

APPENDIX E.8.7.2 INITIAL AND FOLLOW UP SPILL REPORTS OTHER (Part 2)



May 12, 2017

Resource Management Officer Nunavut Field Operations Indigenous and Northern Affairs Canada Box 100 Iqaluit, NU X0A 0H0 Justin.Hack@aandc-aadnc.gc.ca Manager, Major Projects Qikiqtani Inuit Association P.O. Box 219 Iqaluit, NU X0A 0H0

Re: Follow-up to Spill #17-109, Reported on April 13th, 2017 Mary River Project - Water Licence No. 2AM-MRY1325

Summary:

On April 12th, 2017 while an operator was refueling the fuel tank connected to an IT tower generator (Tote Road Km 61) it was noted that fuel was seeping from the tank vent pipe impacting the below adjacent area. Approximately 110L was released, impacting an area of 11 square meters. The location of the spill was confined to the frozen surface below the vent pipe with no possibility of migrating. The spill occurred on crown land, and is greater than 500m from the closest water body, which is frozen. The Environment Canada tank registration number is 00043663.

Immediate and Follow-Up Action:

The source of the leak was removed from the system; spill pads and secondary containment were used to mitigate the spill. The contaminated material was removed from site and transported to a Milne Port hazardous storage lined engineered containment. It was identified that the source of the leak was due to snow/ice buildup within the vent pipe blocking the return fuel line to flow back into the tank. The system was modified by removing the external tank vent pipe and replacing it with an internal horizontal pipe which is not exposed to the elements to prevent snow and ice buildup to occur.

Recommendations:

Inspection of communication tower power stations to determine if any units are currently operating with a similar tank venting system and modify if required.

Current Status:

The tank is currently back in operation and the vent system repaired/modified. The area will continue to be monitored as the ground thaws.

Should you require further information or clarification on the above noted spill, please feel free to contact William Bowden at (647) 253-0596 x6016, Laura Taylor (647) 253-0596 x6016 or Allan Knight at (647) 253-0596 x6010

Prepared By: Katherine Babin Reviewed by: William Bowden

Bell Bonder

Attach: Photos, Map, NT-NU Spill Report

cc. Todd Burlingame, Wayne McPhee, Sylvain Proulx, William Bowden, Laura Taylor (Baffinland), Stephen Bathroy (QIA), Erik Allain, Sarah Forte, Jonathon Mesher (INAC



Photo 1 -Tank set up with vent pipe to outside.



Photo 2 –Contaminated snow impacted by fuel dripping from vent pipe



Photo 3 – Tank set up with hose inside secondary containment



Photo 4 – Contaminated snow removed of outside of seacan

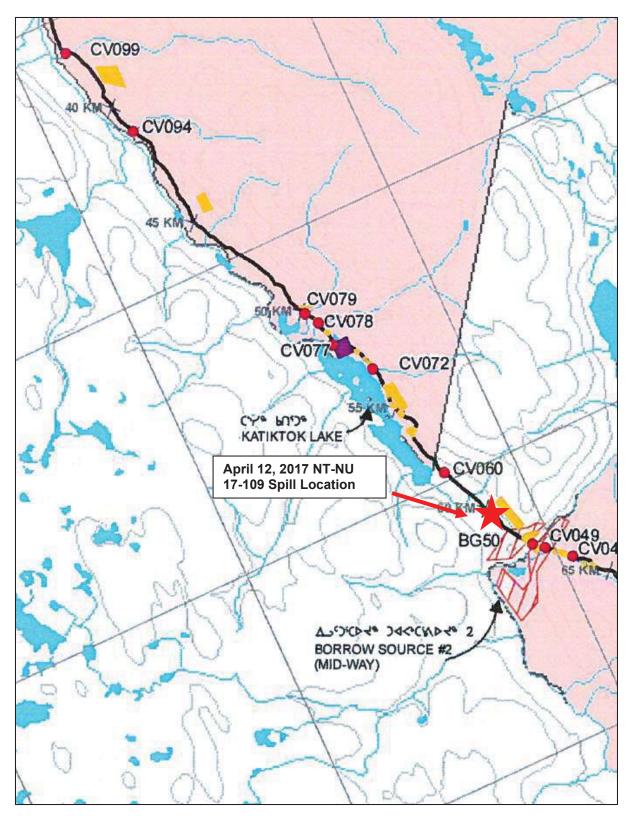


Figure 1: NT-NU 17-109 Spill Location



THIRD SUPPORT AGENCY

NT-NU 24-HOUR SPILL REPORT LINE

TEL: (867) 920-8130 FAX: (867) 873-6924

	empones inunavut		JIE, GROOLINE, C	ALIENIONES	S AND OTHER HAZARDOO	I WINTERINES	REPORT LINE USE ONLY		
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В	OCCURRENCE DATE: MONTH 04-12-2017			Unkn	OWN	□ UPDATE # TO THE ORIGINAL SPI	17 - 109		
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	ANY CONTRACTOR INVOLVED	•			OR OFFICE LOCATION	,, .			
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Т	REPORTED TO SPILL LINE BY			EMPLOYE		LOCATION CALLING F			
<u> </u>	William Bowden	Env. Superint	lendent	Baffir		647-253-0596 ALTERNATE CONTACT			
M	Wayen McPhee	Env. Director		Baffir		416-996-5523			
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SEC	OND SUPPORT AGENCY								

Figure 2: NT-NU Spill Report 17-109



May 22 2017

Resource Management Officer Nunavut Field Operations Indigenous and Northern Affairs Canada Box 100 Iqaluit, NU X0A 0H0 Justin.Hack@aandc-aadnc.gc.ca Director, Major Projects Qikiqtani Inuit Association P.O. Box 219 Iqaluit, NU X0A 0H0

Re: Follow-up to Spill #17-117, Reported on April 22nd, 2017 Mary River Project - Water Licence No. 2AM-MRY1325

Summary:

At 09:30 HRS on April 22nd, Surface Works vacuum truck operator discovered that the OHT laydown wash car had overflowed. Upon investigation, it was determined that the heat trace failed causing the contents of the wash car to freeze. Incoming sewage was unable to enter the wash car resulting in an overflow. Approximately 125 L of raw sewage was released to the adjacent pad, on IOL, impacting an area of 9 m2. The location of the spill was confined to the OHT laydown, with no chance of migrating and is greater than 75 metres from the closest water body which is currently frozen.

Immediate and Follow-Up Action:

The operator notified his supervisor and pumped out the remaining sewage in the wash car. The contaminated snow and material was scraped up with heavy equipment and disposed of in engineered lined containment. The heat trace and piping was repaired.

Recommendations:

Routine checks of wash cars and piping while being regularly emptied is recommended.

Current Status:

The heat trace and influent piping was repaired and the wash car is currently operational.

Should you require further information or clarification on the above noted spill, please feel free to contact William Bowden / Laura Taylor at (647) 253-0596 x6016 or Allan Knight at (647) 253-0596 x6010

Prepared By:

Connor Devereaux

Environmental Coordinator

Reviewed by:

William Bowden

Bell Bander

Environmental Superintendent

Attach: Photos, Map, NT-NU Spill Report

cc. Todd Burlingame, Wayne McPhee, Sylvain Proulx Eric Steinmetzer Lyle Hemmerling J-P Provencher (Baffinland) Stephen Bathory (QIA), Erik Allain, Sarah Forte, Jonathon Mesher (INAC).





Figure 1 – Raw sewage spill from washcar in OHT laydown



Figure 2 – Raw Sewage spill from washcar in OHT Laydown post clean up





Canada NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

NT-NU 24-HOUR SPILL REPORT LINE TEL: (867) 920-8130 FAX: (867) 873-6924 EMAIL: spills@gov.nt.ca

Α	04-22-2017	- YE	AR			21:15				X	ORIGINAL SPIL	L REPORT,		REPORT NUMBER
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Figure2: NT-NU Spill Report 17-117



May 28th, 2017

Resource Management Officer Nunavut Field Operations Indigenous and Northern Affairs Canada Box 100 Iqaluit, NU X0A 0H0 Justin.Hack@aandc-aadnc.gc.ca Director, Major Projects Qikiqtani Inuit Association P.O. Box 219 Iqaluit, NU X0A 0H0

Re: Follow-up to Spill #17-134, Reported on April 29th, 2017 Mary River Project - Water Licence No. 2AM-MRY1325

Summary:

At 10:30 HRS on April 29th, a worker advised the environmental department that there was a dark area on the ground behind the wash bay directly beside a fuel tank. It was determined after inspection that there was a diesel spill from the tank. The workers responded immediately by placing spill pads and duck ponds to collect the diesel. Approx. 270 L of diesel fuel spilled on the camp pad, impacting an area of less than 20m2. The contaminated material was cleaned up and properly disposed of. The location of the spill was confined to the east side of the wash bay pad, and is greater than 100 meters from the closest water body which is currently frozen. The Wiggins Nozzle was tightened to stop the leak.

Recommendations:

Routine checks of tanks is ongoing and will be focusing efforts to inspect the Wiggins nozzles as well as all other devices used on the fuel tanks.

Current Status:

The wash bay fuel tank is used to heat the wash bay. It is currently in use and there has been no leakage from the nozzle.

Should you require further information or clarification on the above noted spill, please feel free to contact William Bowden / Laura Taylor at (647) 253-0596 x6016 or Allan Knight at (647) 253-0596 x6010

Prepared by: Approved By:

Laura Taylor Environmental Superintendent Gordon Mudryk Site Services Manager

Attach: Photos, Map, NT-NU Spill Report

cc. Todd Burlingame, Wayne McPhee, Sylvain Proulx, Eric Steinmetzer, Gordon Mudryk (Baffinland) Stephen Bathory (QIA), Erik Allain, Sarah Forte, Jonathon Mesher (INAC).







Figure 2 – Leaking Wiggins Nozzle into drip tray that mixed with snow melt overtopping

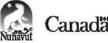




Figure 3 – Area after Occurance







NT-NU SPILL REPORT OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

NT-NU 24-HOUR SPILL REPORT LINE TEL: (867) 920-8130 FAX: (867) 873-6924 EMAIL: spills@gov.nt.ca

							REPORT LINE USE ONLY		
Α	04-29-2017	Y-YEAR		10:30		XORIGINAL SPILL REPO	ORT, REPORT NUMBER		
****	OCCURRENCE DATE: MONTH	H – DAY – YEAR		COMMISSION	NCE TIME	OR UPDATE #	17 -		
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М	ANY ALTERNATE CONTACT Wayne McPhee	POSITION	evelopment	EMPLOYE Baffir	R	ALTERNATE CONTACT	ALTERNATE TELEPHONE 5088		
	182		REPORT LIN	E USE ON	LY	Transition of the Control of the Con			
Ν	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	R	EMPLOYE	R	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130		
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PAGE 1 OF __1__



Resource Management Officer Nunavut Field Operations Indigenous and Northern Affairs Canada Box 100 Iqaluit, NU X0A 0H0 Justin.Hack@aandc-aadnc.gc.ca Director, Major Projects Qikiqtani Inuit Association P.O. Box 219 Iqaluit, NU X0A 0H0

Re: Follow-up to Spill #17-133, Reported on April 29, 2017 Mary River Project - Water Licence No. 2AM-MRY1325

Summary:

On April 29, 2017 at 07:00 HRS, site services staff notified the environment department of a spill outside a sewage lift station located on the south side of MSC AF Wing. It was observed that the sewage lift station appeared to be functioning properly but raw sewage was observed on the adjacent pad. The source of spill was located at the inlet to the life station where a fernco coupler separated on the 4" gravity line. It is estimated that 170 litres of raw sewage was released to the adjacent ground. The location of the spill was confined to the Mine Site Complex pad, on IOL and is greater than 100 metres from the closest water body which is currently frozen. 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.

Immediate and Follow-Up Action:

Fernco coupler was replaced and additional support was added underneath the pipe to limit movement.

Recommendations:

Routine inspections of the pipes and inlets should be completed to ensure all components are functioning as designed and there is no worn out or damaged parts.

Current Status:

The fernco coupler was replaced and fixed on the 4" gravity line into the lift station.

Should you require further information or clarification on the above noted spill, please feel free to contact William Bowden at (647) 253-0596 x6016, Laura Taylor (647) 253-0596 x6039 or Allan Knight at (647) 253-0596 x6010.

Prepared By:

Katherine Babin

Environmental Coordinator

Reviewed by:

Laura Taylor

Environmental Superintendent

Approved By:

Gordon Mudryk Site Services Manager



Attach: Photos, Map, NT-NU Spill Report

cc. Todd Burlingame, Wayne McPhee, Sylvain Proulx, Eric Steinmetzer, Gordon Mudryk, Harold Audet (Baffinland) Stephen Bathory (QIA), Erik Allain, Sarah Forte, Jonathon Mesher (INAC)



Photos:



Photo 1 – Fernco coupler separated on the 4" gravity line into the lift station





Photo 2 - Raw sewage released to the adjacent ground south of MSC AF Wing

Baffinland



Photo 3 - New coupler and wood support installed on 4" gravity line



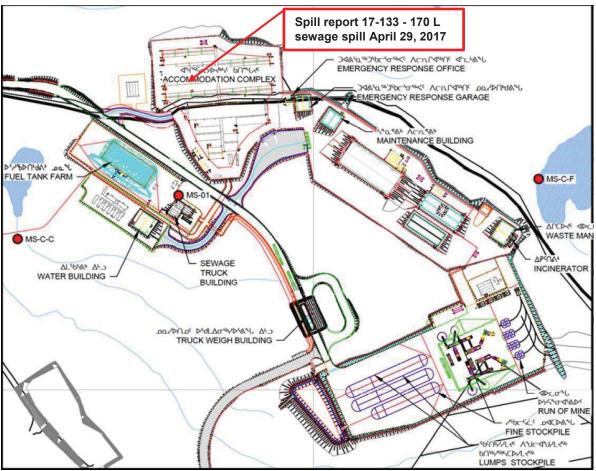


Figure 1 - Map of spill location



Congested area, snow, ice,

electrical



NT-NU SPILL REPORT

Т

N/A

NT-NU 24-HOUR SPILL REPORT LINE TEL: (867) 920-8130

TEL: (867) 920-8130 FAX: (867) 873-6924 EMAIL: spills@gov.nt.ca

OIL, gAsOLinE, chEMicALs And OThEr hAzArdOus MATERIALS REPORT LINE USE ONLY REPORT dATE: MONTh - dAy - yEAR REPORT TIME ORIGINAL SPILL REPORT, 8:00 am REPORT NUMBER 04-29-2017 OccURRENCE dATE:MONTh - dAy-yEAR OccURRENCE TIME □ UPdATE# TO The Original sPill REPORT 17 - 0 В 04-29-2017 Unknown ANdUSEPERMITNUMBER (IFAPPIICABIE) WATER ICENCE NUMBER (ITAPPIICABLE) C IOL - Commercial Lease: Q13C301 2AM-MRY1325 Type "A" GEOGRAPHIC PIACE NAME OR DISTANCE AND DIRECTION FROM NAMED IOCATION REGION d Mary River Mine Site, Baffin Island, NU □ NWT KNUNAVUT £ AdiAcENT IURISDICTION OR OCEAN ATITUdE IONgiTUdE E sEcONds 54 dEgREEs 79 dEgREEs 71 MINUTES 17 sEcONds 03 MINUTES RESPONSIBLE PARTY OR VESSELNAME RESPONSIBLE PARTY AddRESS OR Office lOcaTION Baffinland Iron Mines Corp. 2275 Middle Road East, Suite 300, Oakville, ON L6H 0C3 ANY CONTRACTOR INVOIVED CONTRACTOR AddRESS OR Office IOCATION g N/A PROdUcT sPillEd QUANTITY IN ITRES, KIIOGRAMS OR CUBIC METRES U.N. NUMBER Raw Sewage N/A <170 L sEcONd PROdUcT sPillEd (if APPlicABIE) QUANTITY IN ITRES, killOgRAMs OR cUBIC METRES U.N. NUMBER N/A N/A N/A sPillsOURcE AREA O (cONTAMINATION IN SQUAREMETRES sPillcAUsE İ Sewage Lift Station Coupler separated on gravity line 10 m3 ACTORS Affecting spill OR REcovery dEscRIBE ANY AssisTANCE REQUIRED hAZARds TO PERSONS, PROPERTY OR EQUIPMENT

Additional information, comments, actions proposed or taken to contain, recover or dispose of spilled product and contaminated materials At 07:00 HRS on April 29th, site services staff notified the environment department of possible spill outside a sewage lift station outside the MSC AF Wing West. It was observed that the sewage lift station appeared to functionally properly. Snow and ice was cleared from inlet pipe. Source of spill was located at the inlet where a fernco coupler separated on the 4" gravity line into the lift station. It is estimated that 170 litres of raw sewage was released to the adjacent ground. The location of the spill was confined to the Mine Site Complex pad, and is greater than 100 metres from the closest water body which is currently frozen. The investigation and repairs are ongoing and further details of the incident will be provided in the follow-up report. 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.

I	REPORTED TO SPILINE BY Laura Taylor	POSITION Env. Superintendent	EMPIOYER Baffinland	647-253-059	
M	ANYAITERNATECONTACT Wayne McPhee	POSITION Dir. Sust Development	EMPIOYER Baffinland	Off Site	ATERNATE TELEPHONE 5088
		REPORT LI	NE USE ONLY	*	-\hat{\alpha}
Ν	REcEivEd ATsPill liNE By	POSITION STATIONOPERATOR	EMPIOYER	IOCATION CAILED yEIIOWKNIFE, NT	REPORT IINE NUMBER (867) 920-8130
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fiRs	TSUPPORT AGENCY				
sEc(ONd sUPPORT AgENcy				
ThiR	d sUPPORT AgENcy				



June 2, 2017

Resource Management Officer Nunavut Field Operations Indigenous and Northern Affairs Canada Box 100 Iqaluit, NU X0A 0H0 Justin.Hack@aandc-aadnc.gc.ca Director, Major Projects Qikiqtani Inuit Association P.O. Box 219 Iqaluit, NU X0A 0H0

Re: Follow-up to Spill #17-141, Reported on May 3rd, 2017 Mary River Project - Water Licence No. 2AM-MRY1325

Summary:

On May 3rd 2017 at 1430 HRS, a 777 haul truck located off to the side of the road between km 109 and km 110 on the mine haul road was waiting for repairs. After the haul truck was repaired it was restarted and at that time the oil cooler causing approximately 220L of coolant to be released, impacting an area of 2 square meters. The location of the spill was confined to the frozen surface of the road with no possibility of migrating, and is greater than 500m from the closest water body which is currently frozen.

Immediate and Follow-Up Action:

A berm was formed around the equipment to prevent the spill from migrating. The source of the leak was removed from the system and repaired. Spill pads and secondary containment were used to removes excess pooling coolant.

Recommendations:

Preventative maintenance inspection programs for Cat 777s are continuing to be implemented to reduce operational breakdowns and resultant spills.

Current Status:

The coolant line was replaced and the Cat 777 was put back into service. The affected area was cleaned up and the contaminated snow was placed in the snow dump a lined engineered containment facility.

Should you require further information or clarification on the above noted spill, please feel free to contact William Bowden or Laura Taylor at (647) 253-0596 x6016 or Allan Knight at (647) 253-0596 x6010.

Reviewed by:

Prepared By:

Katherine Babin Laura Taylor

Environmental Coordinator Environmental Superintendent

Attach: Photos, Map, NT-NU Spill Report

cc. Todd Burlingame, Wayne McPhee, Sylvain Proulx, Robert Gagne, Josh Manning, Adam Gyorffy Stephen Bathory (QIA), Erik Allain, Sarah Forte, Jonathon Mesher (INAC)



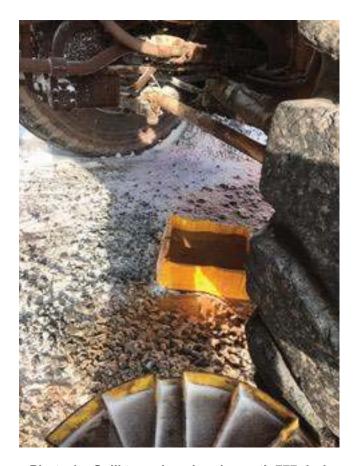


Photo 1 – Spill tray placed underneath 777 during spill



Photo 3 – Photo of spill location after clean up





Figure 1 – Map of spill location







NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

NT-NU 24-HOUR SPILL REPORT LINE TEL: (867) 920-8130 FAX: (867) 873-6924 EMAIL: SDIIIS@00V.nt.ca

REPORT DATE: MONTH - DAY - YEAR REPORT TIME X ORIGINAL SPILL REPORT, 05-03-2017 18:30HRS REPORT NUMBER OCCURRENCE DATE: MONTH - DAY - YEAR OCCURRENCE TIME UPDATE # 17 - 141 В TO THE ORIGINAL SPILL REPORT 17:30 HRS 04-12-2017 LAND USE PERMIT NUMBER (IF APPLICABLE) WATER LICENCE NUMBER (IF APPLICABLE) C IOL - Commercial Lease: Q13C301 2AM-MRY1325 Type "A" GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION D Mary River Mine Site, Baffin Island, NU □ NWT X NUNAVUT DADJACENT JURISDICTION OR OCEAN LATITUDE LONGITUDE Ε DEGREES 79 DEGREES 71 MINUTES 13 MINUTES 19 SECONDS 46 SECONDS 16 RESPONSIBLE PARTY OR VESSEL NAME RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION Baffinland Iron Mines Corp. 2275 Middle Road East, Suite 300, Oakville, ON L6H 0C3 CONTRACTOR ADDRESS OR OFFICE LOCATION ANY CONTRACTOR INVOLVED G N/A QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES PRODUCT SPILLED Coolant Approx. 220 L Н SECOND PRODUCT SPILLED (IF APPLICABLE) QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES U.N. NUMBER N/A N/A N/A SPILL SOURCE SPILL CAUSE AREA OF CONTAMINATION IN SQUARE METRES 777 Haul truck 2 m2 Coolant hose clamp broke FACTORS AFFECTING SPILL OR RECOVERY DESCRIBE ANY ASSISTANCE REQUIRED HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT Frozen Conditions and snow N/A heavy equipment ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS On May 3rd, 2017, a haul truck located between km 109 and km 110 off to the side of the mine road broken down waiting for repairs. When the haul truck was repaired it was restarted and at that time the oil cooler cracked causing approx 220L of coolant to be released, impacting an area of 2 square meters. The source of the leak was removed from the system/ repaired and spill pads and secondary containment were used to mitigate the spill. The location of the spill was confined to the frozen surface on top of the pit with no possibility of migrating, and is greater than 500m from the closest water body which is frozen. The clean up of contaminated material is underway and the investigation is ongoing; further details of the incident and cause will be provided in the follow-up report. 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. REPORTED TO SPILL LINE BY POSITION EMPLOYER LOCATION CALLING FROM Env. Superintendent Baffinland Laura Taylor 647-253-0596 ext. 6016 ANY ALTERNATE CONTACT POSITION EMPLOYER ALTERNATE CONTAC ALTERNATE TELEPHONE М 416-996-5523 Ext 5088 Env. Director Wayen McPhee Baffinland REPORT LINE USE ONLY POSITION LOCATION CALLED EMPLOYER REPORT LINE NUMBER RECEIVED AT SPILL LINE BY STATION OPERATOR YELLOWKNIFE, NT (867) 920-8130 LEAD AGENCY - EC - CCG - GNWT - GN - LA - INAC - NEB - TC SIGNIFICANCE - MINOR - MAJOR - UNKNOWN FILE STATUS - OPEN - CLOSED CONTACT NAME CONTACT TIME REMARKS AGENCY LEAD AGENCY FIRST SLIPPORT AGENCY SECOND SUPPORT AGENCY THIRD SUPPORT AGENCY

Figure 2 – NT-NU Spill report 17-141



June 28, 2017

Resource Management Officer Nunavut Field Operations Aboriginal Affairs and Northern Development Canada Box 100 Iqaluit, NU X0A 0H0 Justin.Hack@aandc-aadnc.gc.ca Manager, Major Projects Qikiqtani Inuit Association P.O. Box 219 Iqaluit, NU X0A 0H0

Re: Follow-up to Spill #17-183, Reported on May 28th, 2017 Mary River Project - Water Licence No. 2AM-MRY1325

Summary:

On May 28th, 17:00, during an inspection of the Mine Site Hazardous Waste Berm #7 (HWB 7), a spill of waste oil was observed inside the bermed facility. Upon investigation, it is suspected the source of the spill was from a damaged waste oil tote with a maximum capacity of 1 cubic metre. The spill is entirely contained within the engineered lined containment that is inspected annually by a qualified Geotechnical Engineer. An inspection around the foot of the berm of the facility indicated no leakage to the environment. The spill location is greater than 500 meters from the nearest water body and occurred on Inuit Owned Land.

Immediate and Follow-Up Action:

The Oily Water Separator (OWS) was employed to treat the contaminated water in the berm starting June 15, 2017 and has processed 220 M³ to date. Contaminated water processing is ongoing. The berm is storage to numerous 1 m³ totes containing used hydrocarbons awaiting backhaul for proper disposal during the 2017 backhaul sealift program.

Recommendations:

Proper stacking and placement of all hazardous materials within line containment structures has been communicated to all responsible departments. Additional OWS supplies are planned for purchase in 2017.

Current Status:

The OWS is processing the contaminated water in the berm under the applicable water licence criteria. Until that time, the integrity of the engineered lined containment is being monitored to ensure there is no release to the receiving environment outside of containment.

Should you require further information or clarification on the above noted spill, please feel free to William Bowden or Laura Taylor at (647) 253-0596 x6016 or Allan Knight at (647) 253-0596 x6010.

Prepared By:

Connor Devereaux

Environmental Coordinator

Reviewed by:

William Bowden

Environmental Superintendent

Sell Bander

Attach: Photos, Map, NT-NU Spill Report

cc. Todd Burlingame, Wayne McPhee, Allan Knight, Sylvain Proulx, Eric Steinmetzer, Gordon Mudryk, Jeff Bush (Baffinland),

Stephen Bathroy (QIA), Erik Allain, Jonathan Mesher Sarah Forte (INAC)



Photo 1: Initial Spill Area inside MS Old Fuel Bladder Farm (HWB 7)



Photo 4: OWS Processing Contaminated Water in MS Old Fuel Bladder Farm (HWB 7

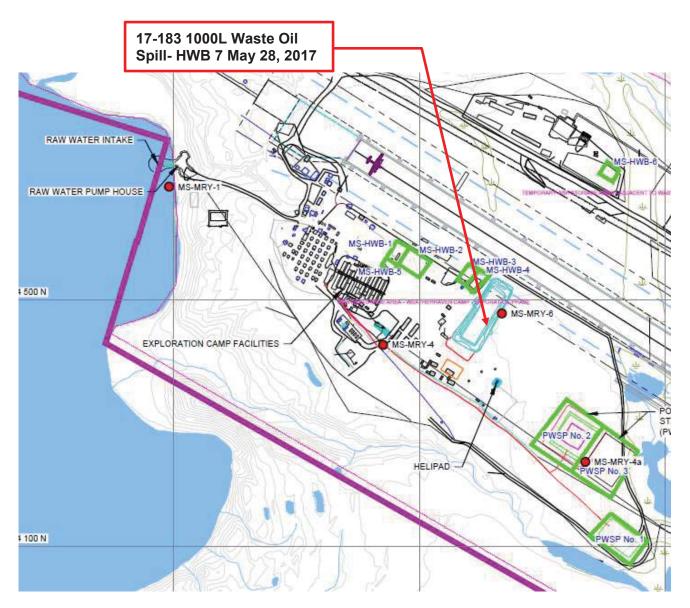


Figure 1: Map of Spill Location



OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

NT-NU 24-HOUR SPILL REPORT LINE TEL: (867) 920-8130 FAX: (867) 873-6924 EMAIL: spills@gov.nt.ca

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Figure 2: NT-NU Spill Report



July 13, 2017

Resource Management Officer Nunavut Field Operations Indigenous and Northern Affairs Canada Box 100 Iqaluit, NU X0A 0H0 Justin.Hack@aandc-aadnc.gc.ca Director, Major Projects Qikiqtani Inuit Association P.O. Box 219 Iqaluit, NU X0A 0H0

Re: Follow-up to Spill #17-207, Reported on June 13th, 2017 Mary River Project - Water Licence No. 2AM-MRY1325

Summary:

At 17:30 hrs on June 13th, a worker advised the environmental department that there was a leak coming from a tote in front of the maintenance shop. It was determined after inspection that a tote was leaking wash water to the maintenance pad. The workers responded immediately by placing spill pads and duck ponds to collect the sump water that potentially was contaminated with hydrocarbons. Approx.100 L of sump water spilled on the pad, impacting an area of less than 20m2. The contaminated material was cleaned up and properly disposed of. The location of the spill was confined to the west side of the wash bay pad, and is greater than 100 meters from the closest water body. The tote was disposed of and a new tote was put in place for use.

Recommendations:

Routine checks of totes is ongoing and will be focusing efforts to inspect the holding containers around the maintenance shop and will be increasing inspections around the area.

Current Status:

New totes have been used since to dispose of sump water.

Should you require further information or clarification on the above noted spill, please feel free to contact William Bowden / Laura Taylor at (647) 253-0596 x6016 or Allan Knight at (647) 253-0596 x6010

Prepared by:

Approved By:

20

Laura Taylor Environmental Superintendent Derek Buzzi Maintenance Manager

Attach: Photos, Map, NT-NU Spill Report

cc. Todd Burlingame, Wayne McPhee, Sylvain Proulx, Eric Steinmetzer, Derek Buzzi, Lee Dixon (Baffinland) Stephen Bathory (QIA), Erik Allain, Sarah Forte, Jonathon Mesher (INAC).



Figure 1 – Area of leak from sump water tote









Figure 3 – Area after Occurrence





Figure 2: NT-NU Spill Report 17-2





NT-NU SPILL REPORT OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

NT-NU 24-HOUR SPILL REPORT LINE TEL: (867) 920-8130

FAX: (867) 873-6924 EMAIL: spills@gov.nt.ca

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July 17th, 2017

Resource Management Officer Nunavut Field Operations Indigenous and Northern Affairs Canada Box 100 Iqaluit, NU X0A 0H0 Justin.Hack@aandc-aadnc.gc.ca Director, Major Projects Qikiqtani Inuit Association P.O. Box 219 Iqaluit, NU X0A 0H0

Re: Follow-up to Spill #17-217, Reported on June 17th, 2017 Mary River Project - Water Licence No. 2AM-MRY1325

Summary:

The rock construction pad at Milne Port, is that it is currently being address through a Request for Modification through the Nunavut Water Board.

Should you require further information or clarification on the above noted spill, please feel free to contact William Bowden / Laura Taylor at (647) 253-0596 x6016 or Allan Knight at (647) 253-0596 x6010

Prepared by:

Laura Taylor

Environmental Superintendent

Attach: NT-NU Spill Report

cc. Todd Burlingame, Wayne McPhee, Sylvain Proulx, Eric Steinmetzer, Gerald Stephen Bathory (QIA), Erik Allain, Sarah Forte, Jonathon Mesher (INAC).



Figure2: NT-NU Spill Report 17-217



NT-NU SPILL REPORT

NT-NU 24-HOUR SPILL REPORT LINE TEL: (867) 920-8130

TEL: (867) 920-8130 FAX: (867) 873-6924 EMAIL: spills@gov.nt.ca

REPORT LINE USE ONLY REPORT DATE: MONTH - DAY - YEAR REPORT TIME X ORIGINAL SPILL REPORT, 06-18-2017 15:00 REPORT NUMBER OCCURRENCE DATE: MONTH - DAY - YEAR UPDATE # OCCURRENCE TIME 17 . 217 В TO THE ORIGINAL SPILL REPORT Unknown Unknown LAND USE PERMIT NUMBER (IF APPLICABLE) WATER LICENCE NUMBER (IF APPLICABLE) C IOL - Commercial Lease No.: Q13C301 2AM-MRY1325 Type "A" GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION D Mary River Project Milne Port, Baffin Island, NU □ NWT X NUNAVUT ADJACENT JURISDICTION OR OCEAN LATITUDE LONGITUDE E GREES 80 DEGREES 71 MINUTES 52 ONDS 53 ONDS 24 RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION RESPONSIBLE PARTY OR VESSEL NAME Baffinland Iron Mines Corp. 2275 Upper Middle Road East, Suite 300, Oakville, ON, Canada ANY CONTRACTOR INVOLVED CONTRACTOR ADDRESS OR OFFICE LOCATION G Nuna Logistics, Hatch PRODUCT SPILLED QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES U.N. NUMBER rock Unknown N/A Н SECOND PRODUCT SPILLED (IF APPLICABLE) QUANTITY IN LITRES. KILOGRAMS OF CUBIC METRES U.N. NUMBER N/A N/A AREA OF CONTAMINATION IN SQUARE METRES 1 Clean quarried rock Placement of rock fill in drainag n/a DESCRIBE ANY ASSISTANCE REQUIRED HAZARDS TO PERSONS, PROPERTY OR ENVIRONMENT FACTORS AFFECTING SPILL OR RECOVERY J None None ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS See attached Inspector's Direction issued on June 9, 2017 and response to Inspector's Direction dated June 14, 2017. This is being reported as required by the conditions of Water Licence No. 2AM-MRY1325 and section 16(1) of the Nunavut Water Regulations. K REPORTED TO SPILL UNE BY POSITION EMPLOYER LOCATION CALLING FROM TELEPHONE Baffinland William Bowden **Env Superintendent** Mary River ext 6016 ANY ALTERNATE CONTACT EMPLOYER 647-253-0596 M Wayne Mcphee Dir Sust Development Baffinland Ext. 5088 REPORT LINE USE ONLY LOCATION CALLED RECEIVED AT SPILL LINE BY POSITION EMPLOYER. REPORT LINE NUMBER STATION OPERATOR YELLOWKNIFE, NT 867) 920-8130 LEAD AGENCY DIEC DOOG DIGNWT DIGN DILA DINAC DINEB DYC SIGNIFICANCE II MINOR II WAJOR II WINKNOWN FILE STATUS OPEN CLOSED CONTACT NAME CONTACT TIME REMARKS MGENCY LEAD AGENCY FIRST SUPPORT AGENCY SECOND SUPPORT AGENCY THIRD SUPPORT AGENCY

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July 16, 2017

Resource Management Officer Nunavut Field Operations Aboriginal Affairs and Northern Development Canada Box 100 Iqaluit, NU X0A 0H0 Justin.Hack@aandc-aadnc.gc.ca Manager, Major Projects Qikiqtani Inuit Association P.O. Box 219 Iqaluit, NU X0A 0H0

Re: Follow-up to Spill #17-215- Reported on June 17th, 2017 Mary River Project - Water Licence No. 2AM-MRY1325

Summary:

At 08:00 HRS on June 17th, housing maintainers were advised of a leak fault light coming from a MSC day tank pump controls. Upon further inspection it was discovered that the fitting on the supply side of the day tank was leaking when the feed pump was running. The master switch for the fuel pumps and the isolation valves on the supply and return piping to and from the day tank were turned off. Approx. 200 L of diesel fuel was released onto the camp pad, occurred on IOL, and impacted an area of approx. 4m2. The location of the spill was confined to the MSC camp pad, and is greater than 100 meters from the closest water body.

Immediate and Follow-Up Action:

Spill pads were utilised and the contaminated material was completely cleaned up and properly disposed of as access and frozen conditions allow. The fitting on the side of the day tank was replaced.

Recommendations:

Continue inspections of the day tanks around site. Train new staff to be conscious of these pump controls.

Should you require further information or clarification on the above noted spill, please feel free to William Bowden or Laura Taylor at (647) 253-0596 x6016 or Allan Knight at (647) 253-0596 x6010.

Prepared By:

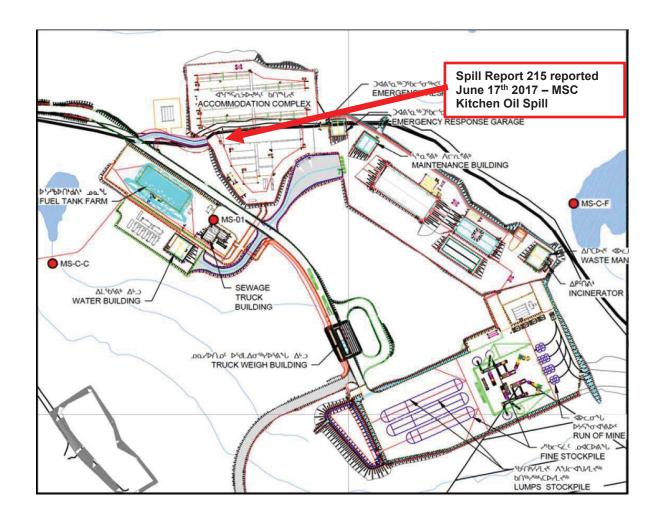
Laura Taylor

Environmental Superintendent

Attach: Map, NT-NU Spill Report

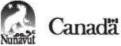
cc. Todd Burlingame, Wayne McPhee, Allan Knight, Sylvain Proulx, Eric Steinmetzer, Gerald Rogers, Gordon Mudryk, Jeff Bush, William Bowden (Baffinland), Stephen Bathroy (QIA), Erik Allain, Jonathan Mesher, Justin Hack, Sarah Forte (INAC)

Figure 1: Map of Spill Location





THIRD SUPPORT AGENCY



NT-NU SPILL REPORT

NT-NU 24-HOUR SPILL REPORT LINE TEL: (867) 920-8130

TEL: (867) 920-8130 FAX: (867) 873-6924 EMAIL: spills@gov.nt.ca

REPORT LINE USE ONLY REPORT DATE: MONTH -- DAY -- YEAR REPORT TIME IX ORIGINAL SPILL REPORT A 06-17-2017 22:00 REPORT NUMBER OCCURRENCE DATE: MONTH - DAY - YEAR OCCURRENCE TIME B 06-17-2017 TO THE ORIGINAL SPILL REPORT Unknown LAND USE PERMIT NUMBER (IF APPLICABLE) WATER LICENCE NUMBER (IF APPLICABLE) IOL - Commercial Lease: Q13C301 2AM-MRY1325 Type "A" GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION Mary River Mine Site, Baffin Island, NU DIMNE ☐ ADJACENT JURISDICTION OR OCEAN X NUNAYUT LONGITUDE Ε DEGREES 79 MINUTES 18 DEGREES 71 SECONDS 52 MINUTES 17 SECONDS 04 RESPONSIBLE PARTY OR VESSEL NAME RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION Baffinland Iron Mines Corp. 2275 Middle Road East, Suite 300, Oakville, ON L6H 0C3 ANY CONTRACTOR INVOLVED CONTRACTOR ADDRESS OR OFFICE LOCATION G N/A PRODUCT SPILLED QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRIES U.N. NUMBER Diesel Fuel Approx. 200 Litres N/A SECOND PRODUCT SPILLED (IF APPLICABLE) QUANTITY IN LITRES. KILOGRAMS OR CUBIC METRIES U.N. NUMBER N/A N/A N/A SPILL SOURCE SPILL CAUSE AREA OF CONTAMINATION IN SQUARE METRES MSC Kitchen Fuel Day Tank FACTORS AFFECTING SPILL OR RECOVERY HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT DESCRIBE ANY ASSISTANCE REQUIRED. Poor access N/A N/A ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAININATED MATERIALS At 08:00 HRS on June 17th, housing maintainers were advised of a leak fault light coming from a MSC day tank pump controls. Upon further inspection it was discovered that the fitting on the supply side of the day tank was leaking when the feed pump was running. The master switch for the fuel pumps and the isolation valves on the supply and return piping to and from the day tank were turned off. Approx. 200 L of diesel fuel was released onto the camp pad, occurred on IOL, and impacted an area of approx. 4m2. Spill pads were utilised and the contaminated material will be cleaned up and properly disposed of as access and frozen conditions allow. The location of the spill was confined to the MSC camp pad, and is greater than 100 meters from the closest water body. The investigation is ongoing and further details of the incident will be provided in the follow-up report. 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. REPORTED TO SPILL LINE BY EMPLOYER POSITION LOCATION CALLING FROM TELEPHONE William Bowden Env. Superintendent Baffinland 647-253-0596 ext. 6016 ANY ALTERNATE CONTACT EMPLOYER. POSITION ALTERNATE CONTACT ALTERNATE TELEPHONE M Dir. Sust Development Off Site 5088 Wayne McPhee Baffinland REPORT LINE USE ONLY REPORT LINE NUMBER POSITION EMPLOYER LOCATION CALLED RECEIVED AT SPILL LINE BY STATION OPERATOR YELLOWKNIFE, NT (867) 920-8130 LEAD AGENCY DEC DCCG DGNWT DGN DILA DINAC DNEB DTC SIGNIFICANCE TI MINOR TI MAJOR TI UNKNOWN. FILE STATUS ID OPEN ID CLOSED CONTACT NAME AGENCY CONTACT TIME REMARKS LEAD AGENCY FIRST SUPPORT AGENCY SECOND SUPPORT AGENCY



August 5, 2017

Resource Management Officer Nunavut Field Operations Aboriginal Affairs and Northern Development Canada Box 100 Iqaluit, NU X0A 0H0 Justin.Hack@aandc-aadnc.gc.ca Manager, Major Projects Qikiqtani Inuit Association P.O. Box 219 Iqaluit, NU X0A 0H0

Re: Follow-up to Spill #17-230- Reported on June 1st, 2017 Mary River Project - Water Licence No. 2AM-MRY1325

Summary:

On July 1st, the Mine Site Waste Rock Sedimentation Pond (MS-08) was in critical danger of overflowing (<0.5m freeboard). Limited pre-discharge sample results have been received from the lab, based on these preliminary results, it was determined that a controlled discharge out of the normal course of events would be required. The volume discharged and complete sample results will be provided in the follow-up report. The spill site is on IOL located > 3 km from the Mary River, the nearest fish bearing water.

Immediate and Follow-Up Action:

Results from sampling on June 27, 2017 were in progress at the time of the controlled discharge. These results were received July 17, 2017 and all parameters were within criteria. Continued water quality monitoring during discharge are included in this report.

Recommendations:

Daily inspection of all containment facility volumes.

Should you require further information or clarification on the above noted spill, please feel free to William Bowden or Laura Taylor at (647) 253-0596 x6016 or Allan Knight at (647) 253-0596 x6010.

Prepared By:

alla Kijto

Allan Knight

Environmental Superintendent

Attach: Analytical Results, Map, NT-NU Spill Report

cc. Todd Burlingame, Wayne McPhee, Sylvain Proulx, Eric Steinmetzer, Gerald Rogers, Gordon Mudryk, Jeff Bush, William Bowden, Laura Taylor (Baffinland), Stephen Bathroy (QIA), Erik Allain, Jonathan Mesher, Justin Hack, Sarah Forte (INAC)

Table 1. Water Chemi	stry Results -	MS-08					
Sample Number	Sample ID	Date Sampled	Results Received	Parameter Name	Result	Units	Lab
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Conductivity	52.3	umhos/cm	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Hardness (as CaCO3)	22	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	pН	7.12	pH units	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Total Suspended Solids	<2.0	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Total Dissolved Solids	25 *	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Turbidity	-	NTU	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Acidity (as CaCO3)	3.3	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Alkalinity, Total (as CaCO3)	<10	mg/L	ALS
L1950717-1 L1950717-1	MS-08 MS-08	27-Jun-17 27-Jun-17	17-Jul-17 17-Jul-17	Ammonia, Total (as N) Chloride (CI)	0.049 <0.50	mg/L	ALS ALS
L1950717-1	MS-08	27-Jun-17 27-Jun-17	17-Jul-17 17-Jul-17	Fluoride (F)	<0.020	mg/L mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Nitrate (as N)	0.020	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Total Kieldahl Nitrogen	0.001	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Phosphorus, Total	0.0045	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Sulfate (SO4)	15	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Cyanide, Total	<0.0020	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Dissolved Organic Carbon	<1.0	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Total Organic Carbon	<1.0	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Aluminum (AI)-Total	0.109	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Antimony (Sb)-Total	<0.00010	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Arsenic (As)-Total	<0.00010	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Barium (Ba)-Total	0.00192	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Beryllium (Be)-Total	<0.00010	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Bismuth (Bi)-Total	<0.000050	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Boron (B)-Total	<0.010	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Cadmium (Cd)-Total	<0.000010	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Calcium (Ca)-Total	2.13	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Cesium (Cs)-Total	0.000012	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Chromium (Cr)-Total	<0.00050	mg/L	ALS
L1950717-1	MS-08	27-Jun-17 27-Jun-17	17-Jul-17 17-Jul-17	Cobalt (Co)-Total	0.00126	mg/L	ALS
L1950717-1 L1950717-1	MS-08 MS-08	27-Jun-17 27-Jun-17	17-Jul-17 17-Jul-17	Copper (Cu)-Total Iron (Fe)-Total	<0.0010 0.191	mg/L	ALS ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Lead (Pb)-Total	0.000096	mg/L mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Lithium (Li)-Total	0.000	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Magnesium (Mg)-Total	3.7	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Manganese (Mn)-Total	0.0883	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Mercury (Hg)-Total	<0.000010	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Molybdenum (Mo)-Total	0.000056	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Nickel (Ni)-Total	0.00145	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Phosphorus (P)-Total	<0.050	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Potassium (K)-Total	0.24	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Rubidium (Rb)-Total	0.00053	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Selenium (Se)-Total	0.000095	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Silicon (Si)-Total	0.28	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Silver (Ag)-Total	<0.000050	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Sodium (Na)-Total	<0.50	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Strontium (Sr)-Total	0.0016	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Sulfur (S)-Total	5.4	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Tellurium (Te)-Total	<0.00020	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Thallium (TI)-Total	<0.00010	mg/L	ALS
L1950717-1 L1950717-1	MS-08 MS-08	27-Jun-17 27-Jun-17	17-Jul-17 17-Jul-17	Thorium (Th)-Total Tin (Sn)-Total	<0.00010 <0.00010	mg/L	ALS ALS
L1950717-1 L1950717-1	MS-08	27-Jun-17 27-Jun-17	17-Jul-17 17-Jul-17	Tin (Sn)-Total Titanium (Ti)-Total	0.00010	mg/L mg/L	ALS
L1950717-1	MS-08	27-Jun-17 27-Jun-17	17-Jul-17 17-Jul-17	Tungsten (W)-Total	<0.00372	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Uranium (U)-Total	0.00008	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Vanadium (V)-Total	<0.00050	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Zinc (Zn)-Total	<0.0030	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Zirconium (Zr)-Total	<0.00030	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Dissolved Mercury Filtration Location	FIELD	Ĭ	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Dissolved Metals Filtration Location	FIELD		ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Aluminum (AI)-Dissolved	0.0087	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Antimony (Sb)-Dissolved	<0.00010	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Arsenic (As)-Dissolved	<0.00010	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Barium (Ba)-Dissolved	0.0018	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Beryllium (Be)-Dissolved	<0.00010	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Bismuth (Bi)-Dissolved	<0.000050	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Boron (B)-Dissolved	<0.010	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Cadmium (Cd)-Dissolved	<0.00010	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Calcium (Ca)-Dissolved	2.34	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Cesium (Cs)-Dissolved	<0.000010	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Chromium (Cr)-Dissolved	<0.00050	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Cobalt (Co)-Dissolved	0.00122	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Copper (Cu)-Dissolved	0.00035	mg/L	ALS

Sample Number	Sample ID	Date Sampled	Results Received	Parameter Name	Result	Units	Lab
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Iron (Fe)-Dissolved	0.018	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Lead (Pb)-Dissolved	<0.000050	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Lithium (Li)-Dissolved	0.0013	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Magnesium (Mg)-Dissolved	3.87	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Manganese (Mn)-Dissolved	0.092	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Mercury (Hg)-Dissolved	<0.00010	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Molybdenum (Mo)-Dissolved	<0.000010	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Nickel (Ni)-Dissolved	0.00131	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Phosphorus (P)-Dissolved	<0.050	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Potassium (K)-Dissolved	0.277	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Rubidium (Rb)-Dissolved	0.00034	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Selenium (Se)-Dissolved	0.000085	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Silicon (Si)-Dissolved	0.079	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Silver (Ag)-Dissolved	<0.000050	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Sodium (Na)-Dissolved	<0.50	mg/L	ALS
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L1950717-1	MS-08	27-Jun-17	17-Jul-17	Strontium (Sr)-Dissolved	0.0019	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Sulfur (S)-Dissolved	4.21	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Tellurium (Te)-Dissolved	<0.00020	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Thallium (TI)-Dissolved	<0.000010	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Thorium (Th)-Dissolved	<0.00010	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Tin (Sn)-Dissolved	<0.00010	mg/L	ALS
		27-Jun-17		. ,	<0.00010		
L1950717-1	MS-08		17-Jul-17	Titanium (Ti)-Dissolved		mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Tungsten (W)-Dissolved	<0.00010	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Uranium (U)-Dissolved	0.000032	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Vanadium (V)-Dissolved	<0.00050	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Zinc (Zn)-Dissolved	0.0024	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Zirconium (Zr)-Dissolved	< 0.00030	mg/L	ALS
L1950717-1	MS-08	27-Jun-17	17-Jul-17	Ra-226	<0.0068	Bq/L	ALS
233856	MS-08	27-Jun-17	17-Jul-17	Acute Toxicity	non-lethal	mortality	Aquatox
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L1954208-1	MS-08	1-Jul-17	2-Aug-17	Conductivity	67.3	umhos/cm	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Hardness (as CaCO3)	26	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	рН	7.19 *	pH units	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Total Suspended Solids	3.4	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Total Dissolved Solids	36 *	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Turbidity	-	NTU	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Acidity (as CaCO3)	2.4	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Alkalinity, Total (as CaCO3)	<10		ALS
				**		mg/L	
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Ammonia, Total (as N)	0.028	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Chloride (CI)	0.52	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Fluoride (F)	<0.020	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Nitrate (as N)	0.15	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Total Kjeldahl Nitrogen	<0.15	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Phosphorus, Total	0.0061	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Sulfate (SO4)	20.9	mg/L	ALS
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L1954208-1	MS-08	1-Jul-17	2-Aug-17	Cyanide, Total	<0.0020	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Dissolved Organic Carbon	<0.50	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Total Organic Carbon	0.73	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Aluminum (Al)-Total	0.106	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Antimony (Sb)-Total	<0.00010	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Arsenic (As)-Total	<0.00010	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Barium (Ba)-Total	0.00276	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Beryllium (Be)-Total	<0.00010	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17 2-Aug-17	Bismuth (Bi)-Total	<0.00010	mg/L	ALS
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L1954208-1	MS-08	1-Jul-17	2-Aug-17	Boron (B)-Total	<0.010	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Cadmium (Cd)-Total	<0.00010	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Calcium (Ca)-Total	2.88	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Cesium (Cs)-Total	0.000015	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Chromium (Cr)-Total	< 0.00050	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Cobalt (Co)-Total	0.0013	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Copper (Cu)-Total	0.009	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17 2-Aug-17	Iron (Fe)-Total	0.009	mg/L	ALS
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L1954208-1	MS-08	1-Jul-17	2-Aug-17	Lead (Pb)-Total	0.000323	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Lithium (Li)-Total	0.0011	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Magnesium (Mg)-Total	4.68	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Manganese (Mn)-Total	0.119	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Mercury (Hg)-Total	<0.000010	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Molybdenum (Mo)-Total	0.000067	mg/L	ALS
	MS-08	1-Jul-17	2-Aug-17	Nickel (Ni)-Total	0.00175	mg/L	ALS
I 1954208-1	MS-08	1-Jul-17	2-Aug-17 2-Aug-17	Phosphorus (P)-Total	<0.050		ALS
L1954208-1	IVIO-UX					mg/L	
L1954208-1	110 00			Potassium (K)-Total	0.341	mg/L	ALS
L1954208-1 L1954208-1	MS-08	1-Jul-17	2-Aug-17	. ,			
L1954208-1	MS-08 MS-08	1-Jul-17 1-Jul-17	2-Aug-17 2-Aug-17	Rubidium (Rb)-Total	0.00069	mg/L	ALS
L1954208-1 L1954208-1				. ,			
L1954208-1 L1954208-1 L1954208-1	MS-08	1-Jul-17	2-Aug-17	Rubidium (Rb)-Total	0.00069	mg/L	ALS

Sample Number	Sample ID	Date Sampled	Results Received	Parameter Name	Result	Units	Lab
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Sodium (Na)-Total	<0.50	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Strontium (Sr)-Total	0.0021	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Sulfur (S)-Total	6.79	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Tellurium (Te)-Total	<0.00020	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Thallium (TI)-Total	<0.000010	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Thorium (Th)-Total	<0.00010	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Tin (Sn)-Total	0.00048	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Titanium (Ti)-Total	0.0047	mg/L	ALS
	MS-08	1-Jul-17		• • • • • • • • • • • • • • • • • • • •			ALS
L1954208-1			2-Aug-17	Tungsten (W)-Total	<0.00010	mg/L	
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Uranium (U)-Total	0.000119	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Vanadium (V)-Total	<0.00050	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Zinc (Zn)-Total	<0.0030	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Zirconium (Zr)-Total	< 0.00030	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Dissolved Mercury Filtration Location	FIELD	,	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Dissolved Metals Filtration Location	FIELD		ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Aluminum (Al)-Dissolved	0.0067	mg/L	ALS
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L1954208-1	MS-08	1-Jul-17	2-Aug-17	Antimony (Sb)-Dissolved	<0.00010	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Arsenic (As)-Dissolved	<0.00010	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Barium (Ba)-Dissolved	0.0021	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Beryllium (Be)-Dissolved	<0.00010	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Bismuth (Bi)-Dissolved	<0.000050	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Boron (B)-Dissolved	<0.010	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Cadmium (Cd)-Dissolved	<0.00010	mg/L	ALS
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L1954208-1	MS-08	1-Jul-17	2-Aug-17	Calcium (Ca)-Dissolved	2.95	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Cesium (Cs)-Dissolved	<0.000010	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Chromium (Cr)-Dissolved	<0.00050	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Cobalt (Co)-Dissolved	0.00121	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Copper (Cu)-Dissolved	0.00026	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Iron (Fe)-Dissolved	0.012	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Lead (Pb)-Dissolved	<0.000050	mg/L	ALS
	MS-08	1-Jul-17	·	* *			ALS
L1954208-1			2-Aug-17	Lithium (Li)-Dissolved	0.0011	mg/L	
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Magnesium (Mg)-Dissolved	4.55	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Manganese (Mn)-Dissolved	0.117	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Mercury (Hg)-Dissolved	<0.000010	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Molybdenum (Mo)-Dissolved	0.000066	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Nickel (Ni)-Dissolved	0.00146	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Phosphorus (P)-Dissolved	<0.050	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17 2-Aug-17	Potassium (K)-Dissolved	0.299	mg/L	ALS
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L1954208-1	MS-08	1-Jul-17	2-Aug-17	Rubidium (Rb)-Dissolved	0.00035	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Selenium (Se)-Dissolved	0.000091	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Silicon (Si)-Dissolved	0.088	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Silver (Ag)-Dissolved	<0.000050	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Sodium (Na)-Dissolved	< 0.50	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Strontium (Sr)-Dissolved	0.0022	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Sulfur (S)-Dissolved	6.88	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Tellurium (Te)-Dissolved	<0.00020	mg/L	ALS
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L1954208-1	MS-08	1-Jul-17	2-Aug-17	Thallium (TI)-Dissolved	<0.000010	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Thorium (Th)-Dissolved	<0.00010	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Tin (Sn)-Dissolved	<0.00010	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Titanium (Ti)-Dissolved	<0.00030	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Tungsten (W)-Dissolved	<0.00010	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Uranium (U)-Dissolved	0.000053	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Vanadium (V)-Dissolved	<0.00050	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17	Zinc (Zn)-Dissolved	0.0013	mg/L	ALS
L1954208-1	MS-08	1-Jul-17	2-Aug-17 2-Aug-17	Ziric (Zr)-Dissolved Zirconium (Zr)-Dissolved	<0.00030	mg/L	ALS
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L1954208-1	MS-08	1-Jul-17	2-Aug-17	Ra-226	<0.0051	Bq/L	ALS
L1954143-1	MS-08	2-Jul-17	13-Jul-17	pH	7	pH units	ALS
L1954143-1	MS-08	2-Jul-17	13-Jul-17	Total Suspended Solids	18.8	mg/L	ALS
L1954143-1	MS-08	2-Jul-17	13-Jul-17	Total Dissolved Solids	105 *	mg/L	ALS
L1954143-1	MS-08	2-Jul-17	13-Jul-17	Turbidity	30.3 *	NTU	ALS
L1952134-1	MS-08	3-Jul-17	5-Jul-17	pH	7	pH units	ALS
L1952134-1	MS-08	3-Jul-17	5-Jul-17	Total Suspended Solids	19.2	mg/L	ALS
L1952134-1	MS-08	3-Jul-17	5-Jul-17	Total Dissolved Solids	105	mg/L	ALS
L1952134-1	MS-08	3-Jul-17	5-Jul-17	Turbidity	25.9	NTU	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Conductivity	192	umhos/cm	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Hardness (as CaCO3)	81	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	pH	7.08	pH units	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Total Suspended Solids	13.6	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Total Dissolved Solids	127 *	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Turbidity	-	NTU	ALS
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L1954085-1	MS-08	4-Jul-17	31-Jul-17	Acidity (as CaCO3)	2.8	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Alkalinity, Total (as CaCO3)	<10	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Ammonia, Total (as N)	0.114	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Chloride (CI)	0.89	mg/L	ALS

Sample Number	Sample ID	Date Sampled	Results Received	Parameter Name	Result	Units	Lab
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Fluoride (F)	<0.020	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Nitrate (as N)	0.658	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Total Kjeldahl Nitrogen	0.26	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Phosphorus, Total	0.0158	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Sulfate (SO4)	70.6	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Cyanide, Total	<0.0020	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Dissolved Organic Carbon	<0.50	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17		0.97		ALS
				Total Organic Carbon		mg/L	<u> </u>
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Aluminum (Al)-Total	0.342	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Antimony (Sb)-Total	<0.00010	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Arsenic (As)-Total	0.0001	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Barium (Ba)-Total	0.00692	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Beryllium (Be)-Total	<0.00010	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Bismuth (Bi)-Total	<0.000050	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Boron (B)-Total	<0.010	mg/L	ALS
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L1954085-1	MS-08	4-Jul-17	31-Jul-17	Cadmium (Cd)-Total	0.000017	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Calcium (Ca)-Total	6.93	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Cesium (Cs)-Total	0.000048	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Chromium (Cr)-Total	0.00105	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Cobalt (Co)-Total	0.00637	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Copper (Cu)-Total	0.003	mg/L	ALS
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L1954085-1	MS-08	4-Jul-17	31-Jul-17	Iron (Fe)-Total	0.857	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Lead (Pb)-Total	0.000688	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Lithium (Li)-Total	0.0018	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Magnesium (Mg)-Total	16.8	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Manganese (Mn)-Total	0.552	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Mercury (Hg)-Total	<0.00010	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Molybdenum (Mo)-Total	0.000010		ALS
				• • • • • • • • • • • • • • • • • • • •		mg/L	
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Nickel (Ni)-Total	0.00695	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Phosphorus (P)-Total	<0.050	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Potassium (K)-Total	0.697	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Rubidium (Rb)-Total	0.00192	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Selenium (Se)-Total	0.000323	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Silicon (Si)-Total	0.69	mg/L	ALS
	MS-08	4-Jul-17	31-Jul-17	• • •			ALS
L1954085-1				Silver (Ag)-Total	<0.000050	mg/L	<u> </u>
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Sodium (Na)-Total	<0.50	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Strontium (Sr)-Total	0.0046	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Sulfur (S)-Total	26.6	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Tellurium (Te)-Total	<0.00020	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Thallium (TI)-Total	0.000014	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Thorium (Th)-Total	0.00053	mg/L	ALS
				• • •			
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Tin (Sn)-Total	<0.00010	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Titanium (Ti)-Total	0.019	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Tungsten (W)-Total	<0.00010	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Uranium (U)-Total	0.000165	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Vanadium (V)-Total	0.00083	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Zinc (Zn)-Total	0.0046	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Zirconium (Zr)-Total	0.00035	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Dissolved Mercury Filtration Location	FIELD	mg/ L	ALS
				•			
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Dissolved Metals Filtration Location	FIELD		ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Aluminum (AI)-Dissolved	<0.0050	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Antimony (Sb)-Dissolved	<0.00010	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Arsenic (As)-Dissolved	<0.00010	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Barium (Ba)-Dissolved	0.00419	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Beryllium (Be)-Dissolved	<0.00010	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Bismuth (Bi)-Dissolved	<0.00010	mg/L	ALS
				• /			
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Boron (B)-Dissolved	<0.010	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Cadmium (Cd)-Dissolved	0.000018	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Calcium (Ca)-Dissolved	6.98	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Cesium (Cs)-Dissolved	<0.000010	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Chromium (Cr)-Dissolved	<0.00050	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Cobalt (Co)-Dissolved	0.00586	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Copper (Cu)-Dissolved	0.001	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Iron (Fe)-Dissolved	0.16	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Lead (Pb)-Dissolved	<0.000050	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Lithium (Li)-Dissolved	0.0021	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Magnesium (Mg)-Dissolved	15.5	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Manganese (Mn)-Dissolved	0.504	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Mercury (Hg)-Dissolved	<0.00010	mg/L	ALS
				, , ,			
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Molybdenum (Mo)-Dissolved	0.000082	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Nickel (Ni)-Dissolved	0.006	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Phosphorus (P)-Dissolved	<0.050	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Potassium (K)-Dissolved	0.519	mg/L	ALS
	MS-08	4-Jul-17	31-Jul-17	Rubidium (Rb)-Dissolved	0.00075	mg/L	ALS

Sample Number	Sample ID	Date Sampled	Results Received	Parameter Name	Result	Units	Lab
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Selenium (Se)-Dissolved	0.000335	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Silicon (Si)-Dissolved	0.164	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Silver (Ag)-Dissolved	<0.000050	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Sodium (Na)-Dissolved	<0.50	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Strontium (Sr)-Dissolved	0.0047	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Sulfur (S)-Dissolved	25.8	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Tellurium (Te)-Dissolved	<0.00020	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Thallium (TI)-Dissolved	<0.000010	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Thorium (Th)-Dissolved	<0.00010	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Tin (Sn)-Dissolved	<0.00010	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Titanium (Ti)-Dissolved	<0.00030	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Tungsten (W)-Dissolved	<0.00010	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Uranium (U)-Dissolved	0.000031	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Vanadium (V)-Dissolved	<0.00050	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Zinc (Zn)-Dissolved	0.0028	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Zirconium (Zr)-Dissolved	<0.00030	mg/L	ALS
L1954085-1	MS-08	4-Jul-17	31-Jul-17	Ra-226	0.012	Bq/L	ALS
L1954760-1	MS-08	7-Jul-17	9-Jul-17	рН	6.76	pH units	ALS
L1954760-1	MS-08	7-Jul-17	9-Jul-17	Total Suspended Solids	4.8	mg/L	ALS
L1954760-1	MS-08	7-Jul-17	9-Jul-17	Total Dissolved Solids	215	mg/L	ALS
L1954760-1	MS-08	7-Jul-17	9-Jul-17	Turbidity	5.85	NTU	ALS
L1957780-1	MS-08	8-Jul-17	17-Jul-17	рН	6.88	pH units	ALS
L1957780-1	MS-08	8-Jul-17	17-Jul-17	Total Suspended Solids	<2.0	mg/L	ALS
L1957780-1	MS-08	8-Jul-17	17-Jul-17	Total Dissolved Solids	271 *	mg/L	ALS
L1957780-1	MS-08	8-Jul-17	17-Jul-17	Turbidity	1.06 *	NTU	ALS

Notes:

*Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)
*Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

MARY RIVER PROJECT

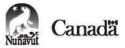
POSTACION SPRALON, 41.2 MINE SITE LAYOUT AND
BATCHOLY CONTRACTOR
SPALON SPRALON MATER LICENCE
SPALON SPRALON SPRALON

KWICH PIÓCOL

REGISTRO FIGURE 1.5 Knight Piésold (2) MS-08 OIG FDP MS-06 Existing Treate MS 08 Discharge MS-08 Old MS-08 FDP

Figure 1: Map of Spill Location





NT-NU SPILL REPORT OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

NT-NU 24-HOUR SPILL REPORT LINE TEL: (867) 920-8130 FAX: (867) 873-6924 EMAIL: spills@gov.nt.ca

								REPORT LINE USE ONLY
Α	V V		15:30	0 hrs	OR	ORIGINAL SPILL REI	PORT,	REPORT NUMBER
В	OCCURRENCE DATE: MONTH - DAY - YEAR 07-01-2017		000URR	RENCE TIME O hrs		UPDATE # OTHE ORIGINAL SPIL	LL REPORT	17 - 230
С				WATER LICENCE NU 2AM-MRY13				
D	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTIO	ON FROM NAMED L	LOCATION	REGION	JUNAVUT	☐ ADJACENT JUI	IRISDICTION	LOR OCEAN
Ε	LATITUDE DEGREES 71 MINUTES 20	SECONDS 42	2	LONGITUDE DEGREES 79	Michigan Company	MINUTES 14	X11.1001-000-08990	ECONDS 21
F	RESPONSIBLE PARTY OR VESSEL NAME Baffinland Iron Mines Corp.	RESPONSIBLE 2275 Mid	PARTY AD	oad East, Su	iite 300		ON L6H	0C3
G		N/A		S OR OFFICE LOCATION				
ч	PRODUCT SPILLED Melt water from storage facility	unquant	tified a	LOGRAMS OR CUBIC at present tim	ne	N/A		
П	SECOND PRODUCT SPILLED (IF APPLICABLE) N/A	N/A	ITRES, KIL	LOGRAMS OR CUBIC	METRES	N/A		
Ī	Waste Rock Sedimentation Pond	SPILL CAUSE Snow me				N/A		SQUARE METRES
J	FACTORS AFFECTING SPILL OR RECOVERY POOR ACCESS / Large volume ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROP	DESCRIBE ANY ASSISTANCE REQUIRED N/A			N/A		PERTY OR EQUIPMENT	
K	normal course of events would be be provided in the follow-up report The spill site is on IOL located > 3. This spill is being reported: 1) As required by the conditions of subsection 12(3) of the Nunavut W. 2) Under the Fisheries Act as requ. 3) As required by the Government.	rt. km from th of water lice Vaters and I uired by sec	he Mar ense no Nunav ction 3	ry River, the r o. 2AM-MRY1 out Surface R 11 of the Meta	neares 1325, F Rights al Mini	st fish bearir Part H , item Tribunal Act ing Effluent l	ng wate 19 (b) p t; Regula	er. oursuant to tions, and;
L	REPORTED TO SPILL LINE BY POSITION Allan Knight Env. Superin	ntendent	EMPLOYE Baffir	ren inland	7.0	0CATION CALLING FR	Charlette	TELEPHONE ext. 6010
М	ANY ALTERNATE CONTACT POSITION	757E STORENT GEORG	EMPLOYE	A111,435-14518:	ALT	TERNATE CONTACT Off Site	3	ALTERNATE TELEPHONE 5088
	L.	REPORT LIN	NE USE OF	NLY	- Inc	Officia		Williams Pro-
N	RECEIVED AT SPILL LINE BY POSITION STATION OPERATOR		EMPLOYE	ER	07.000	OCATION CALLED	1	REPORT LINE NUMBER (867) 920-8130
LEA	DAGENCY DEC DCCG DGNWT DGN DILA DINAG	C □NEB □TC	SIGN	NIFICANCE MINOR	1		1 - '	US OPEN CLOSE
AGE	NCY CONTACT NAME		CON	ITACT TIME	1	REMARKS	2)	
	D AGENCY			STATES AND ADDRESS.		CONTRACTOR S		
FIRS	ST SUPPORT AGENCY							
SEC	COND SUPPORT AGENCY							
THIE	RD SUPPORT AGENCY							

PAGE 1 OF ____1