L	0.00073	-
Zinc - Total	mg/L	0.0034	-
Mercury - Dissolved	mg/L	< 0.000005	-
Phosphorus, Nutrient	mg/L	0.0256	-
Visible Sheen	-	No Visible Sheen	No Visible Sheen
Mean Mortality - Daphnia magna	-	Not Acutely Toxic	-
Mean Mortality - Rainbow Trout	-	Not Acutely Toxic	-

Note:
Sample results are preliminary for sample taken on June 8

Attachment 4 Baffinland NT-NU Spill Report #2025-226

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NT-NU SPILL REPORT

**OIL, GASOLINE, CHEMICALS AND
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A	Report Date: 15 24 25	Report Time: 12:00 pm	☒ Original Spill Report OR ☐ Update # _____ to the Original Spill Report	Report Number:
B	Occurrence Date: 15 22 25	Occurrence Time: 12:30 pm		
C	Land Use Permit Number (if applicable): IOL - Commercial Lease No.: Q13C301	Water Licence Number (if applicable): 2AM-MRY1325 Type "A"		
D	Geographic Place Name or Distance and Direction from the Named Location: Mary River Project Mine Site, Baffin Island, NU		Region: ☐ NT ☒ Nunavut ☐ Trans-boundary or Ocean	
E	Latitude: 71 Degrees 31 Minutes 55 Seconds		Longitude: 79 Degrees 27 Minutes 48 Seconds	
F	Responsible Party or Vessel Name: Baffinland Iron Mines Corp.		Responsible Party Address or Office Location: 360 Oakville Place Dr. Suite 300, Oakville, ON, Canada, L6H6K8	
G	Any Contractor Involved: N/A		Contractor Address or Office Location: N/A	
H	Product Spilled: ☐ Potential Spill Sediment-laden water	Quantity in Litres, Kilograms or Cubic Metres: unquantified	U.N. Number: N/A	
I	Spill Source: snow melt, overland flow	Spill Cause: rapid melt	Area of Contamination in Square Metres: N/A	
J	Factors Affecting Spill or Recovery: Frozen conditions, high flow	Describe Any Assistance Required: N/A	Hazards to Persons, Property or Environment: N/A	
K	Summary of the spill incident and efforts / description of the incident: On May 22, 2025 at 12:30 water was observed flowing at the new proposed MS-11 discharge point downstream of Km 105 valley infrastructure. The water was sampled as per monitoring requirements. Results for Total Suspended Solids (TSS) were received on May 24, 2025 and indicated a result of 31.2 mg/l. An effluent characterization and acute lethality sample was taken of the water on May 22, 2025 and will be reported on within the Follow Up report. Water management infrastructure and polymer dosing are being utilized to mitigate TSS within the continuous discharge. Monitoring of the water quality will continue. The incident occurred on IOL located approximately 350m from water quality station D1-05, the nearest fish bearing waters. This exceedance is being reported as required by the conditions of Water License no. 2AM-MRY1325, Part H, item 9 (b) pursuant to subsection 12(3) of the Nunavut Waters and Nunavut Surface Rights Tribunal Act and as section 31 of the MDMER under the Fisheries Act.			
L	Reported to Spill Line by: William Bowden	Position: Env. Manager	Employer: Baffinland	Location Calling From: Baffinland
M	Any Alternate Contact: Todd Swenson	Position: Env Superintendent	Employer: Baffinland	Alternate Contact Location: Baffinland

REPORT LINE USE ONLY

N	Received at Spill Line by:	Position:	Employer:	Location Called:	Report Line Number:
Lead Agency: ☐ EC ☐ CCG/TCMSS ☐ GNGT ☐ GN ☐ ILA ☐ CIRNAC ☐ CER ☐ Other: _____				File Status: ☐ Open ☐ Closed	
Agency:		Contact Name:	Contact Time:	Remarks:	
Lead Agency:					
First Support Agency:					
Second Support Agency:					
Third Support Agency:					

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Main: 416.364.8820 | Fax: 416.364.0193 | www.baffinland.com

**Attachment 2
2025 Water Quality**

Water Quality Results for Monitoring Location - CLT-REF4

Sample ID ALS Laboratory Work Order Sample Date & Time Sample Type				CLT-REF4	CLT-REF4	CLT-REF4	CLT-REF4	CLT-REF4	CLT-REF4	CLT-REF4	CLT-REF4	
				BF2500050	BF2500117	BF2500158	BF2500229	BF2500269	BF2500295	BF2500295	BF2500319	
				2025-06-08 12:30	2025-06-30 10:05	2025-07-14 08:35	2025-08-02 10:45	2025-08-18 12:00	2025-08-26 08:45	2025-08-26 08:45	2025-09-05 10:35	
Analyte		Units	Water Licence Criteria	MDMER - Max Grab	P	P	P	P	FD	P	P	
pH, Field	pH units	-	-	-	7.46	7.62	7.74	7.71	7.77	-	7.72	7.44
Specific Conductivity, Field	us/cm	-	-	-	14.9	46.8	65.1	134.2	147.4	-	157.7	106.4
Temperature, Field	deg C	-	-	-	0.7	6.4	3	7.5	4.7	-	2.3	1
Turbidity, Field	NTU	-	-	-	0.84	0.9	2.12	0.14	0.1	-	0.13	0
Dissolved Oxygen, Field	mg/L	-	-	-	13.16	11.7	11.93	10.22	11.72	-	12.31	13.01
Dissolved Oxygen, Percent, Field	%	-	-	-	92	94.8	91.1	85.3	91.2	-	89.9	91.6
Visible Sheen, Field	None	No Visible Sheen	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen
Conductivity, Lab	us/cm	-	-	-	16.2	48.4	70.5	130	144	148	147	141
Total Alkalinity	mg/L	-	-	-	5.5	25.1	33.8	67.1	71.6	75.6	75.5	78.6
Hardness	mg/L	-	-	-	6.27	24.6	35	69.8	69.3	77.1	77	78.5
Total Dissolved Solids	mg/L	-	-	-	28	32	46	58	76	71	63	87
Total Suspended Solids	mg/L	Avg 15, Max 30	30	-	< 1.2	< 1	< 1	< 1	< 1	< 1	< 1	1.8
Turbidity, Lab	NTU	-	-	-	0.65	0.87	1.43	0.43	0.32	0.23	0.23	0.32
pH, Lab	pH units	6.0 - 9.5	9.5	-	6.51	6.95	7.67	7.72	7.79	7.72	7.71	7.96
Total Ammonia	mg/L	-	-	-	< 0.005	0.0057	0.0185	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Ammonia, Un-ionized	mg/L	-	1	-	< 0.001	-	< 0.001	-	< 0.001	-	-	< 0.001
Ammonia, Un-ionized (as NH3)	mg/L	-	-	-	< 0.001	-	< 0.001	-	< 0.001	-	-	< 0.001
Chloride	mg/L	-	-	-	0.87	< 0.5	< 0.5	< 0.5	0.95	0.68	0.79	< 5
Fluoride	mg/L	-	-	-	< 0.02	-	0.027	-	0.037	-	-	< 0.2
Total Kjeldahl Nitrogen	mg/L	-	-	-	< 0.05	0.063	0.137	0.086	< 0.05	0.095	0.069	< 0.05
Nitrate	mg/L	-	-	-	0.034	< 0.02	< 0.02	< 0.02	0.023	< 0.02	< 0.02	0.236
Nitrite	mg/L	-	-	-	-	< 0.01	-	< 0.01	-	< 0.01	< 0.01	-
Phosphorus, Nutrient	mg/L	-	-	-	0.0041	0.0022	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Sulfate	mg/L	-	-	-	0.47	0.31	0.53	0.47	1.15	1.06	1.13	5.73
Phenols	mg/L	-	-	-	-	< 0.001	-	< 0.001	-	< 0.001	< 0.001	-
Dissolved Organic Carbon	mg/L	-	-	-	2.18	0.99	1.84	1.64	1.51	1.49	1.33	2.6
Total Organic Carbon	mg/L	-	-	-	2.25	1.34	1.6	1.86	1.98	1.97	1.26	1.87
Aluminum, total	mg/L	-	-	-	0.0205	0.0281	0.0403	0.0062	0.0059	0.0057	0.0058	0.0072
Antimony, total	mg/L	-	-	-	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Arsenic, total	mg/L	Avg 0.3, Max 0.6	0.6	-	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Barium, total	mg/L	-	-	-	0.00082	0.00219	0.00308	0.00605	0.00651	0.00678	0.00669	0.0079
Beryllium, total	mg/L	-	-	-	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002
Bismuth, total	mg/L	-	-	-	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005
Boron, total	mg/L	-	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cadmium, total	mg/L	-	-	-	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005
Calcium, total	mg/L	-	-	-	1.29	4.71	7.22	14.3	14.1	16.7	16.5	16.3
Cesium, total	mg/L	-	-	-	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Chromium, total	mg/L	-	-	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Cobalt, total	mg/L	-	-	-	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Copper, total	mg/L	Avg 0.3, Max 0.6	0.6	-	< 0.0005	< 0.0005	< 0.0005	0.00065	0.00062	0.00058	0.00057	0.00066
Iron, total	mg/L	-	-	-	0.015	0.02	0.023	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Lead, total	mg/L	Avg 0.1, Max 0.2	0.2	-	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005
Lithium, total	mg/L	-	-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Magnesium, total	mg/L	-	-	-	0.74	2.74	4.13	8.84	8.27	9.88	9.83	9.17
Manganese, total	mg/L	-	-	-	0.00088	0.00027	0.00032	0.00018	0.00012	< 0.0001	< 0.0001	0.00013
Mercury, total	mg/L	-	-	-	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005
Molybdenum, total	mg/L	-	-	-	< 0.00005	0.000094	0.000124	0.000231	0.000295	0.000294	0.000295	0.000324
Nickel, total	mg/L	Avg 0.5, Max 1	1	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.00122	< 0.0005	< 0.0005
Phosphorus (P), total	mg/L	-	-	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Potassium, total	mg/L	-	-	-	0.154	0.335	0.418	0.608	0.609	0.659	0.656	0.642
Rubidium, total	mg/L	-	-	-	0.00022	0.00054	0.00066	0.00147	0.00143	0.00131	0.00128	0.00143
Selenium, total	mg/L	-	-	-	0.000068	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005
Silicon, total	mg/L	-	-	-	0.18	0.52	0.72	0.84	0.83	0.87	0.86	0.79
Silver, total	mg/L	-	-	-	< 0.00001	< 0.00001	0.000014	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Sodium, total	mg/L	-	-	-	0.419	0.31	0.442	0.821	0.91	1	1	0.998
Strontium, total	mg/L	-	-	-	0.00102	0.00341	0.00523	0.00969	0.0106	0.0114	0.0113	0.0111
Sulfur, total	mg/L	-	-	-	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.63
Tellurium, total	mg/L	-	-	-	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Thallium, total	mg/L	-	-	-	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Thorium, total	mg/L	-	-	-	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Tin, total	mg/L	-	-	-	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Titanium, total	mg/L	-	-	-	0.00062	0.00072	0.001	< 0.0003	< 0.0003	< 0.0003	< 0.0003	< 0.0003
Tungsten, total	mg/L	-	-	-	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Uranium, total	mg/L	-	-	-	0.000105	0.000244	0.000743	0.0031	0.00483	0.00564	0.0057	0.00607
Vanadium, total	mg/L	-	-	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Zinc, total	mg/L	Avg 0.5, Max 1	1	-	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
Zirconium, total	mg/L	-	-	-	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Aluminum, dissolved	mg/L	-	-	-	-	0.0145	-	0.0034	-	0.0029	0.0029	-
Antimony, dissolved	mg/L	-	-	-	-	< 0.0001	-	< 0.0001	-	< 0.0001	< 0.0001	-
Arsenic, dissolved	mg/L	-	-	-	-	< 0.0001	-	< 0.0001	-	< 0.0001	< 0.0001	-
Barium, dissolved	mg/L	-	-	-	-	0.00219	-	0.00677	-	0.00699	0.00684	-
Beryllium, dissolved	mg/L	-	-	-	-	< 0.00002	-	< 0.00002	-	< 0.00002	< 0.00002	-
Bismuth, dissolved	mg/L	-	-	-	-	< 0.00005	-	< 0.00005	-	< 0.00005	< 0.00005	-
Boron, dissolved	mg/L	-	-	-	-	< 0.01	-	< 0.01	-	< 0.01	< 0.01	-
Cadmium, dissolved	mg/L	-	-	-	-	< 0.000005	-	< 0.000005	-	< 0.000005	< 0.000005	-
Calcium, dissolved	mg/L	-	-	-	-	4.8	-	14.4	-	16.2	16.2	-
Cesium, dissolved	mg/L	-	-	-	-	< 0.00001	-	< 0.00001	-	< 0.00001	< 0.00001	-
Chromium, dissolved	mg/L	-	-	-	-	< 0.0005	-	< 0.0005	-	< 0.0005	< 0.0005	-
Cobalt, dissolved	mg/L	-	-	-	-	< 0.0001	-	< 0.0001	-	< 0.0001	< 0.0001	-
Copper, dissolved	mg/L	-	-	-	-	0.00028	-	0.00063	-	0.00056	0.00055	-
Iron, dissolved	mg/L	-	-	-	-	< 0.01	-	< 0.01	-	< 0.01	< 0.01	-
Lead, dissolved	mg/L	-	-	-	-	< 0.00005	-	0.000058	-	< 0.00005	< 0.00005	-
Lithium, dissolved	mg/L	-	-	-	-	< 0.001	-	< 0.001	-	< 0.001	< 0.001	-
Magnesium, dissolved	mg/L	-	-	-	-	3.07	-	8.22	-	8.91	8.88	-
Manganese, dissolved	mg/L	-	-	-	-	< 0.0001	-	< 0.0001	-	< 0.0001	< 0.0001	-
Mercury, dissolved	mg/L	-	-	-	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005
Molybdenum, dissolved	mg/L	-	-	-	-	0.000083	-	0.000252	-	0.000286	0.00029	-
Nickel, dissolved	mg/L	-	-	-	-	< 0.0005	-	< 0.0005	-	< 0.0005	< 0.0005	-
Phosphorus (P), dissolved	mg/L	-	-	-	-	< 0.05	-	< 0.05	-	< 0.05	< 0.05	-
Potassium, dissolved	mg/L	-	-	-	-	0.344	-	0.613	-	0.627	0.631	-
Rubidium, dissolved	mg/L	-	-	-	-	0.00055	-	0.00159	-	0.0014	0.00141	-
Selenium, dissolved	mg/L	-	-	-	-	< 0.00005	-	< 0.00005	-	< 0.00005	< 0.00005	-
Silicon, dissolved	mg/L	-	-	-	-	0.488	-	0.862	-	0.778	0.785	-
Silver, dissolved	mg/L	-	-	-	-	< 0.00001	-	< 0.00001	-	< 0.00001	< 0.00001	-
Sodium, dissolved	mg/L	-	-	-	-	0.326	-	0.798	-	0.879	0.878	-
Strontium, dissolved	mg/L	-	-	-	-	0.00347	-	0.00899	-	0.0		

Water Quality Results for Monitoring Location - D1-05

Sample ID				D1-05	D1-05	D1-05	D1-05	D1-05	D1-05	D1-05	D1-05	D1-05
ALS Laboratory Work Order				BF2500013	BF2500050	BF2500112	BF2500145	BF2500158	BF2500221	BF2500269	BF2500301	BF2500319
Sample Date & Time				2025-05-24 07:40	2025-06-08 15:25	2025-06-29 11:10	2025-07-08 09:40	2025-07-14 08:35	2025-08-01 14:45	2025-08-18 09:15	2025-08-28 14:20	2025-09-05 13:00
Sample Type				P	P	P	P	P	P	P	P	P
Analyte	Units	Water Licence Criteria	MDMER - Max Grab									
pH, Field	pH units	-	-	7.79	7.73	7.76	7.46	7.83	7.73	7.54	7.95	7.78
Specific Conductivity, Field	us/cm	-	-	107.3	137.9	195.7	257.4	266.2	613	544	622	578
Temperature, Field	deg C	-	-	0.2	3.1	9.2	5.4	4.8	10.1	4.6	4	1.2
Turbidity, Field	NTU	-	-	43.11	7.43	1.45	1.42	8.17	0.11	0.45	1.06	-1.55
Dissolved Oxygen, Field	mg/L	-	-	13.73	12.11	10.42	11.07	11.78	10.35	11.71	12.29	12.81
Dissolved Oxygen, Percent, Field	%	-	-	93.4	90.3	90.7	87.8	91.8	92.1	90.8	94	90.8
Visible Sheen, Field	None	No Visible Sheen	-	0	0	0	0	0	0	0	0	0
Conductivity, Lab	us/cm	-	-	105	145	-	260	283	573	566	581	532
Total Alkalinity	mg/L	-	-	30.4	40.4	-	68.1	58.7	73.5	86.1	94	97.8
Hardness	mg/L	-	-	43.4	65.1	-	117	125	287	255	281	281
Total Dissolved Solids	mg/L	-	-	64	67	114	143	160	369	354	368	376
Total Suspended Solids	mg/L	Avg 15, Max 30	30	17.9	2.5	< 1	< 1	1.8	1.6	< 1	< 1.1	< 1
Turbidity, Lab	NTU	-	-	50.2	7.49	1.26	0.45	8.35	0.41	0.17	1.25	0.3
pH, Lab	pH units	6.0 - 9.5	9.5	7.39	7.47	7.39	7.74	7.76	7.71	7.73	7.85	7.88
Total Ammonia	mg/L	-	-	0.131	0.0103	-	< 0.005	0.105	< 0.005	0.0111	< 0.005	< 0.005
Ammonia, Un-ionized	mg/L	-	1	< 0.001	< 0.001	-	-	< 0.001	-	< 0.001	-	< 0.001
Ammonia, Un-ionized (as NH3)	mg/L	-	-	< 0.001	< 0.001	-	-	0.001	-	< 0.001	-	< 0.001
Chloride	mg/L	-	-	2.53	2.15	-	5.1	4.46	16.1	15.1	16.6	17.6
Fluoride	mg/L	-	-	0.059	0.078	-	-	0.105	-	0.102	-	0.102
Total Kjeldahl Nitrogen	mg/L	-	-	0.662	0.228	-	0.236	0.437	0.362	0.398	0.299	0.429
Nitrate	mg/L	-	-	1.02	1.13	-	2	4.79	9.37	7.34	7.66	7.53
Nitrite	mg/L	-	-	-	-	-	< 0.01	-	< 0.01	-	< 0.01	-
Phosphorus, Nutrient	mg/L	-	-	0.0256	0.0066	-	< 0.002	0.0033	0.0028	< 0.002	< 0.002	< 0.002
Sulfate	mg/L	-	-	15.4	18.9	-	43.2	46.8	148	135	139	147
Phenols	mg/L	-	-	-	-	-	< 0.001	-	< 0.001	-	< 0.001	-
Dissolved Organic Carbon	mg/L	-	-	4.49	1.74	-	1.66	2.27	2.75	1.8	2.21	2.48
Total Organic Carbon	mg/L	-	-	3.76	1.96	-	2.06	2.33	2.74	2.34	3.28	2.35
Aluminum, total	mg/L	-	-	0.428	0.168	-	0.0153	0.2	0.0102	0.0098	0.0158	0.0083
Antimony, total	mg/L	-	-	< 0.0001	< 0.0001	-	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Arsenic, total	mg/L	Avg 0.3, Max 0.6	0.6	0.00011	< 0.0001	-	< 0.0001	0.00012	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Barium, total	mg/L	-	-	0.00927	0.00647	-	0.0104	0.0116	0.0231	0.0213	0.0228	0.0225
Beryllium, total	mg/L	-	-	0.000027	< 0.00002	-	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002
Bismuth, total	mg/L	-	-	< 0.00005	< 0.00005	-	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005
Boron, total	mg/L	-	-	< 0.01	0.011	-	0.016	0.015	0.021	0.018	0.02	0.017
Cadmium, total	mg/L	-	-	0.0000747	0.0000301	-	0.0000159	0.0000303	0.000111	0.0000293	0.00003	0.0000276
Calcium, total	mg/L	-	-	6.73	11.2	-	22.3	20.7	41.8	41.3	46.7	46.1
Cesium, total	mg/L	-	-	0.000039	0.000027	-	0.00001	0.000026	0.000019	0.000016	0.000014	0.000012
Chromium, total	mg/L	-	-	0.00088	0.0007	-	0.00052	0.00079	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Cobalt, total	mg/L	-	-	0.0005	0.00021	-	0.00016	0.00041	0.00074	0.0006	0.00059	0.00059
Copper, total	mg/L	Avg 0.3, Max 0.6	0.6	0.0029	0.00181	-	0.00147	0.00193	0.00203	0.00179	0.00172	0.00172
Iron, total	mg/L	-	-	0.539	0.221	-	0.017	0.244	0.012	0.011	0.022	0.012
Lead, total	mg/L	Avg 0.1, Max 0.20	0.2	0.000793	0.000445	-	< 0.00005	0.000254	< 0.00005	< 0.00005	0.000211	0.00005
Lithium, total	mg/L	-	-	0.003	0.0032	-	0.0045	0.0048	0.0078	0.0058	0.0063	0.0064
Magnesium, total	mg/L	-	-	6.46	9.01	-	17.2	17.8	37.3	36.8	43	40.4
Manganese, total	mg/L	-	-	0.0374	0.0118	-	0.00106	0.00768	0.0219	0.00192	0.0026	0.00265
Mercury, total	mg/L	-	-	< 0.000005	< 0.000005	-	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005
Molybdenum, total	mg/L	-	-	0.00323	0.00411	-	0.007	0.00813	0.00654	0.00604	0.00567	0.00515
Nickel, total	mg/L	Avg 0.5, Max 1	1	0.00162	0.00098	-	0.00056	0.00091	0.00118	0.00088	0.00082	0.00085
Phosphorus (P), total	mg/L	-	-	< 0.05	< 0.05	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Potassium, total	mg/L	-	-	3.97	3.25	-	4.56	6.08	6.58	6.09	6.59	6.21
Rubidium, total	mg/L	-	-	0.00432	0.00352	-	0.00617	0.00675	0.00965	0.00863	0.00917	0.00881
Selenium, total	mg/L	-	-	0.000138	0.00011	-	0.000214	0.000336	0.0005	0.000555	0.000535	0.000565
Silicon, total	mg/L	-	-	1.22	1.25	-	1.46	1.82	1.75	1.7	1.81	1.74
Silver, total	mg/L	-	-	0.00001	< 0.00001	-	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Sodium, total	mg/L	-	-	1.36	1.31	-	2.47	2.7	6.68	6.54	7.11	7.01
Strontium, total	mg/L	-	-	0.0186	0.0265	-	0.05	0.0555	0.104	0.0976	0.103	0.105
Sulfur, total	mg/L	-	-	5.35	6.61	-	15	17.4	50.9	48.3	53.1	52.5
Tellurium, total	mg/L	-	-	< 0.0002	< 0.0002	-	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Thallium, total	mg/L	-	-	0.000016	0.000012	-	0.000013	0.000013	0.000027	0.000018	0.000014	0.000013
Thorium, total	mg/L	-	-	0.00012	< 0.0001	-	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Tin, total	mg/L	-	-	< 0.0001	< 0.0001	-	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Titanium, total	mg/L	-	-	0.015	0.00637	-	0.0004	0.00647	< 0.0006	< 0.0003	0.00052	< 0.0003
Tungsten, total	mg/L	-	-	0.00011	< 0.0001	-	< 0.0001	0.00012	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Uranium, total	mg/L	-	-	0.00089	0.00152	-	0.00623	0.00464	0.0111	0.0172	0.0188	0.0204
Vanadium, total	mg/L	-	-	0.00073	< 0.0005	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Zinc, total	mg/L	Avg 0.5, Max 1	1	0.0034	< 0.003	-	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.0

Water Quality Results for Monitoring Location - MS-11

ALS Laboratory Work Order Sample Date & Time Sample Type				Sample ID MS-11 BF2500010 2025-05-22 12:30 P	MS-11 BF2500015 2025-05-24 23:55 NP	MS-11 BF2500023 2025-05-27 14:05 P	MS-11 BF2500034 2025-06-02 08:50 P	MS-11 BF2500053 2025-06-09 08:20 P	MS-11 BF2500075 2025-06-17 10:10 P	MS-11 BF2500093 2025-06-23 10:35 P
				MDMER - Max Grab						
Analyte	Units	Water Licence Criteria								
pH, Field	pH units	-	-	7.83	7.47	7.64	7.55	7.82	7.62	7.84
Specific Conductivity, Field	us/cm	-	-	185.7	117.7	119.4	134.2	146.8	208.8	181.8
Temperature, Field	deg C	-	-	0.3	0	0.4	0.6	2.2	2.9	7.6
Turbidity, Field	NTU	-	-	118.87	75.12	71.25	13.15	5.3	0	3.33
Dissolved Oxygen, Field	mg/L	-	-	14.45	13.61	13.2	12.66	11.6	12.46	11.05
Dissolved Oxygen, Percent, Field	%	-	-	99.9	93.1	91.2	88.1	84.2	92.5	92.3
Visible Sheen, Field	None	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Conductivity, Lab	us/cm	-	-	161	-	125	142	151	208	198
Acidity	mg/L	-	-	< 2	-	-	-	3.8	-	-
Total Alkalinity	mg/L	-	-	33.7	-	-	-	43.3	-	-
Hardness	mg/L	-	-	69.7	-	-	-	65	-	-
Total Dissolved Solids	mg/L	-	-	131	91	82	88	86	148	116
Total Suspended Solids	mg/L	Avg 15, Max 30	30	31.2	14	16.6	6.5	1.8	< 1	< 1.1
Turbidity, Lab	NTU	-	-	98.8	81.7	80.2	17.4	6.46	5.07	3.6
pH, Lab	pH units	6.0 - 9.5	6.0 - 9.5	7.41	7.4	7.46	7.49	7.43	7.62	7.35
Total Ammonia	mg/L	-	-	0.196	-	0.119	0.139	0.0161	< 0.005	0.0331
Ammonia, Un-ionized	mg/L	-	1	0.0011	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Ammonia, Un-ionized (as NH3)	mg/L	-	-	0.0014	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Chloride	mg/L	-	-	6.69	-	-	-	2.45	-	-
Fluoride	mg/L	-	-	0.093	-	-	-	0.082	-	-
Total Kjeldahl Nitrogen	mg/L	-	-	1.43	-	-	-	0.163	-	-
Nitrate	mg/L	-	-	2.16	-	-	-	1.22	-	-
Nitrite	mg/L	-	-	-	-	-	-	-	-	-
Phosphorus, Nutrient	mg/L	-	-	0.0414	-	-	-	0.0051	-	-
Sulfate	mg/L	-	-	33.3	-	-	-	20.8	-	-
Dissolved Organic Carbon	mg/L	-	-	5.84	-	-	-	1.63	-	-
Total Organic Carbon	mg/L	-	-	6.52	-	-	-	1.32	-	-
Aluminum, total	mg/L	-	-	2.52	-	2.08	0.241	0.104	0.104	0.0548
Antimony, total	mg/L	-	-	< 0.0005	-	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Arsenic, total	mg/L	Avg 0.3, Max 0.6	0.6	< 0.0005	-	< 0.001	0.00011	< 0.0001	< 0.0001	< 0.0001
Barium, total	mg/L	-	-	0.0247	-	0.0181	0.00647	0.0063	0.00855	0.0072
Beryllium, total	mg/L	-	-	0.000131	-	< 0.0002	< 0.00002	< 0.00002	< 0.00002	< 0.00002
Bismuth, total	mg/L	-	-	< 0.00025	-	< 0.0005	< 0.00005	< 0.00005	< 0.00005	< 0.00005
Boron, total	mg/L	-	-	< 0.05	-	< 0.1	0.011	0.011	0.012	0.012
Cadmium, total	mg/L	-	-	0.000107	-	0.000093	0.0000581	0.0000347	0.0000241	0.000015
Calcium, total	mg/L	-	-	12.5	-	8.06	9.84	11.8	16.1	14.8
Cesium, total	mg/L	-	-	0.000207	-	0.000137	0.000023	0.000012	0.000012	< 0.00001
Chromium, total	mg/L	-	-	0.00565	-	< 0.005	0.00068	0.00053	< 0.0005	< 0.0005
Cobalt, total	mg/L	-	-	0.002	-	0.00148	0.00034	0.00016	0.00021	0.00014
Copper, total	mg/L	Avg 0.3, Max 0.6	0.6	0.00714	-	0.00548	0.00202	0.00139	0.00174	0.00127
Iron, total	mg/L	-	-	3.71	-	2.93	0.314	0.126	0.132	0.073
Lead, total	mg/L	Avg 0.1, Max 0.20	0.2	0.00246	-	0.00162	0.00036	0.000172	0.000136	0.000102
Lithium, total	mg/L	-	-	0.0076	-	< 0.01	0.0032	0.0033	0.0036	0.0033
Magnesium, total	mg/L	-	-	12.1	-	8.3	9.35	9.41	13.4	11.7
Manganese, total	mg/L	-	-	0.0989	-	0.0818	0.0426	0.0134	0.00832	0.0033
Mercury, total	mg/L	-	-	< 0.000005	-	-	-	< 0.000005	-	-
Molybdenum, total	mg/L	-	-	0.00524	-	0.00426	0.00362	0.00428	0.00665	0.00674
Nickel, total	mg/L	Avg 0.5, Max 1	1	0.00639	-	0.00556	0.00125	0.00074	0.00095	0.00064
Phosphorus (P), total	mg/L	-	-	< 0.25	-	< 0.5	< 0.05	< 0.05	< 0.05	< 0.05
Potassium, total	mg/L	-	-	6.08	-	4.48	3.33	3.32	4.3	4.16
Rubidium, total	mg/L	-	-	0.00898	-	0.00647	0.00382	0.00322	0.00436	0.00451
Selenium, total	mg/L	-	-	0.000434	-	< 0.0005	0.000204	0.00012	0.000159	0.00017
Silicon, total	mg/L	-	-	4.83	-	3.94	1.27	1.22	1.55	1.27
Silver, total	mg/L	-	-	< 0.00005	-	< 0.0001	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Sodium, total	mg/L	-	-	3.02	-	1.4	1.33	1.38	2.01	1.62
Strontium, total	mg/L	-	-	0.0371	-	0.0202	0.0234	0.0288	0.0428	0.0394
Sulfur, total	mg/L	-	-	10.9	-	< 5	7.07	7.18	11.7	8.55
Tellurium, total	mg/L	-	-	< 0.001	-	< 0.002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Thallium, total	mg/L	-	-	0.000051	-	< 0.0001	0.00001	< 0.00001	0.000011	0.000011
Thorium, total	mg/L	-	-	0.00073	-	< 0.001	0.00013	< 0.0001	< 0.0001	< 0.0001
Tin, total	mg/L	-	-	< 0.0005	-	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Titanium, total	mg/L	-	-	0.0958	-	0.0691	0.00805	0.00364	0.00331	0.00177
Tungsten, total	mg/L	-	-	< 0.0005	-	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Uranium, total	mg/L	-	-	0.00206	-	0.00117	0.00106	0.00159	0.0037	0.00312
Vanadium, total	mg/L	-	-	0.00375	-	< 0.005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Zinc, total	mg/L	Avg 0.5, Max 1	1	< 0.015	-	< 0.03	< 0.003	< 0.003	< 0.003	< 0.003
Zirconium, total	mg/L	-	-	< 0.001	-	< 0.002	0.00023	< 0.0002	< 0.0002	< 0.0002
Aluminum, dissolved	mg/L	-	-	0.023	-	-	-	0.0074	-	-
Antimony, dissolved	mg/L	-	-	< 0.0005	-	-	-	< 0.0001	-	-
Arsenic, dissolved	mg/L	-	-	< 0.0005	-	-	-	< 0.0001	-	-
Barium, dissolved	mg/L	-	-	0.00758	-	-	-	0.00575	-	-
Beryllium, dissolved	mg/L	-	-	< 0.0001	-	-	-	< 0.00002	-	-
Bismuth, dissolved	mg/L	-	-	< 0.00025	-	-	-	< 0.00005	-	-
Boron, dissolved	mg/L	-	-	< 0.05	-	-	-	0.01	-	-
Cadmium, dissolved	mg/L	-	-	0.0000426	-	-	-	0.0000275	-	-
Calcium, dissolved	mg/L	-	-	12.1	-	-	-	10.8	-	-
Cesium, dissolved	mg/L	-	-	< 0.00005	-	-	-	< 0.00001	-	-
Chromium, dissolved	mg/L	-	-	< 0.0025	-	-	-	< 0.0005	-	-
Cobalt, dissolved	mg/L	-	-	< 0.0005	-	-	-	0.0001	-	-
Copper, dissolved	mg/L	-	-	0.00219	-	-	-	0.00102	-	-
Iron, dissolved	mg/L	-	-	< 0.05	-	-	-	< 0.01	-	-
Lead, dissolved	mg/L	-	-	< 0.00025	-	-	-	< 0.00005	-	-
Lithium, dissolved	mg/L	-	-	< 0.005	-	-	-	0.0029	-	-
Magnesium, dissolved	mg/L	-	-	9.6	-	-	-	9.25	-	-
Manganese, dissolved	mg/L	-	-	0.025	-	-	-	0.0113	-	-
Mercury, dissolved	mg/L	-	-	< 0.000005	-	-	-	< 0.000005	-	-
Molybdenum, dissolved	mg/L	-	-	0.00596	-	-	-	0.00442	-	-
Nickel, dissolved	mg/L	-	-	< 0.0025	-	-	-	< 0.0005	-	-
Phosphorus (P), dissolved	mg/L	-	-	< 0.25	-	-	-	< 0.05	-	-
Potassium, dissolved	mg/L	-	-	5.3	-	-	-	3.43	-	-
Rubidium, dissolved	mg/L	-	-	0.00463	-	-	-	0.00294	-	-
Selenium, dissolved	mg/L	-	-	0.000389	-	-	-	0.000161	-	-
Silicon, dissolved	mg/L	-	-	0.798	-	-	-	1.06	-	-
Silver, dissolved	mg/L	-	-	< 0.00005	-	-	-	< 0.00001	-	-
Sodium, dissolved	mg/L	-	-	2.92	-	-	-	1.38	-	-
Strontium, dissolved	mg/L	-	-	0.0352	-	-	-	0.0287	-	-
Sulfur, dissolved	mg/L	-	-	11.4	-	-	-	7.33	-	-
Tellurium, dissolved	mg/L	-	-	< 0.001	-	-	-	< 0.0002	-	-
Thallium, dissolved	mg/L	-	-	< 0.00005	-	-	-	< 0.00001	-	-
Thorium, dissolved	mg/L	-	-	< 0.0005	-	-	-	< 0.0001	-	-
Tin, dissolved	mg/L	-	-	< 0.0005	-	-	-	< 0.0001	-	-
Titanium, dissolved	mg/L	-	-	< 0.0015	-	-	-	< 0.0003	-	-
Tungsten, dissolved	mg/L	-	-	< 0.0005	-	-	-	< 0.0001	-	-
Uranium, dissolved	mg/L	-	-	0.0014	-	-	-	0.00157	-	-
Vanadium, dissolved	mg/L	-	-	< 0.0025	-	-	-	< 0.0005	-	-
Zinc, dissolved	mg/L	-	-	< 0.005	-	-	-	< 0.001	-	-
Zirconium, dissolved	mg/L	-	-	< 0.001	-	-	-	< 0.0003	-	-
Radium-226	Bq/L	-	1.11	0.05	-	0.0333	< 0.01	< 0.037	0.02	0.01
Acute Lethality - Daphnia magna	%	Not Acutely Toxic	< 50	< 1	-	-	-	< 1	-	-
Acute Lethality - Rainbow Trout	%	Not Acutely Toxic	< 50	20	-	-	-	< 1	-	-

Water Quality Results for Monitoring Location - MS-11

ALS Laboratory Work Order Sample Date & Time Sample Type				Sample ID	M5-11	M5-11	M5-11	M5-11	M5-11	M5-11	M5-11
				BF2500116	BF2500141	BF2500158	BF2500184	BF2500184	BF2500209	BF2500242	
				2025-06-30 14:30	2025-07-07 08:20	2025-07-14 09:00	2025-07-21 08:50	2025-07-21 08:50	2025-07-28 08:35	2025-08-04 09:20	
				P	P	P	FD	P	P	P	
Analyte	Units	Water Licence Criteria	MDMER - Max Grab								
pH, Field	pH units	-	-	7.46	7.44	7.72	-	7.25	7.51	6.93	
Specific Conductivity, Field	us/cm	-	-	202.9	254.3	272.4	-	551	640	611	
Temperature, Field	deg C	-	-	9.5	6.6	4.5	-	7.8	8.6	8	
Turbidity, Field	NTU	-	-	1.38	1.43	9.74	-	2	0.24	0.3	
Dissolved Oxygen, Field	mg/L	-	-	10.24	10.35	11.59	-	9.5	9.31	9.69	
Dissolved Oxygen, Percent, Field	%	-	-	89.7	84.5	89.7	-	80	79.9	81.9	
Visible Sheen, Field	None	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	
Conductivity, Lab	us/cm	-	-	218	262	293	580	581	666	623	
Acidity	mg/L	-	-	-	< 2	< 2	-	-	-	3.9	
Total Alkalinity	mg/L	-	-	-	64.6	57.6	-	-	-	77	
Hardness	mg/L	-	-	-	126	119	-	-	-	296	
Total Dissolved Solids	mg/L	-	-	125	148	168	351	359	441	390	
Total Suspended Solids	mg/L	Avg 15, Max 30	30	< 1.3	< 1.4	2.5	< 1.1	< 1	2.3	< 1	
Turbidity, Lab	NTU	-	-	1.33	0.47	9.86	0.65	0.57	0.29	0.3	
pH, Lab	pH units	6.0 - 9.5	6.0 - 9.5	7.34	7.73	7.73	7.56	7.54	7.63	7.53	
Total Ammonia	mg/L	-	-	< 0.0005	0.0083	0.125	0.507	0.521	< 0.005	< 0.005	
Ammonia, Un-ionized	mg/L	-	1	< 0.001	< 0.001	< 0.001	-	0.0014	< 0.001	< 0.001	
Ammonia, Un-ionized (as NH3)	mg/L	-	-	< 0.001	< 0.001	< 0.001	-	0.0018	< 0.001	< 0.001	
Chloride	mg/L	-	-	-	5.04	4.56	-	-	-	18.3	
Fluoride	mg/L	-	-	-	0.126	0.109	-	-	-	0.114	
Total Kjeldahl Nitrogen	mg/L	-	-	-	0.237	0.485	-	-	-	0.467	
Nitrate	mg/L	-	-	-	2	5.08	-	-	-	10.3	
Nitrite	mg/L	-	-	-	< 0.01	0.023	-	-	-	< 0.01	
Phosphorus, Nutrient	mg/L	-	-	-	< 0.002	0.0036	-	-	-	< 0.002	
Sulfate	mg/L	-	-	-	44.4	48.9	-	-	-	168	
Dissolved Organic Carbon	mg/L	-	-	-	1.2	1.95	-	-	-	2.25	
Total Organic Carbon	mg/L	-	-	-	1.44	1.88	-	-	-	2.51	
Aluminum, total	mg/L	-	-	0.0278	0.0109	0.194	0.018	0.0184	0.0078	0.0116	
Antimony, total	mg/L	-	-	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	
Arsenic, total	mg/L	Avg 0.3, Max 0.6	0.6	< 0.0001	< 0.0001	0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	
Barium, total	mg/L	-	-	0.00766	0.00969	0.0119	0.0222	0.0218	0.0275	0.0248	
Beryllium, total	mg/L	-	-	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	
Bismuth, total	mg/L	-	-	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	
Boron, total	mg/L	-	-	0.015	0.016	0.015	0.017	0.017	0.021	0.022	
Cadmium, total	mg/L	-	-	0.0000125	0.0000152	0.0000389	0.000655	0.000642	0.000504	0.00011	
Calcium, total	mg/L	-	-	16.8	19.3	20.9	38.2	37.8	48.3	46.8	
Cesium, total	mg/L	-	-	< 0.00001	< 0.00001	0.000029	0.000028	0.000027	0.000017	0.000014	
Chromium, total	mg/L	-	-	0.00054	< 0.0005	0.00078	< 0.0005	< 0.0005	< 0.0005	< 0.0005	
Cobalt, total	mg/L	-	-	0.00012	0.00017	0.00044	0.00173	0.00169	0.00112	0.00086	
Copper, total	mg/L	Avg 0.3, Max 0.6	0.6	0.00119	0.00124	0.00196	0.00212	0.0021	0.00208	0.00197	
Iron, total	mg/L	-	-	0.039	0.012	0.252	0.028	0.028	0.01	0.013	
Lead, total	mg/L	Avg 0.1, Max 0.20	0.2	0.000075	< 0.00005	0.000342	0.000094	0.000097	< 0.00005	< 0.00005	
Lithium, total	mg/L	-	-	0.0036	0.0048	0.005	0.0093	0.0092	0.0103	0.009	
Magnesium, total	mg/L	-	-	13.4	15.9	17.9	36.4	36.2	44.5	46.6	
Manganese, total	mg/L	-	-	0.00191	0.00131	0.0111	1.31	1.3	0.365	0.0337	
Mercury, total	mg/L	-	-	-	< 0.000005	< 0.000005	-	-	-	< 0.000005	
Molybdenum, total	mg/L	-	-	0.00721	0.00822	0.00837	0.00955	0.00944	0.00885	0.00634	
Nickel, total	mg/L	Avg 0.5, Max 1	1	0.00056	< 0.0005	0.0009	0.00172	0.0018	0.00176	0.00129	
Phosphorus (P), total	mg/L	-	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	
Potassium, total	mg/L	-	-	4.54	5	6.15	6.38	6.32	7.36	7.72	
Rubidium, total	mg/L	-	-	0.00551	0.00559	0.00668	0.00916	0.00924	0.00838	0.00901	
Selenium, total	mg/L	-	-	0.000196	0.000226	0.000371	0.000678	0.00074	0.000694	0.000616	
Silicon, total	mg/L	-	-	1.31	1.4	1.81	1.61	1.6	1.78	1.82	
Silver, total	mg/L	-	-	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	
Sodium, total	mg/L	-	-	2.03	2.45	2.75	6.1	6.08	8.12	7.95	
Strontium, total	mg/L	-	-	0.0424	0.0522	0.0582	0.0957	0.094	0.129	0.121	
Sulfur, total	mg/L	-	-	11.6	15.9	18	53.2	53.3	65	59.7	
Tellurium, total	mg/L	-	-	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	
Thallium, total	mg/L	-	-	0.000013	0.000013	0.000015	0.000031	0.000031	0.000028	0.000024	
Thorium, total	mg/L	-	-	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	
Tin, total	mg/L	-	-	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	
Titanium, total	mg/L	-	-	0.00084	< 0.0003	0.00709	< 0.0007	< 0.0006	< 0.0003	< 0.0003	
Tungsten, total	mg/L	-	-	< 0.0001	< 0.0001	0.00013	< 0.0001	< 0.0001	< 0.0001	< 0.0001	
Uranium, total	mg/L	-	-	0.00377	0.00589	0.00498	0.00671	0.00664	0.0112	0.015	
Vanadium, total	mg/L	-	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	
Zinc, total	mg/L	Avg 0.5, Max 1	1	< 0.003	< 0.003	< 0.003	0.0034	0.0035	0.0034	< 0.003	
Zirconium, total	mg/L	-	-	< 0.0002	< 0.0002	0.00023	< 0.0002	< 0.0002	< 0.0002	< 0.0002	
Aluminum, dissolved	mg/L	-	-	-	0.0044	0.0066	-	-	-	0.0029	
Antimony, dissolved	mg/L	-	-	-	< 0.0001	< 0.0001	-	-	-	< 0.0001	
Arsenic, dissolved	mg/L	-	-	-	< 0.0001	< 0.0001	-	-	-	< 0.0001	
Barium, dissolved	mg/L	-	-	-	0.00983	0.0107	-	-	-	0.0271	
Beryllium, dissolved	mg/L	-	-	-	< 0.00002	< 0.00002	-	-	-	< 0.00002	
Bismuth, dissolved	mg/L	-	-	-	< 0.00005	< 0.00005	-	-	-	< 0.00005	
Boron, dissolved	mg/L	-	-	-	0.016	0.014	-	-	-	0.022	
Cadmium, dissolved	mg/L	-	-	-	0.0000157	0.0000299	-	-	-	0.000112	
Calcium, dissolved	mg/L	-	-	-	21	19.7	-	-	-	47.5	
Cesium, dissolved	mg/L	-	-	-	< 0.00001	0.00001	-	-	-	0.000015	
Chromium, dissolved	mg/L	-	-	-	< 0.0005	< 0.0005	-	-	-	< 0.0005	
Cobalt, dissolved	mg/L	-	-	-	0.00015	0.00032	-	-	-	0.00085	
Copper, dissolved	mg/L	-	-	-	0.00123	0.00146	-	-	-	0.00202	
Iron, dissolved	mg/L	-	-	-	< 0.01	< 0.01	-	-	-	< 0.01	
Lead, dissolved	mg/L	-	-	-	< 0.00005	< 0.00005	-	-	-	< 0.00005	
Lithium, dissolved	mg/L	-	-	-	0.0046	0.0045	-	-	-	0.0093	
Magnesium, dissolved	mg/L	-	-	-	17.8	17	-	-	-	43	
Manganese, dissolved	mg/L	-	-	-	0.00142	0.00611	-	-	-	0.0297	
Mercury, dissolved	mg/L	-	-	-	< 0.000005	< 0.000005	-	-	-	< 0.000005	
Molybdenum, dissolved	mg/L	-	-	-	0.00787	0.00814	-	-	-	0.00695	
Nickel, dissolved	mg/L	-	-	-	< 0.0005	< 0.0005	-	-	-	0.00117	
Phosphorus (P), dissolved	mg/L	-	-	-	< 0.05	< 0.05	-	-	-	< 0.05	
Potassium, dissolved	mg/L	-	-	-	5.41	6.08	-	-	-	7.61	
Rubidium, dissolved	mg/L	-	-	-	0.00574	0.00602	-	-	-	0.00908	
Selenium, dissolved	mg/L	-	-	-	0.000246	0.000435	-	-	-	0.000738	
Silicon, dissolved	mg/L	-	-	-	1.41	1.39	-	-	-	1.85	

Water Quality Results for Monitoring Location - MS-11

ALS Laboratory Work Order				Sample ID	MS-11	MS-11	MS-11	MS-11	MS-11	MS-11	MS-11
				BF2500253	BF2500269	BF2500293	BF2500309	BF2500319	BF2500324	BF2500332	
				2025-08-11 10:45	2025-08-18 09:40	2025-08-25 07:40	2025-09-01 12:45	2025-09-05 13:20	2025-09-08 16:35	2025-09-16 09:55	
Sample Date & Time				Sample Type	P	P	P	P	P	P	FD
Analyte	Units	Water Licence Criteria	MDMER - Max Grab								
pH, Field	pH units	-	-	7.41	7.46	7.81	7.82	7.79	7.97	-	
Specific Conductivity, Field	us/cm	-	-	544	575	640	610	611	362.5	-	
Temperature, Field	deg C	-	-	4.6	4.9	5.4	2.3	1.6	2.2	-	
Turbidity, Field	NTU	-	-	-0.48	0.27	3.44	2.02	-0.61	0.7	-	
Dissolved Oxygen, Field	mg/L	-	-	11.81	11.3	11.45	12.8	13.07	12.6	-	
Dissolved Oxygen, Percent, Field	%	-	-	91.6	88.4	90.8	93.5	93.8	91.7	-	
Visible Sheen, Field	None	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	
Conductivity, Lab	us/cm	-	-	557	591	601	625	564	587	566	
Acidity	mg/L	-	-	-	3	-	4.5	2.1	-	-	
Total Alkalinity	mg/L	-	-	-	86.1	-	93.7	98.2	-	-	
Hardness	mg/L	-	-	-	263	-	285	283	-	-	
Total Dissolved Solids	mg/L	-	-	351	372	367	420	382	378	317	
Total Suspended Solids	mg/L	Avg 15, Max 30	30	< 1	< 1	5.6	2	1.9	1.9	1	
Turbidity, Lab	NTU	-	-	0.41	0.29	3.46	3.65	1.7	1.21	0.87	
pH, Lab	pH units	6.0 - 9.5	6.0 - 9.5	7.65	7.68	7.78	7.9	7.86	7.83	7.84	
Total Ammonia	mg/L	-	-	0.0232	0.005	0.0066	< 0.005	0.0068	< 0.005	0.0111	
Ammonia, Un-ionized	mg/L	-	1	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	
Ammonia, Un-ionized (as NH3)	mg/L	-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	
Chloride	mg/L	-	-	-	16.7	-	17.9	18.8	-	-	
Fluoride	mg/L	-	-	-	0.129	-	0.107	0.109	-	-	
Total Kjeldahl Nitrogen	mg/L	-	-	-	0.382	-	0.431	0.489	-	-	
Nitrate	mg/L	-	-	-	8.1	-	8.13	8.18	-	-	
Nitrite	mg/L	-	-	-	< 0.01	-	< 0.01	< 0.01	-	-	
Phosphorus, Nutrient	mg/L	-	-	-	< 0.002	-	0.003	0.0026	-	-	
Sulfate	mg/L	-	-	-	149	-	149	159	-	-	
Dissolved Organic Carbon	mg/L	-	-	-	3.98	-	1.83	2.18	-	-	
Total Organic Carbon	mg/L	-	-	-	2.04	-	2.64	2.32	-	-	
Aluminum, total	mg/L	-	-	0.0119	0.0087	0.111	0.0762	0.0538	0.0544	0.0374	
Antimony, total	mg/L	-	-	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	
Arsenic, total	mg/L	Avg 0.3, Max 0.6	0.6	< 0.0001	< 0.0001	0.00011	0.0001	< 0.0001	0.0001	< 0.0001	
Barium, total	mg/L	-	-	0.0204	0.0216	0.0222	0.0217	0.021	0.0209	0.0185	
Beryllium, total	mg/L	-	-	< 0.00002	< 0.00002	0.000021	< 0.00002	< 0.00002	< 0.00002	< 0.00002	
Bismuth, total	mg/L	-	-	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	
Boron, total	mg/L	-	-	0.02	0.019	0.018	0.019	0.017	0.017	0.018	
Cadmium, total	mg/L	-	-	0.00011	0.0000399	0.0000519	0.0000484	0.0000459	0.0000387	0.0000252	
Calcium, total	mg/L	-	-	46.6	43.5	47	48.4	45	44.5	40.9	
Cesium, total	mg/L	-	-	0.000012	0.000013	0.000034	0.000024	0.000021	0.00002	0.00002	
Chromium, total	mg/L	-	-	< 0.0005	< 0.0005	0.00065	0.00051	< 0.0005	0.00053	< 0.0005	
Cobalt, total	mg/L	-	-	0.00061	0.00071	0.00079	0.00067	0.00067	0.00061	0.0005	
Copper, total	mg/L	Avg 0.3, Max 0.6	0.6	0.00199	0.00181	0.00244	0.00202	0.00193	0.00198	0.00187	
Iron, total	mg/L	-	-	0.015	0.012	0.181	0.096	0.081	0.072	0.051	
Lead, total	mg/L	Avg 0.1, Max 0.20	0.2	< 0.00005	< 0.00005	0.00125	0.000708	0.000413	0.00048	0.000408	
Lithium, total	mg/L	-	-	0.0076	0.0067	0.0067	0.0083	0.0074	0.0064	0.0055	
Magnesium, total	mg/L	-	-	40.6	39.8	40.2	46.2	40	40.9	37	
Manganese, total	mg/L	-	-	0.0539	0.00677	0.0111	0.012	0.0106	0.00529	0.00252	
Mercury, total	mg/L	-	-	-	< 0.000005	-	< 0.000005	< 0.000005	-	-	
Molybdenum, total	mg/L	-	-	0.00767	0.0065	0.0065	0.00546	0.00512	0.00528	0.00566	
Nickel, total	mg/L	Avg 0.5, Max 1	1	0.00098	0.00084	0.00121	0.00096	0.00102	0.00096	0.0008	
Phosphorus (P), total	mg/L	-	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	
Potassium, total	mg/L	-	-	7.09	6.69	7.12	6.96	6.56	6.81	6.11	
Rubidium, total	mg/L	-	-	0.00712	0.00767	0.00829	0.00732	0.00718	0.00748	0.00675	
Selenium, total	mg/L	-	-	0.000555	0.000635	0.000593	0.000572	0.00059	0.000603	0.000516	
Silicon, total	mg/L	-	-	1.8	1.75	1.8	1.91	1.8	1.86	1.75	
Silver, total	mg/L	-	-	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	
Sodium, total	mg/L	-	-	6.53	6.85	7.16	7.79	7.31	7.34	6.59	
Strontium, total	mg/L	-	-	0.107	0.108	0.112	0.117	0.117	0.111	0.102	
Sulfur, total	mg/L	-	-	52.8	53.8	52.9	58.9	55.2	52	42.5	
Tellurium, total	mg/L	-	-	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	
Thallium, total	mg/L	-	-	0.000016	0.000018	0.000019	0.000013	0.000014	0.000015	0.000012	
Thorium, total	mg/L	-	-	< 0.0001	< 0.0001	0.00019	0.0001	< 0.0001	< 0.0001	< 0.0001	
Tin, total	mg/L	-	-	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	
Titanium, total	mg/L	-	-	0.00044	< 0.0006	< 0.0051	0.00285	0.00224	< 0.0024	< 0.002	
Tungsten, total	mg/L	-	-	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	
Uranium, total	mg/L	-	-	0.0151	0.0183	0.019	0.0201	0.021	0.0211	0.0221	
Vanadium, total	mg/L	-	-	< 0.0005	< 0.0005	0.00054	< 0.0005	< 0.0005	< 0.0005	< 0.0005	
Zinc, total	mg/L	Avg 0.5, Max 1	1	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	
Zirconium, total	mg/L	-	-	< 0.0002	< 0.0002	0.00035	0.00023	< 0.0002	0.00021	< 0.0002	
Aluminum, dissolved	mg/L	-	-	-	0.0033	-	0.0031	0.0033	-	-	
Antimony, dissolved	mg/L	-	-	-	< 0.0001	-	< 0.0001	< 0.0001	-	-	
Arsenic, dissolved	mg/L	-	-	-	< 0.0001	-	< 0.0001	< 0.0001	-	-	
Barium, dissolved	mg/L	-	-	-	0.0216	-	0.0209	0.021	-	-	
Beryllium, dissolved	mg/L	-	-	-	< 0.00002	-	< 0.00002	< 0.00002	-	-	
Bismuth, dissolved	mg/L	-	-	-	< 0.00005	-	< 0.00005	< 0.00005	-	-	
Boron, dissolved	mg/L	-	-	-	0.018	-	0.018	0.016	-	-	
Cadmium, dissolved	mg/L	-	-	-	0.0000386	-	0.000032	0.0000457	-	-	
Calcium, dissolved	mg/L	-	-	-	42.2	-	47.2	46	-	-	
Cesium, dissolved	mg/L	-	-	-	0.000012	-	0.000011	< 0.00001	-	-	
Chromium, dissolved	mg/L	-	-	-	< 0.0005	-	< 0.0005	< 0.0005	-	-	
Cobalt, dissolved	mg/L	-	-	-	0.00067	-	0.00062	0.00062	-	-	
Copper, dissolved	mg/L	-	-	-	0.00173	-	0.00148	0.00162	-	-	
Iron, dissolved	mg/L	-	-	-	< 0.01	-	< 0.01	< 0.01	-	-	
Lead, dissolved	mg/L	-	-	-	< 0.00005	-	< 0.00005	< 0.00005	-	-	
Lithium, dissolved	mg/L	-	-	-	0.0069	-	0.0074	0.0076	-	-	
Magnesium, dissolved	mg/L	-	-	-	38.2	-	40.7	40.9	-	-	
Manganese, dissolved	mg/L	-	-	-	0.00502	-	0.00595	0.0101	-	-	
Mercury, dissolved	mg/L	-	-	-	< 0.000005	-	< 0.000005	< 0.000005	-	-	
Molybdenum, dissolved	mg/L	-	-	-	0.00641	-	0.0055	0.00513	-	-	
Nickel, dissolved	mg/L	-	-	-	0.00078	-	0.00069	0.00082	-	-	
Phosphorus (P), dissolved	mg/L	-	-	-	< 0.05	-	< 0.05	< 0.05	-	-	
Potassium, dissolved	mg/L	-	-	-	6.52	-	6.64	6.84	-	-	
Rubidium, dissolved	mg/L	-	-	-	0.00726	-	0.00713	0.00707	-	-	
Selenium, dissolved	mg/L	-	-	-	0.000717	-	0.000686	0.000669	-	-	
Silicon, dissolved	mg/L	-	-	-	1.7	-	1.6	1.7	-	-	
Silver, dissolved	mg/L	-	-	-	< 0.00001	-	< 0.00001	< 0.00001	-	-	
Sodium, dissolved	mg/L	-	-	-	6.84	-	7.47	7.27	-	-	
Strontium, dissolved	mg/L	-	-	-	0.11	-	0.107	0.116	-	-	
Sulfur, dissolved	mg/L	-	-	-	54.1	-	54.6	56.4	-	-	
Tellurium, dissolved	mg/L	-	-	-	< 0.0002	-	< 0.0002				

Water Quality Results for Monitoring Location - MS-11

ALS Laboratory Work Order				Sample ID	MS-11	MS-11	MS-11	MS-11	MS-11
				BF2500332	BF2500337	BF2500340	BF2500343	BF2500345	
				Sample Date & Time	2025-09-16 09:55	2025-09-22 11:30	2025-09-29 14:00	2025-10-01 08:10	2025-10-06 09:00
Sample Type				P	P	P	P	P	
Analyte	Units	Water Licence Criteria	MDMER - Max Grab						
pH, Field	pH units	-	-	7.87	7.94	7.89	7.85	8.11	
Specific Conductivity, Field	us/cm	-	-	591	539	467.9	477.9	480	
Temperature, Field	deg C	-	-	1.2	1	0.9	0.4	0	
Turbidity, Field	NTU	-	-	0.56	0.17	0.42	0.02	0.11	
Dissolved Oxygen, Field	mg/L	-	-	12.59	12.72	13.39	13.01	12.4	
Dissolved Oxygen, Percent, Field	%	-	-	89.2	89.5	94	90.1	84.9	
Visible Sheen, Field	None	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	
Conductivity, Lab	us/cm	-	-	555	550	434	451	448	
Acidity	mg/L	-	-	-	-	-	2.5	-	
Total Alkalinity	mg/L	-	-	-	-	-	87.6	-	
Hardness	mg/L	-	-	-	-	-	224	-	
Total Dissolved Solids	mg/L	-	-	337	332	251	272	263	
Total Suspended Solids	mg/L	Avg 15, Max 30	30	1.1	2	< 1	< 1.3	< 1.4	
Turbidity, Lab	NTU	-	-	0.95	0.86	0.78	1.12	0.56	
pH, Lab	pH units	6.0 - 9.5	6.0 - 9.5	7.84	7.8	7.74	7.72	7.66	
Total Ammonia	mg/L	-	-	0.0076	0.008	< 0.005	0.0066	0.0344	
Ammonia, Un-ionized	mg/L	-	1	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	
Ammonia, Un-ionized (as NH3)	mg/L	-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	
Chloride	mg/L	-	-	-	-	-	11.4	-	
Fluoride	mg/L	-	-	-	-	-	0.128	-	
Total Kjeldahl Nitrogen	mg/L	-	-	-	-	-	0.302	-	
Nitrate	mg/L	-	-	-	-	-	5.68	-	
Nitrite	mg/L	-	-	-	-	-	< 0.01	-	
Phosphorus, Nutrient	mg/L	-	-	-	-	-	0.0026	-	
Sulfate	mg/L	-	-	-	-	-	94.3	-	
Dissolved Organic Carbon	mg/L	-	-	-	-	-	2.06	-	
Total Organic Carbon	mg/L	-	-	-	-	-	1.93	-	
Aluminum, total	mg/L	-	-	0.0305	0.0542	0.0327	0.0363	0.0362	
Antimony, total	mg/L	-	-	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	
Arsenic, total	mg/L	Avg 0.3, Max 0.6	0.6	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	
Barium, total	mg/L	-	-	0.0182	0.02	0.0154	0.0157	0.0162	
Beryllium, total	mg/L	-	-	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	
Bismuth, total	mg/L	-	-	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	
Boron, total	mg/L	-	-	0.031	0.018	0.017	0.017	0.018	
Cadmium, total	mg/L	-	-	0.0000214	0.0000277	0.0000222	0.0000265	0.0000185	
Calcium, total	mg/L	-	-	40.3	45	35.1	35.4	37.9	
Cesium, total	mg/L	-	-	0.000017	0.00002	0.000012	0.000014	0.000015	
Chromium, total	mg/L	-	-	< 0.0005	< 0.0005	< 0.0005	0.00052	< 0.0005	
Cobalt, total	mg/L	-	-	0.0005	0.00048	0.00036	0.00038	0.00036	
Copper, total	mg/L	Avg 0.3, Max 0.6	0.6	0.00178	0.00208	0.0019	0.00206	0.00202	
Iron, total	mg/L	-	-	0.042	0.066	0.041	0.047	0.045	
Lead, total	mg/L	Avg 0.1, Max 0.20	0.2	0.000337	0.000418	0.000252	0.000265	0.000185	
Lithium, total	mg/L	-	-	0.0052	0.006	0.0054	0.005	0.0051	
Magnesium, total	mg/L	-	-	36.3	39.1	31.4	32.5	30.6	
Manganese, total	mg/L	-	-	0.00226	0.00315	0.0018	0.00258	0.00208	
Mercury, total	mg/L	-	-	-	-	-	< 0.000005	-	
Molybdenum, total	mg/L	-	-	0.00561	0.00634	0.00787	0.00773	0.00739	
Nickel, total	mg/L	Avg 0.5, Max 1	1	0.00078	0.0009	0.00068	0.00086	0.00078	
Phosphorus (P), total	mg/L	-	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	
Potassium, total	mg/L	-	-	6.12	6.3	6	6.34	6.21	
Rubidium, total	mg/L	-	-	0.00674	0.00711	0.0064	0.00655	0.00644	
Selenium, total	mg/L	-	-	0.000465	0.000447	0.000427	0.000414	0.000394	
Silicon, total	mg/L	-	-	1.74	1.94	1.87	1.82	1.89	
Silver, total	mg/L	-	-	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	
Sodium, total	mg/L	-	-	6.49	6.58	5.31	5.35	5.2	
Strontium, total	mg/L	-	-	0.1	0.104	0.0816	0.0801	0.084	
Sulfur, total	mg/L	-	-	42.8	43.4	32.9	31.9	32.1	
Tellurium, total	mg/L	-	-	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	
Thallium, total	mg/L	-	-	0.000013	0.000013	< 0.00001	0.00001	0.00001	
Thorium, total	mg/L	-	-	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	
Tin, total	mg/L	-	-	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	
Titanium, total	mg/L	-	-	< 0.002	0.00222	0.00134	0.00145	0.00148	
Tungsten, total	mg/L	-	-	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	
Uranium, total	mg/L	-	-	0.0226	0.0245	0.0144	0.0152	0.0185	
Vanadium, total	mg/L	-	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	
Zinc, total	mg/L	Avg 0.5, Max 1	1	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	
Zirconium, total	mg/L	-	-	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	
Aluminum, dissolved	mg/L	-	-	-	-	-	0.0029	-	
Antimony, dissolved	mg/L	-	-	-	-	-	< 0.0001	-	
Arsenic, dissolved	mg/L	-	-	-	-	-	< 0.0001	-	
Barium, dissolved	mg/L	-	-	-	-	-	0.0154	-	
Beryllium, dissolved	mg/L	-	-	-	-	-	< 0.00002	-	
Bismuth, dissolved	mg/L	-	-	-	-	-	< 0.00005	-	
Boron, dissolved	mg/L	-	-	-	-	-	0.016	-	
Cadmium, dissolved	mg/L	-	-	-	-	-	0.0000178	-	
Calcium, dissolved	mg/L	-	-	-	-	-	35.8	-	
Cesium, dissolved	mg/L	-	-	-	-	-	< 0.00001	-	
Chromium, dissolved	mg/L	-	-	-	-	-	< 0.0005	-	
Cobalt, dissolved	mg/L	-	-	-	-	-	0.00034	-	
Copper, dissolved	mg/L	-	-	-	-	-	0.00176	-	
Iron, dissolved	mg/L	-	-	-	-	-	< 0.01	-	
Lead, dissolved	mg/L	-	-	-	-	-	< 0.00005	-	
Lithium, dissolved	mg/L	-	-	-	-	-	0.0051	-	
Magnesium, dissolved	mg/L	-	-	-	-	-	32.8	-	
Manganese, dissolved	mg/L	-	-	-	-	-	0.00102	-	
Mercury, dissolved	mg/L	-	-	-	-	-	< 0.000005	-	
Molybdenum, dissolved	mg/L	-	-	-	-	-	0.00765	-	
Nickel, dissolved	mg/L	-	-	-	-	-	0.00056	-	
Phosphorus (P), dissolved	mg/L	-	-	-	-	-	< 0.05	-	
Potassium, dissolved	mg/L	-	-	-	-	-	6.4	-	
Rubidium, dissolved	mg/L	-	-	-	-	-	0.0064	-	
Selenium, dissolved	mg/L	-	-	-	-	-	0.000424	-	
Silicon, dissolved	mg/L	-	-	-	-	-	1.7	-	
Silver, dissolved	mg/L	-	-	-	-	-	< 0.00001	-	
Sodium, dissolved	mg/L	-	-	-	-	-	5.38	-	
Strontium, dissolved	mg/L	-	-	-	-	-	0.0828	-	
Sulfur, dissolved	mg/L	-	-	-	-	-	31.2	-	
Tellurium, dissolved	mg/L	-	-	-	-	-	< 0.0002	-	
Thallium, dissolved	mg/L	-	-	-	-	-	< 0.00001	-	
Thorium, dissolved	mg/L	-	-	-	-	-	< 0.0001	-	
Tin, dissolved	mg/L	-	-	-	-	-	< 0.0001	-	
Titanium, dissolved	mg/L	-	-	-	-	-	< 0.0003	-	
Tungsten, dissolved	mg/L	-	-	-	-	-	< 0.0001	-	
Uranium, dissolved	mg/L	-	-	-	-	-	0.0163	-	
Vanadium, dissolved	mg/L	-	-	-	-	-	< 0.0005	-	
Zinc, dissolved	mg/L	-	-	-	-	-	< 0.001	-	
Zirconium, dissolved	mg/L	-	-	-	-	-	< 0.0003	-	
Radium-226	Bq/L	-	1.11	0.04	0.04	0.02	0.02	0.04	
Acute Lethality - Daphnia magna	%	Not Acutely Toxic	< 50	-	-	-	< 1	-	
Acute Lethality - Rainbow Trout	%	Not Acutely Toxic	< 50	-	-	-	< 1	-	

Attachment 3
2025 SNP Modification Request



March 31, 2025

Karén Kharatyan
Director of Technical Services
Nunavut Water Board
P.O. Box 119
Gjoa Haven, Nunavut, X0B 1J0

Re: Mary River Project – Changes to Surveillance Network Program (SNP) and Alignment of Schedule I of the Type ‘A’ Water Licence 2AM-MRY1325 - Amendment No. 1

In accordance with Part I, Items 6 and 28 of Baffinland Iron Mines Corporation’s (Baffinland) Type ‘A’ Water Licence – 2AM-MRY1325 - Amendment No. 1 (Type ‘A’ Water Licence) for the Mary River Project (Project), Baffinland is pleased to submit this request for approval for proposed changes to the Project’s Surveillance Network Program (SNP), outlined in Schedule I of the Type ‘A’ Water Licence, in addition to alignment recommendations to Schedule I of the Type ‘A’ Water Licence.

The SNP outlines the monitoring requirements for Project effluents discharged to the receiving environment and surface water drainage downstream of specific Project areas. The current and proposed SNP monitoring stations at the Mine Site, as presented in Schedule I of the Type ‘A’ Water Licence - Amendment No. 1 and subsequent approved Water License and Schedule I Modifications, are presented in Figure 1. Baffinland is proposing to relocate one SNP station ID (MS-11), and to remove one SNP station ID (MS-C-F), due to the planned mitigation measures to address ongoing challenges with the intended design operation of the KM 105 surface water management pond. Due to the inclusion of the downstream (non fish-bearing) natural settling pond in the overall KM105 surface water management pond infrastructure, the MS-11 SNP station is proposed to be relocated downstream of all treatment infrastructure. Similarly, MS-C-F is proposed for removal as it is now within the treatment infrastructure of the entire KM 105 treatment facility.

A summary of the proposed changes to the SNP monitoring stations and associated justifications are presented in Table 1.

Table 1: Proposed Changes to SNP Stations at the Mary River Project

Station ID	Station Description	Current Location (NAD83, Zone 17W)		Proposed Location (NAD83, Zone 17W)		Reason for Change
		Easting	Northing	Easting	Northing	
MS-11	KM105 Pond Stormwater	562171	7913159	561677	7913471	Due to ongoing challenges with water containment facilities (in the KM 105 Pond), additional water management measures for this water now include the settling pond at MSC-F, with a control structure installed for measuring flow and water quality at the identified new location for MS-11.
MS-C-F	Surface Water Drainage Downstream of Mine Infrastructure	561797	7913278	Remove		Due to the required expansion of the overall treatment footprint of KM 105 to address containment challenges, this location is now within mine infrastructure.

We trust that this information meets the requirements under Part I of the Type 'A' Water Licence and look forward to the NWB's response. Please do not hesitate to contact the undersigned should you have any questions or comments.

Regards,

A handwritten signature in black ink, appearing to read "Todd Swenson".

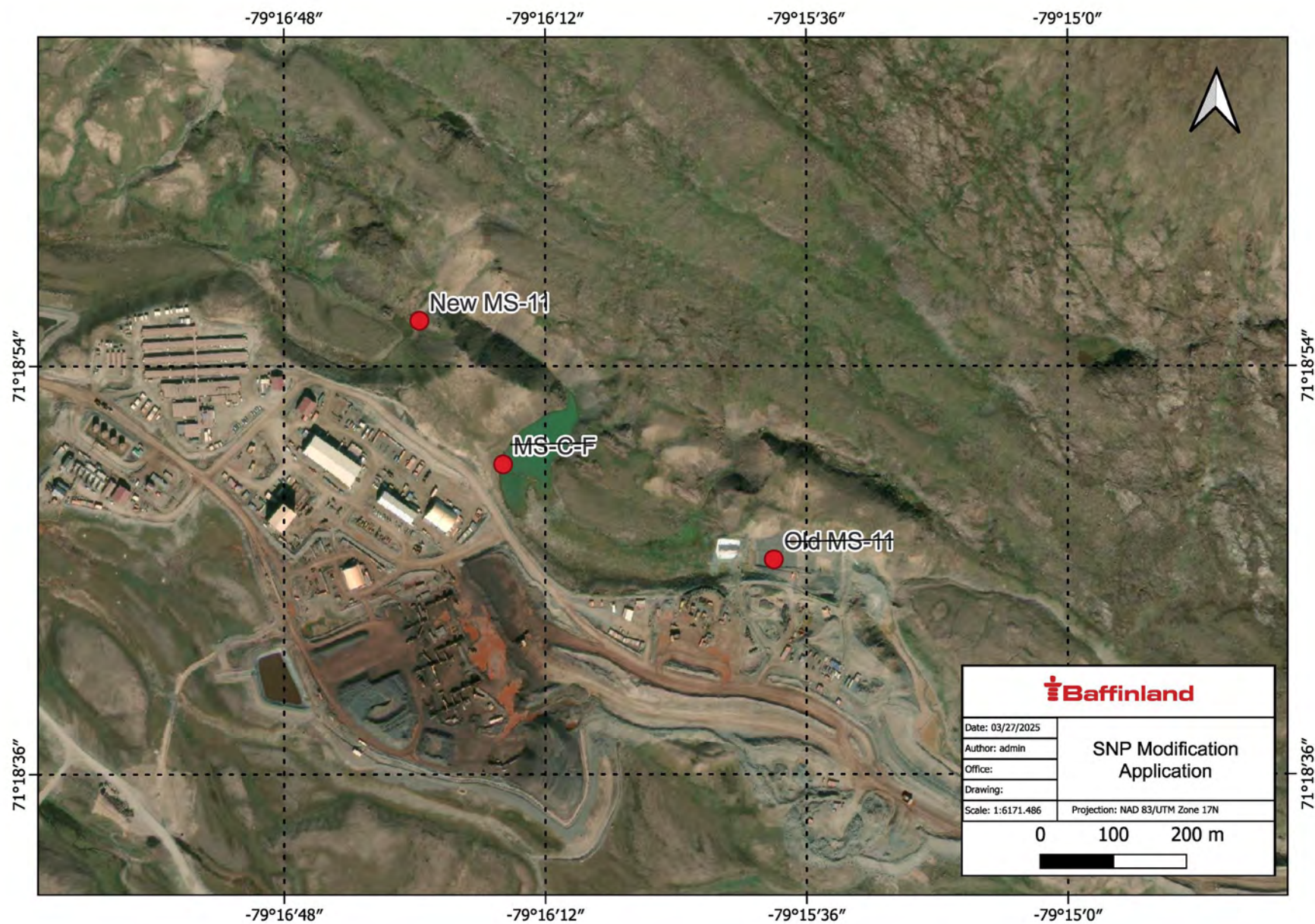
Todd Swenson
Environmental Superintendent

Cc: Robert Hunter (Nunavut Water Board)
Conor Goddard, Assol Kubeisinova (Qikiqtani Inuit Association)
Omer Pasalic (Crown-Indigenous Relations and Northern Affairs Canada)
Megan-Lord Hoyle, Lou Kamermans, William Bowden, Katie Babin, Allison Parker, Shannon Mulhall (Baffinland)

Attachments

Figure 1 – Mine Site Water Licence Monitoring Locations - Pre and Post Change 2025

**Figure 1 – Mine Site Water Licence Monitoring Locations - Pre
and Post Change 2025**



Attachment 4
Photo Journal – KM 105 Facility 2025

Water Management within the KM 105 Valley



Photo 1. Filter Berm within KM 105 Valley Water Management Infrastructure – March 31, 2025



Photo 2. Filter Berm and Downstream Infrastructure within the KM 105 Valley – June 29, 2025



Photo 3. KM 105 Valley Inflow Pre-dosing Plant – August 23, 2025



Photo 4 Filter Berm within the KM 105 Valley – August 23, 2025



Photo 5. Jar Test Pre-Dosing at the KM 105 Chemical Injection Plant – May 31, 2025

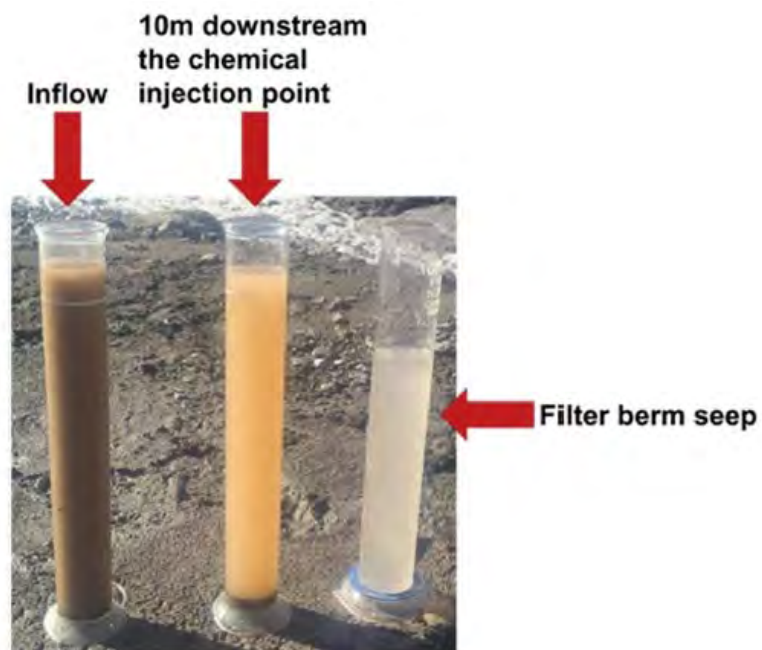


Photo 6. Polymer Dosing Mitigating Sediment Transport within the KM 105 Valley Water Management Infrastructure – May, 2025

Water Management Downstream of the KM 105 DAM



Photo 7. Maintenance and Preparation of Silt Curtains at MS-C-F Settling Pond
Downstream of KM 105 – May 18, 2025



Photo 8. Maintenance and Preparation of Silt Curtains at MS-C-F Settling Pond
Downstream of KM 105 – May 18, 2025



Photo 9. Maintenance and Preparation of Silt Curtains at MS-C-F Settling Pond
Downstream of KM 105 – May 18, 2025



Photo 10. Installation of Silt Curtain Upstream of the Proposed MS-11 Discharge Location – May 23, 2025



Photo 11. Installation of Silt Curtain Upstream of the Proposed MS-11 Discharge Location – May 23, 2025



Photo 12. Installation of Silt Curtain Upstream of the Proposed MS-11 Discharge Location – May 23, 2025



Photo 13. Silt Curtains inside the MS-C-F Settling Pond – July 20, 2025



Photo 14. Silt Curtain inside the MS-C-F Settling Pond – July 7, 2025



Photo 15. Water Quality Monitoring at the Proposed MS-11 Discharge Location – June 23, 2025



Photo 16. Water Quality Monitoring at the Proposed MS-11 Discharge Location – June 30, 2025