

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

REPORT LINE USE ONLY

Α	REPORT DATE: MONTH - DAY - YEAR RE 01-11-2022 6			REPORT [®]	TIME	CRIGINAL SPILL REF	PORT,	REPORT NUMBER		
В	OCCURRENCE DATE: MONTH	E DATE: MONTH – DAY – YEAR 022			ENCE TIME	UPDATE # TO THE ORIGINAL SPIL	L REPORT			
С	LAND USE PERMIT NUMBER ((IF APPLICABLE)			WATER LICENCE NUMBER (IF APPLICABLE)					
D	GEOGRAPHIC PLACE NAME C Meliadine Gold P	OR DISTANCE AND DIREC roject	CTION FROM NAMED L	OCATION		JT 🗆 ADJACENT JUF	RISDICTION (OR OCEAN		
Ε	LATITUDE DEGREES 63	MINUTES 2	SECONDS 21	1	LONGITUDE DEGREES 92	MINUTES 13	SE	CONDS 41		
F	RESPONSIBLE PARTY OR VES	ssel name nes Ltd.	RESPONSIBLE Meliadin	IESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION Meliadine, Rankin Inlet, Nunavut, X0C 0G0						
G	ANY CONTRACTOR INVOLVED	D	CONTRACTOR	ADDRESS	OR OFFICE LOCATION					
	PRODUCT SPILLED	e	QUANTITY IN LI	ITRES, KILO	DGRAMS OR CUBIC METR	ES U.N. NUMBER				
Н	SECOND PRODUCT SPILLED	(IF APPLICABLE)	QUANTITY IN LI	ITRES, KILO	OGRAMS OR CUBIC METR	ES U.N. NUMBER				
	SPILL SOURCE MSB Lift Station		SPILL CAUSE	ent failu	Jre	AREA OF CONTAN	INATION IN S	SQUARE METRES		
J	FACTORS AFFECTING SPILL (DESCRIBE ANY	ASSISTAN	ICE REQUIRED	HAZARDS TO PER	HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT				
K	 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. 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. Pursuant to Part H, Item 8c of water license 2AM-MEL1631, a follow up report will be issued after the investigation is completed. Reported by Randy Schwandt, Environment Coordinator 819-759-3555 ext. 4603996 randy.schwandt@agnicoeagle.com , kyle.conway@agnicoeagle.com ext. 4603212 									
L	REPORTED TO SPILL LINE BY Randy Schwandt	Env. Coord	dinator	EMPLOYE AEM	R	LOCATION CALLING FR	юм ті 8	ELEPHONE 319-759-3555		
Μ	ANY ALTERNATE CONTACT Kyle Conway	POSITION General Su	upervisor	EMPLOYE AEM	R	ALTERNATE CONTACT Meliadine	A	LTERNATE TELEPHONE 819-860-1033		
			REPORT LIN	IE USE ON	ILY	-	· · ·			
N	RECEIVED AT SPILL LINE BY	POSITION		EMPLOYE	ER	LOCATION CALLED		EPORT LINE NUMBER		
-		STATION OPERATO	DR			YELLOWKNIFE, NT	8)	67) 920-8130		
LEAD		GNWT 🗆 GN 🗆 ILA 🗆		SIGNI	FICANCE I MINOR MA		FILE STATU	S OPEN CLOSED		
AGE					ACTIME					
LEAD	DAGENCY									
FIRS	T SUPPORT AGENCY									
SEC	OND SUPPORT AGENCY									
THIRD SUPPORT AGENCY										



February 9th, 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: <u>kyle.amsel@rcaanc-cirnac.gc.ca</u>

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

On January 10th, 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email (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 10th, 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.





Appendix – Photos



Photo 1: Sewage spill location.



Photo 2: Sewage spill post remediation.



NT-NU 24-HOUR SPILL REPORT LINE TEL: (867) 920-8130 FAX: (867) 873-6924

EMAIL: spills@gov.nt.ca

Δ	REPORT DATE: MONTH – DAY – YEAR					CRIGINAL SPILL REPORT.			
Λ				16:45		OR	REPORT NUMBER		
В	OCCURRENCE DATE: MONTH 01-11-2022	I – DAY – YEAR		8:00		UPDATE # TO THE ORIGINAL SPILL REP	ORT		
С	LAND USE PERMIT NUMBER (KVPL11D01	(IF APPLICABLE)		WATER LICENCE NUMBER (IF APPLICABLE) 2AM-MEL1631					
D	GEOGRAPHIC PLACE NAME C Meliadine Gold P	OR DISTANCE AND DIRECTI roject	ON FROM NAMED LC	DCATION					
Е	LATITUDE	•	•	L					
	DEGREES 03	MINUTES 2	SECONDS 21	DEGREES 92 MINUTES 13 SECONDS 41					
F	Agnico Eagle Min	Meliadine	liadine, Rankin Inlet, Nunavut, X0C 0G0						
G	ANY CONTRACTOR INVOLVED	D	CONTRACTOR A	DDRESS C	OR OFFICE LOCATION				
			QUANTITY IN LIT	RES, KILO	GRAMS OR CUBIC METRE	S U.N. NUMBER			
н	Sewage		7 m3			N/A			
	SECOND PRODUCT SPILLED	(IF APPLICABLE)	QUANTITY IN LIT	RES, KILO	GRAMS OR CUBIC METRE	S U.N. NUMBER			
I	SPILL SOURCE Main Camp Lift St	tation	SPILL CAUSE	nt Failu	ure	AREA OF CONTAMINATIO	ON IN SQUARE METRES		
J	FACTORS AFFECTING SPILL C	DESCRIBE ANY	ASSISTANC	CE REQUIRED	HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT				
	ADDITIONAL INFORMATION, C	COMMENTS, ACTIONS PROF	POSED OR TAKEN TO	CONTAIN	, RECOVER OR DISPOSE	DF SPILLED PRODUCT AND C	I		
к	 K 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. Pursuant to Part H, Item 8c of water license 2AM-MEL1631, a follow up report will be issued after the investigation is completed. Reported by Randy Schwandt, Environment Coordinator 819-759-3555 ext. 4603996 Randy.Schwandt@agnicoeagle.com , Kyle.Conway@agnicoeagle.com ext. 4603212 								
L	REPORTED TO SPILL LINE BY Randy Schwandt	POSITION Env. Coordi	dinator AEI		٦	LOCATION CALLING FROM	TELEPHONE 819-759-3555		
Μ	ANY ALTERNATE CONTACT Kyle Conway	POSITION General sup	ervisor	EMPLOYEF	٦	ALTERNATE CONTACT Meliadine LOCATION	ALTERNATE TELEPHONE 819-860-1033		
		•	REPORT LINE	USE ONI	Y				
N	RECEIVED AT SPILL LINE BY	POSITION		EMPLOYER	3	LOCATION CALLED	REPORT LINE NUMBER		
		STATION OPERATOR				YELLOWKNIFE, NT	(867) 920-8130		
LEAD		GNWT 🗆 GN 🗆 ILA 🗆 INA		SIGNIF	ICANCE 🗆 MINOR 🗆 MA		STATUS 🗆 OPEN 🗆 CLOSED		
AGE	NCY	CONTACT NAME		CONTA	CTTIME	REMARKS			
LEAD	DAGENCY					1			
FIRS									
FIRST SUPPORT AGENCY									
SEC	T SUPPORT AGENCY								



February 9th, 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: <u>kyle.amsel@rcaanc-cirnac.gc.ca</u>

Re: Follow-up Report Spill #2023-011 – Spill of 7 m³ of Sewage at the Meliadine Gold Project

On January 11th, 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email (spills@gov.nt.ca) of a spill of approximately 7 m³ 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 11th, 2023, at approximately 8:00 am, an estimated 7 m³ 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 m³ 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 and 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.





Randy Schwandt | Environment Coordinator 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 f 🞯 У in 🕟

Sent from Meliadine



Appendix – Photos



Photo 1: Sewage spill location.





Photo 2: Sewage spill post remediation.



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

REPORT LINE USE ONLY

Α	REPORT DATE: MONTH - DAY - YEAR I 02-03-2022 I		17:45		XORIGINAL SPILL REPORT,		REPORT NUMBER			
В	OCCURRENCE DATE: MONTH 02-03-2022	TH – DAY – YEAR		OCCURRENCE TIME		UPDATE # TO THE ORIGINAL SPIL	L REPORT	⁻		
С	LAND USE PERMIT NUMBER (IF APPLICABLE)		W	ATER LICENCE NUMBER	(IF APPLICABLE)				
D	GEOGRAPHIC PLACE NAME C Meliadine Gold Pi	DR DISTANCE AND DIRECTION TOJECT	ON FROM NAMED LO	DCATION	CATION REGION					
Е	LATITUDE DEGREES 63	MINUTES 2	SECONDS 21		ongitude _{EGREES} 92	MINUTES 13	SE	CONDS 41		
F	RESPONSIBLE PARTY OR VES	SSEL NAME Des Ltd.	RESPONSIBLE F	ARTY ADDI	ARTY ADDRESS OR OFFICE LOCATION					
G)		DDRESS O	R OFFICE LOCATION					
J	PRODUCT SPILLED		QUANTITY IN LIT	RES, KILO	GRAMS OR CUBIC METRI	ES U.N. NUMBER				
	Hydraulic oil		500 litres			N/A				
П	SECOND PRODUCT SPILLED	(IF APPLICABLE)	QUANTITY IN LIT	res, kilo	GRAMS OR CUBIC METRI	ES U.N. NUMBER				
I	spill source Excavator		SPILL CAUSE	nt Failu	Ire	AREA OF CONTAM	IINATION IN S	SQUARE METRES		
J	FACTORS AFFECTING SPILL C	DESCRIBE ANY	ASSISTANC	E REQUIRED	HAZARDS TO PERS	HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT				
ĸ	 Hydraulic hose fallure 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. 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. Pursuant to Part H, Item 8c of water license 2AM-MEL1631, a follow up report will be issued after the investigation is completed. Reported by Randy Schwandt, Environment Coordinator 819-759-3555 ext. 4603996 Randy.Schwandt@agnicoeagle.com , Kyle.Conway@agnicoeagle.com ext. 4603212 									
L	REPORTED TO SPILL LINE BY Randy Schwandt	Env. Coordin	nator	EMPLOYEF	1	LOCATION CALLING FR		ELEPHONE 819-759-3555		
Μ	ANY ALTERNATE CONTACT Kyle Conway	POSITION General sup	ervisor	EMPLOYEF	1	ALTERNATE CONTACT Meliadine	A	LTERNATE TELEPHONE 819-860-1033		
		-	REPORT LINE	E USE ONL	Y					
Ν	RECEIVED AT SPILL LINE BY	POSITION		EMPLOYEF	1		R			
LEAD	│ → AGENCY □ EC □ CCG □ G			SIGNIF			ELLOWKNIFE, NT (867) 920-8130 DB LINKNOWN			
AGEI	NCY	CONTACT NAME		CONTA	CT TIME	REMARKS				
LEAD	DAGENCY									
FIRS	T SUPPORT AGENCY									
SEC	OND SUPPORT AGENCY									
THIR	D SUPPORT AGENCY									



March 1st, 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: <u>kyle.amsel@rcaanc-cirnac.gc.ca</u>

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

On February 3rd, 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email (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 3rd, 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.





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





Appendix – Photos





Photo 1: Hydraulic oil spill area.



Photo 2: Hydraulic oil spill remediated.



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

REPORT LINE USE ONLY

A	REPORT DATE: MONTH – DAY – YEAR 02-06-2023			9:30			PORT,	REPORT NUMBER		
	OCCURRENCE DATE: MONTH -	DAY – YEAR	00	OCCURRENCE TIME						
	02-05-2023		1							
C	KVPL11D01	APPLICABLE)		WATER LICENCE NUMBER (IF APPLICABLE) 2AM-MEL1631						
D	GEOGRAPHIC PLACE NAME OF Meliadine Gold Pre	DISTANCE AND DIRECTION	ON FROM NAMED LOC	ATION F	REGION	UT 🗆 ADJACENT JUF	RISDICTION	OR OCEAN		
F	LATITUDE			LON	GITUDE	1.				
	DEGREES 63	VINUTES 2	SECONDS 21		REES 92	MINUTES 13	SE	CONDS 41		
F	Agnico Eagle Mine	el NAME	Rankin	Inlet, Nunav	ut, X0C 0G0					
G				DRESS OR C	OFFICE LOCATION					
M										
	Sewage		5 Liters	LO, NILOGIN		N/A				
H	SECOND PRODUCT SPILLED (I	- APPLICABLE)	QUANTITY IN LITRE	ES, KILOGR/	AMS OR CUBIC METF	RES U.N. NUMBER				
	MSB Lift Station		Human erre	or		1	AREA OF CONTAMINATION IN SQUARE METRES			
	FACTORS AFFECTING SPILL O	RECOVERY	DESCRIBE ANY AS	SISTANCE F	REQUIRED	HAZARDS TO PER	HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT			
J	N/A									
ĸ	 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. K 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. Pursuant to Part H, Item 8c of water license 2AM-MEL1631, a follow up report will be issued after the investigation is completed. Reported by Randy Schwandt Environment Coordinator 819-759-3555 ext. 4603996 randy.schwandt@agnicoeagle.com. 									
	randy.schwandt@		/ironment Coo m.		or 819-759-3	555 ext. 460399	96			
L	randy.schwandt@ REPORTED TO SPILL LINE BY Randy Schwandt	POSITION Env. Coordin	vironment Coo m. nator A	ordinate	or 819-759-3	555 ext. 460399	96 Rom т	ed aπer the ELEPHONE 819-759-3555		
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March 2nd, 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: <u>kyle.amsel@rcaanc-cirnac.gc.ca</u>

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

On February 5th, 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email (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 5th, 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.





Appendix – Photos



Photo 1: Sewage spill location.



Photo 2: Sewage spill post remediation.



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

REPORT LINE USE ONLY

A	REPORT DATE: MONTH - DAY - YEAR F 02-11-2023 F			REPORT TIME 10:00		CORIGINAL SPILL REPORT,	REPORT NUMBER		
D	OCCURRENCE DATE: MONTH	NTH – DAY – YEAR C		OCCURRENCE TIME					
P	02-11-2023			3:30		TO THE ORIGINAL SPILL REPORT			
C	KVPL11D01	(IF APPLICABLE)		2	WATER LICENCE NUMBER (IF APPLICABLE) 2AM-MEL1631				
D	GEOGRAPHIC PLACE NAME (Meliadine Gold P	OR DISTANCE AND DIRECTIO	N FROM NAMED LO	CATION					
	LATITUDE	-		LO	NGITUDE				
E	DEGREES 63	MINUTES 2	SECONDS 21	DE	GREES 92	MINUTES 13 S	ECONDS 41		
F	Agnico Eagle Mir	ISSEL NAME I es Ltd.	Meliadine	, Ranki	ess or office locati n Inlet, Nunavi	on ut, X0C 0G0			
G		D		DDRESS OF	OFFICE LOCATION				
	Sodium Hydroxid	le	450 Liters	NEO, KILOG		1823			
H	SECOND PRODUCT SPILLED	(IF APPLICABLE)	QUANTITY IN LITE	res, Kilog	RAMS OR CUBIC METRE	ES U.N. NUMBER			
	Caustic Tank		Equipmen	nt Failu	re	5	SQUARE METRES		
J	FACTORS AFFECTING SPILL	DESCRIBE ANY ASSISTANCE REQUIRED			HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT				
	the industrial pac	i a caustic distrib I.		esuiting		50 L of 30% sodium r	yaroxide to		
	The coordinates of spill. The nearest	of the spill are 63 ⁶ : natural water bo	° 2' 22.79''N, dy (G2) is 36	, 92º13' 69 m no	33.91"W. No w orth.	ater bodies were imp	acted by this		
K	Pursuant to Part	H. Item 8c of wate	er license 2A	M-MEL	.1631. a follow	up report will be issu	led after the		
	investigation is c	ompleted.			,				
	Reported by Ran randy.schwandt@	dy Schwandt Env ⊉agnicoeagle.con	ironment Co n.	oordina	tor 819-759-35	55 ext. 4603996			
L	REPORTED TO SPILL LINE BY Randy Schwandt	POSITION	EMPLOYER AFM			LOCATION CALLING FROM	ELEPHONE 819-759-3555		
М	ANY ALTERNATE CONTACT Kyle Conway	POSITION General supe	ervisor	EMPLOYER		ALTERNATE CONTACT	LTERNATE TELEPHONE 819-860-1033		
		I	REPORT LINE	USE ONLY	,				
N	RECEIVED AT SPILL LINE BY	POSITION	E	EMPLOYER		LOCATION CALLED	REPORT LINE NUMBER		
		STATION OPERATOR				YELLOWKNIFE, NT (867) 920-8130		
LEAI		GNWT □ GN □ ILA □ INAC		SIGNIFIC			JS 🗆 OPEN 🗆 CLOSED		
AGE	NCY	CONTACT NAME		CONTAC	TTIME	REMARKS			
LEAI	DAGENCY								
FIRS	ST SUPPORT AGENCY								
SECOND SUPPORT AGENCY				_					
SEC	OND SUPPORT AGENCY								



March 9th, 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: <u>kyle.amsel@rcaanc-cirnac.gc.ca</u>

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

On February 11th, 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email (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 11th, 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
 Direct 819.759.3555 x4603996

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

 agnicoeagle.com
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Appendix – Photos





Photo 1: Contaminated ice and snow.



Photo 2: Spill remedation efforts.



Photo 3: Spill remediation area.



Photo 4: Spill remediation area.



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

REPORT LINE USE ONLY

Α	REPORT DATE: MONTH – DAY – YEAR 02-22-2023		11:00			CORIGINAL SPILL REPORT,				
В	OCCURRENCE DATE: MONTH - 02-21-2023	- DAY – YEAR		OCCURRE 16:00	ENCE TIME	UPDATE # TO THE ORIGINAL SPII	L REPORT			
С	LAND USE PERMIT NUMBER (II KVPL11D01	F APPLICABLE)		Y	WATER LICENCE NUMBER (IF APPLICABLE) 2AM-MEL1631					
D	GEOGRAPHIC PLACE NAME OF Meliadine Gold Pr	R DISTANCE AND DIRECT Oject	ION FROM NAMED L	OCATION		JT 🗆 ADJACENT JU	RISDICTION	OR OCEAN		
Е	LATITUDE DEGREES 63	MINUTES 2	SECONDS 21	 	LONGITUDE DEGREES 92 MINUTES 13 SECONDS 41					
F	RESPONSIBLE PARTY OR VESSEL NAME RESPONSIBLE PART Agnico Eagle Mines Ltd. Meliadine, I				DRESS OR OFFICE LOCATI	on ut, X0C 0G0				
G	ANY CONTRACTOR INVOLVED		CONTRACTOR	ADDRESS (OR OFFICE LOCATION					
	PRODUCT SPILLED Sewage		QUANTITY IN LI	TRES, KILC	OGRAMS OR CUBIC METRI	ES U.N. NUMBER				
Η	SECOND PRODUCT SPILLED (I	IF APPLICABLE)	QUANTITY IN LI	TRES, KILC	OGRAMS OR CUBIC METRI	ES U.N. NUMBER				
	SPILL SOURCE	se	SPILL CAUSE Equipme	nt failu	ire	AREA OF CONTAN	INATION IN	SQUARE METRES		
J	FACTORS AFFECTING SPILL O	R RECOVERY	DESCRIBE ANY	ASSISTAN	CE REQUIRED	HAZARDS TO PEF	HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT			
K	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. 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. Pursuant to Part H, Item 8c of water license 2AM-MEL1631, a follow up report will be issued after the investigation is completed. Reported by Kevin Smith Hydrogeology Specialist 819-759-3555 ext. 4603961 kevin.smith2@agnicoeagle.com.									
	Reported by Kevir kevin.smith2@agr	n Smith Hydrog nicoeagle.com.	eology Spec	ialist 8	-L1631, a follow	up report will t. 4603961	be issu	ed after the		
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L	Reported by Kevir kevin.smith2@agr REPORTED TO SPILL LINE BY Kevin Smith ANY ALTERNATE CONTACT Kyle Conway	n Smith Hydrog nicoeagle.com. POSITION Hydrogeo S POSITION General Suj	eology Spec Specialist pervisor	EMPLOYE AEM AEM AEM	L1631, a follow 319-759-3555 ex ^R	t. 4603961 LOCATION CALLING FF Meliadine ALTERNATE CONTACT LOCATION	be issu	ELEPHONE 819-759-3555 LTERNATE TELEPHONE 819-860-1033		
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March 12th, 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

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

On February 21st 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email (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 21st, 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 was 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 | Direct 819.759.3555 x4603996 | Agnico Eagle Mines Limited - Meliadine Mine, Suite 879 - Rankin Inlet, Nunavut, Canada X0C 0G0 agnicoeagle.com f O I in IN Sent from Meliadine



Appendix – Photos



Photo 1: Sewage spill location.



Photo 2: Sewage spill post remediation.



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

REPORT LINE USE ONLY

A	REPORT DATE: MONTH – DAY – YEAR 02-26-2023			ттіме 30	IXORIGINAL SPILL REPORT,		REPORT NUMBER			
В	OCCURRENCE DATE: MONTH	H – DAY – YEAR			UPDATE # TO THE ORIGINAL SPILI	L REPORT	_			
	LAND USE PERMIT NUMBER (IF APPLICABLE)	00.	WATER LICENCE NUMBER (IF APPLICABLE)						
C	KVPL11D01			2BB-MEL1424						
D	GEOGRAPHIC PLACE NAME C Meliadine Gold Pr	PR DISTANCE AND DIRECTION FROM I	NAMED LOCATIC	N REGION	UT 🗆 ADJACENT JUR		DR OCEAN			
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G	Orbit Garant	Val	d'Or, Que	bec						
	PRODUCT SPILLED Drill Cuttings	QUANT 50 I	TITY IN LITRES, F L	KILOGRAMS OR CUBIC METR	ES U.N. NUMBER					
H	SECOND PRODUCT SPILLED ((IF APPLICABLE) QUANT	TITY IN LITRES, H	KILOGRAMS OR CUBIC METR	RES U.N. NUMBER					
1	SPILL SOURCE	SPILL (CAUSE			INATION IN S	SQUARE METRES			
J	N/A	N/A	RIBE ANY ASSIS	IANCE REQUIRED	N/A	PERSONS, PROPERTY OR EQUIPMENT				
ĸ	 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 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. 									
L	Brett Fairbairn	Env. Coordinator	AEI	VI	Meliadine	8	B19-759-3555			
Μ	ANY ALTERNATE CONTACT Sara Savoie	POSITION General Superviso	or AEI	DYER M	ALTERNATE CONTACT Meliadine	A	ITERNATE TELEPHONE 819-856-9349			
		REP	ORT LINE USE	ONLY						
N	RECEIVED AT SPILL LINE BY	POSITION	EMPLO	DYER	LOCATION CALLED	R				
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LEAI	DAGENCY									
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SEC	OND SUPPORT AGENCY									
THIF	RD SUPPORT AGENCY									


March 18th, 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: <u>kyle.amsel@rcaanc-cirnac.gc.ca</u>

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

On February 26th 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email (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 26th, 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 14th, 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





Appendix – Photos



Photo 1: Drill cutting water spill.



Photo 2: Drill cutting water spill post remediation.



NT-NU SPILL REPORT

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

REPORT LINE USE ONLY

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

Α	A REPORT DATE: MONTH – DAY – YEAR 03-01-2023			REPORT 1	XORIGINAL SPILL REPORT,		REPORT NUMBER			
В	OCCURRENCE DATE: MONTH		OCCURRENCE TIME 8:00		OR UPDATE # TO THE ORIGINAL SPILL RE	PORT	_			
С	LAND USE PERMIT NUMBER (I	IF APPLICABLE)		WATER LICENCE NUMBER (IF 2AM-MEL1631						
D	GEOGRAPHIC PLACE NAME O Meliadine Gold Pr	OR DISTANCE AND DIRECTION TOJECT	ON FROM NAMED L	OCATION	CATION REGION					
Е	LATITUDE DEGREES 63	MINUTES 2	SECONDS 21	ı	LONGITUDE DEGREES 92	MINUTES 13	SE	econds 41		
F	RESPONSIBLE PARTY OR VES	SSEL NAME es Ltd.	RESPONSIBLE Meliadin	PARTY ADI	press or office loca	TION /ut. X0C 0G0				
G	ANY CONTRACTOR INVOLVED)	CONTRACTOR	ADDRESS (OR OFFICE LOCATION	,				
u	N/A PRODUCT SPILLED			TRES, KILO	OGRAMS OR CUBIC MET					
	Sewage		9 m3	THEO, HIEC		N/A				
Н	SECOND PRODUCT SPILLED ((IF APPLICABLE)	QUANTITY IN LI	TRES, KILC	OGRAMS OR CUBIC MET	RES U.N. NUMBER				
I	SPILL SOURCE Main Camp Lift St	ation	SPILL CAUSE	nt Fail	ure	AREA OF CONTAMINAT	ION IN	SQUARE METRES		
J	FACTORS AFFECTING SPILL C	DR RECOVERY	DESCRIBE ANY	ASSISTAN	CE REQUIRED	HAZARDS TO PERSON	6, PROI	PERTY OR EQUIPMENT		
K	The coordinates of this spill. The near Pursuant to Part H investigation is co Reported by Brett Brett.fairbairn@ag	of the spill are 63 rest natural wate H, Item 8c of wate ompleted. t Fairbairn, Envir gnicoeagle.com	º 2' 23.60''N er body (G2 er license 2 onment Coo , Sara.Savo	I, 92º 1) is 280 AM-ME ordina ie@ag	3' 39.57''W. No) m north. EL1631, a follow tor 819-759-355 nicoeagle.com	water bodies wer w up report will be 55 ext. 4603996 ext. 4603212	e im issı	pacted by led after the		
L	REPORTED TO SPILL LINE BY Brett Fairbairn	POSITION Env. Coordir	dinator AEN		R	LOCATION CALLING FROM	ATION CALLING FROM			
Μ	ANY ALTERNATE CONTACT Sara Savoie	POSITION General supe	ervisor	EMPLOYE AEM	R	ALTERNATE CONTACT Meliadine	A	LTERNATE TELEPHONE 819-856-9349		
			REPORT LIN	E USE ON	LY					
Ν	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR		EMPLOYE	R	LOCATION CALLED YELLOWKNIFE, NT	F (8	EPORT LINE NUMBER 367) 920-8130		
LEAD	AGENCY □ EC □ CCG □ G	GNWT 🗆 GN 🗆 ILA 🗆 INA	C 🗆 NEB 🗆 TC	SIGNI						
AGEI	NCY (CONTACT NAME		CONT	ACT TIME	REMARKS	REMARKS			
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FIRS	T SUPPORT AGENCY									
SEC	OND SUPPORT AGENCY									
THIR	D SUPPORT AGENCY						_			



March 21st, 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

Re: Follow-up Report Spill #2023-073 – Release of 9 m^3 of Sewage at the Meliadine Gold Mine

On March 1st, 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email (spills@gov.nt.ca) of a spill of approximately 9 m³ 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 1st, 2023, at approximately 5:30 am, an estimated 9 m³ 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 m³ 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 17th, 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 15th, 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 **f** 🗿 💟 in 💽



Appendix – Photos





Photo 1: Sewage spill location.



Photo 2: Sewage spill post remediation.



NT-NU SPILL REPORT

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

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

REPORT LINE USE ONLY

Α	REPORT DATE: MONTH – DAY 03-18-2023	-YEAR	REPORT TIME			PORT,	REPORT NUMBER	
D	OCCURRENCE DATE: MONTH	– DAY – YEAR			DR DUPDATE # O THE ORIGINAL SPILL REPORT			
	03-17-2023							
C	KVPL11D01	(IF APPLICABLE)	2BB-MEL1424			(IF APPLICABLE)		
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E	DEGREES 63	MINUTES 2	SECONDS 21		GREES 92	MINUTES 13	SF	CONDS 41
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	Agnico Eagle Min	ies Ltd.	Meliadine, F	Ranki	n Inlet, Nunavi	ut, X0C 0G0		
G	Orbit Garant)	Val d'Or, Qu	RESS OF				
	PRODUCT SPILLED		QUANTITY IN LITRES	, KILOG	RAMS OR CUBIC METRE	ES U.N. NUMBER		
н	Hydraulic oil		1 L			N/A		
• •	SECOND PRODUCT SPILLED	(IF APPLICABLE)	QUANTITY IN LITRES	s, Kilog	RAMS OR CUBIC METRE	ES U.N. NUMBER		
	SPILL SOURCE		SPILL CAUSE			AREA OF CONTAM	INATION IN S	QUARE METRES
	Hydraulic line		Unknown			0.25		
J	FACTORS AFFECTING SPILL C	OR RECOVERY	DESCRIBE ANY ASSI	ISTANCE	REQUIRED	HAZARDS TO PER	SONS, PROF	ERTY OR EQUIPMENT
	ADDITIONAL INFORMATION, C	COMMENTS, ACTIONS PROPC	SED OR TAKEN TO CO	NTAIN, F	RECOVER OR DISPOSE	OF SPILLED PRODUCT	AND CONTAI	MINATED MATERIALS
 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 covered. The coordinates of the spill are 63 0'31.9"N, 92 12'04.1"W. K Pursuant to Part H, Section 4c of the Water License, a follow-up report will be issued after a closer assessment is completed. Reported by Brett Fairbairn, Environment Coordinator 819-759-3555 extension 4603996 Brett.Fairbairn@agnicoeagle.com 								
L	REPORTED TO SPILL LINE BY Brett Fairbairn	POSITION Env. Coordin	ator AFN			LOCATION CALLING FF		ELEPHONE 319-759-3555
Μ	ANY ALTERNATE CONTACT Kyle Conway	POSITION General Supe	ervisor AEM					TERNATE TELEPHONE
	-		REPORT LINE US		,		I	
N	RECEIVED AT SPILL LINE BY	POSITION	EMP	LOYER		LOCATION CALLED	R	EPORT LINE NUMBER
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AGE	NCY	CONTACT NAME			REMARKS			
LEA	DAGENCY							
FIRS	T SUPPORT AGENCY							
SEC	OND SUPPORT AGENCY							



April 14th, 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: <u>kyle.amsel@rcaanc-cirnac.gc.ca</u>

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

On March 18th, 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email (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 17th, 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.







Appendix – Photos





Photo 1: 1 L hydraulic oil spill location.



Photo 2: 1 L hydraulic oil spill post remediation.



Canadia NT-NU SPILL REPORT

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

REPORT LINE USE ONLY

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

A	REPORT DATE: MONTH – DAY 03-29-2023		REPOR [®]	ттім 5	ИE		X ORIGI OR	NAL SPII	LL REPO	PRT,	REPORT NUMBE	ĒR			
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E	DEGREES 63	MIN	UTES	2	SECONDS	21		EGREES 92		MI	NUTES	13	SI	ECONDS 41	
Ц	RESPONSIBLE PARTY OR VE	SSEL	NAME		RESPONSIBL	E PARTY A	DDR	ESS OR OFFIC	E LOCATI	ON		-			
1	Agnico Eagle Mir	Meliadi	Meliadine, Rankin Inlet, Nunavut, X0C 0G0												
G	N/A	D			N/A	RADDRES	SOF	R OFFICE LOCA	TION						
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1	MSB Lift Station				Equipm	ent fai	lur	e		1					
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K	The coordinates this spill. The nea Pursuant to Part investigation is c Reported by Ran randy.schwandt@	of ti ares H, li om dy S Dag	he sp st nat tem { plete Schw nico	bill are tural w Bc of w d. vandt, eagle.	63º 2' 21.24' vater body (G vater license Environment com , kyle.co	'N, 92º 2) is 32 2AM-N 2 Coorc onway(13 25 1EI Da	' 40.67"W m northw L1631, a f ator 819-ĭ gnicoeag	V. No vest. follow 759-35 lle.cor	water up re 555 ex n ext.	bodi eport ct. 46 4603	ies w will k 03990 3212	ere im De issu 6	pacted by ued after the	
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VI	Kyle Conway		Ger	neral S	upervisor	AEM	I				adine	•		819-860-1033	3
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THIR	D SUPPORT AGENCY														



April 17th, 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: <u>kyle.amsel@rcaanc-cirnac.gc.ca</u>

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

On March 29th, 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email (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 29th, 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 XOC 0G0 agnicoeagle.com f 🎯 💟 🛅 💽

Sent from Meliadine



Appendix – Photos





Photo 1: Sewage spill location.



Photo 2: Sewage spill post remediation.



NT-NU SPILL REPORT

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

REPORT LINE USE ONLY

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

	REPORT DATE: MONTH – DAY – YE 04-04-2022	8:05		CRIGINAL SPILL REPORT,	REPORT NUMBER					
R	OCCURRENCE DATE: MONTH – D	AY – YEAR	OCCURRENCE TIME 21:00		UPDATE # TO THE ORIGINAL SPILL REPO	 RT [_]				
	LAND USE PERMIT NUMBER (IF A	PPLICABLE)	21:00		R (IF APPLICABLE)					
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G	ANY CONTRACTOR INVOLVED		CTOR ADDRES	S OR OFFICE LOCATION						
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			an Error							
J	N/A	N/A	L ANT AGGION		N/A	HOI ENT ON EQUI MENT				
	ADDITIONAL INFORMATION, COM	MENTS, ACTIONS PROPOSED OR T	AKEN TO CONT	AIN, RECOVER OR DISPOSE	SPILLED PRODUCT AND CONTAMINATED MATERIALS					
к	The coordinates of this spill. The neare	the spill are 63º 1' 37. st natural water body Itom 8c of water licon	07"N, 92º (H5) is 62	12' 39.92''W. No 20 m North North	water bodies were East.	impacted by				
	Investigation is com	pleted.		/IEL1631, a follow	, up report will be is	ssued after the				
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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: <u>kyle.amsel@rcaanc-cirnac.gc.ca</u>

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

On April 3rd, 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email (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 3rd, 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 of in a labeled quatrex bag which will brought to the hazardous waste laydown. An estimated of $1.5m^3$ 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.

Agnico Eagle Mines Limited - Meliadine Mine, Suite 879 - Rankin Inlet, Nunavut, Canada Tel: 819-759-3555 | agnicoeagle.com



• 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 | Direct 819.759.3555 x4603996 | Agnico Eagle Mines Limited - Meliadine Mine, Suite 879 - Rankin Inlet, Nunavut, Canada X0C 0G0



Appendix – Photos





Photo 1: Post cleanup area



Canadä NT-NU SPILL REPORT

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

REPORT LINE USE ONLY

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

A	REPORT DATE: MONTH – DAY – 1 04-07-2023	REPORT TIME							
B	OCCURRENCE DATE: MONTH – I	DAY – YEAR	OCCURRENCE TIME						
D	04-07-2023		13:30						
С	KVPL11D01	APPLICABLE)			2AM-ME	E NUMBER	(IF APPLICABLE)		
D	GEOGRAPHIC PLACE NAME OR Meliadine Gold Pro	DISTANCE AND DIRECTION	N FROM NAMED L	OCATION				TJUBISDICTION	OB OCEAN
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F	Agnico Eagle Mine	s Ltd.	Meliadin	e, Rank	ress or off (in Inlet,	Nunav	on ut, X0C 0G0)	
G	ANY CONTRACTOR INVOLVED		CONTRACTOR	ADDRESS C	OR OFFICE LO	CATION			
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Η	SECOND PRODUCT SPILLED (IF	APPLICABLE)	QUANTITY IN LI	TRES, KILO	GRAMS OR CL	JBIC METRI	ES U.N. NUMBEF	}	
I	SPILL SOURCE		SPILL CAUSE				AREA OF CO	NTAMINATION IN	SQUARE METRES
•				rror					
J	N/A	RECOVERT	N/A	A5515 TAINC	JE REQUIRED		N/A	PERSONS, PROF	PERTY OR EQUIPMENT
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May 4th, 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

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

On April 7th, 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email (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 7th, 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.



Sent from Meliadine



Appendix – Photos





Photo 1: 20 L Sewage spill at powerplant washcar.



Photo 2: 20 L Sewage spill post remediation.



NT-NU SPILL REPORT

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

REPORT LINE USE ONLY

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

A	REPORT DATE: MONTH – DAY – YEAR 04-18-2023			13:30		X	XORIGINAL SPILL REPORT,		REPORT NUMBER		
В	OCCURRENCE DATE: MONTH	– DAY – YEAR		OCCURRENCE TIME 15:30			JPDATE # THE ORIGINAL SPILL	REPORT	[_]		
С	LAND USE PERMIT NUMBER (I	IF APPLICABLE)		WATER LICENCE NUMBER (IF 2BB-MEL1424			APPLICABLE)				
D	GEOGRAPHIC PLACE NAME O Meliadine Gold Pr	ION FROM NAMED L			NAVUT	ADJACENT JUR	ISDICTION	OR OCEAN			
E	LATITUDE DEGREES 63	MINUTES 2	SECONDS 2'	1	LONGITUDE DEGREES 92		MINUTES 13	SE	ECONDS 41		
F	RESPONSIBLE PARTY OR VES Agnico Eagle Min	ISSEL NAME	RESPONSIBLE Meliadin	RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION Meliadine, Rankin Inlet, Nunavut, X0C 0G0							
G	ANY CONTRACTOR INVOLVED)	CONTRACTOR			N					
	PRODUCT SPILLED		QUANTITY IN L	ITRES, KIL	OGRAMS OR CUBIC M	IETRES	U.N. NUMBER				
н	Drill Cuttings		40 L				N/A				
	SECOND PRODUCT SPILLED ((IF APPLICABLE)	QUANTITY IN L	ITRES, KIL	OGRAMS OR CUBIC MI	IETRES	U.N. NUMBER				
Ι	SPILL SOURCE Unknown		SPILL CAUSE	า			AREA OF CONTAMI	NATION IN	SQUARE METRES		
J	FACTORS AFFECTING SPILL C	DR RECOVERY	DESCRIBE ANY	ASSISTAN	ICE REQUIRED		HAZARDS TO PERS	Sons, Proi	PERTY OR EQUIPMENT		
к	 K 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. 								er a closer		
L	REPORTED TO SPILL LINE BY Brett Fairbairn	POSITION Env. Coordi	nator		ĒR		CATION CALLING FRO	T MC	elephone 819-759-3555		
Μ	ANY ALTERNATE CONTACT Kyle Conway	POSITION General Sup	pervisor		ĒR		ERNATE CONTACT Ieliadine CATION	A	LTERNATE TELEPHONE 819-860-1033		
		•	REPORT LIN	IE USE ON	ILY			I			
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FIRS	T SUPPORT AGENCY										
SEC	OND SUPPORT AGENCY										
THIF	D 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 XOC 0G0

Sent via email: kyle.amsel@rcaanc-cirnac.qc.ca

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

On April 18th, 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email (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 16th and 17th, 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 17th, 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 17th, 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 20th, 2023, with a dozer, skid steer and an equipment sled used to recover the spilled drill cuttings. Final cleanup was complete on April 20th, 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.





Appendix – Photos





Photos 1: 40 L Drill cuttings water spill.



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



NT-NU SPILL REPORT

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

REPORT LINE USE ONLY

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

A	REPORT DATE: MONTH – DAY – 05-05-2023	DAY – YEAR		12:30		XORIGINAL SPILL REPORT,		REPORT NUMBER	
	OCCURRENCE DATE: MONTH -	DAY – YEAR		OCCURRENCE TIME				-	
P	04-05-2023			12:00)		LREPORT		
C	KVPL11D01	- APPLICABLE)			2AM-MEL1631				
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		5,000				JT 🗆 ADJACENT JUF	RISDICTION	DR OCEAN	
E	DEGREES 63	MINUTES 2	SECONDS 2'	21 DEGREES 92 MINUTES 13 SECONDS 41					
F	RESPONSIBLE PARTY OR VESS	el name es Ltd.	RESPONSIBLE Meliadin	e Party address or office location ne, Rankin Inlet, Nunavut, X0C 0G0					
G			CONTRACTOR	ADDRESS OR OFFICE LOCATION					
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H	SECOND PRODUCT SPILLED (I	F APPLICABLE)		ITRES, KILC	OGRAMS OR CUBIC METR	ES U.N. NUMBER			
			SPILL CAUSE					SQUARE METRES	
	Sewage pipe		Equipme	ent failu	ure	1			
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May 27th, 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

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

On May 5th, 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email (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 4th, 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.





Appendix – Photos





Photos 1: Sewage spill location.



Photos 2: Spill location post remediation.



NT-NU SPILL REPORT

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

REPORT LINE USE ONLY

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

	05-08-2023	Y – YEAR F		11:20		ORIGINAL SPILL REPORT,	REPORT NUMBER		
B	OCCURRENCE DATE: MONTH – D. 05-07-2023	AY – YEAR		OCCURR 14:00	ENCE TIME		UPDATE # THE ORIGINAL SPILL REPORT	⁻	
С	LAND USE PERMIT NUMBER (IF A	APPLICABLE)		WATER LICENCE NUMBER (IF APPLICABLE) 2AM-MEL1631					
D	GEOGRAPHIC PLACE NAME OR D Meliadine Gold Proj	DISTANCE AND DIRECTIC	ON FROM NAMED L	DCATION REGION □ NWT XNUNAVUT □ ADJACENT JURISDICTION OR OCEAN					
E	LATITUDE	NUTEO 2	21 SECONDS	LONGITUDE 21					
	RESPONSIBLE PARTY OR VESSE		RESPONSIBLE	LE PARTY ADDRESS OR OFFICE LOCATION					
	Agnico Eagle Mines	s Ltd.	Meliadin	e, Ran	kin Inlet, Nun	avut,	, X0C 0G0		
G	N/A		ADDRESS	OR OFFICE LOCATION	N				
	PRODUCT SPILLED QUANTITY IN I			TRES, KILO	OGRAMS OR CUBIC M	ETRES			
Н						FTDEO			
	N/A	AFFLICABLE)	N/A	THEO, KIL		EINES	N/A		
Ι	SPILL SOURCE Snow melt containi	ng sediment	SPILL CAUSE Freshet				AREA OF CONTAMINATION IN Unknown	SQUARE METRES	
J	FACTORS AFFECTING SPILL OR F	RECOVERY	DESCRIBE ANY	ASSISTAN	NCE REQUIRED		HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT		
	 While conducting a routine inspection, runoff was structures at monitoring station MEL-SR-1 at Itiv that TSS concentrations could exceed the NWB V Sediment and erosion controls were deployed to submitted as due diligence, as the water sample received. Location of spill: 62 47'59.85"N, 92 5'3 approximately 75 m south. Pursuant to Part H, Section 8c of the Water Licer investigation is completed. 			Itivia. VB Wa	Turbidity fiel ter License 2	d rea AM-N	idings show results MEL1631 criteria foi	indicative	
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June 6th, 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.qc.ca

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

On May 8th, 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email (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 7th, 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



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 7th, 2023) can be found in Appendix B.

	Total S	uspended Solid	s (mg/L)	2AM-MEL1631	, Part D. Item 18
Date	Itivia Culvert West	Itivia Culvert East	Itivia Culver 1/MEL-SR-1	Maximum Monthly Mean Concentration	Maximum Concentration in a Grab Sample
07-May-23	_1	_1	48		
08-May-23	180	280	30		100
09-May-23	580	290	58		
10-May-23	78	140	46	FO	
11-May-23	_2	150	9	50	100
12-May-23	80	77	10		
13-May-23	_3	_3	14		
Average	229	187	30		

 Table 1. Analytical Results

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

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

³ Samples not taken due to acceptable in field turbidity readings.

The monthly compliance sample collected on May 7th, 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 $8^{th} - 13^{th}$) 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
 Direct 819.759.3555 x4603212

 819.860.1033
 Agnico Eagle Mines Limited - Meliadine Mine, Suite 879 - Rankin Inlet, Nunavut, Canada X0C 0G0

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Appendix A – Photos





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.



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

		Date	Date		
Analyses	Quantity	Extracted	Analyzed	Laboratory Method	Analytical Method
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/ BBY7SOF -00002	PEPA 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
рН	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

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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

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 Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

> Total Cover Pages : 2 Page 2 of 13



RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		VTX771			VTX771		
Sampling Data		2023/05/07			2023/05/07		
		14:00			14:00		
COC Number		n/a			n/a		
	UNITS	MEL-SR 1	RDL	QC Batch	MEL-SR 1 Lab-Dup	RDL	QC Batch
Calculated Parameters							
Calculated TDS	mg/L	67	1.0	8658891			
Dissolved Hardness (CaCO3)	mg/L	54.6	0.50	8668774			
Inorganics							
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-)	mg/L	<0.10	0.10	8659639			
Orthophosphate (P)	mg/L	0.011	0.010	8659395			
рН	рН	7.39		8659659			
Total Phosphorus	mg/L	0.12	0.020	8660160	0.11	0.020	8660160
Reactive Silica (SiO2)	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 CaCO3)	mg/L	22	1.0	8659648			
Dissolved Chloride (Cl-)	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 (SO4)	mg/L	14	0.50	8668763			
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	8659762			
Metals							
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 Du	plicate						



RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		VTX771			VTX771		
Sampling Date		2023/05/07			2023/05/07		
		14:00			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 Data		2023/05/07			2023/05/07		
		14:00			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			
Petroleum Hydrocarbons	•			•			
Total Oil & Grease	mg/L	2.1	0.50	8660010			
RDL = Reportable Detection Limit QC Batch = Quality Control Batch			•		•		
Lab-Dup = Laboratory Initiated Du	uplicate						



ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

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



Collected: 2023/05/07

TEST SUMMARY

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

Sample ID: MEL-SR 1 Matrix: Water				I	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
рН	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: Sample ID: Matrix:	VTX771 Dup MEL-SR 1 Water					Collected: Shipped: Received:	2023/05/07 2023/05/10
Test Description		Instrumentation	Batch	Extracted	Date Analyzed	Analyst	
Total Phosphorus (Colour	imetric)	SKAL/P	8660160	2023/05/11	2023/05/12	Sachi Patel	



GENERAL COMMENTS

Each te	emperature is the ave	rage of up to th	ree cooler temperatures taken at receipt					
	Deckage 1 10.7 $^{\circ}$ C							

Package 1 10.7°C

Revised Report (2023/06/05): Re-repoting requested by client.

Results relate only to the items tested.



QUALITY ASSURANCE REPORT

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

Sampler Initials: GL

SPIKED BLANK QC Standard Matrix Spike Method Blank RPD QC Batch Parameter Date % Recovery QC Limits **QC** Limits Value UNITS Value (%) QC Limits % Recovery QC Limits % Recovery 2023/05/11 75 - 125 80 - 120 8659395 Orthophosphate (P) 90 91 < 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 80 - 120 20 96 80 - 120 99 < 0.10 mg/L 2.8 8659648 Alkalinity (Total as CaCO3) 2023/05/11 98 85 - 115 <1.0 mg/L 0.15 20 N/A 8659659 pН 2023/05/11 102 98 - 103 0.15 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 20 NTU 5.1 8660010 Total Oil & Grease 2023/05/12 99 85 - 115 < 0.50 mg/L 0.25 25 8660160 2023/05/12 80 - 120 80 - 120 <0.020 20 80 - 120 **Total Phosphorus** 101 100 mg/L 4.0 95 8660268 2023/05/12 95 99 < 0.050 20 Total Ammonia-N 75 - 125 80 - 120 mg/L 0.37 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 20 96 85 - 115 13 8663532 **Total Dissolved Solids** 2023/05/15 <10 20 90 - 110 mg/L 17 98 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 2023/05/15 mg/L 8668773 Total Aluminum (Al) 104 80 - 120 98 80 - 120 < 0.0030 8668773 Total Antimony (Sb) 2023/05/15 108 80 - 120 103 80 - 120 < 0.00050 mg/L 8668773 Total Arsenic (As) 2023/05/15 100 80 - 120 < 0.00010 108 80 - 120 mg/L 8668773 Total Barium (Ba) 2023/05/15 105 80 - 120 99 80 - 120 < 0.0010 mg/L 8668773 2023/05/15 97 80 - 120 97 80 - 120 < 0.00010 mg/L Total Beryllium (Be) 8668773 Total Bismuth (Bi) 2023/05/15 100 80 - 120 100 80 - 120 < 0.0010 mg/L 2023/05/15 94 < 0.050 8668773 Total Boron (B) 99 80 - 120 80 - 120 mg/L 8668773 Total Cadmium (Cd) 2023/05/15 80 - 120 102 80 - 120 < 0.000010 105 mg/L 8668773 2023/05/15 80 - 120 103 80 - 120 < 0.0010 Total Chromium (Cr) 105 mg/L 8668773 2023/05/15 Total Cobalt (Co) 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 2023/05/15 8668773 Total Lead (Pb) 102 80 - 120 98 80 - 120 < 0.00020 mg/L 94 8668773 Total Lithium (Li) 2023/05/15 94 80 - 120 80 - 120 < 0.0020 mg/L

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QUALITY ASSURANCE REPORT(CONT'D)

Agnico-Eagle

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

			Matrix	Spike	SPIKED	BLANK	Method I	Blank	RPD		QC Standard	
QC Batch	Parameter	Date	% 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		

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QUALITY ASSURANCE REPORT(CONT'D)

Agnico-Eagle

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

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% 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 (TI)	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:

Anastassia Hamanov, Scientific Specialist

avisting Carriere

Cristina Carriere, Senior Scientific Specialist

David Huang, BBY Scientific Specialist

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

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.



Exceedance Summary Table – Metal Mining Effluent Reg

Result Exceedances

Sample ID	Bureau Veritas ID	Parameter	Criteria	Result	DL	UNITS
No Exceedances						
The exceedance summary ta	ble is for information purp	oses only and should	not be considered a comp	rehensive listing or	statement of	conformance to
applicable regulatory guideli	nes.					



NT-NU SPILL REPORT

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

REPORT LINE USE ONLY

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

Α	REPORT DATE: MONTH - DAY - YEAR 05-22-2023		13:00			CORIGINAL SPILL REPORT,		REPORT NUMBER				
В	OCCURRENCE DATE: MONTH – DAY – YEAR 05-22-2023			OCCURRE	INCE TIME		O THE ORIGINAL SPILL REPORT					
С	LAND USE PERMIT NUMBER (IF APPLICABLE)			WATER LICENCE NUMBER (IF 2AM-MEL1631			APPLICABLE)					
D	GEOGRAPHIC PLACE NAME (OR DISTANCE AND DIREC roject	TION FROM NAMED LC	DCATION		UNAVUT	ADJACENT JUF	RISDICTION	OR OCEAN			
Е	LATITUDE DEGREES 63	MINUTES 2	SECONDS 21	l	LONGITUDE DEGREES 92		MINUTES 13	SE	CONDS 41			
F	RESPONSIBLE PARTY OR VESSEL NAME RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION Agnico Eagle Mines Ltd. Meliadine, Rankin Inlet, Nunavut, X0C 0G0											
G	ANY CONTRACTOR INVOLVE	D	CONTRACTOR A	ADDRESS OR OFFICE LOCATION								
	PRODUCT SPILLED			RES, KILOGRAMS OR CUBIC METRES U.N. NUMBER								
Н												
	N/A	(IF APPLICABLE)	N/A	QUANTITY IN LITRES, KILOGRAMS OF CUBIC METRES				N/A				
I	SPILL SOURCE MSB Lift Station		SPILL CAUSE Equipmer	nt Fail	ure		AREA OF CONTAMINATION IN SQUARE METRES					
J	FACTORS AFFECTING SPILL	OR RECOVERY	DESCRIBE ANY	ASSISTAN	CE REQUIRED	HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT						
К	 undertaken. The coordinates of the spill are 63° 2'21.73" N, 92°13'40.84" W. No water bodies were impacted by this spill. The nearest natural water body (G2) is 310 m north. K Pursuant to Part H, Item 8c of water license 2AM-MEL1631, a follow up report will be issued after the investigation is completed. Reported by Brett Fairbairn, Environment Coordinator 819-759-3555 ext. 4603996 Brett.fairbairn@agnicoeagle.com , Sara.Savoie@agnicoeagle.com ext. 4603212 											
L	REPORTED TO SPILL LINE BY Brett Fairbairn	POSITION	inator	EMPLOYE	VYER LO		OCATION CALLING FROM		TELEPHONE 819-759-3555			
Μ	ANY ALTERNATE CONTACT Sara Savoie	pervisor				LTERNATE CONTACT ALTERNATE TELEI						
			REPORT LINE	USE ON	LY							
N	RECEIVED AT SPILL LINE BY		EMPLOYE	R	DCATION CALLED		REPORT LINE NUMBER					
							ELLOWKNIFE, NT (867) 920-8130		367) 920-8130			
AGENCY CONTACT NAME					ACT TIME	REMARKS						
LEA	JAGENCY			_								
FIRS	T SUPPORT AGENCY			_								
SEC	OND SUPPORT AGENCY											
тнів	D SUPPORT AGENCY											



June 16, 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

Re: Follow-up Report Spill #2023-211 – Release of 200 L of Sewage at the Meliadine Gold Mine

On May 22nd, 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email (spills@gov.nt.ca) of a spill of approximately 200 L of sewage at the Meliadine Gold Mine site (spill location coordinates: 63° 2' 21.73" N, 92° 13' 40.84"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 22nd, 2023, at approximately 12:30 am, an estimated 200 L of sewage was spilled to the industrial pad due to faulty levels indicator at the MSB lift station causing it to overflow. A worker discovered the spill occurring and notified his supervisor.

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 Energy and Infrastructure Maintenance Supervisor was notified that the spill was occurring and immediately sent a plumber to stop the spill and troubleshoot the issue. The impacted area was cleaned up using a vacuum truck. Approximately 100 L of liquid was recovered and returned to the Sewage Treatment Plant. The contaminated solid material was excavated and was placed in the Landfarm A sorting area to be screened before being placed in Landfarm A.



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.





Appendix – Photos




Photos 1: Sewage spill location.



Photos 2: Spill location post remediation.



NT-NU SPILL REPORT

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

REPORT LINE USE ONLY

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

Α	REPORT DATE: MONTH – DAY 05-23-2023	°ORT DATE: MONTH – DAY – YEAR 5 -23-2023		07:00		♥ORIGINAL SPILL REPORT,		REPORT NUMBER				
В	OCCURRENCE DATE: MONTH	I – DAY – YEAR		OCCURRE 7:30	NCE TIME	UPDATE # TO THE ORIGINAL SPI	LL REPORT					
С	LAND USE PERMIT NUMBER	(IF APPLICABLE)	I	V	VATER LICENCE NUMBE	R (IF APPLICABLE)						
D	GEOGRAPHIC PLACE NAME (Meliadine Gold P	OR DISTANCE AND DIREC	CTION FROM NAMED LC	DCATION		/UT 🗆 ADJACENT JU	RISDICTION	DR OCEAN				
E	LATITUDE	MINUTES 2	SECONDS 21	L	ONGITUDE	MINUTER 13		CONDE 41				
	RESPONSIBLE PARTY OR VE	SSEL NAME	RESPONSIBLE P	RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION								
	Agnico Eagle Mir	nes Ltd.	Meliadine	Meliadine, Rankin Inlet, Nunavut, X0C 0G0								
G	N/A	D	N/A	DDRESS C	OFFICE LOCATION							
	PRODUCT SPILLED		QUANTITY IN LIT	RES, KILO	GRAMS OR CUBIC MET	RES U.N. NUMBER						
Н	Sewage		15 Liters									
	N/A	N/A	RES, KILO	GRAMS OR CUBIC MET	N/A							
	SPILL SOURCE	SPILL CAUSE			AREA OF CONTAI	MINATION IN S	SQUARE METRES					
	Vacuum truck co	Equipmer	nt Failu	ure	0.5							
J	FACTORS AFFECTING SPILL	DESCRIBE ANY	ASSISTAN	CE REQUIRED	HAZARDS TO PER	RSONS, PROF	PERTY OR EQUIPMENT					
	ADDITIONAL INFORMATION, (COMMENTS, ACTIONS PF	ROPOSED OR TAKEN TO	CONTAIN	, RECOVER OR DISPOS	E OF SPILLED PRODUCT	AND CONTAI	MINATED MATERIALS				
к	The coordinates spill. The nearest Pursuant to Part investigation is c Reported by Bret Brett.Fairbairn@a	of the spill are natural water I H, Item 8c of w ompleted. t Fairbairn, Env agnicoeagle.co	63º 2' 15''N, 92 body (G2) is 5 ater license 2/ /ironment Coc m.	2º 13' 2 65 m w AM-ME ordinat	29''W. No wate vest. EL1631, a follov or 819-759-355	r bodies were i w up report will 55 ext. 4603996	mpacted be issu ,	l by this ed after the				
L	REPORTED TO SPILL LINE BY Brett Fairbairn	POSITION	dinator	EMPLOYER	7	LOCATION CALLING FI	TI NOR	ELEPHONE 319-759-3555				
Μ	ANY ALTERNATE CONTACT Kyle Conway	POSITION General Su	upervisor	EMPLOYER	F	ALTERNATE CONTACT	A	LTERNATE TELEPHONE				
	1	I	REPORT LINE	E USE ONI	LY		I					
М	RECEIVED AT SPILL LINE BY	POSITION		EMPLOYE	٦	LOCATION CALLED	R	EPORT LINE NUMBER				
		STATION OPERATO	DR			YELLOWKNIFE, NT	8)	67) 920-8130				
LEA		GNWT 🗆 GN 🗆 ILA 🗆		SIGNIF			FILE STATU					
AGE	NCY	CONTACT NAME		CONTA	ACT TIME	REMARKS		S OPEN CLOSED				
LEA	DAGENCY							S OPEN CLOSED				
FIRS								S OPEN CLOSED				
	ST SUPPORT AGENCY							S OPEN CLOSED				
SEC	T SUPPORT AGENCY							S OPEN CLOSED				



June 15, 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.qc.ca

Re: Follow-up Report Spill #2023-213 – Release of 15 L of Sewage at the Meliadine Gold Mine

On May 23rd, 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email (spills@gov.nt.ca) of a spill of approximately 15 L of sewage at the Meliadine Gold Mine site (spill location coordinates: 63° 2' 15" N, 92° 13' 29" 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 22nd, 2023, at approximately 07:30, an estimated 15 L of sewage was spilled onto the industrial pad by the temporary power plant wash car due to a connection failure. No water bodies were impacted by this spill. The closest water body (G2) is approximately 565 meters west, as seen in Figure 1.





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

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:



- Missing gasket on the camlock which connects the vacuum truck to the wash car.
- The vacuum truck hose was not properly inspected prior to use.

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

- A new gasket was installed within the camlock to prevent future leaks.
- The supervisor met with employees to review the importance of performing complete checks on their equipment/tools before proceeding with their jobs.

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



Appendix – **Photos**





Photos 1: Sewage spill location.



Photos 2: Spill location post remediation.



NT-NU SPILL REPORT

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

REPORT LINE USE ONLY

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

Α	REPORT DATE: MONTH – DAY		REPORT TIME 13:00			XORIGINAL SPILL REPORT,					
	OCCURRENCE DATE: MONTH	23-03-23 CURRENCE DATE: MONTH – DAY – YEAR				ME		OR			
B	2023-05-23			10:30)			TO THE ORIGINA	L SPILL REPORT		
С	LAND USE PERMIT NUMBER (I	IF APPLICABLE)		WATER LICENCE NUMBER (IF APPLICABLE)							
	GEOGRAPHIC PLACE NAME O	R DISTANCE AND DIRECTION	ON FROM NAMED L								
D	Meliadine Gold Mi	ine		□ NWT XNUNAVUT □ ADJACENT JURISDICTIO					I OR OCEAN		
F	LATITUDE	21	40						10	57	
	DEGREES 03 RESPONSIBLE PARTY OR VES		SECONDS 42	INDS 42 DEGREES 92 MINUTES 13 SECONDS 57 PONSIBLE PARTY ADDRESS OR OFFICE LOCATION							
F	Agnico Eagle Min	es Ltd	Meliadine	e, Ran	kin In	nlet, N	lunavı	ut, X0X 0G)		
G	ANY CONTRACTOR INVOLVED	CONTRACTOR A	ADDRESS	OR OFFI	ICE LOCA	TION					
	PRODUCT SPILLED Grey water	QUANTITY IN LI	TRES, KILO	OGRAMS	S OR CUB	IC METRE	S U.N. NUMBE	R			
H	SECOND PRODUCT SPILLED (QUANTITY IN LI	TRES, KILO	OGRAMS	S OR CUB	IC METRE	S U.N. NUMBE	R			
	SPILL SOURCE	SPILL CAUSE					AREA OF CO	INTAMINATION I	I SQUARE METRES		
	Distribution pipe	Broken p	ipe				26				
J	Spill beneath infra	None	ASSISTAN	ICE REQ	QUIRED		None) PERSONS, PR	DPERTY OR EQUIPMENT		
	ADDITIONAL INFORMATION, C	OMMENTS, ACTIONS PROP	OSED OR TAKEN TO	O CONTAII	N, RECO	VER OR E	DISPOSE (OF SPILLED PROD	SPILLED PRODUCT AND CONTAMINATED MATERIALS		
к	and reported the i The coordinates of spill. The closest Pursuant to part H after the investiga Reported by	of the spill are 63 water body (G2) H, Section 4c of t	supervisor. 3° 2'25.42"N is 277 mete he Water Li	, 92°1 r norti cense	13'37. h wes 2AM	.57"W st. I-MEL	. No w 1631,	vater bodie a follow u	s were im p report w	pacted by this ill be issued	
-	REPORTED TO SPILL LINE BY	POSITION		EMPLOYE	ER			LOCATION CALLI	NG FROM	TELEPHONE	
	Kyle Conway	Env. Supervi	sor	AEM				Meliadine		819-860-1033	
Μ	ANY ALTERNATE CONTACT Randy Schwandt	Env. Coordir	nator	AEM	ĒR			ALTERNATE CON Meliadine	TACT	ALTERNATE TELEPHONE 819-759-3555	
			REPORT LIN	E USE ON	ILY						
N	RECEIVED AT SPILL LINE BY	POSITION		EMPLOYE	ĒR			LOCATION CALLE	D	REPORT LINE NUMBER	
								YELLOWKNIFE, N		(867) 920-8130	
				SIGN			JR ⊔ MA.		N FILE STA		
AGE					act fim	IE					
	J AGENCY										
FIRS	T SUPPORT AGENCY										
SEC	OND SUPPORT AGENCY										
тнів	D SUPPORT AGENCY										



June 21st, 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

Re: Follow-up Report Spill #2023-215 – Release of 1 m³ of kitchen grey water at the Meliadine Gold Mine

On May 23rd, 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email (spills@gov.nt.ca) of a spill of approximately 1m³ of grey water at the Meliadine Gold Mine site (spill location coordinates: 63°2'25.42"N, 92°13'37.57"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 23rd, 2023, at approximately 10:30 am, an estimated 1m³ of kitchen grey water was spilled to the industrial pad due to a cracked drainpipe. A worker identified the spill during an inspection around the kitchen area and notified their supervisor.

No water bodies were impacted by this spill. The closest water body (G2) is approximately 277 meters northwest, as seen in Figure 1.





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

Spill Response and Remediation

The Energy and Infrastructure Maintenance Supervisor was notified of the spill and immediately shut off the water supply to the kitchen to prevent further leakage. Health and safety concerns limited equipment and personnel access to the spill location and prevented the Maintenance Team from recovering the spilled material. Due to the topography of the area and the freezing conditions at the time of the spill, the spill did not migrate from the footprint of the building, and will be reclaimed when the infrastructure is dismantled.

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 weight of ice/snow melt on the drainpipe and a missing support caused the failure of the drainpipe.

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

• Additional support has been added to the drainpipe.

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



Appendix – Photos





Photo 1: Grey water spill location and source.



NT-NU SPILL REPORT

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

REPORT LINE USE ONLY

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

A	REPORT DATE: MONTH – DAY – Y 06-06-2023	/EAR	12:10						
	OCCURRENCE DATE: MONTH – I	DAY – YEAR	OCCUR	RENCE TIME	OR UPDATE #		-		
В	06-06-2023		7:30	·	TO THE ORIGINAL SPIL	L REPORT			
C	LAND USE PERMIT NUMBER (IF . KVPL11D01	APPLICABLE)		WATER LICENCE NUMBE	R (IF APPLICABLE)				
D	GEOGRAPHIC PLACE NAME OR Meliadine Gold Pro	DISTANCE AND DIRECTION FROM NAME	DLOCATION	N REGION	′UT □ ADJACENT JUF	RISDICTION	OR OCEAN		
F	LATITUDE	•							
┝┺╸	DEGREES 63 M	INUTES 2 SECONDS	NDS 21 DEGREES 92 MINUTES 13 SECONDS 41						
F	Agnico Eagle Mine	s Ltd. Meliadi	liadine, Rankin Inlet, Nunavut, X0C 0G0						
G			R ADDRESS	S OR OFFICE LOCATION					
			LITRES KI						
	Sewage	10 Lite	ís		N/A				
H	SECOND PRODUCT SPILLED (IF	APPLICABLE) QUANTITY IN	LITRES, KII	LOGRAMS OR CUBIC MET	RES U.N. NUMBER				
	N/A	N/A			N/A				
	SPILL SOURCE Assay Lab Lift Stat	ion Equipm	ient Fai	ilure	AREA OF CONTAM	INATION IN S	SQUARE METRES		
J	FACTORS AFFECTING SPILL OR	RECOVERY DESCRIBE A	NY ASSISTA	ANCE REQUIRED	HAZARDS TO PER	SONS, PROF	PERTY OR EQUIPMENT		
	ADDITIONAL INFORMATION, COM	I IMENTS, ACTIONS PROPOSED OR TAKEI		AIN, RECOVER OR DISPOSE	E OF SPILLED PRODUCT	AND CONTAI	MINATED MATERIALS		
	An overflow of the spill was contained	assay lab lift station resu I to the local area. Absor	bent pa	a 10 L spill of so ads were deploye	ewage to the in ed upon discov	dustria	he spill.		
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K L M	An overflow of the spill was contained The coordinates of spill. The nearest n Pursuant to Part H, investigation is cor Reported by Spence spencer.knowles@	assay lab lift station result to the local area. Absord the spill are 63° 2' 17.5''l atural water body (Lake Item 8c of water license npleted. er Knowles Environment agnicoeagle.com. POSITION Env. Technician POSITION General supervisor	Ilted in bent pa N, 92°13 G2) is 4 2AM-M t Techn EMPLOY AEM	a 10 L spill of so ads were deploye 3'37.2''W. No wa 450 m north. 1EL1631, a follow hician 819-759-35	ewage to the in ed upon discov ter bodies were v up report will 555 ext. 460390 LOCATION CALLING FF Meliadine	dustrial very of t e impac be issu 3 3	ELEPHONE 819-759-3555 ITERNATE TELEPHONE 819-860-1033		
K L M	An overflow of the spill was contained The coordinates of spill. The nearest n Pursuant to Part H, investigation is cor Reported by Spence spencer.knowles@	assay lab lift station result to the local area. Absord the spill are 63° 2' 17.5"l atural water body (Lake Item 8c of water license npleted. eer Knowles Environment agnicoeagle.com. POSITION Env. Technician POSITION General supervisor	Ilted in bent pa N, 92°13 G2) is 4 2AM-M t Techn EMPLOY AEM EMPLOY AEM	a 10 L spill of so ads were deploye 3'37.2''W. No wa 450 m north. 1EL1631, a follow nician 819-759-35	ewage to the in ed upon discov ter bodies were v up report will 555 ext. 460390	dustrial rery of t be issu 3	ELEPHONE B19-759-3555 LTERNATE TELEPHONE B19-860-1033		
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July 4th, 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: <u>kyle.amsel@rcaanc-cirnac.gc.ca</u>

Re: Follow-up Report Spill #2023-243 – Release of 10 L of Sewage at the Meliadine Gold Project

On June 6th, 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email (spills@gov.nt.ca) of a spill of approximately 10 L of sewage at the Meliadine Gold Project site (spill location coordinates: 63° 2' 17.5" N, 92° 13' 37.2" 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 June 6th, 2023, at approximately 7:30 am, an estimated 10 L of sewage was spilled onto the industrial pad at the Assay Lab lift station. During a routine lift station inspection an employee noticed that the lift station overflowing and manually initiated the pump to lower the level. The spilled sewage was contained to the local area. No water bodies were impacted by this spill. The closest water body (G2) is approximately 450 meters north, as seen in Figure 1.





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

Spill Response and Remediation

The employee switched the pump from the automatic to the manual setting to lower the level of the tank and prevent further spillage. Absorbent pads were used to collect most of the free liquid on the ground. However, a residual amount of material accumulated underneath the lift station enclosure and is inaccessible. This area will be remediated upon decommissioning of the lift station enclosure.



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 float system was damaged due to accumulation of oil, grease and debris.
- The float was stuck in the up position triggering the pump to run to failure.

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

- The float system was replaced.
- Plumbers have been instructed to inspect the float system during their regular preventive maintenance checks. This proactive approach aims to identify and address any instances where a float may be stuck in the raised activated position.

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 | Direct 819.759.3555 x4603996 | Agnico Eagle Mines Limited - Meliadine Mine, Suite 879 - Rankin Inlet, Nunavut, Canada X0C 0G0 agnicoeagle.com f O I fin IN Sent from Meliadine



Appendix – Photos



Photo 1: Sewage spill location.



Photo 2: Sewage spill post remediation.



NT-NU SPILL REPORT

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

REPORT LINE USE ONLY

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

Δ	REPORT DATE: MONTH – DAY -	-YEAR		REPORT TIME			XORIGINAL SPI	_L REPORT,		
<u> </u>							OR		REPORT NUMBER	
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J K L M LEAL LEAL LEAL FIRS SECC	ADDITIONAL INFORMATION, CA The culvert locate road upstream of a indicative that TSS Licence 2AM-MEL and flow through f sample results fro 5'35.63"W. The clo Pursuant to Part H investigation is co REPORTED TO SPILL LINE BY Brett Fairbairn ANY ALTERNATE CONTACT Matt Gillman RECEIVED AT SPILL LINE BY C AGENCY C CC CG G AGENCY C CC CCG G AGENCY C CCG C G AGENCY C C CCG C G AGENCY C CCG C C AGENCY C C CCG C G AGENCY C C C CCG C G AGENCY C C C CCG C G AGENCY C C C C C C C C C C C C C C C C C C	DMMENTS, ACTION d at Itivia fa sample loca S concentra 1631. Mitig the culvert om the labor osest water d, Section 8 ompleted. POSITION Env. Co POSITION Env. Su POSITION STATION OPE NWT G N LL/ CONTACT NAME	ANS PROPOSED OR TAKEN T ailed during a signation MEL-SR1. ations could exc ations could exc ation measures has resumed. The ratory have not y body (Melvin Ba body (Melvin Ba	ICONTAIN SIGNI CONTAIN SIGNI CONTAIN SIGNI CONTAIN	N, RECOVER OF Ity field r S criteria mplemen ort is sub en receive approximation , a follow FR FICANCE IM ACT TIME	I event eadings a under ted to re omitted ed. Loca ately 75 7-up rep	DE SPILLED PROJ resulting i s at MEL-S Part D Iter educe the as due dil ation of sp m south. ort will be LOCATION CALLI Meliadine LOCATION CALLI VELLOWKNIFE, N JOR UNKNOW REMARKS	NG FROM	flow over the esuits NWB Water of sediment the water 59.85''N, 92 er a closer relephone 819-759-3555 ALTERNATE TELEPHONE 819-759-3555 REPORT LINE NUMBER (867) 920-8130 US OPEN CLOSED	



July 5th, 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.qc.ca

Re: Follow-up Report Spill #2023-246 – MEL-SR-1 Runoff at the Meliadine Gold Project

On June 7th, 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email (spills@gov.nt.ca) of a potential Total Suspended Solids (TSS) exceedance at the Meliadine Gold Mine, Itivia site (spill location coordinates: 62 47'59.85''N, 92 5'35.63''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;
- subsection 38(7) of the Fisheries Act.

Description of Incident

On June 7th, 2023, at approximately 4:00 am, the two culverts situated at Itivia sustained damage during a 1 in 50-year rainfall event. Due to substantial water accumulation within the catchment basin, the buoyancy force of air within the submerged culverts exceeded the weight of the culverts and cover resulting in uplift of the upstream portions of the culverts. Water could no longer be conveyed through the culverts and an unknown volume of water flowed over the roadway upstream of sample location MEL-SR-1. The MEL-SR-1 monitoring station is located at the southern end of Itivia and flows out to Melvin Bay approximately 75 meters to the south.

Field measurements of turbidity indicated a potential exceedance of the Total Suspended Solids (TSS) effluent quality limits specified under Part D Item 18 of the 2AM-MEL1631 Water Licence.



Samples were collected at MEL-SR-1 and subsequently sent to an external laboratory for analysis. The closest water body (Melvin Bay) is.



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



Response and Remediation

Following the Sediment and Erosion Management Plan, the Energy and Infrastructure Department undertook measures to mitigate sediment mobilization and transport caused by overflowing water on the road. These measures included;

- 1. Pumping water from the upstream to the downstream side of the culvert to prevent water from overflowing onto the roadway;
- 2. Facilitate unimpeded water passage by pressing the culvert inlets down to their original position using heavy equipment;
- 3. Installation of supplementary sediment control straw logs and wood logs.

As a result of these interventions, the water flow across the road was stopped within the first hour of implementation. Field monitoring also indicated that actions taken and flow recession resulted in a significant decrease in water turbidity, as shown by the event reading at 283 NTU in the morning and the subsequent reading in evening at 19 NTU. As required, regulatory and due diligence samples were collected during the event and later in afternoon. Analytical results for the monitoring duration are presented in Table 1. The Certificate of Analysis for the regulatory sample and due diligence sample (June 7th, 2023) can be found in Appendix B.

Analytical results for MEL-SR-1 reported a concentration of 2,300 mg/L TSS in the morning, exceeding the allowable TSS effluent quality limits listed under Part D Item 18 of the 2AM-MEL1631 Water Licence. Subsequent sampling later in the day reported a concentration of 13 mg/L, below the allowable TSS effluent quality limits listed under Part D Item 18 of the 2AM-MEL1631 Water Licence.

The results show that the response and remediation measures effectively addressed the issue of sediment transport and helped restore the desired flow conditions.

	Total S	uspended Solid	s (mg/L)	2AM-MEL1631, Part D. Item 18		
Date	Itivia Culvert West	Itivia Culvert East	Itivia Culver 1/MEL-SR-1	Maximum Monthly Mean Concentration	Maximum Concentration in a Grab Sample	
07-Jun-23 (AM)	58	140	2,300	50	100	
07-Jun-23 (PM)	43	35	13 ¹	50	100	

 Table 1. Analytical Results

¹Laboratory duplicate sample result 15 mg/L.



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 culvert was not designed to manage the runoff amplitude of the June 7th rainfall event. The design of the culverts was based on a 1 in 25-year return period, while the environment received an actual rainfall of 50.7 mm per day, equivalent to a 1 in 50-year return period. It is also worth noting that the 50.7 mm of rainfall was received within only a few hours, contributing to an amplified instantaneous runoff rate. As the culvert was not designed for this rate of runoff, the upstream basin was flooded above the inlet of the culvert;
- The uncovered sections of the culverts were too long, and the buoyancy force of the air within the submerged culvert temporarily exceeded the weight of the culvert and cover material causing uplift of the upstream portions; and
- The inlets of the culverts may have been partially blocked by erosion and sediment control installations.

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

- Cut off damaged inlets to allow water flow through culverts until permanent repairs or replacements can be made (completed);
- Until the culverts are repaired or replaced, ensure that a pump with sufficient pumping capacity will be left at the culvert and be ready to operate as soon as an extreme event is forecasted;
- Repair or replace culverts during dry season (fall/winter);
- Consider designing the repaired or replaced culverts to manage rainfall events of greater magnitude, relative to original design;
- Ensure that design and associated construction provide sufficient cover of upstream culvert portions to prevent damage if flooding within the upstream basin occurs again;
- Ensure there is no potential for culvert inlets to become obstructed by sediment and erosion controls during large runoff events;



- Carry out an assessment of all culverts on the Meliadine site, All Weather Access Road (AWAR), and Bypass Road to ensure a similar risk does not exist elsewhere; and
- Share learnings of this event with other Agnico Eagle operations to ensure similar occurrences do not happen at other Agnico Eagle operations.

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



Sent from Meliadine

Kyle ConwayEnvironment General Supervisorkyle.conway@agnicoeagle.comDirect 819.759.3555 x4603212Mobile819.860.1033Agnico Eagle Mines Limited - Meliadine Mine, Suite 879 - Rankin Inlet, Nunavut,
Canada X0C 0G0agnicoeagle.comfIm



Appendix A – Photos





Photo 1 – Situation upon arrival.



Photo 2 – 1h after response.



Photo 3 – Temporary repair to the culvert inlets.



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 XOC 0G0

> Report Date: 2023/07/05 Report #: R7701768 Version: 6 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C3H2457

Received: 2023/06/13, 09:21

Sample Matrix: Water # Samples Received: 6

		Date	Date		
Analyses	Quantity	Extracted	Analyzed	Laboratory Method	Analytical Method
Alkalinity	6	N/A	2023/06/17	CAM SOP-00448	SM 23 2320 B m
Chloride by Automated Colourimetry	6	N/A	2023/06/19	CAM SOP-00463	SM 23 4500-Cl E m
Fluoride	6	2023/06/16	2023/06/19	CAM SOP-00449	SM 23 4500-F C m
Mercury (low level)	6	2023/06/17	2023/06/19	CAM SOP-00453	EPA 7470 m
Low Level Chloride and Sulphate by AC (1)	6	N/A	2023/06/21	AB SOP-00020 / AB SOP- 00018	SM24 4500-CL/SO4-E m
Cyanide, Strong Acid Dissociable (SAD) (1)	6	2023/06/20	2023/06/20	CAL SOP-00270	SM 23 4500-CN m
Hardness Total (calculated as CaCO3) (2, 3)	6	N/A	2023/06/20	BBY WI-00033	Auto Calc
Hardness (calculated as CaCO3) (2)	6	N/A	2023/06/20	BBY WI-00033	Auto Calc
Na, K, Ca, Mg, S by CRC ICPMS (diss.) (2)	6	N/A	2023/06/20	BBY7SOP-00002	EPA 6020B R2 m
Elements by CRC ICPMS (dissolved) (2)	6	N/A	2023/06/19	BBY7SOP-00002	EPA 6020B R2 m
Na, K, Ca, Mg, S by CRC ICPMS (total) (2)	6	2023/06/14	2023/06/20	BBY7SOP-00002	EPA 6020B R2 m
Elements by CRC ICPMS (total) (2)	6	2023/06/19	2023/06/20	BBY7SOP-00003/BBY7SOF	PEPA 6020B R2 m
				-00002	
Silica (Reactive) (1)	6	N/A	2023/06/22	AB SOP-00011	EPA370.1 R1978 m
Total Ammonia-N	6	N/A	2023/06/20	CAM SOP-00441	USGS I-2522-90 m
Nitrate & Nitrite as Nitrogen in Water (4)	2	N/A	2023/06/16	CAM SOP-00440	SM 23 4500-NO3I/NO2B
Nitrate & Nitrite as Nitrogen in Water (4)	4	N/A	2023/06/20	CAM SOP-00440	SM 23 4500-NO3I/NO2B
Total Oil and Grease	6	2023/06/19	2023/06/19	CAM SOP-00326	EPA1664B m,SM5520B m
рН	6	2023/06/16	2023/06/17	CAM SOP-00413	SM 4500H+ B m
Orthophosphate	6	N/A	2023/06/19	CAM SOP-00461	SM 23 4500-P E m
Calculated Total Dissolved Solids	6	N/A	2023/06/26		Auto Calc
Total Dissolved Solids	6	2023/06/17	2023/06/19	CAM SOP-00428	SM 23 2540C m
Total Phosphorus (Colourimetric)	6	2023/06/19	2023/06/19	CAM SOP-00407	SM 23 4500-P I
Low Level Total Suspended Solids	1	2023/06/16	2023/06/19	CAM SOP-00428	SM 23 2540D m
Low Level Total Suspended Solids	5	2023/06/19	2023/06/19	CAM SOP-00428	SM 23 2540D m
Turbidity	3	N/A	2023/06/16	CAM SOP-00417	SM 23 2130 B m
Turbidity	3	N/A	2023/06/17	CAM SOP-00417	SM 23 2130 B m

Remarks:

Page 1 of 25

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com



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: 2023/07/05 Report #: R7701768 Version: 6 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C3H2457

Received: 2023/06/13, 09:21

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 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.

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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

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 Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

> Total Cover Pages : 2 Page 2 of 25

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Bureau Veritas ID		WCF242			WCF242		
Sampling Date		2023/06/07			2023/06/07		
		17:40			17:40		
COC Number		n/a			n/a		
	UNITS	MEL-SR1	RDL	QC Batch	MEL-SR1 Lab-Dup	RDL	QC Batch
Calculated Parameters							
Calculated TDS	mg/L	310	1.0	8726407			
Dissolved Hardness (CaCO3)	mg/L	201	0.50	8742770			
Inorganics							
Total Ammonia-N	mg/L	<0.050	0.050	8736022			
Strong Acid Dissoc. Cyanide (CN)	mg/L	<0.00050	0.00050	8744245			
Total Dissolved Solids	mg/L	375	10	8730858			
Fluoride (F-)	mg/L	0.11	0.10	8732820			
Orthophosphate (P)	mg/L	<0.010	0.010	8735096			
рН	рΗ	7.92		8732822			
Total Phosphorus	mg/L	0.031	0.020	8736026			
Reactive Silica (SiO2)	mg/L	2.1	0.050	8748928			
Total Suspended Solids	mg/L	13	1	8730856	15	1	8730856
Turbidity	NTU	2.8	0.1	8732167	2.9	0.1	8732167
Alkalinity (Total as CaCO3)	mg/L	120	1.0	8732819			
Dissolved Chloride (Cl-)	mg/L	56	1.0	8735091			
Nitrite (N)	mg/L	<0.010	0.010	8732687			
Nitrate (N)	mg/L	<0.10	0.10	8732687			
Dissolved Sulphate (SO4)	mg/L	73	0.50	8744244			
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	8732687			
Metals							
Dissolved Aluminum (Al)	mg/L	0.0066	0.0030	8742772			
Total Aluminum (Al)	mg/L	0.301	0.0030	8742769			
Dissolved Antimony (Sb)	mg/L	<0.00050	0.00050	8742772			
Total Antimony (Sb)	mg/L	<0.00050	0.00050	8742769			
Dissolved Arsenic (As)	mg/L	0.00193	0.00010	8742772			
Total Arsenic (As)	mg/L	0.00268	0.00010	8742769			
Dissolved Barium (Ba)	mg/L	0.0326	0.0010	8742772			
Total Barium (Ba)	mg/L	0.0326	0.0010	8742769			
Dissolved Beryllium (Be)	mg/L	<0.00010	0.00010	8742772			
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							
Lab-Dup = Laboratory Initiated Du	plicate						



Bureau Veritas ID		WCF242			WCF242		
Sampling Data		2023/06/07			2023/06/07		
		17:40			17:40		
COC Number		n/a			n/a		
	UNITS	MEL-SR1	RDL	QC Batch	MEL-SR1 Lab-Dup	RDL	QC Batch
Total Beryllium (Be)	mg/L	<0.00010	0.00010	8742769			
Dissolved Bismuth (Bi)	mg/L	<0.0010	0.0010	8742772			
Total Bismuth (Bi)	mg/L	<0.0010	0.0010	8742769			
Dissolved Boron (B)	mg/L	<0.050	0.050	8742772			
Total Boron (B)	mg/L	<0.050	0.050	8742769			
Dissolved Cadmium (Cd)	mg/L	0.000012	0.000010	8742772			
Total Cadmium (Cd)	mg/L	0.000013	0.000010	8742769			
Dissolved Chromium (Cr)	mg/L	<0.0010	0.0010	8742772			
Total Chromium (Cr)	mg/L	0.0020	0.0010	8742769			
Dissolved Cobalt (Co)	mg/L	0.00022	0.00020	8742772			
Total Cobalt (Co)	mg/L	0.00054	0.00020	8742769			
Dissolved Copper (Cu)	mg/L	0.00294	0.00020	8742772			
Total Copper (Cu)	mg/L	0.00395	0.00050	8742769			
Dissolved Iron (Fe)	mg/L	0.0871	0.0050	8742772			
Total Iron (Fe)	mg/L	0.663	0.010	8742769			
Dissolved Lead (Pb)	mg/L	<0.00020	0.00020	8742772			
Total Lead (Pb)	mg/L	0.00031	0.00020	8742769			
Dissolved Lithium (Li)	mg/L	0.0063	0.0020	8742772			
Total Lithium (Li)	mg/L	0.0063	0.0020	8742769			
Dissolved Manganese (Mn)	mg/L	0.0142	0.0010	8742772			
Total Manganese (Mn)	mg/L	0.0205	0.0010	8742769			
Dissolved Molybdenum (Mo)	mg/L	0.0015	0.0010	8742772			
Total Molybdenum (Mo)	mg/L	0.0020	0.0010	8742769			
Dissolved Nickel (Ni)	mg/L	0.0035	0.0010	8742772			
Total Nickel (Ni)	mg/L	0.0057	0.0010	8742769			
Dissolved Selenium (Se)	mg/L	<0.00010	0.00010	8742772			
Total Selenium (Se)	mg/L	<0.00010	0.00010	8742769			
Dissolved Silicon (Si)	mg/L	0.88	0.10	8742772			
Total Silicon (Si)	mg/L	1.26	0.10	8742769			
Dissolved Silver (Ag)	mg/L	<0.000020	0.000020	8742772			
RDL = Reportable Detection Limit						•	
QC Batch = Quality Control Batch							
Lab-Dup = Laboratory Initiated Du	plicate						



Bureau Veritas ID		WCF242			WCF242		
Sampling Data		2023/06/07			2023/06/07		
		17:40			17:40		
COC Number		n/a			n/a		
	UNITS	MEL-SR1	RDL	QC Batch	MEL-SR1 Lab-Dup	RDL	QC Batch
Total Silver (Ag)	mg/L	<0.000020	0.000020	8742769			
Dissolved Strontium (Sr)	mg/L	0.349	0.0010	8742772			
Total Strontium (Sr)	mg/L	0.331	0.0010	8742769			
Dissolved Thallium (Tl)	mg/L	<0.000010	0.000010	8742772			
Total Thallium (Tl)	mg/L	<0.000010	0.000010	8742769			
Dissolved Tin (Sn)	mg/L	<0.0050	0.0050	8742772			
Total Tin (Sn)	mg/L	<0.0050	0.0050	8742769			
Dissolved Titanium (Ti)	mg/L	<0.0050	0.0050	8742772			
Total Titanium (Ti)	mg/L	0.0111	0.0050	8742769			
Dissolved Uranium (U)	mg/L	0.00129	0.00010	8742772			
Total Uranium (U)	mg/L	0.00126	0.00010	8742769			
Dissolved Vanadium (V)	mg/L	<0.0050	0.0050	8742772			
Total Vanadium (V)	mg/L	<0.0050	0.0050	8742769			
Dissolved Zinc (Zn)	mg/L	0.0065	0.0050	8742772			
Total Zinc (Zn)	mg/L	0.0089	0.0050	8742769			
Dissolved Zirconium (Zr)	mg/L	<0.00010	0.00010	8742772			
Total Zirconium (Zr)	mg/L	0.00020	0.00010	8742769			
Dissolved Calcium (Ca)	mg/L	64.2	0.050	8742771			
Total Calcium (Ca)	mg/L	58.1	0.050	8742768			
Dissolved Magnesium (Mg)	mg/L	9.94	0.050	8742771			
Total Magnesium (Mg)	mg/L	9.31	0.050	8742768			
Dissolved Potassium (K)	mg/L	6.46	0.050	8742771			
Total Potassium (K)	mg/L	6.09	0.050	8742768			
Dissolved Sodium (Na)	mg/L	30.0	0.050	8742771			
Total Sodium (Na)	mg/L	27.9	0.050	8742768			
Dissolved Sulphur (S)	mg/L	23.8	3.0	8742771			
Total Sulphur (S)	mg/L	22.1	3.0	8742768			
Petroleum Hydrocarbons							
Total Oil & Grease	mg/L	1.1	0.50	8736912			
RDL = Reportable Detection Limit QC Batch = Quality Control Batch							
Lab-Dup = Laboratory Initiated Du	plicate						



Bureau Veritas ID		WCF243		WCF244		
		2023/06/07		2023/06/07		
Sampling Date		17:25		17:10		
COC Number		n/a		n/a	1	
	UNITS	ITIVIA CULVERT1 EAST	QC Batch	ITIVIA CULVERT1 WEST	RDL	QC Batch
Calculated Parameters						
Calculated TDS	mg/L	340	8726407	220	1.0	8726407
Dissolved Hardness (CaCO3)	mg/L	162	8742770	153	0.50	8742770
Inorganics	·		<u>.</u>		4	
Total Ammonia-N	mg/L	<0.050	8736022	<0.050	0.050	8736022
Strong Acid Dissoc. Cyanide (CN)	mg/L	<0.00050	8744245	<0.00050	0.00050	8744245
Total Dissolved Solids	mg/L	385	8733678	255	10	8733678
Fluoride (F-)	mg/L	0.10	8732820	0.11	0.10	8732820
Orthophosphate (P)	mg/L	<0.010	8732795	<0.010	0.010	8732795
рН	рН	7.76	8732822	7.74	1	8732822
Total Phosphorus	mg/L	0.063	8736026	0.059	0.020	8736026
Reactive Silica (SiO2)	mg/L	1.1	8748928	2.9	0.050	8748928
Total Suspended Solids	mg/L	35	8730856	43	1	8730856
Turbidity	NTU	4.6	8732167	3.6	0.1	8731277
Alkalinity (Total as CaCO3)	mg/L	67	8732819	110	1.0	8732819
Dissolved Chloride (Cl-)	mg/L	67	8732803	34	1.0	8732803
Nitrite (N)	mg/L	<0.010	8732687	<0.010	0.010	8732104
Nitrate (N)	mg/L	0.48	8732687	<0.10	0.10	8732104
Dissolved Sulphate (SO4)	mg/L	110	8744244	41	0.50	8744244
Nitrate + Nitrite (N)	mg/L	0.48	8732687	<0.10	0.10	8732104
Metals						
Dissolved Aluminum (Al)	mg/L	0.0180	8742772	0.0128	0.0030	8742772
Total Aluminum (Al)	mg/L	0.507	8742769	3.32	0.0030	8742769
Dissolved Antimony (Sb)	mg/L	0.00107	8742772	<0.00050	0.00050	8742772
Total Antimony (Sb)	mg/L	0.00097	8742769	<0.00050	0.00050	8742769
Dissolved Arsenic (As)	mg/L	0.00160	8742772	0.00086	0.00010	8742772
Total Arsenic (As)	mg/L	0.00231	8742769	0.00320	0.00010	8742769
Dissolved Barium (Ba)	mg/L	0.0196	8742772	0.0399	0.0010	8742772
Total Barium (Ba)	mg/L	0.0221	8742769	0.0811	0.0010	8742769
Dissolved Beryllium (Be)	mg/L	<0.00010	8742772	<0.00010	0.00010	8742772
Total Beryllium (Be)	mg/L	<0.00010	8742769	<0.00010	0.00010	8742769
RDL = Reportable Detection Limit QC Batch = Quality Control Batch			÷			•



Bureau Veritas ID		WCF243		WCF244		
Sampling Data		2023/06/07		2023/06/07		
		17:25		17:10		
COC Number		n/a		n/a		
	UNITS	ITIVIA CULVERT1 EAST	QC Batch	ITIVIA CULVERT1 WEST	RDL	QC Batch
Dissolved Bismuth (Bi)	mg/L	<0.0010	8742772	<0.0010	0.0010	8742772
Total Bismuth (Bi)	mg/L	<0.0010	8742769	<0.0010	0.0010	8742769
Dissolved Boron (B)	mg/L	0.065	8742772	<0.050	0.050	8742772
Total Boron (B)	mg/L	0.061	8742769	<0.050	0.050	8742769
Dissolved Cadmium (Cd)	mg/L	0.000011	8742772	<0.000010	0.000010	8742772
Total Cadmium (Cd)	mg/L	0.000018	8742769	0.000031	0.000010	8742769
Dissolved Chromium (Cr)	mg/L	<0.0010	8742772	<0.0010	0.0010	8742772
Total Chromium (Cr)	mg/L	0.0032	8742769	0.0159	0.0010	8742769
Dissolved Cobalt (Co)	mg/L	0.00033	8742772	0.00052	0.00020	8742772
Total Cobalt (Co)	mg/L	0.00119	8742769	0.00369	0.00020	8742769
Dissolved Copper (Cu)	mg/L	0.00448	8742772	0.00400	0.00020	8742772
Total Copper (Cu)	mg/L	0.00727	8742769	0.0141	0.00050	8742769
Dissolved Iron (Fe)	mg/L	0.0115	8742772	0.126	0.0050	8742772
Total Iron (Fe)	mg/L	0.839	8742769	5.42	0.010	8742769
Dissolved Lead (Pb)	mg/L	<0.00020	8742772	<0.00020	0.00020	8742772
Total Lead (Pb)	mg/L	0.00033	8742769	0.00189	0.00020	8742769
Dissolved Lithium (Li)	mg/L	0.0030	8742772	0.0071	0.0020	8742772
Total Lithium (Li)	mg/L	0.0034	8742769	0.0119	0.0020	8742769
Dissolved Manganese (Mn)	mg/L	0.0149	8742772	0.0641	0.0010	8742772
Total Manganese (Mn)	mg/L	0.0258	8742769	0.133	0.0010	8742769
Dissolved Molybdenum (Mo)	mg/L	0.0015	8742772	0.0015	0.0010	8742772
Total Molybdenum (Mo)	mg/L	0.0015	8742769	0.0014	0.0010	8742769
Dissolved Nickel (Ni)	mg/L	0.0034	8742772	0.0038	0.0010	8742772
Total Nickel (Ni)	mg/L	0.0058	8742769	0.0124	0.0010	8742769
Dissolved Selenium (Se)	mg/L	0.00016	8742772	<0.00010	0.00010	8742772
Total Selenium (Se)	mg/L	0.00016	8742769	<0.00010	0.00010	8742769
Dissolved Silicon (Si)	mg/L	0.50	8742772	1.42	0.10	8742772
Total Silicon (Si)	mg/L	1.08	8742769	6.50	0.10	8742769
Dissolved Silver (Ag)	mg/L	<0.000020	8742772	<0.000020	0.000020	8742772
Total Silver (Ag)	mg/L	<0.000020	8742769	<0.000020	0.000020	8742769
Dissolved Strontium (Sr)	mg/L	0.172	8742772	0.311	0.0010	8742772
RDL = Reportable Detection Limit QC Batch = Quality Control Batch						



Bureau Veritas ID		WCF243		WCF244		
Sampling Data		2023/06/07		2023/06/07		
		17:25		17:10		
COC Number		n/a		n/a		
	UNITS	ITIVIA CULVERT1 EAST	QC Batch	ITIVIA CULVERT1 WEST	RDL	QC Batch
Total Strontium (Sr)	mg/L	0.152	8742769	0.310	0.0010	8742769
Dissolved Thallium (Tl)	mg/L	0.000015	8742772	<0.000010	0.000010	8742772
Total Thallium (TI)	mg/L	0.000018	8742769	0.000059	0.000010	8742769
Dissolved Tin (Sn)	mg/L	<0.0050	8742772	<0.0050	0.0050	8742772
Total Tin (Sn)	mg/L	<0.0050	8742769	<0.0050	0.0050	8742769
Dissolved Titanium (Ti)	mg/L	<0.0050	8742772	<0.0050	0.0050	8742772
Total Titanium (Ti)	mg/L	0.0234	8742769	0.199	0.0050	8742769
Dissolved Uranium (U)	mg/L	0.00118	8742772	0.00081	0.00010	8742772
Total Uranium (U)	mg/L	0.00112	8742769	0.00096	0.00010	8742769
Dissolved Vanadium (V)	mg/L	<0.0050	8742772	<0.0050	0.0050	8742772
Total Vanadium (V)	mg/L	<0.0050	8742769	0.0097	0.0050	8742769
Dissolved Zinc (Zn)	mg/L	<0.0050	8742772	<0.0050	0.0050	8742772
Total Zinc (Zn)	mg/L	<0.0050	8742769	0.0207	0.0050	8742769
Dissolved Zirconium (Zr)	mg/L	<0.00010	8742772	0.00012	0.00010	8742772
Total Zirconium (Zr)	mg/L	0.00023	8742769	0.00085	0.00010	8742769
Dissolved Calcium (Ca)	mg/L	47.1	8742771	53.1	0.050	8742771
Total Calcium (Ca)	mg/L	43.9	8742768	52.4	0.050	8742768
Dissolved Magnesium (Mg)	mg/L	10.9	8742771	5.06	0.050	8742771
Total Magnesium (Mg)	mg/L	10.4	8742768	6.95	0.050	8742768
Dissolved Potassium (K)	mg/L	6.71	8742771	6.90	0.050	8742771
Total Potassium (K)	mg/L	6.26	8742768	7.60	0.050	8742768
Dissolved Sodium (Na)	mg/L	51.4	8742771	15.6	0.050	8742771
Total Sodium (Na)	mg/L	47.0	8742768	14.9	0.050	8742768
Dissolved Sulphur (S)	mg/L	36.1	8742771	12.7	3.0	8742771
Total Sulphur (S)	mg/L	32.6	8742768	11.5	3.0	8742768
Petroleum Hydrocarbons	· · · ·		·			
Total Oil & Grease	mg/L	1.5	8736912	1.0	0.50	8736912
RDL = Reportable Detection Limit QC Batch = Quality Control Batch						



RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WCF245			WCF246		
Sampling Data		2023/06/07			2023/06/07		
Sampling Date		10:20			10:55		
COC Number		n/a			n/a		
	UNITS	MEL-SR1	RDL	QC Batch	ITIVIA CULVERT1 EAST	RDL	QC Batch
Calculated Parameters							
Calculated TDS	mg/L	310	1.0	8726407	320	1.0	8726407
Dissolved Hardness (CaCO3)	mg/L	190	0.50	8742770	151	0.50	8742770
Inorganics							
Total Ammonia-N	mg/L	0.055	0.050	8736022	0.058	0.050	8736022
Strong Acid Dissoc. Cyanide (CN)	mg/L	<0.00050	0.00050	8744245	<0.00050	0.00050	8744245
Total Dissolved Solids	mg/L	390	10	8730858	375	10	8733678
Fluoride (F-)	mg/L	<0.10	0.10	8732820	<0.10	0.10	8732820
Orthophosphate (P)	mg/L	<0.010	0.010	8732795	<0.010	0.010	8732795
pН	рН	7.83		8732822	7.78		8732822
Total Phosphorus	mg/L	0.50	0.020	8736026	0.14	0.020	8736026
Reactive Silica (SiO2)	mg/L	1.7	0.050	8748928	1.3	0.050	8748923
Total Suspended Solids	mg/L	2300	5	8730856	140	2	8730856
Turbidity	NTU	8.8	0.1	8732167	8.8	0.1	8731277
Alkalinity (Total as CaCO3)	mg/L	74	1.0	8732819	57	1.0	8732819
Dissolved Chloride (Cl-)	mg/L	58	1.0	8732803	70	1.0	8732803
Nitrite (N)	mg/L	<0.010	0.010	8732687	<0.010	0.010	8732687
Nitrate (N)	mg/L	0.18	0.10	8732687	0.43	0.10	8732687
Dissolved Sulphate (SO4)	mg/L	100	0.50	8744244	100	0.50	8744244
Nitrate + Nitrite (N)	mg/L	0.18	0.10	8732687	0.43	0.10	8732687
Metals							
Dissolved Aluminum (Al)	mg/L	0.0086	0.0030	8742772	0.0175	0.0030	8742772
Total Aluminum (Al)	mg/L	12.4	0.0060	8742769	4.54	0.0030	8742769
Dissolved Antimony (Sb)	mg/L	<0.00050	0.00050	8742772	0.00082	0.00050	8742772
Total Antimony (Sb)	mg/L	<0.0010	0.0010	8742769	0.00078	0.00050	8742769
Dissolved Arsenic (As)	mg/L	0.00157	0.00010	8742772	0.00124	0.00010	8742772
Total Arsenic (As)	mg/L	0.0159	0.00020	8742769	0.00520	0.00010	8742769
Dissolved Barium (Ba)	mg/L	0.0340	0.0010	8742772	0.0183	0.0010	8742772
Total Barium (Ba)	mg/L	0.141	0.0020	8742769	0.0573	0.0010	8742769
Dissolved Beryllium (Be)	mg/L	<0.00010	0.00010	8742772	<0.00010	0.00010	8742772
Total Beryllium (Be)	mg/L	<0.00020	0.00020	8742769	<0.00010	0.00010	8742769
RDL = Reportable Detection Limit							

QC Batch = Quality Control Batch


RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WCF245			WCF246		
Sempling Data		2023/06/07			2023/06/07		
Sampling Date		10:20			10:55		
COC Number		n/a			n/a		
	UNITS	MEL-SR1	RDL	QC Batch	ITIVIA CULVERT1 EAST	RDL	QC Batch
Dissolved Bismuth (Bi)	mg/L	<0.0010	0.0010	8742772	<0.0010	0.0010	8742772
Total Bismuth (Bi)	mg/L	<0.0020	0.0020	8742769	<0.0010	0.0010	8742769
Dissolved Boron (B)	mg/L	<0.050	0.050	8742772	0.065	0.050	8742772
Total Boron (B)	mg/L	<0.10	0.10	8742769	0.060	0.050	8742769
Dissolved Cadmium (Cd)	mg/L	< 0.000010	0.000010	8742772	0.000014	0.000010	8742772
Total Cadmium (Cd)	mg/L	0.000084	0.000020	8742769	0.000052	0.000010	8742769
Dissolved Chromium (Cr)	mg/L	<0.0010	0.0010	8742772	<0.0010	0.0010	8742772
Total Chromium (Cr)	mg/L	0.0637	0.0020	8742769	0.0244	0.0010	8742769
Dissolved Cobalt (Co)	mg/L	0.00022	0.00020	8742772	0.00032	0.00020	8742772
Total Cobalt (Co)	mg/L	0.0137	0.00040	8742769	0.00550	0.00020	8742769
Dissolved Copper (Cu)	mg/L	0.00314	0.00020	8742772	0.00752	0.00020	8742772
Total Copper (Cu)	mg/L	0.0451	0.0010	8742769	0.0261	0.00050	8742769
Dissolved Iron (Fe)	mg/L	0.0128	0.0050	8742772	0.0122	0.0050	8742772
Total Iron (Fe)	mg/L	19.9	0.020	8742769	6.99	0.010	8742769
Dissolved Lead (Pb)	mg/L	<0.00020	0.00020	8742772	<0.00020	0.00020	8742772
Total Lead (Pb)	mg/L	0.00772	0.00040	8742769	0.00220	0.00020	8742769
Dissolved Lithium (Li)	mg/L	0.0112	0.0020	8742772	0.0026	0.0020	8742772
Total Lithium (Li)	mg/L	0.0291	0.0040	8742769	0.0081	0.0020	8742769
Dissolved Manganese (Mn)	mg/L	0.0113	0.0010	8742772	0.0184	0.0010	8742772
Total Manganese (Mn)	mg/L	0.285	0.0020	8742769	0.111	0.0010	8742769
Dissolved Molybdenum (Mo)	mg/L	0.0012	0.0010	8742772	0.0014	0.0010	8742772
Total Molybdenum (Mo)	mg/L	<0.0020	0.0020	8742769	0.0013	0.0010	8742769
Dissolved Nickel (Ni)	mg/L	0.0030	0.0010	8742772	0.0039	0.0010	8742772
Total Nickel (Ni)	mg/L	0.0421	0.0020	8742769	0.0188	0.0010	8742769
Dissolved Selenium (Se)	mg/L	<0.00010	0.00010	8742772	0.00015	0.00010	8742772
Total Selenium (Se)	mg/L	<0.00020	0.00020	8742769	0.00018	0.00010	8742769
Dissolved Silicon (Si)	mg/L	0.66	0.10	8742772	0.44	0.10	8742772
Total Silicon (Si)	mg/L	18.2	0.20	8742769	7.01	0.10	8742769
Dissolved Silver (Ag)	mg/L	<0.000020	0.000020	8742772	<0.000020	0.000020	8742772
Total Silver (Ag)	mg/L	0.000053	0.000040	8742769	0.000025	0.000020	8742769
Dissolved Strontium (Sr)	mg/L	0.467	0.0010	8742772	0.165	0.0010	8742772
RDL = Reportable Detection Limit							

QC Batch = Quality Control Batch



RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WCF245			WCF246		
Sampling Date		2023/06/07			2023/06/07		
		10:20			10:55		
COC Number		n/a			n/a		
	UNITS	MEL-SR1	RDL	QC Batch	ITIVIA CULVERT1 EAST	RDL	QC Batch
Total Strontium (Sr)	mg/L	0.486	0.0020	8742769	0.150	0.0010	8742769
Dissolved Thallium (Tl)	mg/L	<0.000010	0.000010	8742772	<0.000010	0.000010	8742772
Total Thallium (Tl)	mg/L	0.000177	0.000020	8742769	0.000067	0.000010	8742769
Dissolved Tin (Sn)	mg/L	<0.0050	0.0050	8742772	<0.0050	0.0050	8742772
Total Tin (Sn)	mg/L	<0.010	0.010	8742769	<0.0050	0.0050	8742769
Dissolved Titanium (Ti)	mg/L	<0.0050	0.0050	8742772	<0.0050	0.0050	8742772
Total Titanium (Ti)	mg/L	0.661	0.010	8742769	0.231	0.0050	8742769
Dissolved Uranium (U)	mg/L	0.00129	0.00010	8742772	0.00096	0.00010	8742772
Total Uranium (U)	mg/L	0.00179	0.00020	8742769	0.00114	0.00010	8742769
Dissolved Vanadium (V)	mg/L	<0.0050	0.0050	8742772	<0.0050	0.0050	8742772
Total Vanadium (V)	mg/L	0.033	0.010	8742769	0.0122	0.0050	8742769
Dissolved Zinc (Zn)	mg/L	0.0104	0.0050	8742772	<0.0050	0.0050	8742772
Total Zinc (Zn)	mg/L	0.121	0.010	8742769	0.0233	0.0050	8742769
Dissolved Zirconium (Zr)	mg/L	<0.00010	0.00010	8742772	<0.00010	0.00010	8742772
Total Zirconium (Zr)	mg/L	0.00189	0.00020	8742769	0.00085	0.00010	8742769
Dissolved Calcium (Ca)	mg/L	60.8	0.050	8742771	43.1	0.050	8742771
Total Calcium (Ca)	mg/L	63.5	0.10	8742768	42.3	0.050	8742768
Dissolved Magnesium (Mg)	mg/L	9.25	0.050	8742771	10.4	0.050	8742771
Total Magnesium (Mg)	mg/L	16.8	0.10	8742768	12.4	0.050	8742768
Dissolved Potassium (K)	mg/L	5.66	0.050	8742771	6.48	0.050	8742771
Total Potassium (K)	mg/L	8.68	0.10	8742768	7.09	0.050	8742768
Dissolved Sodium (Na)	mg/L	32.4	0.050	8742771	50.6	0.050	8742771
Total Sodium (Na)	mg/L	30.2	0.10	8742768	45.7	0.050	8742768
Dissolved Sulphur (S)	mg/L	33.2	3.0	8742771	33.5	3.0	8742771
Total Sulphur (S)	mg/L	29.6	6.0	8742768	29.6	3.0	8742768
Petroleum Hydrocarbons			<u> </u>				
Total Oil & Grease	mg/L	2.3	0.50	8736912	1.9	0.50	8736912
RDL = Reportable Detection Limit QC Batch = Quality Control Batch							



RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WCF247		
Sampling Date		2023/06/07		
		11:05		
COC Number		n/a		
	UNITS	ITIVIA CULVERT1 WEST	RDL	QC Batch
Calculated Parameters				
Calculated TDS	mg/L	160	1.0	8726407
Dissolved Hardness (CaCO3)	mg/L	113	0.50	8742770
Inorganics				
Total Ammonia-N	mg/L	0.050	0.050	8736022
Strong Acid Dissoc. Cyanide (CN)	mg/L	<0.00050	0.00050	8744245
Total Dissolved Solids	mg/L	345	10	8730858
Fluoride (F-)	mg/L	<0.10	0.10	8732820
Orthophosphate (P)	mg/L	0.014	0.010	8732795
рН	рН	7.76		8732822
Total Phosphorus	mg/L	0.082	0.020	8736026
Reactive Silica (SiO2)	mg/L	2.1	0.050	8748928
Total Suspended Solids	mg/L	58	1	8730853
Turbidity	NTU	10	0.1	8731277
Alkalinity (Total as CaCO3)	mg/L	74	1.0	8732819
Dissolved Chloride (Cl-)	mg/L	28	1.0	8732803
Nitrite (N)	mg/L	0.015	0.010	8732104
Nitrate (N)	mg/L	0.15	0.10	8732104
Dissolved Sulphate (SO4)	mg/L	31	0.50	8744244
Nitrate + Nitrite (N)	mg/L	0.16	0.10	8732104
Metals				
Dissolved Aluminum (Al)	mg/L	0.0117	0.0030	8742772
Total Aluminum (Al)	mg/L	1.82	0.0030	8742769
Dissolved Antimony (Sb)	mg/L	<0.00050	0.00050	8742772
Total Antimony (Sb)	mg/L	<0.00050	0.00050	8742769
Dissolved Arsenic (As)	mg/L	0.00102	0.00010	8742772
Total Arsenic (As)	mg/L	0.00240	0.00010	8742769
Dissolved Barium (Ba)	mg/L	0.0290	0.0010	8742772
Total Barium (Ba)	mg/L	0.0490	0.0010	8742769
Dissolved Beryllium (Be)	mg/L	<0.00010	0.00010	8742772
Total Beryllium (Be)	mg/L	<0.00010	0.00010	8742769
RDL = Reportable Detection Limit QC Batch = Quality Control Batch				



RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WCF247		
Sampling Date		2023/06/07		
		11:05		
COC Number		n/a		
	UNITS	ITIVIA CULVERT1 WEST	RDL	QC Batch
Dissolved Bismuth (Bi)	mg/L	<0.0010	0.0010	8742772
Total Bismuth (Bi)	mg/L	<0.0010	0.0010	8742769
Dissolved Boron (B)	mg/L	<0.050	0.050	8742772
Total Boron (B)	mg/L	<0.050	0.050	8742769
Dissolved Cadmium (Cd)	mg/L	<0.000010	0.000010	8742772
Total Cadmium (Cd)	mg/L	0.000020	0.000010	8742769
Dissolved Chromium (Cr)	mg/L	<0.0010	0.0010	8742772
Total Chromium (Cr)	mg/L	0.0092	0.0010	8742769
Dissolved Cobalt (Co)	mg/L	0.00038	0.00020	8742772
Total Cobalt (Co)	mg/L	0.00230	0.00020	8742769
Dissolved Copper (Cu)	mg/L	0.00372	0.00020	8742772
Total Copper (Cu)	mg/L	0.0103	0.00050	8742769
Dissolved Iron (Fe)	mg/L	0.0910	0.0050	8742772
Total Iron (Fe)	mg/L	2.97	0.010	8742769
Dissolved Lead (Pb)	mg/L	<0.00020	0.00020	8742772
Total Lead (Pb)	mg/L	0.00156	0.00020	8742769
Dissolved Lithium (Li)	mg/L	0.0060	0.0020	8742772
Total Lithium (Li)	mg/L	0.0079	0.0020	8742769
Dissolved Manganese (Mn)	mg/L	0.0417	0.0010	8742772
Total Manganese (Mn)	mg/L	0.0765	0.0010	8742769
Dissolved Molybdenum (Mo)	mg/L	0.0011	0.0010	8742772
Total Molybdenum (Mo)	mg/L	0.0011	0.0010	8742769
Dissolved Nickel (Ni)	mg/L	0.0024	0.0010	8742772
Total Nickel (Ni)	mg/L	0.0075	0.0010	8742769
Dissolved Selenium (Se)	mg/L	<0.00010	0.00010	8742772
Total Selenium (Se)	mg/L	<0.00010	0.00010	8742769
Dissolved Silicon (Si)	mg/L	0.83	0.10	8742772
Total Silicon (Si)	mg/L	3.68	0.10	8742769
Dissolved Silver (Ag)	mg/L	<0.000020	0.000020	8742772
Total Silver (Ag)	mg/L	<0.000020	0.000020	8742769
Dissolved Strontium (Sr)	mg/L	0.227	0.0010	8742772
RDL = Reportable Detection Limit				
QC Batch = Quality Control Batch				



RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WCF247		
Sampling Date		2023/06/07		
		11:05		
COC Number		n/a		
	UNITS	ITIVIA CULVERT1 WEST	RDL	QC Batch
Total Strontium (Sr)	mg/L	0.215	0.0010	8742769
Dissolved Thallium (Tl)	mg/L	<0.000010	0.000010	8742772
Total Thallium (Tl)	mg/L	0.000030	0.000010	8742769
Dissolved Tin (Sn)	mg/L	<0.0050	0.0050	8742772
Total Tin (Sn)	mg/L	<0.0050	0.0050	8742769
Dissolved Titanium (Ti)	mg/L	<0.0050	0.0050	8742772
Total Titanium (Ti)	mg/L	0.0965	0.0050	8742769
Dissolved Uranium (U)	mg/L	0.00063	0.00010	8742772
Total Uranium (U)	mg/L	0.00068	0.00010	8742769
Dissolved Vanadium (V)	mg/L	<0.0050	0.0050	8742772
Total Vanadium (V)	mg/L	0.0052	0.0050	8742769
Dissolved Zinc (Zn)	mg/L	<0.0050	0.0050	8742772
Total Zinc (Zn)	mg/L	0.0151	0.0050	8742769
Dissolved Zirconium (Zr)	mg/L	<0.00010	0.00010	8742772
Total Zirconium (Zr)	mg/L	0.00053	0.00010	8742769
Dissolved Calcium (Ca)	mg/L	38.8	0.050	8742771
Total Calcium (Ca)	mg/L	36.0	0.050	8742768
Dissolved Magnesium (Mg)	mg/L	3.86	0.050	8742771
Total Magnesium (Mg)	mg/L	4.68	0.050	8742768
Dissolved Potassium (K)	mg/L	5.24	0.050	8742771
Total Potassium (K)	mg/L	5.36	0.050	8742768
Dissolved Sodium (Na)	mg/L	12.1	0.050	8742771
Total Sodium (Na)	mg/L	11.1	0.050	8742768
Dissolved Sulphur (S)	mg/L	10.1	3.0	8742771
Total Sulphur (S)	mg/L	8.6	3.0	8742768
Petroleum Hydrocarbons	-			
Total Oil & Grease	mg/L	1.4	0.50	8736912
RDL = Reportable Detection Limit QC Batch = Quality Control Batch				



ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		WCF242		WCF243	WCF244			
Sampling Date		2023/06/07		2023/06/07	2023/06/07			
Sampling Date		17:40		17:25	17:10			
COC Number		n/a		n/a	n/a			
	UNITS	MEL-SR1	QC Batch	ITIVIA CULVERT1 EAST	ITIVIA CULVERT1 WEST	RDL	QC Batch	
Calculated Parameters								
Total Hardness (CaCO3)	mg/L	183	8742767	152	159	0.50	8742767	
Metals								
Mercury (Hg)	mg/L	<0.00001	8734229	<0.00001	<0.00001	0.00001	8734320	
					•			

QC Batch = Quality Control Batch

Bureau Veritas ID		WCF245	WCF246	WCF247		
Sampling Date		2023/06/07 10:20	2023/06/07 10:55	2023/06/07 11:05		
COC Number		n/a	n/a	n/a		
	UNITS	MEL-SR1	ITIVIA CULVERT1 EAST	ULVERT1 ITIVIA CULVERT1 ST WEST		QC Batch
Calculated Parameters						
Total Hardness (CaCO3)	mg/L	228	157	109	0.50	8742767
Metals	_					
Mercury (Hg)	mg/L	<0.00001	<0.00001	<0.00001	0.00001	8734229



TEST SUMMARY

Bureau Veritas ID:	WCF242
Sample ID:	MEL-SR1
Matrix:	Water

Sample ID: MEL-SR1 Matrix: Water					Shipped: Received: 2023/06/13
Water Water					Received. 2023/00/13
Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	8732819	N/A	2023/06/17	Yogesh Patel
Chloride by Automated Colourimetry	KONE	8735091	N/A	2023/06/19	Massarat Jan
Fluoride	ISE	8732820	2023/06/16	2023/06/19	Kien Tran
Mercury (low level)	CV/AA	8734229	2023/06/17	2023/06/19	Jaswinder Kaur
Low Level Chloride and Sulphate by AC	KONE	8744244	N/A	2023/06/21	Shanna McKort
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8744245	2023/06/20	2023/06/20	Ming Dong
Hardness Total (calculated as CaCO3)	CALC	8742767	N/A	2023/06/20	Automated Statchk
Hardness (calculated as CaCO3)	CALC	8742770	N/A	2023/06/20	Automated Statchk
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	ICP	8742771	N/A	2023/06/20	Automated Statchk
Elements by CRC ICPMS (dissolved)	ICP/MS	8742772	N/A	2023/06/19	Andrew An
Na, K, Ca, Mg, S by CRC ICPMS (total)	ICP	8742768	2023/06/20	2023/06/20	Automated Statchk
Elements by CRC ICPMS (total)	ICP/MS	8742769	2023/06/19	2023/06/20	Andrew An
Silica (Reactive)	KONE	8748928	N/A	2023/06/22	Marjolen Busslinger
Total Ammonia-N	LACH/NH4	8736022	N/A	2023/06/20	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8732687	N/A	2023/06/20	Chandra Nandlal
Total Oil and Grease	BAL	8736912	2023/06/19	2023/06/19	Kishan Patel
рН	AT	8732822	2023/06/16	2023/06/17	Yogesh Patel
Orthophosphate	KONE	8735096	N/A	2023/06/19	Massarat Jan
Calculated Total Dissolved Solids	CALC	8726407	N/A	2023/06/26	Automated Statchk
Total Dissolved Solids	BAL	8730858	2023/06/17	2023/06/19	Razieh Tabesh
Total Phosphorus (Colourimetric)	SKAL/P	8736026	2023/06/19	2023/06/19	Sachi Patel
Low Level Total Suspended Solids	BAL	8730856	2023/06/19	2023/06/19	Darshan Patel
Turbidity	AT	8732167	N/A	2023/06/17	Gurparteek KAUR

Bureau Veritas ID:	WCF242 Dup
Sample ID:	MEL-SR1
Matrix:	Water

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Low Level Total Suspended Solids	BAL	8730856	2023/06/19	2023/06/19	Darshan Patel
Turbidity	AT	8732167	N/A	2023/06/17	Gurparteek KAUR

Bureau Veritas ID: WCF243 Sample ID: ITIVIA CULVERT1 EAST Matrix: Water

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	8732819	N/A	2023/06/17	Yogesh Patel
Chloride by Automated Colourimetry	KONE	8732803	N/A	2023/06/19	Alina Dobreanu
Fluoride	ISE	8732820	2023/06/16	2023/06/19	Kien Tran
Mercury (low level)	CV/AA	8734320	2023/06/17	2023/06/19	Jaswinder Kaur
Low Level Chloride and Sulphate by AC	KONE	8744244	N/A	2023/06/21	Shanna McKort
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8744245	2023/06/20	2023/06/20	Ming Dong
Hardness Total (calculated as CaCO3)	CALC	8742767	N/A	2023/06/20	Automated Statchk

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Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Collected: 2023/06/07 Shipped: Received: 2023/06/13

Collected: 2023/06/07

Received: 2023/06/13

Shipped:

Collected: 2023/06/07



TEST SUMMARY

Bureau Veritas ID:	WCF243
Sample ID:	ITIVIA CULVERT1 EAST
Matrix:	Water

Collected:	2023/06/07
Shipped:	
Received:	2023/06/13

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hardness (calculated as CaCO3)	CALC	8742770	N/A	2023/06/20	Automated Statchk
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	ICP	8742771	N/A	2023/06/20	Automated Statchk
Elements by CRC ICPMS (dissolved)	ICP/MS	8742772	N/A	2023/06/19	Andrew An
Na, K, Ca, Mg, S by CRC ICPMS (total)	ICP	8742768	2023/06/20	2023/06/20	Automated Statchk
Elements by CRC ICPMS (total)	ICP/MS	8742769	2023/06/19	2023/06/20	Andrew An
Silica (Reactive)	KONE	8748928	N/A	2023/06/22	Marjolen Busslinger
Total Ammonia-N	LACH/NH4	8736022	N/A	2023/06/20	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8732687	N/A	2023/06/20	Chandra Nandlal
Total Oil and Grease	BAL	8736912	2023/06/19	2023/06/19	Kishan Patel
рН	AT	8732822	2023/06/16	2023/06/17	Yogesh Patel
Orthophosphate	KONE	8732795	N/A	2023/06/19	Alina Dobreanu
Calculated Total Dissolved Solids	CALC	8726407	N/A	2023/06/26	Automated Statchk
Total Dissolved Solids	BAL	8733678	2023/06/17	2023/06/19	Shaneil Hall
Total Phosphorus (Colourimetric)	SKAL/P	8736026	2023/06/19	2023/06/19	Sachi Patel
Low Level Total Suspended Solids	BAL	8730856	2023/06/19	2023/06/19	Darshan Patel
Turbidity	AT	8732167	N/A	2023/06/17	Gurparteek KAUR

Bureau Veritas ID:WCF244Sample ID:ITIVIA CULVERT1 WESTMatrix:Water

Collected: 2023/06/07 Shipped: **Received:** 2023/06/13

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	8732819	N/A	2023/06/17	Yogesh Patel
Chloride by Automated Colourimetry	KONE	8732803	N/A	2023/06/19	Alina Dobreanu
Fluoride	ISE	8732820	2023/06/16	2023/06/19	Kien Tran
Mercury (low level)	CV/AA	8734320	2023/06/17	2023/06/19	Jaswinder Kaur
Low Level Chloride and Sulphate by AC	KONE	8744244	N/A	2023/06/21	Shanna McKort
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8744245	2023/06/20	2023/06/20	Ming Dong
Hardness Total (calculated as CaCO3)	CALC	8742767	N/A	2023/06/20	Automated Statchk
Hardness (calculated as CaCO3)	CALC	8742770	N/A	2023/06/20	Automated Statchk
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	ICP	8742771	N/A	2023/06/20	Automated Statchk
Elements by CRC ICPMS (dissolved)	ICP/MS	8742772	N/A	2023/06/19	Andrew An
Na, K, Ca, Mg, S by CRC ICPMS (total)	ICP	8742768	2023/06/20	2023/06/20	Automated Statchk
Elements by CRC ICPMS (total)	ICP/MS	8742769	2023/06/19	2023/06/20	Andrew An
Silica (Reactive)	KONE	8748928	N/A	2023/06/22	Marjolen Busslinger
Total Ammonia-N	LACH/NH4	8736022	N/A	2023/06/20	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8732104	N/A	2023/06/16	Chandra Nandlal
Total Oil and Grease	BAL	8736912	2023/06/19	2023/06/19	Kishan Patel
рН	AT	8732822	2023/06/16	2023/06/17	Yogesh Patel
Orthophosphate	KONE	8732795	N/A	2023/06/19	Alina Dobreanu
Calculated Total Dissolved Solids	CALC	8726407	N/A	2023/06/26	Automated Statchk
Total Dissolved Solids	BAL	8733678	2023/06/17	2023/06/19	Shaneil Hall
Total Phosphorus (Colourimetric)	SKAL/P	8736026	2023/06/19	2023/06/19	Sachi Patel
Low Level Total Suspended Solids	BAL	8730856	2023/06/19	2023/06/19	Darshan Patel

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TEST SUMMARY

Bureau Veritas ID: Sample ID:	WCF244 ITIVIA CULVERT1 WI	EST				Collected: 2023/06/07 Shipped:
Matrix:	Water					Received: 2023/06/13
Test Description		Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Turbidity		AT	8731277	N/A	2023/06/16	Gurparteek KAUR
Bureau Veritas ID:	WCF245					Collected: 2023/06/07
Sample ID: Matrix:	Water					Snipped: Received: 2023/06/13
Test Description		Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity		AT	8732819	N/A	2023/06/17	Yogesh Patel
Chloride by Automated C	olourimetry	KONE	8732803	N/A	2023/06/19	Alina Dobreanu
Fluoride		ISE	8732820	2023/06/16	2023/06/19	Kien Tran
Mercury (low level)		CV/AA	8734229	2023/06/17	2023/06/19	Jaswinder Kaur
Low Level Chloride and S	ulphate by AC	KONE	8744244	N/A	2023/06/21	Shanna McKort
Cyanide, Strong Acid Diss	ociable (SAD)	TECH/UVVS	8744245	2023/06/20	2023/06/20	Ming Dong
Hardness Total (calculate	d as CaCO3)	CALC	8742767	N/A	2023/06/20	Automated Statchk
Hardness (calculated as C	CaCO3)	CALC	8742770	N/A	2023/06/20	Automated Statchk
Na, K, Ca, Mg, S by CRC IC	CPMS (diss.)	ICP	8742771	N/A	2023/06/20	Automated Statchk
Elements by CRC ICPMS (dissolved)	ICP/MS	8742772	N/A	2023/06/19	Andrew An
Na, K, Ca, Mg, S by CRC IC	CPMS (total)	ICP	8742768	2023/06/20	2023/06/20	Automated Statchk
Elements by CRC ICPMS (total)	ICP/MS	8742769	2023/06/19	2023/06/20	Andrew An
Silica (Reactive)		KONE	8748928	N/A	2023/06/22	Marjolen Busslinger
Total Ammonia-N		LACH/NH4	8736022	N/A	2023/06/20	Prabhjot Kaur
Nitrate & Nitrite as Nitrog	gen in Water	LACH	8732687	N/A	2023/06/20	Chandra Nandlal
Total Oil and Grease		BAL	8736912	2023/06/19	2023/06/19	Kishan Patel
рН		AT	8732822	2023/06/16	2023/06/17	Yogesh Patel
Orthophosphate		KONE	8732795	N/A	2023/06/19	Alina Dobreanu
Calculated Total Dissolve	d Solids	CALC	8726407	N/A	2023/06/26	Automated Statchk
Total Dissolved Solids		BAL	8730858	2023/06/17	2023/06/19	Razieh Tabesh
Total Phosphorus (Colour	imetric)	SKAL/P	8736026	2023/06/19	2023/06/19	Sachi Patel
Low Level Total Suspende	ed Solids	BAL	8730856	2023/06/19	2023/06/19	Darshan Patel
Turbidity		AT	8732167	N/A	2023/06/17	Gurparteek KAUR

Bureau Veritas ID:	WCF246
Sample ID:	ITIVIA CULVERT1 EAST
Matrix:	Water

Collected: 2023/06/07 Shipped: Received: 2023/06/13

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	8732819	N/A	2023/06/17	Yogesh Patel
Chloride by Automated Colourimetry	KONE	8732803	N/A	2023/06/19	Alina Dobreanu
Fluoride	ISE	8732820	2023/06/16	2023/06/19	Kien Tran
Mercury (low level)	CV/AA	8734229	2023/06/17	2023/06/19	Jaswinder Kaur
Low Level Chloride and Sulphate by AC	KONE	8744244	N/A	2023/06/21	Shanna McKort
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8744245	2023/06/20	2023/06/20	Ming Dong
Hardness Total (calculated as CaCO3)	CALC	8742767	N/A	2023/06/20	Automated Statchk
Hardness (calculated as CaCO3)	CALC	8742770	N/A	2023/06/20	Automated Statchk

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TEST SUMMARY

Bureau Veritas ID:	WCF246
Sample ID:	ITIVIA CULVERT1 EAST
Matrix:	Water

Collected:	2023/06/07
Shipped:	
Received:	2023/06/13

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	ICP	8742771	N/A	2023/06/20	Automated Statchk
Elements by CRC ICPMS (dissolved)	ICP/MS	8742772	N/A	2023/06/19	Andrew An
Na, K, Ca, Mg, S by CRC ICPMS (total)	ICP	8742768	2023/06/20	2023/06/20	Automated Statchk
Elements by CRC ICPMS (total)	ICP/MS	8742769	2023/06/19	2023/06/20	Andrew An
Silica (Reactive)	KONE	8748923	N/A	2023/06/22	Marjolen Busslinger
Total Ammonia-N	LACH/NH4	8736022	N/A	2023/06/20	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8732687	N/A	2023/06/20	Chandra Nandlal
Total Oil and Grease	BAL	8736912	2023/06/19	2023/06/19	Kishan Patel
рН	AT	8732822	2023/06/16	2023/06/17	Yogesh Patel
Orthophosphate	KONE	8732795	N/A	2023/06/19	Alina Dobreanu
Calculated Total Dissolved Solids	CALC	8726407	N/A	2023/06/26	Automated Statchk
Total Dissolved Solids	BAL	8733678	2023/06/17	2023/06/19	Shaneil Hall
Total Phosphorus (Colourimetric)	SKAL/P	8736026	2023/06/19	2023/06/19	Sachi Patel
Low Level Total Suspended Solids	BAL	8730856	2023/06/19	2023/06/19	Darshan Patel
Turbidity	AT	8731277	N/A	2023/06/16	Gurparteek KAUR

Matrix: Water

Bureau Veritas ID: WCF247 Sample ID: ITIVIA CULVERT1 WEST

Collected: 2023/06/07 Shipped: Received: 2023/06/13

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	8732819	N/A	2023/06/17	Yogesh Patel
Chloride by Automated Colourimetry	KONE	8732803	N/A	2023/06/19	Alina Dobreanu
Fluoride	ISE	8732820	2023/06/16	2023/06/19	Kien Tran
Mercury (low level)	CV/AA	8734229	2023/06/17	2023/06/19	Jaswinder Kaur
Low Level Chloride and Sulphate by AC	KONE	8744244	N/A	2023/06/21	Shanna McKort
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	8744245	2023/06/20	2023/06/20	Ming Dong
Hardness Total (calculated as CaCO3)	CALC	8742767	N/A	2023/06/20	Automated Statchk
Hardness (calculated as CaCO3)	CALC	8742770	N/A	2023/06/20	Automated Statchk
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	ICP	8742771	N/A	2023/06/20	Automated Statchk
Elements by CRC ICPMS (dissolved)	ICP/MS	8742772	N/A	2023/06/19	Andrew An
Na, K, Ca, Mg, S by CRC ICPMS (total)	ICP	8742768	2023/06/20	2023/06/20	Automated Statchk
Elements by CRC ICPMS (total)	ICP/MS	8742769	2023/06/19	2023/06/20	Andrew An
Silica (Reactive)	KONE	8748928	N/A	2023/06/22	Marjolen Busslinger
Total Ammonia-N	LACH/NH4	8736022	N/A	2023/06/20	Prabhjot Kaur
Nitrate & Nitrite as Nitrogen in Water	LACH	8732104	N/A	2023/06/16	Chandra Nandlal
Total Oil and Grease	BAL	8736912	2023/06/19	2023/06/19	Kishan Patel
рН	AT	8732822	2023/06/16	2023/06/17	Yogesh Patel
Orthophosphate	KONE	8732795	N/A	2023/06/19	Alina Dobreanu
Calculated Total Dissolved Solids	CALC	8726407	N/A	2023/06/26	Automated Statchk
Total Dissolved Solids	BAL	8730858	2023/06/17	2023/06/19	Razieh Tabesh
Total Phosphorus (Colourimetric)	SKAL/P	8736026	2023/06/19	2023/06/19	Sachi Patel
Low Level Total Suspended Solids	BAL	8730853	2023/06/16	2023/06/19	Razieh Tabesh
Turbidity	AT	8731277	N/A	2023/06/16	Gurparteek KAUR

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GENERAL COMMENTS

Each	temperature is the	average of up to th	iree cooler temperatures taken at receipt
	Package 1	19.7°C]
Revis Revis Revis	ed Report [2023/07 ed Report [2023/06 ed Report [2023/06	/05]:Sample IDs an /30]: Report resent /27]: Amended san	nended per client request to client, no modifications nple ID MEL-SR1B
Resu	Its relate only to th	e items tested.	



QUALITY ASSURANCE REPORT

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

			Matrix	Spike	SPIKED	BLANK	Method I	Blank	RP	D	QC Sta	ndard
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8730853	Total Suspended Solids	2023/06/19			95	85 - 115	<1	mg/L	6.5	20		
8730856	Total Suspended Solids	2023/06/19			97	85 - 115	<1	mg/L	17	20		
8730858	Total Dissolved Solids	2023/06/19			102	90 - 110	<10	mg/L	0.63	20		
8731277	Turbidity	2023/06/16			99	80 - 120	<0.1	NTU	1.1	20		
8732104	Nitrate (N)	2023/06/16	92	80 - 120	97	80 - 120	<0.10	mg/L	NC	20		
8732104	Nitrite (N)	2023/06/16	95	80 - 120	102	80 - 120	<0.010	mg/L	NC	20		
8732167	Turbidity	2023/06/17			98	80 - 120	<0.1	NTU	2.1	20		
8732687	Nitrate (N)	2023/06/20	104	80 - 120	106	80 - 120	<0.10	mg/L	0.37	20		
8732687	Nitrite (N)	2023/06/20	103	80 - 120	97	80 - 120	<0.010	mg/L	NC	20		
8732795	Orthophosphate (P)	2023/06/19	91	75 - 125	91	80 - 120	<0.010	mg/L	NC	20		
8732803	Dissolved Chloride (Cl-)	2023/06/19	NC	80 - 120	92	80 - 120	<1.0	mg/L	1.8	20		
8732819	Alkalinity (Total as CaCO3)	2023/06/17			96	85 - 115	<1.0	mg/L	0.21	20		
8732820	Fluoride (F-)	2023/06/19	101	80 - 120	99	80 - 120	<0.10	mg/L	NC	20		
8732822	рН	2023/06/17			102	98 - 103			0.22	N/A		
8733678	Total Dissolved Solids	2023/06/19			98	90 - 110	<10	mg/L	2.0	20		
8734229	Mercury (Hg)	2023/06/19	100	75 - 125	98	80 - 120	<0.00001	mg/L	NC	20		
8734320	Mercury (Hg)	2023/06/19	91	75 - 125	99	80 - 120	<0.00001	mg/L	NC	20		
8735091	Dissolved Chloride (Cl-)	2023/06/19	98	80 - 120	95	80 - 120	<1.0	mg/L	11	20		
8735096	Orthophosphate (P)	2023/06/19	94	75 - 125	95	80 - 120	<0.010	mg/L	9.9	20		
8736022	Total Ammonia-N	2023/06/20	103	75 - 125	103	80 - 120	<0.050	mg/L	NC	20		
8736026	Total Phosphorus	2023/06/19	95	80 - 120	100	80 - 120	<0.020	mg/L	2.3	20	98	80 - 120
8736912	Total Oil & Grease	2023/06/19			99	85 - 115	<0.50	mg/L	0.51	25		
8742769	Total Aluminum (Al)	2023/06/20	101	80 - 120	101	80 - 120	<0.0030	mg/L				
8742769	Total Antimony (Sb)	2023/06/20	104	80 - 120	102	80 - 120	<0.00050	mg/L				
8742769	Total Arsenic (As)	2023/06/20	108	80 - 120	101	80 - 120	<0.00010	mg/L				
8742769	Total Barium (Ba)	2023/06/20	NC	80 - 120	101	80 - 120	<0.0010	mg/L				
8742769	Total Beryllium (Be)	2023/06/20	96	80 - 120	97	80 - 120	<0.00010	mg/L				
8742769	Total Bismuth (Bi)	2023/06/20	95	80 - 120	100	80 - 120	<0.0010	mg/L				
8742769	Total Boron (B)	2023/06/20	101	80 - 120	102	80 - 120	<0.050	mg/L				
8742769	Total Cadmium (Cd)	2023/06/20	99	80 - 120	100	80 - 120	<0.000010	mg/L				
8742769	Total Chromium (Cr)	2023/06/20	NC	80 - 120	96	80 - 120	<0.0010	mg/L				

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QUALITY ASSURANCE REPORT(CONT'D)

Agnico-Eagle

Site Location: MELIADINE Your P.O. #: 1253250 Sampler Initials: SG

			Matrix	Spike	SPIKED	BLANK	Method I	Blank	RP	D	QC Sta	andard
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8742769	Total Cobalt (Co)	2023/06/20	91	80 - 120	96	80 - 120	<0.00020	mg/L				
8742769	Total Copper (Cu)	2023/06/20	85	80 - 120	94	80 - 120	<0.00050	mg/L				
8742769	Total Iron (Fe)	2023/06/20	102	80 - 120	101	80 - 120	<0.010	mg/L				
8742769	Total Lead (Pb)	2023/06/20	97	80 - 120	99	80 - 120	<0.00020	mg/L				
8742769	Total Lithium (Li)	2023/06/20	97	80 - 120	100	80 - 120	<0.0020	mg/L				
8742769	Total Manganese (Mn)	2023/06/20	95	80 - 120	100	80 - 120	<0.0010	mg/L				
8742769	Total Molybdenum (Mo)	2023/06/20	NC	80 - 120	105	80 - 120	<0.0010	mg/L				
8742769	Total Nickel (Ni)	2023/06/20	90	80 - 120	98	80 - 120	<0.0010	mg/L				
8742769	Total Selenium (Se)	2023/06/20	101	80 - 120	100	80 - 120	<0.00010	mg/L				
8742769	Total Silicon (Si)	2023/06/20	NC	80 - 120	102	80 - 120	<0.10	mg/L				
8742769	Total Silver (Ag)	2023/06/20	99	80 - 120	101	80 - 120	<0.000020	mg/L				
8742769	Total Strontium (Sr)	2023/06/20	NC	80 - 120	102	80 - 120	<0.0010	mg/L				
8742769	Total Thallium (TI)	2023/06/20	100	80 - 120	100	80 - 120	<0.000010	mg/L				
8742769	Total Tin (Sn)	2023/06/20	102	80 - 120	101	80 - 120	<0.0050	mg/L				
8742769	Total Titanium (Ti)	2023/06/20	101	80 - 120	100	80 - 120	<0.0050	mg/L				
8742769	Total Uranium (U)	2023/06/20	107	80 - 120	103	80 - 120	<0.00010	mg/L				
8742769	Total Vanadium (V)	2023/06/20	100	80 - 120	99	80 - 120	<0.0050	mg/L				
8742769	Total Zinc (Zn)	2023/06/20	89	80 - 120	100	80 - 120	<0.0050	mg/L				
8742769	Total Zirconium (Zr)	2023/06/20	112	80 - 120	103	80 - 120	<0.00010	mg/L				
8742772	Dissolved Aluminum (Al)	2023/06/19	101	80 - 120	103	80 - 120	<0.0030	mg/L				
8742772	Dissolved Antimony (Sb)	2023/06/19	105	80 - 120	104	80 - 120	<0.00050	mg/L				
8742772	Dissolved Arsenic (As)	2023/06/19	105	80 - 120	104	80 - 120	<0.00010	mg/L				
8742772	Dissolved Barium (Ba)	2023/06/19	99	80 - 120	103	80 - 120	<0.0010	mg/L				
8742772	Dissolved Beryllium (Be)	2023/06/19	99	80 - 120	101	80 - 120	<0.00010	mg/L				
8742772	Dissolved Bismuth (Bi)	2023/06/19	97	80 - 120	99	80 - 120	<0.0010	mg/L				
8742772	Dissolved Boron (B)	2023/06/19	99	80 - 120	103	80 - 120	<0.050	mg/L				
8742772	Dissolved Cadmium (Cd)	2023/06/19	101	80 - 120	102	80 - 120	<0.000010	mg/L				
8742772	Dissolved Chromium (Cr)	2023/06/19	95	80 - 120	97	80 - 120	<0.0010	mg/L				
8742772	Dissolved Cobalt (Co)	2023/06/19	93	80 - 120	98	80 - 120	<0.00020	mg/L				
8742772	Dissolved Copper (Cu)	2023/06/19	89	80 - 120	96	80 - 120	<0.00020	mg/L				
8742772	Dissolved Iron (Fe)	2023/06/19	103	80 - 120	103	80 - 120	<0.0050	mg/L				

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QUALITY ASSURANCE REPORT(CONT'D)

Agnico-Eagle

Site Location: MELIADINE Your P.O. #: 1253250 Sampler Initials: SG

			Matrix	Spike	SPIKED	BLANK	Method E	Blank	RP	D	QC Sta	ndard
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8742772	Dissolved Lead (Pb)	2023/06/19	96	80 - 120	99	80 - 120	<0.00020	mg/L				
8742772	Dissolved Lithium (Li)	2023/06/19	95	80 - 120	100	80 - 120	<0.0020	mg/L				
8742772	Dissolved Manganese (Mn)	2023/06/19	97	80 - 120	101	80 - 120	<0.0010	mg/L				
8742772	Dissolved Molybdenum (Mo)	2023/06/19	NC	80 - 120	106	80 - 120	<0.0010	mg/L				
8742772	Dissolved Nickel (Ni)	2023/06/19	94	80 - 120	100	80 - 120	<0.0010	mg/L				
8742772	Dissolved Selenium (Se)	2023/06/19	101	80 - 120	103	80 - 120	<0.00010	mg/L				
8742772	Dissolved Silicon (Si)	2023/06/19	NC	80 - 120	110	80 - 120	<0.10	mg/L				
8742772	Dissolved Silver (Ag)	2023/06/19	102	80 - 120	103	80 - 120	<0.000020	mg/L				
8742772	Dissolved Strontium (Sr)	2023/06/19	NC	80 - 120	104	80 - 120	<0.0010	mg/L				
8742772	Dissolved Thallium (TI)	2023/06/19	99	80 - 120	102	80 - 120	<0.000010	mg/L				
8742772	Dissolved Tin (Sn)	2023/06/19	106	80 - 120	104	80 - 120	<0.0050	mg/L				
8742772	Dissolved Titanium (Ti)	2023/06/19	102	80 - 120	102	80 - 120	<0.0050	mg/L				
8742772	Dissolved Uranium (U)	2023/06/19	104	80 - 120	104	80 - 120	<0.00010	mg/L				
8742772	Dissolved Vanadium (V)	2023/06/19	101	80 - 120	101	80 - 120	<0.0050	mg/L				
8742772	Dissolved Zinc (Zn)	2023/06/19	98	80 - 120	101	80 - 120	<0.0050	mg/L				
8742772	Dissolved Zirconium (Zr)	2023/06/19	109	80 - 120	105	80 - 120	<0.00010	mg/L				
8744244	Dissolved Sulphate (SO4)	2023/06/21	NC	80 - 120	99	80 - 120	<0.50	mg/L				
8744245	Strong Acid Dissoc. Cyanide (CN)	2023/06/20	96	80 - 120	97	80 - 120	<0.00050	mg/L				
8748923	Reactive Silica (SiO2)	2023/06/22	NC	80 - 120	96	80 - 120	<0.050	mg/L				
8748928	Reactive Silica (SiO2)	2023/06/22	NC	80 - 120	105	80 - 120	<0.050	mg/L				

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).

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VALIDATION SIGNATURE PAGE

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

Anastassia Hamanov, Scientific Specialist

David Huang, BBY Scientific Specialist

m

Ghayasuddin Khan, M.Sc., P.Chem., QP, Scientific Specialist, Inorganics

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

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.



Exceedance Summary Table – Metal Mining Effluent Reg

Result Exceedances

Sample ID	Bureau Veritas ID	Parameter	Criteria	Result	DL	UNITS
No Exceedances						
The exceedance summary ta	ble is for information purp	oses only and should	not be considered a comp	rehensive listing or	statement of	conformance to
applicable regulatory guideli	nes.					



NT-NU SPILL REPORT

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

REPORT LINE USE ONLY

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

A	REPORT DATE: MONTH - DAY - YEAR 2023-08-05			REPORT TI	ME		DRT,	REPORT NUMBER	
В	OCCURRENCE DATE: MONTH	I – DAY – YEAR		OCCURREN 18:00	ICE TIME	UPDATE # TO THE ORIGINAL SPILL	REPORT	⁻	
С	LAND USE PERMIT NUMBER	(IF APPLICABLE)	I	w Z	ATER LICENCE NUMBER	R (IF APPLICABLE)			
D	GEOGRAPHIC PLACE NAME (Meliadine Gold P	DR DISTANCE AND DIRECTIO	N FROM NAMED LO	DCATION	REGION	UT 🗆 ADJACENT JURI	SDICTION (DR OCEAN	
E	LATITUDE DEGREES 63	MINUTES 2	SECONDS 21	D	EGREES 92	MINUTES 13	SE	CONDS 41	
F	RESPONSIBLE PARTY OR VESSEL NAME RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION Agnico Eagle Mines Ltd. Meliadine, Rankin Inlet, Nunavut, X0C 0G0								
G	ANY CONTRACTOR INVOLVED	D	CONTRACTOR A	DDRESS O	R OFFICE LOCATION				
	PRODUCT SPILLED		QUANTITY IN LIT	RES, KILOO	GRAMS OR CUBIC METH	RES U.N. NUMBER			
H	SECOND PRODUCT SPILLED	QUANTITY IN LIT	RES, KILOO	GRAMS OR CUBIC METF	ES U.N. NUMBER				
1	SPILL SOURCE Wing 8 Lift Statio	n	SPILL CAUSE	nt Failu	re	AREA OF CONTAMIN	NATION IN S	SQUARE METRES	
J	FACTORS AFFECTING SPILL	OR RECOVERY	DESCRIBE ANY	ASSISTANC	E REQUIRED	HAZARDS TO PERS	HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT		
к	spill was contain coordinates of th spill. The nearest Pursuant to Part the investigation Reported by Matt matt.gillman@ag	ed to the local are e spill are 63° 2'23 natural water boo H, Item 8c of the 2 is completed. Gillman, Environ nicoeagle.com, al	ea. Clean up 3.38" N, 92' dy (G2) is lo 2AM-MEL16 ment Super ternate con	activit 13'48.3 cated 31 Wat 31 Wat rintend tact: sa	ies were imme 34" W . No wat 208 m northwe er Licence, a f ent 819-759-35 ara.savoie@ag	ediately underta er bodies were i est. follow-up report 555 ext. 4603175 inicoeagle.com	ken. Th impact will be ext. 46	ne ed by this e issued after 03212	
L	REPORTED TO SPILL LINE BY	POSITION Env. Superin	tendent	EMPLOYER		LOCATION CALLING FRC	ом те 8	ELEPHONE 319-759-3555	
Μ	ANY ALTERNATE CONTACT	POSITION General Supe	ervisor			ALTERNATE CONTACT	AI 8	19-759-3555	
	-		REPORT LINE	USE ONL	Ŷ				
Ν	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR		EMPLOYER		LOCATION CALLED	RI (8	EPORT LINE NUMBER 67) 920-8130	
LEA	DAGENCY□EC□CCG□0	GNWT □ GN □ ILA □ INAC		SIGNIFI			FILE STATU	S 🗆 OPEN 🗆 CLOSED	
AGE	NCY	CONTACT NAME		CONTA	CT TIME	REMARKS			
LEA	D AGENCY								
FIRS	ST SUPPORT AGENCY								
SEC	OND SUPPORT AGENCY								



August 22nd, 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.qc.ca

Re: Follow-up Report Spill # 2023-331 – Release of 125 L of Sewage at the Meliadine Gold Project

On August 5th, 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email (spills@gov.nt.ca) of a spill of approximately 125 L of sewage at the Meliadine Gold Project site (spill location coordinates: (63° 2'23.38" N, 92°13'48.34" 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 August 4th, 2023, at approximately 6:00 pm, an estimated 125 L of sewage was spilled onto the industrial pad at the wing 8 lift station. The Energy and Infrastructure department was notified of an overflow occurring at wing 8 lift station. A plumber was dispatched to address the situation and restore the system to its intended operational state. The spilled sewage was contained to the immediate local area, and no water bodies were impacted by the spill. The closest water body (Lake G2) is approximately 208 meters northwest, as seen in Figure 1.





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

Response and Remediation

Upon arrival to wing 8 lift station, the plumber switched the pump from the automatic to the manual setting to lower the level of the tank and prevent further spillage. A vacuum truck was used to clean the free liquid on the ground. The ground surface was hand excavated and the recovered material 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:

• The float system experienced a malfunction due to the accumulation of oil, grease and debris resulting in the adherence of the floats to the basin's interior. This adherence has consequently restricted the float's ability to ascend with the elevation of the fluid level.

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

• Routine inspection of all compact lift stations that are sealed will be completed as part of the preventive maintenance schedule. This process requires unfastening all bolts holding the lid and seal, followed by visual inspection and cleaning of the float system.

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 | Direct 819.759.3555 x4603996 | Agnico Eagle Mines Limited - Meliadine Mine, Suite 879 - Rankin Inlet, Nunavut, Canada XOC 0G0



Sent from Meliadine



Appendix A – Photos





Photo 1: Sewage spill location.



Photo 2: Sewage spill location post-remediation.



NT-NU SPILL REPORT

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

REPORT LINE USE ONLY

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

A	REPORT DATE: MONTH – DAY – YEAR 2023-08-12			REPORT 17:45	TIME	ORIGINAL SPILL REPORT, OR	RE	EPORT NUMBER		
R	OCCURRENCE DATE: MONTH	I – DAY – YEAR		OCCURR	ENCE TIME					
	2023-08-12			02:30						
C	KVPL11D01	(,		2AM-MEL 1631						
D	GEOGRAPHIC PLACE NAME C Meliadine Gold P	OR DISTANCE AND DIRECTION OF THE STANCE AND DIRECTION OF THE STANCE AND DIRECTION OF THE STANDARD STATEMENT OF THE STATEMENT OF THE STANDARD STATEMENT OF THE STATEMENT OF TH	ON FROM NAMED L	OCATION	REGION	T 🗆 ADJACENT JURISDI	CTION OR OC	CEAN		
E 63 1 20 LONGITUDE								50 6		
<u> </u>	RESPONSIBLE PARTY OR VES	SSEL NAME	RESPONSIBLE	PARTY AD	DEGREES DRESS OR OFFICE LOCATI		SECONL	DS U		
F	Agnico Eagle Min	nes Ltd.	Meliadin	e, Ran	kin Inlet, Nunav	ut, X0C 0G0				
G	ANY CONTRACTOR INVOLVED	0	CONTRACTOR	ADDRESS	OR OFFICE LOCATION					
	PRODUCT SPILLED		QUANTITY IN LI	TRES, KIL	OGRAMS OR CUBIC METRE	ES U.N. NUMBER				
н	Tailings and Fres	h Water	1500 L			N/A				
' '	SECOND PRODUCT SPILLED	(IF APPLICABLE)	QUANTITY IN LI	TRES, KIL	OGRAMS OR CUBIC METRE	ES U.N. NUMBER				
	SPILL SOURCE		SPILL CAUSE			AREA OF CONTAMINATI	ON IN SQUAI	ARE METRES		
Ľ	Paste Plant Hum					15	15			
J	N/A	N/A	ASSISTA	NCE REQUIRED	N/A					
	ADDITIONAL INFORMATION, C	COMMENTS, ACTIONS PROF	POSED OR TAKEN T	O CONTAI	N, RECOVER OR DISPOSE	OF SPILLED PRODUCT AND	CONTAMINAT	TED MATERIALS		
к	to flow through a Tailings Storage I bodies were impa Pursuant to Part I investigation is c Reported by Johr john.baechler@ag	n exterior door a Facility (TSF). Th acted by this spil H, Item 8c of Wat ompleted. n Baechler, Envir gnicoeagle.com,	nd onto the le coordinat I. The close ter Licence conment Wa alternate co	groun es of st wat 2AM-N ter Ma ontact	nd. The material the spill are 63° er body (B7) is a /IEL1631, a follow nagement Coord : sara.savoie@a	was removed and 1'38.29"N 92°13' pproximately 630 v up report will be dinator 819-759-3 gnicoeagle.com e	l placed 5.81''W. meters issued 555 ext. xt. 4603	I at the No water west. I after the 4603961 3212.		
L	REPORTED TO SPILL LINE BY		oordinator		ĒR	LOCATION CALLING FROM	TELEPH	HONE		
M	ANY ALTERNATE CONTACT	POSITION Env. Gen. Su	upervisor		ĒR		ALTERN 819	NATE TELEPHONE		
	1	1	REPORT LIN	E USE OI	ILY		I			
N	RECEIVED AT SPILL LINE BY	POSITION		EMPLOY	ER	LOCATION CALLED	REPOR	RT LINE NUMBER		
Ľ		STATION OPERATOR				YELLOWKNIFE, NT	(867) 92	20-8130		
LEAI		GNWT □ GN □ ILA □ INA		SIGN	IFICANCE 🗆 MINOR 🗆 MA		STATUS 🗆 (OPEN CLOSED		
AGE	NCY	CONTACT NAME			FACT TIME	REMARKS				
LEAI	D AGENCY									
FIRS	ST SUPPORT AGENCY									
SEC	OND SUPPORT AGENCY									
THIF	RD SUPPORT AGENCY									



September 8th, 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

Re: Follow-up Report Spill #2023-340 – Release of 1.5 m³ of fresh water and tailings at the Meliadine Gold Project

On August 12th, 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email (spills@gov.nt.ca) of a spill of approximately 1.5 m³ mixture of fresh water and tailings at the Meliadine Gold Project site (spill location coordinates: (63° 1'38.29"N 92°13'5.81"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 August 12th, 2023, at approximately 2:30 a.m., there was an inadvertent release of approximately 1.5m³ of tailings and fresh water outside the paste plant facility. The incident resulted from an overflow within the solid tailings hopper due to a malfunctioning sensor. In response, the plant operator undertook remedial actions, which involved hosing down the affected area. This action inadvertently led the mixture of tailings and fresh water to migrate from a maintenance door outside the facility.

No water bodies were impacted by the spill. The closest water body (B7) is approximately 630 meters west, as seen in Figure 1.





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

Response and Remediation

During the floor-cleaning process, the operator realized the mixture of tailings and fresh water was leaving the structure and promptly reported it to the supervisor, who initiated the spill



cleanup. The tailings-impacted material that migrated outside of the paste plant facility was collected and relocated to the Tailings Storage Facility for disposal.

Root Cause and Corrective Measures

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

- On August 11th, 2023, an electrical storm affected signal transmission of the tailings hopper sensor, which allowed the tailings hopper to overflow and solids tailings to fall to the paste plant floor.
- During the tailing's cleanup, the operator used fresh water to hose down the tailings to a collection sump. During this process, some of the tailings and fresh water flowed outside the maintenance door, resulting in the spill.

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

- The level sensor was cleaned, and the transmitter was reconfigured. This sensor is linked to a process interlock, which stops the transfer of tailings into the hopper in the event of a high-level reading.
- As a redundancy, a secondary tilt switch is planned to be installed in the coming weeks when parts arrive. This switch is also linked to a process interlock, which stops the transfer of tailings into the hopper in the event of a high-level reading.
- Water will not be used on the 2nd floor at paste plant to clean tailings; only a shovel will be used for tailings cleanup.
- Toolbox meetings were conducted to highlight the importance of being diligent when cleaning material.

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 Direct 819.759.3555 x4603212 Mobile



819.860.1033 Agnico Eagle Mines Limited - Meliadine Mine, Suite 879 - Rankin Inlet, Nunavut, Canada X0C 0G0_____



Sent from Meliadine



Appendix A – Photos





Photo 1: Spill location.



Photo 2: Post spill clean-up.



NT-NU SPILL REPORT

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

REPORT LINE USE ONLY

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

A	REPORT DATE: MONTH - DAY - YEAR 08-25-2023			ттіме О		T, REPORT NUMBER					
B	OCCURRENCE DATE: MONTH – DAY – YEAR				UPDATE # TO THE ORIGINAL SPILL R						
	LAND USE PERMIT NUMBER (IF APPLICABLE)		10:0	WATER LICENCE NUMBE	ER (IF APPLICABLE)						
C	KVPL11D01			2AM-MEL1631							
D	GEOGRAPHIC PLACE NAME OR I	DISTANCE AND DIRECTION FROM NAM	ED LOCATION		VUT 🗆 ADJACENT JURISI	DICTION OR OCEAN					
E	LATITUDE		28	LONGITUDE		6					
╞═	RESPONSIBLE PARTY OR VESSE	INUTES SECONDS	BLE PARTY A	DEGREES		SECONDS U					
⊢	Agnico Eagle Mines Ltd. Meliadine, Rankin Inlet, Nunavut, X0C 0G0										
G	ANY CONTRACTOR INVOLVED CONTRACTOR ADDRESS OR OFFICE LOCATION N/A N/A										
	PRODUCT SPILLED Contact water	QUANTITY 20m3	IN LITRES, KI	ILOGRAMS OR CUBIC MET	RES U.N. NUMBER						
H	SECOND PRODUCT SPILLED (IF , N/A	APPLICABLE) QUANTITY	IN LITRES, KI	ILOGRAMS OR CUBIC MET	TRES U.N. NUMBER						
	SPILL SOURCE	SPILL CAU	SE		AREA OF CONTAMINA	TION IN SQUARE METRES					
		tion Broke	n pipe		120						
J	None	None	ANY ASSIST	ANCE REQUIRED	None	None					
	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS										
к	 released 20m3 of contact water on the ground. The spill was contained to the local area. Further investigation is currently being conducted and findings will be provided on the follow-up report. Location of spill: 63 2' 42" N 92 13' 52" W No water bodies were impacted, the closest water body (Meliadine Lake) is approximately 585m away (NNE). Pursuant to Part H, Section 8c of the Water License, a follow-up report will be issued after a closer investigation is completed. Reported by Randy Schwandt Environment Coordinator (819-759-3555, x4603996). 										
	investigation is con Reported by Randy	Section 8c of the Wate npleted. Schwandt Environmen	r Licens t Coordi	e, a follow-up re inator (819-759-	eport will be issue 3555, x4603996).	d after a closer					
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September 21, 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.qc.ca

Re: Follow-up Report Spill #2023-362 – Release of 20 m³ of contact water at the Meliadine Gold Mine

On August 25th, 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email (spills@gov.nt.ca) of a spill of approximately 20 m³ of contact water at the Meliadine Mine site (spill location coordinates: (63° 2'42"N 92°13'52"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 August 25th, 2023, at approximately 10:00 am, there was an inadvertent release of approximately 20 m³ of contact water outside the Water Treatment Complex (WTC) during the Saline Effluent Treatment Plant (SETP) commissioning activities. A High-Density Polyethylene (HDPE) influent line that transitions to a Polyvinyl Chloride (PVC) coupler as it enters the WTC was conveying saline contact water from Tiriganiaq Open Pit 2 (Tiri 02) to the SETP. The contraction of the HDPE line caused the vertical portion of the coupling to shift, then break due to additional stress, resulting in a spill of contact water. Due to the location of the spill, contact water flowed into Collection Pond 1 (CP1), a part of the site's surface contact runoff management system.

No water bodies were impacted by the spill. The closest water body (Meliadine Lake) is approximately 585 meters northeast, as seen in Figure 1.





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

Response and Remediation

In response to the spill incident, contact water being conveyed to the SETP was immediately suspended to prevent further spillage. As per the Spill Contingency Plan, the Environmental Department was notified to assess the situation.



Given the volume of the release, the event was calculated to have a negligible impact on CP1 water quality. As the spilled contact water originated from saline water storage in Tiri 02, total dissolved solids (TDS) is the parameter of interest in this event. Through a mass balance calculation, it was determined that the spill could result in a maximum 0.002% increase on CP1 TDS levels. Electrical conductivity readings were collected within CP1 as seen in Figure 2. Samples were also taken and submitted to a third-party laboratory as due diligence. Field readings and laboratory results are provided in Table 1 below. Results were not indicative of significant changes in water quality nor of the presence of an isolated plume of spilled water at the sampled locations. Concurrent with the sampling and mass balance calculation efforts, the Effluent Water Treatment Plant (EWTP) was placed into recirculation until August 25th, suspending discharge to Meliadine Lake (MEL-14). The EWTP remained in recirculation until August 29th. This measure was precautionary, to ensure impact to the TDS level of CP1 was negligible before resuming discharge to the environment. Once it was confirmed that the impact was negligible, discharge was resumed.

It is important to note that the EWTP is continuously monitored for electrical conductivity and trigger limits for stopping discharge are in place for TDS exceedance mitigation during periods of discharge. When a trigger limit is reached, the EWTP-WTC stops discharge immediately and begins recirculating treated water to CP1.



Figure 2: Location of sampling efforts.



Table 1: Field measurements and laboratory results related to sampling efforts.

	08/27/2023	08/27/2023	08/27/2023
Parameter	CP1-A	CP1-B	CP1-C
Field conductivity (µS/cm)	2,794	2,783	2,754
Lab Conductivity (µS/cm)	2,700	2,700	2,600
Total Dissolved Solids (mg/L)	1,470	1,470	1,450

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:

- Inadequate support and anchoring of the HDPE line where it enters the WTC.
- HPDE/PVC coupler design did not allow for expansion and contraction of the line.

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

- Enhance the HDPE pipe support and anchoring to reduce movement of the line where it enters the WTC.
- Replace the PVC outside of the building with HDPE.

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



Alexandre Langlais-Bourassa Environment Coordinator <u>alexandre.langlais-bourassa@agnicoeagle.com</u> Direct 819.759.3555 x4603996 Agnico Eagle Mines Limited - Meliadine Mine, Suite 879 - Rankin Inlet, Nunavut, Canada XOC OGO





Appendix A – Photos





Photo 1: Broken segment of PVC pipe, facing southwest.



Photo 2: Broken segment of PVC pipe, facing southeast.


NT-NU SPILL REPORT

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

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

REPORT LINE USE ONLY

										HEI OTT EINE OOE OTTET
Α	REPORT DATE: MONTH – DAY – YEAR 08-30-2023			REPORT TIME			X OF	ORIGINAL SPILL REPORT,		REPORT NUMBER
R	OCCURRENCE DATE: MONTH	TTE: MONTH – DAY – YEAR								
	08-30-2023			05:00						
С	LAND USE PERMIT NUMBER (I KVPL11D01	IF APPLICABLE)		ľ	WAT 2/	ER LICENCE NUMBER	R (IF A	PPLICABLE)		
	GEOGRAPHIC PLACE NAME O	R DISTANCE AND DIRECTIC	N FROM NAMED LC	OCATION		REGION				
U	J Meliadine Gold Project						JT	ADJACENT JUF	RISDICTION	OR OCEAN
E	LATITUDE		araana 21			IGITUDE			0.5	41
	BESPONSIBLE PARTY OR VES						ION	MINUTES IC	55	
F	Agnico Eagle Min	es Ltd.	Meliadine	e, Ranl	kir	n Inlet, Nunav	ut, X	X0C 0G0		
	ANY CONTRACTOR INVOLVED	I	CONTRACTOR A	DDRESS	OR	OFFICE LOCATION				
G	N/A		N/A							
	PRODUCT SPILLED		QUANTITY IN LIT	RES, KILC	GR	AMS OR CUBIC METRI	ES	U.N. NUMBER		
н	Sewage		25 Liters					N/A		
• •	SECOND PRODUCT SPILLED (IF APPLICABLE)		RES, KILC	GR	AMS OR CUBIC METRI	ES			
	Lift station		Equipmer	nt Fail	ur	e		0.5	INATION IN	SQUARE METRES
1	FACTORS AFFECTING SPILL OR RECOVERY DESCRIBE ANY			ASSISTAN	CE	REQUIRED		HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT		
J	none		N/A					N/A		
К	spill out of contain activities were import The coordinates of spill. The nearest Pursuant to Part H investigation is con Reported by Kevin kevin.smith2@ago	nment onto the in mediately undert of the spill are 63 natural water bo H, Item 8c of wate ompleted. n Smith, Hydroge nicoeagle.com.	ndustrial pa aken. º 2' 23''N, 92 dy (G2) is 22 er license 24 eology Spec	d. The 2º 13' 4 25 m r AM-ME :ialist 8	9 S 44' 101 EL 81	pill was cons 'W. No water rth. 1631, a follow 9-759-3555 ex	traiı boc / up kt. 4	ned to the l dies were in report will 603961,	ocal ard npacted be issu	ea. Clean up d by this led after the
1	REPORTED TO SPILL LINE BY	POSITION		EMPLOYE	R		LOC	ATION CALLING FR	ОМ Т	ELEPHONE
╘			alist							819-759-3555
M	Kyle Conway	General Supe	ervisor		ĸ				A	819-860-1033
			REPORT LINE	USE ON	LY					
NI	RECEIVED AT SPILL LINE BY	POSITION		EMPLOYE	R		LOC	ATION CALLED	R	EPORT LINE NUMBER
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LEA					FICA	ANCE 🗆 MINOR 🗆 MA	JOR		FILE STATU	JS □ OPEN □ CLOSED
AGE	AGENCY CONTACT NAME				ACT	ТІМЕ	F	REMARKS		
LEA	DAGENCY									
FIRS	T SUPPORT AGENCY									
SEC	OND SUPPORT AGENCY									



September 30th, 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

Re: Follow-up Report Spill #2023-368 – Release of 25 L of Sewage at the Meliadine Gold Mine

On August 30th, 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email (spills@gov.nt.ca) of a spill of approximately 25 L of sewage at the Meliadine Gold Mine site (spill location coordinates: 63° 2′ 23″N, 92° 13′ 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 August 30th, 2023, at approximately 05:00, an estimated 25 L of sewage was spilled onto the industrial pad by wing 4 lift station. A power failure at wing 4 de-energized the lift station and caused the spill. No water bodies were impacted by this spill. The closest water body (Lake G2) is approximately 225 meters northwest, as seen in Figure 1.





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

Response and Remediation

E&I Maintenance received the call reporting a transformer failure resulting in a power outage at wing 4. This prompted the dispatch of personnel to investigate the situation at wing 4 lift station. Upon arrival, personnel noticed the spill and closed the water source to prevent any further spillage. A vacuum truck was brought up to pump the water in the basin and the secondary containment. Spill pads were laid out to soak up any remaining wastewater on the ground. These pads were then disposed of in the incinerator.



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:

• In wing 4, a transformer failure occurred, resulting in the de-energizing of the pumps within their respective lift station.

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

• The electrical department completed an evaluation of and continues to implement updates to the lift station systems. The initial focus was on the main camp lift stations as they have the potential for larger volume spills. The secondary focus has been on the accommodation wing lifts stations. Completed and planned efforts are summarized below:

Main Camp Lift Stations

- Replaced pump control (previous floats) with Ultrasonic level sensor & high-level switch – increased reliability.
- Added pump drives to the network.
- Added a low temperature switch in the main lift station.
- Added equipment visibility on HMI (STP Lift station page).
- Set alarms to notify designated phones and radios.
- Have plan to move drives into the electrical room away from the harsh lift station environment.
- Have plan to install drives on separate circuits to ensure pump redundancy.

Accommodation Wing Lift Stations (Planned)

- Each wing lift station will have low temperature, pump fault and loss of power alarms that will allow control of the wings water supply valve.
- Engineering of these changes is complete 95% of parts have been received.



- Awaiting enclosures to arrive to build the remote PLC (programmable logic controller) panels.
- CAT5 cable to be pulled to each wing mech room/e-room cable will be received on the 2023 sealift.
- Network switches to be added to IT panels (connect remote PLC panels with the rest of the network).
- Alarms to be added to HMI (Human Machine Interface) and alert designated phones/radios.

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



Alexandre Langlais-Bourassa | Environment Coordinator alexandre.langlais-bourassa@agnicoeagle.com | Direct 819.759.3555 x4603996 | Agnico Eagle Mines Limited - Meliadine Mine, Suite 879 - Rankin Inlet, Nunavut, Canada X0C 0G0





Appendix – Photos





Photo 1: Sewage spill location.



Photo 2: Sewage spill remediation.



NT-NU SPILL REPORT

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

REPORT LINE USE ONLY

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

A	REPORT DATE: MONTH – DAY 09-21-2023	′–YEAR		REPORT	PORT TIME 5:00		ORIGINAL SPILL REPC	GINAL SPILL REPORT, REPORT NU	
В	OCCURRENCE DATE: MONTH 09-20-2023	I – DAY – YEAR		OCCURF 18:00	RENCE TIME		UPDATE # THE ORIGINAL SPILL	REPORT	
С	LAND USE PERMIT NUMBER	(IF APPLICABLE)		1	WATER LICENCE NUMBER (IF APPLICABLE)				
D	BEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED I Meliadine Gold Project				REGION	X NUNAVUT		SDICTION (OR OCEAN
E	LATITUDE DEGREES 63 MINUTES 2 SECONDS 21					92	MINUTES 13	SE	CONDS 41
F	RESPONSIBLE PARTY OR VE	SSEL NAME	RESPONSIBLE		DRESS OR OFF				
-	Agnico Eagle IVIII	1es Lta.	CONTRACTOR	ADDRESS	OR OFFICE LO		, XUC UGU		
G	N/A		N/A				-1		
	PRODUCT SPILLED Sewage		QUANTITY IN L	ITRES, KIL	OGRAMS OR C	UBIC METRES	U.N. NUMBER		
	SECOND PRODUCT SPILLED	(IF APPLICABLE)	QUANTITY IN L	ITRES, KIL	OGRAMS OR C	UBIC METRES	U.N. NUMBER		
I	SPILL SOURCE Lift station		SPILL CAUSE Equipme	ent Fai	lure		AREA OF CONTAMIN	NATION IN S	QUARE METRES
J	FACTORS AFFECTING SPILL	OR RECOVERY	DESCRIBE ANY	ASSISTAI	NCE REQUIRED)	HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT		
	ADDITIONAL INFORMATION, (COMMENTS, ACTIC	I NS PROPOSED OR TAKEN T	O CONTAI	N, RECOVER O	R DISPOSE OF	SPILLED PRODUCT A		MINATED MATERIALS
к	The coordinates spill. The nearest Pursuant to Part investigation is c Reported by Alex alexandre.langlai	of the spill a natural wa H, Item 8c c ompleted. andre Lang s-bourassa	n. are 63º 2' 23''N, 9 ter body (G2) is 2 of water license 2 llais-Bourassa, E @agnicoeagle.co	2º 13' 200 m AM-M	53''W. No north. EL1631, a nment Co	o water be a follow u ordinator	odies were im p report will k r, 819-759-355	pactec pe issu 5 ext. 4	I by this ed after the 4603996,
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Μ	ANY ALTERNATE CONTACT Kyle Conway	POSITION Genera	Il Supervisor	EMPLOY AEM	ER		TERNATE CONTACT Meliadine SCATION	AI	_ternate telephone 319-860-1033
			REPORT LIN	IE USE OI	NLY				
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LEA	│ DAGENCY □ EC □ CCG □ '			SIGN				ILE STATU	S
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LEA	DAGENCY								
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THIF	D SUPPORT AGENCY								



October 19, 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

Re: Follow-up Report Spill #2023-402 – Release of 40 L of Sewage at the Meliadine Gold Mine

On September 21st, 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email (spills@gov.nt.ca) of a spill of approximately 40 L of sewage at the Meliadine Gold Mine site (spill location coordinates: 63° 2′ 22″N, 92° 13' 41″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 September 20th, 2023, at approximately 18:00, an estimated 40 L of sewage was spilled onto the industrial pad by wing 13 lift station. The pump was unplugged during routine lift station maintenance at wing 13 and was not plugged back in during the restart, causing the spill. No water bodies were impacted by this spill. The closest water body (Lake G2) is approximately 200 meters northwest, as seen in Figure 1.





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

Response and Remediation

E&I Maintenance observed that the high-water level strobe light was on around 18:00 at wing 13. This prompted the dispatch of personnel to investigate the situation at wing 13 lift station. Upon arrival, personnel noticed the spill and closed the water source to prevent any further spillage. A vacuum truck was brought up to pump the water in the basin and the secondary containment. Spill pads were laid out to soak up any remaining wastewater on the ground. These pads were then disposed of in the incinerator. The ground surface was also hand excavated, and the recovered material was 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:

• Investigation determined that the pumps were left unplugged after routine maintenance was completed.

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

• During the daily inspection of the lift stations, staff will verify that float pumps are plugged into the PDC-230 after any maintenance event; this has been added to the daily maintenance check list.

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





Appendix – Photos



Photos 1 and 2: Sewage spill location.





Photos 3 and 4: Spill location post remediation.





NT-NU SPILL REPORT

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

REPORT LINE USE ONLY

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

A	REPORT DATE: MONTH – DAY – YEAR I I 10-16-2023		19:00			CORIGINAL SPILL REPORT,		REPORT NUMBER		
R	OCCURRENCE DATE: MONTH	I – DAY – YEAR		OCCURR	ENCE TIME		UPDATE #	FPORT	_	
	10-16-2023			17:00						
C	KVPL11D01				2AM-MEL	_1631				
D	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOC Meliadine Gold Project				REGION	X NUNAVUT	ADJACENT JURISI		DR OCEAN	
E	LATITUDE					2				
╞	DEGREES OJ MINUTES Z SECONDS Z I RESPONSIBLE PARTY OR VESSEL NAME RESPONSIBLE PARTY RESPONSIBLE PARTY RESPONSIBLE PARTY				DEGREES		MINUTES 13	SE	CONDS 41	
F	Agnico Eagle Mir	nes Ltd.	Meliadine	e, Ran	kin Inlet, I	Nunavut	, X0C 0G0			
G	ANY CONTRACTOR INVOLVE	D	CONTRACTOR A	DDRESS	OR OFFICE LOC	ATION				
	PRODUCT SPILLED		QUANTITY IN LIT	RES, KILO	OGRAMS OR CU	BIC METRES	U.N. NUMBER			
Ц	Sewage		10 Liters				N/A			
' '	SECOND PRODUCT SPILLED	(IF APPLICABLE)	QUANTITY IN LIT	RES, KILO	OGRAMS OR CU	BIC METRES	U.N. NUMBER			
	SPILL SOURCE		SPILL CAUSE				AREA OF CONTAMINA	ATION IN S	QUARE METRES	
	Lift station		Equipmer	nt Fail	ure		1			
J	FACTORS AFFECTING SPILL OR RECOVERY DESCR NOne N/A			SCRIBE ANY ASSISTANCE REQUIRED				HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT		
	ADDITIONAL INFORMATION,	COMMENTS, ACTIONS PROP	DSED OR TAKEN TO	CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS						
к	were immediately The coordinates spill. The nearest Pursuant to Part investigation is c Reported by Ran Randy.Schwandt	y undertaken. of the spill are 63 t natural water bo H, Item 8c of wate ompleted. dy Schwandt, En @agnicoeagle.co	⁹ 2' 22''N, 92 dy (G2) is 1 er license 2/ vironment C m.	2º 13'	53''W. No north. EL1631, a nator, 819	water bo follow u)-759-35	odies were imp p report will b 55 ext. 4603990	oactec e issu ô,	l by this ed after the	
L	REPORTED TO SPILL LINE BY Randy Schwandt	r POSITION Environment	Coord.	EMPLOYE AEM	R	LC	CATION CALLING FROM	1 TE 8	ELEPHONE 319-759-3555	
Μ	ANY ALTERNATE CONTACT	POSITION General Supe	ervisor		R	al L	TERNATE CONTACT	AI E	TERNATE TELEPHONE	
		•	REPORT LINE	USE ON	ILY					
М	RECEIVED AT SPILL LINE BY	POSITION		EMPLOYE	R	LC	CATION CALLED	R	EPORT LINE NUMBER	
		STATION OPERATOR				YE	LLOWKNIFE, NT	(8	67) 920-8130	
LEA								LE STATU	S OPEN CLOSED	
AGE	AGENCY CONTACT NAME				ACT TIME		REMARKS			
LEA	DAGENCY									
FIRS	ST SUPPORT AGENCY									
SEC	OND SUPPORT AGENCY									
THIRD SUPPORT AGENCY										



October 30th, 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.qc.ca

Re: Follow-up Report Spill #2023-436 – Release of 10 L of Sewage at the Meliadine Gold Mine

On October 16th, 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email (spills@gov.nt.ca) of a spill of approximately 10 L of sewage at the Meliadine Gold Mine site (spill location coordinates: 63° 2′ 22′N, 92° 13′ 53″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 October 16th, 2023, at approximately 17:00, an estimated 10 L of sewage was spilled onto the industrial pad by wing 14 lift station. A transfer pump failed due to blockage at the intake of the pumps, resulting in the sewage spill. No water bodies were impacted by this spill. The closest water body (Lake G2) is approximately 195 m northwest, as seen in Figure 1.





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

Response and Remediation

During a routine inspection of the site sewage system, an employee form the Energy and Infrastructure (E&I) maintenance department noticed that the high-water level strobe had been activated at wing 14 at 16:50. Upon inspection, the employee observed the presence of sewage effluent outside the lift station enclosure. In response, a vacuum truck was promptly dispatched to pump out the water accumulated in the lift station basin. The ground surface was hand excavated, and the recovered material was brought to Landfarm A as per the Spill Contingency Plan. The employee inspected the transfer pump and discovered a personal hygienic product obstructing the intake and had caused the pump to burn out. The personal hygienic product was then removed from the pump system, the pump was replaced, and the system was back on full functionality the same day.



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:

• Investigation determined that personal hygienic products obstructed the intake of the float pump, causing the pump to fail.

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

- All employees in wing 14 were met individually by their supervisor, and they were briefed on the importance of not flushing personal hygienic products in the bathroom.
- Site-wide notification was also sent in the Meliadine minute for supervisors to talk with their team about the importance of putting personal hygienic products in the garbage.

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



Alexandre Langlais-Bourassa, M.Sc. Biol. | Environment Coordinator <u>alexandre.langlais-bourassa@agnicoeagle.com</u> | Direct 819.759.3555 x4603996 | Agnico Eagle Mines Limited - Meliadine Mine, Suite 879 - Rankin Inlet, Nunavut, Canada X0C 0G0 <u>agnicoeagle.com</u> f O V in V



Appendix – Photos





Photos 1: Sewage spill location.



Photos 2: Spill location post remediation.



NT-NU SPILL REPORT

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

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

REPORT LINE USE ONLY

									REPORT LINE USE UNLT		
Α	REPORT DATE: MONTH – DAY 11-05-2023	⁷ – YEAR	1	13:30			ORIGINAL SPILL REF	REPORT NUMBER			
В	OCCURRENCE DATE: MONTH 11-04-2023	– DAY – YEAR		OCCURRENCE TIME		UPDATE # THE ORIGINAL SPIL	L REPORT				
С	LAND USE PERMIT NUMBER	(IF APPLICABLE)		Ň	VATER LICENCE NUME	BER (IF 1	APPLICABLE)				
D	GEOGRAPHIC PLACE NAME (N FROM NAMED LC	DCATION	REGION						
-						AVUT	ADJACENT JUF	RISDICTION	OR OCEAN		
E	DEGREES 63	MINUTES 2	SECONDS 21	[DEGREES 92		MINUTES 13	SI	ECONDS 41		
F	RESPONSIBLE PARTY OR VE Agnico Eagle Mir	SSEL NAME Des Ltd.	RESPONSIBLE P.	arty add Ranl	ress or office loc (in Inlet. Nun a	ATION	. X0C 0G0				
G	ANY CONTRACTOR INVOLVED)	CONTRACTOR A	DDRESS	DR OFFICE LOCATION		,				
	PRODUCT SPILLED Suspended Solid	S	QUANTITY IN LIT	RES, KILC	GRAMS OR CUBIC ME	TRES	U.N. NUMBER				
	SECOND PRODUCT SPILLED	(IF APPLICABLE)	QUANTITY IN LIT	RES, KILC	GRAMS OR CUBIC ME	TRES	U.N. NUMBER				
	SPILL SOURCE Streambed sedim	ents	SPILL CAUSE	tion o	f sediments		AREA OF CONTAM	IINATION IN	SQUARE METRES		
J	FACTORS AFFECTING SPILL OR RECOVERY DESCRIBE ANY ICE NOne			ASSISTANCE REQUIRED			HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT				
к	 Construction work was being conducted to replace the culvert at Itivia upstream of MEL-SR-1. Water pumped from below ice upstream of the culvert was directed downstream, into the partially installed culvert, to create a dry working environment. A sample of runoff water collected further downstream of the culvert installation yielded a turbidity measurement of 69.7 NTU, presumed to be above the maximum TSS concentration of 100 mg/L outlined in Part D, Item 18 of the NWB Water Licence 2AM-MEL1631 (the Licence). Construction work ceased until the following day, where additional monitoring and sedimentation mitigations could be implemented. K Location of spill: 62 47'59.94"N, 92 5'35.74"W. The closest water body (Melvin Bay) is approximately 75 m south. Pursuant to Part H, Item 8c of the Licence, a follow-up report will be issued after an investigation is completed. 								SR-1. Water ally installed downstream bove the cence ditional proximately after an		
L	John Baechler	Env. Coordin	ator	AEM	7		CATION CALLING FR	OM T	ELEPHONE 819-759-3555		
Μ	ANY ALTERNATE CONTACT Kyle Conway	POSITION Env. General	Supervis	EMPLOYE	3		TERNATE CONTACT Aeliadine CATION	A	LTERNATE TELEPHONE 819-759-3555		
	•	•	REPORT LINE	USE ON	LY			I			
Ν	RECEIVED AT SPILL LINE BY	POSITION		EMPLOYE	7	LC	OCATION CALLED	F	EPORT LINE NUMBER		
Ľ		STATION OPERATOR				YE	LLOWKNIFE, NT	(1	367) 920-8130		
LEA				SIGNI		MAJO		FILE STATU	JS □ OPEN □ CLOSED		
AGE	NCY	CONTACT NAME			ACT TIME		REMARKS				
LEA	DAGENCY										
FIRS	T SUPPORT AGENCY										
SEC	OND SUPPORT AGENCY										



December 4th, 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.qc.ca

Re: Follow-up Report Spill #2023-462 – MEL-SR-1 Surface Water Runoff at the Meliadine Gold Mine, Itivia Site

On November 5th, 2023, as due diligence, the Nunavut Spill Line was notified by Agnico Eagle personnel via email (spills@gov.nt.ca) of a potential Total Suspended Solids (TSS) exceedance at the Meliadine Gold Mine, Itivia site (spill location coordinates: 62 47'59.94'' N, 92 5'35.74'' W).

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

- Nunavut Water Board Licence Water Licence 2AM-MEL1631, part H, item 8c; and
- The Fisheries Act, subsection 38(7).

Analytical results of samples collected on November 4th and November 5th show TSS concentrations below the allowable TSS criteria listed under Part D, Item 18 of the 2AM-MEL1631 Water Licence.

Thus, the event was reported as due diligence and is not an exceedance under Part D Item 18 of the 2AM-MEL1631 Water Licence.

Description of Event

On November 4th, 2023, construction work was underway to replace two culverts at the Itivia laydown area which sustained damage following a significant rainfall event on June 7th, 2023. To



facilitate the placement of riprap on the upstream side of the partially installed culverts, an area of ice and soil was excavated, resulting in the upwelling of unfrozen water present beneath the ice.



Figure 1: MEL-SR-1 monitoring location.

A submersible pump was installed in the excavation upstream of the culverts to dewater the area, and the discharge stream was directed into one of the partially installed culverts (Figure 2). Approximately 6 m³ of water was pumped from the excavation.





Figure 2: Dewatering of excavated area upstream of new Itivia culverts.

Sampling Results

A water sample was collected from runoff at station MEL-SR-1, downstream of the culverts (Figure 3), November 4th. The sample was brought back to the mine site and measured for turbidity, yielding a reading of 69.7 NTU. The sample was internally analyzed for TSS at the mine site Assay Laboratory and results reported a TSS concentration of 43.5 mg/L, well below the 100 mg/L-TSS effluent quality limit identified in Part D, Item 18 of the Licence.

An assessment of a TSS to turbidity ratio was conducted specific to the composition of water present at the MEL-SR-1 station. Using pairs of field turbidity readings and laboratory assessed TSS concentrations for historic sample events at MEL-SR-1 and MEL-SR-7 (these stations represent a similar flow path), a linear rating curve was established to estimate TSS concentration from an input turbidity measurement. Using the rating curve, the November 4th MEL-SR-1 measurement of 69.7 NTU resulted in an approximate TSS concentration of 42.5 mg/L.

As shown in Table 1, the results of both assessment methods have a low percent difference, providing confidence that the runoff at MEL-SR-1 did not exceed the TSS effluent quality limit identified in Part D, Item 18 of the Licence.



Table 1: Results from internal analysis of November 4th sample.

Assessment Method	Total Suspended Solids (mg/L)
Assay Lab	43.5
TSS:Turbidity Relationship*	42.5
% Difference	2.3 %

* TSS calculation of 69.7 NTU from TSS: Turbidity rating curve, derived from historic MEL-SR-1 + MEL-SR-7 data.

On November 5th, a sample was collected for analysis of group 1 parameters at monitoring station MEL-SR-1, per table 2 of the Licence.

Laboratory analytical results for the MEL-SR-1 sample reported a concentration of 14 mg/L TSS, which is below the TSS effluent quality limit listed under Part D Item 18 of the 2AM-MEL1631 Water Licence.



Figure 3: Discharge of pump dewatering downstream of Itivia culverts.



Sedimentation Controls

As per the Sediment and Erosion Management Plan, mitigation measures were installed to control potential sedimentation issues prior to further dewatering of the sump upstream of the culverts.

On November 5th, 2023, a sediment dewatering bag was installed on the end of the pump discharge hose, and straw and woodchip wattles were installed downstream of the culvert prior to resuming dewatering (Figure 4).



Figure 4: Sediment dewatering bag and straw/wood chip wattles installed downstream.

Following the resumption of pumping, a series of turbidity measurements were collected at MEL-SR-1, downstream of the culverts, and their results are indicative of efficient sedimentation control measures.

Time (November 5 th)	Turbidity (NTU)
09:44	29.6
09:58	22.7
10:13	9.38

|--|



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



Alexandre Langlais-Bourassa, M.Sc. Biol. | Environment Coordinator alexandre.langlais-bourassa@agnicoeagle.com | Direct 819.759.3555 x4603996 | Agnico Eagle Mines Limited - Meliadine Mine, Suite 879 - Rankin Inlet, Nunavut, Canada X0C 0G0





Appendix A – 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: 2023/11/14 Report #: R7910701 Version: 1 - Partial

CERTIFICATE OF ANALYSIS – PARTIAL RESULTS

BUREAU VERITAS JOB #: C3Z1334

Received: 2023/11/08, 10:00

Sample Matrix: Water # Samples Received: 1

		Date	Date		
Analyses	Quantity	Extracted	Analyzed	Laboratory Method	Analytical Method
Alkalinity	1	N/A	2023/11/10	CAM SOP-00448	SM 24 2320 B m
Carbonate, Bicarbonate and Hydroxide	1	N/A	2023/11/11	CAM SOP-00102	APHA 4500-CO2 D
Chloride by Automated Colourimetry	1	N/A	2023/11/10	CAM SOP-00463	SM 23 4500-Cl E m
Fluoride	1	2023/11/09	2023/11/10	CAM SOP-00449	SM 24 4500-F C m
Mercury (low level)	1	2023/11/13	2023/11/13	CAM SOP-00453	EPA 7470 m
Total Ammonia-N	1	N/A	2023/11/10	CAM SOP-00441	USGS I-2522-90 m
Total Oil and Grease	1	2023/11/12	2023/11/12	CAM SOP-00326	EPA1664B m,SM5520B m
рН	1	2023/11/09	2023/11/10	CAM SOP-00413	SM 24th - 4500H+ B
Orthophosphate	1	N/A	2023/11/10	CAM SOP-00461	SM 23 4500-P E m
Total Dissolved Solids	1	2023/11/09	2023/11/10	CAM SOP-00428	SM 23 2540C m
Total Phosphorus (Colourimetric)	1	2023/11/09	2023/11/10	CAM SOP-00407	SM 23 4500-P I
Low Level Total Suspended Solids	1	2023/11/10	2023/11/13	CAM SOP-00428	SM 23 2540D m
Turbidity	1	N/A	2023/11/09	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 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.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com



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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: 2023/11/14 Report #: R7910701 Version: 1 - Partial

CERTIFICATE OF ANALYSIS – PARTIAL RESULTS

BUREAU VERITAS JOB #: C3Z1334

Received: 2023/11/08, 10:00

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.

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

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 Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Total Cover Pages : 2 Page 2 of 8

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com



RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		XNY545		
Sampling Date		2023/11/05 09:45		
COC Number		n/a		
	UNITS	MEL-SR1	RDL	QC Batch
Calculated Parameters				
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	290	1.0	9038716
Carb. Alkalinity (calc. as CaCO3)	mg/L	1.1	1.0	9038716
Inorganics	•			
Total Ammonia-N	mg/L	3.8	0.050	9040409
Total Dissolved Solids	mg/L	3530	10	9040888
Fluoride (F-)	mg/L	0.17	0.10	9041103
Orthophosphate (P)	mg/L	<0.010	0.010	9040999
рН	рН	7.62		9041107
Total Phosphorus	mg/L	0.059	0.020	9041080
Total Suspended Solids	mg/L	14	2	9042133
Turbidity	NTU	5.1	0.1	9039791
Alkalinity (Total as CaCO3)	mg/L	290	1.0	9041099
Dissolved Chloride (Cl-)	mg/L	1500	20	9040995
Petroleum Hydrocarbons				
Total Oil & Grease	mg/L	0.80	0.50	9044998
RDL = Reportable Detection Limit QC Batch = Quality Control Batch				

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ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		XNY545		
Sampling Date		2023/11/05		
		09:45		
COC Number		n/a		
	UNITS	MEL-SR1	RDL	QC Batch
Metals				
Mercury (Hg)	mg/L	<0.00001	0.00001	9046051
RDL = Reportable Detection L	imit			
QC Batch = Quality Control Ba	atch			

Page 4 of 8 Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, LSN 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

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GENERAL COMMENTS

Sample XNY545 [MEL-SR1] : TSS analysis: Due to the nature of the sample, a smaller than usual portion of the sample was used.

Results relate only to the items tested.

Page 5 of 8 Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, LSN 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com



QUALITY ASSURANCE REPORT

QA/QC			
Batch Init QC Type Parameter Date Analyzed Value	Recovery	UNITS	QC Limits
9039791 LKI Spiked Blank Turbidity 2023/11/09	101	%	80 - 120
9039791 LKI Method Blank Turbidity 2023/11/09 <0.1		NTU	
9039791 LKI RPD Turbidity 2023/11/09 6.5		%	20
9040409 KPJ Matrix Spike Total Ammonia-N 2023/11/10	104	%	75 - 125
9040409 KPJ Spiked Blank Total Ammonia-N 2023/11/10	104	%	80 - 120
9040409 KPJ Method Blank Total Ammonia-N 2023/11/10 <0.050		mg/L	
^{la} 9040409 KPJ RPD Total Ammonia-N 2023/11/10 NC		%	20
9040888 RTB Spiked Blank Total Dissolved Solids 2023/11/10	95	%	90 - 110
👖 9040888 RTB Method Blank Total Dissolved Solids 2023/11/10 <10		mg/L	
9040888 RTB RPD Total Dissolved Solids 2023/11/10 13		%	20
9040995 MJ1 Matrix Spike Dissolved Chloride (Cl-) 2023/11/10	99	%	80 - 120
9040995 MJ1 Spiked Blank Dissolved Chloride (Cl-) 2023/11/10	103	%	80 - 120
9040995 MJ1 Method Blank Dissolved Chloride (Cl-) 2023/11/10 <1.0		mg/L	
9040995 MJ1 RPD Dissolved Chloride (Cl-) 2023/11/10 NC		%	20
🗧 9040999 MJ1 Matrix Spike Orthophosphate (P) 2023/11/10	92	%	75 - 125
9040999 MJ1 Spiked Blank Orthophosphate (P) 2023/11/10	95	%	80 - 120
9040999 MJ1 Method Blank Orthophosphate (P) 2023/11/10 <0.010		mg/L	
9040999 MJ1 RPD Orthophosphate (P) 2023/11/10 NC		%	20
9041080 MUM Matrix Spike [XNY545-06] Total Phosphorus 2023/11/10	109	%	80 - 120
🕴 9041080 MUM QC Standard Total Phosphorus 2023/11/10	107	%	80 - 120
9041080 MUM Spiked Blank Total Phosphorus 2023/11/10	104	%	80 - 120
9041080 MUM Method Blank Total Phosphorus 2023/11/10 <0.020		mg/L	
9041080 MUM RPD [XNY545-06] Total Phosphorus 2023/11/10 3.4		%	20
9041099 NGI Spiked Blank Alkalinity (Total as CaCO3) 2023/11/10	99	%	85 - 115
9041099 NGI Method Blank Alkalinity (Total as CaCO3) 2023/11/10 <1.0		mg/L	
9041099 NGI RPD Alkalinity (Total as CaCO3) 2023/11/10 1.5		%	20
9041103 NGI Matrix Spike Fluoride (F-) 2023/11/10	99	%	80 - 120
9041103 NGI Spiked Blank Fluoride (F-) 2023/11/10	102	%	80 - 120
9041103 NGI Method Blank Fluoride (F-) 2023/11/10 <0.10		mg/L	
9041103 NGI RPD Fluoride (F-) 2023/11/10 1.4		%	20
9041107 NGI Spiked Blank pH 2023/11/10	102	%	98 - 103
9041107 NGI RPD pH 2023/11/10 0.22		%	N/A
9042133 RTB Spiked Blank Total Suspended Solids 2023/11/13	100	%	85 - 115
9042133 RTB Method Blank Total Suspended Solids 2023/11/13 <1		mg/L	
9042133 RTB RPD Total Suspended Solids 2023/11/13 8.0		%	20
9044998 NSG Spiked Blank Total Oil & Grease 2023/11/12	98	%	85 - 115
9044998 NSG RPD Total Oil & Grease 2023/11/12 0.25		%	25
9044998 NSG Method Blank Total Oil & Grease 2023/11/12 <0.50		mg/L	
9046051 MPJ Matrix Spike Mercury (Hg) 2023/11/13	106	%	75 - 125
9046051 MPJ Spiked Blank Mercury (Hg) 2023/11/13	107	%	80 - 120
9046051 MPJ Method Blank Mercury (Hg) 2023/11/13 <0.00001	-	mg/L	

Page 6 of 8 Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com



QUALITY ASSURANCE REPORT(CONT'D)

QA/QC								
Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9046051	MPJ	RPD	Mercury (Hg)	2023/11/13	2.8		%	20
N/A = No	t Applic	able						
Duplicate	e: Paireo	d analysis of a sep	arate portion of the same sample. Used to o	evaluate the variance in the measure	ment.			
Matrix Sp	oike: A s	ample to which a	known amount of the analyte of interest ha	as been added. Used to evaluate sam	ple matrix inte	erference.		
QC Stand	ard: A s	ample of known c	oncentration prepared by an external agen	cy under stringent conditions. Used a	as an independ	lent check of met	thod accur	асу.
Spiked Bla	ank: A b	lank matrix samp	e to which a known amount of the analyte,	usually from a second source, has be	en added. Use	ed to evaluate me	ethod accu	racy.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.								
NC (Dupli difference	icate RP e <= 2x	D): The duplicate RDL).	RPD was not calculated. The concentration i	in the sample and/or duplicate was to	oo low to perm	iit a reliable RPD	calculation	i (absolute

Ø



VALIDATION SIGNATURE PAGE

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

avisting Carriere

Cristina Carriere, Senior Scientific Specialist

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 Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

10


NT-NU SPILL REPORT

NT-NU 24-HOUR SPILL REPORT LINE TEL: (867) 920-8130 FAX: (867) 873-6924

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

EMAIL: spills@gov.nt.ca

Α	REPORT DATE: MONTH – DAY – YEAR 11-06-2023			REPORT TIME 19:15				ORIGINAL SPILL REPORT,	
В	OCCURRENCE DATE: MONTH - DAY - YEAR OCCURRENCE TIME 11-06-2023 06:30				UPDATE # TO THE ORIGINAL SPILL REPORT				
С	LAND USE PERMIT NUMBER (IF APPLICABLE)				WATER LICENCE NUMBER (IF APPLICABLE)				
D	GEOGRAPHIC PLACE NAME C Meliadine Gold Pi	ON FROM NAMED LO	OCATION	REGIO	N				
-	LATITUDE				E NUNAVU	I 🗌 ADJACENT JU	IRISDICTION	OR OCEAN	
E	DEGREES 63	MINUTES 2	SECONDS 21		DEGREES	92	MINUTES 13	B SE	CONDS 41
F	RESPONSIBLE PARTY OR VES	SSEL NAME Ies Ltd.	RESPONSIBLE F	PARTY AD e. Ran	DRESS OR	office location office location of the second secon	DN It. XOC 0G0		
G	ANY CONTRACTOR INVOLVED)	CONTRACTOR A	ADDRESS	OR OFFICE	LOCATION			
	PRODUCT SPILLED Sewage		QUANTITY IN LIT	TRES, KIL	OGRAMS O	R CUBIC METRE	S U.N. NUMBER		
Π	SECOND PRODUCT SPILLED	(IF APPLICABLE)	QUANTITY IN LIT	TRES, KIL	OGRAMS O	R CUBIC METRE	S U.N. NUMBER		
	SPILL SOURCE Lift station	SPILL CAUSE Human ei	rror			AREA OF CONTA	MINATION IN S	SQUARE METRES	
J	FACTORS AFFECTING SPILL C	DESCRIBE ANY	BE ANY ASSISTANCE REQUIRED			HAZARDS TO PE	HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT		
K	 was not frozen was removed with a vacuum truck. Frozen sewage material is to be removed with equipment and placed into the operational Landfarm. The coordinates of the spill are 63 1'36.68"N, 92 12'44.33"W. No water bodies were impacted by this spill. The nearest natural water body (H5A) is 650 m northeast. Pursuant to Part H, Item 8c of water license 2AM-MEL1631, a follow up report will be issued after the investigation is completed. 								
L	REPORTED TO SPILL LINE BY John Baechler	POSITION Env Coordina			LOCATION CALLING F	ROM T	elephone 819-759-3555		
Μ	ANY ALTERNATE CONTACT Kyle Conway	POSITION Env General	Superviso		ER		ALTERNATE CONTACT Meliadine	- A	LTERNATE TELEPHONE 819-860-1033
	- •	I	REPORT LINI	E USE ON	NLY				
Ν	RECEIVED AT SPILL LINE BY	POSITION		EMPLOY	ER	LOCATION CALLED		R	EPORT LINE NUMBER
		STATION OPERATOR					YELLOWKNIFE, NT	3)	867) 920-8130
LEAD		GNWT 🗆 GN 🗆 ILA 🗆 INA		SIGN	IFICANCE	i minor 🗆 Maj		FILE STATU	IS OPEN CLOSED
AGE	NCY	CONTACT NAME			TACT TIME		REMARKS		
LEAD	D AGENCY			_					
FIRS	T SUPPORT AGENCY								
SEC	OND SUPPORT AGENCY								
THIR	D SUPPORT AGENCY		THIRD SUPPORT AGENCY						



December 5th, 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.qc.ca

Re: Follow-up Report Spill #2023-464 – Release of 50 L of Sewage at the Meliadine Gold Mine

On November 7th, 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email (spills@gov.nt.ca) of a spill of approximately 50 L of sewage at the Meliadine Gold Mine site (spill location coordinates: 63°1'36.68"N, 92°12'44.33"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 November 6th, 2023, at approximately 06:30, an estimated 50 L of sewage was spilled onto the ground at the Orbit Garant holding tank. The facility was serviced but its valve was inadvertently left partially open, allowing for sewage to leak from the valve into the enclosure. No water bodies were impacted by this spill. The closest water body (Lake H5A) is approximately 650 m northeast, as seen in Figure 1.





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

Upon detection of the spill, a member of the Energy & Infrastructure (E&I) department closed the valve stopping the leak. Following this, E&I personnel used a vacuum truck to remove free liquid within the secondary containment and the ground surface. E&I personnel then hand-excavated the area to recover the contaminated material. Snowfall occurred later in the morning; a loader was utilized to perform a final scraping in the affected area. The material collected was transported 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 spill occurrence was attributed to human oversight, specifically, the operators who last serviced the holding tank and removed sewage failed to secure the value in the closed position.

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

- Staff were met by supervisors and reiterated the importance of having both operators working on the vacuum truck verify each other's work, reducing the likelihood of a future spill occurrence of this nature.
- The supervisors conveyed to the operators the importance of careful attention in their tasks, emphasizing the critical necessity of not rushing to complete tasks.

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









Photos 1 & 2: Sewage spill location.



Photos 3: Spill location post remediation.



NT-NU SPILL REPORT

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

REPORT LINE USE ONLY

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

Α	REPORT DATE: MONTH - DAY - YEAR					CRIGINAL SPILL RE	ORIGINAL SPILL REPORT,			
	OCCURRENCE DATE: MONTH – DAY – YEAR OCC			OCCURR				REPORT NUMBER		
B	11-11-2023			06:00)	TO THE ORIGINAL SP	ILL REPORT	[_]		
С		(IF APPLICABLE)			WATER LICENCE NUMBER (IF APPLICABLE)					
			ION FROM NAMED I		BEGION					
D	Meliadine Gold P	roject				UT 🗆 ADJACENT JU	JRISDICTION	OR OCEAN		
F	LATITUDE				LONGITUDE		_			
	DEGREES 63	MINUTES 2	SECONDS 21		DEGREES 92	MINUTES 1 :	3 se	ECONDS 41		
F	Agnico Eagle Mir	nes Ltd.	e, Ran	kin Inlet, Nunav	ut, X0C 0G0					
G		D	CONTRACTOR	ADDRESS	OR OFFICE LOCATION					
	Sewage		50 Liters	5 3	OGRAMS OR CUBIC METH	N/A				
H	SECOND PRODUCT SPILLED	(IF APPLICABLE)	QUANTITY IN LI	TRES, KIL	OGRAMS OR CUBIC METF	ES U.N. NUMBER				
	SPILL SOURCE SPILL CAUSE Lift station Equipme			nt Fail	lure	AREA OF CONTA	MINATION IN	TION IN SQUARE METRES		
1	FACTORS AFFECTING SPILL OR RECOVERY DESCRIBE ANY A			ASSISTAN		HAZARDS TO PE	PERTY OR EQUIPMENT			
	None N/A									
к	 determine the cause. Sewage that was not frozen was collected with a vacuum truck. Frozen material collected will be brought to Landfarm A, as per the Spill Contingency Plan. K The coordinates of the spill are 63° 1'36.68"N, 92 12'44.33"W. No water bodies were impacted by this spill. The nearest natural water body (H5A) is 650 m northeast. Pursuant to Part H, Item 8c of water license 2AM-MEL1631, a follow up report will be issued after the investigation is completed. Reported by Randy Schwandt, Environment Coordinator, 819-759-3555 ext. 4603996, Randy.Schwandt@agnicoeagle.com. 									
L	Randy Schwandt	Environmen	t Coord.		ER	Meliadine	ROM T	819-759-3555		
М	ANY ALTERNATE CONTACT Kyle Conway	POSITION General Sup	pervisor		ĒR	ALTERNATE CONTACT	Г	LTERNATE TELEPHONE 819-860-1033		
	-		REPORT LIN	IE USE ON	ILY	1	I			
М	RECEIVED AT SPILL LINE BY	POSITION		EMPLOYE	ER	LOCATION CALLED	F	EPORT LINE NUMBER		
		STATION OPERATOR				YELLOWKNIFE, NT	(8	367) 920-8130		
LEAI		GNWT □ GN □ ILA □ IN.		SIGN		AJOR 🗆 UNKNOWN	FILE STATU	JS □ OPEN □ CLOSED		
AGE	NCY	CONTACT NAME		CONT	FACT TIME	REMARKS				
LEAI	DAGENCY									
FIRS	ST SUPPORT AGENCY									
SEC	OND SUPPORT AGENCY									
THIF	D SUPPORT AGENCY									



December 6th, 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.qc.ca

Re: Follow-up Report Spill #2023-469 – Release of 50 L of Sewage at the Meliadine Gold Mine

On November 11th, 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email (spills@gov.nt.ca) of a spill of approximately 50 L of sewage at the Meliadine Gold Mine site (spill location coordinates: 63°1'36.68"N, 92°12'44.33"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 November 11th, 2023, at approximately 06:00, an estimated 50 L of sewage was spilled onto the ground by Orbit Garant holding tank. The Energy and Infrastructure (E&I) department discovered a leak resulting from a malfunctioning valve. The closest water body (Lake H5A) is approximately 650 m northeast, as seen in Figure 1.





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

The leak was discovered by E&I personnel during a routine daily facility inspection. In response, a plumber was called to replace the malfunctioning valve and install a camlock cap as an additional precaution. Subsequently, E&I personnel hand-excavated the area to recover the contaminated material and transported the material 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:

• A broken valve caused the spill to occur.

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

- Secondary containment inside the Orbit holding tank to be replaced by the end of 2023 to increase holding capacity.
- Installation of camlock caps to all lift station and holding tank connections by the end of 2023 to prevent sewage from exiting the line in the event of a valve malfunction.

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









Photos 1: Sewage spill location.



Photos 2: Spill location post remediation.



REPORT DATE: MONTH - DAY - YEAR

11-30-2023

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THIRD SUPPORT AGENCY

NT-NU SPILL REPORT

REPORT TIME

13:00

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

CRIGINAL SPILL REPORT,

REPORT LINE USE ONLY

REPORT NUMBER

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

Л	11-30-2023			13:00		OR	REPORT NUMBER				
В	OCCURRENCE DATE: MONTH – DAY – YEAR 11-29-2023			OCCURRE 14:30	NCE TIME	TO THE ORIGINAL SP	LL REPORT				
С	LAND USE PERMIT NUMBER ((IF APPLICABLE)		V	WATER LICENCE NUMBER (IF APPLICABLE) 2AM-MEL1631						
D	GEOGRAPHIC PLACE NAME C Meliadine Gold M	OR DISTANCE AND DIRECT	ION FROM NAMED L	OCATION		/UT 🗆 ADJACENT JL	IRISDICTION C	DR OCEAN			
Е	LATITUDE 63	2	22	L	LONGITUDE						
_	DEGREES 03 RESPONSIBLE PARTY OR VES	MINUTES Z	SECONDS Z3	PARTY ADD	DEGREES 32 DRESS OR OFFICE LOCA		D SE	CONDS JU			
F	Agnico Eagle Min	nes Ltd.	Meliadine	Meliadine, Rankin Inlet, Nunavut, X0C 0G0							
G	ANY CONTRACTOR INVOLVED	D	CONTRACTOR A	CONTRACTOR ADDRESS OR OFFICE LOCATION							
	PRODUCT SPILLED Sewage		TRES, KILO 1	GRAMS OR CUBIC METI	RES U.N. NUMBER						
Н	SECOND PRODUCT SPILLED	QUANTITY IN LI	TRES, KILO	GRAMS OR CUBIC METI	RES U.N. NUMBER						
I	SPILL SOURCE	SPILL CAUSE	L CAUSE AREA OF CONTAMINATION IN UIDENT Failure Unknown				QUARE METRES				
J	FACTORS AFFECTING SPILL (DESCRIBE ANY	VY ASSISTANCE REQUIRED HAZAF			AZARDS TO PERSONS, PROPERTY OR EQUIPMENT					
K	Ongoing investig The coordinates of spill. The nearest Pursuant to Part investigation is c Reported by Alex Alexandre.Langla	ation will confirm of the spill are for a natural water be H, Item 8c of water ompleted. andre Langlais- ais-Bourassa@a	m quantity o 63°2'23.01"N, ody (H5A) is ter license 2 Bourassa, Ei gnicoeagle.c	f the se , 92°13 250 m AM-ME nvironi com.	ewage spilled a 8'50.20"W. No v northwest. EL1631, a follov ment Coordina	and root cause water bodies w w-up report wil tor, 819-759-3	vere impa I be issu 555 ext. 4	ed after the 603996,			
L	A. LBourassa	Environmen	t Coord.	coord. AEM		Meliadine	ROM TE	19-759-3555			
M	ANY ALTERNATE CONTACT Sara Savoie	POSITION General Sup	pervisor	EMPLOYER AEM	R	ALTERNATE CONTACT Meliadine	- AL 8				
	·	•						TERNATE TELEPHONE 319-856-9349			
N	RECEIVED AT SPILL LINE BY		REPORT LIN	E USE ONI	LY			TERNATE TELEPHONE 319-856-9349			
		POSITION	REPORT LIN	E USE ONI	L Y	LOCATION CALLED	RE	TERNATE TELEPHONE 319-856-9349 EPORT LINE NUMBER			
LEA		POSITION STATION OPERATOR	REPORT LIN	E USE ONI EMPLOYER	L Y R	LOCATION CALLED	(8	TERNATE TELEPHONE 319-856-9349 EPORT LINE NUMBER 67) 920-8130			
AGENCY CONTACT NAME CONTACT				E USE ONI EMPLOYEF SIGNIF	LY R FICANCE I MINOR I M	LOCATION CALLED YELLOWKNIFE, NT	FILE STATUS	TERNATE TELEPHONE 319-856-9349 EPORT LINE NUMBER 57) 920-8130 S □ OPEN □ CLOSED			
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December 28th, 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.qc.ca

Re: Follow-up Report Spill #2023-509 – Release of 4m³ of Sewage at the Meliadine Gold Mine

On November 29th, 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email (spills@gov.nt.ca) of a spill of an unknown quantity of sewage at the Meliadine Gold Mine site (spill location coordinates: 63°2'23.01"N, 92°13'50.20"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 November 29th, 2023, at 13:00, approximately 4m³ of sewage was inadvertently released to the camp pad due to a damaged sewage distribution line between the accommodations and the Wing 10 lift station. Snow accumulation caused a crack due to direct stress on the line. The nearest water body of water, Lake G2, is located about 250 m northwest as seen in Figure 1.





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

The leak was discovered by Energy & Infrastructure (E&I) personnel during snow removal activities after a recent blizzard event. An equipment operator immediately notified their supervisor of the leak and personnel were sent to assess and conduct the necessary repairs. Once the snow was removed and area was made accessible, the damaged section of the line was replaced, and an additional support bracket was installed in this location. Subsequently, E&I personnel excavated the area with a backhoe to recover sewage impacted snow and transported the material to Landfarm A as per the Spill Contingency Plan.



Temporary insulation was installed around the repaired section of the distribution line. A work order was created to complete the final insulation of the line and will be completed in the coming days.

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:

• Insufficient support beneath the sewage line.

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

- Installation of additional sewage line support brackets.
- Audit to be conducted on all the accommodation wing sewage distribution lines to determine if this risk is present elsewhere.
- Install a protective canopy over the lift station sewage intake and discharge lines to prevent snow accumulation on the infrastructure.

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



Alexandre Langlais-Bourassa, M.Sc. Biol. | Environment Coordinator alexandre.langlais-bourassa@agnicoeagle.com | Direct 819.759.3555 x4603996 | Agnico Eagle Mines Limited - Meliadine Mine, Suite 879 - Rankin Inlet, Nunavut, Canada X0C 0G0









Photo 1: Sewage spill location.



Photo 2: Spill location post snow removal.



Photo 3: Spill location post remediation.



NT-NU SPILL REPORT

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

REPORT LINE USE ONLY

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

A	REPORT DATE: MONTH – DAY – YEAR 12-11-2023		16:3	тіме 5		CORIGINAL SPILL REPORT,			
R	OCCURRENCE DATE: MONTH – D	AY – YEAR	OCCURF			O THE OBIGINAL SPILL REPORT			
	12-11-2023		12:30						
C	KVPL11D01			2AM-MEL1631					
D	GEOGRAPHIC PLACE NAME OR D Meliadine Gold Pro	DISTANCE AND DIRECTION FROM NAM	ED LOCATION	REGION	'UT 🗆 ADJACENT JUF		OR OCEAN		
E	LATITUDE 63	2	21						
	RESPONSIBLE PARTY OR VESSE	NUTES Z SECONDS		DEGREES		SE	CONDS 41		
F	Agnico Eagle Mines	s Ltd. Meliad	line, Rar	nkin Inlet, Nunav	/ut, X0C 0G0				
G	ANY CONTRACTOR INVOLVED	CONTRAC [®]	OR ADDRESS	S OR OFFICE LOCATION					
		QUANTITY	IN LITRES, KIL	OGRAMS OR CUBIC MET	RES U.N. NUMBER				
Н									
• •	N/A	N/A	IN LITRES, KIL	LOGRAMS OR CUBIC METE	N/A				
	SPILL SOURCE	SPILL CAU	SE		AREA OF CONTAM	INATION IN S	SQUARE METRES		
	Sewage vacuum tru	n Error		1					
J	FACTORS AFFECTING SPILL OR I	ANY ASSISTA	SISTANCE REQUIRED HAZARDS TO PER			REAL ASONS, PROPERTY OR EQUIPMENT			
	ADDITIONAL INFORMATION, COM	IMENTS, ACTIONS PROPOSED OR TAK	EN TO CONTA	IN, RECOVER OR DISPOSE	OF SPILLED PRODUCT	AND CONTAN	MINATED MATERIALS		
K	 Clean-up activities were immediately undertaken. The coordinates of the spill are 63° 1'21''N, 92°13'56''W. No water bodies were impacted by this spill. The nearest natural water body (B5) is 260 m west. Pursuant to Part H, Item 8c of water license 2AM-MEL1631, a follow up report will be issued after the investigation is completed. Reported by Randy Schwandt, Environment Coordinator, 819-759-3555 ext. 4603996, Randy.Schwandt@agnicoeagle.com. 								
	investigation is con Reported by Randy Randy.Schwandt@a	Item 8c of water licens npleted. Schwandt, Environmer agnicoeagle.com.	e 2AM-M	EL1631, a follov inator, 819-759-3	v up report will 3555 ext. 46039	be issu 96,	ed after the		
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January 9th, 2024

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.qc.ca

Re: Follow-up Report Spill #2023-518 – Release of 10 L of Sewage at the Meliadine Gold Mine

On December 11th, 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email (spills@gov.nt.ca) of a spill of approximately 10 L of sewage at the Meliadine Gold Mine site (spill location coordinates: 63° 1'21"N, 92°13'56"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 December 11th, 2023, at approximately 12:30, an estimated 10 L of sewage was spilled onto the industrial pad by the west exhaust raise. Residual sewage in vacuum truck transfer hose was released when disconnecting the hose from a wash car holding tank, resulting in the sewage spill. No water bodies were impacted by this spill. The closest water body (Lake B5) is approximately 260 m southwest, as seen in Figure 1.





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

The operator of the vacuum truck contacted their supervisor and the Environment department soon after the spill event occurred. The Environment department promptly responded to the spill and upon arrival, the ground surface was hand excavated, and the recovered material was 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 vacuum truck operator failed to fully empty the transfer hose prior to disconnecting the hose from the holding tank.

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

- The procedure was reviewed with sewage truck operator.
- Secondary containment (drip tray) will be used when disconnecting hose from holding tank.
- Assess the equipment for optimization opportunities to reduce the chances for human error.

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









Photo 1: Sewage spill location.



Photo 2: Spill location post remediation.



REPORT DATE: MONTH - DAY - YEAR

NT-NU SPILL REPORT

REPORT TIME

NT-NU 24-HOUR SPILL REPORT LINE TEL: (867) 920-8130 FAX: (867) 873-6924

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

EMAIL: spills@gov.nt.ca REPORT LINE USE ONLY

XORIGINAL SPILL REPORT, OR UPDATE #	REPORT NUMBER	
R (IF APPLICABLE)		

A	12-11-2023		1	16:35		XORIGINAL SPILL RE	ORIGINAL SPILL REPORT,			
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F	Agnico Eagle Mir	nes Ltd.	Meliadine,	PARTY ADDRESS OR OFFICE LOCATION e. Rankin Inlet. Nunavut. X0C 0G0						
	ANY CONTRACTOR INVOLVED CONTRACTOR				DR OFFICE LOCATION					
G	N/A N/A									
	PRODUCT SPILLED Sewage		QUANTITY IN LITRI 10 Liters	ES, KILO	GRAMS OR CUBIC METRE	S U.N. NUMBER				
Н	SECOND PRODUCT SPILLED	(IF APPLICABLE)	QUANTITY IN LITRI	ES, KILO	GRAMS OR CUBIC METRE	S U.N. NUMBER				
	N/A		N/A			N/A				
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	ADDITIONAL INFORMATION, C	COMMENTS, ACTIONS PRO	POSED OR TAKEN TO C	CONTAIN	, RECOVER OR DISPOSE (DF SPILLED PRODUCT	AND CONTA	MINATED MATERIALS		
 Windertaken. K The coordinates of the spill are 63° 2'24''N, 92°13'45''W. No water bodies were impacted by this spin the nearest natural water body (G2) is 220 m north. Pursuant to Part H, Item 8c of water license 2AM-MEL1631, a follow up report will be issued after the investigation is completed. Reported by Randy Schwandt, Environment Coordinator, 819-759-3555 ext. 4603996, Randy.Schwandt@agnicoeagle.com. 								by this spill. led after the		
L	REPORTED TO SPILL LINE BY Randy Schwandt	POSITION	t Coord.			LOCATION CALLING FI	ROM T	ELEPHONE 819-759-3555		
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M	Alex Bourassa	Environmen	t Coord.	ΑEM		Meliadine		819-759-3555		
			REPORT LINE U	JSE ONI	_Y					
N	RECEIVED AT SPILL LINE BY	POSITION	EN	MPLOYE	3		R			
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FIRS	T SUPPORT AGENCY									
SEC	OND SUPPORT AGENCY			1						
				-						



January 8th, 2024

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.qc.ca

Re: Follow-up Report Spill #2023-517 – Release of 10 L of Sewage at the Meliadine Gold Mine

On December 11th, 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email (spills@gov.nt.ca) of a spill of approximately 10 L of sewage at the Meliadine Gold Mine site (spill location coordinates: 63° 2′ 24′N, 92° 13′ 45″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 December 11th, 2023, at approximately 11:30, an estimated 10 L of sewage was spilled onto the industrial pad at the wing 4 lift station. Due to a site power outage, the transfer pump did not engage allowing the lift station holding tank to overflow. No water bodies were impacted by the spill. The closest water body (Lake G2) is approximately 220 m northwest, as seen in Figure 1.





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

Once power was restored, the environment department conducted an inspection of the site sewage system. During this inspection, an employee observed the presence of sewage outside the wing 4 lift station enclosure. Upon further inspection, the secondary containment was observed to be full and had overflowed. In response, a vacuum truck was dispatched to pump out the sewage that accumulated in the lift station secondary containment. The ground surface was hand excavated, and the recovered material was 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:

• A site wide power outage resulted in the wing 4 lift station losing power and overflowing. Washrooms and laundry machines in wing 4 were in use at the time of the power outage. The water and sewage generated exceeded the capacity of the lift station holding tank.

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

 In the event of a power outage the water supply at the camp accommodation wings will be immediately shut off to prevent lift station overflows from occurring. This will also provide the Energy and Infrastructure department adequate time to systematically inspect and bring sewage system back online.

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









Photo 1: Sewage spill location.



Photo 2: Spill location post remediation.



NT-NU SPILL REPORT

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

REPORT LINE USE ONLY

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

A	REPORT DATE: MONTH – DAY – YEAR 12-13-2023			14:00		ORIGINAL SPILL REF	PORT,	REPORT NUMBER		
В	OCCURRENCE DATE: MONTH	I – DAY – YEAR		OCCURR 12:15	RRENCE TIME		UPDATE # THE ORIGINAL SPIL	L REPORT		
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D	GEOGRAPHIC PLACE NAME (Meliadine Gold P	OR DISTANCE AND DIREC	TION FROM NAMED L	OCATION	ATION REGION					
E	LATITUDE	MINUTES 2	SECONDS 2'	1	LONGITUDE DECREES 92 MINUTES 13 SECONDS 41					
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к	 The coordinates of the spill are 63° 2'16"N, 92°13'35"W. No water bodies were impacted by this spill. The nearest natural water body (G2) is 500 m northwest. Pursuant to Part H, Item 8c of water license 2AM-MEL1631, a follow up report will be issued after the investigation is completed. Reported by Randy Schwandt, Environment Coordinator, 819-759-3555 ext. 4603996, Randy.Schwandt@agnicoeagle.com. 									
L	REPORTED TO SPILL LINE BY Randy Schwandt	POSITION	nt Coord.			CATION CALLING FROM		ELEPHONE 319-759-3555		
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LEAI	DAGENCY									
FIRS	T SUPPORT AGENCY									
SEC	OND SUPPORT AGENCY									
THIF	D SUPPORT AGENCY									



January 9th, 2024

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

Re: Follow-up Report Spill #2023-520 – Release of 5 L of Sewage at the Meliadine Gold Mine

On December 13th, 2023, the Nunavut Spill Line was notified by Agnico Eagle personnel via email (spills@gov.nt.ca) of a spill of approximately 5 L of sewage at the Meliadine Gold Mine site (spill location coordinates: 63° 2′ 16′N, 92° 13′ 35″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 December 13th, 2023, at approximately 12:15, an estimated 5 L of sewage was spilled onto the industrial pad at the mill lift station. The transfer pump failed to empty the lift station holding tank, resulting in sewage overflowing and causing the spill. No water bodies were impacted by this spill. The closest water body (Lake G2) is approximately 500 m northwest, as seen in Figure 1.





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

An electrician working in the area observed the lift station alarm. The employee is familiar with the lift station infrastructure and in response, they manually initiated the backup pump to draw down the sewage level and prevent further spillage. The employee observed the presence of sewage effluent outside the lift station enclosure and immediately contacted the environment department. The ground surface was hand excavated, and the recovered material was 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:

• A blockage in pump 1 caused the pump to fail. Although the pump intake was blocked, the pump was still running which did not signal pump 2 to engage.

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

- The electrical department installed a "high-high" level sensor at the mill lift station. If this sensor is triggered both pumps will engage to draw down the sewage level within the holding tank.
- The installation of a stronger audible/visual alarm is planned to be installed on the exterior of the lift station in the coming weeks.

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









Photo 1: Sewage spill location.



Photo 2: Spill location post remediation.