

**APPENDIX 14 2023 REPORTABLE SPILLS**

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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

REPORT LINE USE ONLY

<b>A</b>	REPORT DATE: MONTH – DAY – YEAR <b>01-11-2022</b>	REPORT TIME <b>6:30</b>	<input checked="" type="checkbox"/> ORIGINAL SPILL REPORT, OR		REPORT NUMBER _____
	OCCURRENCE DATE: MONTH – DAY – YEAR <b>01-10-2022</b>	OCCURRENCE TIME <b>13:00</b>	<input type="checkbox"/> UPDATE # _____ TO THE ORIGINAL SPILL REPORT		
<b>C</b>	LAND USE PERMIT NUMBER (IF APPLICABLE) <b>KVPL11D01</b>		WATER LICENCE NUMBER (IF APPLICABLE) <b>2AM-MEL1631</b>		
	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION <b>Meliadine Gold Project</b>		REGION <input type="checkbox"/> NWT <input checked="" type="checkbox"/> NUNAVUT <input type="checkbox"/> ADJACENT JURISDICTION OR OCEAN		
<b>E</b>	LATITUDE DEGREES <b>63</b> MINUTES <b>2</b> SECONDS <b>21</b>		LONGITUDE DEGREES <b>92</b> MINUTES <b>13</b> SECONDS <b>41</b>		
	RESPONSIBLE PARTY OR VESSEL NAME <b>Agnico Eagle Mines Ltd.</b>		RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION <b>Meliadine, Rankin Inlet, Nunavut, X0C 0G0</b>		
<b>G</b>	ANY CONTRACTOR INVOLVED <b>N/A</b>		CONTRACTOR ADDRESS OR OFFICE LOCATION <b>N/A</b>		
	PRODUCT SPILLED <b>Untreated sewage</b>		QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES <b>5 Litres</b>	U.N. NUMBER <b>N/A</b>	
<b>H</b>	SECOND PRODUCT SPILLED (IF APPLICABLE) <b>N/A</b>		QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES <b>N/A</b>	U.N. NUMBER <b>N/A</b>	
	SPILL SOURCE <b>MSB Lift Station</b>		SPILL CAUSE <b>Equipment failure</b>	AREA OF CONTAMINATION IN SQUARE METRES <b>1</b>	
<b>J</b>	FACTORS AFFECTING SPILL OR RECOVERY <b>N/A</b>		DESCRIBE ANY ASSISTANCE REQUIRED <b>N/A</b>		HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT <b>N/A</b>
	<b>K</b> ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS <b>After transferring sewage from the vacuum truck to the MSB lift station the operating lever system failed resulting in a 5 L spill of untreated sewage to the industrial pad. The spill was contained to the local area.</b>  <b>The coordinates of the spill are 63° 2' 21.24"N, 92° 13' 40.67"W. No water bodies were impacted by this spill. The nearest natural water body (G2) is 325 m northwest.</b>  <b>Pursuant to Part H, Item 8c of water license 2AM-MEL1631, a follow up report will be issued after the investigation is completed.</b> <b>Reported by Randy Schwandt, Environment Coordinator 819-759-3555 ext. 4603996</b> <b>randy.schwandt@agnicoeagle.com , kyle.conway@agnicoeagle.com ext. 4603212</b>				
<b>L</b>	REPORTED TO SPILL LINE BY <b>Randy Schwandt</b>	POSITION <b>Env. Coordinator</b>	EMPLOYER <b>AEM</b>	LOCATION CALLING FROM <b>Meliadine</b>	TELEPHONE <b>819-759-3555</b>
	ANY ALTERNATE CONTACT <b>Kyle Conway</b>	POSITION <b>General Supervisor</b>	EMPLOYER <b>AEM</b>	ALTERNATE CONTACT LOCATION <b>Meliadine</b>	ALTERNATE TELEPHONE <b>819-860-1033</b>
<b>REPORT LINE USE ONLY</b>					
<b>N</b>	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130
	LEAD AGENCY <input type="checkbox"/> EC <input type="checkbox"/> CCG <input type="checkbox"/> GNWT <input type="checkbox"/> GN <input type="checkbox"/> ILA <input type="checkbox"/> INAC <input type="checkbox"/> NEB <input type="checkbox"/> TC		SIGNIFICANCE <input type="checkbox"/> MINOR <input type="checkbox"/> MAJOR <input type="checkbox"/> UNKNOWN		FILE STATUS <input type="checkbox"/> OPEN <input type="checkbox"/> CLOSED
AGENCY		CONTACT NAME	CONTACT TIME	REMARKS	
LEAD AGENCY					
FIRST SUPPORT AGENCY					
SECOND SUPPORT AGENCY					
THIRD SUPPORT AGENCY					



February 9<sup>th</sup>, 2023

Kyle Amsel  
Water Resource Officer  
Kivalliq Region, Field Operations Unit  
Crown-Indigenous Relations and Northern Affairs Canada  
Rankin Inlet, NU  
X0C 0G0

*Sent via email: [kyle.amsel@rcaanc-cirnac.gc.ca](mailto:kyle.amsel@rcaanc-cirnac.gc.ca)*

## **Re: Follow-up Report Spill #2023-009 – Release of 5 L of Sewage at the Meliadine Gold Project**

On January 10<sup>th</sup>, 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email ([spills@gov.nt.ca](mailto:spills@gov.nt.ca)) of a spill of approximately 5 L of sewage at the Meliadine Gold Project site (spill location coordinates: 63° 2' 21.62" N, 92° 13' 41.20" W). This follow-up report provides supplemental information based on the results of the incident investigation and is being provided in accordance with:

- Nunavut Water Board License 2AM-MEL1631 Water License, part H, item 8c.

### **Description of Incident**

On January 10<sup>th</sup>, 2023, at approximately 1:00 pm, an estimated 5 L of sewage was spilled on the industrial pad at the multiple service building (MSB) lift station due to the vacuum truck operator deviating from an established procedure. The contents of the vacuum truck were emptied into the MSB lift station and the operator attempted to clear the hose. The operator deviated from the procedure when disconnecting the hose from the lift station and attempted to vacuum out the residual sewage from the hose. Due to the hose being disconnected from the lift station the remaining sewage in the line spilled to the industrial pad. The spilled sewage collected directly on the road behind the vacuum truck and was contained to the local area. No water bodies were impacted by this spill. The closest water body (G2) is approximately 300 meters north, as seen in Figure 1.



**Figure 1:** Location of the sewage spill and proximity to water bodies.

## Spill Response and Remediation

Upon observing the spill, the operator shutoff the pump to prevent further spillage. The impacted surface area was hand excavated and an estimated 5 kg of contaminated snow was brought to Landfarm A as per the Spill Contingency Plan.



## Root Causes and Corrective Measures

An investigation was conducted soon after the incident occurred to determine the root cause and contributing factors. The investigation concluded with the following:

- Employee did not follow procedure. The vacuum truck hose is to remain connected to the lift station when it is being emptied.

The following corrective and preventative actions have been implemented to address the root causes and to reduce the likelihood of reoccurrence:

- Supervisor to review sewage transfer procedure with employee.

Should you have any questions or require further information, please do not hesitate to contact the undersigned.



**Randy Schwandt** | Environment Coordinator

[randy.schwandt@agnicoeagle.com](mailto:randy.schwandt@agnicoeagle.com) | Direct 819.759.3555 x4603996 |

Agnico Eagle Mines Limited - Meliadine Mine, Suite 879 - Rankin Inlet, Nunavut,  
Canada X0C 0G0

[agnicoeagle.com](http://agnicoeagle.com)     

Sent from Meliadine



# AGNICO EAGLE

MELIADINE

## Appendix – Photos



**Photo 1:** Sewage spill location.



**Photo 2:** Sewage spill post remediation.



Canada

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EMAIL: spills@gov.nt.ca

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<b>A</b>	REPORT DATE: MONTH – DAY – YEAR <b>01-11-2022</b>	REPORT TIME <b>16:45</b>	<input checked="" type="checkbox"/> ORIGINAL SPILL REPORT, OR <input type="checkbox"/> UPDATE # _____ TO THE ORIGINAL SPILL REPORT	REPORT NUMBER _____
	OCCURRENCE DATE: MONTH – DAY – YEAR <b>01-11-2022</b>	OCCURRENCE TIME <b>8:00</b>		
<b>C</b>	LAND USE PERMIT NUMBER (IF APPLICABLE) <b>KVPL11D01</b>	WATER LICENCE NUMBER (IF APPLICABLE) <b>2AM-MEL1631</b>		
	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION <b>Meliadine Gold Project</b>	REGION <input type="checkbox"/> NWT <input checked="" type="checkbox"/> NUNAVUT <input type="checkbox"/> ADJACENT JURISDICTION OR OCEAN		
<b>E</b>	LATITUDE DEGREES <b>63</b> MINUTES <b>2</b> SECONDS <b>21</b>	LONGITUDE DEGREES <b>92</b> MINUTES <b>13</b> SECONDS <b>41</b>		
	RESPONSIBLE PARTY OR VESSEL NAME <b>Agnico Eagle Mines Ltd.</b>	RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION <b>Meliadine, Rankin Inlet, Nunavut, X0C 0G0</b>		
<b>G</b>	ANY CONTRACTOR INVOLVED <b>N/A</b>	CONTRACTOR ADDRESS OR OFFICE LOCATION <b>N/A</b>		
	PRODUCT SPILLED <b>Sewage</b>	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES <b>7 m3</b>	U.N. NUMBER <b>N/A</b>	
<b>H</b>	SECOND PRODUCT SPILLED (IF APPLICABLE) <b>N/A</b>	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES <b>N/A</b>	U.N. NUMBER <b>N/A</b>	
	SPILL SOURCE <b>Main Camp Lift Station</b>	SPILL CAUSE <b>Equipment Failure</b>	AREA OF CONTAMINATION IN SQUARE METRES <b>800 m2</b>	
<b>J</b>	FACTORS AFFECTING SPILL OR RECOVERY <b>Infrastructure</b>	DESCRIBE ANY ASSISTANCE REQUIRED <b>N/A</b>	HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT <b>N/A</b>	
	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS <b>An overflow of the main camp lift station resulted in a spill of 7 m3 of sewage to the industrial pad. The spill was contained to the local area. Clean up activities are underway.</b>  <b>The coordinates of the spill are 63° 2' 23.60"N, 92° 13' 39.57"W. No water bodies were impacted by this spill. The nearest natural water body (G2) is 280 m north.</b>  <b>Pursuant to Part H, Item 8c of water license 2AM-MEL1631, a follow up report will be issued after the investigation is completed.</b>  <b>Reported by Randy Schwandt, Environment Coordinator 819-759-3555 ext. 4603996 Randy.Schwandt@agnicoeagle.com , Kyle.Conway@agnicoeagle.com ext. 4603212</b>			
<b>L</b>	REPORTED TO SPILL LINE BY <b>Randy Schwandt</b>	POSITION <b>Env. Coordinator</b>	EMPLOYER <b>AEM</b>	LOCATION CALLING FROM <b>Meliadine</b>
	TELEPHONE <b>819-759-3555</b>			
<b>M</b>	ANY ALTERNATE CONTACT <b>Kyle Conway</b>	POSITION <b>General supervisor</b>	EMPLOYER <b>AEM</b>	ALTERNATE CONTACT <b>Meliadine</b>
	ALTERNATE TELEPHONE <b>819-860-1033</b>	LOCATION		
<b>REPORT LINE USE ONLY</b>				
<b>N</b>	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT
				REPORT LINE NUMBER (867) 920-8130
LEAD AGENCY <input type="checkbox"/> EC <input type="checkbox"/> CCG <input type="checkbox"/> GNWT <input type="checkbox"/> GN <input type="checkbox"/> ILA <input type="checkbox"/> INAC <input type="checkbox"/> NEB <input type="checkbox"/> TC		SIGNIFICANCE <input type="checkbox"/> MINOR <input type="checkbox"/> MAJOR <input type="checkbox"/> UNKNOWN		FILE STATUS <input type="checkbox"/> OPEN <input type="checkbox"/> CLOSED
AGENCY	CONTACT NAME	CONTACT TIME	REMARKS	
LEAD AGENCY				
FIRST SUPPORT AGENCY				
SECOND SUPPORT AGENCY				
THIRD SUPPORT AGENCY				



February 9<sup>th</sup>, 2023

Kyle Amsel  
Water Resource Officer  
Kivalliq Region, Field Operations Unit  
Crown-Indigenous Relations and Northern Affairs Canada  
Rankin Inlet, NU  
XOC 0G0

*Sent via email: [kyle.amsel@rcaanc-cirnac.gc.ca](mailto:kyle.amsel@rcaanc-cirnac.gc.ca)*

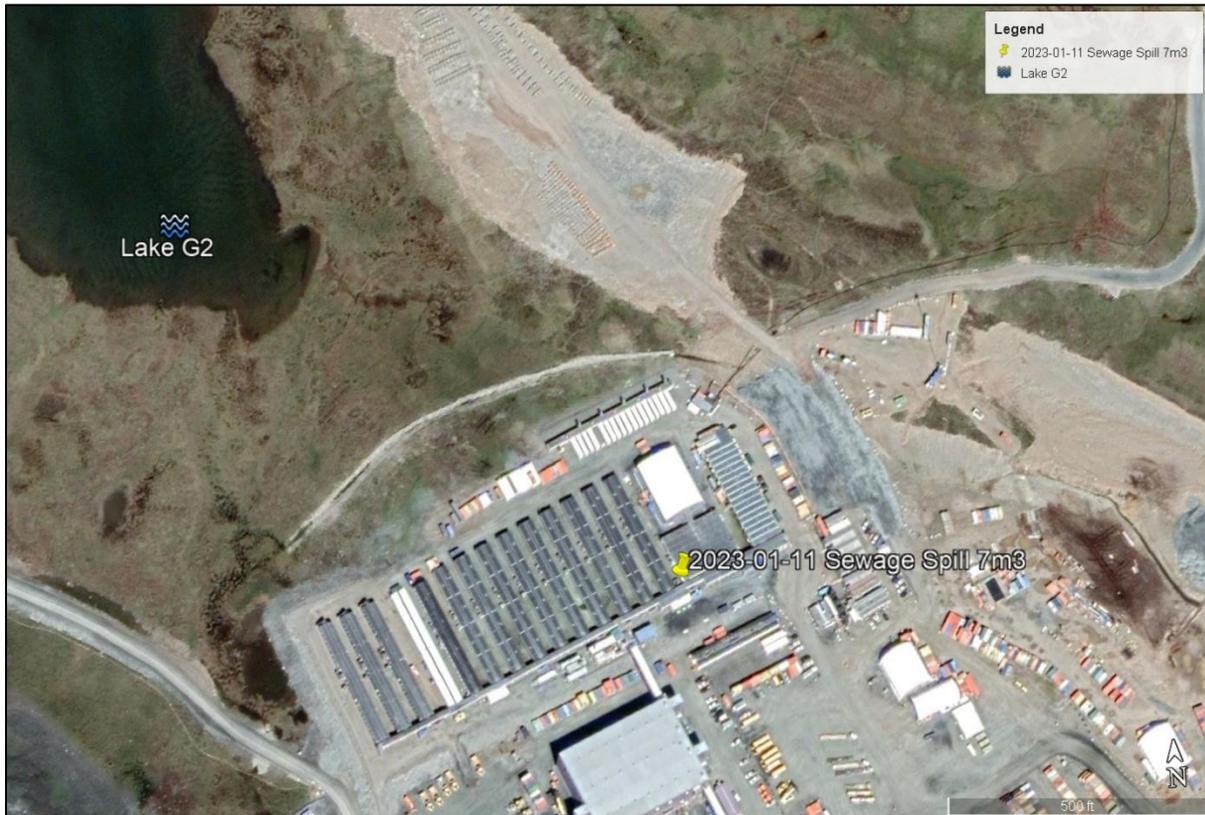
## **Re: Follow-up Report Spill #2023-011 – Spill of 7 m<sup>3</sup> of Sewage at the Meliadine Gold Project**

On January 11<sup>th</sup>, 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email ([spills@gov.nt.ca](mailto:spills@gov.nt.ca)) of a spill of approximately 7 m<sup>3</sup> of sewage at the Meliadine Gold Project site (spill location coordinates: 63° 2' 23.60" N, 92° 13' 39.57"). This follow-up report provides supplemental information based on the results of the incident investigation and is being provided in accordance with:

- Nunavut Water Board License 2AM-MEL1631 Water License, part H, item 8c.

### **Description of Incident**

On January 11<sup>th</sup>, 2023, at approximately 8:00 am, an estimated 7 m<sup>3</sup> of sewage was spilled to the industrial pad due to an equipment failure at the main camp lift station causing it to overflow. A worker discovered the spill occurring and notified their supervisor. The spilled sewage migrated south and collected in the multiple service building (MSB) parking lot. No water bodies were impacted by this spill. The closest water body (G2) is approximately 280 meters north, as seen in Figure 1.



**Figure 1:** Location of the sewage spill and proximity to water bodies.

## Spill Response and Remediation

The Energy and Infrastructure Maintenance supervisor was notified that the spill was occurring and immediately sent an employee to stop the spill. The employee switched the pumping system into manual mode to lower the level in the tank to stop the overflow. The area was scrapped using a loader, and approximately 20 m<sup>3</sup> of sewage-contaminated snow was brought to Landfarm A as per the Spill Contingency Plan.



Historically, smaller volumes of sewage or sewage-contaminated snow are disposed of within a sewage list station for treatment at the Sewage Treatment Plant. Alternatively, sewage-contaminated snow or soils may be utilized in the Landfarm. Due to the large volume of material that was generated from the spill remediation, Agnico Eagle requested and was granted a one time authorization from CIRNAC, in consultation with the KivIA, to allow for this material to be disposed of within the Tiriganiaq Pit 2.

Tiriganiaq Pit 2 is currently used for interim storage of saline contact water from the underground mine. This water will be treated at the Saline Effluent Treatment Plant (SETP) prior to discharge to sea at Melvin Bay to meet the MDMER discharge criteria.

## **Root Causes and Corrective Measures**

An investigation was conducted soon after the incident occurred to determine the root cause and contributing factors. The investigation concluded with the following:

- The float detection system failed, resulting in the overflow.

The following corrective and preventative actions have been implemented to address the root causes and to reduce the likelihood of reoccurrence:

- Installation of a new float mechanism.
- An improved ultrasonic level sensor has been ordered and will be installed in this list station.

Should you have any questions or require further information, please do not hesitate to contact the undersigned.



# AGNICO EAGLE

MELIADINE



**Randy Schwandt** | Environment Coordinator

[randy.schwandt@agnicoeagle.com](mailto:randy.schwandt@agnicoeagle.com) | Direct 819.759.3555 x4603996 |

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Canada X0C 0G0

[agnicoeagle.com](http://agnicoeagle.com)     

Sent from Meliadine



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MELIADINE

## Appendix – Photos



**Photo 1:** Sewage spill location.



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**Photo 2:** Sewage spill post remediation.



Canada

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OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

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REPORT LINE USE ONLY

<b>A</b>	REPORT DATE: MONTH – DAY – YEAR <b>02-03-2022</b>	REPORT TIME <b>17:45</b>	<input checked="" type="checkbox"/> ORIGINAL SPILL REPORT, OR <input type="checkbox"/> UPDATE # _____ TO THE ORIGINAL SPILL REPORT	REPORT NUMBER _____
<b>B</b>	OCCURRENCE DATE: MONTH – DAY – YEAR <b>02-03-2022</b>	OCCURRENCE TIME <b>16:00</b>		
<b>C</b>	LAND USE PERMIT NUMBER (IF APPLICABLE) <b>KVPL11D01</b>	WATER LICENCE NUMBER (IF APPLICABLE) <b>2AM-MEL1631</b>		
<b>D</b>	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION <b>Meliadine Gold Project</b>	REGION <input type="checkbox"/> NWT <input checked="" type="checkbox"/> NUNAVUT <input type="checkbox"/> ADJACENT JURISDICTION OR OCEAN		
<b>E</b>	LATITUDE DEGREES <b>63</b> MINUTES <b>2</b> SECONDS <b>21</b>	LONGITUDE DEGREES <b>92</b> MINUTES <b>13</b> SECONDS <b>41</b>		
<b>F</b>	RESPONSIBLE PARTY OR VESSEL NAME <b>Agnico Eagle Mines Ltd.</b>	RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION <b>Meliadine, Rankin Inlet, Nunavut, X0C 0G0</b>		
<b>G</b>	ANY CONTRACTOR INVOLVED <b>N/A</b>	CONTRACTOR ADDRESS OR OFFICE LOCATION <b>N/A</b>		
<b>H</b>	PRODUCT SPILLED <b>Hydraulic oil</b>	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES <b>500 litres</b>	U.N. NUMBER <b>N/A</b>	
	SECOND PRODUCT SPILLED (IF APPLICABLE) <b>N/A</b>	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES <b>N/A</b>	U.N. NUMBER <b>N/A</b>	
<b>I</b>	SPILL SOURCE <b>Excavator</b>	SPILL CAUSE <b>Equipment Failure</b>	AREA OF CONTAMINATION IN SQUARE METRES <b>10</b>	
<b>J</b>	FACTORS AFFECTING SPILL OR RECOVERY <b>N/A</b>	DESCRIBE ANY ASSISTANCE REQUIRED <b>N/A</b>	HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT <b>N/A</b>	

<b>K</b>	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS <p><b>Hydraulic hose failure on an excavator occurred inside TIRI01 pit. The excavator was immediately turned off, spill pads and a secondary containment were used. Spill clean up is currently on-going.</b></p> <p><b>The coordinates of the spill are 63° 1' 22.03"N, 92° 13' 11.69"W. No water bodies were impacted by this spill. The nearest natural water body (A8) is 480 m south.</b></p> <p><b>Pursuant to Part H, Item 8c of water license 2AM-MEL1631, a follow up report will be issued after the investigation is completed.</b></p> <p><b>Reported by Randy Schwandt, Environment Coordinator 819-759-3555 ext. 4603996 Randy.Schwandt@agnicoeagle.com , Kyle.Conway@agnicoeagle.com ext. 4603212</b></p>			
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<b>L</b>	REPORTED TO SPILL LINE BY <b>Randy Schwandt</b>	POSITION <b>Env. Coordinator</b>	EMPLOYER <b>AEM</b>	LOCATION CALLING FROM <b>Meliadine</b>	TELEPHONE <b>819-759-3555</b>
<b>M</b>	ANY ALTERNATE CONTACT <b>Kyle Conway</b>	POSITION <b>General supervisor</b>	EMPLOYER <b>AEM</b>	ALTERNATE CONTACT LOCATION <b>Meliadine</b>	ALTERNATE TELEPHONE <b>819-860-1033</b>

REPORT LINE USE ONLY					
<b>N</b>	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130
LEAD AGENCY <input type="checkbox"/> EC <input type="checkbox"/> CCG <input type="checkbox"/> GNWT <input type="checkbox"/> GN <input type="checkbox"/> ILA <input type="checkbox"/> INAC <input type="checkbox"/> NEB <input type="checkbox"/> TC			SIGNIFICANCE <input type="checkbox"/> MINOR <input type="checkbox"/> MAJOR <input type="checkbox"/> UNKNOWN		FILE STATUS <input type="checkbox"/> OPEN <input type="checkbox"/> CLOSED
AGENCY	CONTACT NAME		CONTACT TIME	REMARKS	
LEAD AGENCY					
FIRST SUPPORT AGENCY					
SECOND SUPPORT AGENCY					
THIRD SUPPORT AGENCY					



March 1<sup>st</sup>, 2023

Kyle Amsel  
Water Resource Officer  
Kivalliq Region, Field Operations Unit  
Crown-Indigenous Relations and Northern Affairs Canada  
Rankin Inlet, NU  
XOC OGO

*Sent via email: [kyle.amsel@rcaanc-cirnac.gc.ca](mailto:kyle.amsel@rcaanc-cirnac.gc.ca)*

## **Re.: Follow-up Report Spill #2023-034 – Release of 600 L of hydraulic oil at the Meliadine Gold Project**

On February 3<sup>rd</sup>, 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email ([spills@gov.nt.ca](mailto:spills@gov.nt.ca)) of a spill of approximately 600 L of hydraulic oil at the Meliadine Gold Project site (spill location coordinates: 63° 1' 22.03"N, 92° 13' 11.69"). This follow-up report provides supplemental information based on the results of the incident assessment and is being provided in accordance with:

- the Nunavut Water Board License 2AM-MEL1631 Water License, part H, item 8c.

### **Description of Incident**

On February 3<sup>rd</sup>, 2023, at approximately 4:00 pm, an estimated 600 L of hydraulic oil was spilled on to Tiriganiaq pit 1 (Tiri-1). During normal operations, four bolts broke on the main line between the hydraulic oil pump and tank of an excavator, causing the contents of the tank to release. The initial NT/NU Spill Report indicated that 500 L was released but after further assessment it was determined that 600 L was released.

No water bodies were impacted by this spill. The closest water body (A8) is approximately 480 meters south, as seen in Figure 1.



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**Figure 1:** Location of the hydraulic spill and proximity to water bodies.

## Spill Response and Remediation

The immediate response from the employee was to shut down the equipment. The employee then contacted their supervisor to report the incident. As the entire contents of the hydraulic oil tank released, no intervention was required to stop the spill. The contaminated material was then excavated and directed to Landfarm A as per the Spill Contingency Plan.

## Root Cause and Corrective Measures

An assessment was conducted soon after the incident occurred to determine the root cause and contributing factors. The assessment concluded with the following:



- Extreme temperatures placed additional stress on the hydraulic system causing a system failure.
- Preventive maintenance inspection of the Hydraulic pump compartment and associated equipment was not included in the preventative schedule

The following corrective and preventative actions have been implemented to address the root causes and to reduce the likelihood of reoccurrence:

- Frost fighter will be used on hydraulic compartment when starting up in cold temperatures.
- Preventive maintenance schedule has been updated to include visual inspection of the hydraulic pump compartment and associated equipment every 1000 hours.

Should you have any questions or require further information, please do not hesitate to contact the undersigned.



**Brett Fairbairn** | Environment Coordinator

brett.fairbairn@agnicoeagle.com | Direct 819.759.3555 x4603996 |

Agnico Eagle Mines Limited - Meliadine Mine, Suite 879 - Rankin Inlet, Nunavut,  
Canada X0C 0G0

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**AGNICO EAGLE**  
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## **Appendix – Photos**



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**Photo 1:** Hydraulic oil spill area.



**Photo 2:** Hydraulic oil spill remediated.



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<b>C</b>	LAND USE PERMIT NUMBER (IF APPLICABLE) <b>KVPL11D01</b>	WATER LICENCE NUMBER (IF APPLICABLE) <b>2AM-MEL1631</b>		
<b>D</b>	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION <b>Meliadine Gold Project</b>		REGION <input type="checkbox"/> NWT <input checked="" type="checkbox"/> NUNAVUT <input type="checkbox"/> ADJACENT JURISDICTION OR OCEAN	
<b>E</b>	LATITUDE DEGREES <b>63</b> MINUTES <b>2</b> SECONDS <b>21</b>		LONGITUDE DEGREES <b>92</b> MINUTES <b>13</b> SECONDS <b>41</b>	
<b>F</b>	RESPONSIBLE PARTY OR VESSEL NAME <b>Agnico Eagle Mines Ltd.</b>	RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION <b>Meliadine, Rankin Inlet, Nunavut, X0C 0G0</b>		
<b>G</b>	ANY CONTRACTOR INVOLVED <b>N/A</b>	CONTRACTOR ADDRESS OR OFFICE LOCATION <b>N/A</b>		
<b>H</b>	PRODUCT SPILLED <b>Sewage</b>	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES <b>5 Liters</b>	U.N. NUMBER <b>N/A</b>	
	SECOND PRODUCT SPILLED (IF APPLICABLE) <b>N/A</b>	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES <b>N/A</b>	U.N. NUMBER <b>N/A</b>	
<b>I</b>	SPILL SOURCE <b>MSB Lift Station</b>	SPILL CAUSE <b>Human error</b>	AREA OF CONTAMINATION IN SQUARE METRES <b>1</b>	
<b>J</b>	FACTORS AFFECTING SPILL OR RECOVERY <b>N/A</b>	DESCRIBE ANY ASSISTANCE REQUIRED <b>N/A</b>	HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT <b>N/A</b>	

<b>K</b>	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS <p><b>Residual sewage was left in vaccum truck hose when disconnected at the MSB lift station and resulted in a spill of 5 L of sewage to the industrial pad. The spill was contained to the local area and froze in place. The frozen sewage was cleaned up and brought to landfarm A for disposal.</b></p> <p><b>The coordinates of the spill are 63° 2' 21.21"N, 92°13'40.89"W. No water bodies were impacted by this spill. The nearest natural water body (G2) is 325 m north.</b></p> <p><b>Pursuant to Part H, Item 8c of water license 2AM-MEL1631, a follow up report will be issued after the investigation is completed.</b></p> <p><b>Reported by Randy Schwandt Environment Coordinator 819-759-3555 ext. 4603996 randy.schwandt@agnicoeagle.com.</b></p>			
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<b>L</b>	REPORTED TO SPILL LINE BY <b>Randy Schwandt</b>	POSITION <b>Env. Coordinator</b>	EMPLOYER <b>AEM</b>	LOCATION CALLING FROM <b>Meliadine</b>	TELEPHONE <b>819-759-3555</b>
<b>M</b>	ANY ALTERNATE CONTACT <b>Kyle Conway</b>	POSITION <b>General supervisor</b>	EMPLOYER <b>AEM</b>	ALTERNATE CONTACT LOCATION <b>Meliadine</b>	ALTERNATE TELEPHONE <b>819-860-1033</b>

REPORT LINE USE ONLY					
<b>N</b>	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130
LEAD AGENCY <input type="checkbox"/> EC <input type="checkbox"/> CCG <input type="checkbox"/> GNWT <input type="checkbox"/> GN <input type="checkbox"/> ILA <input type="checkbox"/> INAC <input type="checkbox"/> NEB <input type="checkbox"/> TC			SIGNIFICANCE <input type="checkbox"/> MINOR <input type="checkbox"/> MAJOR <input type="checkbox"/> UNKNOWN		FILE STATUS <input type="checkbox"/> OPEN <input type="checkbox"/> CLOSED
AGENCY	CONTACT NAME		CONTACT TIME	REMARKS	
LEAD AGENCY					
FIRST SUPPORT AGENCY					
SECOND SUPPORT AGENCY					
THIRD SUPPORT AGENCY					



March 2<sup>nd</sup>, 2023

Kyle Amsel  
Water Resource Officer  
Kivalliq Region, Field Operations Unit  
Crown-Indigenous Relations and Northern Affairs Canada  
Rankin Inlet, NU  
XOC 0G0

*Sent via email: [kyle.amsel@rcaanc-cirnac.gc.ca](mailto:kyle.amsel@rcaanc-cirnac.gc.ca)*

## **Re: Follow-up Report Spill #2023-037 – Release of 5L of Sewage at the Meliadine Gold Project**

On February 5<sup>th</sup>, 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email ([spills@gov.nt.ca](mailto:spills@gov.nt.ca)) of a spill of approximately 5 L of sewage at the Meliadine Gold Project site (spill location coordinates: 63° 2' 21.62" N, 92° 13' 41.20" W). This follow-up report provides supplemental information based on the results of the incident assessment and is being provided in accordance with:

- Nunavut Water Board License 2AM-MEL1631 Water License, part H, item 8c.

### **Description of Incident**

On February 5<sup>th</sup>, 2023, at approximately 2:30 pm, an estimated 5 L of sewage was spilled onto the industrial pad at the multi service building (MSB) lift station. The vacuum truck operator had finished emptying the sewage into the MSB lift station. The operator emptied the hose according to procedure and was preparing to put the hose back on the truck. It was at this time that residual sewage spilled out of the vacuum truck hose and onto the industrial pad. The spilled sewage collected directly on the road behind the vacuum truck and was contained to the local area. No water bodies were impacted by this spill. The closest water body (G2) is approximately 325 meters north, as seen in Figure 1.



**Figure 1:** Location of the sewage spill and proximity to water bodies.

## Spill Response and Remediation

The spill stopped on its own as all residual sewage had exited the vacuum truck hose. The impacted surface area was hand excavated and an estimated 10 kg of contaminated snow was brought to Landfarm A as per the Spill Contingency Plan.



## Root Cause and Corrective Measures

An assessment was conducted soon after the incident occurred to determine the root cause and contributing factors. The assessment concluded with the following:

- After transfer of sewage from vacuum truck to MSB lift station sewage remains trapped in sewage transfer line from low spots between the truck and lift station.

The following corrective and preventative actions have been implemented to address the root cause and to reduce the likelihood of reoccurrence:

- Procedure has been updated with an additional step. Operator will walk the hose and adjust the elevation of the hose into a bucket when disconnecting after normal operations are complete to ensure no residual material is left.
- The updated procedure has been reviewed with all personnel operating the vacuum truck.

Should you have any questions or require further information, please do not hesitate to contact the undersigned.



**Brett Fairbairn** | Environment Coordinator  
brett.fairbairn@agnicoeagle.com | Direct 819.759.3555 x4603996 |  
Agnico Eagle Mines Limited - Meliadine Mine, Suite 879 - Rankin Inlet, Nunavut, Canada X0C 0G0  
[agnicoeagle.com](http://agnicoeagle.com)       
Sent from Meliadine



# AGNICO EAGLE

MELIADINE

## Appendix – Photos



**Photo 1:** Sewage spill location.



**Photo 2:** Sewage spill post remediation.



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

REPORT LINE USE ONLY

<b>A</b>	REPORT DATE: MONTH – DAY – YEAR <b>02-11-2023</b>	REPORT TIME <b>10:00</b>	<input checked="" type="checkbox"/> ORIGINAL SPILL REPORT, OR <input type="checkbox"/> UPDATE # _____ TO THE ORIGINAL SPILL REPORT	REPORT NUMBER _____	
	OCCURRENCE DATE: MONTH – DAY – YEAR <b>02-11-2023</b>	OCCURRENCE TIME <b>3:30</b>			
<b>C</b>	LAND USE PERMIT NUMBER (IF APPLICABLE) <b>KVPL11D01</b>	WATER LICENCE NUMBER (IF APPLICABLE) <b>2AM-MEL1631</b>			
	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION <b>Meliadine Gold Project</b>	REGION <input type="checkbox"/> NWT <input checked="" type="checkbox"/> NUNAVUT <input type="checkbox"/> ADJACENT JURISDICTION OR OCEAN			
<b>E</b>	LATITUDE DEGREES <b>63</b> MINUTES <b>2</b> SECONDS <b>21</b>	LONGITUDE DEGREES <b>92</b> MINUTES <b>13</b> SECONDS <b>41</b>			
	RESPONSIBLE PARTY OR VESSEL NAME <b>Agnico Eagle Mines Ltd.</b>	RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION <b>Meliadine, Rankin Inlet, Nunavut, X0C 0G0</b>			
<b>H</b>	PRODUCT SPILLED <b>Sodium Hydroxide</b>	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES <b>450 Liters</b>	U.N. NUMBER <b>1823</b>		
	SECOND PRODUCT SPILLED (IF APPLICABLE) <b>N/A</b>	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES <b>N/A</b>	U.N. NUMBER <b>N/A</b>		
<b>I</b>	SPILL SOURCE <b>Caustic Tank</b>	SPILL CAUSE <b>Equipment Failure</b>	AREA OF CONTAMINATION IN SQUARE METRES <b>5</b>		
	FACTORS AFFECTING SPILL OR RECOVERY <b>Infrastructure</b>	DESCRIBE ANY ASSISTANCE REQUIRED <b>N/A</b>	HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT <b>N/A</b>		
<b>K</b>	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS				
	<b>A fitting broke on a caustic distribution tank resulting in a spill of 450 L of 30% sodium hydroxide to the industrial pad.</b>				
	<b>The coordinates of the spill are 63° 2' 22.79"N, 92°13'33.91"W. No water bodies were impacted by this spill. The nearest natural water body (G2) is 369 m north.</b>				
	<b>Pursuant to Part H, Item 8c of water license 2AM-MEL1631, a follow up report will be issued after the investigation is completed.</b>				
<b>Reported by Randy Schwandt Environment Coordinator 819-759-3555 ext. 4603996 randy.schwandt@agnicoeagle.com.</b>					
<b>L</b>	REPORTED TO SPILL LINE BY <b>Randy Schwandt</b>	POSITION <b>Env. Coordinator</b>	EMPLOYER <b>AEM</b>	LOCATION CALLING FROM <b>Meliadine</b>	TELEPHONE <b>819-759-3555</b>
	ANY ALTERNATE CONTACT <b>Kyle Conway</b>	POSITION <b>General supervisor</b>	EMPLOYER <b>AEM</b>	ALTERNATE CONTACT LOCATION <b>Meliadine</b>	ALTERNATE TELEPHONE <b>819-860-1033</b>
REPORT LINE USE ONLY					
<b>N</b>	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130
	LEAD AGENCY <input type="checkbox"/> EC <input type="checkbox"/> CCG <input type="checkbox"/> GNWT <input type="checkbox"/> GN <input type="checkbox"/> ILA <input type="checkbox"/> INAC <input type="checkbox"/> NEB <input type="checkbox"/> TC		SIGNIFICANCE <input type="checkbox"/> MINOR <input type="checkbox"/> MAJOR <input type="checkbox"/> UNKNOWN		FILE STATUS <input type="checkbox"/> OPEN <input type="checkbox"/> CLOSED
AGENCY	CONTACT NAME	CONTACT TIME	REMARKS		
LEAD AGENCY					
FIRST SUPPORT AGENCY					
SECOND SUPPORT AGENCY					
THIRD SUPPORT AGENCY					



March 9<sup>th</sup>, 2023

Kyle Amsel  
Water Resource Officer  
Kivalliq Region, Field Operations Unit  
Crown-Indigenous Relations and Northern Affairs Canada  
Rankin Inlet, NU  
XOC 0G0

*Sent via email: [kyle.amsel@rcaanc-cirnac.gc.ca](mailto:kyle.amsel@rcaanc-cirnac.gc.ca)*

## **Re: Follow-up Report Spill #2023-047 – Release of 450 L of Sodium hydroxide at the Meliadine Gold Project**

On February 11<sup>th</sup>, 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email ([spills@gov.nt.ca](mailto:spills@gov.nt.ca)) of a spill of approximately 450 L of sewage at the Meliadine Gold Project site (spill location coordinates: 63° 2' 22.79" N, 92° 13' 33.91" W). This follow-up report provides supplemental information based on the results of the incident assessment and is being provided in accordance with:

- Nunavut Water Board License 2AM-MEL1631 Water License, part H, item 8c.

### **Description of Incident**

On February 11<sup>th</sup>, 2023, at approximately 3:30 am, an estimated 450 L of sodium hydroxide was spilled on the industrial pad beneath the sewage treatment plant (STP) due to a cracked PVC fitting. A 6 cm hole inside the STP floor allowed for the free liquid to drain to the ground below. The spilled sodium hydroxide collected directly underneath the STP, which was contained to the local area. No water bodies were impacted by this spill. The closest water body (G2) is approximately 370 meters north, as seen in Figure 1.



**Figure 1:** Location of the sodium hydroxide spill and proximity to water bodies.

## Spill Response and Remediation

Upon observing the spill, the operator shut off the manual valve on the reservoir to stop the spill and deployed chemical spill pads to absorb the spilled material. The operator then reported the spill to their supervisor. The spill was contained underneath the STP as heat from building created a layer of ice under and around the infrastructure containing the spill to that area.



As per the spill contingency plan, a neutralizer was used on the sodium hydroxide to adjust the pH of the free liquid to a neutral pH. An industrial vacuum was later used to collect the remaining free liquid which was then transferred into a plastic tote. All contaminated spill rags, free liquid and contaminated ice/snow were brought to the Mill's reagent storage area where it's stored as hazardous waste and will be shipped offsite for disposal.

During freshet, this area will be monitored frequently for run-off. Any pooling water from this location will be pumped into a tote for disposal.

## Root Causes and Corrective Measures

An assessment was conducted soon after the incident occurred to determine the root cause and contributing factors. The assessment concluded with the following:

- PVC fitting potentially contracted with freezing temperatures (caustic distribution tank is by entrance of building).
- No preventive maintenance (PM) schedule is currently in place for this piece of equipment.

The following corrective and preventative actions have been implemented to address the root causes and to reduce the likelihood of reoccurrence:

- A PM schedule to be created for monthly inspection of the chemical distribution lines within the STP.
- Plug to be installed in the STP floor where a hole was present.
- A centralized caustic distribution system with a single tank to feed the STP will replace the existing three tanks.
- Valves will be locked out at the bottom of the tank and feed from 20 L pails or top feed from the tank when needed. This is a temporary measure until the central feed tank is installed.

Should you have any questions or require further information, please do not hesitate to contact the undersigned.



**Randy Schwandt** | Environment Coordinator  
[randy.schwandt@agnicoeagle.com](mailto:randy.schwandt@agnicoeagle.com) | Direct 819.759.3555 x4603996 |  
Agnico Eagle Mines Limited - Meliadine Mine, Suite 879 - Rankin Inlet, Nunavut, Canada X0C 0G0  
[agnicoeagle.com](http://agnicoeagle.com)       
Sent from Meliadine

Agnico Eagle Mines Limited - Meliadine Mine, Suite 879 - Rankin Inlet, Nunavut, Canada  
Tel: 819-759-3555 | [agnicoeagle.com](http://agnicoeagle.com)



## **Appendix – Photos**



# AGNICO EAGLE

MELIADINE



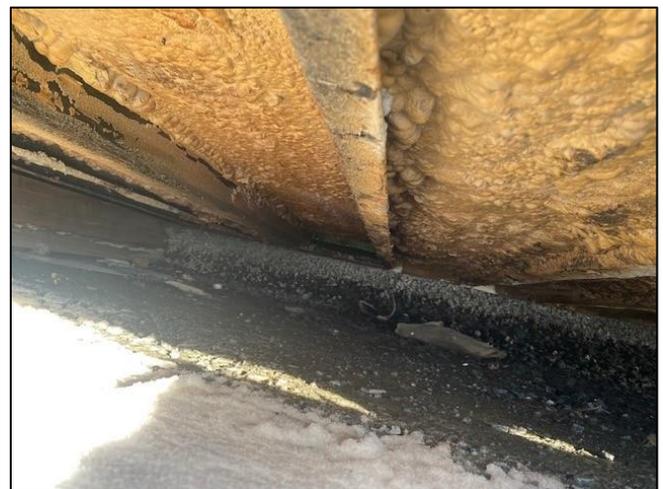
**Photo 1:** Contaminated ice and snow.



**Photo 2:** Spill remediation efforts.



**Photo 3:** Spill remediation area.



**Photo 4:** Spill remediation area.



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

REPORT LINE USE ONLY

<b>A</b>	REPORT DATE: MONTH – DAY – YEAR <b>02-22-2023</b>	REPORT TIME <b>11:00</b>	<input checked="" type="checkbox"/> ORIGINAL SPILL REPORT, OR <input type="checkbox"/> UPDATE # _____ TO THE ORIGINAL SPILL REPORT	<b>REPORT NUMBER</b>  _____
<b>B</b>	OCCURRENCE DATE: MONTH – DAY – YEAR <b>02-21-2023</b>	OCCURRENCE TIME <b>16:00</b>		
<b>C</b>	LAND USE PERMIT NUMBER (IF APPLICABLE) <b>KVPL11D01</b>	WATER LICENCE NUMBER (IF APPLICABLE) <b>2AM-MEL1631</b>		
<b>D</b>	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION <b>Meliadine Gold Project</b>		REGION <input type="checkbox"/> NWT <input checked="" type="checkbox"/> NUNAVUT <input type="checkbox"/> ADJACENT JURISDICTION OR OCEAN	
<b>E</b>	LATITUDE DEGREES <b>63</b> MINUTES <b>2</b> SECONDS <b>21</b>		LONGITUDE DEGREES <b>92</b> MINUTES <b>13</b> SECONDS <b>41</b>	
<b>F</b>	RESPONSIBLE PARTY OR VESSEL NAME <b>Agnico Eagle Mines Ltd.</b>	RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION <b>Meliadine, Rankin Inlet, Nunavut, X0C 0G0</b>		
<b>G</b>	ANY CONTRACTOR INVOLVED <b>N/A</b>	CONTRACTOR ADDRESS OR OFFICE LOCATION <b>N/A</b>		
<b>H</b>	PRODUCT SPILLED <b>Sewage</b>	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES <b>25 Liters</b>	U.N. NUMBER <b>N/A</b>	
	SECOND PRODUCT SPILLED (IF APPLICABLE) <b>N/A</b>	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES <b>N/A</b>	U.N. NUMBER <b>N/A</b>	
<b>I</b>	SPILL SOURCE <b>Vacuum truck hose</b>	SPILL CAUSE <b>Equipment failure</b>	AREA OF CONTAMINATION IN SQUARE METRES <b>0.5</b>	
<b>J</b>	FACTORS AFFECTING SPILL OR RECOVERY <b>N/A</b>	DESCRIBE ANY ASSISTANCE REQUIRED <b>N/A</b>	HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT <b>N/A</b>	

<b>K</b>	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS  <b>A suction hose on a vacuum truck failed while doing routine sewage collection at the Power Plant lift station resulting in a 25L spill of sewage. The sewage was cleaned up and brought to Landfarm A for disposal.</b>  <b>The coordinates of the spill are 63° 2' 16.66"N, 92° 13' 32.44"W. No water bodies were impacted by this spill. The nearest natural water body (H15) is 269 m west.</b> <b>Pursuant to Part H, Item 8c of water license 2AM-MEL1631, a follow up report will be issued after the investigation is completed.</b>  <b>Reported by Kevin Smith Hydrogeology Specialist 819-759-3555 ext. 4603961          kevin.smith2@agnicoeagle.com.</b>			
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<b>L</b>	REPORTED TO SPILL LINE BY <b>Kevin Smith</b>	POSITION <b>Hydrogeo Specialist</b>	EMPLOYER <b>AEM</b>	LOCATION CALLING FROM <b>Meliadine</b>	TELEPHONE <b>819-759-3555</b>
<b>M</b>	ANY ALTERNATE CONTACT <b>Kyle Conway</b>	POSITION <b>General Supervisor</b>	EMPLOYER <b>AEM</b>	ALTERNATE CONTACT LOCATION <b>Meliadine</b>	ALTERNATE TELEPHONE <b>819-860-1033</b>

REPORT LINE USE ONLY					
<b>N</b>	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130
LEAD AGENCY <input type="checkbox"/> EC <input type="checkbox"/> CCG <input type="checkbox"/> GNWT <input type="checkbox"/> GN <input type="checkbox"/> ILA <input type="checkbox"/> INAC <input type="checkbox"/> NEB <input type="checkbox"/> TC			SIGNIFICANCE <input type="checkbox"/> MINOR <input type="checkbox"/> MAJOR <input type="checkbox"/> UNKNOWN		FILE STATUS <input type="checkbox"/> OPEN <input type="checkbox"/> CLOSED
AGENCY	CONTACT NAME		CONTACT TIME	REMARKS	
LEAD AGENCY					
FIRST SUPPORT AGENCY					
SECOND SUPPORT AGENCY					
THIRD SUPPORT AGENCY					



March 12<sup>th</sup>, 2023

Kyle Amsel  
Water Resource Officer  
Kivalliq Region, Field Operations Unit  
Crown-Indigenous Relations and Northern Affairs Canada  
Rankin Inlet, NU  
XOC 0G0

*Sent via email: [kyle.amsel@rcaanc-cirnac.gc.ca](mailto:kyle.amsel@rcaanc-cirnac.gc.ca)*

## **Re: Follow-up Report Spill #2023-057 – Release of 25L of Sewage at the Meliadine Gold Project**

On February 21<sup>st</sup> 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email ([spills@gov.nt.ca](mailto:spills@gov.nt.ca)) of a spill of approximately 25L of sewage at the Meliadine Gold Project site (spill location coordinates: 63° 2' 16.66" N, 92° 13' 32.44" W). This follow-up report provides supplemental information based on the results of the incident assessment and is being provided in accordance with:

- Nunavut Water Board License 2AM-MEL1631 Water License, part H, item 8c.

### **Description of Incident**

On February 21<sup>st</sup>, 2023, at approximately 4:00 pm, an estimated 25L of sewage was spilled onto the industrial pad at the Power Plant lift station. The vacuum truck was at the site setup to perform a routine removal of sewage from the Power Plant lift station. When the valve to the pump at the vacuum truck was opened the 3" suction hose split spraying sewage on the ground. The spill was cleaned up with a backhoe and the material placed in a drum to be moved Landfarm A. No water bodies were impacted by this spill. The closest water body (G2) is approximately 500 meters northwest, as seen in Figure 1. Please note that this is a correction from the initial report which indicated H15 was the nearest waterbody; H15 is part of our site water management plan.



**Figure 1:** Location of the sewage spill and proximity to water bodies.

## Spill Response and Remediation

The operators closed the valve on the sucker truck and stopped the vacuum. Their supervisor called in a backhoe to scrape the spill up. The contaminated snow and ice was excavated and brought to Landfarm A as per the Spill Contingency Plan.



## Root Cause and Corrective Measures

An assessment was conducted soon after the incident occurred to determine the root cause and contributing factors. The assessment concluded with the following:

- Cold weather caused the vacuum truck hose to become brittle and crack during operation.

The following corrective and preventative actions have been implemented to address the root cause and to reduce the likelihood of reoccurrence:

- Vacuum truck operators instructed to thoroughly inspect the vacuum truck hose to ensure the integrity of the hose before each use.

Should you have any questions or require further information, please do not hesitate to contact the undersigned.



**Randy Schwandt** | Environment Coordinator

[randy.schwandt@agnicoeagle.com](mailto:randy.schwandt@agnicoeagle.com) | Direct 819.759.3555 x4603996 |

Agnico Eagle Mines Limited - Meliadine Mine, Suite 879 - Rankin Inlet, Nunavut,  
Canada X0C 0G0

[agnicoeagle.com](http://agnicoeagle.com)     

Sent from Meliadine

**Appendix – Photos**



**Photo 1:** Sewage spill location.



**Photo 2:** Sewage spill post remediation.



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

REPORT LINE USE ONLY

<b>A</b>	REPORT DATE: MONTH – DAY – YEAR <b>02-26-2023</b>	REPORT TIME <b>15:30</b>	<input checked="" type="checkbox"/> ORIGINAL SPILL REPORT, OR <input type="checkbox"/> UPDATE # _____ TO THE ORIGINAL SPILL REPORT	REPORT NUMBER _____	
	OCCURRENCE DATE: MONTH – DAY – YEAR <b>02-26-2023</b>	OCCURRENCE TIME <b>08:00</b>			
<b>C</b>	LAND USE PERMIT NUMBER (IF APPLICABLE) <b>KVPL11D01</b>	WATER LICENCE NUMBER (IF APPLICABLE) <b>2BB-MEL1424</b>			
	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION <b>Meliadine Gold Project</b>	REGION <input type="checkbox"/> NWT <input checked="" type="checkbox"/> NUNAVUT <input type="checkbox"/> ADJACENT JURISDICTION OR OCEAN			
<b>E</b>	LATITUDE DEGREES <b>63</b> MINUTES <b>2</b> SECONDS <b>21</b>	LONGITUDE DEGREES <b>92</b> MINUTES <b>13</b> SECONDS <b>41</b>			
	RESPONSIBLE PARTY OR VESSEL NAME <b>Agnico Eagle Mines Ltd.</b>	RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION <b>Meliadine, Rankin Inlet, Nunavut, X0C 0G0</b>			
<b>G</b>	ANY CONTRACTOR INVOLVED <b>Orbit Garant</b>	CONTRACTOR ADDRESS OR OFFICE LOCATION <b>Val d'Or, Quebec</b>			
	PRODUCT SPILLED <b>Drill Cuttings</b>	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES <b>50 L</b>	U.N. NUMBER <b>N/A</b>		
<b>H</b>	SECOND PRODUCT SPILLED (IF APPLICABLE) <b>N/A</b>	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES <b>N/A</b>	U.N. NUMBER <b>N/A</b>		
	SPILL SOURCE <b>Cutting Tub</b>	SPILL CAUSE <b>Equipment Failure</b>	AREA OF CONTAMINATION IN SQUARE METRES <b>3</b>		
<b>J</b>	FACTORS AFFECTING SPILL OR RECOVERY <b>N/A</b>	DESCRIBE ANY ASSISTANCE REQUIRED <b>N/A</b>	HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT <b>N/A</b>		
	<b>K</b> ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS <p><b>On February 26, 2023, while drilling on lake A19 the water recovery pan overflowed spilling 50 L of drill cuttings on the frozen lake. Clean up the cuttings was initiated and final cleanup will occur after the hole is complete and the drill equipment is removed. No cuttings entered the water body as they were contained on the surface of the ice cover. The coordinates of the spill are 63 0'21.70"N 92 9'39.09"W</b></p> <p><b>Pursuant to Part H, Section 4c of the Water License, a follow-up report will be issued after a closer investigation is completed.</b></p> <p><b>Reported by Brett Fairbairn Environment Coordinator 819-759-3555 ext. 4603996 Brett.Fairbairn@agnicoeagle.com.</b></p>				
<b>L</b>	REPORTED TO SPILL LINE BY <b>Brett Fairbairn</b>	POSITION <b>Env. Coordinator</b>	EMPLOYER <b>AEM</b>	LOCATION CALLING FROM <b>Meliadine</b>	TELEPHONE <b>819-759-3555</b>
	ANY ALTERNATE CONTACT <b>Sara Savoie</b>	POSITION <b>General Supervisor</b>	EMPLOYER <b>AEM</b>	ALTERNATE CONTACT LOCATION <b>Meliadine</b>	ALTERNATE TELEPHONE <b>819-856-9349</b>
<b>REPORT LINE USE ONLY</b>					
<b>N</b>	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130
	LEAD AGENCY <input type="checkbox"/> EC <input type="checkbox"/> CCG <input type="checkbox"/> GNWT <input type="checkbox"/> GN <input type="checkbox"/> ILA <input type="checkbox"/> INAC <input type="checkbox"/> NEB <input type="checkbox"/> TC		SIGNIFICANCE <input type="checkbox"/> MINOR <input type="checkbox"/> MAJOR <input type="checkbox"/> UNKNOWN		FILE STATUS <input type="checkbox"/> OPEN <input type="checkbox"/> CLOSED
AGENCY	CONTACT NAME	CONTACT TIME	REMARKS		
LEAD AGENCY					
FIRST SUPPORT AGENCY					
SECOND SUPPORT AGENCY					
THIRD SUPPORT AGENCY					



March 18<sup>th</sup>, 2023

Kyle Amsel  
Water Resource Officer  
Kivalliq Region, Field Operations Unit  
Crown-Indigenous Relations and Northern Affairs Canada  
Rankin Inlet, NU  
X0C 0G0

Sent via email: [kyle.amsel@rcaanc-cirnac.gc.ca](mailto:kyle.amsel@rcaanc-cirnac.gc.ca)

## **Re: Follow-up Report Spill #2023-068 – Release of 50 L of Drill Cuttings Water Meliadine Gold Project Lake A19**

On February 26<sup>th</sup> 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email ([spills@gov.nt.ca](mailto:spills@gov.nt.ca)) of a spill of approximately 50 L of drill cutting water at the Meliadine Gold Project (spill location coordinates: 63° 0' 21.70" N, 92° 9' 39.09" W). This follow-up report provides supplemental information based on the results of the incident assessment and is being provided in accordance with:

- the Nunavut Water Board License 2BB-MEL1424 Water Licence, part H, item 4c
- the Fisheries Act subsection 38(7)

### **Description of Incident**

On February 26<sup>th</sup>, 2023, at approximately 8:00 am, an estimated 50 L of drill cuttings water was spilled onto the ice surface on lake A19. The generator powering the water recovery pan pump failed allowing the water recovery pan to overflow. The spill was located on Lake A19, as seen in Figure 1.



**Figure 1:** Location of the drill cuttings water spill.

## **Spill Response and Remediation**

The driller stopped the water pressure pump to prevent additional water from entering the water recovery pan and stopped the overflow. The generator powering the water recovery pan pump was



repaired and restarted to lower the volume in the water recovery pan. Clean up of the spilled material occurred on March 14<sup>th</sup>, 2023, immediately after the drill setup was demobilized from this location. The impacted snow and ice was disposed of on the Waste Rock Storage Facility 3 (WRSF3).

## Root Cause and Corrective Measures

An assessment was conducted soon after the incident occurred to determine the root cause and contributing factors. The assessment concluded with the following:

- The failure of the drill site generator resulted in a power loss to the water recovery pan pump allowing it to continue to fill from the water pressure pump.
- Water contaminated fuel was identified in the fuel filter sight glass resulting in a generator failure.

The following corrective and preventative actions have been implemented to address the root cause and to reduce the likelihood of reoccurrence:

- A signal light has been installed in the drills to notify the driller of a generator failure.
- Operating instructions to shut down the water pressure pump during a generator failure has been provided to all drilling employees.
- Direction has been provided to all drilling employees to inspect fuel nozzle to ensure there is no snow inside prior to refueling equipment, therefore preventing equipment failure.

Should you have any questions or require further information, please do not hesitate to contact the undersigned.



**Brett Fairbairn** | Environment Coordinator  
brett.fairbairn@agnicoeagle.com | Direct 819.759.3555 x4603996 |  
Agnico Eagle Mines Limited - Meliadine Mine, Suite 879 - Rankin Inlet, Nunavut,  
Canada X0C 0G0

[agnicoeagle.com](http://agnicoeagle.com)     

Sent from Meliadine



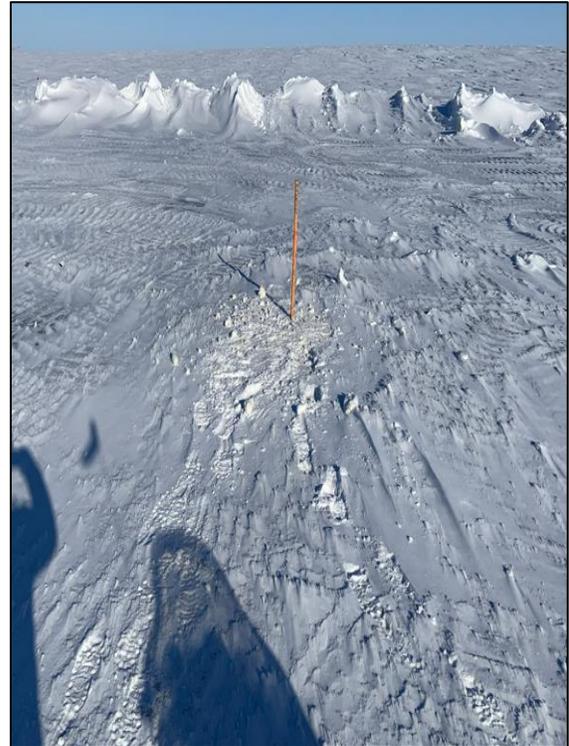
# AGNICO EAGLE

MELIADINE

## Appendix – Photos



**Photo 1:** Drill cutting water spill.



**Photo 2:** Drill cutting water spill post remediation.



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

REPORT LINE USE ONLY

<b>A</b>	REPORT DATE: MONTH – DAY – YEAR <b>03-01-2023</b>	REPORT TIME <b>18:00</b>	<input checked="" type="checkbox"/> ORIGINAL SPILL REPORT, OR <input type="checkbox"/> UPDATE # _____ TO THE ORIGINAL SPILL REPORT	REPORT NUMBER _____	
	OCCURRENCE DATE: MONTH – DAY – YEAR <b>03-01-2023</b>	OCCURRENCE TIME <b>8:00</b>			
<b>C</b>	LAND USE PERMIT NUMBER (IF APPLICABLE) <b>KVPL11D01</b>	WATER LICENCE NUMBER (IF APPLICABLE) <b>2AM-MEL1631</b>			
	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION <b>Meliadine Gold Project</b>		REGION <input type="checkbox"/> NWT <input checked="" type="checkbox"/> NUNAVUT <input type="checkbox"/> ADJACENT JURISDICTION OR OCEAN		
<b>E</b>	LATITUDE DEGREES <b>63</b> MINUTES <b>2</b> SECONDS <b>21</b>	LONGITUDE DEGREES <b>92</b> MINUTES <b>13</b> SECONDS <b>41</b>			
	RESPONSIBLE PARTY OR VESSEL NAME <b>Agnico Eagle Mines Ltd.</b>	RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION <b>Meliadine, Rankin Inlet, Nunavut, X0C 0G0</b>			
<b>G</b>	ANY CONTRACTOR INVOLVED <b>N/A</b>	CONTRACTOR ADDRESS OR OFFICE LOCATION <b>N/A</b>			
	PRODUCT SPILLED <b>Sewage</b>	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES <b>9 m3</b>	U.N. NUMBER <b>N/A</b>		
<b>H</b>	SECOND PRODUCT SPILLED (IF APPLICABLE) <b>N/A</b>	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES <b>N/A</b>	U.N. NUMBER <b>N/A</b>		
	SPILL SOURCE <b>Main Camp Lift Station</b>	SPILL CAUSE <b>Equipment Failure</b>	AREA OF CONTAMINATION IN SQUARE METRES <b>1000 m2</b>		
<b>J</b>	FACTORS AFFECTING SPILL OR RECOVERY <b>Infrastructure</b>	DESCRIBE ANY ASSISTANCE REQUIRED <b>N/A</b>	HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT <b>N/A</b>		
	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS <b>An overflow of the main camp lift station resulted in a spill of 9 m3 of sewage to the industrial pad. The spill was contained to the local area. Clean up activities are underway.</b>  <b>The coordinates of the spill are 63° 2' 23.60"N, 92° 13' 39.57"W. No water bodies were impacted by this spill. The nearest natural water body (G2) is 280 m north.</b>  <b>Pursuant to Part H, Item 8c of water license 2AM-MEL1631, a follow up report will be issued after the investigation is completed.</b>  <b>Reported by Brett Fairbairn, Environment Coordinator 819-759-3555 ext. 4603996          Brett.fairbairn@agnicoeagle.com , Sara.Savoie@agnicoeagle.com ext. 4603212</b>				
<b>L</b>	REPORTED TO SPILL LINE BY <b>Brett Fairbairn</b>	POSITION <b>Env. Coordinator</b>	EMPLOYER <b>AEM</b>	LOCATION CALLING FROM <b>Meliadine</b>	TELEPHONE <b>819-759-3555</b>
	ANY ALTERNATE CONTACT <b>Sara Savoie</b>	POSITION <b>General supervisor</b>	EMPLOYER <b>AEM</b>	ALTERNATE CONTACT LOCATION <b>Meliadine</b>	ALTERNATE TELEPHONE <b>819-856-9349</b>
<b>REPORT LINE USE ONLY</b>					
<b>N</b>	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130
	LEAD AGENCY <input type="checkbox"/> EC <input type="checkbox"/> CCG <input type="checkbox"/> GNWT <input type="checkbox"/> GN <input type="checkbox"/> ILA <input type="checkbox"/> INAC <input type="checkbox"/> NEB <input type="checkbox"/> TC		SIGNIFICANCE <input type="checkbox"/> MINOR <input type="checkbox"/> MAJOR <input type="checkbox"/> UNKNOWN		FILE STATUS <input type="checkbox"/> OPEN <input type="checkbox"/> CLOSED
AGENCY	CONTACT NAME	CONTACT TIME	REMARKS		
LEAD AGENCY					
FIRST SUPPORT AGENCY					
SECOND SUPPORT AGENCY					
THIRD SUPPORT AGENCY					



March 21<sup>st</sup>, 2023

Kyle Amsel  
Water Resource Officer  
Kivalliq Region, Field Operations Unit  
Crown-Indigenous Relations and Northern Affairs Canada  
Rankin Inlet, NU  
XOC 0G0

*Sent via email: [kyle.amsel@rcaanc-cirnac.gc.ca](mailto:kyle.amsel@rcaanc-cirnac.gc.ca)*

## **Re: Follow-up Report Spill #2023-073 – Release of 9 m<sup>3</sup> of Sewage at the Meliadine Gold Mine**

On March 1<sup>st</sup>, 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email ([spills@gov.nt.ca](mailto:spills@gov.nt.ca)) of a spill of approximately 9 m<sup>3</sup> of sewage at the Meliadine Gold Mine site (spill location coordinates: 63° 2' 23.60" N, 92° 13' 39.57"). This follow-up report provides supplemental information based on the results of the incident assessment and is being provided in accordance with:

- Nunavut Water Board License 2AM-MEL1631 Water License, part H, item 8c.

### **Description of Incident**

On March 1<sup>st</sup>, 2023, at approximately 5:30 am, an estimated 9 m<sup>3</sup> of sewage was spilled to the industrial pad due to an equipment failure at the main camp lift station causing it to overflow. The original report indicated that this spill occurred at 8:00 am, following the assessment it was identified that the spill began at approximately 5:30 am. The spilled sewage migrated south and collected in the multiple service building (MSB) parking lot where it was contained, and cleanup was initiated. No water bodies were impacted by this spill. The closest water body (G2) is approximately 280 meters north, as seen in Figure 1.



**Figure 1:** Location of the sewage spill and proximity to water bodies.

## Spill Response and Remediation

The Energy and Infrastructure Maintenance supervisor was notified that the spill was occurring and switched the pumping system into manual mode to lower the lift station level and stop the release. The impacted area was scrapped using an excavator, and approximately 40 m<sup>3</sup> of sewage-impacted snow and ice was recovered. Due to the large volume of material that was generated from the spill remediation, Agnico Eagle requested authorization from CIRNAC, in consultation with KivIA, to transfer the sewage-impacted snow and ice within the Tiriganiaq Pit 2. A one-time authorization was granted on February 17<sup>th</sup>, 2023.

Tiriganiaq Pit 2 is currently used for interim storage of saline contact water from the underground mine. This water will be treated at the Saline Effluent Treatment Plant (SETP) prior to discharge to sea at Melvin Bay to meet the MDMER discharge criteria.



## Root Causes and Corrective Measures

An assessment was conducted soon after the incident occurred to determine the root cause and contributing factors. The assessment concluded with the following:

- The float level detection system failed, resulting in the overflow.

The following corrective and preventative actions have been implemented to address the root cause and to reduce the likelihood of reoccurrence:

- Installation of an ultrasonic level sensor to ensure reliable lift station levels. Completed March 15<sup>th</sup>, 2023.

Additional corrective actions for the Meliadine sewage system include the following:

- Installation of individual spill containment at wing lift stations – completed.
- Replacing pump blades at lift stations – completed.
- Development of reliability tracking tools to identify the cause of failure and improve response time – completed.
- Upgrades to lift station instrumentation to provide early warning of potential spills – in progress.
- Adding remote IO (input/output) panels to monitor each wing lift stations for faults – in progress.

Should you have any questions or require further information, please do not hesitate to contact the undersigned.



**Brett Fairbairn** | Environment Coordinator

brett.fairbairn@agnicoeagle.com | Direct 819.759.3555 x4603996 |

Agnico Eagle Mines Limited - Meliadine Mine, Suite 879 - Rankin Inlet, Nunavut,  
Canada X0C 0G0

[agnicoeagle.com](http://agnicoeagle.com)     

Sent from Meliadine



## **Appendix – Photos**



# AGNICO EAGLE

MELIADINE



**Photo 1:** Sewage spill location.



**Photo 2:** Sewage spill post remediation.



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

REPORT LINE USE ONLY

<b>A</b>	REPORT DATE: MONTH – DAY – YEAR <b>03-18-2023</b>	REPORT TIME <b>08:30</b>	<input checked="" type="checkbox"/> ORIGINAL SPILL REPORT, OR		REPORT NUMBER _____
	OCCURRENCE DATE: MONTH – DAY – YEAR <b>03-17-2023</b>	OCCURRENCE TIME <b>14:00</b>	<input type="checkbox"/> UPDATE # _____ TO THE ORIGINAL SPILL REPORT		
<b>C</b>	LAND USE PERMIT NUMBER (IF APPLICABLE) <b>KVPL11D01</b>	WATER LICENCE NUMBER (IF APPLICABLE) <b>2BB-MEL1424</b>			
	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION <b>Meliadine Gold Mine</b>		REGION <input type="checkbox"/> NWT <input checked="" type="checkbox"/> NUNAVUT <input type="checkbox"/> ADJACENT JURISDICTION OR OCEAN		
<b>E</b>	LATITUDE DEGREES <b>63</b> MINUTES <b>2</b> SECONDS <b>21</b>	LONGITUDE DEGREES <b>92</b> MINUTES <b>13</b> SECONDS <b>41</b>			
	RESPONSIBLE PARTY OR VESSEL NAME <b>Agnico Eagle Mines Ltd.</b>	RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION <b>Meliadine, Rankin Inlet, Nunavut, X0C 0G0</b>			
<b>G</b>	ANY CONTRACTOR INVOLVED <b>Orbit Garant</b>	CONTRACTOR ADDRESS OR OFFICE LOCATION <b>Val d'Or, Quebec</b>			
	PRODUCT SPILLED <b>Hydraulic oil</b>	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES <b>1 L</b>	U.N. NUMBER <b>N/A</b>		
<b>H</b>	SECOND PRODUCT SPILLED (IF APPLICABLE) <b>N/A</b>	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES <b>N/A</b>	U.N. NUMBER <b>N/A</b>		
	SPILL SOURCE <b>Hydraulic line</b>	SPILL CAUSE <b>Unknown</b>	AREA OF CONTAMINATION IN SQUARE METRES <b>0.25</b>		
<b>J</b>	FACTORS AFFECTING SPILL OR RECOVERY <b>N/A</b>	DESCRIBE ANY ASSISTANCE REQUIRED <b>N/A</b>	HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT <b>N/A</b>		
	<b>K</b> ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS <b>A worker identified a 1 L hydraulic oil spill at Orbit Drill 31 located on Lake A8. The spill was observed after a hydraulic line was pinch while preparing to move the drill. Spill pads were placed to absorb the spill and the impacted snow and ice was recovered and placed in the contaminated snow cell at the mine site. No oil entered the water body as it was contained on the surface of the ice cover. The coordinates of the spill are 63 0'31.9"N, 92 12'04.1"W.</b>  <b>Pursuant to Part H, Section 4c of the Water License, a follow-up report will be issued after a closer assessment is completed.</b>  <b>Reported by Brett Fairbairn, Environment Coordinator 819-759-3555 extension 4603996 Brett.Fairbairn@agnicoeagle.com</b>				
<b>L</b>	REPORTED TO SPILL LINE BY <b>Brett Fairbairn</b>	POSITION <b>Env. Coordinator</b>	EMPLOYER <b>AEM</b>	LOCATION CALLING FROM <b>Meliadine</b>	TELEPHONE <b>819-759-3555</b>
	ANY ALTERNATE CONTACT <b>Kyle Conway</b>	POSITION <b>General Supervisor</b>	EMPLOYER <b>AEM</b>	ALTERNATE CONTACT LOCATION <b>Meliadine</b>	ALTERNATE TELEPHONE <b>819-860-1033</b>
<b>REPORT LINE USE ONLY</b>					
<b>N</b>	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130
	LEAD AGENCY <input type="checkbox"/> EC <input type="checkbox"/> CCG <input type="checkbox"/> GNWT <input type="checkbox"/> GN <input type="checkbox"/> ILA <input type="checkbox"/> INAC <input type="checkbox"/> NEB <input type="checkbox"/> TC		SIGNIFICANCE <input type="checkbox"/> MINOR <input type="checkbox"/> MAJOR <input type="checkbox"/> UNKNOWN		FILE STATUS <input type="checkbox"/> OPEN <input type="checkbox"/> CLOSED
AGENCY		CONTACT NAME	CONTACT TIME	REMARKS	
LEAD AGENCY					
FIRST SUPPORT AGENCY					
SECOND SUPPORT AGENCY					
THIRD SUPPORT AGENCY					



April 14<sup>th</sup>, 2023

Kyle Amsel  
Water Resource Officer  
Kivalliq Region, Field Operations Unit  
Crown-Indigenous Relations and Northern Affairs Canada  
Rankin Inlet, NU  
XOC 0G0

*Sent via email: [kyle.amsel@rcaanc-cirnac.gc.ca](mailto:kyle.amsel@rcaanc-cirnac.gc.ca)*

## **Re: Follow-up Report Spill #2023-104 – Release of 1 L of Hydraulic Oil Meliadine Gold Mine Lake A8**

On March 18<sup>th</sup>, 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email ([spills@gov.nt.ca](mailto:spills@gov.nt.ca)) of a spill of approximately 1 L of hydraulic oil at the Meliadine Gold Mine (spill location coordinates: 63° 0' 31.9" N, 92° 12' 04.1" W). This follow-up report provides supplemental information based on the results of the incident assessment and is being provided in accordance with:

- the Nunavut Water Board License 2BB-MEL1424 Water Licence, part H, item 4c
- the Fisheries Act subsection 38(7)

### **Description of Incident**

On March 17<sup>th</sup>, 2023, at approximately 14:00, an estimated 1 L of hydraulic oil was spilled onto the ice surface on Lake A8 as seen in Figure 1. While lowering the drill tower to relocate the drill a hydraulic line was pinched spilling hydraulic oil within the drill and into the water recovery pan. After the water recovery pan was removed and the drill relocated, remnant oil from under the drill floor was observed on the snow.



**Figure 1:** Location of the 1 L hydraulic oil spill.

## Spill Response and Remediation

Absorbent pads were deployed to absorb the free oil and disposed of in a Quatrex bag at the Meliadine mine site. The remaining impacted snow and ice was recovered with a shovel and bucket and transferred to the contaminated snow cell at the mine site, to be treated through the Oil Water Separator.

## Root Cause and Corrective Measures

An assessment was conducted soon after the incident occurred to determine the root cause and contributing factors. The assessment concluded with the following:



- The length of the hydraulic line was determined to be too long and allowed excess to become pinched when the tower was lowered.

The following corrective and preventative actions have been implemented to address the root cause and to reduce the likelihood of reoccurrence:

- A hydraulic line of suitable length was installed.
- Direction has been provided to all drilling employees to inspect hydraulic lines before a drill move begins.

Should you have any questions or require further information, please do not hesitate to contact the undersigned.



**Brett Fairbairn** | Environment Coordinator  
brett.fairbairn@agnicoeagle.com | Direct 819.759.3555 x4603996 |  
Agnico Eagle Mines Limited - Meliadine Mine, Suite 879 - Rankin Inlet, Nunavut,  
Canada X0C 0G0  
[agnicoeagle.com](http://agnicoeagle.com)       
Sent from Meliadine



## Appendix – Photos



**AGNICO EAGLE**  
MELIADINE



**Photo 1:** 1 L hydraulic oil spill location.



**Photo 2:** 1 L hydraulic oil spill post remediation.



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

REPORT LINE USE ONLY

<b>A</b>	REPORT DATE: MONTH – DAY – YEAR <b>03-29-2023</b>	REPORT TIME <b>17:45</b>	<input checked="" type="checkbox"/> ORIGINAL SPILL REPORT, OR <input type="checkbox"/> UPDATE # _____ TO THE ORIGINAL SPILL REPORT	REPORT NUMBER _____
	OCCURRENCE DATE: MONTH – DAY – YEAR <b>03-29-2023</b>	OCCURRENCE TIME <b>13:25</b>		
<b>C</b>	LAND USE PERMIT NUMBER (IF APPLICABLE) <b>KVPL11D01</b>	WATER LICENCE NUMBER (IF APPLICABLE) <b>2AM-MEL1631</b>		
	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION <b>Meliadine Gold Project</b>	REGION <input type="checkbox"/> NWT <input checked="" type="checkbox"/> NUNAVUT <input type="checkbox"/> ADJACENT JURISDICTION OR OCEAN		
<b>E</b>	LATITUDE DEGREES <b>63</b> MINUTES <b>2</b> SECONDS <b>21</b>	LONGITUDE DEGREES <b>92</b> MINUTES <b>13</b> SECONDS <b>41</b>		
	RESPONSIBLE PARTY OR VESSEL NAME <b>Agnico Eagle Mines Ltd.</b>	RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION <b>Meliadine, Rankin Inlet, Nunavut, X0C 0G0</b>		
<b>G</b>	ANY CONTRACTOR INVOLVED <b>N/A</b>	CONTRACTOR ADDRESS OR OFFICE LOCATION <b>N/A</b>		
	PRODUCT SPILLED <b>Untreated sewage</b>	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES <b>5 Litres</b>	U.N. NUMBER <b>N/A</b>	
<b>H</b>	SECOND PRODUCT SPILLED (IF APPLICABLE) <b>N/A</b>	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES <b>N/A</b>	U.N. NUMBER <b>N/A</b>	
	SPILL SOURCE <b>MSB Lift Station</b>	SPILL CAUSE <b>Equipment failure</b>	AREA OF CONTAMINATION IN SQUARE METRES <b>1</b>	
<b>J</b>	FACTORS AFFECTING SPILL OR RECOVERY <b>N/A</b>	DESCRIBE ANY ASSISTANCE REQUIRED <b>N/A</b>	HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT <b>N/A</b>	

<b>K</b>	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS			
	<p><b>A 5 L sewage spill was identified next to the Multi Service Building (MSB) lift station on the industrial pad after the sucker truck was emptied. The spill froze in place and was contained to the local area.</b></p> <p><b>The coordinates of the spill are 63° 2' 21.24"N, 92° 13' 40.67"W. No water bodies were impacted by this spill. The nearest natural water body (G2) is 325 m northwest.</b></p> <p><b>Pursuant to Part H, Item 8c of water license 2AM-MEL1631, a follow up report will be issued after the investigation is completed.</b></p> <p><b>Reported by Randy Schwandt, Environment Coordinator 819-759-3555 ext. 4603996 randy.schwandt@agnicoeagle.com , kyle.conway@agnicoeagle.com ext. 4603212</b></p>			

<b>L</b>	REPORTED TO SPILL LINE BY <b>Randy Schwandt</b>	POSITION <b>Env. Coordinator</b>	EMPLOYER <b>AEM</b>	LOCATION CALLING FROM <b>Meliadine</b>	TELEPHONE <b>819-759-3555</b>
	ANY ALTERNATE CONTACT <b>Kyle Conway</b>	POSITION <b>General Supervisor</b>	EMPLOYER <b>AEM</b>	ALTERNATE CONTACT LOCATION <b>Meliadine</b>	ALTERNATE TELEPHONE <b>819-860-1033</b>

REPORT LINE USE ONLY					
<b>N</b>	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130
	LEAD AGENCY <input type="checkbox"/> EC <input type="checkbox"/> CCG <input type="checkbox"/> GNWT <input type="checkbox"/> GN <input type="checkbox"/> ILA <input type="checkbox"/> INAC <input type="checkbox"/> NEB <input type="checkbox"/> TC			SIGNIFICANCE <input type="checkbox"/> MINOR <input type="checkbox"/> MAJOR <input type="checkbox"/> UNKNOWN	
AGENCY		CONTACT NAME	CONTACT TIME	REMARKS	
LEAD AGENCY					
FIRST SUPPORT AGENCY					
SECOND SUPPORT AGENCY					
THIRD SUPPORT AGENCY					



April 17<sup>th</sup>, 2023

Kyle Amsel  
Water Resource Officer  
Kivalliq Region, Field Operations Unit  
Crown-Indigenous Relations and Northern Affairs Canada  
Rankin Inlet, NU  
XOC 0G0

*Sent via email: [kyle.amsel@rcaanc-cirnac.gc.ca](mailto:kyle.amsel@rcaanc-cirnac.gc.ca)*

## **Re: Follow-up Report Spill #2023-124 – Release of 2 L of Sewage at the Meliadine Gold Mine**

On March 29<sup>th</sup>, 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email ([spills@gov.nt.ca](mailto:spills@gov.nt.ca)) of a spill of approximately 5 L of sewage at the Meliadine Gold Mine site (spill location coordinates: 63° 2' 21.24" N, 92° 13' 10.67" W). This follow-up report provides supplemental information based on the results of the incident assessment and is being provided in accordance with:

- Nunavut Water Board License 2AM-MEL1631 Water License, part H, item 8c.

### **Description of Incident**

On March 29<sup>th</sup>, 2023, at approximately 13:25 pm, an estimated 2 L of sewage was spilled onto the industrial pad due to a condensation buildup in the air intake pipe of the vacuum truck. The contaminated material was cleaned up with a loader and the material has been placed in Landfarm A. The initial NT/NU Spill Report indicated that 5 L of sewage was released but after further assessment it was determined that 2 L was released. No water bodies were impacted by this spill. The closest water body (G2) is approximately 325 meters northwest, as seen in Figure 1.



**Figure 1:** Location of the sewage spill and proximity to water bodies.

## Spill Response and Remediation

The operator notified his supervisor of the incident. The supervisor then contacted the environment department to assess the spill. The contaminated ice and gravel were excavated and brought to Landfarm A as per the Spill Contingency Plan.

## Root Cause and Corrective Measures

An assessment was conducted soon after the incident occurred to determine the root cause and contributing factors. The assessment concluded with the following:

- Operational procedure was missing a step indicating to bleed the air vent on the vacuum truck at the end of each shift.



The following corrective and preventative actions have been implemented to address the root cause and to reduce the likelihood of reoccurrence:

- Procedure update to incorporate the bleeding of the Vacuum truck at the end of each shift.
- Procedure updated to include a secondary containment installed under the air intake pipe while vacuum truck is in use.
- Procedure has been reviewed with all operators and is scheduled to be reviewed with other crew.

Should you have any questions or require further information, please do not hesitate to contact the undersigned.



**Brett Fairbairn** | Environment Coordinator  
brett.fairbairn@agnicoeagle.com | Direct 819.759.3555 x4603996 |  
Agnico Eagle Mines Limited - Meliadine Mine, Suite 879 - Rankin Inlet, Nunavut,  
Canada X0C 0G0  
[agnicoeagle.com](http://agnicoeagle.com)       
Sent from Meliadine



## **Appendix – Photos**



# AGNICO EAGLE

MELIADINE



**Photo 1:** Sewage spill location.



**Photo 2:** Sewage spill post remediation.



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

REPORT LINE USE ONLY

<b>A</b>	REPORT DATE: MONTH – DAY – YEAR <b>04-04-2022</b>	REPORT TIME <b>9:05</b>	<input checked="" type="checkbox"/> ORIGINAL SPILL REPORT, OR <input type="checkbox"/> UPDATE # _____ TO THE ORIGINAL SPILL REPORT	REPORT NUMBER _____	
	OCCURRENCE DATE: MONTH – DAY – YEAR <b>04-03-2022</b>	OCCURRENCE TIME <b>21:00</b>			
<b>C</b>	LAND USE PERMIT NUMBER (IF APPLICABLE) <b>KVPL11D01</b>	WATER LICENCE NUMBER (IF APPLICABLE) <b>2AM-MEL1631</b>			
	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION <b>Meliadine Gold Project</b>	REGION <input type="checkbox"/> NWT <input checked="" type="checkbox"/> NUNAVUT <input type="checkbox"/> ADJACENT JURISDICTION OR OCEAN			
<b>E</b>	LATITUDE DEGREES <b>63</b> MINUTES <b>2</b> SECONDS <b>21</b>	LONGITUDE DEGREES <b>92</b> MINUTES <b>13</b> SECONDS <b>41</b>			
	RESPONSIBLE PARTY OR VESSEL NAME <b>Agnico Eagle Mines Ltd.</b>	RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION <b>Meliadine, Rankin Inlet, Nunavut, X0C 0G0</b>			
<b>G</b>	ANY CONTRACTOR INVOLVED <b>N/A</b>	CONTRACTOR ADDRESS OR OFFICE LOCATION <b>N/A</b>			
	PRODUCT SPILLED <b>Hydraulic oil</b>	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES <b>100 litres</b>	U.N. NUMBER <b>N/A</b>		
<b>H</b>	SECOND PRODUCT SPILLED (IF APPLICABLE) <b>N/A</b>	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES <b>N/A</b>	U.N. NUMBER <b>N/A</b>		
	SPILL SOURCE <b>Tote</b>	SPILL CAUSE <b>Human Error</b>	AREA OF CONTAMINATION IN SQUARE METRES <b>6</b>		
<b>J</b>	FACTORS AFFECTING SPILL OR RECOVERY <b>N/A</b>	DESCRIBE ANY ASSISTANCE REQUIRED <b>N/A</b>	HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT <b>N/A</b>		
	<b>Operator was reversing a haul truck by dome 3 and came in contact with a tote causing 100 L of hydraulic oil to be released on the ground. Spill clean up is currently on-going.</b>  <b>The coordinates of the spill are 63° 1' 37.07"N, 92° 12' 39.92"W. No water bodies were impacted by this spill. The nearest natural water body (H5) is 620 m North North East.</b>  <b>Pursuant to Part H, Item 8c of water license 2AM-MEL1631, a follow up report will be issued after the investigation is completed.</b>  <b>Reported by Randy Schwandt, Environment Coordinator 819-759-3555 ext. 4603996          Randy.Schwandt@agnicoeagle.com , Kyle.Conway@agnicoeagle.com ext. 4603212</b>				
<b>L</b>	REPORTED TO SPILL LINE BY <b>Randy Schwandt</b>	POSITION <b>Env. Coordinator</b>	EMPLOYER <b>AEM</b>	LOCATION CALLING FROM <b>Meliadine</b>	TELEPHONE <b>819-759-3555</b>
	ANY ALTERNATE CONTACT <b>Kyle Conway</b>	POSITION <b>General supervisor</b>	EMPLOYER <b>AEM</b>	ALTERNATE CONTACT LOCATION <b>Meliadine</b>	ALTERNATE TELEPHONE <b>819-860-1033</b>
<b>REPORT LINE USE ONLY</b>					
<b>N</b>	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130
	LEAD AGENCY <input type="checkbox"/> EC <input type="checkbox"/> CCG <input type="checkbox"/> GNWT <input type="checkbox"/> GN <input type="checkbox"/> ILA <input type="checkbox"/> INAC <input type="checkbox"/> NEB <input type="checkbox"/> TC		SIGNIFICANCE <input type="checkbox"/> MINOR <input type="checkbox"/> MAJOR <input type="checkbox"/> UNKNOWN		FILE STATUS <input type="checkbox"/> OPEN <input type="checkbox"/> CLOSED
AGENCY	CONTACT NAME	CONTACT TIME	REMARKS		
LEAD AGENCY					
FIRST SUPPORT AGENCY					
SECOND SUPPORT AGENCY					
THIRD SUPPORT AGENCY					



April 28, 2023

Kyle Amsel  
Water Resource Officer  
Kivalliq Region, Field Operations Unit  
Crown-Indigenous Relations and Northern Affairs Canada  
Rankin Inlet, NU  
XOC 0G0

*Sent via email: [kyle.amsel@rcaanc-cirnac.gc.ca](mailto:kyle.amsel@rcaanc-cirnac.gc.ca)*

## **Re.: Follow-up Report Spill #2023-129 – Release of 100 L of hydraulic oil at the Meliadine Gold Mine**

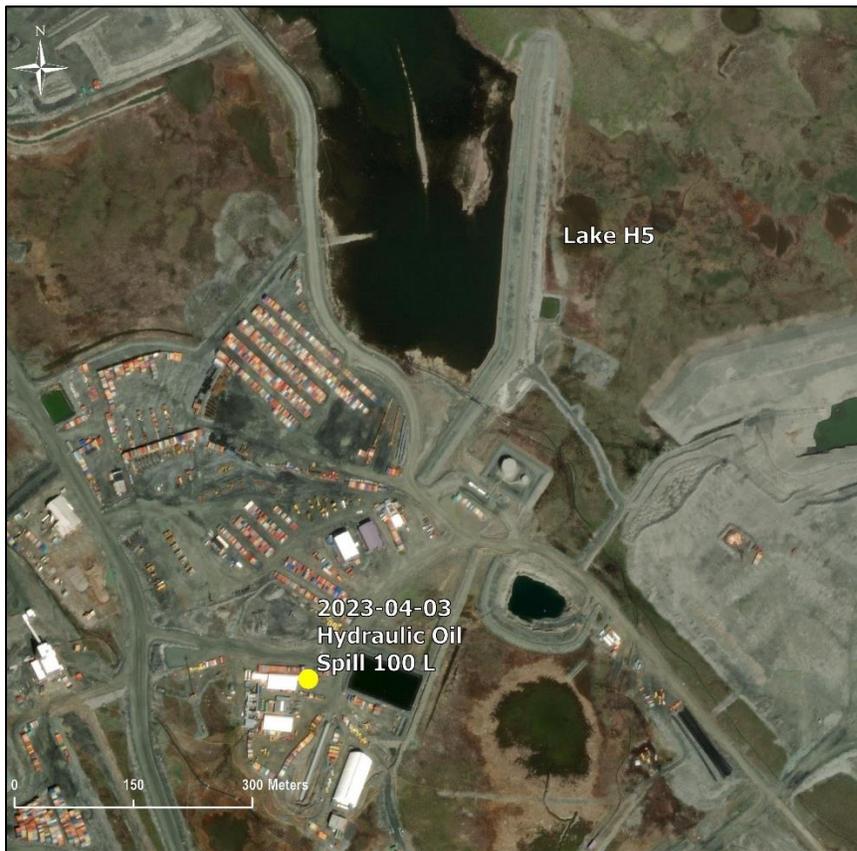
On April 3<sup>rd</sup>, 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email ([spills@gov.nt.ca](mailto:spills@gov.nt.ca)) of a spill of approximately 100 L of hydraulic oil at the Meliadine Gold Mine site (spill location coordinates: 63° 1' 37.07"N, 92° 12' 39.92"). This follow-up report provides supplemental information based on the results of the incident assessment and is being provided in accordance with:

- the Nunavut Water Board License 2AM-MEL1631 Water License, part H, item 8c.

### **Description of Incident**

On April 3<sup>rd</sup>, 2023, at approximately 9:00 pm, an estimated 100 L of hydraulic oil was spilled on the ground at the front entrance of Dome 3. While arranging equipment around the dome, an underground haul truck came in contact with a tote, causing a small crack on the tote and flipping it on its side.

No water bodies were impacted by this spill. The closest water body (H5) is approximately 620 meters north northeast, as seen in Figure 1.



**Figure 1:** Location of the hydraulic spill and proximity to water bodies.

## Spill Response and Remediation

The immediate response from the employee was to request a loader to flip the tote back on its side to prevent any further hydraulic oil from leaking from the tote. The tote was then brought inside Dome 3 where it was pumped and transferred to another tote. Spill rags were deployed on the free liquid and loader was used to scrape the contaminated surface. Contaminated absorbent rags that were disposed in in a labeled quatrex bag which will brought to the hazardous waste laydown. An estimated of 1.5m<sup>3</sup> of contaminated material was excavated and brought to Landfarm A for treatment as per the Spill Contingency Plan .

## Root Cause and Corrective Measures

An assessment was conducted soon after the incident occurred to determine the root cause and contributing factors. The assessment concluded with the following:

- Tote of hydraulic oil was temporarily stored outside of secondary containment.



- The operator did not use a spotter when reversing out of the area and came in contact with the tote of hydraulic oil.

The following corrective and preventative actions have been implemented to address the root causes and to reduce the likelihood of reoccurrence:

- Storage of totes that contain potentially hazardous material will be placed inside Dome 3 (concrete pad is present).
- Underground supervisor to meet with crew and discuss the importance of always using a spotter.

Should you have any questions or require further information, please do not hesitate to contact the undersigned.



**Randy Schwandt** | Environment Coordinator

[randy.schwandt@agnicoeagle.com](mailto:randy.schwandt@agnicoeagle.com) | Direct 819.759.3555 x4603996 |

Agnico Eagle Mines Limited - Meliadine Mine, Suite 879 - Rankin Inlet, Nunavut,  
Canada X0C 0G0



**AGNICO EAGLE**  
MELIADINE

## **Appendix – Photos**



**AGNICO EAGLE**  
MELIADINE



**Photo 1:** Post cleanup area



# 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

<b>A</b>	REPORT DATE: MONTH – DAY – YEAR <b>04-07-2023</b>	REPORT TIME <b>18:15</b>	<input checked="" type="checkbox"/> ORIGINAL SPILL REPORT, OR <input type="checkbox"/> UPDATE # _____ TO THE ORIGINAL SPILL REPORT	REPORT NUMBER _____	
	OCCURRENCE DATE: MONTH – DAY – YEAR <b>04-07-2023</b>	OCCURRENCE TIME <b>13:30</b>			
<b>C</b>	LAND USE PERMIT NUMBER (IF APPLICABLE) <b>KVPL11D01</b>	WATER LICENCE NUMBER (IF APPLICABLE) <b>2AM-MEL1631</b>			
	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION <b>Meliadine Gold Project</b>	REGION <input type="checkbox"/> NWT <input checked="" type="checkbox"/> NUNAVUT <input type="checkbox"/> ADJACENT JURISDICTION OR OCEAN			
<b>E</b>	LATITUDE DEGREES <b>63</b> MINUTES <b>2</b> SECONDS <b>21</b>	LONGITUDE DEGREES <b>92</b> MINUTES <b>13</b> SECONDS <b>41</b>			
	RESPONSIBLE PARTY OR VESSEL NAME <b>Agnico Eagle Mines Ltd.</b>	RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION <b>Meliadine, Rankin Inlet, Nunavut, X0C 0G0</b>			
<b>G</b>	ANY CONTRACTOR INVOLVED <b>N/A</b>	CONTRACTOR ADDRESS OR OFFICE LOCATION <b>N/A</b>			
	PRODUCT SPILLED <b>Untreated sewage</b>	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES <b>20 Litres</b>	U.N. NUMBER <b>N/A</b>		
<b>H</b>	SECOND PRODUCT SPILLED (IF APPLICABLE) <b>N/A</b>	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES <b>N/A</b>	U.N. NUMBER <b>N/A</b>		
	SPILL SOURCE <b>Power Plant Washcar</b>	SPILL CAUSE <b>Human error</b>	AREA OF CONTAMINATION IN SQUARE METRES <b>1</b>		
<b>J</b>	FACTORS AFFECTING SPILL OR RECOVERY <b>N/A</b>	DESCRIBE ANY ASSISTANCE REQUIRED <b>N/A</b>	HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT <b>N/A</b>		
	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS <b>A 20 L sewage spill occurred by the power plant due to a miscommunication between operators when transferring sewage. The spill froze in place and was contained to the local area.</b>  <b>The coordinates of the spill are 63° 2' 14.79"N, 92° 13' 25.64"W. No water bodies were impacted by this spill. The nearest natural water body (G2) is 595 m northwest.</b>  <b>Pursuant to Part H, Item 8c of water license 2AM-MEL1631, a follow up report will be issued after the investigation is completed.</b> <b>Reported by Randy Schwandt, Environment Coordinator 819-759-3555 ext. 4603996</b> <b>randy.schwandt@agnicoeagle.com , kyle.conway@agnicoeagle.com ext. 4603212</b>				
<b>L</b>	REPORTED TO SPILL LINE BY <b>Randy Schwandt</b>	POSITION <b>Env. Coordinator</b>	EMPLOYER <b>AEM</b>	LOCATION CALLING FROM <b>Meliadine</b>	TELEPHONE <b>819-759-3555</b>
	ANY ALTERNATE CONTACT <b>Kyle Conway</b>	POSITION <b>General Supervisor</b>	EMPLOYER <b>AEM</b>	ALTERNATE CONTACT LOCATION <b>Meliadine</b>	ALTERNATE TELEPHONE <b>819-860-1033</b>
<b>REPORT LINE USE ONLY</b>					
<b>N</b>	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130
	LEAD AGENCY <input type="checkbox"/> EC <input type="checkbox"/> CCG <input type="checkbox"/> GNWT <input type="checkbox"/> GN <input type="checkbox"/> ILA <input type="checkbox"/> INAC <input type="checkbox"/> NEB <input type="checkbox"/> TC		SIGNIFICANCE <input type="checkbox"/> MINOR <input type="checkbox"/> MAJOR <input type="checkbox"/> UNKNOWN		FILE STATUS <input type="checkbox"/> OPEN <input type="checkbox"/> CLOSED
AGENCY		CONTACT NAME	CONTACT TIME	REMARKS	
LEAD AGENCY					
FIRST SUPPORT AGENCY					
SECOND SUPPORT AGENCY					
THIRD SUPPORT AGENCY					



May 4<sup>th</sup>, 2023

Kyle Amsel  
Water Resource Officer  
Kivalliq Region, Field Operations Unit  
Crown-Indigenous Relations and Northern Affairs Canada  
Rankin Inlet, NU  
XOC 0G0

*Sent via email: [kyle.amsel@rcaanc-cirnac.gc.ca](mailto:kyle.amsel@rcaanc-cirnac.gc.ca)*

## **Re: Follow-up Report Spill #2023-139 – Release of 20 L of Sewage at the Meliadine Gold Mine**

On April 7<sup>th</sup>, 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email ([spills@gov.nt.ca](mailto:spills@gov.nt.ca)) of a spill of approximately 20 L of sewage at the Meliadine Gold Mine site (spill location coordinates: 63° 2' 14.79" N, 92° 13' 25.64" W). This follow-up report provides supplemental information based on the results of the incident assessment and is being provided in accordance with:

- Nunavut Water Board License 2AM-MEL1631 Water License, part H, item 8c.

### **Description of Incident**

On April 7<sup>th</sup>, 2023, at approximately 13:30pm, an estimated 20 L of sewage was spilled onto the industrial pad by the powerplant wash car due to a miscommunication between the vacuum truck operators. During normal operations, both vacuum truck operators failed to confirm if hose was connected to the truck prior to transferring material from the lift station. No water bodies were impacted by this spill. The closest water body (G2) is approximately 595 meters northwest, as seen in Figure 1.



**Figure 1:** Location of the sewage spill and proximity to water bodies.

## Spill Response and Remediation

The operator notified his supervisor of the incident. The supervisor then contacted the environment department to assess the spill. The sewage-impacted snow was excavated and brought to Landfarm A as per the Spill Contingency Plan.

## Root Cause and Corrective Measures

An assessment was conducted soon after the incident occurred to determine the root cause and contributing factors. The assessment concluded with the following:



- Lack of communication between operators. Both employees had radios but did not use them to confirm that the hose between the lift station and the vacuum truck was secure before the sewage transfer.

The following corrective and preventative actions have been implemented to address the root cause and to reduce the likelihood of reoccurrence:

- Reviewed procedure and put emphasis on the importance of communication when conducting a sewage transfer.
- Reiterated the importance of always confirming the hose connection before starting the vacuum truck.

Should you have any questions or require further information, please do not hesitate to contact the undersigned.



**Randy Schwandt** | Environment Coordinator

[randy.schwandt@agnicoeagle.com](mailto:randy.schwandt@agnicoeagle.com) | Direct 819.759.3555 x4603996 |

Agnico Eagle Mines Limited – Meliadine Mine, Suite 879 – Rankin Inlet, Nunavut,  
Canada X0C 0G0

[agnicoeagle.com](http://agnicoeagle.com)     

Sent from Meliadine



## **Appendix – Photos**



# AGNICO EAGLE

MELIADINE



**Photo 1:** 20 L Sewage spill at powerplant washcar.



**Photo 2:** 20 L Sewage spill post remediation.



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

REPORT LINE USE ONLY

<b>A</b>	REPORT DATE: MONTH – DAY – YEAR <b>04-18-2023</b>	REPORT TIME <b>13:30</b>	<input checked="" type="checkbox"/> ORIGINAL SPILL REPORT, OR <input type="checkbox"/> UPDATE # _____ TO THE ORIGINAL SPILL REPORT	REPORT NUMBER _____
	OCCURRENCE DATE: MONTH – DAY – YEAR <b>04-17-2023</b>	OCCURRENCE TIME <b>15:30</b>		
<b>C</b>	LAND USE PERMIT NUMBER (IF APPLICABLE) <b>KVL302C268</b>	WATER LICENCE NUMBER (IF APPLICABLE) <b>2BB-MEL1424</b>		
	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION <b>Meliadine Gold Project</b>	REGION <input type="checkbox"/> NWT <input checked="" type="checkbox"/> NUNAVUT <input type="checkbox"/> ADJACENT JURISDICTION OR OCEAN		
<b>E</b>	LATITUDE DEGREES <b>63</b> MINUTES <b>2</b> SECONDS <b>21</b>	LONGITUDE DEGREES <b>92</b> MINUTES <b>13</b> SECONDS <b>41</b>		
	RESPONSIBLE PARTY OR VESSEL NAME <b>Agnico Eagle Mines Ltd.</b>	RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION <b>Meliadine, Rankin Inlet, Nunavut, X0C 0G0</b>		
<b>G</b>	ANY CONTRACTOR INVOLVED <b>Orbit Garant</b>	CONTRACTOR ADDRESS OR OFFICE LOCATION <b>Val d'Or, Quebec</b>		
	PRODUCT SPILLED <b>Drill Cuttings</b>	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES <b>40 L</b>	U.N. NUMBER <b>N/A</b>	
<b>H</b>	SECOND PRODUCT SPILLED (IF APPLICABLE) <b>N/A</b>	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES <b>N/A</b>	U.N. NUMBER <b>N/A</b>	
	SPILL SOURCE <b>Unknown</b>	SPILL CAUSE <b>Unknown</b>	AREA OF CONTAMINATION IN SQUARE METRES <b>4</b>	
<b>J</b>	FACTORS AFFECTING SPILL OR RECOVERY <b>N/A</b>	DESCRIBE ANY ASSISTANCE REQUIRED <b>N/A</b>	HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT <b>N/A</b>	
	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS <b>On April 17th, 2023, while conducting a post drilling inspection approximately 40 L of drill cuttings were observed on the frozen water body. Clean up of the cuttings was initiated and will continue as part of the final drill site clean up. No cuttings entered the water body as they were contained on the surface of the ice cover. The coordinates of the spill are 63 2'07.3"N 92 3'47.8"W</b>			
<b>K</b>	Pursuant to Part H, Section 4c of the Water License, a follow-up report will be issued after a closer investigation is completed.			
	Reported by Brett Fairbairn Environment Coordinator 819-759-3555 ext. 4603996 Brett.Fairbairn@agnicoeagle.com.			
<b>L</b>	REPORTED TO SPILL LINE BY <b>Brett Fairbairn</b>	POSITION <b>Env. Coordinator</b>	EMPLOYER <b>AEM</b>	LOCATION CALLING FROM <b>Meliadine</b>
	TELEPHONE <b>819-759-3555</b>			
<b>M</b>	ANY ALTERNATE CONTACT <b>Kyle Conway</b>	POSITION <b>General Supervisor</b>	EMPLOYER <b>AEM</b>	ALTERNATE CONTACT <b>Meliadine</b>
	ALTERNATE TELEPHONE <b>819-860-1033</b>	LOCATION		
REPORT LINE USE ONLY				
<b>N</b>	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT
				REPORT LINE NUMBER (867) 920-8130
LEAD AGENCY <input type="checkbox"/> EC <input type="checkbox"/> CCG <input type="checkbox"/> GNWT <input type="checkbox"/> GN <input type="checkbox"/> ILA <input type="checkbox"/> INAC <input type="checkbox"/> NEB <input type="checkbox"/> TC		SIGNIFICANCE <input type="checkbox"/> MINOR <input type="checkbox"/> MAJOR <input type="checkbox"/> UNKNOWN		FILE STATUS <input type="checkbox"/> OPEN <input type="checkbox"/> CLOSED
AGENCY	CONTACT NAME	CONTACT TIME	REMARKS	
LEAD AGENCY				
FIRST SUPPORT AGENCY				
SECOND SUPPORT AGENCY				
THIRD SUPPORT AGENCY				

May 14, 2023

Kyle Amsel  
Water Resource Officer  
Kivalliq Region, Field Operations Unit  
Crown-Indigenous Relations and Northern Affairs Canada  
Rankin Inlet, NU  
X0C 0G0

Sent via email: [kyle.amsel@rcaanc-cirnac.gc.ca](mailto:kyle.amsel@rcaanc-cirnac.gc.ca)

## **Re: Follow-up Report Spill #2023-151 – Release of 40 L of Drill Cuttings Meliadine Gold Mine, Unnamed Waterbody**

On April 18<sup>th</sup>, 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email ([spills@gov.nt.ca](mailto:spills@gov.nt.ca)) of a spill of approximately 40 L of drill cuttings at the Meliadine Gold Mine (spill location coordinates: 63° 2' 07.3" N, 92° 3' 47.8" W). This follow-up report provides supplemental information based on the results of the incident assessment and is being provided in accordance with:

- the Nunavut Water Board License 2BB-MEL1424 Water Licence, part H, item 4c
- the Fisheries Act subsection 38(7)

### **Description of Incident**

On April 16<sup>th</sup> and 17<sup>th</sup>, 2023, Orbit Garant Drilling was removing their drilling equipment from the ice surface of an unnamed waterbody approximately 7.5 kilometers east of the Meliadine Gold Mine industrial pad. At approximately 3:30 am on April 17<sup>th</sup>, the drill crew prepared to drag two skid-mounted units of drilling equipment, chained in series, behind a tractor. The last unit in the train was the cuttings recirculation unit. Due to the lack of daylight and the cuttings recirculation unit being at the back of the train, the drilling crew did not notice the spill of 40 L of drill cuttings to the ice surface as the equipment left the site. The spill was discovered during the post-drilling inspection on April 17<sup>th</sup>, 2023, at approximately 15:30. The location of the spill is shown in Figure 1.

As Agnico Eagle has not assessed this waterbody for fish presence, it is assumed to be frequented by fish, however, at the time of the incident the water body was frozen to bottom.



**Figure 1:** Drill Cuttings Spill Location.

## Spill Response and Remediation

Logistical issues with equipment transportation to the spill site delayed the start of cleanup. Equipment was mobilized on April 20<sup>th</sup>, 2023, with a dozer, skid steer and an equipment sled used to recover the spilled drill cuttings. Final cleanup was complete on April 20<sup>th</sup>, 2023. The frozen material was scraped off the frozen waterbody surface and deposited in a natural depression previously used for drill cuttings disposal which was approved by the Environment Department.

## Root Cause and Corrective Measures

An incident assessment was conducted soon after the incident occurred to determine the root cause and contributing factors. The assessment concluded with the following:

- Prior to conducting the move, the drill cutting recirculation unit was not cleaned.

The following corrective and preventative actions have been implemented to address the root cause and to reduce the likelihood of reoccurrence:

- The drill transportation procedure will be updated to ensure the cuttings recirculation unit is cleaned prior to transportation.
- The updated drill transportation procedure will be reviewed with the Orbit Garant drilling crews.



**Brett Fairbairn** | Environment Coordinator  
brett.fairbairn@agnicoeagle.com | Direct 819.759.3555 x4603996 |  
Agnico Eagle Mines Limited - Meliadine Mine, Suite 879 - Rankin Inlet, Nunavut,  
Canada X0C 0G0

[agnicoeagle.com](http://agnicoeagle.com)       
Sent from Meliadine



**AGNICO EAGLE**  
MELIADINE

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## Appendix – Photos



# AGNICO EAGLE

MELIADINE

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**Photos 1:** 40 L Drill cuttings water spill.



**Photos 2:** 40 L drill cuttings water spill post remediation.



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

REPORT LINE USE ONLY

<b>A</b>	REPORT DATE: MONTH – DAY – YEAR <b>05-05-2023</b>	REPORT TIME <b>12:30</b>	<input checked="" type="checkbox"/> ORIGINAL SPILL REPORT, OR <input type="checkbox"/> UPDATE # _____ TO THE ORIGINAL SPILL REPORT	REPORT NUMBER _____
<b>B</b>	OCCURRENCE DATE: MONTH – DAY – YEAR <b>04-05-2023</b>	OCCURRENCE TIME <b>12:00</b>		
<b>C</b>	LAND USE PERMIT NUMBER (IF APPLICABLE) <b>KVPL11D01</b>	WATER LICENCE NUMBER (IF APPLICABLE) <b>2AM-MEL1631</b>		
<b>D</b>	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION <b>Meliadine Gold Project</b>	REGION <input type="checkbox"/> NWT <input checked="" type="checkbox"/> NUNAVUT <input type="checkbox"/> ADJACENT JURISDICTION OR OCEAN		
<b>E</b>	LATITUDE DEGREES <b>63</b> MINUTES <b>2</b> SECONDS <b>21</b>	LONGITUDE DEGREES <b>92</b> MINUTES <b>13</b> SECONDS <b>41</b>		
<b>F</b>	RESPONSIBLE PARTY OR VESSEL NAME <b>Agnico Eagle Mines Ltd.</b>	RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION <b>Meliadine, Rankin Inlet, Nunavut, X0C 0G0</b>		
<b>G</b>	ANY CONTRACTOR INVOLVED <b>N/A</b>	CONTRACTOR ADDRESS OR OFFICE LOCATION <b>N/A</b>		
<b>H</b>	PRODUCT SPILLED <b>Sewage</b>	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES <b>10 Liters</b>	U.N. NUMBER <b>N/A</b>	
	SECOND PRODUCT SPILLED (IF APPLICABLE) <b>N/A</b>	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES <b>N/A</b>	U.N. NUMBER <b>N/A</b>	
<b>I</b>	SPILL SOURCE <b>Sewage pipe</b>	SPILL CAUSE <b>Equipment failure</b>	AREA OF CONTAMINATION IN SQUARE METRES <b>1</b>	
<b>J</b>	FACTORS AFFECTING SPILL OR RECOVERY <b>N/A</b>	DESCRIBE ANY ASSISTANCE REQUIRED <b>N/A</b>	HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT <b>N/A</b>	

<b>K</b>	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS <p><b>A fracture in the sewage pipe line at the fusion pads wash car resulted in a spill of 5 L of sewage being released on the fusion pad. The spill was contained to the local area and froze in place. The frozen sewage was cleaned up and brought to landfarm A for disposal.</b></p> <p><b>The coordinates of the spill are 63° 1' 18.74"N, 92°11'25.93"W. No water bodies were impacted by this spill. The nearest natural water body (J6) is 108 m south.</b></p> <p><b>Pursuant to Part H, Item 8c of water license 2AM-MEL1631, a follow up report will be issued after the investigation is completed.</b></p> <p><b>Reported by Randy Schwandt Environment Coordinator 819-759-3555 ext. 4603996 randy.schwandt@agnicoeagle.com.</b></p>			
----------	--	--	--	--

<b>L</b>	REPORTED TO SPILL LINE BY <b>Randy Schwandt</b>	POSITION <b>Env. Coordinator</b>	EMPLOYER <b>AEM</b>	LOCATION CALLING FROM <b>Meliadine</b>	TELEPHONE <b>819-759-3555</b>
<b>M</b>	ANY ALTERNATE CONTACT <b>Kyle Conway</b>	POSITION <b>General supervisor</b>	EMPLOYER <b>AEM</b>	ALTERNATE CONTACT LOCATION <b>Meliadine</b>	ALTERNATE TELEPHONE <b>819-860-1033</b>

REPORT LINE USE ONLY					
<b>N</b>	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130
LEAD AGENCY <input type="checkbox"/> EC <input type="checkbox"/> CCG <input type="checkbox"/> GNWT <input type="checkbox"/> GN <input type="checkbox"/> ILA <input type="checkbox"/> INAC <input type="checkbox"/> NEB <input type="checkbox"/> TC			SIGNIFICANCE <input type="checkbox"/> MINOR <input type="checkbox"/> MAJOR <input type="checkbox"/> UNKNOWN		FILE STATUS <input type="checkbox"/> OPEN <input type="checkbox"/> CLOSED
AGENCY	CONTACT NAME		CONTACT TIME	REMARKS	
LEAD AGENCY					
FIRST SUPPORT AGENCY					
SECOND SUPPORT AGENCY					
THIRD SUPPORT AGENCY					

May 27<sup>th</sup>, 2023

Kyle Amsel  
Water Resource Officer  
Kivalliq Region, Field Operations Unit  
Crown-Indigenous Relations and Northern Affairs Canada  
Rankin Inlet, NU  
X0C 0G0

Sent via email: [kyle.amsel@rcaanc-cirnac.gc.ca](mailto:kyle.amsel@rcaanc-cirnac.gc.ca)

## **Re: Follow-up Report Spill #2023-183 – Release of 10 L of Sewage at the Meliadine Gold Mine**

On May 5<sup>th</sup>, 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email ([spills@gov.nt.ca](mailto:spills@gov.nt.ca)) of a spill of approximately 20 L of sewage at the Meliadine Gold Mine site (spill location coordinates: 63° 1' 18.74" N, 92° 11' 25.93" W). This follow-up report provides supplemental information based on the results of the incident assessment and is being provided in accordance with:

- Nunavut Water Board License 2AM-MEL1631 Water License, part H, item 8c.

### **Description of Incident**

On May 4<sup>th</sup>, 2023, at approximately 23:00, an estimated 10 L of sewage was spilled onto the fusion pad by the fusion pad wash car due to a fracture in the sewage line. No water bodies were impacted by this spill. The closest water body (J6) is approximately 108 meters south, as seen in Figure 1.



**Figure 1:** Location of the sewage spill and proximity to water bodies.

## **Spill Response and Remediation**

The operator notified his supervisor of the incident. The supervisor then contacted the environment department to assess the spill. The sewage-impacted gravel and ice was excavated and brought to Landfarm A as per the Spill Contingency Plan.

## **Root Cause and Corrective Measures**

An incident assessment was conducted soon after the incident occurred to determine the root cause and contributing factors. The assessment concluded with the following:



- The heat tracing system on the sewage piping had been damaged, leading to the heat trace failing and causing the sewage pipe to freeze and fracture.

The following corrective and preventative actions have been implemented to address the root cause and to reduce the likelihood of reoccurrence:

- A Saniflo toilet system was installed which connects directly to each toilet, eliminating the need for an external holding tank and piping. The sewage line is now more protected from the weather elements and if a spill occurs, it will be contained within the trailer unit.

Should you have any questions or require further information, please do not hesitate to contact the undersigned.



**Randy Schwandt** | Environment Coordinator  
[randy.schwandt@agnicoeagle.com](mailto:randy.schwandt@agnicoeagle.com) | Direct 819.759.3555 x4603996 |  
Agnico Eagle Mines Limited – Meliadine Mine, Suite 879 – Rankin Inlet, Nunavut,  
Canada X0C 0G0  
[agnicoeagle.com](http://agnicoeagle.com)       
Sent from Meliadine



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## **Appendix – Photos**

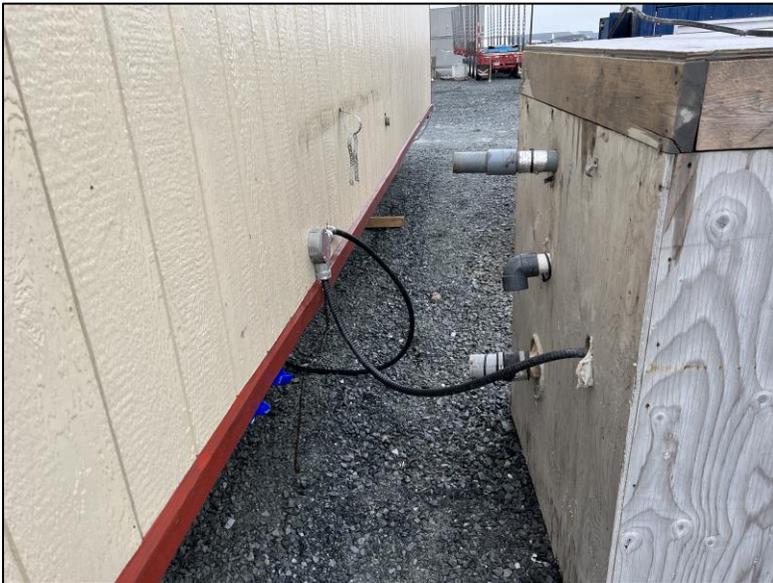


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**Photos 1:** Sewage spill location.



**Photos 2:** Spill location post remediation.



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

REPORT LINE USE ONLY

<b>A</b>	REPORT DATE: MONTH – DAY – YEAR <b>05-08-2023</b>	REPORT TIME <b>11:20</b>	<input checked="" type="checkbox"/> ORIGINAL SPILL REPORT, OR		REPORT NUMBER _____
	OCCURRENCE DATE: MONTH – DAY – YEAR <b>05-07-2023</b>	OCCURRENCE TIME <b>14:00</b>	<input type="checkbox"/> UPDATE # _____ TO THE ORIGINAL SPILL REPORT		
<b>C</b>	LAND USE PERMIT NUMBER (IF APPLICABLE) <b>KVPL11D01</b>	WATER LICENCE NUMBER (IF APPLICABLE) <b>2AM-MEL1631</b>			
	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION <b>Meliadine Gold Project</b>		REGION <input type="checkbox"/> NWT <input checked="" type="checkbox"/> NUNAVUT <input type="checkbox"/> ADJACENT JURISDICTION OR OCEAN		
<b>E</b>	LATITUDE DEGREES <b>63</b> MINUTES <b>2</b> SECONDS <b>21</b>	LONGITUDE DEGREES <b>92</b> MINUTES <b>13</b> SECONDS <b>41</b>			
	RESPONSIBLE PARTY OR VESSEL NAME <b>Agnico Eagle Mines Ltd.</b>	RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION <b>Meliadine, Rankin Inlet, Nunavut, X0C 0G0</b>			
<b>G</b>	ANY CONTRACTOR INVOLVED <b>N/A</b>	CONTRACTOR ADDRESS OR OFFICE LOCATION <b>N/A</b>			
	PRODUCT SPILLED <b>Suspended Solids</b>	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES <b>To be determined</b>	U.N. NUMBER <b>N/A</b>		
<b>H</b>	SECOND PRODUCT SPILLED (IF APPLICABLE) <b>N/A</b>	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES <b>N/A</b>	U.N. NUMBER <b>N/A</b>		
	SPILL SOURCE <b>Snow melt containing sediment</b>	SPILL CAUSE <b>Freshet</b>	AREA OF CONTAMINATION IN SQUARE METRES <b>Unknown</b>		
<b>J</b>	FACTORS AFFECTING SPILL OR RECOVERY <b>None</b>	DESCRIBE ANY ASSISTANCE REQUIRED <b>None</b>	HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT <b>None</b>		
	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS <b>While conducting a routine inspection, runoff was observed flowing through the water management structures at monitoring station MEL-SR-1 at Itivia. Turbidity field readings show results indicative that TSS concentrations could exceed the NWB Water License 2AM-MEL1631 criteria for TSS. Sediment and erosion controls were deployed to mitigate the transport of sediment. This report is submitted as due diligence, as the water sample results from the laboratory have not yet been received. Location of spill: 62 47'59.85"N, 92 5'35.63"W. The closest water body (Melvin Bay) is approximately 75 m south.</b>  <b>Pursuant to Part H, Section 8c of the Water License, a follow-up report will be issued after a closer investigation is completed.</b>				
<b>L</b>	REPORTED TO SPILL LINE BY <b>Randy Schwandt</b>	POSITION <b>Env. Coordinator</b>	EMPLOYER <b>AEM</b>	LOCATION CALLING FROM <b>Meliadine</b>	TELEPHONE <b>819-759-3555</b>
	ANY ALTERNATE CONTACT <b>Kyle Conway</b>	POSITION <b>General supervisor</b>	EMPLOYER <b>AEM</b>	ALTERNATE CONTACT LOCATION <b>Meliadine</b>	ALTERNATE TELEPHONE <b>819-860-1033</b>
<b>REPORT LINE USE ONLY</b>					
<b>N</b>	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130
	LEAD AGENCY <input type="checkbox"/> EC <input type="checkbox"/> CCG <input type="checkbox"/> GNWT <input type="checkbox"/> GN <input type="checkbox"/> ILA <input type="checkbox"/> INAC <input type="checkbox"/> NEB <input type="checkbox"/> TC		SIGNIFICANCE <input type="checkbox"/> MINOR <input type="checkbox"/> MAJOR <input type="checkbox"/> UNKNOWN		FILE STATUS <input type="checkbox"/> OPEN <input type="checkbox"/> CLOSED
AGENCY		CONTACT NAME	CONTACT TIME	REMARKS	
LEAD AGENCY					
FIRST SUPPORT AGENCY					
SECOND SUPPORT AGENCY					
THIRD SUPPORT AGENCY					



June 6<sup>th</sup>, 2023

Kyle Amsel  
Water Resource Officer  
Kivalliq Region, Field Operations Unit  
Crown-Indigenous Relations and Northern Affairs Canada  
Rankin Inlet, NU  
XOC OGO

Sent via email: [kyle.amsel@rcaanc-cirnac.gc.ca](mailto:kyle.amsel@rcaanc-cirnac.gc.ca)

## **Re: Follow-up Report Spill #2023-189 – MEL-SR1 Surface Water Runoff at the Meliadine Gold Mine, Itivia Site**

On May 8<sup>th</sup>, 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email ([spills@gov.nt.ca](mailto:spills@gov.nt.ca)) of a potential Total Suspended Solids (TSS) exceedance at the Meliadine Gold Mine, Itivia site (spill location coordinates: 63° 47' 59.85" N, 92° 5' 35.63" W). Although the analytical results indicated that the water quality did not exceed the effluent criteria, the event was reported as due diligence before receiving analytical results.

This follow-up report provides supplemental information based on the results of the incident assessment and is being provided in accordance with the following:

- Nunavut Water Board License 2AM-MEL1631 Water Licence, part H, item 8c.

### **Description of Incident**

On May 7<sup>th</sup>, 2023, at approximately 2:00pm, surface runoff was observed at monitoring station MEL-SR-1, located at the south end of the Itivia site. Field turbidity measurements indicated a potential exceedance of the TSS effluent quality limits listed under Part D Item 18 of the 2AM-MEL1631 Water Licence. Samples were collected at MEL-SR-1 and sent to an external laboratory for analysis. Upstream monitoring indicated that sediment-laden runoff was entering the Itivia lease boundary and was not a result of the activities or infrastructure within the Itivia lease. Analytical results reported a concentration of 48 mg/L TSS, below the allowable TSS effluent quality limits listed under Part D Item 18 of the 2AM-MEL1631 Water Licence.

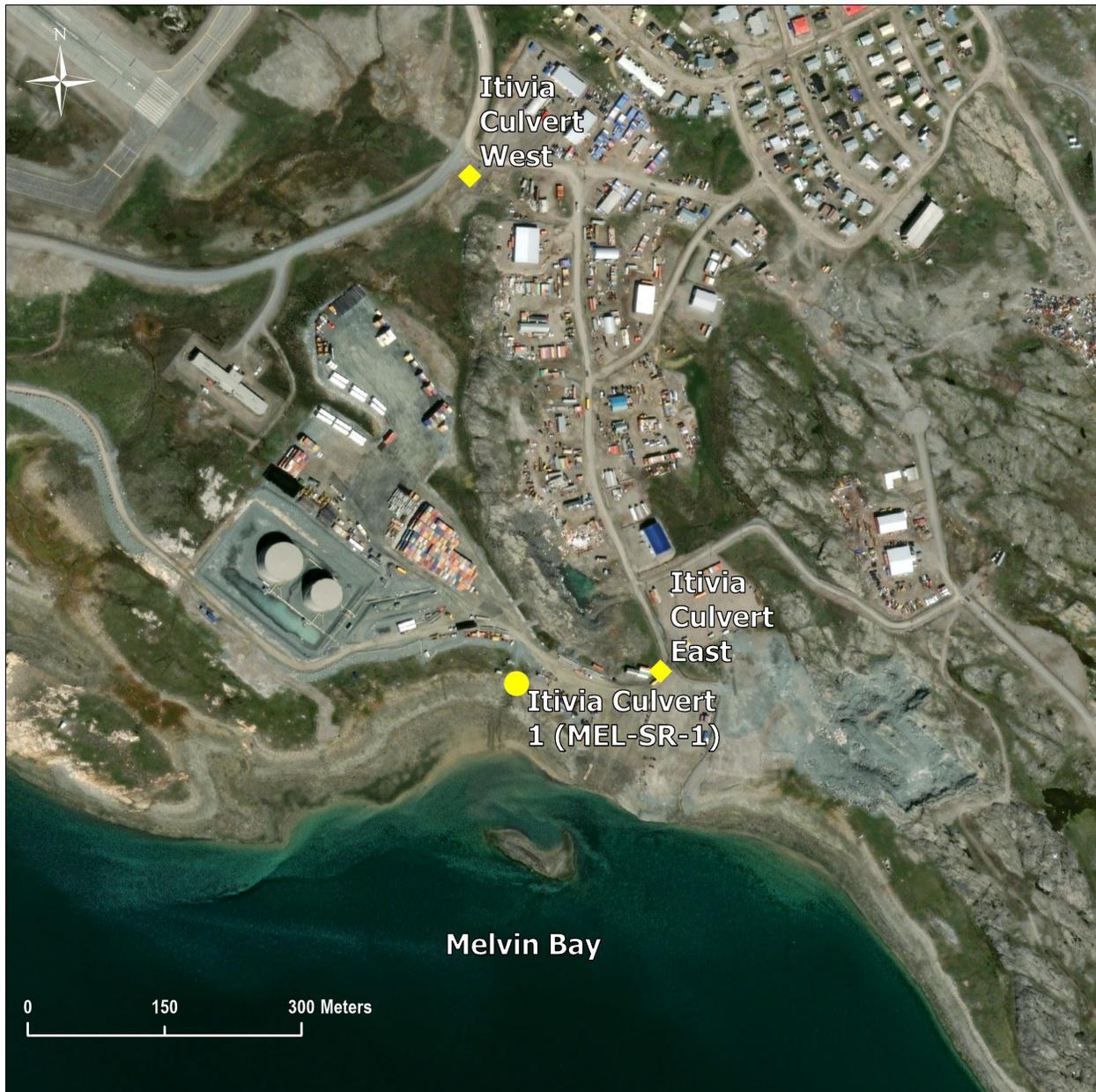
Discharge from the MEL-SR-1 monitoring location combines surface runoff from Rankin Inlet and the Itivia site. Runoff passes through a series of rock check dams and a settling basin designed to



# AGNICO EAGLE

MELIADINE

reduce water velocity and allow suspended solids to settle out prior to flowing through the MEL-SR-1 culvert to Melvin Bay.



**Figure 1:** Location of the MEL-SR-1 and upstream monitoring locations.

## Response and Remediation

In response to the elevated field turbidity readings and as per the Sediment and Erosion Management Plan, erosion, and sediment controls (ESC) were deployed to complement the existing rock check dams and settling basin to reduce the sediment load in the water flowing through the Itivia site. Combinations of ESC measures were installed and maintained at specific locations where erosion and sedimentation were observed. These installations were monitored and maintained throughout the runoff event. Both visual and analytical monitoring demonstrated the efficacy of these measures in reducing TSS at the MEL-SR-1 monitoring location.

Subsequent daily monitoring was conducted during the runoff event as due diligence. Analytical results for the monitoring duration are presented in Table 1. The Certificate of Analysis for the regulatory sample (May 7<sup>th</sup>, 2023) can be found in Appendix B.

**Table 1.** Analytical Results

Date	Total Suspended Solids (mg/L)			2AM-MEL1631, Part D. Item 18	
	Itivia Culvert West	Itivia Culvert East	Itivia Culvert 1/MEL-SR-1	Maximum Monthly Mean Concentration	Maximum Concentration in a Grab Sample
<b>07-May-23</b>	_ <sup>1</sup>	_ <sup>1</sup>	48	50	100
<b>08-May-23</b>	180	280	30		
<b>09-May-23</b>	580	290	58		
<b>10-May-23</b>	78	140	46		
<b>11-May-23</b>	_ <sup>2</sup>	150	9		
<b>12-May-23</b>	80	77	10		
<b>13-May-23</b>	_ <sup>3</sup>	_ <sup>3</sup>	14		
<b>Average</b>	229	187	30		

<sup>1</sup> No samples taken. In field turbidity readings: Upstream West 900NTU, Upstream East was inaccessible.

<sup>2</sup> Community grader on the road causing a lot of turbidity. No sample, water not representative.

<sup>3</sup> Samples not taken due to acceptable in field turbidity readings.

The monthly compliance sample collected on May 7<sup>th</sup>, 2023, did not exceed the Maximum Monthly Mean Concentration or the Maximum Concentration in a Grab Sample for TSS. The additional due diligence samples (May 8<sup>th</sup> – 13<sup>th</sup>) did not exceed these effluent quality limits for TSS.

## Root Cause and Corrective Measures

An incident assessment was conducted soon after the incident occurred to determine the root cause and contributing factors. The assessment concluded with the following:

- Runoff entering the Itivia site has elevated TSS levels and is outside of Agnico Eagle's control.

The following corrective and preventative actions have been implemented to address the root cause and to reduce the likelihood of reoccurrence:

- The ESCs in place at the Itivia site have demonstrated efficacy in the reduction of TSS concentrations. Agnico Eagle will continue to monitor and maintain these controls as required.

Should you have any questions or require further information, please do not hesitate to contact the undersigned.



**Kyle Conway** | Environment General Supervisor

[kyle.conway@agnicoeagle.com](mailto:kyle.conway@agnicoeagle.com) | Direct 819.759.3555 x4603212 | Mobile 819.860.1033

Agnico Eagle Mines Limited - Meliadine Mine, Suite 879 - Rankin Inlet, Nunavut, Canada X0C 0G0

[agnicoeagle.com](http://agnicoeagle.com)     

Sent from Meliadine



**AGNICO EAGLE**  
MELIADINE

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## **Appendix A – Photos**



# AGNICO EAGLE

MELIADINE



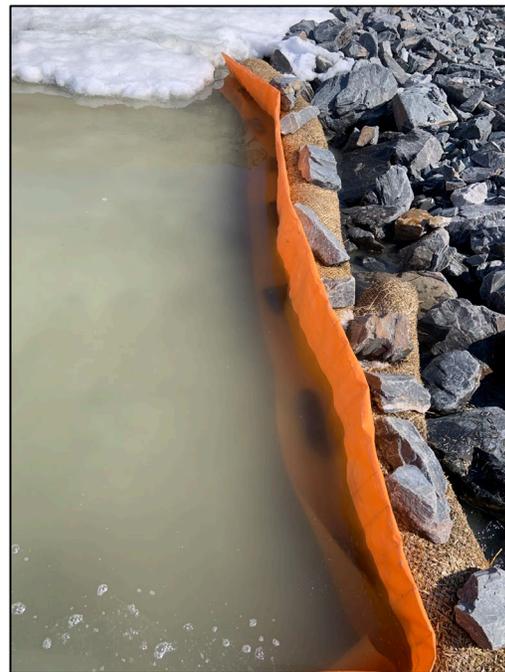
**Photo 1** – Upstream east of Itivia site.



**Photo 2** – Upstream east entering Itivia site.



**Photo 3** – Upstream of MEL-SR-1.



**Photo 4** – Rock check dam at settling basin.



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MELIADINE

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## **Appendix B – Certificate of Analysis**



Your P.O. #: 1253250  
 Site Location: MELIADINE  
 Your C.O.C. #: n/a

**Attention: Reporting**

Agnico-Eagle  
 Meliadine  
 Meliadine Mine  
 Rankin Inlet, NU  
 CANADA X0C 0G0

**Report Date: 2023/06/05**  
 Report #: R7657345  
 Version: 4 - Revision

**CERTIFICATE OF ANALYSIS – REVISED REPORT**

**BUREAU VERITAS JOB #: C3D3620**

**Received: 2023/05/10, 09:30**

Sample Matrix: Water  
 # Samples Received: 1

<b>Analyses</b>	<b>Quantity</b>	<b>Date Extracted</b>	<b>Date Analyzed</b>	<b>Laboratory Method</b>	<b>Analytical Method</b>
Alkalinity	1	N/A	2023/05/11	CAM SOP-00448	SM 23 2320 B m
Chloride by Automated Colourimetry	1	N/A	2023/05/11	CAM SOP-00463	SM 23 4500-Cl E m
Fluoride	1	2023/05/11	2023/05/11	CAM SOP-00449	SM 23 4500-F C m
Mercury (low level)	1	2023/05/12	2023/05/12	CAM SOP-00453	EPA 7470 m
Low Level Chloride and Sulphate by AC (1)	1	N/A	2023/05/15	AB SOP-00020 / AB SOP-00018	SM24 4500-CL/SO4-E m
Cyanide, Strong Acid Dissociable (SAD) (1)	1	2023/05/15	2023/05/15	CAL SOP-00270	SM 23 4500-CN m
Hardness Total (calculated as CaCO3) (2, 3)	1	N/A	2023/05/15	BBY WI-00033	Auto Calc
Hardness (calculated as CaCO3) (2)	1	N/A	2023/05/16	BBY WI-00033	Auto Calc
Na, K, Ca, Mg, S by CRC ICPMS (diss.) (2)	1	N/A	2023/05/16	BBY7SOP-00002	EPA 6020B R2 m
Elements by CRC ICPMS (dissolved) (2)	1	N/A	2023/05/15	BBY7SOP-00002	EPA 6020B R2 m
Na, K, Ca, Mg, S by CRC ICPMS (total) (2)	1	2023/05/11	2023/05/15	BBY7SOP-00002	EPA 6020B R2 m
Elements by CRC ICPMS (total) (2)	1	2023/05/15	2023/05/15	BBY7SOP-00003/ BBY7SOEPA-00002	EPA 6020B R2 m
Silica (Reactive) (1)	1	N/A	2023/05/12	AB SOP-00011	EPA370.1 R1978 m
Total Ammonia-N	1	N/A	2023/05/12	CAM SOP-00441	USGS I-2522-90 m
Nitrate & Nitrite as Nitrogen in Water (4)	1	N/A	2023/05/12	CAM SOP-00440	SM 23 4500-NO3I/NO2B
Total Oil and Grease	1	2023/05/11	2023/05/12	CAM SOP-00326	EPA1664B m,SM5520B m
pH	1	2023/05/11	2023/05/11	CAM SOP-00413	SM 4500H+ B m
Orthophosphate	1	N/A	2023/05/11	CAM SOP-00461	SM 23 4500-P E m
Calculated Total Dissolved Solids	1	N/A	2023/05/17		Auto Calc
Total Dissolved Solids	1	2023/05/13	2023/05/15	CAM SOP-00428	SM 23 2540C m
Total Phosphorus (Colourimetric)	1	2023/05/11	2023/05/12	CAM SOP-00407	SM 23 4500-P I
Low Level Total Suspended Solids	1	2023/05/12	2023/05/12	CAM SOP-00428	SM 23 2540D m
Turbidity	1	N/A	2023/05/12	CAM SOP-00417	SM 23 2130 B m

**Remarks:**

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCCFP, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession



Your P.O. #: 1253250  
Site Location: MELIADINE  
Your C.O.C. #: n/a

**Attention: Reporting**

Agnico-Eagle  
Meliadine  
Meliadine Mine  
Rankin Inlet, NU  
CANADA X0C 0G0

**Report Date: 2023/06/05**  
Report #: R7657345  
Version: 4 - Revision

**CERTIFICATE OF ANALYSIS – REVISED REPORT**

**BUREAU VERITAS JOB #: C3D3620**

**Received: 2023/05/10, 09:30**

using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

\* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

- (1) This test was performed by Bureau Veritas Calgary (19th), 4000 19th Street NE , Calgary, AB, T2E 6P8
- (2) This test was performed by Bureau Veritas Burnaby, 4606 Canada Way , Burnaby, BC, V5G 1K5
- (3) "Total Hardness" was calculated from Total Ca and Mg concentrations and may be biased high (Hardness, or Dissolved Hardness, calculated from Dissolved Ca and Mg, should be used for compliance if available).
- (4) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.

**Encryption Key**

Please direct all questions regarding this Certificate of Analysis to:

Katherine Szozda, Project Manager  
Email: Katherine.Szozda@bureauveritas.com  
Phone# (613)274-0573 Ext:7063633

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BUREAU  
VERITAS

Bureau Veritas Job #: C3D3620  
Report Date: 2023/06/05

Agnico-Eagle  
Site Location: MELIADINE  
Your P.O. #: 1253250  
Sampler Initials: GL

### RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		VTX771			VTX771		
Sampling Date		2023/05/07 14:00			2023/05/07 14:00		
COC Number		n/a			n/a		
	UNITS	MEL-SR 1	RDL	QC Batch	MEL-SR 1 Lab-Dup	RDL	QC Batch
<b>Calculated Parameters</b>							
Calculated TDS	mg/L	67	1.0	8658891			
Dissolved Hardness (CaCO <sub>3</sub> )	mg/L	54.6	0.50	8668774			
<b>Inorganics</b>							
Total Ammonia-N	mg/L	0.11	0.050	8660268			
Strong Acid Dissoc. Cyanide (CN)	mg/L	<0.00050	0.00050	8668765			
Total Dissolved Solids	mg/L	50	10	8663532			
Fluoride (F <sup>-</sup> )	mg/L	<0.10	0.10	8659639			
Orthophosphate (P)	mg/L	0.011	0.010	8659395			
pH	pH	7.39		8659659			
Total Phosphorus	mg/L	0.12	0.020	8660160	0.11	0.020	8660160
Reactive Silica (SiO <sub>2</sub> )	mg/L	0.83	0.050	8668764			
Total Suspended Solids	mg/L	48	1	8661565			
Turbidity	NTU	6.9	0.1	8659827			
Alkalinity (Total as CaCO <sub>3</sub> )	mg/L	22	1.0	8659648			
Dissolved Chloride (Cl <sup>-</sup> )	mg/L	8.0	1.0	8659401			
Nitrite (N)	mg/L	<0.010	0.010	8659762			
Nitrate (N)	mg/L	<0.10	0.10	8659762			
Dissolved Sulphate (SO <sub>4</sub> )	mg/L	14	0.50	8668763			
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	8659762			
<b>Metals</b>							
Dissolved Aluminum (Al)	mg/L	0.0541	0.0030	8668776			
Total Aluminum (Al)	mg/L	1.36	0.0030	8668773			
Dissolved Antimony (Sb)	mg/L	<0.00050	0.00050	8668776			
Total Antimony (Sb)	mg/L	<0.00050	0.00050	8668773			
Dissolved Arsenic (As)	mg/L	0.00137	0.00010	8668776			
Total Arsenic (As)	mg/L	0.00295	0.00010	8668773			
Dissolved Barium (Ba)	mg/L	0.0134	0.0010	8668776			
Total Barium (Ba)	mg/L	0.0224	0.0010	8668773			
Dissolved Beryllium (Be)	mg/L	<0.00010	0.00010	8668776			
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate							



BUREAU  
VERITAS

Bureau Veritas Job #: C3D3620  
Report Date: 2023/06/05

Agnico-Eagle  
Site Location: MELIADINE  
Your P.O. #: 1253250  
Sampler Initials: GL

### RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		VTX771			VTX771		
Sampling Date		2023/05/07 14:00			2023/05/07 14:00		
COC Number		n/a			n/a		
	UNITS	MEL-SR 1	RDL	QC Batch	MEL-SR 1 Lab-Dup	RDL	QC Batch
Total Beryllium (Be)	mg/L	<0.00010	0.00010	8668773			
Dissolved Bismuth (Bi)	mg/L	<0.0010	0.0010	8668776			
Total Bismuth (Bi)	mg/L	<0.0010	0.0010	8668773			
Dissolved Boron (B)	mg/L	<0.050	0.050	8668776			
Total Boron (B)	mg/L	<0.050	0.050	8668773			
Dissolved Cadmium (Cd)	mg/L	0.000013	0.000010	8668776			
Total Cadmium (Cd)	mg/L	0.000022	0.000010	8668773			
Dissolved Chromium (Cr)	mg/L	<0.0010	0.0010	8668776			
Total Chromium (Cr)	mg/L	0.0076	0.0010	8668773			
Dissolved Cobalt (Co)	mg/L	0.00026	0.00020	8668776			
Total Cobalt (Co)	mg/L	0.00161	0.00020	8668773			
Dissolved Copper (Cu)	mg/L	0.00348	0.00020	8668776			
Total Copper (Cu)	mg/L	0.00736	0.00050	8668773			
Dissolved Iron (Fe)	mg/L	0.0261	0.0050	8668776			
Total Iron (Fe)	mg/L	2.28	0.010	8668773			
Dissolved Lead (Pb)	mg/L	<0.00020	0.00020	8668776			
Total Lead (Pb)	mg/L	0.00118	0.00020	8668773			
Dissolved Lithium (Li)	mg/L	0.0065	0.0020	8668776			
Total Lithium (Li)	mg/L	0.0070	0.0020	8668773			
Dissolved Manganese (Mn)	mg/L	0.0299	0.0010	8668776			
Total Manganese (Mn)	mg/L	0.0532	0.0010	8668773			
Dissolved Molybdenum (Mo)	mg/L	<0.0010	0.0010	8668776			
Total Molybdenum (Mo)	mg/L	<0.0010	0.0010	8668773			
Dissolved Nickel (Ni)	mg/L	0.0012	0.0010	8668776			
Total Nickel (Ni)	mg/L	0.0051	0.0010	8668773			
Dissolved Selenium (Se)	mg/L	<0.00010	0.00010	8668776			
Total Selenium (Se)	mg/L	<0.00010	0.00010	8668773			
Dissolved Silicon (Si)	mg/L	0.36	0.10	8668776			
Total Silicon (Si)	mg/L	2.17	0.10	8668773			
Dissolved Silver (Ag)	mg/L	<0.000020	0.000020	8668776			
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate							



RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		VTX771			VTX771		
Sampling Date		2023/05/07 14:00			2023/05/07 14:00		
COC Number		n/a			n/a		
	UNITS	MEL-SR 1	RDL	QC Batch	MEL-SR 1 Lab-Dup	RDL	QC Batch
Total Silver (Ag)	mg/L	<0.000020	0.000020	8668773			
Dissolved Strontium (Sr)	mg/L	0.174	0.0010	8668776			
Total Strontium (Sr)	mg/L	0.151	0.0010	8668773			
Dissolved Thallium (Tl)	mg/L	<0.000010	0.000010	8668776			
Total Thallium (Tl)	mg/L	0.000016	0.000010	8668773			
Dissolved Tin (Sn)	mg/L	<0.0050	0.0050	8668776			
Total Tin (Sn)	mg/L	<0.0050	0.0050	8668773			
Dissolved Titanium (Ti)	mg/L	<0.0050	0.0050	8668776			
Total Titanium (Ti)	mg/L	0.0546	0.0050	8668773			
Dissolved Uranium (U)	mg/L	0.00032	0.00010	8668776			
Total Uranium (U)	mg/L	0.00036	0.00010	8668773			
Dissolved Vanadium (V)	mg/L	<0.0050	0.0050	8668776			
Total Vanadium (V)	mg/L	<0.0050	0.0050	8668773			
Dissolved Zinc (Zn)	mg/L	0.0095	0.0050	8668776			
Total Zinc (Zn)	mg/L	0.0252	0.0050	8668773			
Dissolved Zirconium (Zr)	mg/L	<0.00010	0.00010	8668776			
Total Zirconium (Zr)	mg/L	0.00037	0.00010	8668773			
Dissolved Calcium (Ca)	mg/L	17.8	0.050	8668775			
Total Calcium (Ca)	mg/L	17.0	0.050	8668772			
Dissolved Magnesium (Mg)	mg/L	2.49	0.050	8668775			
Total Magnesium (Mg)	mg/L	3.17	0.050	8668772			
Dissolved Potassium (K)	mg/L	4.06	0.050	8668775			
Total Potassium (K)	mg/L	4.30	0.050	8668772			
Dissolved Sodium (Na)	mg/L	7.13	0.050	8668775			
Total Sodium (Na)	mg/L	6.64	0.050	8668772			
Dissolved Sulphur (S)	mg/L	4.7	3.0	8668775			
Total Sulphur (S)	mg/L	4.2	3.0	8668772			
<b>Petroleum Hydrocarbons</b>							
Total Oil & Grease	mg/L	2.1	0.50	8660010			
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate							



BUREAU  
VERITAS

Bureau Veritas Job #: C3D3620  
Report Date: 2023/06/05

Agnico-Eagle  
Site Location: MELIADINE  
Your P.O. #: 1253250  
Sampler Initials: GL

### ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

<b>Bureau Veritas ID</b>		VTX771		
<b>Sampling Date</b>		2023/05/07 14:00		
<b>COC Number</b>		n/a		
	<b>UNITS</b>	<b>MEL-SR 1</b>	<b>RDL</b>	<b>QC Batch</b>
<b>Calculated Parameters</b>				
Total Hardness (CaCO3)	mg/L	55.6	0.50	8668771
<b>Metals</b>				
Mercury (Hg)	mg/L	<0.00001	0.00001	8661084
RDL = Reportable Detection Limit QC Batch = Quality Control Batch				



BUREAU  
VERITAS

Bureau Veritas Job #: C3D3620  
Report Date: 2023/06/05

Agnico-Eagle  
Site Location: MELIADINE  
Your P.O. #: 1253250  
Sampler Initials: GL

### TEST SUMMARY

**Bureau Veritas ID:** VTX771  
**Sample ID:** MEL-SR 1  
**Matrix:** Water

**Collected:** 2023/05/07  
**Shipped:**  
**Received:** 2023/05/10

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	8659648	N/A	2023/05/11	Kien Tran
Chloride by Automated Colourimetry	KONE	8659401	N/A	2023/05/11	Massarat Jan
Fluoride	ISE	8659639	2023/05/11	2023/05/11	Kien Tran
Mercury (low level)	CV/AA	8661084	2023/05/12	2023/05/12	Japneet Gill
Low Level Chloride and Sulphate by AC	KONE	8668763	N/A	2023/05/15	Adam Fishleigh
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8668765	2023/05/15	2023/05/15	Ming Dong
Hardness Total (calculated as CaCO3)	CALC	8668771	N/A	2023/05/15	Automated Statchk
Hardness (calculated as CaCO3)	CALC	8668774	N/A	2023/05/16	Automated Statchk
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	ICP	8668775	N/A	2023/05/16	Automated Statchk
Elements by CRC ICPMS (dissolved)	ICP/MS	8668776	N/A	2023/05/15	Andrew An
Na, K, Ca, Mg, S by CRC ICPMS (total)	ICP	8668772	2023/05/15	2023/05/15	Automated Statchk
Elements by CRC ICPMS (total)	ICP/MS	8668773	2023/05/15	2023/05/15	Andrew An
Silica (Reactive)	KONE	8668764	N/A	2023/05/12	Shanna McKort
Total Ammonia-N	LACH/NH4	8660268	N/A	2023/05/12	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8659762	N/A	2023/05/12	Chandra Nandlal
Total Oil and Grease	BAL	8660010	2023/05/11	2023/05/12	Kishan Patel
pH	AT	8659659	2023/05/11	2023/05/11	Kien Tran
Orthophosphate	KONE	8659395	N/A	2023/05/11	Massarat Jan
Calculated Total Dissolved Solids	CALC	8658891	N/A	2023/05/17	Automated Statchk
Total Dissolved Solids	BAL	8663532	2023/05/13	2023/05/15	Shaneil Hall
Total Phosphorus (Colourimetric)	SKAL/P	8660160	2023/05/11	2023/05/12	Sachi Patel
Low Level Total Suspended Solids	BAL	8661565	2023/05/12	2023/05/12	Darshan Patel
Turbidity	AT	8659827	N/A	2023/05/12	Gurparteek KAUR

**Bureau Veritas ID:** VTX771 Dup  
**Sample ID:** MEL-SR 1  
**Matrix:** Water

**Collected:** 2023/05/07  
**Shipped:**  
**Received:** 2023/05/10

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Phosphorus (Colourimetric)	SKAL/P	8660160	2023/05/11	2023/05/12	Sachi Patel



BUREAU  
VERITAS

Bureau Veritas Job #: C3D3620  
Report Date: 2023/06/05

Agnico-Eagle  
Site Location: MELIADINE  
Your P.O. #: 1253250  
Sampler Initials: GL

### GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	10.7°C
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Revised Report (2023/06/05): Re-repoting requested by client.

**Results relate only to the items tested.**



BUREAU  
VERITAS

Bureau Veritas Job #: C3D3620

Report Date: 2023/06/05

### QUALITY ASSURANCE REPORT

Agnico-Eagle

Site Location: MELIADINE

Your P.O. #: 1253250

Sampler Initials: GL

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8659395	Orthophosphate (P)	2023/05/11	90	75 - 125	91	80 - 120	<0.010	mg/L	0.65	20		
8659401	Dissolved Chloride (Cl-)	2023/05/11	95	80 - 120	91	80 - 120	<1.0	mg/L	1.5	20		
8659639	Fluoride (F-)	2023/05/11	96	80 - 120	99	80 - 120	<0.10	mg/L	2.8	20		
8659648	Alkalinity (Total as CaCO3)	2023/05/11			98	85 - 115	<1.0	mg/L	0.15	20		
8659659	pH	2023/05/11			102	98 - 103			0.15	N/A		
8659762	Nitrate (N)	2023/05/12	103	80 - 120	105	80 - 120	<0.10	mg/L	0.73	20		
8659762	Nitrite (N)	2023/05/12	102	80 - 120	103	80 - 120	<0.010	mg/L	NC	20		
8659827	Turbidity	2023/05/12			100	80 - 120	<0.1	NTU	5.1	20		
8660010	Total Oil & Grease	2023/05/12			99	85 - 115	<0.50	mg/L	0.25	25		
8660160	Total Phosphorus	2023/05/12	101	80 - 120	100	80 - 120	<0.020	mg/L	4.0	20	95	80 - 120
8660268	Total Ammonia-N	2023/05/12	95	75 - 125	99	80 - 120	<0.050	mg/L	0.37	20		
8661084	Mercury (Hg)	2023/05/12	117	75 - 125	106	80 - 120	<0.00001	mg/L	NC	20		
8661565	Total Suspended Solids	2023/05/12					<1	mg/L	13	20	96	85 - 115
8663532	Total Dissolved Solids	2023/05/15					<10	mg/L	17	20	98	90 - 110
8668763	Dissolved Sulphate (SO4)	2023/05/15	NC	80 - 120	100	80 - 120	<0.50	mg/L				
8668764	Reactive Silica (SiO2)	2023/05/12	NC	80 - 120	104	80 - 120	<0.050	mg/L				
8668765	Strong Acid Dissoc. Cyanide (CN)	2023/05/15	NC	80 - 120	107	80 - 120	<0.00050	mg/L				
8668773	Total Aluminum (Al)	2023/05/15	104	80 - 120	98	80 - 120	<0.0030	mg/L				
8668773	Total Antimony (Sb)	2023/05/15	108	80 - 120	103	80 - 120	<0.00050	mg/L				
8668773	Total Arsenic (As)	2023/05/15	108	80 - 120	100	80 - 120	<0.00010	mg/L				
8668773	Total Barium (Ba)	2023/05/15	105	80 - 120	99	80 - 120	<0.0010	mg/L				
8668773	Total Beryllium (Be)	2023/05/15	97	80 - 120	97	80 - 120	<0.00010	mg/L				
8668773	Total Bismuth (Bi)	2023/05/15	100	80 - 120	100	80 - 120	<0.0010	mg/L				
8668773	Total Boron (B)	2023/05/15	99	80 - 120	94	80 - 120	<0.050	mg/L				
8668773	Total Cadmium (Cd)	2023/05/15	105	80 - 120	102	80 - 120	<0.000010	mg/L				
8668773	Total Chromium (Cr)	2023/05/15	105	80 - 120	103	80 - 120	<0.0010	mg/L				
8668773	Total Cobalt (Co)	2023/05/15	100	80 - 120	99	80 - 120	<0.00020	mg/L				
8668773	Total Copper (Cu)	2023/05/15	99	80 - 120	98	80 - 120	<0.00050	mg/L				
8668773	Total Iron (Fe)	2023/05/15	106	80 - 120	105	80 - 120	<0.010	mg/L				
8668773	Total Lead (Pb)	2023/05/15	102	80 - 120	98	80 - 120	<0.00020	mg/L				
8668773	Total Lithium (Li)	2023/05/15	94	80 - 120	94	80 - 120	<0.0020	mg/L				



BUREAU  
VERITAS

Bureau Veritas Job #: C3D3620

Report Date: 2023/06/05

### QUALITY ASSURANCE REPORT(CONT'D)

Agnico-Eagle

Site Location: MELIADINE

Your P.O. #: 1253250

Sampler Initials: GL

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8668773	Total Manganese (Mn)	2023/05/15	105	80 - 120	102	80 - 120	<0.0010	mg/L				
8668773	Total Molybdenum (Mo)	2023/05/15	112	80 - 120	104	80 - 120	<0.0010	mg/L				
8668773	Total Nickel (Ni)	2023/05/15	102	80 - 120	101	80 - 120	<0.0010	mg/L				
8668773	Total Selenium (Se)	2023/05/15	107	80 - 120	104	80 - 120	<0.00010	mg/L				
8668773	Total Silicon (Si)	2023/05/15	NC	80 - 120	112	80 - 120	<0.10	mg/L				
8668773	Total Silver (Ag)	2023/05/15	104	80 - 120	101	80 - 120	<0.000020	mg/L				
8668773	Total Strontium (Sr)	2023/05/15	111	80 - 120	98	80 - 120	<0.0010	mg/L				
8668773	Total Thallium (Tl)	2023/05/15	103	80 - 120	99	80 - 120	<0.000010	mg/L				
8668773	Total Tin (Sn)	2023/05/15	107	80 - 120	104	80 - 120	<0.0050	mg/L				
8668773	Total Titanium (Ti)	2023/05/15	107	80 - 120	101	80 - 120	<0.0050	mg/L				
8668773	Total Uranium (U)	2023/05/15	108	80 - 120	101	80 - 120	<0.00010	mg/L				
8668773	Total Vanadium (V)	2023/05/15	108	80 - 120	103	80 - 120	<0.0050	mg/L				
8668773	Total Zinc (Zn)	2023/05/15	101	80 - 120	101	80 - 120	<0.0050	mg/L				
8668773	Total Zirconium (Zr)	2023/05/15	111	80 - 120	99	80 - 120	<0.00010	mg/L				
8668776	Dissolved Aluminum (Al)	2023/05/16	96	80 - 120	97	80 - 120	<0.0030	mg/L	NC	20		
8668776	Dissolved Antimony (Sb)	2023/05/16	101	80 - 120	99	80 - 120	<0.00050	mg/L	NC	20		
8668776	Dissolved Arsenic (As)	2023/05/16	103	80 - 120	100	80 - 120	<0.00010	mg/L	1.5	20		
8668776	Dissolved Barium (Ba)	2023/05/16	NC	80 - 120	99	80 - 120	<0.0010	mg/L	0.57	20		
8668776	Dissolved Beryllium (Be)	2023/05/16	94	80 - 120	96	80 - 120	<0.00010	mg/L	NC	20		
8668776	Dissolved Bismuth (Bi)	2023/05/16	94	80 - 120	98	80 - 120	<0.0010	mg/L	NC	20		
8668776	Dissolved Boron (B)	2023/05/16	97	80 - 120	99	80 - 120	<0.050	mg/L	NC	20		
8668776	Dissolved Cadmium (Cd)	2023/05/16	97	80 - 120	98	80 - 120	<0.000010	mg/L	NC	20		
8668776	Dissolved Chromium (Cr)	2023/05/16	96	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20		
8668776	Dissolved Cobalt (Co)	2023/05/16	89	80 - 120	93	80 - 120	<0.00020	mg/L	NC	20		
8668776	Dissolved Copper (Cu)	2023/05/16	91	80 - 120	96	80 - 120	<0.00020	mg/L	3.5	20		
8668776	Dissolved Iron (Fe)	2023/05/16	101	80 - 120	99	80 - 120	<0.0050	mg/L	NC	20		
8668776	Dissolved Lead (Pb)	2023/05/16	93	80 - 120	97	80 - 120	<0.00020	mg/L	NC	20		
8668776	Dissolved Lithium (Li)	2023/05/16	91	80 - 120	93	80 - 120	<0.0020	mg/L	NC	20		
8668776	Dissolved Manganese (Mn)	2023/05/16	95	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20		
8668776	Dissolved Molybdenum (Mo)	2023/05/16	102	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20		
8668776	Dissolved Nickel (Ni)	2023/05/16	92	80 - 120	96	80 - 120	<0.0010	mg/L	NC	20		



BUREAU  
VERITAS

Bureau Veritas Job #: C3D3620

Report Date: 2023/06/05

### QUALITY ASSURANCE REPORT(CONT'D)

Agnico-Eagle

Site Location: MELIADINE

Your P.O. #: 1253250

Sampler Initials: GL

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8668776	Dissolved Selenium (Se)	2023/05/16	100	80 - 120	99	80 - 120	<0.00010	mg/L	14	20		
8668776	Dissolved Silicon (Si)	2023/05/16	NC	80 - 120	107	80 - 120	<0.10	mg/L	1.2	20		
8668776	Dissolved Silver (Ag)	2023/05/16	98	80 - 120	100	80 - 120	<0.000020	mg/L	NC	20		
8668776	Dissolved Strontium (Sr)	2023/05/16	NC	80 - 120	100	80 - 120	<0.0010	mg/L	0.25	20		
8668776	Dissolved Thallium (Tl)	2023/05/16	97	80 - 120	100	80 - 120	<0.000010	mg/L	NC	20		
8668776	Dissolved Tin (Sn)	2023/05/16	101	80 - 120	100	80 - 120	<0.0050	mg/L	NC	20		
8668776	Dissolved Titanium (Ti)	2023/05/16	99	80 - 120	99	80 - 120	<0.0050	mg/L	NC	20		
8668776	Dissolved Uranium (U)	2023/05/16	101	80 - 120	100	80 - 120	<0.00010	mg/L	2.4	20		
8668776	Dissolved Vanadium (V)	2023/05/16	98	80 - 120	98	80 - 120	<0.0050	mg/L	NC	20		
8668776	Dissolved Zinc (Zn)	2023/05/16	90	80 - 120	97	80 - 120	<0.0050	mg/L	NC	20		
8668776	Dissolved Zirconium (Zr)	2023/05/16	104	80 - 120	100	80 - 120	<0.00010	mg/L	NC	20		

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).



### VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

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Anastassia Hamanov, Scientific Specialist

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Cristina Carriere, Senior Scientific Specialist

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David Huang, BBY Scientific Specialist

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Suwan (Sze Yeung) Fock, B.Sc., Scientific Specialist

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Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.



**BUREAU  
VERITAS**

Bureau Veritas Job #: C3D3620  
Report Date: 2023/06/05

Agnico-Eagle  
Site Location: MELIADINE  
Your P.O. #: 1253250  
Sampler Initials: GL

**Exceedance Summary Table – Metal Mining Effluent Reg  
Result Exceedances**

<b>Sample ID</b>	<b>Bureau Veritas ID</b>	<b>Parameter</b>	<b>Criteria</b>	<b>Result</b>	<b>DL</b>	<b>UNITS</b>
No Exceedances						
The exceedance summary table is for information purposes only and should not be considered a comprehensive listing or statement of conformance to applicable regulatory guidelines.						