

Appendix 15 : 2020 Reportable Spills

Appendix F-3
Reportable Spills and Follow-up Reports



Canada

NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

NT-NU 24-HOUR SPILL REPORT LINE

TEL: (867) 920-8130

FAX: (867) 873-6924

EMAIL: spills@gov.nt.ca

REPORT LINE USE ONLY

A	REPORT DATE: MONTH – DAY – YEAR 01-15-2020	REPORT TIME 07:00	<input checked="" type="checkbox"/> ORIGINAL SPILL REPORT, OR <input type="checkbox"/> UPDATE # _____ TO THE ORIGINAL SPILL REPORT		REPORT NUMBER 20 - 010
B	OCCURRENCE DATE: MONTH – DAY – YEAR 01-14-2020	OCCURRENCE TIME 07:00			
C	LAND USE PERMIT NUMBER (IF APPLICABLE) KVPL11D01	WATER LICENCE NUMBER (IF APPLICABLE) 2AM-MEL1631			
D	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION Meliadine Gold Project	REGION <input type="checkbox"/> NWT <input checked="" type="checkbox"/> NUNAVUT <input type="checkbox"/> ADJACENT JURISDICTION OR OCEAN			
E	LATITUDE DEGREES 63 MINUTES 1 SECONDS 17	LONGITUDE DEGREES 92 MINUTES 13 SECONDS 58			
F	RESPONSIBLE PARTY OR VESSEL NAME Agnico Eagle Mines Ltd.	RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION Meliadine, Rankin Inlet, Nunavut, X0C 0G0			
G	ANY CONTRACTOR INVOLVED CMAC	CONTRACTOR ADDRESS OR OFFICE LOCATION			
H	PRODUCT SPILLED Hydraulic Oil	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES 190 Litres	U.N. NUMBER UN1268		
	SECOND PRODUCT SPILLED (IF APPLICABLE) N/A	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES N/A	U.N. NUMBER N/A		
I	SPILL SOURCE 130 tonne Grove Crane	SPILL CAUSE Hydraulic Hose Failure	AREA OF CONTAMINATION IN SQUARE METRES 4		
J	FACTORS AFFECTING SPILL OR RECOVERY N/A	DESCRIBE ANY ASSISTANCE REQUIRED N/A	HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT Explosive/flammable material		
K	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS 130 tonne Grove Crane was started and was warming up, at the West Exhaust Raise, when oil was seen leaking from the crane enclosure. The operator was notified of the leak and shut the machine down immediately. Spill pads were placed on the ground to soak up the oil, once the crane can be removed, a full clean-up will be completed. Preliminary investigation indicates that approximately 190 litres of oil spilled to the ground. Due to the shape of the pad the oil was contained in a small area. No water bodies were impacted by the spill. The closest water body is approximately 220 metres from the spill location. A follow-up report will be issued after a closer investigation is completed. Contact Person: Terence (Terry) Ternes 819-759-3555 Ext. 4603112				
L	REPORTED TO SPILL LINE BY Terry Ternes	POSITION Env. Supervisor	EMPLOYER AEM	LOCATION CALLING FROM Meliadine	TELEPHONE 8197593555
M	ANY ALTERNATE CONTACT Sean Arruda	POSITION Env. Corrdinator	EMPLOYER AEM	ALTERNATE CONTACT Meliadine	ALTERNATE TELEPHONE 8197593555
REPORT LINE USE ONLY					
N	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130
LEAD AGENCY <input type="checkbox"/> EC <input type="checkbox"/> CCG <input type="checkbox"/> GNWT <input type="checkbox"/> GN <input type="checkbox"/> ILA <input type="checkbox"/> INAC <input type="checkbox"/> NEB <input type="checkbox"/> TC			SIGNIFICANCE <input type="checkbox"/> MINOR <input type="checkbox"/> MAJOR <input type="checkbox"/> UNKNOWN		FILE STATUS <input type="checkbox"/> OPEN <input type="checkbox"/> CLOSED
AGENCY		CONTACT NAME	CONTACT TIME	REMARKS	
LEAD AGENCY					
FIRST SUPPORT AGENCY					
SECOND SUPPORT AGENCY					
THIRD SUPPORT AGENCY					

Follow Up Report: #20-010

January 14, 2020 Hydraulic Oil Spill



The following information refers to spill 20-010 reported by Agnico Eagle Mines Ltd. on January 14, and is being provided in accordance with:

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

Description of Incident:

On January 14th at approximately 7 am, the 130 tonne Grove Crane was started up at the West Exhaust Raise and the crane operator began warming up the hydraulic components. The operator was notified that there was oil leaking from the crane enclosure. The operator shut the crane down immediately and went outside to investigate. It was noticed that a hydraulic line had ruptured.

The initial investigation completed by the Environment Department indicated that the contaminated surface area was approximately 4 m² with the spill located at 63°01'17"N, 92°13'58"W, approximately 220 m from the closest natural water body. Discussions with the maintenance department indicated that they placed 190 L of oil back into the machine and added an additional 10 L when the oil recirculated through the hoses. It is estimated that approximately 200 L of oil was spilled to the ground with the oil being contained on the crane pad.



Figure 1: Approximate location of 200L hydraulic oil spill.

Spill Response & Cleanup:

The crane operator shut down the engine, placed absorbent spill pads and contacted the Maintenance Department to provide further assistance. Comprehensive cleanup was delayed until the crane could be removed. Once the crane was removed, the Energy and Infrastructure department completed the cleanup, using an excavator bucket to break the ice and collect the contaminated snow. Spill pads were disposed of as hazmat and contaminated snow was transported to the landfarm.



Figure 2: Spill and initial clean-up efforts at West Exhaust Raise.



Figure 3: Spill location following clean up, 30th January and 2nd February (left to right).

Corrective Measures




The hydraulic hose was inspected by the maintenance department and it was determined that there was some chaffing on the hose which may have caused a premature failure. Due to the location of the hose, a pre-start inspection would not have detected this issue. The maintenance department inspects hydraulic hoses during scheduled preventative maintenance, and replaces them as required. Operators inspect equipment for leaks during pre-start inspections. The maintenance department will continue to inspect and monitor this specific component and assess alternative options in the event of reoccurrence.



Dan Gorton | Environmental Coordinator

dan.gorton@agnicoeagle.com | Direct 819.759.3555 x4603996 |

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

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Canada

NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

NT-NU 24-HOUR SPILL REPORT LINE

TEL: (867) 920-8130

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EMAIL: spills@gov.nt.ca

REPORT LINE USE ONLY

A	REPORT DATE: MONTH – DAY – YEAR 01-26-2020		REPORT TIME 08:30		<input checked="" type="checkbox"/> ORIGINAL SPILL REPORT, OR <input type="checkbox"/> UPDATE # _____ TO THE ORIGINAL SPILL REPORT	REPORT NUMBER 20 - 023
	OCCURRENCE DATE: MONTH – DAY – YEAR 01-24-2020		OCCURRENCE TIME 08:30			
C	LAND USE PERMIT NUMBER (IF APPLICABLE) KVPL11D01			WATER LICENCE NUMBER (IF APPLICABLE) 2AM-MEL1631		
D	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION Meliadine Gold Project			REGION <input type="checkbox"/> NWT <input checked="" type="checkbox"/> NUNAVUT <input type="checkbox"/> ADJACENT JURISDICTION OR OCEAN		
E	LATITUDE DEGREES 63 MINUTES 1 SECONDS 34			LONGITUDE DEGREES 92 MINUTES 12 SECONDS 38		
F	RESPONSIBLE PARTY OR VESSEL NAME Agnico Eagle Mines Ltd.		RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION Meliadine, Rankin Inlet, Nunavut, X0C 0G0			
G	ANY CONTRACTOR INVOLVED		CONTRACTOR ADDRESS OR OFFICE LOCATION			
H	PRODUCT SPILLED Lime		QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES 50L		U.N. NUMBER N/A	
	SECOND PRODUCT SPILLED (IF APPLICABLE) N/A		QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES N/A		U.N. NUMBER N/A	
I	SPILL SOURCE Pipeline		SPILL CAUSE Equipment failure		AREA OF CONTAMINATION IN SQUARE METRES 25	
J	FACTORS AFFECTING SPILL OR RECOVERY N/A		DESCRIBE ANY ASSISTANCE REQUIRED N/A		HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT Corrosive Substance	
K	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS Approximately 50L of 20% calcium oxide (lime) solution spilled to ground on the northern side of the process plant. The material and spilled product was picked up and disposed of in the mill sump, to be returned into the process. No water bodies were impacted by this spill. The closest water body is approximately 496m from the spill location. Pursuant to Part H, section 8c of the water license, a follow-up report will be issued after a closer investigation is completed.					
L	REPORTED TO SPILL LINE BY Dan Gorton	POSITION Env. Coordinator	EMPLOYER AEM	LOCATION CALLING FROM Meliadine	TELEPHONE 8197593555	
M	ANY ALTERNATE CONTACT Terry Ternes	POSITION Env. Supervisor	EMPLOYER AEM	ALTERNATE CONTACT Meliadine LOCATION	ALTERNATE TELEPHONE 8197593555	
REPORT LINE USE ONLY						
N	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130	
LEAD AGENCY <input type="checkbox"/> EC <input type="checkbox"/> CCG <input type="checkbox"/> GNWT <input type="checkbox"/> GN <input type="checkbox"/> ILA <input type="checkbox"/> INAC <input type="checkbox"/> NEB <input type="checkbox"/> TC			SIGNIFICANCE <input type="checkbox"/> MINOR <input type="checkbox"/> MAJOR <input type="checkbox"/> UNKNOWN		FILE STATUS <input type="checkbox"/> OPEN <input type="checkbox"/> CLOSED	
AGENCY		CONTACT NAME	CONTACT TIME	REMARKS		
LEAD AGENCY						
FIRST SUPPORT AGENCY						
SECOND SUPPORT AGENCY						
THIRD SUPPORT AGENCY						

Follow Up Report: #20-023

January 24th, 2020 Calcium Hydroxide Spill



The following information refers to spill 20-023 reported by Agnico Eagle Mines Ltd. January 24th, 2020, and is being provided in accordance with:

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

Description of Incident:

On January 24th the Environment Department was contacted by a worker at the Process Plant informing that 50 L of 20 % liquid calcium hydroxide had spilled to the ground. A dosing pipe seal ruptured on a pressurized line, causing the solution to spray onto the interior wall of the process plant above the concrete secondary containment. As the solution flowed down the aluminum cladding walls to the concrete containment, some seeped out between the cladding and the concrete, which then flowed onto the industrial pad.

No water bodies were impacted by this spill. The closest natural water body is over 460 m from the spill location. The coordinates of the spill are 63° 2'16.77"N, 92°13'38.26"W.



Figure 1: Location of 20 % calcium hydroxide solution spill on the northern side of the process plant.



Figure 2: Calcium Hydroxide solution sprayed from the ruptured seal (circled) and seeped out between the cladding and concrete (arrow).



Figure 3: 50 L of 20 % Calcium Hydroxide prior to clean-up.

Spill Response & Clean-up:

Mill personnel shut down the pump and tagged out the system to prevent further spillage. Material spilled outside of the building was collected using a telehandler, and placed in the mill sump. This material reentered the process and no further disposal considerations were required.

Corrective Measures:

Parts are on order to replace the damaged seal. The pump was removed and reinstalled on the backup dosing line. The installation of spray guards has been recommended and feasibility is being evaluated.



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TEL: (867) 920-8130

FAX: (867) 873-6924

EMAIL: spills@gov.nt.ca

REPORT LINE USE ONLY

A	REPORT DATE: MONTH – DAY – YEAR 02-20-2020	REPORT TIME 7:00	<input checked="" type="checkbox"/> ORIGINAL SPILL REPORT, OR <input type="checkbox"/> UPDATE # _____ TO THE ORIGINAL SPILL REPORT		REPORT NUMBER 20 - 052
B	OCCURRENCE DATE: MONTH – DAY – YEAR 02-19-2020	OCCURRENCE TIME 11:00			
C	LAND USE PERMIT NUMBER (IF APPLICABLE) KVPL11D01	WATER LICENCE NUMBER (IF APPLICABLE) 2AM-MEL1631			
D	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION Meliadine Gold Project		REGION <input type="checkbox"/> NWT <input type="checkbox"/> NUNAVUT <input type="checkbox"/> ADJACENT JURISDICTION OR OCEAN		
E	LATITUDE DEGREES 63 MINUTES 1 SECONDS 34		LONGITUDE DEGREES 92 MINUTES 12 SECONDS 37		
F	RESPONSIBLE PARTY OR VESSEL NAME Agnico Eagle Mines Ltd.	RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION Meliadine, Rankin Inlet, Nunavut, X0C 0G0			
G	ANY CONTRACTOR INVOLVED	CONTRACTOR ADDRESS OR OFFICE LOCATION			
H	PRODUCT SPILLED Saline water	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES Unknown	U.N. NUMBER N/A		
	SECOND PRODUCT SPILLED (IF APPLICABLE) N/A	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES N/A	U.N. NUMBER N/A		
I	SPILL SOURCE SWTP Process	SPILL CAUSE Crack in cement floor	AREA OF CONTAMINATION IN SQUARE METRES Unknown		
J	FACTORS AFFECTING SPILL OR RECOVERY Water is under the building	DESCRIBE ANY ASSISTANCE REQUIRED N/A	HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT N/A		
K	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS It was brought to our attention that there is a crack in the floor of the SWTP. During normal operations, some process water can accumulate on the floor and migrate towards the crack. It is suspected that the water eventually drains through the crack reaching the gravel pad underneath. It is important to note that the water will eventually drain towards CP5, therefore no contamination will leave the site footprint and no water bodies are impacted. An investigation is currently underway to assess the amount of water that has potentially migrated through the crack. Pursuant to Part H, section 8c of the water license, a follow-up report will be issued after a closer investigation is completed.				
L	REPORTED TO SPILL LINE BY Sean Arruda	POSITION Env. Coordinator	EMPLOYER AEM	LOCATION CALLING FROM Meliadine	TELEPHONE 819-759-3555
M	ANY ALTERNATE CONTACT Dan Gorton	POSITION Env. Coordinator	EMPLOYER AEM	ALTERNATE CONTACT Meliadine LOCATION	ALTERNATE TELEPHONE 819-759-3555
REPORT LINE USE ONLY					
N	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130
LEAD AGENCY <input type="checkbox"/> EC <input type="checkbox"/> CCG <input type="checkbox"/> GNWT <input type="checkbox"/> GN <input type="checkbox"/> ILA <input type="checkbox"/> INAC <input type="checkbox"/> NEB <input type="checkbox"/> TC			SIGNIFICANCE <input type="checkbox"/> MINOR <input type="checkbox"/> MAJOR <input type="checkbox"/> UNKNOWN		FILE STATUS <input type="checkbox"/> OPEN <input type="checkbox"/> CLOSED
AGENCY		CONTACT NAME	CONTACT TIME	REMARKS	
LEAD AGENCY					
FIRST SUPPORT AGENCY					
SECOND SUPPORT AGENCY					
THIRD SUPPORT AGENCY					

Follow Up Report: #20-052

February 19, 2020 Saline Water Spill



The following information refers to spill 20-052 reported by Agnico Eagle Mines Ltd. February 20th, 2020, 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 19th the Environment Department was informed that a crack in the floor of the Saline Water Treatment Plant (SWTP) had been identified which allowed saline water to seep through the foundation. It is estimated that a cumulative volume of approximately 300 m³ of saline water may have seeped through the building's secondary containment over a period of approximately 6 months. The spill occurred at the final tank in the salt removal process when a level sensor malfunctioned causing the tank to overflow.

No water bodies were impacted by this spill. The closest natural water body is over 875 m from the spill location. The coordinates of the spill are 63° 1'33.22"N, 92°12'36.20"W.



Figure 1: Location of saline water spill on eastern side of Saline Water Treatment Plant.



Figure 2: Cracked concrete foundation saline water flowed through (left) and repairs made 1st March 2020 (right).

Spill Response & Clean-up:

A building inspection was completed by a contracted engineer, who identified a cavity beneath the concrete flooring. Holes were drilled through the flooring to examine the extent of the cavity to remove any free standing water, if present. No free standing water was observed during the time of the inspection.

Corrective Measures:

Repairs were completed 1st March 2020, to prevent any future saline water spillage entering the active layer. Concrete grout was pumped into the cavity and will be finished with a waterproof epoxy coating to prevent further damage to the foundation. Adjustments were made to level sensors and communication to workers included the importance of respecting the levels in the process tanks. Preventative maintenance will be performed to ensure sensors are clean and free of salt build-up.





Weekly inspections by the plant operators will be completed which will include photo documentation of areas susceptible to future cracks. Any future cracks will be repaired immediately upon detection.



Sean Arruda | Environmental Coordinator

sean.arruda@agnicoeagle.com | Direct 819.759.3555 x4603996 |

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TEL: (867) 920-8130

FAX: (867) 873-6924

EMAIL: spills@gov.nt.ca

REPORT LINE USE ONLY

A	REPORT DATE: MONTH – DAY – YEAR 03-09-2020		REPORT TIME 14:30		<input checked="" type="checkbox"/> ORIGINAL SPILL REPORT, OR <input type="checkbox"/> UPDATE # _____ TO THE ORIGINAL SPILL REPORT	REPORT NUMBER 20 - 073
	OCCURRENCE DATE: MONTH – DAY – YEAR 03-08-2020		OCCURRENCE TIME 20:00			
C	LAND USE PERMIT NUMBER (IF APPLICABLE) KVPL11D01			WATER LICENCE NUMBER (IF APPLICABLE) 2AM-MEL1631		
	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION Meliadine Gold Project				REGION <input type="checkbox"/> NWT <input checked="" type="checkbox"/> NUNAVUT <input type="checkbox"/> ADJACENT JURISDICTION OR OCEAN	
E	LATITUDE DEGREES 63 MINUTES 1 SECONDS 53			LONGITUDE DEGREES 92 MINUTES 12 SECONDS 44		
	RESPONSIBLE PARTY OR VESSEL NAME Agnico Eagle Mines Ltd.		RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION Meliadine, Rankin Inlet, Nunavut, X0C 0G0			
G	ANY CONTRACTOR INVOLVED N/A		CONTRACTOR ADDRESS OR OFFICE LOCATION N/A			
	PRODUCT SPILLED Engine Oil		QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES 1 cubic meter		U.N. NUMBER N/A	
H	SECOND PRODUCT SPILLED (IF APPLICABLE) N/A		QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES N/A		U.N. NUMBER N/A	
	SPILL SOURCE Storage Tote		SPILL CAUSE Operator Error		AREA OF CONTAMINATION IN SQUARE METRES 30	
J	FACTORS AFFECTING SPILL OR RECOVERY Low Temperature		DESCRIBE ANY ASSISTANCE REQUIRED N/A		HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT N/A	
	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS While unloading a tote of engine oil from a seacan, the operator accidentally punctured the tote with the equipment's fork. The entire tote of oil drained inside the seacan, and migrated out onto the gravel pad. The spill is in the process of being cleaned up and area decontaminated. An investigation will follow. No water bodies were impacted by this spill. The closest natural water body is approximately 900m away. 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 Sean Arruda, Environmental Coordinator, 819-759-3555 ext. 4603996 sean.arruda@agnicoeagle.com					
L	REPORTED TO SPILL LINE BY Sean Arruda	POSITION Env. Coordinator	EMPLOYER AEM	LOCATION CALLING FROM Meliadine	TELEPHONE 819-759-3555	
	M	ANY ALTERNATE CONTACT Dan Gorton	POSITION Env. Coordinator	EMPLOYER AEM	ALTERNATE CONTACT Meliadine LOCATION	ALTERNATE TELEPHONE 819-759-3555
REPORT LINE USE ONLY						
N	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130	
	LEAD AGENCY <input type="checkbox"/> EC <input type="checkbox"/> CCG <input type="checkbox"/> GNWT <input type="checkbox"/> GN <input type="checkbox"/> ILA <input type="checkbox"/> INAC <input type="checkbox"/> NEB <input type="checkbox"/> TC			SIGNIFICANCE <input type="checkbox"/> MINOR <input type="checkbox"/> MAJOR <input type="checkbox"/> UNKNOWN		FILE STATUS <input type="checkbox"/> OPEN <input type="checkbox"/> CLOSED
AGENCY		CONTACT NAME	CONTACT TIME	REMARKS		
LEAD AGENCY						
FIRST SUPPORT AGENCY						
SECOND SUPPORT AGENCY						
THIRD SUPPORT AGENCY						

Follow Up Report: #20-073

March 8, 2020 Engine Oil Tote Spill



The following information refers to spill 20-073 reported by Agnico Eagle Mines Ltd. March 9th, 2020, and is being provided in accordance with:

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

Description of Incident:

On the morning of March 9, 2020, the warehouse supervisor was notified that a spill had occurred at 8 pm during night shift (March 8). The supervisor notified the Environment Department right away, and Environment staff visited the site to begin an investigation.

The incident occurred when a warehouse worker was attempting to retrieve a full, 1000 L tote containing engine oil, from inside a sea-can. While attempting to align the equipment's forks into the tote, the operator accidentally crushed and punctured a corner of the tote, which led to the release of the contents inside the sea-can. The tote was located in the back of the sea-can, so a large amount of oil settled on the floor inside, while the rest slowly flowed outside onto the gravel pad.



Figure 1: Spill site the morning of March 9, 2020.

No water bodies were impacted by this spill. The closest natural water body is over 900 m from the spill location. The coordinates of the spill are 63° 01'53"N, 92°12'44"W (Figure 2).



Figure 2: Spill location at warehouse sea-can laydown.

Spill Response & Clean-up:

The worker involved used absorbent pads to soak up the material prevent further spillage (Figure 3, left). Low temperatures increased the viscosity of the oil, slowing the flow, which reduced the effectiveness of the absorbent pads. Oil-Dri Quicksorb powder was then used to help coagulate the remaining standing oil (Figure 3, right).



Figure 3: Initial clean up response, absorbing and slowing the spread of the oil.

Used absorbent pads and Oil-Dri Quicksorb was disposed of as hazmat in Quatrex bags. Sea-cans impeding the clean-up were removed from the area. A loader was used to scrape the surface and remove 7 m³ of contaminated material from the spill site. The contaminated material was placed in the landfarm.



Figure 4: Initial clean-up of the area after sea-cans removed and loader began removing material (Left). Contaminated material brought to the landfarm (Right).

Corrective Measures:

After investigation, it was determined that the operator was working alone while attempting to retrieve the tote, and using equipment that they were not as familiar with for this specific job (Telehandler). The usual equipment (Manitou) was undergoing maintenance at the time. The visibility from the Telehandler is low, especially at night while attempting to retrieve an item from the back of a sea-can.

To mitigate this risk in the future, the warehouse will be implementing a new working policy where they will not conduct any oil-tote deliveries at night while it is dark, and will not perform this task without a spotter. If the worker had had a spotter, and the area had better lighting, they would have had better visibility of the forks and could have avoided the spill.



Sean Arruda | Environmental Coordinator

sean.arruda@agnicoeagle.com | Direct 819.759.3555 x4603996 |

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REPORT LINE USE ONLY

A	REPORT DATE: MONTH – DAY – YEAR 03-29-2020	REPORT TIME 07:30	<input checked="" type="checkbox"/> ORIGINAL SPILL REPORT, OR <input type="checkbox"/> UPDATE # _____ TO THE ORIGINAL SPILL REPORT		REPORT NUMBER 20 - _____
B	OCCURRENCE DATE: MONTH – DAY – YEAR 03-28-2020	OCCURRENCE TIME 15:00			
C	LAND USE PERMIT NUMBER (IF APPLICABLE) KVPL11D01	WATER LICENCE NUMBER (IF APPLICABLE) 2AM-MEL1631			
D	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION Meliadine Gold Project		REGION <input type="checkbox"/> NWT <input checked="" type="checkbox"/> NUNAVUT <input type="checkbox"/> ADJACENT JURISDICTION OR OCEAN		
E	LATITUDE DEGREES 63 MINUTES 2 SECONDS 55		LONGITUDE DEGREES 92 MINUTES 15 SECONDS 88		
F	RESPONSIBLE PARTY OR VESSEL NAME Agnico Eagle Mines Ltd.	RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION Meliadine, Rankin Inlet, Nunavut, X0C 0G0			
G	ANY CONTRACTOR INVOLVED Dyno Nobel	CONTRACTOR ADDRESS OR OFFICE LOCATION Meliadine, Rankin Inlet, Nunavut, X0C 0G0			
H	PRODUCT SPILLED Emulsion	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES 400L	U.N. NUMBER 3375		
	SECOND PRODUCT SPILLED (IF APPLICABLE) N/A	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES N/A	U.N. NUMBER N/A		
I	SPILL SOURCE Emulsion Bin	SPILL CAUSE Operator Error	AREA OF CONTAMINATION IN SQUARE METRES 5		
J	FACTORS AFFECTING SPILL OR RECOVERY N/A	DESCRIBE ANY ASSISTANCE REQUIRED N/A	HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT N/A		
K	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS When refilling an emulsion bin a leak was identified. Approximately 400L of emulsion had spilled onto the gravel pad. The spill is in the process of being cleaned up and the area decontaminated. An investigation will follow. No water bodies were impacted by this spill. The closest natural water body is approximately 550m away. 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 Dan Gorton, Environmental Coordinator, 819-759-3555 ext. 4603996 dan.gorton@agnicoeagle.com				
L	REPORTED TO SPILL LINE BY Dan Gorton	POSITION Env. Coordinator	EMPLOYER AEM	LOCATION CALLING FROM Meliadine	TELEPHONE 819-759-3555
M	ANY ALTERNATE CONTACT Sean Arruda	POSITION Env. Coordinator	EMPLOYER AEM	ALTERNATE CONTACT LOCATION Meliadine	ALTERNATE TELEPHONE 819-759-3555
REPORT LINE USE ONLY					
N	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130
LEAD AGENCY <input type="checkbox"/> EC <input type="checkbox"/> CCG <input type="checkbox"/> GNWT <input type="checkbox"/> GN <input type="checkbox"/> ILA <input type="checkbox"/> INAC <input type="checkbox"/> NEB <input type="checkbox"/> TC			SIGNIFICANCE <input type="checkbox"/> MINOR <input type="checkbox"/> MAJOR <input type="checkbox"/> UNKNOWN		FILE STATUS <input type="checkbox"/> OPEN <input type="checkbox"/> CLOSED
AGENCY		CONTACT NAME	CONTACT TIME	REMARKS	
LEAD AGENCY					
FIRST SUPPORT AGENCY					
SECOND SUPPORT AGENCY					
THIRD SUPPORT AGENCY					

Follow Up Report: #20-087

March 28th 2020, Emulsion Spill



The following information refers to spill 20-087 reported by Agnico Eagle Mines Ltd. March 29th 2020, and is being provided in accordance with:

- the Nunavut Water Board License 2AM-MEL1631 Water License, part H, item 8c
- the Government of Nunavut's, Environmental Protection Act subsection 5.1(a)

Description of Incident:

On March 28th at approximately 3:00 pm, an estimated 400 L of emulsion was spilled on the western side of the emulsion plant. A tele-handler operator punctured an empty emulsion bin while loading it onto the flat-bed truck for transport from underground to surface. The damage was not reported by the operator and was not seen by emulsion plant personnel prior to refilling. As the emulsion plant operator began refilling the bin he noticed the leak and shut down the system immediately. Approximately 400 L of emulsion spilled to the compacted gravel industrial pad, which was frozen at the time of occurrence, preventing residue infiltrating the ground. The spilled emulsion was contained within a 5 m² area due to the viscosity of the product.

No water bodies were impacted by this spill. The closest natural water body is over 550 m from the spill location. The coordinates of the spill are 63° 2'41.91"N, 92°15'26.42"W (Figure 1).



Figure 1: Location of 400 L emulsion spill and proximity to water bodies.

Spill Response & Cleanup:

Emulsion plant personnel determined that there was no risk of ignition prior to responding to the spill. The product spilled was Titan 7000 RU (UN0332), which has a division 1.5 blast sensitivity rating (very insensitive). This product requires high pressure and a heat source for detonation. No pressure or heat source was present at the time of the spill. The bin was punctured while empty and the bins are not pressurized in the refilling process.

Emulsion plant personnel removed the damaged bin from the flat-rack using a forklift, and drained the emulsion from the damaged bin into another bin (Figure 2). The flat-rack was moved using a hyster, to provide access to the spill (Figure 3). Spilled emulsion was pumped into an emulsion bin for reprocessing and reuse (Figure 4). A bobcat was used to scrape remaining emulsion residue from the ground. This material was brought back into the emulsion plant and neutralized.



Figure 2: Forklift removing emulsion bin from flat-rack.



Figure 3: Hyster removing flat-rack from spill area.



Figure 4: Spilled emulsion being pumped to emulsion bin.



Figure 5: Spill area following clean up.

Corrective Measures

The Environment Department held a follow-up meeting with the Mine Department and Dyno Nobel (Emulsion Contractor) to discuss the cause and corrective measures. Operators loading and unloading emulsion bins will now require a spotter to ensure forks are correctly positioned under emulsion bins. Flat-racks used to transport emulsion bins between the emulsion plant are now equipped with dividers, to ensure all sides of the bin can be thoroughly inspected prior to filling (Figure 6). Bins must be placed on the flat-rack with valves facing out to provide quick access in the event of a hose connection failure.







Figure 6: Steel dividers installed to improve visibility during pre-loading inspection.



Dan Gorton | Environmental Coordinator

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A	REPORT DATE: MONTH – DAY – YEAR 05-04-2020		REPORT TIME 14:00		<input checked="" type="checkbox"/> ORIGINAL SPILL REPORT, OR <input type="checkbox"/> UPDATE # _____ TO THE ORIGINAL SPILL REPORT	REPORT NUMBER _____
	B	OCCURRENCE DATE: MONTH – DAY – YEAR 05-04-2020		OCCURRENCE TIME 03:30		
C		LAND USE PERMIT NUMBER (IF APPLICABLE) KVPL11D01			WATER LICENCE NUMBER (IF APPLICABLE) 2AM-MEL1631	
	D	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION Meliadine Gold Project			REGION <input type="checkbox"/> NWT <input checked="" type="checkbox"/> NUNAVUT <input type="checkbox"/> ADJACENT JURISDICTION OR OCEAN	
E		LATITUDE DEGREES 63 MINUTES 1 SECONDS 16			LONGITUDE DEGREES 92 MINUTES 12 SECONDS 34	
	F	RESPONSIBLE PARTY OR VESSEL NAME Agnico Eagle Mines Ltd.		RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION Meliadine, Rankin Inlet, Nunavut, X0C 0G0		
G		ANY CONTRACTOR INVOLVED N/A		CONTRACTOR ADDRESS OR OFFICE LOCATION N/A		
	H	PRODUCT SPILLED Emulsion		QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES 800L	U.N. NUMBER 3375	
I		SECOND PRODUCT SPILLED (IF APPLICABLE) N/A		QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES N/A	U.N. NUMBER N/A	
	J	SPILL SOURCE Emulsion Bin		SPILL CAUSE Human Error		AREA OF CONTAMINATION IN SQUARE METRES 10
K		FACTORS AFFECTING SPILL OR RECOVERY N/A		DESCRIBE ANY ASSISTANCE REQUIRED N/A		HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT N/A
	L	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS Approximately 800L of emulsion was spilled on the gravel transfer pad beside Portal 1. While removing a bin of emulsion from the flat rack, the operator was unaware that one fork had been improperly placed below the bin. When backing up, the improperly secured bin tipped off of the forks and landed on its side breaking off the lid. No water bodies were impacted by this spill. The closest water body was approximately 1km away. 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 Sean Arruda, Environmental Coordinator, 819-759-3555 ext. 4603996 sean.arruda@agnicoeagle.com				
M		REPORTED TO SPILL LINE BY Sean Arruda	POSITION Env. Coordinator	EMPLOYER AEM	LOCATION CALLING FROM Meliadine	TELEPHONE 819-759-3555
	N	ANY ALTERNATE CONTACT Dan Gorton	POSITION Env. Coordinator	EMPLOYER AEM	ALTERNATE CONTACT Meliadine LOCATION	ALTERNATE TELEPHONE 819-759-3555
REPORT LINE USE ONLY						
N	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130	
	LEAD AGENCY <input type="checkbox"/> EC <input type="checkbox"/> CCG <input type="checkbox"/> GNWT <input type="checkbox"/> GN <input type="checkbox"/> ILA <input type="checkbox"/> INAC <input type="checkbox"/> NEB <input type="checkbox"/> TC			SIGNIFICANCE <input type="checkbox"/> MINOR <input type="checkbox"/> MAJOR <input type="checkbox"/> UNKNOWN		FILE STATUS <input type="checkbox"/> OPEN <input type="checkbox"/> CLOSED
AGENCY		CONTACT NAME	CONTACT TIME	REMARKS		
LEAD AGENCY						
FIRST SUPPORT AGENCY						
SECOND SUPPORT AGENCY						
THIRD SUPPORT AGENCY						

Follow Up Report: #20-121

May 4th 2020, Emulsion Spill



The following information refers to spill 20-121 reported by Agnico Eagle Mines Ltd. May 4th 2020, and is being provided in accordance with:

- the Nunavut Water Board License 2AM-MEL1631 Water License, part H, item 8c
- the Government of Nunavut's, Environmental Protection Act subsection 5.1(a)

Description of Incident:

On May 4th at approximately 3:30 am, an estimated 800 L of emulsion was spilled on the gravel transfer pad just outside of Portal 1 (Figure 1). While attempting to remove the emulsion bin from the flat rack, the operator was not aware that one of their forks had been improperly placed below the bin, as opposed to being properly inserted through the fork slot. When they backed up with the full bin, it tipped off of the forks and fell onto its side, popping off the lid, and spilling the contents on the ground. The emulsion poured out over an area of about 10 m².

No water bodies were impacted by this spill. The closest natural water body (Lake B7) is over 1000 m from the spill location. The coordinates of the spill are 63° 1'16"N, 92°12'34"W (Figure 1).



Figure 1: Location of 800 L emulsion spill.

Spill Response & Cleanup:

After the spill occurred, the mine workers taped off the area with caution tape and covered the spilled product with gravel. At 6 a.m. the Environment Department was notified of the spill. Emulsion plant personnel determined that there was no risk of ignition prior to responding to the spill. The product spilled was Titan 7000 RU (UN0332), which has a division 1.5 blast sensitivity rating (very insensitive). This product requires high pressure and a heat source for detonation. No pressure or heat source was present at the time of the spill.

Upon arrival that morning at the site, the DYNO Nobel team had begun scooping the contaminated gravel and emulsion into quatrex bags. Normally, as much of the raw product as possible that can be recovered will be used again. Since this material was mixed with gravel, everything that was removed is now slowly being destroyed by packing the gravel-emulsion mix into blast holes where it is then detonated. It will take several weeks to properly destroy the remaining material.



Figure 2: Initial spill scene just after 3:30 a.m.



Figure 3: Photos taken at 7:22 a.m. Spill recovery was underway and material was being moved into quatrex bags to be stored at the DYNO Nobel emulsion plant.

Corrective Measures





The Environment Department held additional toolbox meetings with the underground mine department, to further discuss methods for spill prevention, the importance of using a spotter, and ensuring that loads are secure before moving them. Since this specific incident had the potential to cause injury if there had been a worker next to the bin, this incident was also reported to the Health and Safety Department. Supervisor job task observations are being completed in order to improve the training for this task. In addition, a long-term solution for an improved emulsion handling and distribution system is currently being investigated.



Sean Arruda | Environmental Coordinator

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A	REPORT DATE: MONTH – DAY – YEAR 06-04-2020		REPORT TIME 16:00		<input checked="" type="checkbox"/> ORIGINAL SPILL REPORT, OR <input type="checkbox"/> UPDATE # _____ TO THE ORIGINAL SPILL REPORT	REPORT NUMBER _____
	B	OCCURRENCE DATE: MONTH – DAY – YEAR 06-03-2020		OCCURRENCE TIME 18:00		
C		LAND USE PERMIT NUMBER (IF APPLICABLE) KVPL11D01		WATER LICENCE NUMBER (IF APPLICABLE) 2AM-MEL1631		
	D	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION Meliadine Gold Project			REGION <input type="checkbox"/> NWT <input checked="" type="checkbox"/> NUNAVUT <input type="checkbox"/> ADJACENT JURISDICTION OR OCEAN	
E		LATITUDE DEGREES 63 MINUTES 1 SECONDS 39			LONGITUDE DEGREES 92 MINUTES 12 SECONDS 11	
	F	RESPONSIBLE PARTY OR VESSEL NAME Agnico Eagle Mines Ltd.		RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION Meliadine, Rankin Inlet, Nunavut, X0C 0G0		
G		ANY CONTRACTOR INVOLVED N/A		CONTRACTOR ADDRESS OR OFFICE LOCATION N/A		
	H	PRODUCT SPILLED Surface runoff (snow melt)		QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES Approximately 10 m3		U.N. NUMBER N/A
I		SECOND PRODUCT SPILLED (IF APPLICABLE) N/A		QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES N/A		U.N. NUMBER N/A
	J	SPILL SOURCE Water transfer pipeline		SPILL CAUSE Equipment malfunction		AREA OF CONTAMINATION IN SQUARE METRES 2,000 (CP6 catchment)
K		FACTORS AFFECTING SPILL OR RECOVERY N/A		DESCRIBE ANY ASSISTANCE REQUIRED N/A		HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT N/A
	L	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS Surface runoff water on site was being conveyed via a pipeline in preparation for freshet. An accidental release occurred from a cracked flange, resulting in water spilling to ground towards CP6. No water migrated off-site. The closest water body is approximately 480 metres. This report is being issued for due diligence purposes as it is not expected to have an environmental impact due to the released material being surface runoff water originating from snow melt. 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 Jessica Huza, Environment Superintendent, 819-856-5097, jessica.huza@agnicoeagle.com				
M		REPORTED TO SPILL LINE BY Jessica Huza	POSITION Superintendent	EMPLOYER AEM	LOCATION CALLING FROM Meliadine	TELEPHONE 819-856-5097
	N	ANY ALTERNATE CONTACT Matt Gillman	POSITION Coordinator	EMPLOYER AEM	ALTERNATE CONTACT Meliadine	ALTERNATE TELEPHONE 819-759-3555
REPORT LINE USE ONLY						
N	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130	
	LEAD AGENCY <input type="checkbox"/> EC <input type="checkbox"/> CCG <input type="checkbox"/> GNWT <input type="checkbox"/> GN <input type="checkbox"/> ILA <input type="checkbox"/> INAC <input type="checkbox"/> NEB <input type="checkbox"/> TC			SIGNIFICANCE <input type="checkbox"/> MINOR <input type="checkbox"/> MAJOR <input type="checkbox"/> UNKNOWN		FILE STATUS <input type="checkbox"/> OPEN <input type="checkbox"/> CLOSED
AGENCY		CONTACT NAME	CONTACT TIME	REMARKS		
LEAD AGENCY						
FIRST SUPPORT AGENCY						
SECOND SUPPORT AGENCY						
THIRD SUPPORT AGENCY						

Follow Up Report: #20-164

June 3rd 2020, Saline Water Spill



The following information refers to spill 20-164 reported by Agnico Eagle Mines Ltd. June 4th 2020, and is being provided in accordance with:

- the Nunavut Water Board License 2AM-MEL1631 Water License, part H, item 8c
- the Government of Nunavut's, Environmental Protection Act subsection 5.1(a)

Description of Incident:

On June 3rd, at approximately 6:00 pm, an estimated 10 m³ of surface water run-off was spilled as water was being conveyed via a waterline in preparation for freshet. An accidental release occurred from a cracked flange, resulting in water spilling to the ground and flowing towards Containment Pond 6 (CP6). No water migrated off-site. The closest water body is approximately 480 m away. The coordinates of the spill are 63° 1'39.00"N, 92°12'11.00"W (Figure 1).



Figure 1: Location of spill.

Spill Response & Cleanup:

No clean-up was required as the surface water flowed back into CP6, which is part of the sites' managed water system. The source of the surface water run-off was CP5 which is a licensed compliance monitoring location (Mel-22). A sample was collected from Mel-22 at the time of the spill, and showed no results of concern (Table 1). The flange was repaired and pumping continued.

Table 1: MEL-22 water quality analysis collected 3 June 2020

Parameter	Result	Unit
Total Ammonia	2.7	mg/L
Conductivity	620	umho/cm
Total Dissolved Solids	385	mg/L
Total Suspended Solids	18	mg/L
Total Oil and Grease	<0.50	mg/L

Corrective Measures





The Energy and Infrastructure department replaced the cracked flange and completed a full inspection of the line prior to start-up. When the line was brought back into service, Mine personnel remained at the point of the spill to ensure that the replaced flange was operating properly. No issues were observed.



Sean Arruda | Environmental Coordinator

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EMAIL: spills@gov.nt.ca

REPORT LINE USE ONLY

A	REPORT DATE: MONTH – DAY – YEAR 06-27-2020		REPORT TIME 17:00		<input checked="" type="checkbox"/> ORIGINAL SPILL REPORT, OR <input type="checkbox"/> UPDATE # _____ TO THE ORIGINAL SPILL REPORT	REPORT NUMBER _____
	B	OCCURRENCE DATE: MONTH – DAY – YEAR 06-27-2020		OCCURRENCE TIME 02:30		
C		LAND USE PERMIT NUMBER (IF APPLICABLE) KVPL11D01			WATER LICENCE NUMBER (IF APPLICABLE) 2BB-MEL-1424	
	D	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION Meliadine Gold Project			REGION <input type="checkbox"/> NWT <input checked="" type="checkbox"/> NUNAVUT <input type="checkbox"/> ADJACENT JURISDICTION OR OCEAN	
E		LATITUDE DEGREES 63 MINUTES 1 SECONDS 41			LONGITUDE DEGREES 92 MINUTES 10 SECONDS 21	
	F	RESPONSIBLE PARTY OR VESSEL NAME Agnico Eagle Mines Ltd.		RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION Meliadine, Rankin Inlet, Nunavut, X0C 0G0		
G		ANY CONTRACTOR INVOLVED Orbit Garant		CONTRACTOR ADDRESS OR OFFICE LOCATION Val d'Or, Quebec		
	H	PRODUCT SPILLED Jet A Fuel		QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES 205	U.N. NUMBER 1863	
I		SECOND PRODUCT SPILLED (IF APPLICABLE) Waste oil/diesel		QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES 100	U.N. NUMBER 1202	
	J	SPILL SOURCE Steel Drum		SPILL CAUSE Failure to follow procedure		AREA OF CONTAMINATION IN SQUARE METRES 5
K		FACTORS AFFECTING SPILL OR RECOVERY Recent rain accumulation		DESCRIBE ANY ASSISTANCE REQUIRED N/A		HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT Flammable liquid / vapours
	L	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS While offloading drums of Jet A fuel from a flat rack trailer at the Exploration camp, the operator had one fork go over the top of the pallet and puncture a drum. The entire drum released onto the road area but was immediately contained. While responding to this event, Environment personnel noticed hydrocarbon seepage/sheen coming from within a locked sea-can, and migrating into the Jet A spill. A damaged waste oil/diesel drum which partially drained over an unknown time frame, is likely the source. Both incidents are being investigated. 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 Sean Arruda, Environment Coordinator, 819-759-3555 ext. 4603996 sean.arruda@agnicoeagle.com				
M		REPORTED TO SPILL LINE BY Sean Arruda	POSITION Coordinator	EMPLOYER Agnico Eagle	LOCATION CALLING FROM Meliadine	TELEPHONE 819-759-3555
	N	ANY ALTERNATE CONTACT Dan Gorton	POSITION Coordinator	EMPLOYER Agnico Eagle	ALTERNATE CONTACT Meliadine	ALTERNATE TELEPHONE 819-759-3555
REPORT LINE USE ONLY						
N	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130	
	LEAD AGENCY <input type="checkbox"/> EC <input type="checkbox"/> CCG <input type="checkbox"/> GNWT <input type="checkbox"/> GN <input type="checkbox"/> ILA <input type="checkbox"/> INAC <input type="checkbox"/> NEB <input type="checkbox"/> TC			SIGNIFICANCE <input type="checkbox"/> MINOR <input type="checkbox"/> MAJOR <input type="checkbox"/> UNKNOWN		FILE STATUS <input type="checkbox"/> OPEN <input type="checkbox"/> CLOSED
AGENCY		CONTACT NAME	CONTACT TIME	REMARKS		
LEAD AGENCY						
FIRST SUPPORT AGENCY						
SECOND SUPPORT AGENCY						
THIRD SUPPORT AGENCY						

Follow Up Report:

June 27, 2020, Jet-A / Waste Oil



The following information refers to a spill reported by Agnico Eagle Mines Ltd. June 27th 2020, and is being provided in accordance with:

- the Nunavut Water Board License 2BB-MEL1424 Water License, part H, item 4c
- the Government of Nunavut's, Environmental Protection Act subsection 5.1(a)

No official spill number was available on the ENR Spills online database at the time of submitting this report, although the spill was reported to the spill line.

Description of Incident:

On June 27, 2020 the Environment Department was notified of an early morning spill which occurred near the Exploration camp. While removing a pallet of fuel drums from a flatbed, the fork of a loader punctured a full drum of Jet-A fuel (205L), releasing it on the ground. This spill was contained quickly, but during the clean-up process, it was noticed that there was a sheen coming from a different location and migrating into the Jet-A spill. Upon further investigation, a drum with a pinhole leak, containing waste oil/diesel, was found to have been stored in a sea-can nearby. Over an unknown period of time the drum drained out (100L), and was likely covered by snow and ice over winter, becoming exposed and visible after the rainfall the previous night.

No water body was impacted by this spill. The closest water body (Meliadine Lake) is approximately 70 m away. The coordinates of the spill are 63° 1'41.33"N, 92°10'19.88"W (Figure 1).

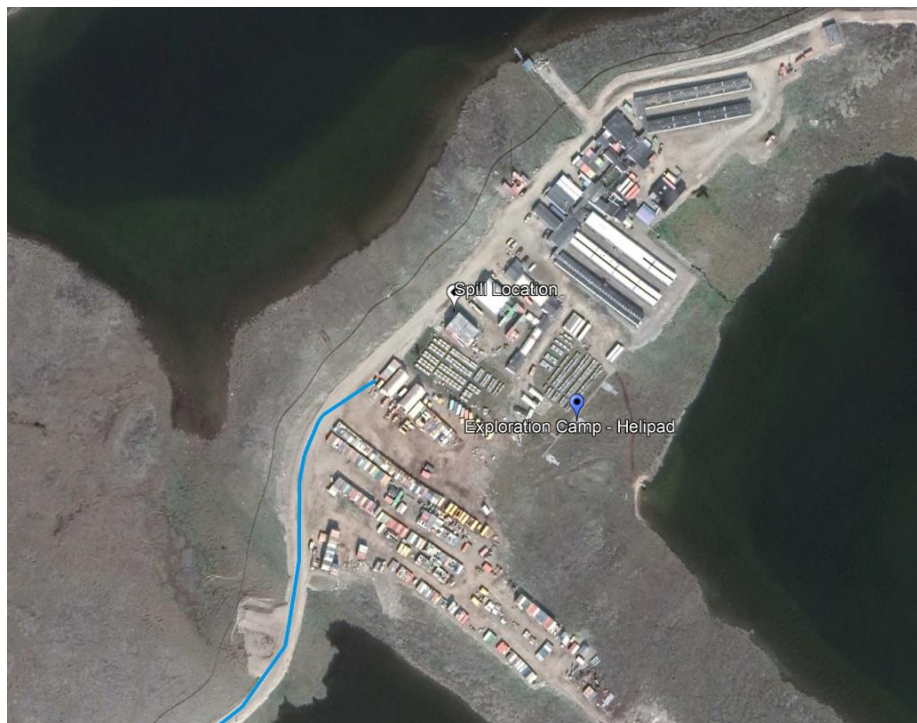


Figure 1: Location of spill.

Spill Response & Cleanup:

The spill occurred after a night of significant rainfall. The Jet-A fuel settled into a large puddle on the road, and spill pads and absorbent booms were used to contain the area (Figure 2). A sump was dug out using a back hoe so that a vacuum truck could be used to pump out the contaminated water from the puddle. This water was transported to the Landfarm A oil-water separator for treatment.



Figure 2: Initial Jet A spill initial containment.

After the water was removed, the back hoe began clearing the contaminated gravel into piles, and a loader was used to transport all of this material to Landfarm A (Figure 3).



Figure 3: Contaminated gravel being removed from Jet A spill area.

The area affected by the contaminated sea can was also excavated, and the sea can was removed to access the material underneath. The damaged drum was pumped into a new drum, the entire sea can was emptied, and the contents were repacked properly in order to avoid future spills (Figure 4).



Figure 4: Condition of the seacan before, and after decontaminating and repacking the drums.

Corrective Measures

The sea can was emptied and the drums were inspected and repacked properly. Several cubic meters of contaminated gravel was removed from the surface of this pad. An investigation was completed with all departments involved and the Environment Department has provided them with a list of corrective and preventative measures. These include ensuring that personnel use a mandatory spotter when moving hazardous materials with forked equipment, completing a full inventory of the remaining sea cans in that area, repacking any improperly stored sea cans, and ensuring that hazardous waste containers are shipped south each year.



Sean Arruda | Environmental Coordinator

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EMAIL: spills@gov.nt.ca

REPORT LINE USE ONLY

A	REPORT DATE: MONTH – DAY – YEAR 09-08-2020		REPORT TIME 17:00		<input checked="" type="checkbox"/> ORIGINAL SPILL REPORT, OR <input type="checkbox"/> UPDATE # _____ TO THE ORIGINAL SPILL REPORT	REPORT NUMBER _____
	B	OCCURRENCE DATE: MONTH – DAY – YEAR 09-08-2020		OCCURRENCE TIME 15:00		
C		LAND USE PERMIT NUMBER (IF APPLICABLE) KVPL11D01			WATER LICENCE NUMBER (IF APPLICABLE) 2AM-MEL1631	
	D	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION Meliadine Gold Project			REGION <input type="checkbox"/> NWT <input checked="" type="checkbox"/> NUNAVUT <input type="checkbox"/> ADJACENT JURISDICTION OR OCEAN	
E		LATITUDE DEGREES 63 MINUTES 1 SECONDS 36			LONGITUDE DEGREES 92 MINUTES 12 SECONDS 10	
	F	RESPONSIBLE PARTY OR VESSEL NAME Agnico Eagle Mines Ltd.		RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION Meliadine, Rankin Inlet, Nunavut, X0C 0G0		
G		ANY CONTRACTOR INVOLVED N/A		CONTRACTOR ADDRESS OR OFFICE LOCATION N/A		
	H	PRODUCT SPILLED Treated saline water		QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES 1 m3		U.N. NUMBER N/A
I		SECOND PRODUCT SPILLED (IF APPLICABLE) N/A		QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES N/A		U.N. NUMBER N/A
	J	SPILL SOURCE Water transfer pipeline		SPILL CAUSE Equipment malfunction		AREA OF CONTAMINATION IN SQUARE METRES 20
K		FACTORS AFFECTING SPILL OR RECOVERY N/A		DESCRIBE ANY ASSISTANCE REQUIRED N/A		HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT N/A
	L	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS During a transfer of treated saline water from SP3 to the truck loading station, in preparation for discharge to sea, approximately 1 m3 of water was released from pipeline connections at the new filter system. The released water was collected in the CP5 containment pond and did not migrate off-site. The closest water body is approximately 925 meters. 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 Dan Gorton, Environment Coordinator, 819-759-3555 ext 4603996 meli.environment@agnicoeagle.com				
M		REPORTED TO SPILL LINE BY Dan Gorton	POSITION Coordinator	EMPLOYER AEM	LOCATION CALLING FROM Meliadine	TELEPHONE 819-759-3555
	N	ANY ALTERNATE CONTACT Matt Gillman	POSITION Coordinator	EMPLOYER AEM	ALTERNATE CONTACT Meliadine	ALTERNATE TELEPHONE 819-759-3555
REPORT LINE USE ONLY						
N	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130	
	LEAD AGENCY <input type="checkbox"/> EC <input type="checkbox"/> CCG <input type="checkbox"/> GNWT <input type="checkbox"/> GN <input type="checkbox"/> ILA <input type="checkbox"/> INAC <input type="checkbox"/> NEB <input type="checkbox"/> TC			SIGNIFICANCE <input type="checkbox"/> MINOR <input type="checkbox"/> MAJOR <input type="checkbox"/> UNKNOWN		FILE STATUS <input type="checkbox"/> OPEN <input type="checkbox"/> CLOSED
AGENCY		CONTACT NAME		CONTACT TIME		REMARKS
LEAD AGENCY						
FIRST SUPPORT AGENCY						
SECOND SUPPORT AGENCY						
THIRD SUPPORT AGENCY						

Follow Up Report: #20-310

August 9th 2020, 1 m³ Saline Water Spill



The following information refers to a spill reported by Agnico Eagle Mines Ltd. August 9th 2020, and is being provided in accordance with:

- the Nunavut Water Board License 2AM-MEL1631 Water License, part H, item 8c
- the Government of Nunavut's, Environmental Protection Act subsection 5.1(a)

Description of Incident:

On August 9th, at approximately 3:00 pm, an estimated 1 m³ of treated saline water was spilled as water was being conveyed via a waterline from Saline Pond 3 (SP3) to the truck loading station. An accidental release occurred from a recently commissioned waterline, resulting in water spilling to the ground and flowing towards Containment Pond 5 (CP5). No water migrated off-site. The closest water body is approximately 925 m away. The coordinates of the spill are 63° 1'36.00"N, 92°12'10.00"W (Figure 1).



Figure 1: Location of spill 1 m³ treated saline water spill in CP5 catchment, adjacent to loading station.

Spill Response & Cleanup:

No clean-up was required as the surface water flowed back into CP5, which is part of the sites' managed water system. The source of the treated saline water was SP3, which contains post-treatment water from the saline effluent treatment plant (SETP). Water quality from SP3 is monitored at licensed compliance monitoring location, Mel-26, prior to discharge to sea. A sample was collected from Mel-26 at the time of the spill and showed no results of concern.



Figure 2: Piping removed from SP3 to loading station.



Figure 3: Piping replaced from SP3 to loading station.

Corrective Measures





The Energy and Infrastructure (E&I) department replaced the piping August 10th and inspected the line before resuming operations. When the line was brought back into service, E&I personnel remained at the point of the spill to ensure that the replaced piping was operating correctly. No issues were observed.



Dan Gorton | Environmental Coordinator

dan.gorton@agnicoeagle.com | Direct 819.759.3555 x4603996 |

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

agnicoeagle.com    

Sent from Meliadine



Canada

NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

NT-NU 24-HOUR SPILL REPORT LINE

TEL: (867) 920-8130

FAX: (867) 873-6924

EMAIL: spills@gov.nt.ca

REPORT LINE USE ONLY

A	REPORT DATE: MONTH – DAY – YEAR 12-08-2020	REPORT TIME 17:30	<input checked="" type="checkbox"/> ORIGINAL SPILL REPORT, OR <input type="checkbox"/> UPDATE # _____ TO THE ORIGINAL SPILL REPORT		REPORT NUMBER _____
B	OCCURRENCE DATE: MONTH – DAY – YEAR 12-08-2020	OCCURRENCE TIME 07:00			
C	LAND USE PERMIT NUMBER (IF APPLICABLE) KVPL11D01	WATER LICENCE NUMBER (IF APPLICABLE) 2AM-MEL1631			
D	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION Meliadine Gold Project		REGION <input type="checkbox"/> NWT <input checked="" type="checkbox"/> NUNAVUT <input type="checkbox"/> ADJACENT JURISDICTION OR OCEAN		
E	LATITUDE DEGREES 63 MINUTES 1 SECONDS 18		LONGITUDE DEGREES 92 MINUTES 12 SECONDS 7		
F	RESPONSIBLE PARTY OR VESSEL NAME Agnico Eagle Mines Ltd.	RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION Meliadine, Rankin Inlet, Nunavut, X0C 0G0			
G	ANY CONTRACTOR INVOLVED Kivalliq Contractors Group	CONTRACTOR ADDRESS OR OFFICE LOCATION 32 Sivulliq Ave., PO Box 188, Rankin Inlet (NU) X0C 0G0			
H	PRODUCT SPILLED Diesel	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES 300 L	U.N. NUMBER N/A		
	SECOND PRODUCT SPILLED (IF APPLICABLE) N/A	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES N/A	U.N. NUMBER N/A		
I	SPILL SOURCE Haul Truck	SPILL CAUSE Equipment Damage	AREA OF CONTAMINATION IN SQUARE METRES 50		
J	FACTORS AFFECTING SPILL OR RECOVERY N/A	DESCRIBE ANY ASSISTANCE REQUIRED N/A	HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT N/A		
K	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS During loading of a haul truck, a rock fell from an excavator bucket, puncturing the fuel tank of the haul truck. The contents of the fuel tank spilled to the ground in Tiriganiaq II open pit and did not migrate off-site. The closest water body is approximately 550 meters. 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 Dan Gorton, Environment Coordinator, 819-759-3555 ext 4603996 meli.environment@agnicoeagle.com				
L	REPORTED TO SPILL LINE BY Dan Gorton	POSITION Coordinator	EMPLOYER AEM	LOCATION CALLING FROM Meliadine	TELEPHONE 819-759-3555
M	ANY ALTERNATE CONTACT Terry Ternes	POSITION General Supervisor	EMPLOYER AEM	ALTERNATE CONTACT Meliadine LOCATION	ALTERNATE TELEPHONE 819-759-3555
REPORT LINE USE ONLY					
N	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130
LEAD AGENCY <input type="checkbox"/> EC <input type="checkbox"/> CCG <input type="checkbox"/> GNWT <input type="checkbox"/> GN <input type="checkbox"/> ILA <input type="checkbox"/> INAC <input type="checkbox"/> NEB <input type="checkbox"/> TC			SIGNIFICANCE <input type="checkbox"/> MINOR <input type="checkbox"/> MAJOR <input type="checkbox"/> UNKNOWN		FILE STATUS <input type="checkbox"/> OPEN <input type="checkbox"/> CLOSED
AGENCY		CONTACT NAME	CONTACT TIME	REMARKS	
LEAD AGENCY					
FIRST SUPPORT AGENCY					
SECOND SUPPORT AGENCY					
THIRD SUPPORT AGENCY					

Follow Up Report: #20-286

August 12th 2020, 300 L Diesel Spill



The following information refers to a spill reported by Agnico Eagle Mines Ltd. August 12th, 2020, and is being provided in accordance with:

- the Nunavut Water Board License 2AM-MEL1631 Water License, part H, item 8c
- the Government of Nunavut's, Environmental Protection Act subsection 5.1(a)

Description of Incident:

On August 12th, 2020 the Environment Department was notified of a 300 L diesel spill which occurred at 7am in Tiriganiaq II open pit. While loading waste rock into a haul truck, a rock fell from the excavator bucket, puncturing the trucks' fuel tank. The contents of the fuel tank spilled to the pit floor and did not migrate off site.

No water body was impacted by this spill. The closest water body is approximately 550 m away. The coordinates of the spill are 63° 1'18.00"N, 92°12'7.00"W (Figure 1).



Figure 1: Location of 300 L diesel spill in Tiriganiaq II open pit.

Spill Response & Cleanup:

The previously blasted waste rock impacted by the spill was excavated and transported to the landfarm screening pad, beside Landfarm A. The material will remain in this location until hydrocarbons have volatilized, after which it will be transferred to WRSF 3.



Figure 2: Spill location following removal of hydrocarbon contaminated material.

Corrective Measures




The Environment Department completed an investigation with the Mine Department and concluded that human error and standard operating procedures were causation factors. The standard operating procedure was updated to ensure trucks are always loaded on the drivers' side, which is the opposite side to the fuel tank. Operators have been reminded to follow safe operating procedures and avoid overfilling trucks or attempting to load rocks unsuitable for the equipment.



Dan Gorton | Environmental Coordinator

dan.gorton@agnicoeagle.com | Direct 819.759.3555 x4603996 |

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

agnicoeagle.com    

Sent from Meliadine



Canada

NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

NT-NU 24-HOUR SPILL REPORT LINE

TEL: (867) 920-8130

FAX: (867) 873-6924

EMAIL: spills@gov.nt.ca

REPORT LINE USE ONLY

A	REPORT DATE: MONTH – DAY – YEAR 08-18-2020	REPORT TIME 16:30	<input checked="" type="checkbox"/> ORIGINAL SPILL REPORT, OR <input type="checkbox"/> UPDATE # _____ TO THE ORIGINAL SPILL REPORT		REPORT NUMBER _____
B	OCCURRENCE DATE: MONTH – DAY – YEAR Uncertain - see section K	OCCURRENCE TIME Uncertain - see K			
C	LAND USE PERMIT NUMBER (IF APPLICABLE) KVPL11D01	WATER LICENCE NUMBER (IF APPLICABLE) 2BB-MEL1424			
D	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION Meliadine Gold Project		REGION <input type="checkbox"/> NWT <input checked="" type="checkbox"/> NUNAVUT <input type="checkbox"/> ADJACENT JURISDICTION OR OCEAN		
E	LATITUDE DEGREES 62 MINUTES 58 SECONDS 53		LONGITUDE DEGREES 92 MINUTES 01 SECONDS 41		
F	RESPONSIBLE PARTY OR VESSEL NAME Agnico Eagle Mines Ltd.	RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION Meliadine, Rankin Inlet, Nunavut, X0C 0G0			
G	ANY CONTRACTOR INVOLVED Orbit Garant Drilling	CONTRACTOR ADDRESS OR OFFICE LOCATION 3200, boulevard Jean-Jacques Cossette, Val-d'Or, Qc, J9P 7G4			
H	PRODUCT SPILLED Diesel	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES Uncertain	U.N. NUMBER 1202		
	SECOND PRODUCT SPILLED (IF APPLICABLE) N/A	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES N/A	U.N. NUMBER N/A		
I	SPILL SOURCE Fuel tank from Drilling Activities	SPILL CAUSE Human Error	AREA OF CONTAMINATION IN SQUARE METRES Unknown		
J	FACTORS AFFECTING SPILL OR RECOVERY Volume and date of spill uncertain	DESCRIBE ANY ASSISTANCE REQUIRED N/A	HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT N/A		
K	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS On August 18th, Agnico Eagle Mines Limited was informed by Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) that a steel sled and fuel tank had been observed in Meliadine Lake at approximately N62 58 53.0 W092 01 41.2 , between the main camp and the drilling area, at approximately 60 meters from the shore. An investigation was immediately launched and it appears the fuel tank might have inadvertently been left behind by one of our drilling contractor following a 2019 drilling campaign. At this time, Agnico Eagle Mines Limited would like to clarify that no spill has yet been confirmed and this report is being submitted as due diligence. We are currently verifying if there are any evidence of a spill. Helicopter survey, shore surveys and water sampling are currently being conducted. Regulators will be updated as soon as additional information becomes available.				
L	REPORTED TO SPILL LINE BY David Frenette	POSITION Env. Coord	EMPLOYER Agnico Eagle Mines	LOCATION CALLING FROM Val-d'Or	TELEPHONE 8198745980
M	ANY ALTERNATE CONTACT Jean Claude Blais	POSITION Geology Superintend	EMPLOYER Agnico Eagle Mines	ALTERNATE CONTACT Meliadine	ALTERNATE TELEPHONE 8197595555
REPORT LINE USE ONLY					
N	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130
LEAD AGENCY <input type="checkbox"/> EC <input type="checkbox"/> CCG <input type="checkbox"/> GNWT <input type="checkbox"/> GN <input type="checkbox"/> ILA <input type="checkbox"/> INAC <input type="checkbox"/> NEB <input type="checkbox"/> TC			SIGNIFICANCE <input type="checkbox"/> MINOR <input type="checkbox"/> MAJOR <input type="checkbox"/> UNKNOWN		FILE STATUS <input type="checkbox"/> OPEN <input type="checkbox"/> CLOSED
AGENCY		CONTACT NAME	CONTACT TIME	REMARKS	
LEAD AGENCY					
FIRST SUPPORT AGENCY					
SECOND SUPPORT AGENCY					
THIRD SUPPORT AGENCY					



AGNICO EAGLE

Meliadine Exploration Project

Fuel Tank in Meliadine Lake, Closing Report

September 17th, 2020

Prepared by:

**Agnico Eagle Mines Limited,
Exploration Division**

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INTRODUCTION

On August 18th, Agnico Eagle Mines Limited (Agnico Eagle) was informed by Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC), Water Resources Officer, that a steel sled and fuel tank had been observed in Meliadine Lake (see Figure 1) at coordinates N62 58' 53.0" W092 01' 41.2" at approximately 8.9 km southeast of the Meliadine exploration camp (see Figure 2).

The initial assessment conducted by Agnico Eagle showed that it was located in a bay of Meliadine Lake, between the main camp and the Discovery Gold Deposit. The tank was a certified 4,640-litre double-walled fuel tank mounted on a steel sled used during winter drilling activities. It was inadvertently left behind on the ice surface by one of our drilling contractors after a 2019 winter drilling campaign and partly sank in the lake after freshet in 2019.

The tank was seen resting on its side, in shallow water. Given the fairly shallow water depth at this location, the fuel tank was partially submerged in the lake. The information received from our drilling contractor seems to suggest that this fuel tank was essentially empty after the drilling program when left at this location.

A declaration for a potential reportable event was submitted the same day (on August 18th 2020) to the Spill Report Line, to the Nunavut Water Board and to inspectors from Kivalliq Inuit Association, Crown-Indigenous Relations and Northern Affairs Canada and Environment Canada.



Figure 1. Fuel tank in the lake, August 19th, 2020

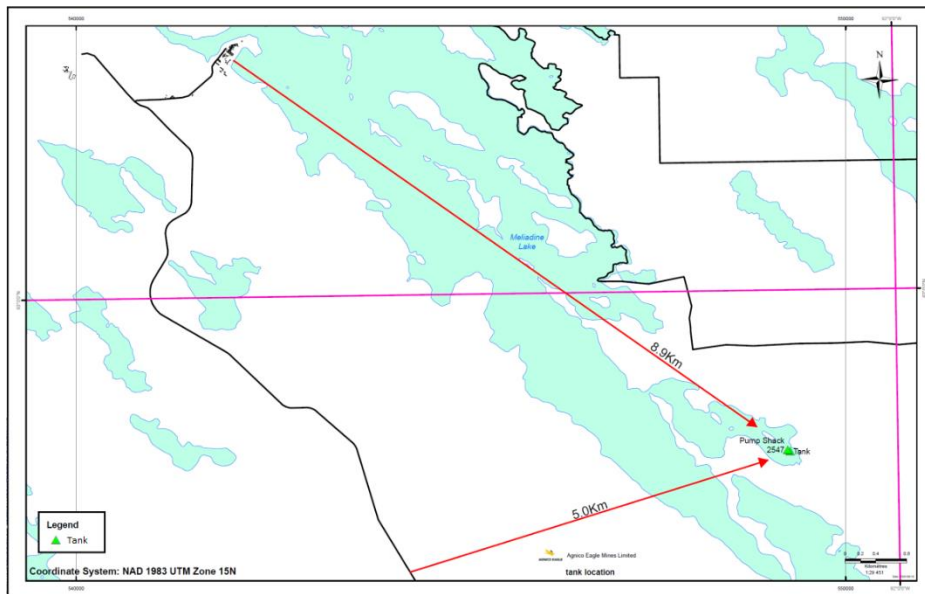


Figure 2. Location of the fuel tank

IMMEDIATE ACTIONS TAKEN

An investigation was immediately launched in conjunction with the elaboration of an action and mitigation plan to ensure the lake was monitored and protected in the vicinity of the fuel tank.

Initial information available provided by our drilling contractor was that the fuel tank was inadvertently left behind, on the lake by one of our drilling contractors after a 2019 drilling campaign and that it was essentially empty after the drilling program when left at this location.

August 19th

A visit of the area was conducted on August 19th by the Nunavut Environmental and the Geology departments. A marine containment barrier and absorbent booms (see Figure 3) were installed around the tank as a preventative measure, even if no visual evidence of a fuel (diesel) spill was seen on the water surface or on the shoreline. Several walks along the shore were conducted to verify if there were any evidence of a spill or contamination, none was observed.

Also, all the previously available water samples in the area including the fresh water supply samples at the mine were reviewed by our Environmental department and no indication of a fuel contamination was detected upon lab analysis.



Figure 3. Fuel tank inside containment barrier and absorbent booms

August 20th

A formal investigation was initiated by Agnico Eagle on August 20th to better understand the sequence of events. Available information was collected and reviewed. A team of divers arrived on site and started to plan the first dive to assess the condition of the tank.

A fly-over by helicopter and another walk along the shoreline were conducted by Agnico Eagle and no evidence of contamination was again observed.

Scenarios/options to remove the fuel tank from the lake were developed and analysed by a team involving Agnico Eagle and the drilling contractor owning the tank. It was decided to elaborate the plan slowly to ensure to develop a robust and safe action plan that would result in a safe removal of the tank.

August 21st

Divers proceeded to their first dive on August 21st and assessed the tank and surrounding ground condition. Two of the three caps normally installed at the top of the fuel tank were missing. Using a camera, the divers were able to show that the tank did not present any evidence of containing fuel and was partially filled with water. The overall condition of the fuel tank was fine, and the bottom of the lake did not show anything problematic that could prevent its extraction up to the shore. The tank was lying on its side and needed to be pivoted to bring it back to its normal position (skids at the bottom).

Based on the information obtained by the drilling contractor, Orbit Garant Drilling (OGD), the fuel tank was essentially empty when it was left on the ice surface after the 2019 winter drilling program. The drilling contractor informed Agnico Eagle that it was never realized that one of their fuel tanks was missing. This event was an unintentional event that could be linked to some gap in communication during a crew change.

Another walk along the shoreline was conducted by Agnico Eagle and again, no evidence of contamination was observed.

August 22nd

On August 22nd, the divers replaced the two missing caps on the fuel tank. New aluminium caps were used and the threads were sealed with Teflon. They also installed buoys above the bigger boulders between the tank and the shore to create a preferred pathway for the extraction operation in order to avoid them during the winching operation.

Cables were attached at specific points on the tank and on the sled to have some pulling options during the upcoming operation. Divers confirmed that the overall condition of the fuel tank had not changed (in fine condition), that the bottom of the lake didn't show anything problematic that could prevent its extraction (mostly sand and some boulders). The tank lying on its side needed to be pivoted first to bring it to its normal position (skids at the bottom). Equipment was transported by helicopter in preparation for the extraction of the fuel tank.

August 23rd

The divers proceeded with a third dive on August 23rd to reassess the tank and surrounding ground conditions. Absorbent booms around the tank were re-anchored to form a shape that would allow the pivoting operation, the sleigh's upright position and all other manipulations required.

Divers confirmed that the overall condition of the fuel tank and surrounding area had not changed.

In preparation for the operation, a 4,500-liter water container was heliported and filled with water on the shore to be used as an anchor during the pivoting operation (see Figure 5). Straps were attached to the container and a chain block was installed. The cable was attached from the container to the side of the submerged tank and a slight tension was applied. Divers observed that only by this slight tension the tank was starting to rise. The skid that would act as a pivot point seemed to be anchored securely enough to the ground so that any other means to avoid its sliding during the lifting operation would be unnecessary.

Environmental and pulling equipment was transported by helicopter in preparation for the extraction of the fuel tank.

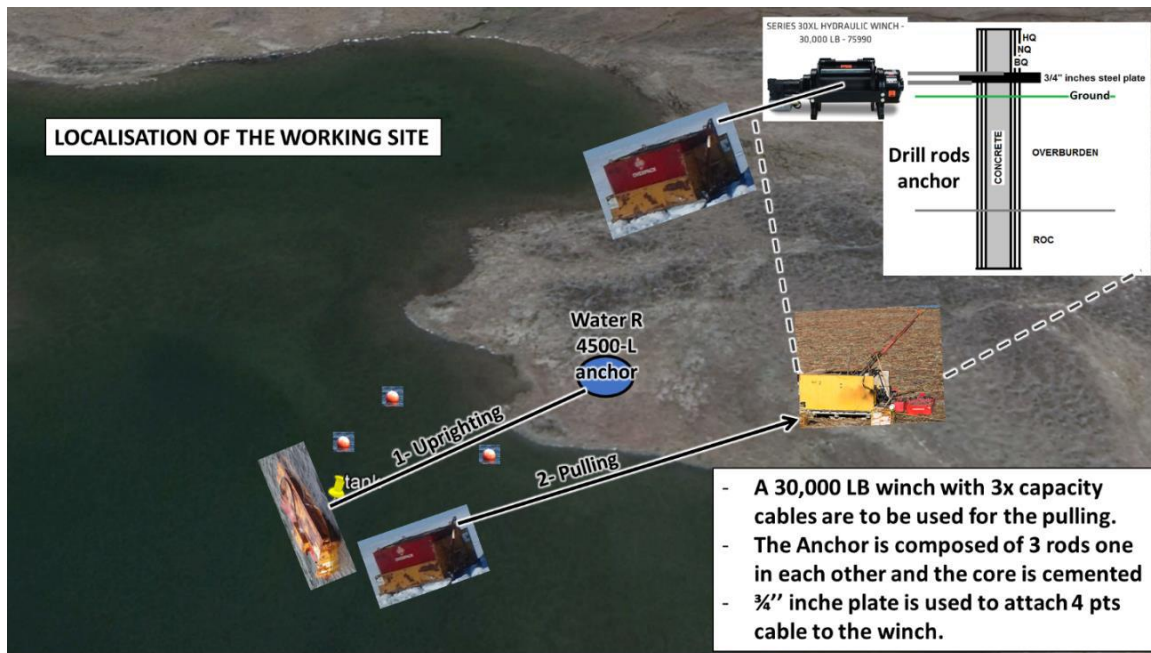


Figure 4. Plan view of the planned operation

August 24th

Experienced workers arrived at the Meliadine site on August 24th and a detailed Job Hazard Assessment was conducted by Jérôme Lavoie – AEM, Christian Rousseau – OGD, Tommy Thelland – OGD, Morgan Hjorth – AEM, Sara Savoie – AEM, Taylor McComber – DIVEX.

Methodology of the pulling operation was reviewed in preparation of the action plan application (Appendix B) to ensure the action plan was robust and safe and will result in a safe removal of the tank.

The remaining equipment needed for the operation was transported by helicopter in preparation for the extraction of the fuel tank

August 25th

A task review and a risk assessment were completed again along with the remaining preparation work.

The 4 phases of the Action Plan (plan in Appendix B) were conducted on August 25th between 11AM CT and 6PM CT and resulted in a successful and safe tank extraction and according to plan. The tank was laid on the shore after being fully emptied and installed on two wood beams placed on a tarp on a flat surface. All the drums with the contaminated water pumped from the tank were transported to

the Meliadine mine site to be stored until transported to a treatment facility (see Figures 6 to 9)

The tarp was flipped over the tank and secured with ropes to fully wrap it.

A bulldozer will bring back the tank to the camp next winter to minimize damage to the tundra.



Figure 5. Diver preparation



Figure 6. Fuel tank being extracted from the lake



Figure 7. Fuel tank is on land and secured



Figure 8. Fuel tank general location with drums ready to be transported

WATER SAMPLING

A review of the Meliadine Mine water samples was conducted by the Meliadine Environmental department. The conclusion of this review including data from 2018 to 2020 showed no evidence of contamination due to hydrocarbons.

During the extraction activities conducted to transport the fuel tank to the shore, three water sampling campaigns were conducted. A first sampling campaign was conducted on August 18th when the tank was located. This first campaign was used to define the conditions prior to the extraction operation. The second sampling campaign was conducted on August 25th immediately after the extraction operation. The third sampling campaign was conducted on August 29th a few days after the extraction as a precautionary measure in case the second campaign would have revealed signs of contamination.

The first sampling campaign included 34 samples, the second campaign included 35 samples (a sample in the tank added) and the third campaign included 39 samples as field duplicate and blanks samples were added to ensure a quality control.

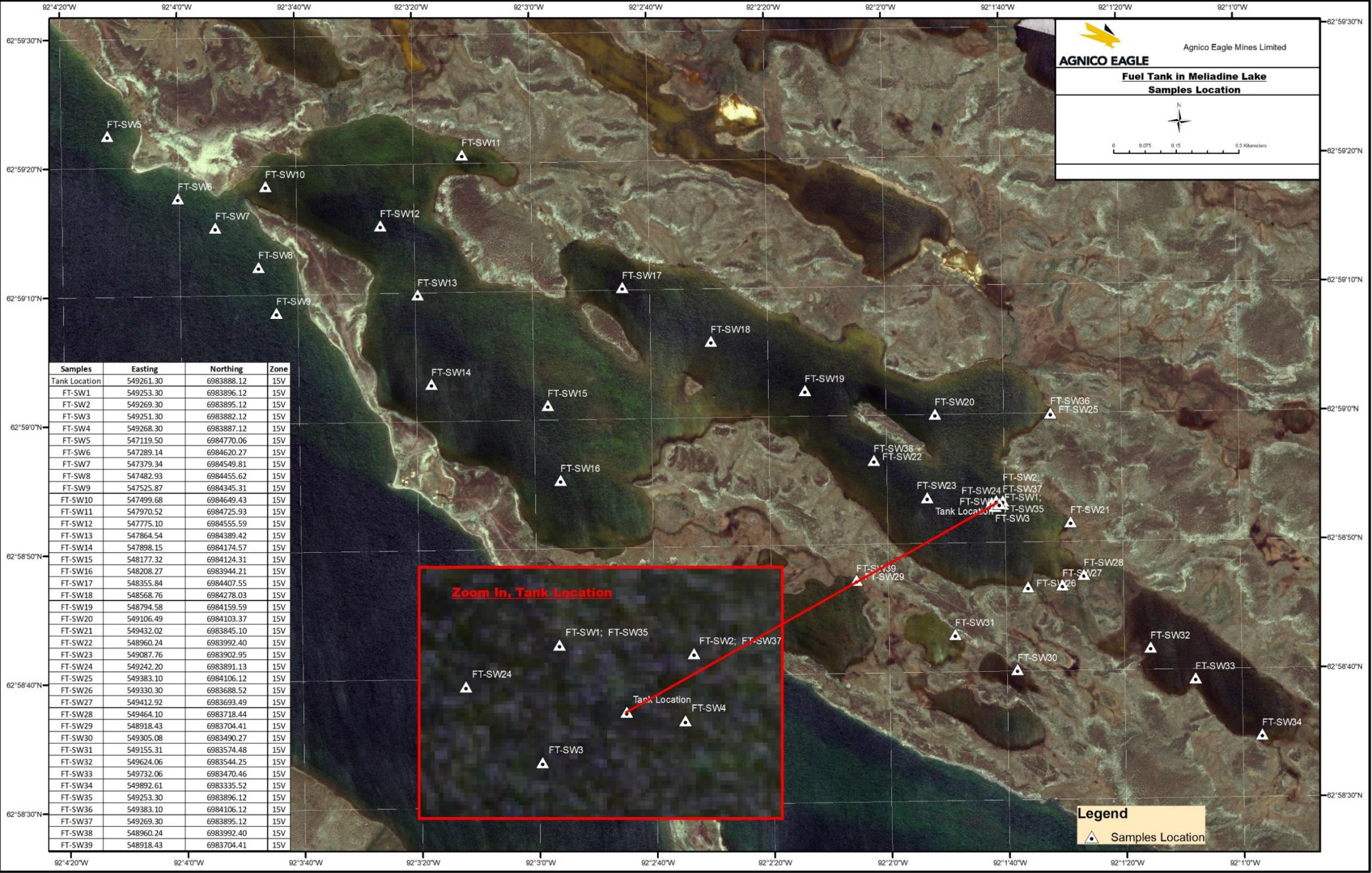


Figure 9, Water Sampling Locations

SAMPLE RESULTS ANALYSIS

The results obtained during these 3 sampling campaigns were reviewed and analyzed by Golder (their report is included in Attachment 1). Following the review of the samples results and the information provided by Golder, it does not appear that the activities associated with the tank recovery caused a significant impact to the surface water quality in the Meliadine Lake prior to, the same day and after the tank recovery.

Golder also recommended that based on the results of their review and the information provided by Agnico Eagle indicating that only a small volume of fuel could have been released by the tank, no further environmental monitoring (water, sediments or soils) is recommended.

CONCLUSION, LESSONS LEARNED AND CORRECTIVE MEASURES

Following the investigation, the actions conducted to extract the fuel tank from the lake, the inspection of the lake and the shore by helicopter, by boat and on foot and the sampling results analyzed by Golder, it is concluded that the fuel tank, left behind on the lake by one of our drilling contractors after a 2019 drilling campaign, was essentially empty after the drilling program and that there was not a significant volume of fuel that could have spilled during the period the tank was present in the lake. The investigation showed areas where the process could be optimized and to avoid any similar event in the future, members of both Agnico Eagle Mines Ltd. and OGD teams proposed a series of improvement measures:

- 1- Clarify the post-inspection procedure using a form including a clear procedure on picture taking after all material and equipment has been cleared off an exploration site. Winter trail pickets will not be removed until the final inspection is 100% completed.
- 2- Implement a simple and clear numerical system to identify the mobile fuel tanks on every exploration sites. Numbers will follow in sequence and will be clearly indicated on flags installed on the tanks. Work cards will include this numerical system for the drill and the pump station. At the end of the drilling season a verification will be made that all tanks are accounted for.
- 3- Implement a system to document which tank has been filled by Energy & Infrastructure (Agnico Eagle) and when. This information combined with corrective measure #2 will allow a better tracking of the quantity of fuel remaining in each tank and their location on the field.
- 4- A board will be installed at the supervisor's office with magnetic numbers to track the fuel tanks assigned to each drill sites and pump stations.
- 5- Communicate these new procedures to the drillers and the supervisors in charge of each department involved and ensure that they understand their

importance. Listen to suggestions that can improve these procedures. Meet with stakeholders for final approval.

- 6- Make sure that for all water sampling campaigns, duplicate and blanks are taken to ensure that a quality control is available.

These measures will be implemented at the other Agnico Eagle Exploration projects.

Agnico Eagle is confident that the implementation of the above mitigation measures has improved the robustness of our process and will effectively prevent any future event.

A handwritten signature in black ink, appearing to read 'Denis Vaillancourt', written over a horizontal line.

Denis Vaillancourt

Exploration Manager, Canada

CC: Michel Julien, Martin Plante, David Frenette

APPENDIX A; INITIAL COMMUNICATION FROM CIRNAC

From: Shouldice, Atuat (AADNC/AANDC) <atuat.shouldice@canada.ca>
Sent: Tuesday, August 18, 2020 9:35 AM
To: Dan Gorton <dan.gorton@agnicoeagle.com>; Sean Arruda <sean.arruda@agnicoeagle.com>; Meliadine Environment Supervisors <meli.environment.supervisors@agnicoeagle.com>; Meliadine Environment <meli.environment@agnicoeagle.com>
Cc: Pasalic, Omer (AADNC/AANDC) <omer.pasalic@canada.ca>; Justin Hack <justin.hack@canada.ca>; Christine Wilson <Christine.Wilson3@canada.ca>; Jeff Tulugak <jtulugak@kivalliqinuit.ca>
Subject: [EXTERNAL] Drill fuel tank sled in Lake

CAUTION: EXTERNAL

Good Morning

Yesterday on our way back from Chesterfield we came across a steal sled and fuel tank from your exploration program in a lake, please contact me as soon as possible so we can discuss how this will be addressed.

Here are the coordinates N62 58' 53.0" w092 01' 41.2" and attached is a picture. The site is between main camp and the drilling area.

Atuat Shouldice

Water Resource Officer

Kivalliq Region, Field Operations Unit

Crown-Indigenous Relations and Northern Affairs Canada

Atuat.Shouldice@Canada.ca / Tel: (867) 645-2840 / Mobile: (867) 645-7389



Crown-Indigenous Relations
and Northern Affairs Canada

Relations Couronne-Autochtones
et Affaires du Nord Canada

***** We have moved into our new office, but do not have phone services yet*****

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APPENDIX B; ACTION PLAN

Action Plan in 4 Phases

PHASE 1 – UPRIGHTING OF THE TANK WITH THE DIVERS

The first phase was to tilt and bring back the fuel tank to its normal position, which was placed upward on its skids.

Floating matting and booms have been repositioned to make sure they contain and collect any potential contamination and do not hinder the work.

Preparation

- Installed barricades & signs in a 100m radius to limit access of possible observers around the site to prevent any incidents.
- Sling with the helicopter on the shore an empty 4,500-liter water reservoir to store fresh water during drilling activities to act as counterweight when filled with water for the tilting operation. This reservoir was considered clean and has been emptied when the tilting operation is completed.
- Attached a cable for the chain block to the upper part of the sleigh and bring the cable to the shore. This cable was used to tilt the fuel tank.
- Anchored the booms and the mats with cables so they remained away from the fuel tank during the tilting operation.

Operation

- Attached the cable to the chain block on the water reservoir on shore.
- Anchored 2-3 metal pins in front of the skid to help stabilize the pivot point during the pull.
- Attached balloons to the fuel tank bottom hook and inflated them to increase buoyancy (filled with air from the diver's reservoirs). A second layer of balloons can be added to help lifting the fuel reservoir a little more. With the balloons, the tank lifted +-30cm.
- Nobody in 100m radius except the operator.
- Tightened the cable with the chain block, pulling until the top of the tank was moved forwardly. Loosen the cable then.
- Disinflated and removed the balloons.
- Attached all the cables that could have been needed for the pulling operation.

PHASE 2 – PULLING THE TANK TO THE SHORE

During this operation, the only people allowed within the 100m radius were the two operators. Balloons, cables and hydraulic hitch were used to help if a boulder is blocking the path of the sleigh. If so, the tension on the cable would be decreased if any task is needed besides the pulling.

Preparation

- The best path to be used to pull the tank has been determined by the divers and is indicated by the buoys.
- A series of picket were implanted for the location of the drill.
- Buoys were indicating the location of boulders and the pathway to follow. Divers confirmed that the bottom of the lake for the proposed pathway is a sand and gravel with some small boulders.
- A small drill rig with its supporting equipment was moved by helicopter on the shoreline. This drill rig was used to drill a HQ hole to serve as an anchoring system for the winch used to pull the fuel tank. The hole was drilled at a dip of 45 degrees toward the lake. The hole was drilled at least 1.5 m into bedrock. To increase the stiffness of the anchor system, a NQ core barrel and a BQ will be inserted in the HQ rods. The couplings of the rods included in the anchoring system will be disaligned to optimize its strength. The anchoring system corresponded to 3 layers of steel rods and provided a very stiff anchoring system.
- A ramp made of steel rods was used to allow the sleigh to reach the tundra.

Operation

The operators were senior superintendents of the drilling contractor in Nunavut. The divers are the persons that were attaching the cables.

- The right cable was used to rotate the sleigh, so its front points were properly aligned.
- The cable attached to the tong was pulled and the sleigh moved toward the winch attached to the anchoring system.
- The tension was monitored. The pulling continued until the tank was at the shore or the tension seems a little high. As soon as the top of the tank was sufficiently out of water (minimum 0.5 m), the pumping operation to transfer the fuel tank to drums on the shore began (using the boat).
- Pumping operation aimed at emptying the full content of the fuel tank. The collected drums were airlifted to camp before being sent to the south.
- When the emptying of the fuel tank was completed, the final pulling operation of the empty fuel tank began.

PHASE 3 – PUMPING THE TANK

A boat can be used if the tank is not directly accessible by the shore to install the pump.

The drums were flown back to the camp to be stored in a seacan.

Preparation

- Installed containment berm and spill kit beside the drill site, 25 empty 205 liters drums were transported nearby. Ensured the length of hose was sufficient and its integrity was adequate.

Operation

- Looked inside the tank if we could see fuel floating on the water.
- Installed the pump on the tank. One person at the tank with the pump, one at the drums with constant communication (visual, radio).
- Started the pumping. Water samples were taken from the last filled drum.
- When at least 4 drums were filled and capped, rolled them in a net to be picked up by the helicopter. Two persons were available at the drop zone to receive the net, empty it and roll the drums on a pallet. Straps were installed to secure the load.
- Continued the pumping until the pump was breathing air then stopped.
- Packed everything up.
- Get to the final phase of the pulling.

PHASE 4 – PACKING THE TANK FOR THE WINTER

Preparation

- Installed containment berm on the ground on the tundra in front of the drill where the tank was stored.
- Installed a ramp to climb the sleigh on the tundra and into the berm.
- Put some pallets inside the berm so the sleigh did get stuck to the berm during the winter.

Operation

- The cable attached to the tong was pulled and the sleigh was moved forward towards the drill.
- The tension was monitored. As soon as the tank sleigh was inside the berm, all cables were detached.
- Packed everything up. Moved the drill back to its original setup.
- Covered the tank with a tarp for the winter.
- Documented the operation with pictures.
- When the pulling operation was completed, proceed to another round of water sampling similar to the one done earlier and starting from the fuel tank location and move downstream.
- Pickup all booms and mattings.
- Leave only one buoy for the original location of the fuel tank.
- Conclude the investigation report.



Canada

NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

NT-NU 24-HOUR SPILL REPORT LINE

TEL: (867) 920-8130

FAX: (867) 873-6924

EMAIL: spills@gov.nt.ca

REPORT LINE USE ONLY

A	REPORT DATE: MONTH – DAY – YEAR 08-24-2020		REPORT TIME 12:45		<input checked="" type="checkbox"/> ORIGINAL SPILL REPORT, OR <input type="checkbox"/> UPDATE # _____ TO THE ORIGINAL SPILL REPORT	REPORT NUMBER _____
	B	OCCURRENCE DATE: MONTH – DAY – YEAR 08-23-2020		OCCURRENCE TIME 14:00		
C		LAND USE PERMIT NUMBER (IF APPLICABLE) KVPL11D01			WATER LICENCE NUMBER (IF APPLICABLE) 2AM-MEL1631	
	D	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION Meliadine Gold Project			REGION <input type="checkbox"/> NWT <input checked="" type="checkbox"/> NUNAVUT <input type="checkbox"/> ADJACENT JURISDICTION OR OCEAN	
E		LATITUDE DEGREES 63 MINUTES 2 SECONDS 13			LONGITUDE DEGREES 92 MINUTES 13 SECONDS 33	
	F	RESPONSIBLE PARTY OR VESSEL NAME Agnico Eagle Mines Ltd.		RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION Meliadine, Rankin Inlet, Nunavut, X0C 0G0		
G		ANY CONTRACTOR INVOLVED None		CONTRACTOR ADDRESS OR OFFICE LOCATION NA		
	H	PRODUCT SPILLED Slurry		QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES 15 m3	U.N. NUMBER N/A	
I		SECOND PRODUCT SPILLED (IF APPLICABLE) N/A		QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES N/A	U.N. NUMBER N/A	
	J	SPILL SOURCE Process Plant Trash Screen#2		SPILL CAUSE Equipment Failure		AREA OF CONTAMINATION IN SQUARE METRES 100 m2
K		FACTORS AFFECTING SPILL OR RECOVERY None		DESCRIBE ANY ASSISTANCE REQUIRED None		HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT None
	L	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS				
M		<p>On August 23 2020, an equipment failure on the Process Plant Trash Screen #2 and HMI interface occurred which led to approximately 15 m3 of slurry flowing outside the building onto the industrial pad.</p> <p>The mill was stopped to correct the issue and the spill was cleaned up. The spilled material will be reprocessed through the mill.</p> <p>No bodies of water were impacted by this spill, the closest body of water, lake G2, is approximately 600 m away. Pursuant to Part H, Section 8c of the Water Licence, a follow-up report will be issues after a closer investigation is completed. Reported by Sara Savoie, Compliance Counselor 819-759-3555 ext. 4603996 sara.savoie@agnicoeagle.com</p>				
	N	REPORTED TO SPILL LINE BY Sara Savoie	POSITION ComplianceCounselor	EMPLOYER AEM	LOCATION CALLING FROM Meliadine	TELEPHONE 8197593555
ANY ALTERNATE CONTACT Matt Gillman		POSITION HydrologyCoordinator	EMPLOYER AEM	ALTERNATE CONTACT Meliadine	ALTERNATE TELEPHONE 8197593555	
REPORT LINE USE ONLY						
N	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130	
	LEAD AGENCY <input type="checkbox"/> EC <input type="checkbox"/> CCG <input type="checkbox"/> GNWT <input type="checkbox"/> GN <input type="checkbox"/> ILA <input type="checkbox"/> INAC <input type="checkbox"/> NEB <input type="checkbox"/> TC			SIGNIFICANCE <input type="checkbox"/> MINOR <input type="checkbox"/> MAJOR <input type="checkbox"/> UNKNOWN		FILE STATUS <input type="checkbox"/> OPEN <input type="checkbox"/> CLOSED
AGENCY		CONTACT NAME	CONTACT TIME	REMARKS		
LEAD AGENCY						
FIRST SUPPORT AGENCY						
SECOND SUPPORT AGENCY						
THIRD SUPPORT AGENCY						

Follow Up Report: #20-292

August 23rd, 2020 – 15 m³ Slurry Spill



The following information refers to a spill reported by Agnico Eagle Mines Ltd. August 23rd 2020, and is being provided in accordance with:

- the Nunavut Water Board License 2AM-MEL1631 Water License, part H, item 8c
- the Government of Nunavut's, Environmental Protection Act subsection 5.1(a)

Description of Incident:

On August 23rd 2020, at 2:00pm an equipment failure on the Process Plant Trash Screen #2 and Human Machine Interface (HMI) occurred which led to approximately 15 m³ of slurry flowing outside the building onto the industrial pad. No bodies of water were impacted by this spill, the closest body of water, lake G2, is approximately 600 m away. The coordinates of the spill were 63° 2'11.02"N, 92°13'29.92"W (Figure 1).



Figure 1: Location of slurry spill at the process plant, and proximity to water bodies.

Spill Response & Cleanup

The process was stopped to correct the issue and the spill was cleaned up (Figure 2). The spilled material was collected and added to the ore feed for immediate reprocessing (Figure 3).



Figure 2: Spilled slurry outside of process plant door, during clean-up.



Figure 3: Spilled slurry added to existing ore feed pile for immediate reprocessing.

Cause of Incident and Corrective Measures

The spill occurred when a piece of steel passed the trash screen and entered the cyclone system, creating a blockage. The HMI alert did not allow enough time for the operator to shut down the process before the overflow occurred. Most of the spill was contained within the building, however approximately 15 m³ of slurry migrated out the door onto the industrial pad. Following the investigation into the cause it was determined the piece of steel had been in the ore as it entered the process. To prevent reoccurrence, a large magnet is being installed to remove such objects.



Dan Gorton | Environmental Coordinator

dan.gorton@agnicoeagle.com | Direct 819.759.3555 x4603996 |

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

agnicoeagle.com





Canada

NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

NT-NU 24-HOUR SPILL REPORT LINE

TEL: (867) 920-8130

FAX: (867) 873-6924

EMAIL: spills@gov.nt.ca

REPORT LINE USE ONLY

A	REPORT DATE: MONTH – DAY – YEAR 08-31-2020	REPORT TIME 5:45 pm	<input checked="" type="checkbox"/> ORIGINAL SPILL REPORT, OR <input type="checkbox"/> UPDATE # _____ TO THE ORIGINAL SPILL REPORT		REPORT NUMBER _____
B	OCCURRENCE DATE: MONTH – DAY – YEAR 08-23-2020	OCCURRENCE TIME Unknown			
C	LAND USE PERMIT NUMBER (IF APPLICABLE) KVPL11D01	WATER LICENCE NUMBER (IF APPLICABLE) 2AM-MEL1631			
D	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION Meliadine Gold Project		REGION <input type="checkbox"/> NWT <input checked="" type="checkbox"/> NUNAVUT <input type="checkbox"/> ADJACENT JURISDICTION OR OCEAN		
E	LATITUDE DEGREES 62 MINUTES 48 SECONDS 1		LONGITUDE DEGREES 92 MINUTES 5 SECONDS 57		
F	RESPONSIBLE PARTY OR VESSEL NAME Agnico Eagle Mines Ltd.	RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION Meliadine, Rankin Inlet, Nunavut, X0C 0G0			
G	ANY CONTRACTOR INVOLVED None	CONTRACTOR ADDRESS OR OFFICE LOCATION N/A			
H	PRODUCT SPILLED Treated Saline Water	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES 11,005 m3 approximately	U.N. NUMBER N/A		
	SECOND PRODUCT SPILLED (IF APPLICABLE) N/A	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES N/A	U.N. NUMBER N/A		
I	SPILL SOURCE MEL-26 Final Discharge Point	SPILL CAUSE TSS Exceedance	AREA OF CONTAMINATION IN SQUARE METRES Unknown		
J	FACTORS AFFECTING SPILL OR RECOVERY Organic TSS	DESCRIBE ANY ASSISTANCE REQUIRED None	HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT None		
K	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS During discharge to sea, regulatory samples were collected at compliance point MEL-26 on August 23, 2020. Partial results from the sample were received on August 31, 2020, indicating TSS levels of 46 mg/L and volatile TSS levels of 35 mg/L. As due diligence, Agnico Eagle Mines Ltd. has stopped discharge on August 31, 2020 until the cause of this exceedance is identified and appropriate corrective measures are implemented. A follow-up report will be issued after a closer investigation is completed. Reported by Sean Arruda, Environment Coordinator 819-759-3555 ext. 4603996 sean.arruda@agnicoeagle.com.				
L	REPORTED TO SPILL LINE BY Sean Arruda	POSITION EnvCoordinator	EMPLOYER AEM	LOCATION CALLING FROM Meliadine	TELEPHONE 8197593555
M	ANY ALTERNATE CONTACT Terry Ternes	POSITION Env GeneralSuperviso	EMPLOYER AEM	ALTERNATE CONTACT Meliadine	ALTERNATE TELEPHONE 8197593555
REPORT LINE USE ONLY					
N	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130
LEAD AGENCY <input type="checkbox"/> EC <input type="checkbox"/> CCG <input type="checkbox"/> GNWT <input type="checkbox"/> GN <input type="checkbox"/> ILA <input type="checkbox"/> INAC <input type="checkbox"/> NEB <input type="checkbox"/> TC			SIGNIFICANCE <input type="checkbox"/> MINOR <input type="checkbox"/> MAJOR <input type="checkbox"/> UNKNOWN		FILE STATUS <input type="checkbox"/> OPEN <input type="checkbox"/> CLOSED
AGENCY		CONTACT NAME	CONTACT TIME	REMARKS	
LEAD AGENCY					
FIRST SUPPORT AGENCY					
SECOND SUPPORT AGENCY					
THIRD SUPPORT AGENCY					

September 30th, 2020

**Re.: Agnico Eagle - Meliadine Project – TSS exceedance to Marine Environment
Final Report**

This letter provides the final report for the TSS exceedance reported on August 31st, 2020. Specifically, this letter includes:

- a summary of the background information on the event,
- water quality test results,
- results of the investigation of the event and additional actions taken,
- discussion of possible mechanisms leading to the event, and the proposed path forward.

Background

Agnico Eagle Mines Limited – Meliadine Division informed you via email on August 31, 2020, that the level of Total Suspended Solids (TSS) from the Saline discharge in Melvin Bay exceeded the limits, set out in MDMER Schedule 4, of 30 mg/L, for the maximum authorized concentration in a grab sample.

As well, the monthly mean of 15 mg/L for suspended solids was exceeded for the period of August 2020.

All other parameters were in compliance with MDMER authorized discharge criteria and the toxicity test results show the water discharged to be safe to aquatic life.

This event report was submitted in compliance with the requirements of Part H, Item 8b of Water License 2AM-MEL1631 (Water License), subsection 12(3) of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (Canada), paragraph 5.1(a) of the *Environmental Protection Act* (Nunavut), subsection 38(5) of the *Fisheries Act* (Canada) and paragraph 24(1)(a) of the *Metal and Diamond Mining Effluent Regulations* (MDMER) made under the *Fisheries Act* (Canada) and reported as required by Meliadine Crown Surface land lease 55K/16-42-2 authorization covenant 42”.

The effluent was sampled on August 23, 2020. Upon reception of sampling results from our external Laboratory of this sample on August 31, it was observed that total suspended solid (TSS) of 46 mg/L exceeded the regulatory limit of 30 mg/L maximum authorized concentration in a grab sample.

Following the reception of the results, the discharge was stopped immediately on August 31.

The initial, very conservative, estimate provided of the quantity of water released between August 16 and August 31 was 11 000 m³. Upon reception of fully compliant subsequent sampling results from August 28, the overall maximum volume that could have been released was determined to be 8,069 m³ discharged into Melvin Bay from sampling dates of August 16 to 28. This is obviously an upper bound for the possible volume of released effluent that could have exceeded the maximum TSS authorized concentration in a grab sample. As mentioned above, all other parameters were below permissible limits and the acute toxicity passed showing no effect.

The investigation showed that the exceedance of TSS is primarily the result of algae developing in the pond used to hold treated water before it is being trucked to Itivia to be discharged in Melvin Bay. In addition, it appears that an intermittent filter failure from the saline pond may have further amplified the exceedance of TSS. Therefore, the quantity of water with a TSS level exceeding our water license is expected to be lower than maximum 8,069 m³.

Toxicity and water quality results

Toxicity tests

Samples were taken for analysis on August 23 and 31 from the discharged water source. The toxicity test results show the effluent to be safe to aquatic life and compliant to regulations. Results can be found in appendix A.

Water quality sampling

Samples are taken regularly to ensure compliance for MDMER related parameters. Results can be found in appendix A.

Table 1: MDMER related water quality results:

Sample Date			10 Aug. 2020	16 Aug. 2020	23 Aug. 2020	28 Aug 2020	29 Aug 2020	30 Aug 2020	31 Aug 2020
Result Received			Aug 17	Aug 21	Aug 31	Sept 3	Sept 3	Sept 3	Sept 4
Location			MEL-26 Discharge in Melvin Bay						
Parameter	Unit	MDMER Limits							
Total suspended solids	mg/L	30	25	18	46	6	7	7	7
Volatile suspended solids	mg/L		15	11	34	5	5	4	6

Sampling and subsequent sample shipment were executed according to site Standard Operating Procedures and samples were sent on the same day via charter and transported directly to an accredited and certified laboratory (BV Lab) in Ottawa.

The timeline between sampling and reception is considered normal for these samples. Multiple factors can affect the turn around time for TSS results including: the shipping of our samples to Val-d'Or via our charter, the shipping from our warehouse in Val-d'Or to the accredited lab, the workload at the lab, etc.

Regular water samples were also collected in the receiving environment during this period and the analysis from these samples showed no exceedances of the MDMER water quality criteria.

The calculated average considering the discharge for the month of August was tabulated at 16,6 mg/L. Exceeding the allowed MDMER monthly average limit of 15 mg/L.

Additional investigations, analysis and mitigation measures

Further investigations and analysis were completed, as well as an action plan was developed, to understand the cause of the exceedance on August 23, 2020. Increased sampling was completed at multiple process stages to fully understand the source of increase.

Following the campaign conducted, results show that the high TSS level in the water was likely due to the presence of algae. Confirmatory biological sampling was also completed to further identify the associated species. The sampling was completed and shipped to a lab that will be able to identify saline water species. Because of this specificity, the turnover on getting results, including shipping on the west coast, are expected to take up to 4 weeks. The analyses were started last week and are ongoing.

As indicated in Table 1, the majority of the sediment in the samples taken from August 10 to 31 consisted of Volatile Suspended Solids (VSS). VSS tests by definition "is a water quality measure obtained from the loss of ignition of the mass of measured total suspended solids. The ignition generally takes place in an oven at a temperature of 550 C to 600 C. It represents the amount of volatile matter present in the solid fraction of the measured solution". VSS represents the volatile fraction of TSS which can be composed of organics, such as algae, and other fractions which are ignitable at the test temperature. If the VSS is removed from the TSS then the Suspended Solids on August 31 could be calculated to be at 12 mg/L.

In addition, it appears that an intermittent filter failure from the discharge of the saline pond may have further amplified the exceedance of TSS.

Mitigation measures have been implemented since.

- The pond was fully emptied, rinsed and cleaned by September 8.
- Our water discharge process was audited externally and validated treatment efficiencies.
- The sampling frequency was increased with daily samples taken in multiple locations of the process since August 31 to monitor more closely the compliance of the water and identify interference sources.
- Those daily samples are analyzed on site to avoid delays in sampling results and are in addition to the external weekly analysis done by an external accredited laboratory. Thus, allowing quicker responses in sediments concerns.
- Pressure monitoring of the filters have been installed enabling us to detect any anomaly that could arise in a timely manner.
- Filters types and pore sizes were assessed for efficiencies and ensuring higher frequency changes.

Path Forward

The action plan will remain active until the discharge is stopped for the winter time.

Agnico is confident that the overall steps undertaken in understanding and correcting the overall algae and filter situation that led to the observed exceedance are effective and have improved the stability and reliability of the system.

Considering the above, the discharge to the sea at Melvin Bay, restarted on September 16, 2020.

In addition, the following environmental monitoring will be conducted:

- Increased internal and external sampling to determine water quality during active discharge, also ensuring that external samples are treated with high priority once received; and.
- A receiving environment monitoring program was carried out in Melvin Bay on September 17 and 18, results can be provided upon reception.

Conclusion

Agnico Eagle's team responded rapidly following this event and was able to implement a series of measures when the exceedance was reported.

Water quality data showed that the overall impact of this event in the receiving environment was minimal. Thus, we are confident that the aquatic environment was not impacted.

Agnico Eagle is committed to maintaining very close monitoring of this area.

Should you have any questions regarding this report, please do not hesitate to contact the undersigned.

Regards,

A handwritten signature in black ink, appearing to read 'R. Allard', is centered on the page. The signature is fluid and cursive, with a small dot at the end.

Robin Allard
General Supervisor
Environment

Appendix A

Results certificates

CLIENT INFORMATION

Aquatox/Agnico Eagle Mines - Meliadine
 Rankin Inlet,
 Nunavut, Canada
 Contact: Martina Rendas

TEST FACILITY INFORMATION

Harris Industrial Testing Service Ltd.
 1320 Ashdale Rd., South Rawdon
 Nova Scotia B0N 1Z0
 Ph: 902 757-0232 Fax: 902 757-2839 office@harrisindustrial.info

SAMPLE INFORMATION (Client-provided data italicised)

Lab Identification #: 20-412
Sample Name/Location: MEL-26 – 62°48'01.99" 92°06'00.05"
Sampling Method: Grab Sample Homogenized: Yes
Sampler Name: B. Hodgins
Date & Time Sampled: Aug. 10 2020 1725 Hrs
Date & Time Received: Aug. 14 2020 1530 Hrs
 Sample Description: Yellow, transparent liquid.

GENERAL TEST INFORMATION

Reference Method:
 EPS 1/RM/10 2nd Ed. December 2017
 Type: LC50 Tox 9B
 General Test Procedures held on file
 Test Organism: *Gasterosteus aculeatus*
 (Threespine stickleback)

PRE-TEST PARAMETERS

Pre-test Temp. (°C): 16.0
 Pre-test D.O. (mg/L): 6.1
 D.O. Saturation (%): 78

 Pre-test pH: 7.4
 pH Adjusted: No

 Sample Salinity¹ (‰): 32.1
 Seawater Control Salinity¹ (‰): 30.3

SAMPLE PRE-TREATMENT

Filtration of sample: No
 Adjustment of sample salinity: No

 Mandatory Pre-aeration: Yes Duration: 30 min.
 Rate: 6.5 ± 1 ml/min/L Time: 1615 hrs
 D.O. (mg/L): 7.8 D.O. saturation (%): 96

 Pre-aeration Continued: No Duration: -- min. @ -- hrs
 D.O. (mg/L): -- D.O. saturation (%): --
 Aeration continued throughout test by airstone @ 6.5 ± 1 ml/min/L

TEST CONDITIONS

Date & Time Test Initiated: Aug. 14 2020 1645 Hrs	Deviations from Test Method: No	
Date & Time Test Terminated: Aug. 18 2020 1645 Hrs	Description: N/A	
Fish Batch #: 63	Loading Density (g/L): 0.47	Temperature: 15 ± 1°C
% Mortality over 7 days prior to test: 0		Photoperiod: 16L/8D
	Mean Fork Length (mm): 44 ± 2.7 SD	Lux: 100 – 500
Test Volume (L): 15	Range (mm): 40 - 47	Static Test, Duration: 96 hours
Depth (cm): 26.8		Control/Dilution Water: Natural Seawater
Replicates: No	Mean Wet Weight (g): 0.71 ± 0.09 SD	
Number of fish per vessel: 10	Range (g): 0.61 – 0.91	

¹When salinity is >40‰, it is measured using refractometry method (Environment Canada, 2017). When salinity is <40‰, the salinity is measured using conductivity method (*ibid.*).

TEST PARAMETERS									
INITIAL (0 hrs)					FINAL (96 hrs)				
CONC. %	TEMP. °C	D.O. mg/L	D.O. %	pH	SALINITY ‰	TEMP. °C	D.O. mg/L	D.O. %	pH
100	15.0	7.8	96	7.4	32.1	16.0	7.7	96	7.6
50	16.0	7.5	91	7.7	28.9	16.0	7.8	95	7.8
25	16.0	7.6	91	7.8	27.5	16.0	7.9	97	7.8
12.5	16.0	8.0	96	7.8	28.9	16.0	8.0	100	7.8
6.25	16.0	7.8	95	7.9	29.6	16.0	7.9	98	7.8
Control	16.0	7.8	95	8.0	30.3	16.0	8.0	100	7.8

TEST RESULTS								
TOTAL MORTALITY					PERCENT MORTALITY			
CONC. %	#				%			
	24 hrs	48 hrs	72 hrs	96 hrs	24 hrs	48 hrs	72 hrs	96 hrs
100	0/10	0/10	0/10	0/10	0	0	0	0
50	0/10	0/10	0/10	0/10	0	0	0	0
25	0/10	0/10	0/10	0/10	0	0	0	0
12.5	0/10	0/10	0/10	0/10	0	0	0	0
6.25	0/10	0/10	0/10	0/10	0	0	0	0
Control	0/10	0/10	0/10	0/10	0	0	0	0

TOTAL STRESS					PERCENT STRESS			
CONC. %	#				%			
	24 hrs	48 hrs	72 hrs	96 hrs	24 hrs	48 hrs	72 hrs	96 hrs
100	0/10	0/10	0/10	0/10	0	0	0	0
50	0/10	0/10	0/10	0/10	0	0	0	0
25	0/10	0/10	0/10	0/10	0	0	0	0
12.5	0/10	0/10	0/10	0/10	0	0	0	0
6.25	0/10	0/10	0/10	0/10	0	0	0	0
Control	0/10	0/10	0/10	0/10	0	0	0	0

96 HR LC₅₀ RESULTS

LC₅₀ Value (%): Non-lethal
Result: Pass
95% Confidence Limits (%): N/A
Statistical Method: N/A

REFERENCE TOXICANT DATA

Performed under laboratory conditions as above, no deviations

Batch: 63 Test Date: Aug. 04 – 08 2020

Reference Substance: Phenol

LC₅₀ Value (mg/L): 16.8
 95% Confidence Limits (mg/L): 12.0 – 22.3
 Historical Mean (mg/L): 16.0
 Warning Limits \pm 2 SD (mg/L): 12.4 – 20.6

COMMENTS

Test meets all conditions for test validity.

TEST AUTHORIZATION AND VERIFICATION

Analyst(s): J. Fraser & S. Elliot

Verified by: D. Robinson

Date: Aug. 18 2020

Signed:



REFERENCES

Tidepool Scientific Software, 2001 - 2014. Comprehensive Environmental Toxicity Information System – CETIS v1.8.7.20
Environment Canada, 2017. Biological Test Method: Reference Method for Determining Acute Lethality Using Threespine Stickleback.
Environment and Climate Change Canada, Ottawa, Ontario, Report EPS 1/RM/10, 2nd Edition, December 2017.

Accredited by the Canadian Association for Laboratory Accreditation Inc. (CALA Inc.).

The test included in this report is within the scope of this accreditation.

Results apply to the sample as received. The results reported apply only to the sample tested. Results are based on nominal concentrations.

CLIENT INFORMATION

Aquatox/Agnico Eagle Mines - Meliadine
 Rankin Inlet,
 Nunavut, Canada
 Contact: Martina Rendas

TEST FACILITY INFORMATION

Harris Industrial Testing Service Ltd.
 1320 Ashdale Rd., South Rawdon
 Nova Scotia B0N 1Z0
 Ph : 902 757-0232 Fax: 902 757-2839
 office@harrisindustrial.info

SAMPLE INFORMATION (Client-provided data italicised)

Lab Identification #: 20-426
Sample Name/Location: MEL-26 62°48'01.99" 92°06'00.05"
Sampling Method: Grab Sample Homogenized: Yes
Sampler Name: D. Morin
Date & Time Sampled: Aug. 16 2020 1030 Hrs
Date & Time Received: Aug. 20 2020 1430 Hrs
 Sample Description: Yellow, transparent liquid.

GENERAL TEST INFORMATION

Reference Method:
 EPS 1/RM/10 July 1990 2nd Ed. December 2017
 Type: LC50 Tox 9B
 General Test Procedures held on file
 Test Organism: *Gasterosteus aculeatus*
 (Threespine stickleback)

PRE-TEST PARAMETERS

Pre-test Temp. (°C): 16.0
 Pre-test D.O. (mg/L): 7.6 D.O. Saturation (%): 91
 Pre-test pH: 7.1
 pH Adjusted: No

Sample Salinity¹ (‰): 20.2
 Seawater Control Salinity¹ (‰): 31.4
 Salinity adjusted Control (‰): 21.3

SAMPLE PRE-TREATMENT

Filtration of sample: No
 Adjustment of sample salinity: No

Mandatory Pre-aeration: Yes Duration: 30 minutes
 Rate: 6.5 ± 1 ml/min/L Time: 1545 hrs
 D.O. (mg/L): 8.0 D.O. saturation (%): 90

Pre-aeration Continued: No Duration: -- min. @ -- hrs
 D.O. (mg/L): -- D.O. saturation (%): --

Aeration continued throughout test by airstone @ 6.5 ± 1 ml/min/L

TEST CONDITIONS

Date & Time Test Initiated: Aug. 20 2020 1615 Hrs
 Date & Time Test Terminated: Aug. 24 2020 1615 Hrs

Deviations from Test Method: No
 Description: N/A

Fish Batch #: 63
 % Mortality over 7 days prior to test: 0.6

Loading Density (g/L): 0.24

Temperature: 15 ± 1°C

Photoperiod: 16L/8D

Lux: 100 – 500

Test Volume (L): 13

Mean Fork Length (mm): 33 ± 5.3 SD

Range (mm): 28 - 44

Static Test, Duration: 96 hours

Control/Dilution Water: Natural Seawater

Depth (cm): 23

Replicates: No

Mean Wet Weight (g): 0.31 ± 0.15 SD

Number of fish per vessel: 10

Range (g): 0.14 – 0.62

¹When salinity is >40‰, it is measured using refractometry method (Environment Canada, 2017). When salinity is <40‰, the salinity is measured using conductivity method (*ibid.*).

TEST PARAMETERS									
CONC. %	TEMP. °C	D.O. mg/L	INITIAL (0 hrs)			TEMP. °C	D.O. mg/L	FINAL (96 hrs)	
			D.O. %	pH	SALINITY ‰			D.O. %	pH
100	14.5	8.0	90	7.2	20.2	15.0	8.9	100	7.7
50	14.5	8.4	94	7.5	20.6	15.5	8.6	99	7.7
25	16.0	8.6	100	7.8	20.8	16.0	8.7	99	7.8
12.5	15.0	8.9	99	7.9	21.5	15.5	8.7	99	7.8
6.25	15.5	8.8	100	8.0	21.4	15.0	8.6	99	7.9
Control	16.0	8.2	102	8.0	31.4	15.0	9.1	99	7.8
Sal. Adj. Control	15.5	10.0	101	8.0	21.3	15.0	8.7	99	7.8

TEST RESULTS									
CONC. %	TOTAL MORTALITY #				PERCENT MORTALITY %				
	24 hrs	48 hrs	72 hrs	96 hrs	24 hrs	48 hrs	72 hrs	96 hrs	
100	0/10	0/10	0/10	0/10	0	0	0	0	
50	0/10	0/10	0/10	0/10	0	0	0	0	
25	0/10	0/10	0/10	0/10	0	0	0	0	
12.5	0/10	0/10	0/10	0/10	0	0	0	0	
6.25	0/10	0/10	0/10	0/10	0	0	0	0	
Control	0/10	0/10	0/10	0/10	0	0	0	0	
Sal. Adj. Control	0/10	0/10	0/10	0/10	0	0	0	0	

CONC. %	TOTAL STRESS #				PERCENT STRESS %				
	24 hrs	48 hrs	72 hrs	96 hrs	24 hrs	48 hrs	72 hrs	96 hrs	
100	0/10	0/10	0/10	0/10	0	0	0	0	
50	0/10	0/10	0/10	0/10	0	0	0	0	
25	0/10	0/10	0/10	0/10	0	0	0	0	
12.5	0/10	0/10	0/10	0/10	0	0	0	0	
6.25	0/10	0/10	0/10	0/10	0	0	0	0	
Control	0/10	0/10	0/10	0/10	0	0	0	0	
Sal. Adj. Control	0/10	0/10	0/10	0/10	0	0	0	0	

96 HR LC₅₀ RESULTS

LC₅₀ Value (%): Non-lethal
Result: Pass
95% Confidence Limits (%): N/A
Statistical Method: N/A

REFERENCE TOXICANT DATA

Performed under laboratory conditions as above, no deviations

Batch: 63-3 Test Date: Aug. 21 – 25 2020

Reference Substance: Phenol

LC₅₀ Value (mg/L): 17.3
 95% Confidence Limits (mg/L): 16.2 – 18.4
 Historical Mean (mg/L): 16.1
 Warning Limits \pm 2 SD (mg/L): 12.5 – 20.7

COMMENTS

Test meets all conditions for test validity.

TEST AUTHORIZATION AND VERIFICATION

Analyst(s): J. Fraser & K. Marks

Verified by: D. Robinson

Date: Aug. 25 2020

Signed:



REFERENCES

Tidepool Scientific Software, 2001 - 2014. Comprehensive Environmental Toxicity Information System – CETIS v1.8.7.20
Environment Canada, 2017. Biological Test Method: Reference Method for Determining Acute Lethality Using Threespine Stickleback.
Environment and Climate Change Canada, Ottawa, Ontario, Report EPS 1/RM/10, 2nd Edition December 2017.

Accredited by the Canadian Association for Laboratory Accreditation Inc. (CALA Inc.).

The test included in this report is within the scope of this accreditation.

Results apply to the sample as received. The results reported apply only to the sample tested. Results are based on nominal concentrations.

CLIENT INFORMATION

Aquatox/Agnico Eagle Mines - Meliadine
 Rankin Inlet,
 Nunavut, Canada
 Contact: Martina Rendas

TEST FACILITY INFORMATION

Harris Industrial Testing Service Ltd.
 1320 Ashdale Rd., South Rawdon
 Nova Scotia B0N 1Z0
 Ph: 902 757-0232 Fax: 902 757-2839 office@harrisindustrial.info

SAMPLE INFORMATION (Client-provided data italicised)

Lab Identification #: 20-437
Sample Name/Location: MEL-26 62°48'01.99" 92°06'00.05"
Sampling Method: Grab Sample Homogenized: Yes
Sampler Name: R. Schwandt
Date & Time Sampled: Aug. 23 2020 1120 Hrs
Date & Time Received: Aug. 27 2020 1615 Hrs
 Sample Description: Yellow, transparent liquid

GENERAL TEST INFORMATION

Reference Method:
 EPS 1/RM/10 2nd Ed. December 2017
 Type: LC50 Tox 9B
 General Test Procedures held on file
 Test Organism: *Gasterosteus aculeatus*
 (Threespine stickleback)

PRE-TEST PARAMETERS

Pre-test Temp. (°C): 16.0
 Pre-test D.O. (mg/L): 7.9
 D.O. Saturation (%): 93

Pre-test pH: 7.3
 pH Adjusted: No

Sample Salinity¹ (‰): 17.1
 Seawater Control Salinity¹ (‰): 30.2
 Salinity Adjusted Control (‰): 18.3

SAMPLE PRE-TREATMENT

Filtration of sample: No
 Adjustment of sample salinity: No

Mandatory Pre-aeration: Yes Duration: 30 min.
 Rate: 6.5 ± 1 ml/min/L Time: 0945 hrs
 D.O. (mg/L): 8.3 D.O. saturation (%): 92

Pre-aeration Continued: No Duration: -- min. @ -- hrs
 D.O. (mg/L): -- D.O. saturation (%): --

Aeration continued throughout test by airstone @ 6.5 + 1 ml/min/L

TEST CONDITIONS

Date & Time Test Initiated: Aug. 28 2020 1015 Hrs
 Date & Time Test Terminated: Sep. 01 2020 1015 Hrs

Deviations from Test Method: No
 Description: N/A

Fish Batch #: 63
 % Mortality over 7 days prior to test: 0.6

Loading Density (g/L): 0.26

Temperature: 15 ± 1°C

Test Volume (L): 10

Depth (cm): 17.7

Replicates: No

Number of fish per vessel: 10

Mean Fork Length (mm): 32 ± 3.9 SD

Range (mm): 26 - 40

Mean Wet Weight (g): 0.26 ± 0.08 SD

Range (g): 0.15 - 0.44

Photoperiod: 16L/8D

Lux: 100 - 500

Static Test, Duration: 96 hours

Control/Dilution Water: Natural Seawater

¹When salinity is >40‰, it is measured using refractometry method (Environment Canada, 2017). When salinity is <40‰, the salinity is measured using conductivity method (*ibid.*).

TEST PARAMETERS									
CONC. %	TEMP. °C	D.O. mg/L	INITIAL (0 hrs)			TEMP. °C	D.O. mg/L	FINAL (96 hrs)	
			D.O. %	pH	SALINITY ‰			D.O. %	pH
100	15.5	8.3	92	7.3	17.1	16.0	8.5	98	7.5
50	16.0	8.5	96	7.6	18.3	16.0	8.6	98	7.6
25	16.0	8.7	99	7.8	18.6	16.0	8.4	96	7.7
12.5	16.0	8.8	100	7.9	19.0	16.0	8.5	96	7.7
6.25	16.0	8.8	100	8.0	19.0	16.0	8.5	97	7.8
Control	16.0	8.1	99	8.0	30.2	16.0	7.8	97	7.7
Sal. Adj. Control	16.0	8.9	100	7.8	18.3	16.0	8.9	98	8.0

TEST RESULTS								
CONC. %	TOTAL MORTALITY #				PERCENT MORTALITY %			
	24 hrs	48 hrs	72 hrs	96 hrs	24 hrs	48 hrs	72 hrs	96 hrs
100	0/10	0/10	0/10	0/10	0	0	0	0
50	0/10	0/10	0/10	0/10	0	0	0	0
25	0/10	0/10	0/10	0/10	0	0	0	0
12.5	0/10	0/10	0/10	0/10	0	0	0	0
6.25	0/10	0/10	0/10	0/10	0	0	0	0
Control	0/10	0/10	0/10	0/10	0	0	0	0
Sal. Adj. Control	0/10	0/10	0/10	0/10	0	0	0	0

CONC. %	TOTAL STRESS #				PERCENT STRESS %			
	24 hrs	48 hrs	72 hrs	96 hrs	24 hrs	48 hrs	72 hrs	96 hrs
100	0/10	0/10	0/10	0/10	0	0	0	0
50	0/10	0/10	0/10	0/10	0	0	0	0
25	0/10	0/10	0/10	0/10	0	0	0	0
12.5	0/10	0/10	0/10	0/10	0	0	0	0
6.25	0/10	0/10	0/10	0/10	0	0	0	0
Control	0/10	0/10	0/10	0/10	0	0	0	0
Sal. Adj. Control	0/10	0/10	0/10	0/10	0	0	0	0

96 HR LC₅₀ RESULTS

LC₅₀ Value (%): Non-lethal
Result: Pass
95% Confidence Limits (%): N/A
Statistical Method: N/A

REFERENCE TOXICANT DATA

Performed under laboratory conditions as above, no deviations

Batch: 63 **Test Date:** Aug. 21 – 25 2020
Reference Substance: Phenol

LC₅₀ Value (mg/L): 17.3
95% Confidence Limits (mg/L): 16.2 – 18.4
Historical Mean (mg/L): 16.1
Warning Limits \pm 2 SD (mg/L): 12.5 – 20.7

COMMENTS

Test meets all conditions for test validity.

TEST AUTHORIZATION AND VERIFICATION

Analyst(s): J. Fraser

Verified by: D. Robinson

Date: Sep. 01 2020

Signed: 

REFERENCES

Tidepool Scientific Software, 2001 - 2014. Comprehensive Environmental Toxicity Information System – CETIS v1.8.7.20
Environment Canada, 2017. Biological Test Method: Reference Method for Determining Acute Lethality Using Threespine Stickleback.
Environment and Climate Change Canada, Ottawa, Ontario, Report EPS 1/RM/10, 2nd Edition, December 2017.

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CLIENT INFORMATION

Aquatox/Agnico Eagle Mines - Meliadine
 Rankin Inlet,
 Nunavut, Canada
 Contact: Martina Rendas

TEST FACILITY INFORMATION

Harris Industrial Testing Service Ltd.
 1320 Ashdale Rd., South Rawdon
 Nova Scotia B0N 1Z0
 Ph : 902 757-0232 Fax: 902 757-2839
 office@harrisindustrial.info

SAMPLE INFORMATION (Client-provided data italicised)

Lab Identification #: 20-449
Sample Name/Location: MEL-26 62°48'01.99" 92°06'00.05"
Sampling Method: Grab Sample Homogenized: Yes
Sampler Name: R.S
Date & Time Sampled: Aug. 31 2020 1445 Hrs
Date & Time Received: Sep. 04 2020 1530 Hrs
 Sample Description: Yellow, transparent liquid.

GENERAL TEST INFORMATION

Reference Method:
 EPS 1/RM/10 July 1990 2nd Ed. December 2017
 Type: LC50 Tox 9B
 General Test Procedures held on file
 Test Organism: *Gasterosteus aculeatus*
 (Threespine stickleback)

PRE-TEST PARAMETERS

Pre-test Temp. (°C): 16.0
 Pre-test D.O. (mg/L): 7.7 D.O. Saturation (%): 91
 Pre-test pH: 7.1
 pH Adjusted: No

Sample Salinity¹ (‰): 16.9
 Seawater Control Salinity¹ (‰): 31.0
 Salinity adjusted Control (‰): 17.8

SAMPLE PRE-TREATMENT

Filtration of sample: No
 Adjustment of sample salinity: No

Mandatory Pre-aeration: Yes Duration: 30 minutes
 Rate: 6.5 ± 1 ml/min/L Time: 1600 hrs
 D.O. (mg/L): 7.8 D.O. saturation (%): 88

Pre-aeration Continued: No Duration: -- min. @ -- hrs
 D.O. (mg/L): -- D.O. saturation (%): --

Aeration continued throughout test by airstone @ 6.5 ± 1 ml/min/L

TEST CONDITIONS

Date & Time Test Initiated: Sep. 04 2020 1630 Hrs
 Date & Time Test Terminated: Sep. 08 2020 1630 Hrs

Deviations from Test Method: No
 Description: N/A

Fish Batch #: 63
 % Mortality over 7 days prior to test: 0.7

Loading Density (g/L): 0.36

Temperature: 15 ± 1°C

Mean Fork Length (mm): 34 ± 3.5 SD

Photoperiod: 16L/8D

Range (mm): 30 - 41

Lux: 100 – 500

Test Volume (L): 10

Depth (cm): 17.7

Replicates: No

Number of fish per vessel: 10

Mean Wet Weight (g): 0.36 ± 0.20 SD

Range (g): 0.19 – 0.80

Static Test, Duration: 96 hours

Control/Dilution Water: Natural Seawater

¹When salinity is >40‰, it is measured using refractometry method (Environment Canada, 2017). When salinity is <40‰, the salinity is measured using conductivity method (*ibid.*).

TEST PARAMETERS									
CONC. %	TEMP. °C	D.O. mg/L	INITIAL (0 hrs)			TEMP. °C	D.O. mg/L	FINAL (96 hrs)	
			D.O. %	pH	SALINITY ‰			D.O. %	pH
100	16.0	7.8	88	7.1	16.7	15.5	8.8	99	7.4
50	16.0	8.9	100	7.6	18.0	15.5	8.7	97	7.5
25	16.0	8.8	100	7.8	18.4	15.5	8.7	98	7.6
12.5	16.0	8.8	100	7.8	18.6	15.5	8.8	98	7.7
6.25	16.0	8.7	98	7.9	17.9	15.5	8.8	99	7.6
Control	16.0	8.1	99	7.9	31.0	15.5	8.0	98	7.7
Sal. Adj. Control	15.5	8.9	99	7.8	17.8	15.5	8.9	99	7.8

TEST RESULTS									
CONC. %		TOTAL MORTALITY #				PERCENT MORTALITY %			
		24 hrs	48 hrs	72 hrs	96 hrs	24 hrs	48 hrs	72 hrs	96 hrs
100		0/10	0/10	0/10	0/10	0	0	0	0
50		0/10	0/10	0/10	0/10	0	0	0	0
25		0/10	0/10	0/10	0/10	0	0	0	0
12.5		0/10	0/10	0/10	0/10	0	0	0	0
6.25		0/10	0/10	0/10	0/10	0	0	0	0
Control		0/10	0/10	0/10	0/10	0	0	0	0
Sal. Adj. Control		0/10	0/10	0/10	0/10	0	0	0	0

CONC. %		TOTAL STRESS #				PERCENT STRESS %			
		24 hrs	48 hrs	72 hrs	96 hrs	24 hrs	48 hrs	72 hrs	96 hrs
100		0/10	0/10	0/10	0/10	0	0	0	0
50		0/10	0/10	0/10	0/10	0	0	0	0
25		0/10	0/10	0/10	0/10	0	0	0	0
12.5		0/10	0/10	0/10	0/10	0	0	0	0
6.25		0/10	0/10	0/10	0/10	0	0	0	0
Control		0/10	0/10	0/10	0/10	0	0	0	0
Sal. Adj. Control		0/10	0/10	0/10	0/10	0	0	0	0

96 HR LC₅₀ RESULTS

LC₅₀ Value (%): Non-lethal
Result: Pass
95% Confidence Limits (%): N/A
Statistical Method: N/A

REFERENCE TOXICANT DATA

Performed under laboratory conditions as above, no deviations

Batch: 63-4

Test Date: Sep. 02 – 06 2020

Reference Substance: Phenol

LC₅₀ Value (mg/L): 14.3
 95% Confidence Limits (mg/L): 11.0 – 18.6
 Historical Mean (mg/L): 15.9
 Warning Limits \pm 2 SD (mg/L): 12.4 – 20.5

COMMENTS

Test meets all conditions for test validity.

TEST AUTHORIZATION AND VERIFICATION

Analyst(s): J. Fraser

Verified by: D. Robinson

Date: Sep. 08 2020

Signed:



REFERENCES

Tidepool Scientific Software, 2001 - 2014. Comprehensive Environmental Toxicity Information System – CETIS v1.8.7.20
Environment Canada, 2017. Biological Test Method: Reference Method for Determining Acute Lethality Using Threespine Stickleback.
Environment and Climate Change Canada, Ottawa, Ontario, Report EPS 1/RM/10, 2nd Edition December 2017.

Accredited by the Canadian Association for Laboratory Accreditation Inc. (CALA Inc.).

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Your P.O. #: OL-891917
 Site#: 62 78' 01.99" 92 06' 00.05"
 Site Location: MELIADINE
 Your C.O.C. #: na

Attention: Reporting

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

Report Date: 2020/08/21
 Report #: R6301778
 Version: 3 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C0K7149

Received: 2020/08/13, 09:40

Sample Matrix: Water
 # Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity (1)	1	N/A	2020/08/17	CAM SOP-00448	SM 23 2320 B m
Carbonate, Bicarbonate and Hydroxide (1)	1	N/A	2020/08/18	CAM SOP-00102	APHA 4500-CO2 D
Chloride by Automated Colourimetry (1)	1	N/A	2020/08/19	CAM SOP-00463	SM 23 4500-Cl E m
Conductivity (1)	1	N/A	2020/08/17	CAM SOP-00414	SM 23 2510 m
Free (WAD) Cyanide (1)	1	N/A	2020/08/17	CAM SOP-00457	OMOE E3015 m
Total Cyanide (1)	1	2020/08/17	2020/08/17	CAM SOP-00457	OMOE E3015 5 m
Dissolved Organic Carbon (DOC) (1, 5)	1	N/A	2020/08/17	CAM SOP-00446	SM 23 5310 B m
Dissolved Oxygen (1)	1	2020/08/14	2020/08/14	CAM SOP-00427	SM 23 4500 O G m
Fluoride (1)	1	2020/08/18	2020/08/19	CAM SOP-00449	SM 23 4500-F C m
Dissolved Mercury (low level) (1)	1	2020/08/17	2020/08/17	CAM SOP-00453	EPA 7470 m
Mercury (low level) (1)	1	2020/08/17	2020/08/17	CAM SOP-00453	EPA 7470 m
Chloride & Sulphate by Auto Colorimetry (2)	1	N/A	2020/08/18	AB SOP-00020 / AB SOP-00018	SM23 4500-CL/SO4-E m
Cyanide (Free) (2)	1	2020/08/17	2020/08/17	CAL SOP-00266	EPA 9016d R0 m
Conductivity @25C (2)	1	N/A	2020/08/17	AB SOP-00005	SM 23 2510 B m
Hardness Total (calculated as CaCO3) (3, 6)	1	N/A	2020/08/17	BBY WI-00033	Auto Calc
Hardness (calculated as CaCO3) (3)	1	N/A	2020/08/17	BBY WI-00033	Auto Calc
Elements by ICP-Dissolved-Lab Filtered (2)	1	N/A	2020/08/18	AB SOP-00042	EPA 6010d R5 m
Na, K, Ca, Mg, S by CRC ICPMS (diss.) (3)	1	N/A	2020/08/17	BBY7SOP-00002	EPA 6020B R2 m
Elements by CRC ICPMS (dissolved) (3)	1	N/A	2020/08/17	BBY7SOP-00002	EPA 6020B R2 m
Na, K, Ca, Mg, S by CRC ICPMS (total) (3)	1	2020/08/14	2020/08/17	BBY7SOP-00002	EPA 6020B R2 m
Elements by CRC ICPMS (total) (3)	1	2020/08/16	2020/08/17	BBY7SOP-00003/02	EPA 6020B R2 m
pH @25°C (2, 7)	1	N/A	2020/08/17	AB SOP-00005	SM 23 4500-H+B m
Sodium Adsorption Ratio (2)	1	N/A	2020/08/18		Auto Calc
Silica (Reactive) (2)	1	N/A	2020/08/17	AB SOP-00011	EPA370.1 R1978 m
Total Dissolved Solids (Calc. from EC) (2)	1	N/A	2020/08/18		Auto Calc
Total Ammonia-N (1)	1	N/A	2020/08/17	CAM SOP-00441	USGS I-2522-90 m
Nitrate (NO3) and Nitrite (NO2) in Water (1, 8)	1	N/A	2020/08/17	CAM SOP-00440	SM 23 4500-NO3I/NO2B
pH (1)	1	2020/08/14	2020/08/17	CAM SOP-00413	SM 4500H+ B m
Orthophosphate (1)	1	N/A	2020/08/17	CAM SOP-00461	EPA 365.1 m



Your P.O. #: OL-891917
 Site#: 62 78' 01.99" 92 06' 00.05"
 Site Location: MELIADINE
 Your C.O.C. #: na

Attention: Reporting

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

Report Date: 2020/08/21
 Report #: R6301778
 Version: 3 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C0K7149

Received: 2020/08/13, 09:40

Sample Matrix: Water
 # Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Radium-226 Low Level (4, 9)	1	N/A	2020/08/20	BQL SOP-00006 BQL SOP-00017 BQL SOP-00032	Alpha Spectrometry
Sulphate by Automated Colourimetry (1)	1	N/A	2020/08/17	CAM SOP-00464	EPA 375.4 m
Calculated Total Dissolved Solids (1)	1	N/A	2020/08/19		Auto Calc
Total Dissolved Solids (1)	1	2020/08/14	2020/08/17	CAM SOP-00428	SM 23 2540C m
Total Kjeldahl Nitrogen in Water (1)	1	2020/08/14	2020/08/17	CAM SOP-00938	OMOE E3516 m
Total Organic Carbon (TOC) (1, 10)	1	N/A	2020/08/17	CAM SOP-00446	SM 23 5310B m
Total Phosphorus (Colourimetric) (1)	1	2020/08/17	2020/08/17	CAM SOP-00407	SM 23 4500 P B H m
Low Level Total Suspended Solids (1)	1	2020/08/15	2020/08/17	CAM SOP-00428	SM 23 2540D m
Turbidity (1)	1	N/A	2020/08/17	CAM SOP-00417	SM 23 2130 B m
Low Level Volatile Suspended Solids (1)	1	2020/08/15	2020/08/18	CAM SOP-00428	SM 23 2540

Remarks:

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

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in BV Labs profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and BV Labs 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.

BV Labs liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. BV Labs 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 BV Labs, unless otherwise agreed in writing. BV Labs 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 BV Labs, 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.



Your P.O. #: OL-891917
Site#: 62 78' 01.99" 92 06' 00.05"
Site Location: MELIADINE
Your C.O.C. #: na

Attention: Reporting

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

Report Date: 2020/08/21
Report #: R6301778
Version: 3 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C0K7149

Received: 2020/08/13, 09:40

- (1) This test was performed by Bureau Veritas Laboratories Mississauga
- (2) This test was performed by BVLabs Calgary via Mississauga
- (3) This test was performed by BVLabs Burnaby via Mississauga
- (4) This test was performed by Bureau Veritas Laboratories Kitimat
- (5) Dissolved Organic Carbon (DOC) present in the sample should be considered as non-purgeable DOC.
- (6) "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).
- (7) The CCME method requires pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the CCME holding time. Bureau Veritas Laboratories endeavours to analyze samples as soon as possible after receipt.
- (8) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.
- (9) Radium-226 results have not been corrected for blanks.
- (10) Total Organic Carbon (TOC) present in the sample should be considered as non-purgeable TOC.

Encryption Key

Katherine Szozda

Katherine Szozda
Project Manager
21 Aug 2020 15:40:12

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

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

=====

BV Labs 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 Signature Page.



BUREAU
VERITAS

BV Labs Job #: COK7149
Report Date: 2020/08/21

Agnico-Eagle
Site Location: MELIADINE
Your P.O. #: OL-891917
Sampler Initials: TG

SALINITY IN WATER (WATER)

BV Labs ID		NJG721		
Sampling Date		2020/08/10 17:25		
COC Number		na		
	UNITS	MEL-26	RDL	QC Batch
Calculated Parameters				
Sodium Adsorption Ratio	N/A	28	0.10	6895860
Total dissolved solids (calc., EC)	mg/L	32000	10	6895861
ELEMENTS				
Dissolved Calcium (Ca)	mg/L	1300 (1)	15	6895858
Dissolved Magnesium (Mg)	mg/L	760 (1)	10	6895858
Dissolved Potassium (K)	mg/L	220	0.30	6895858
Dissolved Sodium (Na)	mg/L	5200 (1)	25	6895858
Inorganics				
Dissolved Chloride (Cl-)	mg/L	12000 (1)	100	6895856
Conductivity	uS/cm	32000	2.0	6895857
pH	pH	7.60	N/A	6895859
Dissolved Sulphate (SO4)	mg/L	1200 (1)	10	6895856
RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable (1) Detection limits raised due to dilution to bring analyte within the calibrated range.				



BUREAU
VERITAS

BV Labs Job #: COK7149
Report Date: 2020/08/21

Agnico-Eagle
Site Location: MELIADINE
Your P.O. #: OL-891917
Sampler Initials: TG

DISS. ICPMS METALS FOR FEDERAL INT. GWQG (WATER)

BV Labs ID		NJG721		
Sampling Date		2020/08/10 17:25		
COC Number		na		
	UNITS	MEL-26	RDL	QC Batch
Calculated Parameters				
Dissolved Hardness (CaCO3)	mg/L	6280	0.50	6895437
Metals				
Dissolved Aluminum (Al)	ug/L	212	60	6895439
Dissolved Antimony (Sb)	ug/L	<10	10	6895439
Dissolved Arsenic (As)	ug/L	14.5	2.0	6895439
Dissolved Barium (Ba)	ug/L	274	20	6895439
Dissolved Beryllium (Be)	ug/L	<2.0	2.0	6895439
Dissolved Bismuth (Bi)	ug/L	<20	20	6895439
Dissolved Boron (B)	ug/L	<1000	1000	6895439
Dissolved Cadmium (Cd)	ug/L	0.26	0.20	6895439
Dissolved Chromium (Cr)	ug/L	<20	20	6895439
Dissolved Cobalt (Co)	ug/L	9.7	4.0	6895439
Dissolved Copper (Cu)	ug/L	6.3	4.0	6895439
Dissolved Iron (Fe)	ug/L	<100	100	6895439
Dissolved Lead (Pb)	ug/L	5.3	4.0	6895439
Dissolved Lithium (Li)	ug/L	640	40	6895439
Dissolved Manganese (Mn)	ug/L	374	20	6895439
Dissolved Molybdenum (Mo)	ug/L	<20	20	6895439
Dissolved Nickel (Ni)	ug/L	55	20	6895439
Dissolved Selenium (Se)	ug/L	<2.0	2.0	6895439
Dissolved Silicon (Si)	ug/L	2040	2000	6895439
Dissolved Silver (Ag)	ug/L	<0.40	0.40	6895439
Dissolved Strontium (Sr)	ug/L	29900	20	6895439
Dissolved Thallium (Tl)	ug/L	<0.20	0.20	6895439
Dissolved Tin (Sn)	ug/L	<100	100	6895439
Dissolved Titanium (Ti)	ug/L	<100	100	6895439
Dissolved Uranium (U)	ug/L	5.5	2.0	6895439
Dissolved Vanadium (V)	ug/L	<100	100	6895439
Dissolved Zinc (Zn)	ug/L	<100	100	6895439
Dissolved Zirconium (Zr)	ug/L	<2.0	2.0	6895439
Dissolved Calcium (Ca)	mg/L	1280	1.0	6895438
RDL = Reportable Detection Limit QC Batch = Quality Control Batch				



BV Labs Job #: COK7149
Report Date: 2020/08/21

Agnico-Eagle
Site Location: MELIADINE
Your P.O. #: OL-891917
Sampler Initials: TG

DISS. ICPMS METALS FOR FEDERAL INT. GWQG (WATER)

BV Labs ID		NJG721		
Sampling Date		2020/08/10 17:25		
COC Number		na		
	UNITS	MEL-26	RDL	QC Batch
Dissolved Magnesium (Mg)	mg/L	748	1.0	6895438
Dissolved Potassium (K)	mg/L	225	1.0	6895438
Dissolved Sodium (Na)	mg/L	5320	1.0	6895438
Dissolved Sulphur (S)	mg/L	495	60	6895438
RDL = Reportable Detection Limit QC Batch = Quality Control Batch				



BV Labs Job #: COK7149
Report Date: 2020/08/21

Agnico-Eagle
Site Location: MELIADINE
Your P.O. #: OL-891917
Sampler Initials: TG

TOTAL ICPMS METALS FOR CCME CEQG FOR SW (WATER)

BV Labs ID		NJG721		
Sampling Date		2020/08/10 17:25		
COC Number		na		
	UNITS	MEL-26	RDL	QC Batch
Metals				
Total Aluminum (Al)	ug/L	404	60	6895436
Total Antimony (Sb)	ug/L	<10	10	6895436
Total Arsenic (As)	ug/L	14.7	2.0	6895436
Total Barium (Ba)	ug/L	258	20	6895436
Total Beryllium (Be)	ug/L	<2.0	2.0	6895436
Total Bismuth (Bi)	ug/L	<20	20	6895436
Total Boron (B)	ug/L	<1000	1000	6895436
Total Cadmium (Cd)	ug/L	<0.20	0.20	6895436
Total Chromium (Cr)	ug/L	<20	20	6895436
Total Cobalt (Co)	ug/L	9.6	4.0	6895436
Total Copper (Cu)	ug/L	<10	10	6895436
Total Iron (Fe)	ug/L	<200	200	6895436
Total Lead (Pb)	ug/L	5.1	4.0	6895436
Total Lithium (Li)	ug/L	620	40	6895436
Total Manganese (Mn)	ug/L	356	20	6895436
Total Molybdenum (Mo)	ug/L	<20	20	6895436
Total Nickel (Ni)	ug/L	54	20	6895436
Total Selenium (Se)	ug/L	<2.0	2.0	6895436
Total Silicon (Si)	ug/L	2040	2000	6895436
Total Silver (Ag)	ug/L	<0.40	0.40	6895436
Total Strontium (Sr)	ug/L	28800	20	6895436
Total Thallium (Tl)	ug/L	<0.20	0.20	6895436
Total Tin (Sn)	ug/L	<100	100	6895436
Total Titanium (Ti)	ug/L	<100	100	6895436
Total Uranium (U)	ug/L	5.4	2.0	6895436
Total Vanadium (V)	ug/L	<100	100	6895436
Total Zinc (Zn)	ug/L	<100	100	6895436
Total Zirconium (Zr)	ug/L	<2.0	2.0	6895436
Total Calcium (Ca)	ug/L	1240000	1000	6895435
Total Magnesium (Mg)	ug/L	699000	1000	6895435
Total Potassium (K)	ug/L	215000	1000	6895435
RDL = Reportable Detection Limit				
QC Batch = Quality Control Batch				



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BV Labs Job #: COK7149
Report Date: 2020/08/21

Agnico-Eagle
Site Location: MELIADINE
Your P.O. #: OL-891917
Sampler Initials: TG

TOTAL ICPMS METALS FOR CCME CEQG FOR SW (WATER)

BV Labs ID		NJG721		
Sampling Date		2020/08/10 17:25		
COC Number		na		
	UNITS	MEL-26	RDL	QC Batch
Total Sodium (Na)	ug/L	5020000	1000	6895435
Total Sulphur (S)	ug/L	465000	60000	6895435
Calculated Parameters				
Total Hardness (CaCO3)	ug/L	5980000	500	6895434
RDL = Reportable Detection Limit				
QC Batch = Quality Control Batch				



BUREAU
VERITAS

BV Labs Job #: COK7149

Report Date: 2020/08/21

Agnico-Eagle

Site Location: MELIADINE

Your P.O. #: OL-891917

Sampler Initials: TG

RESULTS OF ANALYSES OF WATER

BV Labs ID		NJG721			NJG721		
Sampling Date		2020/08/10 17:25			2020/08/10 17:25		
COC Number		na			na		
	UNITS	MEL-26	RDL	QC Batch	MEL-26 Lab-Dup	RDL	QC Batch
Calculated Parameters							
Bicarb. Alkalinity (calc. as CaCO ₃)	mg/L	93	1.0	6889991			
Calculated TDS	mg/L	19000	1.0	6890239			
Carb. Alkalinity (calc. as CaCO ₃)	mg/L	<1.0	1.0	6889991			
Inorganics							
Total Ammonia-N	mg/L	36	0.25	6890402			
Conductivity	umho/cm	32000	1.0	6890598			
Free Cyanide (CN)	ug/L	16	1.0	6895863			
Total Dissolved Solids	mg/L	21200	20	6890934			
Fluoride (F-)	mg/L	<0.10	0.10	6895167			
Total Kjeldahl Nitrogen (TKN)	mg/L	43	5.0	6890046	49	5.0	6890046
Dissolved Organic Carbon	mg/L	22	0.40	6890548			
Total Organic Carbon (TOC)	mg/L	22	0.40	6890434			
Orthophosphate (P)	mg/L	<0.010	0.010	6892022			
Dissolved Oxygen	mg/L	9.64		6890828	9.65		6890828
pH	pH	7.50		6890601			
Total Phosphorus	mg/L	0.057	0.020	6892527			
Reactive Silica (SiO ₂)	mg/L	3.8 (1)	0.25	6895862			
Total Suspended Solids	mg/L	25	1	6891997			
Dissolved Sulphate (SO ₄)	mg/L	1200	5.0	6892023			
Total Cyanide (CN)	mg/L	0.059	0.0050	6892715	0.060	0.0050	6892715
Turbidity	NTU	2.1	0.1	6890721	2.1	0.1	6890721
Volatile Suspended Solids	mg/L	15	1	6891998			
WAD Cyanide (Free)	mg/L	0.011	0.0010	6892712	0.012	0.0010	6892712
Alkalinity (Total as CaCO ₃)	mg/L	93	1.0	6890592			
Dissolved Chloride (Cl-)	mg/L	11000	120	6892021			
Nitrite (N)	mg/L	1.23	0.010	6890615			
Nitrate (N)	mg/L	65.0	0.50	6890615			
Nitrate + Nitrite (N)	mg/L	66.2	0.50	6890615			
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate (1) Detection limits raised due to dilution to bring analyte within the calibrated range.							



BUREAU
VERITAS

BV Labs Job #: COK7149

Report Date: 2020/08/21

Agnico-Eagle

Site Location: MELIADINE

Your P.O. #: OL-891917

Sampler Initials: TG

RESULTS OF ANALYSES OF WATER

BV Labs ID		NJG721			NJG721		
Sampling Date		2020/08/10 17:25			2020/08/10 17:25		
COC Number		na			na		
	UNITS	MEL-26	RDL	QC Batch	MEL-26 Lab-Dup	RDL	QC Batch
RADIONUCLIDE							
Radium-226	Bq/L	0.22	0.0050	6889746			
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							
Lab-Dup = Laboratory Initiated Duplicate							



BV Labs Job #: COK7149
Report Date: 2020/08/21

Agnico-Eagle
Site Location: MELIADINE
Your P.O. #: OL-891917
Sampler Initials: TG

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

BV Labs ID		NJG721			NJG721		
Sampling Date		2020/08/10 17:25			2020/08/10 17:25		
COC Number		na			na		
	UNITS	MEL-26	RDL	QC Batch	MEL-26 Lab-Dup	RDL	QC Batch
Metals							
Mercury (Hg)	mg/L	<0.00001	0.00001	6893001			
Dissolved Mercury (Hg)	mg/L	0.00001	0.00001	6893006	0.00001	0.00001	6893006
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate							



BV Labs Job #: COK7149
Report Date: 2020/08/21

Agnico-Eagle
Site Location: MELIADINE
Your P.O. #: OL-891917
Sampler Initials: TG

TEST SUMMARY

BV Labs ID: NJG721
Sample ID: MEL-26
Matrix: Water

Collected: 2020/08/10
Shipped:
Received: 2020/08/13

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	6890592	N/A	2020/08/17	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	6889991	N/A	2020/08/18	Automated Statchk
Chloride by Automated Colourimetry	KONE	6892021	N/A	2020/08/19	Kazzandra Adeva
Conductivity	AT	6890598	N/A	2020/08/17	Surinder Rai
Free (WAD) Cyanide	SKAL/CN	6892712	N/A	2020/08/17	Louise Harding
Total Cyanide	SKAL/CN	6892715	2020/08/17	2020/08/17	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	6890548	N/A	2020/08/17	Nimarta Singh
Dissolved Oxygen	DO	6890828	2020/08/14	2020/08/14	Navjot Kaur Gill
Fluoride	ISE	6895167	2020/08/18	2020/08/19	Surinder Rai
Dissolved Mercury (low level)	CV/AA	6893006	2020/08/17	2020/08/17	Medhat Nasr
Mercury (low level)	CV/AA	6893001	2020/08/17	2020/08/17	Medhat Nasr
Chloride & Sulphate by Auto Colorimetry	KONE	6895856	N/A	2020/08/18	Serena Tian
Cyanide (Free)	SPEC	6895863	2020/08/17	2020/08/17	Taylor Mullings
Conductivity @25C	COND	6895857	N/A	2020/08/17	Coralynn Topping
Hardness Total (calculated as CaCO ₃)	CALC	6895434	N/A	2020/08/17	Automated Statchk
Hardness (calculated as CaCO ₃)	CALC	6895437	N/A	2020/08/17	Automated Statchk
Elements by ICP-Dissolved-Lab Filtered	ICP	6895858	N/A	2020/08/18	Mary Anne Dela Cruz
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	ICP	6895438	N/A	2020/08/17	Automated Statchk
Elements by CRC ICPMS (dissolved)	ICP/MS	6895439	N/A	2020/08/17	Andrew An
Na, K, Ca, Mg, S by CRC ICPMS (total)	ICP	6895435	2020/08/17	2020/08/17	Automated Statchk
Elements by CRC ICPMS (total)	ICP/MS	6895436	2020/08/16	2020/08/17	Andrew An
pH @25°C	AT/PH	6895859	N/A	2020/08/17	Coralynn Topping
Sodium Adsorption Ratio	CALC	6895860	N/A	2020/08/18	Automated Statchk
Silica (Reactive)	KONE	6895862	N/A	2020/08/17	Serena Tian
Total Dissolved Solids (Calc. from EC)	CALC	6895861	N/A	2020/08/18	Automated Statchk
Total Ammonia-N	LACH/NH ₄	6890402	N/A	2020/08/17	Amanpreet Sappal
Nitrate (NO ₃) and Nitrite (NO ₂) in Water	LACH	6890615	N/A	2020/08/17	Chandra Nandlal
pH	AT	6890601	2020/08/14	2020/08/17	Surinder Rai
Orthophosphate	KONE	6892022	N/A	2020/08/17	Kazzandra Adeva
Radium-226 Low Level	AS	6889746	N/A	2020/08/20	Blake Barber
Sulphate by Automated Colourimetry	KONE	6892023	N/A	2020/08/17	Kazzandra Adeva
Calculated Total Dissolved Solids	CALC	6890239	N/A	2020/08/19	Automated Statchk
Total Dissolved Solids	BAL	6890934	2020/08/14	2020/08/17	Shivani Desai
Total Kjeldahl Nitrogen in Water	SKAL	6890046	2020/08/14	2020/08/17	Rajni Tyagi
Total Organic Carbon (TOC)	TOCV/NDIR	6890434	N/A	2020/08/17	Nimarta Singh
Total Phosphorus (Colourimetric)	LACH/P	6892527	2020/08/17	2020/08/17	Shivani Shivani
Low Level Total Suspended Solids	BAL	6891997	2020/08/15	2020/08/17	Shivani Desai
Turbidity	AT	6890721	N/A	2020/08/17	Neil Dassanayake
Low Level Volatile Suspended Solids	BAL	6891998	2020/08/15	2020/08/18	Shivani Desai



BV Labs Job #: COK7149
Report Date: 2020/08/21

Agnico-Eagle
Site Location: MELIADINE
Your P.O. #: OL-891917
Sampler Initials: TG

TEST SUMMARY

BV Labs ID: NJG721 Dup
Sample ID: MEL-26
Matrix: Water

Collected: 2020/08/10
Shipped:
Received: 2020/08/13

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Free (WAD) Cyanide	SKAL/CN	6892712	N/A	2020/08/17	Louise Harding
Total Cyanide	SKAL/CN	6892715	2020/08/17	2020/08/17	Louise Harding
Dissolved Oxygen	DO	6890828	2020/08/14	2020/08/14	Navjot Kaur Gill
Dissolved Mercury (low level)	CV/AA	6893006	2020/08/17	2020/08/17	Medhat Nasr
Total Kjeldahl Nitrogen in Water	SKAL	6890046	2020/08/14	2020/08/17	Rajni Tyagi
Turbidity	AT	6890721	N/A	2020/08/17	Neil Dassanayake



GENERAL COMMENTS

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

Package 1	14.3°C
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Sample NJG721 [MEL-26] : Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results

Sample was not submitted in an appropriate container for free cyanide analysis. Results may have a high bias due to decomposition of hexacyanoferrate and some other metal-cyanide complexes to free cyanide

Sample pH <12, preservation incomplete. Due to volatility of analyte, a low bias in the results is likely.

DISS. ICPMS METALS FOR FEDERAL INT. GWQG (WATER)

Sample NJG721 [MEL-26] Elements by CRC ICPMS (dissolved): RDL raised due to concentration over linear range, sample dilution required.

TOTAL ICPMS METALS FOR CCME CEQG FOR SW (WATER)

Sample NJG721 [MEL-26] Elements by CRC ICPMS (total): RDL raised due to concentration over linear range, sample dilution required.

Results relate only to the items tested.



BV Labs Job #: COK7149
Report Date: 2020/08/21

QUALITY ASSURANCE REPORT

Agnico-Eagle
Site Location: MELIADINE
Your P.O. #: OL-891917
Sampler Initials: TG

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6889746	Radium-226	2020/08/20			105	85 - 115	<0.0050	Bq/L	NC	N/A		
6890046	Total Kjeldahl Nitrogen (TKN)	2020/08/17	NC	80 - 120	101	80 - 120	<0.10	mg/L	14	20	100	80 - 120
6890402	Total Ammonia-N	2020/08/17	NC	75 - 125	100	80 - 120	<0.050	mg/L	1.5	20		
6890434	Total Organic Carbon (TOC)	2020/08/17	91	80 - 120	99	80 - 120	<0.40	mg/L	1.7	20		
6890548	Dissolved Organic Carbon	2020/08/17	96	80 - 120	100	80 - 120	<0.40	mg/L	0.31	20		
6890592	Alkalinity (Total as CaCO ₃)	2020/08/17			97	85 - 115	<1.0	mg/L	3.1	20		
6890598	Conductivity	2020/08/17			101	85 - 115	<1.0	umho/cm	0	25		
6890601	pH	2020/08/17			102	98 - 103			0.21	N/A		
6890615	Nitrate (N)	2020/08/17	85	80 - 120	100	80 - 120	<0.10	mg/L	0.090	20		
6890615	Nitrite (N)	2020/08/17	102	80 - 120	108	80 - 120	<0.010	mg/L	0.83	20		
6890721	Turbidity	2020/08/17			111	85 - 115	<0.1	NTU	2.9	20		
6890934	Total Dissolved Solids	2020/08/17					<10	mg/L	6.3	25	102	90 - 110
6891997	Total Suspended Solids	2020/08/17					<1	mg/L	NC	25	96	85 - 115
6891998	Volatile Suspended Solids	2020/08/18					<1	mg/L	NC	25		
6892021	Dissolved Chloride (Cl-)	2020/08/19	100	80 - 120	104	80 - 120	<1.0	mg/L	2.8	20		
6892022	Orthophosphate (P)	2020/08/17	98	75 - 125	102	80 - 120	<0.010	mg/L	NC	25		
6892023	Dissolved Sulphate (SO ₄)	2020/08/17	101	75 - 125	103	80 - 120	<1.0	mg/L	1.4	20		
6892527	Total Phosphorus	2020/08/17	98	80 - 120	99	80 - 120	<0.020	mg/L	0.38	20	97	80 - 120
6892712	WAD Cyanide (Free)	2020/08/17	82	80 - 120	95	80 - 120	<0.0010	mg/L	5.3	20		
6892715	Total Cyanide (CN)	2020/08/17	86	80 - 120	100	80 - 120	<0.0050	mg/L	2.4	20		
6893001	Mercury (Hg)	2020/08/17	96	75 - 125	97	80 - 120	<0.00001	mg/L	NC	20		
6893006	Dissolved Mercury (Hg)	2020/08/17	92	75 - 125	97	80 - 120	<0.00001	mg/L	8.9	20		
6895167	Fluoride (F-)	2020/08/19	116	80 - 120	108	80 - 120	<0.10	mg/L	16	20		
6895436	Total Aluminum (Al)	2020/08/17	107	80 - 120	105	80 - 120	<3.0	ug/L				
6895436	Total Antimony (Sb)	2020/08/17	100	80 - 120	101	80 - 120	<0.50	ug/L				
6895436	Total Arsenic (As)	2020/08/17	111	80 - 120	105	80 - 120	<0.10	ug/L				
6895436	Total Barium (Ba)	2020/08/17	NC	80 - 120	104	80 - 120	<1.0	ug/L				
6895436	Total Beryllium (Be)	2020/08/17	95	80 - 120	103	80 - 120	<0.10	ug/L				
6895436	Total Bismuth (Bi)	2020/08/17	87	80 - 120	96	80 - 120	<1.0	ug/L				
6895436	Total Boron (B)	2020/08/17	94	80 - 120	101	80 - 120	<50	ug/L				
6895436	Total Cadmium (Cd)	2020/08/17	97	80 - 120	105	80 - 120	<0.010	ug/L				



BV Labs Job #: COK7149
Report Date: 2020/08/21

QUALITY ASSURANCE REPORT(CONT'D)

Agnico-Eagle
Site Location: MELIADINE
Your P.O. #: OL-891917
Sampler Initials: TG

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6895436	Total Chromium (Cr)	2020/08/17	97	80 - 120	104	80 - 120	<1.0	ug/L				
6895436	Total Cobalt (Co)	2020/08/17	91	80 - 120	102	80 - 120	<0.20	ug/L				
6895436	Total Copper (Cu)	2020/08/17	86	80 - 120	102	80 - 120	<0.50	ug/L				
6895436	Total Iron (Fe)	2020/08/17	101	80 - 120	106	80 - 120	<10	ug/L				
6895436	Total Lead (Pb)	2020/08/17	100	80 - 120	103	80 - 120	<0.20	ug/L				
6895436	Total Lithium (Li)	2020/08/17	NC	80 - 120	101	80 - 120	<2.0	ug/L				
6895436	Total Manganese (Mn)	2020/08/17	94	80 - 120	103	80 - 120	<1.0	ug/L				
6895436	Total Molybdenum (Mo)	2020/08/17	NC	80 - 120	103	80 - 120	<1.0	ug/L				
6895436	Total Nickel (Ni)	2020/08/17	88	80 - 120	103	80 - 120	<1.0	ug/L				
6895436	Total Selenium (Se)	2020/08/17	109	80 - 120	104	80 - 120	<0.10	ug/L				
6895436	Total Silicon (Si)	2020/08/17	105	80 - 120	105	80 - 120	<100	ug/L				
6895436	Total Silver (Ag)	2020/08/17	96	80 - 120	105	80 - 120	<0.020	ug/L				
6895436	Total Strontium (Sr)	2020/08/17	NC	80 - 120	101	80 - 120	<1.0	ug/L				
6895436	Total Thallium (Tl)	2020/08/17	97	80 - 120	99	80 - 120	<0.010	ug/L				
6895436	Total Tin (Sn)	2020/08/17	102	80 - 120	101	80 - 120	<5.0	ug/L				
6895436	Total Titanium (Ti)	2020/08/17	105	80 - 120	103	80 - 120	<5.0	ug/L				
6895436	Total Uranium (U)	2020/08/17	105	80 - 120	103	80 - 120	<0.10	ug/L				
6895436	Total Vanadium (V)	2020/08/17	102	80 - 120	106	80 - 120	<5.0	ug/L				
6895436	Total Zinc (Zn)	2020/08/17	85	80 - 120	103	80 - 120	<5.0	ug/L				
6895436	Total Zirconium (Zr)	2020/08/17	116	80 - 120	101	80 - 120	<0.10	ug/L				
6895439	Dissolved Aluminum (Al)	2020/08/17	100	80 - 120	101	80 - 120	<3.0	ug/L				
6895439	Dissolved Antimony (Sb)	2020/08/17	NC	80 - 120	99	80 - 120	<0.50	ug/L				
6895439	Dissolved Arsenic (As)	2020/08/17	112	80 - 120	100	80 - 120	<0.10	ug/L				
6895439	Dissolved Barium (Ba)	2020/08/17	103	80 - 120	100	80 - 120	<1.0	ug/L				
6895439	Dissolved Beryllium (Be)	2020/08/17	96	80 - 120	99	80 - 120	<0.10	ug/L				
6895439	Dissolved Bismuth (Bi)	2020/08/17	85	80 - 120	91	80 - 120	<1.0	ug/L				
6895439	Dissolved Boron (B)	2020/08/17	NC	80 - 120	97	80 - 120	<50	ug/L				
6895439	Dissolved Cadmium (Cd)	2020/08/17	96	80 - 120	101	80 - 120	<0.010	ug/L				
6895439	Dissolved Chromium (Cr)	2020/08/17	94	80 - 120	99	80 - 120	<1.0	ug/L				
6895439	Dissolved Cobalt (Co)	2020/08/17	90	80 - 120	97	80 - 120	<0.20	ug/L				
6895439	Dissolved Copper (Cu)	2020/08/17	86	80 - 120	97	80 - 120	<0.20	ug/L				
6895439	Dissolved Iron (Fe)	2020/08/17	97	80 - 120	102	80 - 120	<5.0	ug/L				



BV Labs Job #: C0K7149
Report Date: 2020/08/21

QUALITY ASSURANCE REPORT(CONT'D)

Agnico-Eagle
Site Location: MELIADINE
Your P.O. #: OL-891917
Sampler Initials: TG

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6895439	Dissolved Lead (Pb)	2020/08/17	96	80 - 120	100	80 - 120	<0.20	ug/L				
6895439	Dissolved Lithium (Li)	2020/08/17	NC	80 - 120	95	80 - 120	<2.0	ug/L				
6895439	Dissolved Manganese (Mn)	2020/08/17	88	80 - 120	98	80 - 120	<1.0	ug/L				
6895439	Dissolved Molybdenum (Mo)	2020/08/17	NC	80 - 120	100	80 - 120	<1.0	ug/L				
6895439	Dissolved Nickel (Ni)	2020/08/17	85	80 - 120	98	80 - 120	<1.0	ug/L				
6895439	Dissolved Selenium (Se)	2020/08/17	111	80 - 120	100	80 - 120	<0.10	ug/L				
6895439	Dissolved Silicon (Si)	2020/08/17	NC	80 - 120	101	80 - 120	<100	ug/L				
6895439	Dissolved Silver (Ag)	2020/08/17	92	80 - 120	100	80 - 120	<0.020	ug/L				
6895439	Dissolved Strontium (Sr)	2020/08/17	NC	80 - 120	96	80 - 120	<1.0	ug/L				
6895439	Dissolved Thallium (Tl)	2020/08/17	98	80 - 120	95	80 - 120	<0.010	ug/L				
6895439	Dissolved Tin (Sn)	2020/08/17	96	80 - 120	98	80 - 120	<5.0	ug/L				
6895439	Dissolved Titanium (Ti)	2020/08/17	113	80 - 120	98	80 - 120	<5.0	ug/L				
6895439	Dissolved Uranium (U)	2020/08/17	103	80 - 120	101	80 - 120	<0.10	ug/L				
6895439	Dissolved Vanadium (V)	2020/08/17	106	80 - 120	101	80 - 120	<5.0	ug/L				
6895439	Dissolved Zinc (Zn)	2020/08/17	92	80 - 120	100	80 - 120	<5.0	ug/L				
6895439	Dissolved Zirconium (Zr)	2020/08/17	100	80 - 120	96	80 - 120	<0.10	ug/L				
6895856	Dissolved Chloride (Cl-)	2020/08/17	109	80 - 120	101	80 - 120	<1.0	mg/L				
6895856	Dissolved Sulphate (SO4)	2020/08/17	NC	80 - 120	106	80 - 120	<1.0	mg/L				
6895857	Conductivity	2020/08/17			100	90 - 110	<2.0	uS/cm				
6895858	Dissolved Calcium (Ca)	2020/08/18	99	80 - 120	99	80 - 120	<0.30	mg/L				
6895858	Dissolved Magnesium (Mg)	2020/08/18	99	80 - 120	99	80 - 120	<0.20	mg/L				
6895858	Dissolved Potassium (K)	2020/08/18	100	80 - 120	102	80 - 120	<0.30	mg/L				
6895858	Dissolved Sodium (Na)	2020/08/18	97	80 - 120	99	80 - 120	<0.50	mg/L				
6895859	pH	2020/08/17			101	97 - 103						
6895862	Reactive Silica (SiO2)	2020/08/17	112	80 - 120	107	80 - 120	<0.050	mg/L				



BUREAU
VERITAS

BV Labs Job #: C0K7149

Report Date: 2020/08/21

QUALITY ASSURANCE REPORT(CONT'D)

Agnico-Eagle
Site Location: MELIADINE
Your P.O. #: OL-891917
Sampler Initials: TG

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6895863	Free Cyanide (CN)	2020/08/17	109	80 - 120	102	80 - 120	<1.0	ug/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 $\leq 2 \times \text{RDL}$).



BUREAU
VERITAS

BV Labs Job #: COK7149
Report Date: 2020/08/21

Agnico-Eagle
Site Location: MELIADINE
Your P.O. #: OL-891917
Sampler Initials: TG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Brad Newman, Scientific Service Specialist

David Huang, BBY Scientific Specialist

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

Kurt Headrick, Ph.D., C. Chem., Laboratory Manager

BV Labs 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 Signature Page.



BUREAU
VERITAS

BV Labs Job #: COK7149
Report Date: 2020/08/21

Agnico-Eagle
Site Location: MELIADINE
Your P.O. #: OL-891917
Sampler Initials: TG

Exceedance Summary Table – Metal Mining Effluent Reg
Result Exceedances

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



Your P.O. #: OL-891917
 Site#: 62 48' 01.99" 92 06' 00.05"
 Site Location: MELIADINE
 Your C.O.C. #: na

Attention: Reporting

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

Report Date: 2020/09/02
 Report #: R6316390
 Version: 5 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: COL2878

Received: 2020/08/19, 15:45

Sample Matrix: Water
 # Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity (1)	1	N/A	2020/08/21	CAM SOP-00448	SM 23 2320 B m
Carbonate, Bicarbonate and Hydroxide (1)	1	N/A	2020/08/27	CAM SOP-00102	APHA 4500-CO2 D
Chloride by Automated Colourimetry (1)	1	N/A	2020/08/21	CAM SOP-00463	SM 23 4500-Cl E m
Conductivity (1)	1	N/A	2020/08/21	CAM SOP-00414	SM 23 2510 m
Free (WAD) Cyanide (1)	1	N/A	2020/08/20	CAM SOP-00457	OMOE E3015 m
Total Cyanide (1)	1	2020/08/20	2020/08/20	CAM SOP-00457	OMOE E3015 5 m
Dissolved Organic Carbon (DOC) (1, 5)	1	N/A	2020/08/20	CAM SOP-00446	SM 23 5310 B m
Dissolved Oxygen (1)	1	2020/08/20	2020/08/20	CAM SOP-00427	SM 23 4500 O G m
Fluoride (1)	1	2020/08/20	2020/08/21	CAM SOP-00449	SM 23 4500-F C m
Dissolved Mercury (low level) (1)	1	2020/08/21	2020/08/21	CAM SOP-00453	EPA 7470 m
Mercury (low level) (1)	1	2020/08/21	2020/08/21	CAM SOP-00453	EPA 7470 m
Chloride & Sulphate by Auto Colorimetry (2)	1	N/A	2020/08/24	AB SOP-00020 / AB SOP-00018	SM23 4500-CL/SO4-E m
Cyanide (Free) (2)	1	2020/08/25	2020/08/25	CAL SOP-00266	EPA 9016d R0 m
Conductivity @25C (2)	1	N/A	2020/08/23	AB SOP-00005	SM 23 2510 B m
Hardness Total (calculated as CaCO3) (3, 6)	1	N/A	2020/08/25	BBY WI-00033	Auto Calc
Hardness (calculated as CaCO3) (3)	1	N/A	2020/08/25	BBY WI-00033	Auto Calc
Elements by ICP-Dissolved-Lab Filtered (2)	1	N/A	2020/08/25	AB SOP-00042	EPA 6010d R5 m
Na, K, Ca, Mg, S by CRC ICPMS (diss.) (3)	1	N/A	2020/08/25	BBY7SOP-00002	EPA 6020B R2 m
Elements by CRC ICPMS (dissolved) (3)	1	N/A	2020/08/24	BBY7SOP-00002	EPA 6020B R2 m
Na, K, Ca, Mg, S by CRC ICPMS (total) (3)	1	2020/08/20	2020/08/25	BBY7SOP-00002	EPA 6020B R2 m
Elements by CRC ICPMS (total) (3)	1	2020/08/24	2020/08/25	BBY7SOP-00003/02	EPA 6020B R2 m
pH @25°C (2, 7)	1	N/A	2020/08/23	AB SOP-00005	SM 23 4500-H+B m
Sodium Adsorption Ratio (2)	1	N/A	2020/08/25		Auto Calc
Silica (Reactive) (2)	1	N/A	2020/08/25	AB SOP-00011	EPA370.1 R1978 m
Total Dissolved Solids (Calc. from EC) (2)	1	N/A	2020/08/24		Auto Calc
Total Ammonia-N (1)	1	N/A	2020/08/21	CAM SOP-00441	USGS I-2522-90 m
Nitrate (NO3) and Nitrite (NO2) in Water (1, 8)	1	N/A	2020/08/21	CAM SOP-00440	SM 23 4500-NO3I/NO2B
pH (1)	1	2020/08/20	2020/08/21	CAM SOP-00413	SM 4500H+ B m
Orthophosphate (1)	1	N/A	2020/08/21	CAM SOP-00461	EPA 365.1 m



Your P.O. #: OL-891917
 Site#: 62 48' 01.99" 92 06' 00.05"
 Site Location: MELIADINE
 Your C.O.C. #: na

Attention: Reporting

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

Report Date: 2020/09/02
 Report #: R6316390
 Version: 5 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: COL2878

Received: 2020/08/19, 15:45

Sample Matrix: Water
 # Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Radium-226 Low Level (4, 9)	1	N/A	2020/09/01	BQL SOP-00006 BQL SOP-00017 BQL SOP-00032	Alpha Spectrometry
Sulphate by Automated Colourimetry (1)	1	N/A	2020/08/21	CAM SOP-00464	EPA 375.4 m
Calculated Total Dissolved Solids (1)	1	N/A	2020/08/27		Auto Calc
Total Dissolved Solids (1)	1	2020/08/20	2020/08/21	CAM SOP-00428	SM 23 2540C m
Total Kjeldahl Nitrogen in Water (1)	1	2020/08/21	2020/08/21	CAM SOP-00938	OMOE E3516 m
Total Organic Carbon (TOC) (1, 10)	1	N/A	2020/08/21	CAM SOP-00446	SM 23 5310B m
Total Phosphorus (Colourimetric) (1)	1	2020/08/21	2020/08/21	CAM SOP-00407	SM 23 4500 P B H m
Low Level Total Suspended Solids (1)	1	2020/08/20	2020/08/21	CAM SOP-00428	SM 23 2540D m
Turbidity (1)	1	N/A	2020/08/21	CAM SOP-00417	SM 23 2130 B m
Low Level Volatile Suspended Solids (1)	1	2020/08/20	2020/08/21	CAM SOP-00428	SM 23 2540

Remarks:

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

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in BV Labs profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and BV Labs 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.

BV Labs liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. BV Labs 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 BV Labs, unless otherwise agreed in writing. BV Labs 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 BV Labs, 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.



Your P.O. #: OL-891917
Site#: 62 48' 01.99" 92 06' 00.05"
Site Location: MELIADINE
Your C.O.C. #: na

Attention: Reporting

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

Report Date: 2020/09/02
Report #: R6316390
Version: 5 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: COL2878

Received: 2020/08/19, 15:45

- (1) This test was performed by Bureau Veritas Laboratories Mississauga
- (2) This test was performed by BVLabs Calgary via Mississauga
- (3) This test was performed by BVLabs Burnaby via Mississauga
- (4) This test was performed by Bureau Veritas Laboratories Kitimat
- (5) Dissolved Organic Carbon (DOC) present in the sample should be considered as non-purgeable DOC.
- (6) "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).
- (7) The CCME method requires pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the CCME holding time. Bureau Veritas Laboratories endeavours to analyze samples as soon as possible after receipt.
- (8) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.
- (9) Radium-226 results have not been corrected for blanks.
- (10) Total Organic Carbon (TOC) present in the sample should be considered as non-purgeable TOC.

Encryption Key

Katherine Szozda

Katherine Szozda
Project Manager
02 Sep 2020 15:26:43

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

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

=====

BV Labs 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 Signature Page.



SALINITY IN WATER (WATER)

BV Labs ID		NKM978		
Sampling Date		2020/08/16 10:30		
COC Number		na		
	UNITS	MEL-26	RDL	QC Batch
Calculated Parameters				
Sodium Adsorption Ratio	N/A	28	0.10	6913133
Total dissolved solids (calc., EC)	mg/L	31000	10	6913134
ELEMENTS				
Dissolved Calcium (Ca)	mg/L	1200	6.0	6913131
Dissolved Magnesium (Mg)	mg/L	670	4.0	6913131
Dissolved Potassium (K)	mg/L	210	6.0	6913131
Dissolved Sodium (Na)	mg/L	5000	10	6913131
Inorganics				
Dissolved Chloride (Cl-)	mg/L	11000 (1)	100	6913128
Conductivity	uS/cm	31000	2.0	6913129
pH	pH	7.44	N/A	6913132
Dissolved Sulphate (SO4)	mg/L	1200 (1)	10	6913128
RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable (1) Detection limits raised due to dilution to bring analyte within the calibrated range.				



BUREAU
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BV Labs Job #: COL2878
Report Date: 2020/09/02

Agnico-Eagle
Site Location: MELIADINE
Your P.O. #: OL-891917
Sampler Initials: GL

DISS. ICPMS METALS FOR FEDERAL INT. GWQG (WATER)

BV Labs ID		NKM978		
Sampling Date		2020/08/16 10:30		
COC Number		na		
	UNITS	MEL-26	RDL	QC Batch
Calculated Parameters				
Dissolved Hardness (CaCO3)	mg/L	5950	0.50	6908298
Metals				
Dissolved Aluminum (Al)	ug/L	111	60	6908300
Dissolved Antimony (Sb)	ug/L	<10	10	6908300
Dissolved Arsenic (As)	ug/L	14.7	2.0	6908300
Dissolved Barium (Ba)	ug/L	261	20	6908300
Dissolved Beryllium (Be)	ug/L	<2.0	2.0	6908300
Dissolved Bismuth (Bi)	ug/L	<20	20	6908300
Dissolved Boron (B)	ug/L	<1000	1000	6908300
Dissolved Cadmium (Cd)	ug/L	0.22	0.20	6908300
Dissolved Chromium (Cr)	ug/L	<20	20	6908300
Dissolved Cobalt (Co)	ug/L	9.5	4.0	6908300
Dissolved Copper (Cu)	ug/L	5.7	4.0	6908300
Dissolved Iron (Fe)	ug/L	<100	100	6908300
Dissolved Lead (Pb)	ug/L	5.0	4.0	6908300
Dissolved Lithium (Li)	ug/L	676	40	6908300
Dissolved Manganese (Mn)	ug/L	378	20	6908300
Dissolved Molybdenum (Mo)	ug/L	<20	20	6908300
Dissolved Nickel (Ni)	ug/L	49	20	6908300
Dissolved Selenium (Se)	ug/L	<2.0	2.0	6908300
Dissolved Silicon (Si)	ug/L	2110	2000	6908300
Dissolved Silver (Ag)	ug/L	<0.40	0.40	6908300
Dissolved Strontium (Sr)	ug/L	31300	20	6908300
Dissolved Thallium (Tl)	ug/L	<0.20	0.20	6908300
Dissolved Tin (Sn)	ug/L	<100	100	6908300
Dissolved Titanium (Ti)	ug/L	<100	100	6908300
Dissolved Uranium (U)	ug/L	6.1	2.0	6908300
Dissolved Vanadium (V)	ug/L	<100	100	6908300
Dissolved Zinc (Zn)	ug/L	<100	100	6908300
Dissolved Zirconium (Zr)	ug/L	<2.0	2.0	6908300
Dissolved Calcium (Ca)	mg/L	1230	1.0	6908299
RDL = Reportable Detection Limit				
QC Batch = Quality Control Batch				



BV Labs Job #: COL2878
Report Date: 2020/09/02

Agnico-Eagle
Site Location: MELIADINE
Your P.O. #: OL-891917
Sampler Initials: GL

DISS. ICPMS METALS FOR FEDERAL INT. GWQG (WATER)

BV Labs ID		NKM978		
Sampling Date		2020/08/16 10:30		
COC Number		na		
	UNITS	MEL-26	RDL	QC Batch
Dissolved Magnesium (Mg)	mg/L	700	1.0	6908299
Dissolved Potassium (K)	mg/L	218	1.0	6908299
Dissolved Sodium (Na)	mg/L	4760	1.0	6908299
Dissolved Sulphur (S)	mg/L	489	60	6908299
RDL = Reportable Detection Limit QC Batch = Quality Control Batch				



BUREAU
VERITAS

BV Labs Job #: COL2878

Report Date: 2020/09/02

Agnico-Eagle

Site Location: MELIADINE

Your P.O. #: OL-891917

Sampler Initials: GL

TOTAL ICPMS METALS FOR CCME CEQG FOR SW (WATER)

BV Labs ID		NKM978		
Sampling Date		2020/08/16 10:30		
COC Number		na		
	UNITS	MEL-26	RDL	QC Batch
Metals				
Total Aluminum (Al)	ug/L	502	30	6908297
Total Antimony (Sb)	ug/L	<5.0	5.0	6908297
Total Arsenic (As)	ug/L	18.4	1.0	6908297
Total Barium (Ba)	ug/L	260	10	6908297
Total Beryllium (Be)	ug/L	<1.0	1.0	6908297
Total Bismuth (Bi)	ug/L	<10	10	6908297
Total Boron (B)	ug/L	888	500	6908297
Total Cadmium (Cd)	ug/L	0.21	0.10	6908297
Total Chromium (Cr)	ug/L	<10	10	6908297
Total Cobalt (Co)	ug/L	9.8	2.0	6908297
Total Copper (Cu)	ug/L	6.3	5.0	6908297
Total Iron (Fe)	ug/L	<100	100	6908297
Total Lead (Pb)	ug/L	5.1	2.0	6908297
Total Lithium (Li)	ug/L	658	20	6908297
Total Manganese (Mn)	ug/L	377	10	6908297
Total Molybdenum (Mo)	ug/L	22	10	6908297
Total Nickel (Ni)	ug/L	52	10	6908297
Total Selenium (Se)	ug/L	1.3	1.0	6908297
Total Silicon (Si)	ug/L	2160	1000	6908297
Total Silver (Ag)	ug/L	<0.20	0.20	6908297
Total Strontium (Sr)	ug/L	31600	10	6908297
Total Thallium (Tl)	ug/L	0.19	0.10	6908297
Total Tin (Sn)	ug/L	<50	50	6908297
Total Titanium (Ti)	ug/L	<50	50	6908297
Total Uranium (U)	ug/L	6.9	1.0	6908297
Total Vanadium (V)	ug/L	<50	50	6908297
Total Zinc (Zn)	ug/L	<50	50	6908297
Total Zirconium (Zr)	ug/L	<1.0	1.0	6908297
Total Calcium (Ca)	ug/L	1240000	500	6908296
Total Magnesium (Mg)	ug/L	680000	500	6908296
Total Potassium (K)	ug/L	215000	500	6908296
RDL = Reportable Detection Limit				
QC Batch = Quality Control Batch				



BV Labs Job #: COL2878
Report Date: 2020/09/02

Agnico-Eagle
Site Location: MELIADINE
Your P.O. #: OL-891917
Sampler Initials: GL

TOTAL ICPMS METALS FOR CCME CEQG FOR SW (WATER)

BV Labs ID		NKM978		
Sampling Date		2020/08/16 10:30		
COC Number		na		
	UNITS	MEL-26	RDL	QC Batch
Total Sodium (Na)	ug/L	4700000	500	6908296
Total Sulphur (S)	ug/L	477000	30000	6908296
Calculated Parameters				
Total Hardness (CaCO3)	ug/L	5890000	500	6908295
RDL = Reportable Detection Limit QC Batch = Quality Control Batch				



BV Labs Job #: COL2878
Report Date: 2020/09/02

Agnico-Eagle
Site Location: MELIADINE
Your P.O. #: OL-891917
Sampler Initials: GL

RESULTS OF ANALYSES OF WATER

BV Labs ID		NKM978			NKM978		
Sampling Date		2020/08/16 10:30			2020/08/16 10:30		
COC Number		na			na		
	UNITS	MEL-26	RDL	QC Batch	MEL-26 Lab-Dup	RDL	QC Batch
Calculated Parameters							
Bicarb. Alkalinity (calc. as CaCO ₃)	mg/L	67	1.0	6900387			
Calculated TDS	mg/L	18000	1.0	6900580			
Carb. Alkalinity (calc. as CaCO ₃)	mg/L	<1.0	1.0	6900387			
Inorganics							
Total Ammonia-N	mg/L	35	0.25	6902381			
Conductivity	umho/cm	32000	1.0	6901008	32000	1.0	6901008
Free Cyanide (CN)	ug/L	19	1.0	6910840			
Total Dissolved Solids	mg/L	21100	20	6901635			
Fluoride (F ⁻)	mg/L	<0.10	0.10	6901452	<0.10	0.10	6901452
Total Kjeldahl Nitrogen (TKN)	mg/L	49	5.0	6902394			
Dissolved Organic Carbon	mg/L	22	0.40	6898439			
Total Organic Carbon (TOC)	mg/L	23	0.40	6902357			
Orthophosphate (P)	mg/L	<0.010	0.010	6898675	<0.010	0.010	6898675
Dissolved Oxygen	mg/L	10.1		6901307	10.1		6901307
pH	pH	7.29		6901010	7.30		6901010
Total Phosphorus	mg/L	0.068	0.020	6902294			
Reactive Silica (SiO ₂)	mg/L	4.4 (1)	0.50	6910839	3.7	0.50	6910839
Total Suspended Solids	mg/L	18	1	6900136			
Dissolved Sulphate (SO ₄)	mg/L	1200	10	6898673	1200	10	6898673
Total Cyanide (CN)	mg/L	0.063	0.0050	6900740			
Turbidity	NTU	0.8	0.1	6902507			
Volatile Suspended Solids	mg/L	11	1	6900138			
WAD Cyanide (Free)	mg/L	0.017	0.0010	6899941			
Alkalinity (Total as CaCO ₃)	mg/L	67	1.0	6901007	68	1.0	6901007
Dissolved Chloride (Cl ⁻)	mg/L	9500	100	6898672	9900	100	6898672
Nitrite (N)	mg/L	1.16	0.010	6901420	1.16	0.010	6901420
Nitrate (N)	mg/L	52.4	0.50	6901420	52.8	0.50	6901420
Nitrate + Nitrite (N)	mg/L	53.5	0.50	6901420	53.9	0.50	6901420
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate (1) Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.							



BUREAU
VERITAS

BV Labs Job #: COL2878
Report Date: 2020/09/02

Agnico-Eagle
Site Location: MELIADINE
Your P.O. #: OL-891917
Sampler Initials: GL

RESULTS OF ANALYSES OF WATER

BV Labs ID		NKM978			NKM978		
Sampling Date		2020/08/16 10:30			2020/08/16 10:30		
COC Number		na			na		
	UNITS	MEL-26	RDL	QC Batch	MEL-26 Lab-Dup	RDL	QC Batch
RADIONUCLIDE							
Radium-226	Bq/L	0.18	0.0050	6907625			
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate							



BUREAU
VERITAS

BV Labs Job #: COL2878
Report Date: 2020/09/02

Agnico-Eagle
Site Location: MELIADINE
Your P.O. #: OL-891917
Sampler Initials: GL

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

BV Labs ID		NKM978		
Sampling Date		2020/08/16 10:30		
COC Number		na		
	UNITS	MEL-26	RDL	QC Batch
Metals				
Mercury (Hg)	mg/L	<0.00001	0.00001	6902496
Dissolved Mercury (Hg)	mg/L	<0.00001	0.00001	6902491
RDL = Reportable Detection Limit				
QC Batch = Quality Control Batch				



BV Labs Job #: COL2878
Report Date: 2020/09/02

Agnico-Eagle
Site Location: MELIADINE
Your P.O. #: OL-891917
Sampler Initials: GL

TEST SUMMARY

BV Labs ID: NKM978
Sample ID: MEL-26
Matrix: Water

Collected: 2020/08/16
Shipped:
Received: 2020/08/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	6901007	N/A	2020/08/21	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	6900387	N/A	2020/08/27	Automated Statchk
Chloride by Automated Colourimetry	KONE	6898672	N/A	2020/08/21	Deonarine Ramnarine
Conductivity	AT	6901008	N/A	2020/08/21	Surinder Rai
Free (WAD) Cyanide	SKAL/CN	6899941	N/A	2020/08/20	Louise Harding
Total Cyanide	SKAL/CN	6900740	2020/08/20	2020/08/20	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	6898439	N/A	2020/08/20	Nimarta Singh
Dissolved Oxygen	DO	6901307	2020/08/20	2020/08/20	Navjot Kaur Gill
Fluoride	ISE	6901452	2020/08/20	2020/08/21	Surinder Rai
Dissolved Mercury (low level)	CV/AA	6902491	2020/08/21	2020/08/21	Meghaben Patel
Mercury (low level)	CV/AA	6902496	2020/08/21	2020/08/21	Meghaben Patel
Chloride & Sulphate by Auto Colorimetry	KONE	6913128	N/A	2020/08/24	Serena Tian
Cyanide (Free)	SPEC	6910840	2020/08/25	2020/08/25	Taylor Mullings
Conductivity @25C	COND	6913129	N/A	2020/08/23	Tracy (Jing) Ling
Hardness Total (calculated as CaCO3)	CALC	6908295	N/A	2020/08/25	Automated Statchk
Hardness (calculated as CaCO3)	CALC	6908298	N/A	2020/08/25	Automated Statchk
Elements by ICP-Dissolved-Lab Filtered	ICP	6913131	N/A	2020/08/25	Mary Anne Dela Cruz
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	ICP	6908299	N/A	2020/08/25	Automated Statchk
Elements by CRC ICPMS (dissolved)	ICP/MS	6908300	N/A	2020/08/24	Andrew An
Na, K, Ca, Mg, S by CRC ICPMS (total)	ICP	6908296	2020/08/25	2020/08/25	Automated Statchk
Elements by CRC ICPMS (total)	ICP/MS	6908297	2020/08/24	2020/08/25	Valentina Balada
pH @25°C	AT/PH	6913132	N/A	2020/08/23	Tracy (Jing) Ling
Sodium Adsorption Ratio	CALC	6913133	N/A	2020/08/25	Automated Statchk
Silica (Reactive)	KONE	6910839	N/A	2020/08/25	Serena Tian
Total Dissolved Solids (Calc. from EC)	CALC	6913134	N/A	2020/08/24	Automated Statchk
Total Ammonia-N	LACH/NH4	6902381	N/A	2020/08/21	Amanpreet Sappal
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	6901420	N/A	2020/08/21	Chandra Nandlal
pH	AT	6901010	2020/08/20	2020/08/21	Surinder Rai
Orthophosphate	KONE	6898675	N/A	2020/08/21	Kazzandra Adeva
Radium-226 Low Level	AS	6907625	N/A	2020/09/01	Blake Barber
Sulphate by Automated Colourimetry	KONE	6898673	N/A	2020/08/21	Deonarine Ramnarine
Calculated Total Dissolved Solids	CALC	6900580	N/A	2020/08/27	Automated Statchk
Total Dissolved Solids	BAL	6901635	2020/08/20	2020/08/21	Shivani Desai
Total Kjeldahl Nitrogen in Water	SKAL	6902394	2020/08/21	2020/08/21	Rajni Tyagi
Total Organic Carbon (TOC)	TOCV/NDIR	6902357	N/A	2020/08/21	Nimarta Singh
Total Phosphorus (Colourimetric)	LACH/P	6902294	2020/08/21	2020/08/21	Shivani Shivani
Low Level Total Suspended Solids	BAL	6900136	2020/08/20	2020/08/21	Massarat Jan
Turbidity	AT	6902507	N/A	2020/08/21	Neil Dassanayake
Low Level Volatile Suspended Solids	BAL	6900138	2020/08/20	2020/08/21	Massarat Jan



BV Labs Job #: COL2878
Report Date: 2020/09/02

Agnico-Eagle
Site Location: MELIADINE
Your P.O. #: OL-891917
Sampler Initials: GL

TEST SUMMARY

BV Labs ID: NKM978 Dup
Sample ID: MEL-26
Matrix: Water

Collected: 2020/08/16
Shipped:
Received: 2020/08/19

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	6901007	N/A	2020/08/21	Surinder Rai
Chloride by Automated Colourimetry	KONE	6898672	N/A	2020/08/21	Deonarine Ramnarine
Conductivity	AT	6901008	N/A	2020/08/21	Surinder Rai
Dissolved Oxygen	DO	6901307	2020/08/20	2020/08/20	Navjot Kaur Gill
Fluoride	ISE	6901452	2020/08/20	2020/08/21	Surinder Rai
Silica (Reactive)	KONE	6910839	N/A	2020/08/25	Serena Tian
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	6901420	N/A	2020/08/21	Chandra Nandlal
pH	AT	6901010	2020/08/20	2020/08/21	Surinder Rai
Orthophosphate	KONE	6898675	N/A	2020/08/21	Kazzandra Adeva
Sulphate by Automated Colourimetry	KONE	6898673	N/A	2020/08/21	Deonarine Ramnarine



GENERAL COMMENTS

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

Package 1	12.0°C
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Sample NKM978 [MEL-26] : Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results

Sample was not submitted in an appropriate container for free cyanide analysis. Results may have a high bias due to decomposition of hexacyanoferrate and some other metal-cyanide complexes to free cyanide

Sample pH <12, preservation incomplete. Due to volatility of analyte, a low bias in the results is likely.

SALINITY IN WATER (WATER)

Sample NKM978 [MEL-26] Elements by ICP-Dissolved-Lab Filtered: Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.

DISS. ICPMS METALS FOR FEDERAL INT. GWQG (WATER)

Sample NKM978 [MEL-26] Elements by CRC ICPMS (dissolved): RDL raised due to concentration over linear range, sample dilution required.

TOTAL ICPMS METALS FOR CCME CEQG FOR SW (WATER)

Sample NKM978 [MEL-26] Elements by CRC ICPMS (total): RDL raised due to concentration over linear range, sample dilution required.

Results relate only to the items tested.



BV Labs Job #: COL2878
Report Date: 2020/09/02

QUALITY ASSURANCE REPORT

Agnico-Eagle
Site Location: MELIADINE
Your P.O. #: OL-891917
Sampler Initials: GL

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6898439	Dissolved Organic Carbon	2020/08/20	97	80 - 120	99	80 - 120	<0.40	mg/L	2.4	20		
6898672	Dissolved Chloride (Cl ⁻)	2020/08/21	NC	80 - 120	103	80 - 120	<1.0	mg/L	3.3	20		
6898673	Dissolved Sulphate (SO ₄)	2020/08/21	NC	75 - 125	104	80 - 120	<1.0	mg/L	0.41	20		
6898675	Orthophosphate (P)	2020/08/21	93	75 - 125	100	80 - 120	<0.010	mg/L	NC	25		
6899941	WAD Cyanide (Free)	2020/08/20	101	80 - 120	101	80 - 120	<0.0010	mg/L	NC	20		
6900136	Total Suspended Solids	2020/08/21					<1	mg/L	18	25	101	85 - 115
6900138	Volatile Suspended Solids	2020/08/21					<1	mg/L	9.5	25		
6900740	Total Cyanide (CN)	2020/08/20	81	80 - 120	97	80 - 120	<0.0050	mg/L	NC	20		
6901007	Alkalinity (Total as CaCO ₃)	2020/08/21			95	85 - 115	<1.0	mg/L	1.2	20		
6901008	Conductivity	2020/08/21			101	85 - 115	<1.0	umho/cm	0	25		
6901010	pH	2020/08/21			102	98 - 103			0.062	N/A		
6901420	Nitrate (N)	2020/08/21	NC	80 - 120	96	80 - 120	<0.10	mg/L	0.75	20		
6901420	Nitrite (N)	2020/08/21	NC	80 - 120	104	80 - 120	<0.010	mg/L	0.30	20		
6901452	Fluoride (F ⁻)	2020/08/21	65 (1)	80 - 120	99	80 - 120	<0.10	mg/L	NC	20		
6901635	Total Dissolved Solids	2020/08/21					<10	mg/L	5.9	25	95	90 - 110
6902294	Total Phosphorus	2020/08/21	96	80 - 120	97	80 - 120	<0.020	mg/L	2.6	20	96	80 - 120
6902357	Total Organic Carbon (TOC)	2020/08/21	98	80 - 120	100	80 - 120	<0.40	mg/L	1.3	20		
6902381	Total Ammonia-N	2020/08/21	99	75 - 125	99	80 - 120	<0.050	mg/L	20	20		
6902394	Total Kjeldahl Nitrogen (TKN)	2020/08/21	97	80 - 120	99	80 - 120	<0.10	mg/L	4.1	20	101	80 - 120
6902491	Dissolved Mercury (Hg)	2020/08/21	103	75 - 125	106	80 - 120	<0.00001	mg/L	NC	20		
6902496	Mercury (Hg)	2020/08/21	97	75 - 125	102	80 - 120	<0.00001	mg/L	NC	20		
6902507	Turbidity	2020/08/21			109	85 - 115	<0.1	NTU	1.7	20		
6907625	Radium-226	2020/09/01			93	85 - 115	<0.0050	Bq/L	NC	N/A		
6908297	Total Aluminium (Al)	2020/08/25	104	80 - 120	105	80 - 120	<3.0	ug/L				
6908297	Total Antimony (Sb)	2020/08/25	102	80 - 120	101	80 - 120	<0.50	ug/L				
6908297	Total Arsenic (As)	2020/08/25	105	80 - 120	103	80 - 120	<0.10	ug/L				
6908297	Total Barium (Ba)	2020/08/25	NC	80 - 120	108	80 - 120	<1.0	ug/L				
6908297	Total Beryllium (Be)	2020/08/25	102	80 - 120	104	80 - 120	<0.10	ug/L				
6908297	Total Bismuth (Bi)	2020/08/25	95	80 - 120	102	80 - 120	<1.0	ug/L				
6908297	Total Boron (B)	2020/08/25	95	80 - 120	98	80 - 120	<50	ug/L				
6908297	Total Cadmium (Cd)	2020/08/25	102	80 - 120	102	80 - 120	<0.010	ug/L				



BV Labs Job #: COL2878
Report Date: 2020/09/02

QUALITY ASSURANCE REPORT(CONT'D)

Agnico-Eagle
Site Location: MELIADINE
Your P.O. #: OL-891917
Sampler Initials: GL

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6908297	Total Chromium (Cr)	2020/08/25	102	80 - 120	106	80 - 120	<1.0	ug/L				
6908297	Total Cobalt (Co)	2020/08/25	100	80 - 120	106	80 - 120	<0.20	ug/L				
6908297	Total Copper (Cu)	2020/08/25	97	80 - 120	104	80 - 120	<0.50	ug/L				
6908297	Total Iron (Fe)	2020/08/25	104	80 - 120	110	80 - 120	<10	ug/L				
6908297	Total Lead (Pb)	2020/08/25	103	80 - 120	106	80 - 120	<0.20	ug/L				
6908297	Total Lithium (Li)	2020/08/25	102	80 - 120	106	80 - 120	<2.0	ug/L				
6908297	Total Manganese (Mn)	2020/08/25	104	80 - 120	107	80 - 120	<1.0	ug/L				
6908297	Total Molybdenum (Mo)	2020/08/25	NC	80 - 120	103	80 - 120	<1.0	ug/L				
6908297	Total Nickel (Ni)	2020/08/25	100	80 - 120	107	80 - 120	<1.0	ug/L				
6908297	Total Selenium (Se)	2020/08/25	105	80 - 120	105	80 - 120	<0.10	ug/L				
6908297	Total Silicon (Si)	2020/08/25	105	80 - 120	107	80 - 120	<100	ug/L				
6908297	Total Silver (Ag)	2020/08/25	101	80 - 120	102	80 - 120	<0.020	ug/L				
6908297	Total Strontium (Sr)	2020/08/25	NC	80 - 120	106	80 - 120	<1.0	ug/L				
6908297	Total Thallium (Tl)	2020/08/25	100	80 - 120	101	80 - 120	<0.010	ug/L				
6908297	Total Tin (Sn)	2020/08/25	102	80 - 120	101	80 - 120	<5.0	ug/L				
6908297	Total Titanium (Ti)	2020/08/25	105	80 - 120	107	80 - 120	<5.0	ug/L				
6908297	Total Uranium (U)	2020/08/25	111	80 - 120	111	80 - 120	<0.10	ug/L				
6908297	Total Vanadium (V)	2020/08/25	104	80 - 120	105	80 - 120	<5.0	ug/L				
6908297	Total Zinc (Zn)	2020/08/25	100	80 - 120	107	80 - 120	<5.0	ug/L				
6908297	Total Zirconium (Zr)	2020/08/25	105	80 - 120	102	80 - 120	<0.10	ug/L				
6908300	Dissolved Aluminum (Al)	2020/08/22	96	80 - 120	101	80 - 120	<3.0	ug/L				
6908300	Dissolved Antimony (Sb)	2020/08/22	98	80 - 120	102	80 - 120	<0.50	ug/L				
6908300	Dissolved Arsenic (As)	2020/08/22	110	80 - 120	104	80 - 120	<0.10	ug/L				
6908300	Dissolved Barium (Ba)	2020/08/22	NC	80 - 120	106	80 - 120	<1.0	ug/L				
6908300	Dissolved Beryllium (Be)	2020/08/22	96	80 - 120	101	80 - 120	<0.10	ug/L				
6908300	Dissolved Bismuth (Bi)	2020/08/22	83	80 - 120	94	80 - 120	<1.0	ug/L				
6908300	Dissolved Boron (B)	2020/08/22	100	80 - 120	104	80 - 120	<50	ug/L				
6908300	Dissolved Cadmium (Cd)	2020/08/22	96	80 - 120	102	80 - 120	<0.010	ug/L				
6908300	Dissolved Chromium (Cr)	2020/08/22	95	80 - 120	102	80 - 120	<1.0	ug/L				
6908300	Dissolved Cobalt (Co)	2020/08/22	90	80 - 120	101	80 - 120	<0.20	ug/L				
6908300	Dissolved Copper (Cu)	2020/08/22	NC	80 - 120	99	80 - 120	<0.20	ug/L				
6908300	Dissolved Iron (Fe)	2020/08/22	94	80 - 120	104	80 - 120	<5.0	ug/L				



BV Labs Job #: COL2878
Report Date: 2020/09/02

QUALITY ASSURANCE REPORT(CONT'D)

Agnico-Eagle
Site Location: MELIADINE
Your P.O. #: OL-891917
Sampler Initials: GL

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6908300	Dissolved Lead (Pb)	2020/08/22	95	80 - 120	100	80 - 120	<0.20	ug/L				
6908300	Dissolved Lithium (Li)	2020/08/22	94	80 - 120	98	80 - 120	<2.0	ug/L				
6908300	Dissolved Manganese (Mn)	2020/08/22	NC	80 - 120	101	80 - 120	<1.0	ug/L				
6908300	Dissolved Molybdenum (Mo)	2020/08/22	109	80 - 120	106	80 - 120	<1.0	ug/L				
6908300	Dissolved Nickel (Ni)	2020/08/22	87	80 - 120	101	80 - 120	<1.0	ug/L				
6908300	Dissolved Selenium (Se)	2020/08/22	113	80 - 120	105	80 - 120	<0.10	ug/L				
6908300	Dissolved Silicon (Si)	2020/08/22	NC	80 - 120	104	80 - 120	<100	ug/L				
6908300	Dissolved Silver (Ag)	2020/08/22	93	80 - 120	100	80 - 120	<0.020	ug/L				
6908300	Dissolved Strontium (Sr)	2020/08/22	NC	80 - 120	107	80 - 120	<1.0	ug/L				
6908300	Dissolved Thallium (Tl)	2020/08/22	98	80 - 120	86	80 - 120	<0.010	ug/L				
6908300	Dissolved Tin (Sn)	2020/08/22	96	80 - 120	102	80 - 120	<5.0	ug/L				
6908300	Dissolved Titanium (Ti)	2020/08/22	102	80 - 120	103	80 - 120	<5.0	ug/L				
6908300	Dissolved Uranium (U)	2020/08/22	101	80 - 120	103	80 - 120	<0.10	ug/L				
6908300	Dissolved Vanadium (V)	2020/08/22	99	80 - 120	103	80 - 120	<5.0	ug/L				
6908300	Dissolved Zinc (Zn)	2020/08/22	84	80 - 120	103	80 - 120	<5.0	ug/L				
6908300	Dissolved Zirconium (Zr)	2020/08/22	109	80 - 120	107	80 - 120	<0.10	ug/L				
6910839	Reactive Silica (SiO2)	2020/08/25	105	80 - 120	108	80 - 120	<0.050	mg/L	17	20		
6910840	Free Cyanide (CN)	2020/08/25	104	80 - 120	106	80 - 120	<1.0	ug/L	NC	20		
6913128	Dissolved Chloride (Cl-)	2020/08/24	106	80 - 120	103	80 - 120	<1.0	mg/L				
6913128	Dissolved Sulphate (SO4)	2020/08/24	NC	80 - 120	107	80 - 120	<1.0	mg/L				
6913129	Conductivity	2020/08/23			101	90 - 110	<2.0	uS/cm				
6913131	Dissolved Calcium (Ca)	2020/08/25	NC	80 - 120	104	80 - 120	<0.30	mg/L				
6913131	Dissolved Magnesium (Mg)	2020/08/25	NC	80 - 120	100	80 - 120	<0.20	mg/L				
6913131	Dissolved Potassium (K)	2020/08/25	107	80 - 120	104	80 - 120	<0.30	mg/L				
6913131	Dissolved Sodium (Na)	2020/08/25	NC	80 - 120	102	80 - 120	<0.50	mg/L				



BV Labs Job #: COL2878
Report Date: 2020/09/02

QUALITY ASSURANCE REPORT(CONT'D)

Agnico-Eagle
Site Location: MELIADINE
Your P.O. #: OL-891917
Sampler Initials: GL

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6913132	pH	2020/08/23			99	97 - 103						

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 $\leq 2 \times \text{RDL}$).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.



BUREAU
VERITAS

BV Labs Job #: COL2878
Report Date: 2020/09/02

Agnico-Eagle
Site Location: MELIADINE
Your P.O. #: OL-891917
Sampler Initials: GL

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Anastassia Hamanov, Scientific Specialist

Brad Newman, Scientific Service Specialist

David Huang, BBY Scientific Specialist

Harry (Peng) Liang, Senior Analyst

Steven Simpson, Lab Director

BV Labs 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 Signature Page.



BUREAU
VERITAS

BV Labs Job #: COL2878

Report Date: 2020/09/02

Agnico-Eagle

Site Location: MELIADINE

Your P.O. #: OL-891917

Sampler Initials: GL

Exceedance Summary Table – Metal Mining Effluent Reg
Result Exceedances

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



Your P.O. #: OL-891917
 Site#: 62 48' 01.99" 92 06' 00.05"
 Site Location: MELIADINE
 Your C.O.C. #: na

Attention: Reporting

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

Report Date: 2020/09/04
 Report #: R6319962
 Version: 4 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: COM1484

Received: 2020/08/27, 13:37

Sample Matrix: Water
 # Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity (1)	1	N/A	2020/08/31	CAM SOP-00448	SM 23 2320 B m
Carbonate, Bicarbonate and Hydroxide (1)	1	N/A	2020/09/04	CAM SOP-00102	APHA 4500-CO2 D
Chloride by Automated Colourimetry (1)	1	N/A	2020/08/31	CAM SOP-00463	SM 23 4500-Cl E m
Conductivity (1)	1	N/A	2020/08/31	CAM SOP-00414	SM 23 2510 m
Free (WAD) Cyanide (1)	1	N/A	2020/08/28	CAM SOP-00457	OMOE E3015 m
Total Cyanide (1)	1	2020/08/28	2020/08/28	CAM SOP-00457	OMOE E3015 5 m
Dissolved Organic Carbon (DOC) (1, 5)	1	N/A	2020/08/28	CAM SOP-00446	SM 23 5310 B m
Dissolved Oxygen (1)	1	2020/08/28	2020/08/28	CAM SOP-00427	SM 23 4500 O G m
Fluoride (1)	1	2020/08/28	2020/08/31	CAM SOP-00449	SM 23 4500-F C m
Dissolved Mercury (low level) (1)	1	2020/08/31	2020/08/31	CAM SOP-00453	EPA 7470 m
Mercury (low level) (1)	1	2020/08/31	2020/08/31	CAM SOP-00453	EPA 7470 m
Chloride & Sulphate by Auto Colorimetry (2)	1	N/A	2020/08/30	AB SOP-00020 / AB SOP-00018	SM23 4500-CL/SO4-E m
Cyanide (Free) (2)	1	2020/09/04	2020/09/04	CAL SOP-00266	EPA 9016d R0 m
Conductivity @25C (2)	1	N/A	2020/08/29	AB SOP-00005	SM 23 2510 B m
Hardness Total (calculated as CaCO3) (3, 6)	1	N/A	2020/09/01	BBY WI-00033	Auto Calc
Hardness (calculated as CaCO3) (3)	1	N/A	2020/09/01	BBY WI-00033	Auto Calc
Elements by ICP-Dissolved-Lab Filtered (2)	1	N/A	2020/08/31	AB SOP-00042	EPA 6010d R5 m
Na, K, Ca, Mg, S by CRC ICPMS (diss.) (3)	1	N/A	2020/09/01	BBY7SOP-00002	EPA 6020B R2 m
Elements by CRC ICPMS (dissolved) (3)	1	N/A	2020/08/31	BBY7SOP-00002	EPA 6020B R2 m
Na, K, Ca, Mg, S by CRC ICPMS (total) (3)	1	2020/08/28	2020/09/01	BBY7SOP-00002	EPA 6020B R2 m
Elements by CRC ICPMS (total) (3)	1	2020/08/31	2020/09/01	BBY7SOP-00003/02	EPA 6020B R2 m
pH @25°C (2, 7)	1	N/A	2020/08/29	AB SOP-00005	SM 23 4500-H+B m
Sodium Adsorption Ratio (2)	1	N/A	2020/08/31		Auto Calc
Silica (Reactive) (2)	1	N/A	2020/09/01	AB SOP-00011	EPA370.1 R1978 m
Total Dissolved Solids (Calc. from EC) (2)	1	N/A	2020/08/30		Auto Calc
Total Ammonia-N (1)	1	N/A	2020/08/31	CAM SOP-00441	USGS I-2522-90 m
Nitrate (NO3) and Nitrite (NO2) in Water (1, 8)	1	N/A	2020/08/31	CAM SOP-00440	SM 23 4500-NO3I/NO2B
pH (1)	1	2020/08/28	2020/08/31	CAM SOP-00413	SM 4500H+ B m
Orthophosphate (1)	1	N/A	2020/08/31	CAM SOP-00461	EPA 365.1 m



Your P.O. #: OL-891917
 Site#: 62 48' 01.99" 92 06' 00.05"
 Site Location: MELIADINE
 Your C.O.C. #: na

Attention: Reporting

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

Report Date: 2020/09/04
 Report #: R6319962
 Version: 4 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: COM1484

Received: 2020/08/27, 13:37

Sample Matrix: Water
 # Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Radium-226 Low Level (4, 9)	1	N/A	2020/09/02	BQL SOP-00006 BQL SOP-00017 BQL SOP-00032	Alpha Spectrometry
Sulphate by Automated Colourimetry (1)	1	N/A	2020/08/31	CAM SOP-00464	EPA 375.4 m
Calculated Total Dissolved Solids (1)	1	N/A	2020/09/04		Auto Calc
Total Dissolved Solids (1)	1	2020/09/01	2020/09/02	CAM SOP-00428	SM 23 2540C m
Total Kjeldahl Nitrogen in Water (1)	1	2020/08/28	2020/08/31	CAM SOP-00938	OMOE E3516 m
Total Organic Carbon (TOC) (1, 10)	1	N/A	2020/08/28	CAM SOP-00446	SM 23 5310B m
Total Phosphorus (Colourimetric) (1)	1	2020/08/28	2020/08/31	CAM SOP-00407	SM 23 4500 P B H m
Low Level Total Suspended Solids (1)	1	2020/08/28	2020/08/29	CAM SOP-00428	SM 23 2540D m
Turbidity (1)	1	N/A	2020/08/31	CAM SOP-00417	SM 23 2130 B m
Low Level Volatile Suspended Solids (1)	1	2020/08/28	2020/08/29	CAM SOP-00428	SM 23 2540

Remarks:

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

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in BV Labs profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and BV Labs 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.

BV Labs liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. BV Labs 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 BV Labs, unless otherwise agreed in writing. BV Labs 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 BV Labs, 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.



Your P.O. #: OL-891917
Site#: 62 48' 01.99" 92 06' 00.05"
Site Location: MELIADINE
Your C.O.C. #: na

Attention: Reporting

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

Report Date: 2020/09/04
Report #: R6319962
Version: 4 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: COM1484

Received: 2020/08/27, 13:37

- (1) This test was performed by Bureau Veritas Laboratories Mississauga
- (2) This test was performed by BVLabs Calgary via Mississauga
- (3) This test was performed by BVLabs Burnaby via Mississauga
- (4) This test was performed by Bureau Veritas Laboratories Kitimat
- (5) Dissolved Organic Carbon (DOC) present in the sample should be considered as non-purgeable DOC.
- (6) "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).
- (7) The CCME method requires pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the CCME holding time. Bureau Veritas Laboratories endeavours to analyze samples as soon as possible after receipt.
- (8) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.
- (9) Radium-226 results have not been corrected for blanks.
- (10) Total Organic Carbon (TOC) present in the sample should be considered as non-purgeable TOC.

Encryption Key

Julie Clement
Technical Account Manager
04 Sep 2020 17:38:45

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

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

=====

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BUREAU
VERITAS

BV Labs Job #: COM1484

Report Date: 2020/09/04

Agnico-Eagle

Site Location: MELIADINE

Your P.O. #: OL-891917

Sampler Initials: RS

SALINITY IN WATER (WATER)

BV Labs ID		NMH708			NMH708		
Sampling Date		2020/08/23 11:20			2020/08/23 11:20		
COC Number		na			na		
	UNITS	MEL-26	RDL	QC Batch	MEL-26 Lab-Dup	RDL	QC Batch
Calculated Parameters							
Sodium Adsorption Ratio	N/A	27	0.10	6929204			
Total dissolved solids (calc., EC)	mg/L	28000	10	6929205			
ELEMENTS							
Dissolved Calcium (Ca)	mg/L	1200 (1)	6.0	6929252	1200	6.0	6929252
Dissolved Magnesium (Mg)	mg/L	660 (1)	4.0	6929252	660	4.0	6929252
Dissolved Potassium (K)	mg/L	190	0.30	6929252	190	0.30	6929252
Dissolved Sodium (Na)	mg/L	4600 (1)	10	6929252	4500	10	6929252
Inorganics							
Dissolved Chloride (Cl-)	mg/L	9400 (1)	100	6918189			
Conductivity	uS/cm	28000	2.0	6929251			
pH	pH	7.68	N/A	6929253			
Dissolved Sulphate (SO4)	mg/L	1100 (1)	10	6918189			
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate N/A = Not Applicable (1) Detection limits raised due to dilution to bring analyte within the calibrated range.							



BUREAU
VERITAS

BV Labs Job #: COM1484
Report Date: 2020/09/04

Agnico-Eagle
Site Location: MELIADINE
Your P.O. #: OL-891917
Sampler Initials: RS

DISS. ICPMS METALS FOR FEDERAL INT. GWQG (WATER)

BV Labs ID		NMH708		
Sampling Date		2020/08/23 11:20		
COC Number		na		
	UNITS	MEL-26	RDL	QC Batch
Calculated Parameters				
Dissolved Hardness (CaCO3)	mg/L	4800	0.50	6921781
Metals				
Dissolved Aluminum (Al)	ug/L	163	30	6921783
Dissolved Antimony (Sb)	ug/L	<5.0	5.0	6921783
Dissolved Arsenic (As)	ug/L	11.6	1.0	6921783
Dissolved Barium (Ba)	ug/L	231	10	6921783
Dissolved Beryllium (Be)	ug/L	<1.0	1.0	6921783
Dissolved Bismuth (Bi)	ug/L	<10	10	6921783
Dissolved Boron (B)	ug/L	773	500	6921783
Dissolved Cadmium (Cd)	ug/L	0.15	0.10	6921783
Dissolved Chromium (Cr)	ug/L	<10	10	6921783
Dissolved Cobalt (Co)	ug/L	8.4	2.0	6921783
Dissolved Copper (Cu)	ug/L	4.7	2.0	6921783
Dissolved Iron (Fe)	ug/L	<50	50	6921783
Dissolved Lead (Pb)	ug/L	4.0	2.0	6921783
Dissolved Lithium (Li)	ug/L	521	20	6921783
Dissolved Manganese (Mn)	ug/L	335	10	6921783
Dissolved Molybdenum (Mo)	ug/L	10	10	6921783
Dissolved Nickel (Ni)	ug/L	46	10	6921783
Dissolved Selenium (Se)	ug/L	1.1	1.0	6921783
Dissolved Silicon (Si)	ug/L	1520	1000	6921783
Dissolved Silver (Ag)	ug/L	<0.20	0.20	6921783
Dissolved Strontium (Sr)	ug/L	26200	10	6921783
Dissolved Thallium (Tl)	ug/L	0.17	0.10	6921783
Dissolved Tin (Sn)	ug/L	<50	50	6921783
Dissolved Titanium (Ti)	ug/L	<50	50	6921783
Dissolved Uranium (U)	ug/L	5.0	1.0	6921783
Dissolved Vanadium (V)	ug/L	<50	50	6921783
Dissolved Zinc (Zn)	ug/L	<50	50	6921783
Dissolved Zirconium (Zr)	ug/L	<1.0	1.0	6921783
Dissolved Calcium (Ca)	mg/L	1050	0.50	6921782
RDL = Reportable Detection Limit				
QC Batch = Quality Control Batch				



BV Labs Job #: COM1484
Report Date: 2020/09/04

Agnico-Eagle
Site Location: MELIADINE
Your P.O. #: OL-891917
Sampler Initials: RS

DISS. ICPMS METALS FOR FEDERAL INT. GWQG (WATER)

BV Labs ID		NMH708		
Sampling Date		2020/08/23 11:20		
COC Number		na		
	UNITS	MEL-26	RDL	QC Batch
Dissolved Magnesium (Mg)	mg/L	526	0.50	6921782
Dissolved Potassium (K)	mg/L	172	0.50	6921782
Dissolved Sodium (Na)	mg/L	3760	0.50	6921782
Dissolved Sulphur (S)	mg/L	350	30	6921782
RDL = Reportable Detection Limit				
QC Batch = Quality Control Batch				



BV Labs Job #: COM1484
Report Date: 2020/09/04

Agnico-Eagle
Site Location: MELIADINE
Your P.O. #: OL-891917
Sampler Initials: RS

TOTAL ICPMS METALS FOR CCME CEQG FOR SW (WATER)

BV Labs ID		NMH708		
Sampling Date		2020/08/23 11:20		
COC Number		na		
	UNITS	MEL-26	RDL	QC Batch
Metals				
Total Aluminum (Al)	ug/L	345	30	6921780
Total Antimony (Sb)	ug/L	<5.0	5.0	6921780
Total Arsenic (As)	ug/L	13.4	1.0	6921780
Total Barium (Ba)	ug/L	238	10	6921780
Total Beryllium (Be)	ug/L	<1.0	1.0	6921780
Total Bismuth (Bi)	ug/L	<10	10	6921780
Total Boron (B)	ug/L	824	500	6921780
Total Cadmium (Cd)	ug/L	0.18	0.10	6921780
Total Chromium (Cr)	ug/L	<10	10	6921780
Total Cobalt (Co)	ug/L	8.8	2.0	6921780
Total Copper (Cu)	ug/L	5.5	5.0	6921780
Total Iron (Fe)	ug/L	<100	100	6921780
Total Lead (Pb)	ug/L	4.3	2.0	6921780
Total Lithium (Li)	ug/L	574	20	6921780
Total Manganese (Mn)	ug/L	333	10	6921780
Total Molybdenum (Mo)	ug/L	11	10	6921780
Total Nickel (Ni)	ug/L	45	10	6921780
Total Selenium (Se)	ug/L	1.4	1.0	6921780
Total Silicon (Si)	ug/L	1930	1000	6921780
Total Silver (Ag)	ug/L	0.51	0.20	6921780
Total Strontium (Sr)	ug/L	27300	10	6921780
Total Thallium (Tl)	ug/L	0.16	0.10	6921780
Total Tin (Sn)	ug/L	<50	50	6921780
Total Titanium (Ti)	ug/L	<50	50	6921780
Total Uranium (U)	ug/L	5.6	1.0	6921780
Total Vanadium (V)	ug/L	<50	50	6921780
Total Zinc (Zn)	ug/L	<50	50	6921780
Total Zirconium (Zr)	ug/L	<1.0	1.0	6921780
Total Calcium (Ca)	ug/L	1110000	500	6921779
Total Magnesium (Mg)	ug/L	563000	500	6921779
Total Potassium (K)	ug/L	184000	500	6921779
RDL = Reportable Detection Limit				
QC Batch = Quality Control Batch				



BV Labs Job #: COM1484
Report Date: 2020/09/04

Agnico-Eagle
Site Location: MELIADINE
Your P.O. #: OL-891917
Sampler Initials: RS

TOTAL ICPMS METALS FOR CCME CEQG FOR SW (WATER)

BV Labs ID		NMH708		
Sampling Date		2020/08/23 11:20		
COC Number		na		
	UNITS	MEL-26	RDL	QC Batch
Total Sodium (Na)	ug/L	4020000	500	6921779
Total Sulphur (S)	ug/L	400000	30000	6921779
Calculated Parameters				
Total Hardness (CaCO3)	ug/L	5080000	500	6921778
RDL = Reportable Detection Limit				
QC Batch = Quality Control Batch				



BV Labs Job #: COM1484
Report Date: 2020/09/04

Agnico-Eagle
Site Location: MELIADINE
Your P.O. #: OL-891917
Sampler Initials: RS

RESULTS OF ANALYSES OF WATER

BV Labs ID		NMH708			NMH708		
Sampling Date		2020/08/23 11:20			2020/08/23 11:20		
COC Number		na			na		
	UNITS	MEL-26	RDL	QC Batch	MEL-26 Lab-Dup	RDL	QC Batch
Calculated Parameters							
Bicarb. Alkalinity (calc. as CaCO ₃)	mg/L	69	1.0	6915317			
Calculated TDS	mg/L	17000	1.0	6915318			
Carb. Alkalinity (calc. as CaCO ₃)	mg/L	<1.0	1.0	6915317			
Inorganics							
Total Ammonia-N	mg/L	29	0.050	6915625			
Conductivity	umho/cm	28000	1.0	6916663			
Free Cyanide (CN)	ug/L	24 (1)	1.0	6929254	24	1.0	6929254
Total Dissolved Solids	mg/L	19400	20	6921753			
Fluoride (F-)	mg/L	<0.10	0.10	6916658			
Total Kjeldahl Nitrogen (TKN)	mg/L	41	5.0	6915632			
Dissolved Organic Carbon	mg/L	19	0.40	6912893			
Total Organic Carbon (TOC)	mg/L	20	0.40	6915812			
Orthophosphate (P)	mg/L	<0.010	0.010	6917388	<0.010	0.010	6917388
Dissolved Oxygen	mg/L	10.2		6915556			
pH	pH	7.45		6916653			
Total Phosphorus	mg/L	0.053	0.020	6915538			
Reactive Silica (SiO ₂)	mg/L	4.3 (2)	0.50	6923452	4.1	0.50	6923452
Total Suspended Solids	mg/L	46	2	6915672	49	2	6915672
Dissolved Sulphate (SO ₄)	mg/L	990	10	6917387	1000	10	6917387
Total Cyanide (CN)	mg/L	0.049	0.0050	6915406	0.050	0.0050	6915406
Turbidity	NTU	0.7	0.1	6916568			
Volatile Suspended Solids	mg/L	34	1	6915686	35	1	6915686
WAD Cyanide (Free)	mg/L	0.014	0.0010	6915404	0.015	0.0010	6915404
Alkalinity (Total as CaCO ₃)	mg/L	70	1.0	6916649			
Dissolved Chloride (Cl-)	mg/L	8700	120	6917382	8700	120	6917382
Nitrite (N)	mg/L	1.03	0.010	6917360			
Nitrate (N)	mg/L	58.3	0.50	6917360			
Nitrate + Nitrite (N)	mg/L	59.4	0.50	6917360			
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate (1) See general comments for notes regarding CNFREE-W (2) Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.							



BUREAU
VERITAS

BV Labs Job #: COM1484

Report Date: 2020/09/04

Agnico-Eagle

Site Location: MELIADINE

Your P.O. #: OL-891917

Sampler Initials: RS

RESULTS OF ANALYSES OF WATER

BV Labs ID		NMH708			NMH708		
Sampling Date		2020/08/23 11:20			2020/08/23 11:20		
COC Number		na			na		
	UNITS	MEL-26	RDL	QC Batch	MEL-26 Lab-Dup	RDL	QC Batch
RADIONUCLIDE							
Radium-226	Bq/L	0.18	0.0050	6918359			
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate							



BUREAU
VERITAS

BV Labs Job #: COM1484

Report Date: 2020/09/04

Agnico-Eagle

Site Location: MELIADINE

Your P.O. #: OL-891917

Sampler Initials: RS

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

BV Labs ID		NMH708			NMH708		
Sampling Date		2020/08/23 11:20			2020/08/23 11:20		
COC Number		na			na		
	UNITS	MEL-26	RDL	QC Batch	MEL-26 Lab-Dup	RDL	QC Batch
Metals							
Mercury (Hg)	mg/L	<0.00001	0.00001	6918286			
Dissolved Mercury (Hg)	mg/L	<0.00001	0.00001	6918281	<0.00001	0.00001	6918281
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							
Lab-Dup = Laboratory Initiated Duplicate							



BV Labs Job #: COM1484
Report Date: 2020/09/04

Agnico-Eagle
Site Location: MELIADINE
Your P.O. #: OL-891917
Sampler Initials: RS

TEST SUMMARY

BV Labs ID: NMH708
Sample ID: MEL-26
Matrix: Water

Collected: 2020/08/23
Shipped:
Received: 2020/08/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	6916649	N/A	2020/08/31	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	6915317	N/A	2020/09/04	Automated Statchk
Chloride by Automated Colourimetry	KONE	6917382	N/A	2020/08/31	Deonarine Ramnarine
Conductivity	AT	6916663	N/A	2020/08/31	Surinder Rai
Free (WAD) Cyanide	SKAL/CN	6915404	N/A	2020/08/28	Louise Harding
Total Cyanide	SKAL/CN	6915406	2020/08/28	2020/08/28	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	6912893	N/A	2020/08/28	Nimarta Singh
Dissolved Oxygen	DO	6915556	2020/08/28	2020/08/28	Navjot Kaur Gill
Fluoride	ISE	6916658	2020/08/28	2020/08/31	Surinder Rai
Dissolved Mercury (low level)	CV/AA	6918281	2020/08/31	2020/08/31	Meghaben Patel
Mercury (low level)	CV/AA	6918286	2020/08/31	2020/08/31	Meghaben Patel
Chloride & Sulphate by Auto Colorimetry	KONE	6918189	N/A	2020/08/30	Serena Tian
Cyanide (Free)	SPEC	6929254	2020/09/04	2020/09/04	Taylor Mullings
Conductivity @25C	COND	6929251	N/A	2020/08/29	Tracy (Jing) Ling
Hardness Total (calculated as CaCO3)	CALC	6921778	N/A	2020/09/01	Automated Statchk
Hardness (calculated as CaCO3)	CALC	6921781	N/A	2020/09/01	Automated Statchk
Elements by ICP-Dissolved-Lab Filtered	ICP	6929252	N/A	2020/08/31	Jason Bao
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	ICP	6921782	N/A	2020/09/01	Automated Statchk
Elements by CRC ICPMS (dissolved)	ICP/MS	6921783	N/A	2020/08/31	Andrew An
Na, K, Ca, Mg, S by CRC ICPMS (total)	ICP	6921779	2020/09/01	2020/09/01	Automated Statchk
Elements by CRC ICPMS (total)	ICP/MS	6921780	2020/08/31	2020/09/01	Andrew An
pH @25°C	AT/PH	6929253	N/A	2020/08/29	Tracy (Jing) Ling
Sodium Adsorption Ratio	CALC	6929204	N/A	2020/08/31	Automated Statchk
Silica (Reactive)	KONE	6923452	N/A	2020/09/01	Fadia Mostafa
Total Dissolved Solids (Calc. from EC)	CALC	6929205	N/A	2020/08/30	Automated Statchk
Total Ammonia-N	LACH/NH4	6915625	N/A	2020/08/31	Amanpreet Sappal
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	6917360	N/A	2020/08/31	Alina Dobreanu
pH	AT	6916653	2020/08/28	2020/08/31	Surinder Rai
Orthophosphate	KONE	6917388	N/A	2020/08/31	Kazzandra Adeva
Radium-226 Low Level	AS	6918359	N/A	2020/09/02	Blake Barber
Sulphate by Automated Colourimetry	KONE	6917387	N/A	2020/08/31	Deonarine Ramnarine
Calculated Total Dissolved Solids	CALC	6915318	N/A	2020/09/04	Automated Statchk
Total Dissolved Solids	BAL	6921753	2020/09/01	2020/09/02	Shivani Desai
Total Kjeldahl Nitrogen in Water	SKAL	6915632	2020/08/28	2020/08/31	Rajni Tyagi
Total Organic Carbon (TOC)	TOCV/NDIR	6915812	N/A	2020/08/28	Nimarta Singh
Total Phosphorus (Colourimetric)	LACH/P	6915538	2020/08/28	2020/08/31	Shivani Shivani
Low Level Total Suspended Solids	BAL	6915672	2020/08/28	2020/08/29	Jingwei (Alvin) Shi
Turbidity	AT	6916568	N/A	2020/08/31	Gnana Thomas
Low Level Volatile Suspended Solids	BAL	6915686	2020/08/28	2020/08/29	Shivani Desai



BV Labs Job #: COM1484
Report Date: 2020/09/04

Agnico-Eagle
Site Location: MELIADINE
Your P.O. #: OL-891917
Sampler Initials: RS

TEST SUMMARY

BV Labs ID: NMH708 Dup
Sample ID: MEL-26
Matrix: Water

Collected: 2020/08/23
Shipped:
Received: 2020/08/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Chloride by Automated Colourimetry	KONE	6917382	N/A	2020/08/31	Deonarine Ramnarine
Free (WAD) Cyanide	SKAL/CN	6915404	N/A	2020/08/28	Louise Harding
Total Cyanide	SKAL/CN	6915406	2020/08/28	2020/08/28	Louise Harding
Dissolved Mercury (low level)	CV/AA	6918281	2020/08/31	2020/08/31	Meghaben Patel
Cyanide (Free)	SPEC	6929254	2020/09/04	2020/09/04	Taylor Mullings
Elements by ICP-Dissolved-Lab Filtered	ICP	6929252	N/A	2020/08/31	Jason Bao
Silica (Reactive)	KONE	6923452	N/A	2020/09/01	Fadia Mostafa
Orthophosphate	KONE	6917388	N/A	2020/08/31	Kazzandra Adeva
Sulphate by Automated Colourimetry	KONE	6917387	N/A	2020/08/31	Deonarine Ramnarine
Low Level Total Suspended Solids	BAL	6915672	2020/08/28	2020/08/29	Jingwei (Alvin) Shi
Low Level Volatile Suspended Solids	BAL	6915686	2020/08/28	2020/08/29	Shivani Desai



GENERAL COMMENTS

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

Package 1	11.0°C
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Sample NMH708 [MEL-26] : Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results

Sample was not submitted in an appropriate container for CNFREE-W analysis. Results may have a high bias due to decomposition of hexacyanoferrate and some other metal-cyanide complexes to free cyanide

Sample pH <12, preservation incomplete. Due to volatility of analyte, a low bias in the results is likely.

DISS. ICPMS METALS FOR FEDERAL INT. GWQG (WATER)

Sample NMH708 [MEL-26] Elements by CRC ICPMS (dissolved): RDL raised due to concentration over linear range, sample dilution required.

TOTAL ICPMS METALS FOR CCME CEQG FOR SW (WATER)

Sample NMH708 [MEL-26] Elements by CRC ICPMS (total): RDL raised due to concentration over linear range, sample dilution required.

Results relate only to the items tested.



BV Labs Job #: COM1484
Report Date: 2020/09/04

QUALITY ASSURANCE REPORT

Agnico-Eagle
Site Location: MELIADINE
Your P.O. #: OL-891917
Sampler Initials: RS

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6912893	Dissolved Organic Carbon	2020/08/28	98	80 - 120	101	80 - 120	<0.40	mg/L	0.63	20		
6915404	WAD Cyanide (Free)	2020/08/28	98	80 - 120	98	80 - 120	<0.0010	mg/L	6.1	20		
6915406	Total Cyanide (CN)	2020/08/28	98	80 - 120	98	80 - 120	<0.0050	mg/L	3.2	20		
6915538	Total Phosphorus	2020/08/31	96	80 - 120	99	80 - 120	<0.020	mg/L	2.2	20	96	80 - 120
6915625	Total Ammonia-N	2020/08/31	100	75 - 125	103	80 - 120	<0.050	mg/L	NC	20		
6915632	Total Kjeldahl Nitrogen (TKN)	2020/08/31	NC	80 - 120	94	80 - 120	<0.10	mg/L	4.4	20	95	80 - 120
6915672	Total Suspended Solids	2020/08/29					<1	mg/L	6.8	25	97	85 - 115
6915686	Volatile Suspended Solids	2020/08/29					<1	mg/L	2.3	25		
6915812	Total Organic Carbon (TOC)	2020/08/28	98	80 - 120	103	80 - 120	<0.40	mg/L	0.33	20		
6916568	Turbidity	2020/08/31			109	85 - 115	<0.1	NTU	1.5	20		
6916649	Alkalinity (Total as CaCO3)	2020/08/31			97	85 - 115	<1.0	mg/L	NC	20		
6916653	pH	2020/08/31			102	98 - 103			0.26	N/A		
6916658	Fluoride (F-)	2020/08/31	109	80 - 120	101	80 - 120	<0.10	mg/L	NC	20		
6916663	Conductivity	2020/08/31			101	85 - 115	<1.0	umho/cm	NC	25		
6917360	Nitrate (N)	2020/08/31	95	80 - 120	98	80 - 120	<0.10	mg/L	NC	20		
6917360	Nitrite (N)	2020/08/31	102	80 - 120	95	80 - 120	<0.010	mg/L	NC	20		
6917382	Dissolved Chloride (Cl-)	2020/08/31	NC	80 - 120	103	80 - 120	<1.0	mg/L	0.14	20		
6917387	Dissolved Sulphate (SO4)	2020/08/31	NC	75 - 125	99	80 - 120	<1.0	mg/L	0.39	20		
6917388	Orthophosphate (P)	2020/08/31	100	75 - 125	99	80 - 120	<0.010	mg/L	NC	25		
6918189	Dissolved Chloride (Cl-)	2020/08/30	106	80 - 120	109	80 - 120	<1.0	mg/L				
6918189	Dissolved Sulphate (SO4)	2020/08/30	106	80 - 120	106	80 - 120	<1.0	mg/L				
6918281	Dissolved Mercury (Hg)	2020/08/31	84	75 - 125	100	80 - 120	<0.00001	mg/L	NC	20		
6918286	Mercury (Hg)	2020/08/31	96	75 - 125	97	80 - 120	<0.00001	mg/L	NC	20		
6918359	Radium-226	2020/09/02			108	85 - 115	<0.0050	Bq/L	NC	N/A		
6921753	Total Dissolved Solids	2020/09/02					<10	mg/L	0	25	102	90 - 110
6921780	Total Aluminum (Al)	2020/09/01	106	80 - 120	108	80 - 120	<3.0	ug/L				
6921780	Total Antimony (Sb)	2020/09/01	103	80 - 120	103	80 - 120	<0.50	ug/L				
6921780	Total Arsenic (As)	2020/09/01	105	80 - 120	105	80 - 120	<0.10	ug/L				
6921780	Total Barium (Ba)	2020/09/01	105	80 - 120	106	80 - 120	<1.0	ug/L				
6921780	Total Beryllium (Be)	2020/09/01	108	80 - 120	109	80 - 120	<0.10	ug/L				
6921780	Total Bismuth (Bi)	2020/09/01	94	80 - 120	99	80 - 120	<1.0	ug/L				



BV Labs Job #: COM1484
Report Date: 2020/09/04

QUALITY ASSURANCE REPORT(CONT'D)

Agnico-Eagle
Site Location: MELIADINE
Your P.O. #: OL-891917
Sampler Initials: RS

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6921780	Total Boron (B)	2020/09/01	106	80 - 120	110	80 - 120	<50	ug/L				
6921780	Total Cadmium (Cd)	2020/09/01	105	80 - 120	107	80 - 120	<0.010	ug/L				
6921780	Total Chromium (Cr)	2020/09/01	102	80 - 120	103	80 - 120	<1.0	ug/L				
6921780	Total Cobalt (Co)	2020/09/01	98	80 - 120	100	80 - 120	<0.20	ug/L				
6921780	Total Copper (Cu)	2020/09/01	100	80 - 120	103	80 - 120	<0.50	ug/L				
6921780	Total Iron (Fe)	2020/09/01	107	80 - 120	106	80 - 120	<10	ug/L				
6921780	Total Lead (Pb)	2020/09/01	105	80 - 120	105	80 - 120	<0.20	ug/L				
6921780	Total Lithium (Li)	2020/09/01	109	80 - 120	107	80 - 120	<2.0	ug/L				
6921780	Total Manganese (Mn)	2020/09/01	NC	80 - 120	105	80 - 120	<1.0	ug/L				
6921780	Total Molybdenum (Mo)	2020/09/01	106	80 - 120	107	80 - 120	<1.0	ug/L				
6921780	Total Nickel (Ni)	2020/09/01	101	80 - 120	104	80 - 120	<1.0	ug/L				
6921780	Total Selenium (Se)	2020/09/01	105	80 - 120	104	80 - 120	<0.10	ug/L				
6921780	Total Silicon (Si)	2020/09/01	NC	80 - 120	111	80 - 120	<100	ug/L				
6921780	Total Silver (Ag)	2020/09/01	105	80 - 120	105	80 - 120	<0.020	ug/L				
6921780	Total Strontium (Sr)	2020/09/01	NC	80 - 120	107	80 - 120	<1.0	ug/L				
6921780	Total Thallium (Tl)	2020/09/01	103	80 - 120	103	80 - 120	<0.010	ug/L				
6921780	Total Tin (Sn)	2020/09/01	100	80 - 120	102	80 - 120	<5.0	ug/L				
6921780	Total Titanium (Ti)	2020/09/01	108	80 - 120	105	80 - 120	<5.0	ug/L				
6921780	Total Uranium (U)	2020/09/01	112	80 - 120	112	80 - 120	<0.10	ug/L				
6921780	Total Vanadium (V)	2020/09/01	105	80 - 120	105	80 - 120	<5.0	ug/L				
6921780	Total Zinc (Zn)	2020/09/01	103	80 - 120	104	80 - 120	<5.0	ug/L				
6921780	Total Zirconium (Zr)	2020/09/01	104	80 - 120	105	80 - 120	<0.10	ug/L				
6921783	Dissolved Aluminum (Al)	2020/08/31	94	80 - 120	93	80 - 120	<3.0	ug/L				
6921783	Dissolved Antimony (Sb)	2020/08/31	98	80 - 120	96	80 - 120	<0.50	ug/L				
6921783	Dissolved Arsenic (As)	2020/08/31	101	80 - 120	95	80 - 120	<0.10	ug/L				
6921783	Dissolved Barium (Ba)	2020/08/31	NC	80 - 120	96	80 - 120	<1.0	ug/L				
6921783	Dissolved Beryllium (Be)	2020/08/31	98	80 - 120	100	80 - 120	<0.10	ug/L				
6921783	Dissolved Bismuth (Bi)	2020/08/31	83	80 - 120	87	80 - 120	<1.0	ug/L				
6921783	Dissolved Boron (B)	2020/08/31	99	80 - 120	97	80 - 120	<50	ug/L				
6921783	Dissolved Cadmium (Cd)	2020/08/31	100	80 - 120	99	80 - 120	<0.010	ug/L				
6921783	Dissolved Chromium (Cr)	2020/08/31	93	80 - 120	96	80 - 120	<1.0	ug/L				
6921783	Dissolved Cobalt (Co)	2020/08/31	93	80 - 120	94	80 - 120	<0.20	ug/L				



BV Labs Job #: COM1484
Report Date: 2020/09/04

QUALITY ASSURANCE REPORT(CONT'D)

Agnico-Eagle
Site Location: MELIADINE
Your P.O. #: OL-891917
Sampler Initials: RS

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6921783	Dissolved Copper (Cu)	2020/08/31	89	80 - 120	93	80 - 120	<0.20	ug/L				
6921783	Dissolved Iron (Fe)	2020/08/31	97	80 - 120	92	80 - 120	<5.0	ug/L				
6921783	Dissolved Lead (Pb)	2020/08/31	91	80 - 120	98	80 - 120	<0.20	ug/L				
6921783	Dissolved Lithium (Li)	2020/08/31	NC	80 - 120	99	80 - 120	<2.0	ug/L				
6921783	Dissolved Manganese (Mn)	2020/08/31	NC	80 - 120	98	80 - 120	<1.0	ug/L				
6921783	Dissolved Molybdenum (Mo)	2020/08/31	NC	80 - 120	96	80 - 120	<1.0	ug/L				
6921783	Dissolved Nickel (Ni)	2020/08/31	NC	80 - 120	98	80 - 120	<1.0	ug/L				
6921783	Dissolved Selenium (Se)	2020/08/31	102	80 - 120	98	80 - 120	<0.10	ug/L				
6921783	Dissolved Silicon (Si)	2020/08/31	102	80 - 120	92	80 - 120	<100	ug/L				
6921783	Dissolved Silver (Ag)	2020/08/31	96	80 - 120	95	80 - 120	<0.020	ug/L				
6921783	Dissolved Strontium (Sr)	2020/08/31	NC	80 - 120	98	80 - 120	<1.0	ug/L				
6921783	Dissolved Thallium (Tl)	2020/08/31	93	80 - 120	92	80 - 120	<0.010	ug/L				
6921783	Dissolved Tin (Sn)	2020/08/31	99	80 - 120	93	80 - 120	<5.0	ug/L				
6921783	Dissolved Titanium (Ti)	2020/08/31	102	80 - 120	99	80 - 120	<5.0	ug/L				
6921783	Dissolved Uranium (U)	2020/08/31	104	80 - 120	98	80 - 120	<0.10	ug/L				
6921783	Dissolved Vanadium (V)	2020/08/31	102	80 - 120	99	80 - 120	<5.0	ug/L				
6921783	Dissolved Zinc (Zn)	2020/08/31	129 (1)	80 - 120	100	80 - 120	<5.0	ug/L				
6921783	Dissolved Zirconium (Zr)	2020/08/31	102	80 - 120	94	80 - 120	<0.10	ug/L				
6923452	Reactive Silica (SiO ₂)	2020/09/01	104	80 - 120	105	80 - 120	<0.050	mg/L	4.9	20		
6929251	Conductivity	2020/08/29			100	90 - 110	<2.0	uS/cm				
6929252	Dissolved Calcium (Ca)	2020/08/31	NC	80 - 120	103	80 - 120	<0.30	mg/L	0.15	20		
6929252	Dissolved Magnesium (Mg)	2020/08/31	NC	80 - 120	100	80 - 120	<0.20	mg/L	0.15	20		
6929252	Dissolved Potassium (K)	2020/08/31	NC	80 - 120	101	80 - 120	<0.30	mg/L	0.48	20		
6929252	Dissolved Sodium (Na)	2020/08/31	NC	80 - 120	100	80 - 120	<0.50	mg/L	0.25	20		
6929253	pH	2020/08/29			100	97 - 103						



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VERITAS
LABS

BV Labs Job #: COM1484

Report Date: 2020/09/04

QUALITY ASSURANCE REPORT(CONT'D)

Agnico-Eagle
Site Location: MELIADINE
Your P.O. #: OL-891917
Sampler Initials: RS

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6929254	Free Cyanide (CN)	2020/09/04	102	80 - 120	102	80 - 120	<1.0	ug/L	0	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 $\leq 2 \times \text{RDL}$).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.



BUREAU
VERITAS

BV Labs Job #: COM1484

Report Date: 2020/09/04

Agnico-Eagle

Site Location: MELIADINE

Your P.O. #: OL-891917

Sampler Initials: RS

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Anastassia Hamanov, Scientific Specialist

Brad Newman, Scientific Service Specialist

David Huang, BBY Scientific Specialist

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



Kurt Headrick, Ph.D., C. Chem., Laboratory Manager

BV Labs 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 Signature Page.



BUREAU
VERITAS

BV Labs Job #: COM1484

Report Date: 2020/09/04

Agnico-Eagle

Site Location: MELIADINE

Your P.O. #: OL-891917

Sampler Initials: RS

Exceedance Summary Table – Metal Mining Effluent Reg
Result Exceedances

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



Your P.O. #: OL-891917
Site Location: MELIADINE

Attention: Reporting

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

Report Date: 2020/09/03
Report #: R6318120
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C0M6190

Received: 2020/09/02, 12:49

Sample Matrix: Water
Samples Received: 4

Analyses	Quantity	Date	Date	Laboratory Method	Analytical Method
		Extracted	Analyzed		
Low Level Total Suspended Solids (1)	4	2020/09/03	2020/09/03	CAM SOP-00428	SM 23 2540D m
Low Level Volatile Suspended Solids (1)	4	2020/09/03	2020/09/03	CAM SOP-00428	SM 23 2540

Remarks:

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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 BV Labs, 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 Laboratories Mississauga



Your P.O. #: OL-891917
Site Location: MELIADINE

Attention: Reporting

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

Report Date: 2020/09/03
Report #: R6318120
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: COM6190

Received: 2020/09/02, 12:49

Encryption Key

Katherine Szozda

Katherine Szozda
Project Manager
03 Sep 2020 16:00:23

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

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

=====

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BUREAU
VERITAS

BV Labs Job #: COM6190

Report Date: 2020/09/03

Agnico-Eagle

Site Location: MELIADINE

Your P.O. #: OL-891917

Sampler Initials: BH

RESULTS OF ANALYSES OF WATER

BV Labs ID		NNJ522	NNJ523	NNJ524	NNJ525		
Sampling Date		2020/08/29 06:32	2020/08/29 06:42	2020/08/29 06:50	2020/08/29 09:20		
	UNITS	SETP DISCHARGE	SP3-BF	SP3-AF	MEL-26	RDL	QC Batch
Inorganics							
Total Suspended Solids	mg/L	8	6	11	7	1	6925467
Volatile Suspended Solids	mg/L	5	5	6	5	1	6925477
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							



BV Labs Job #: COM6190
Report Date: 2020/09/03

Agnico-Eagle
Site Location: MELIADINE
Your P.O. #: OL-891917
Sampler Initials: BH

TEST SUMMARY

BV Labs ID: NNJ522
Sample ID: SETP DISCHARGE
Matrix: Water

Collected: 2020/08/29
Shipped:
Received: 2020/09/02

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Low Level Total Suspended Solids	BAL	6925467	2020/09/03	2020/09/03	Massarat Jan
Low Level Volatile Suspended Solids	BAL	6925477	2020/09/03	2020/09/03	Massarat Jan

BV Labs ID: NNJ523
Sample ID: SP3-BF
Matrix: Water

Collected: 2020/08/29
Shipped:
Received: 2020/09/02

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Low Level Total Suspended Solids	BAL	6925467	2020/09/03	2020/09/03	Massarat Jan
Low Level Volatile Suspended Solids	BAL	6925477	2020/09/03	2020/09/03	Massarat Jan

BV Labs ID: NNJ524
Sample ID: SP3-AF
Matrix: Water

Collected: 2020/08/29
Shipped:
Received: 2020/09/02

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Low Level Total Suspended Solids	BAL	6925467	2020/09/03	2020/09/03	Massarat Jan
Low Level Volatile Suspended Solids	BAL	6925477	2020/09/03	2020/09/03	Massarat Jan

BV Labs ID: NNJ525
Sample ID: MEL-26
Matrix: Water

Collected: 2020/08/29
Shipped:
Received: 2020/09/02

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Low Level Total Suspended Solids	BAL	6925467	2020/09/03	2020/09/03	Massarat Jan
Low Level Volatile Suspended Solids	BAL	6925477	2020/09/03	2020/09/03	Massarat Jan



BUREAU
VERITAS

BV Labs Job #: COM6190

Report Date: 2020/09/03

Agnico-Eagle

Site Location: MELIADINE

Your P.O. #: OL-891917

Sampler Initials: BH

GENERAL COMMENTS

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

Package 1	13.3°C
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Results relate only to the items tested.



BUREAU
VERITAS

BV Labs Job #: COM6190
Report Date: 2020/09/03

QUALITY ASSURANCE REPORT

Agnico-Eagle
Site Location: MELIADINE
Your P.O. #: OL-891917
Sampler Initials: BH

QC Batch	Parameter	Date	Method Blank		RPD		QC Standard	
			Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6925467	Total Suspended Solids	2020/09/03	<1	mg/L	6.8	25	100	85 - 115
6925477	Volatile Suspended Solids	2020/09/03	<1	mg/L	6.7	25		
Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.								
QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.								
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.								



BUREAU
VERITAS

BV Labs Job #: COM6190

Report Date: 2020/09/03

Agnico-Eagle

Site Location: MELIADINE

Your P.O. #: OL-891917

Sampler Initials: BH

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Anastassia Hamanov, Scientific Specialist

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BUREAU
VERITAS

BV Labs Job #: COM6190

Report Date: 2020/09/03

Agnico-Eagle

Site Location: MELIADINE

Your P.O. #: OL-891917

Sampler Initials: BH

Exceedance Summary Table – Metal Mining Effluent Reg
Result Exceedances

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



Your P.O. #: OL-891917
Site Location: MELIADINE

Attention: Reporting

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

Report Date: 2020/09/03
Report #: R6318116
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: COM6200

Received: 2020/09/02, 12:49

Sample Matrix: Water
Samples Received: 5

Analyses	Quantity	Date	Date	Laboratory Method	Analytical Method
		Extracted	Analyzed		
Low Level Total Suspended Solids (1)	5	2020/09/03	2020/09/03	CAM SOP-00428	SM 23 2540D m
Low Level Volatile Suspended Solids (1)	5	2020/09/03	2020/09/03	CAM SOP-00428	SM 23 2540

Remarks:

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Results relate to samples tested. When sampling is not conducted by BV Labs, 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 Laboratories Mississauga



Your P.O. #: OL-891917
Site Location: MELIADINE

Attention: Reporting

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

Report Date: 2020/09/03
Report #: R6318116
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: COM6200

Received: 2020/09/02, 12:49

Encryption Key

Katherine Szozda

Katherine Szozda
Project Manager
03 Sep 2020 15:59:06

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

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

=====

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BUREAU
VERITAS

BV Labs Job #: COM6200

Report Date: 2020/09/03

Agnico-Eagle

Site Location: MELIADINE

Your P.O. #: OL-891917

Sampler Initials: BH

RESULTS OF ANALYSES OF WATER

BV Labs ID		NNJ562	NNJ563	NNJ564	NNJ565	NNJ566		
Sampling Date		2020/08/30 06:05	2020/08/30 06:10	2020/08/30 06:17	2020/08/30 08:25	2020/08/30 09:36		
	UNITS	SETP DISCHARGE	SP3-BF	SP3-AF	MEL-26	SP4	RDL	QC Batch
Inorganics								
Total Suspended Solids	mg/L	9	8	6	7	13	1	6925467
Volatile Suspended Solids	mg/L	6	4	4	4	6	1	6925477
RDL = Reportable Detection Limit								
QC Batch = Quality Control Batch								



BV Labs Job #: COM6200
Report Date: 2020/09/03

Agnico-Eagle
Site Location: MELIADINE
Your P.O. #: OL-891917
Sampler Initials: BH

TEST SUMMARY

BV Labs ID: NNJ562
Sample ID: SETP DISCHARGE
Matrix: Water

Collected: 2020/08/30
Shipped:
Received: 2020/09/02

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Low Level Total Suspended Solids	BAL	6925467	2020/09/03	2020/09/03	Massarat Jan
Low Level Volatile Suspended Solids	BAL	6925477	2020/09/03	2020/09/03	Massarat Jan

BV Labs ID: NNJ563
Sample ID: SP3-BF
Matrix: Water

Collected: 2020/08/30
Shipped:
Received: 2020/09/02

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Low Level Total Suspended Solids	BAL	6925467	2020/09/03	2020/09/03	Massarat Jan
Low Level Volatile Suspended Solids	BAL	6925477	2020/09/03	2020/09/03	Massarat Jan

BV Labs ID: NNJ564
Sample ID: SP3-AF
Matrix: Water

Collected: 2020/08/30
Shipped:
Received: 2020/09/02

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Low Level Total Suspended Solids	BAL	6925467	2020/09/03	2020/09/03	Massarat Jan
Low Level Volatile Suspended Solids	BAL	6925477	2020/09/03	2020/09/03	Massarat Jan

BV Labs ID: NNJ565
Sample ID: MEL-26
Matrix: Water

Collected: 2020/08/30
Shipped:
Received: 2020/09/02

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Low Level Total Suspended Solids	BAL	6925467	2020/09/03	2020/09/03	Massarat Jan
Low Level Volatile Suspended Solids	BAL	6925477	2020/09/03	2020/09/03	Massarat Jan

BV Labs ID: NNJ566
Sample ID: SP4
Matrix: Water

Collected: 2020/08/30
Shipped:
Received: 2020/09/02

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Low Level Total Suspended Solids	BAL	6925467	2020/09/03	2020/09/03	Massarat Jan
Low Level Volatile Suspended Solids	BAL	6925477	2020/09/03	2020/09/03	Massarat Jan



BV Labs Job #: COM6200
Report Date: 2020/09/03

Agnico-Eagle
Site Location: MELIADINE
Your P.O. #: OL-891917
Sampler Initials: BH

GENERAL COMMENTS

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

Package 1	13.3°C
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Results relate only to the items tested.



BUREAU
VERITAS

BV Labs Job #: COM6200
Report Date: 2020/09/03

QUALITY ASSURANCE REPORT

Agnico-Eagle
Site Location: MELIADINE
Your P.O. #: OL-891917
Sampler Initials: BH

QC Batch	Parameter	Date	Method Blank		RPD		QC Standard	
			Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
6925467	Total Suspended Solids	2020/09/03	<1	mg/L	6.8	25	100	85 - 115
6925477	Volatile Suspended Solids	2020/09/03	<1	mg/L	6.7	25		
Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.								
QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.								
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.								



BUREAU
VERITAS

BV Labs Job #: COM6200

Report Date: 2020/09/03

Agnico-Eagle

Site Location: MELIADINE

Your P.O. #: OL-891917

Sampler Initials: BH

VALIDATION SIGNATURE PAGE

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Anastassia Hamanov, Scientific Specialist

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BUREAU
VERITAS

BV Labs Job #: COM6200

Report Date: 2020/09/03

Agnico-Eagle

Site Location: MELIADINE

Your P.O. #: OL-891917

Sampler Initials: BH

Exceedance Summary Table – Metal Mining Effluent Reg
Result Exceedances

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



Your P.O. #: OL-891917
 Site#: 62 48'01.99" 92 06' 00.05"
 Site Location: MELIADINE

Attention: Reporting

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

Report Date: 2020/09/10
 Report #: R6325603
 Version: 3 - Partial

CERTIFICATE OF ANALYSIS – PARTIAL RESULTS

BV LABS JOB #: C0M6364

Received: 2020/09/02, 12:40

Sample Matrix: Water
 # Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Free (WAD) Cyanide	1	N/A	2020/09/03	CAM SOP-00457	OMOE E3015 m
Total Cyanide	1	2020/09/03	2020/09/03	CAM SOP-00457	OMOE E3015 5 m
Hardness Total (calculated as CaCO ₃) (1, 2)	1	N/A	2020/09/09	BBY WI-00033	Auto Calc
Hardness (calculated as CaCO ₃) (1)	1	N/A	2020/09/05	BBY WI-00033	Auto Calc
Na, K, Ca, Mg, S by CRC ICPMS (diss.) (1)	1	N/A	2020/09/05	BBY7SOP-00002	EPA 6020B R2 m
Elements by CRC ICPMS (dissolved) (1)	1	N/A	2020/09/04	BBY7SOP-00002	EPA 6020B R2 m
Na, K, Ca, Mg, S by CRC ICPMS (total) (1)	1	2020/09/02	2020/09/09	BBY7SOP-00002	EPA 6020B R2 m
Elements by CRC ICPMS (total) (1)	1	2020/09/09	2020/09/09	BBY7SOP-00003/02	EPA 6020B R2 m
Low Level Total Suspended Solids	1	2020/09/03	2020/09/03	CAM SOP-00428	SM 23 2540D m
Low Level Volatile Suspended Solids	1	2020/09/03	2020/09/03	CAM SOP-00428	SM 23 2540

Remarks:

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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.

BV Labs - Partial/Rush Results



BV Labs - Partial/Rush Results

Your P.O. #: OL-891917
Site#: 62 48'01.99" 92 06' 00.05"
Site Location: MELIADINE

Attention: Reporting

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

Report Date: 2020/09/10
Report #: R6325603
Version: 3 - Partial

CERTIFICATE OF ANALYSIS – PARTIAL RESULTS

BV LABS JOB #: C0M6364

Received: 2020/09/02, 12:40

- (1) This test was performed by BVLabs Burnaby via Mississauga
(2) "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).

Encryption Key

Katherine Szozda

Katherine Szozda
Project Manager
10 Sep 2020 17:05:36

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Katherine Szozda, Project Manager
Email: Katherine.Szozda@bvlabs.com
Phone# (905) 817-5700

=====

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BUREAU
VERITAS

BV Labs Job #: COM6364

Report Date: 2020/09/10

Agnico-Eagle

Site Location: MELIADINE

Your P.O. #: OL-891917

Sampler Initials: BH

RESULTS OF ANALYSES OF WATER

BV Labs ID		NNK435		
Sampling Date		2020/08/31 06:25		
	UNITS	MEL-26	RDL	QC Batch
Calculated Parameters				
Dissolved Hardness (CaCO ₃)	mg/L	3990	0.50	6936422
Inorganics				
Total Suspended Solids	mg/L	7	1	6925467
Total Cyanide (CN)	mg/L	0.082	0.0050	6927037
Volatile Suspended Solids	mg/L	6	1	6925477
WAD Cyanide (Free)	mg/L	0.016	0.0010	6927046
Metals				
Dissolved Aluminum (Al)	ug/L	111	30	6935445
Total Aluminum (Al)	ug/L	327	60	6935442
Dissolved Antimony (Sb)	ug/L	<5.0	5.0	6935445
Total Antimony (Sb)	ug/L	<10	10	6935442
Dissolved Arsenic (As)	ug/L	6.5	1.0	6935445
Total Arsenic (As)	ug/L	6.7	2.0	6935442
Dissolved Barium (Ba)	ug/L	158	10	6935445
Total Barium (Ba)	ug/L	155	20	6935442
Dissolved Beryllium (Be)	ug/L	<1.0	1.0	6935445
Total Beryllium (Be)	ug/L	<2.0	2.0	6935442
Dissolved Bismuth (Bi)	ug/L	<10	10	6935445
Total Bismuth (Bi)	ug/L	<20	20	6935442
Dissolved Boron (B)	ug/L	932	500	6935445
Total Boron (B)	ug/L	<1000	1000	6935442
Dissolved Cadmium (Cd)	ug/L	<0.10	0.10	6935445
Total Cadmium (Cd)	ug/L	<0.20	0.20	6935442
Dissolved Chromium (Cr)	ug/L	<10	10	6935445
Total Chromium (Cr)	ug/L	<20	20	6935442
Dissolved Cobalt (Co)	ug/L	4.5	2.0	6935445
Total Cobalt (Co)	ug/L	4.9	4.0	6935442
Dissolved Copper (Cu)	ug/L	3.2	2.0	6935445
Total Copper (Cu)	ug/L	<10	10	6935442
Dissolved Iron (Fe)	ug/L	<50	50	6935445
Total Iron (Fe)	ug/L	<200	200	6935442
Dissolved Lead (Pb)	ug/L	<2.0	2.0	6935445
Total Lead (Pb)	ug/L	<4.0	4.0	6935442
Dissolved Lithium (Li)	ug/L	251	20	6935445
RDL = Reportable Detection Limit				
QC Batch = Quality Control Batch				



BUREAU
VERITAS

BV Labs Job #: COM6364

Report Date: 2020/09/10

Agnico-Eagle

Site Location: MELIADINE

Your P.O. #: OL-891917

Sampler Initials: BH

RESULTS OF ANALYSES OF WATER

BV Labs ID		NNK435		
Sampling Date		2020/08/31 06:25		
	UNITS	MEL-26	RDL	QC Batch
Total Lithium (Li)	ug/L	238	40	6935442
Dissolved Manganese (Mn)	ug/L	176	10	6935445
Total Manganese (Mn)	ug/L	179	20	6935442
Dissolved Molybdenum (Mo)	ug/L	22	10	6935445
Total Molybdenum (Mo)	ug/L	21	20	6935442
Dissolved Nickel (Ni)	ug/L	24	10	6935445
Total Nickel (Ni)	ug/L	26	20	6935442
Dissolved Selenium (Se)	ug/L	<1.0	1.0	6935445
Total Selenium (Se)	ug/L	<2.0	2.0	6935442
Dissolved Silicon (Si)	ug/L	1410	1000	6935445
Total Silicon (Si)	ug/L	<2000	2000	6935442
Dissolved Silver (Ag)	ug/L	<0.20	0.20	6935445
Total Silver (Ag)	ug/L	<0.40	0.40	6935442
Dissolved Strontium (Sr)	ug/L	18700	10	6935445
Total Strontium (Sr)	ug/L	17100	20	6935442
Dissolved Thallium (Tl)	ug/L	<0.10	0.10	6935445
Total Thallium (Tl)	ug/L	<0.20	0.20	6935442
Dissolved Tin (Sn)	ug/L	<50	50	6935445
Total Tin (Sn)	ug/L	<100	100	6935442
Dissolved Titanium (Ti)	ug/L	<50	50	6935445
Total Titanium (Ti)	ug/L	<100	100	6935442
Dissolved Uranium (U)	ug/L	2.1	1.0	6935445
Total Uranium (U)	ug/L	2.2	2.0	6935442
Dissolved Vanadium (V)	ug/L	<50	50	6935445
Total Vanadium (V)	ug/L	<100	100	6935442
Dissolved Zinc (Zn)	ug/L	<50	50	6935445
Total Zinc (Zn)	ug/L	<100	100	6935442
Dissolved Zirconium (Zr)	ug/L	<1.0	1.0	6935445
Total Zirconium (Zr)	ug/L	<2.0	2.0	6935442
Dissolved Calcium (Ca)	mg/L	768	0.50	6936423
Total Calcium (Ca)	ug/L	712000	1000	6936425
Dissolved Magnesium (Mg)	mg/L	502	0.50	6936423
Total Magnesium (Mg)	ug/L	478000	1000	6936425
Dissolved Potassium (K)	mg/L	171	0.50	6936423
Total Potassium (K)	ug/L	160000	1000	6936425
RDL = Reportable Detection Limit				
QC Batch = Quality Control Batch				



BUREAU
VERITAS

BV Labs Job #: COM6364

Report Date: 2020/09/10

Agnico-Eagle

Site Location: MELIADINE

Your P.O. #: OL-891917

Sampler Initials: BH

RESULTS OF ANALYSES OF WATER

BV Labs ID		NNK435		
Sampling Date		2020/08/31 06:25		
	UNITS	MEL-26	RDL	QC Batch
Dissolved Sodium (Na)	mg/L	4120	0.50	6936423
Total Sodium (Na)	ug/L	3890000	1000	6936425
Dissolved Sulphur (S)	mg/L	375	30	6936423
Total Sulphur (S)	ug/L	347000	60000	6936425
RDL = Reportable Detection Limit				
QC Batch = Quality Control Batch				



BUREAU
VERITAS

BV Labs Job #: COM6364

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Agnico-Eagle

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Sampler Initials: BH

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

BV Labs ID		NNK435		
Sampling Date		2020/08/31 06:25		
	UNITS	MEL-26	RDL	QC Batch
Calculated Parameters				
Total Hardness (CaCO ₃)	ug/L	3750000	500	6936424
RDL = Reportable Detection Limit				
QC Batch = Quality Control Batch				



BUREAU
VERITAS

BV Labs Job #: COM6364
Report Date: 2020/09/10

Agnico-Eagle
Site Location: MELIADINE
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Sampler Initials: BH

GENERAL COMMENTS

Sample NNK435 [MEL-26] : TKN < Ammonia: Both values fall within the method uncertainty for duplicates and are likely equivalent.

RESULTS OF ANALYSES OF WATER

Sample NNK435 [MEL-26] Elements by CRC ICPMS (dissolved): RDL raised due to concentration over linear range, sample dilution required.

Sample NNK435 [MEL-26] Elements by CRC ICPMS (total): RDL raised due to concentration over linear range, sample dilution required.

Results relate only to the items tested.

BV Labs - Partial/Rush Results



BUREAU
VERITAS

BV Labs Job #: COM6364

Report Date: 2020/09/10

Agnico-Eagle

Site Location: MELIADINE

Your P.O. #: OL-891917

Sampler Initials: BH

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
6925467	MJ1	QC Standard	Total Suspended Solids	2020/09/03		100	%	85 - 115
6925467	MJ1	Method Blank	Total Suspended Solids	2020/09/03	<1		mg/L	
6925467	MJ1	RPD	Total Suspended Solids	2020/09/03	6.8		%	25
6925477	MJ1	Method Blank	Volatile Suspended Solids	2020/09/03	<1		mg/L	
6925477	MJ1	RPD	Volatile Suspended Solids	2020/09/03	6.7		%	25
6927037	GTO	Matrix Spike	Total Cyanide (CN)	2020/09/03		94	%	80 - 120
6927037	GTO	Spiked Blank	Total Cyanide (CN)	2020/09/03		100	%	80 - 120
6927037	GTO	Method Blank	Total Cyanide (CN)	2020/09/03	<0.0050		mg/L	
6927037	GTO	RPD	Total Cyanide (CN)	2020/09/03	NC		%	20
6927046	GTO	Matrix Spike	WAD Cyanide (Free)	2020/09/03		93	%	80 - 120
6927046	GTO	Spiked Blank	WAD Cyanide (Free)	2020/09/03		93	%	80 - 120
6927046	GTO	Method Blank	WAD Cyanide (Free)	2020/09/03	<0.0010		mg/L	
6927046	GTO	RPD	WAD Cyanide (Free)	2020/09/03	8.7		%	20
6935442	AD5	Matrix Spike	Total Aluminum (Al)	2020/09/09		104	%	80 - 120
			Total Antimony (Sb)	2020/09/09		102	%	80 - 120
			Total Arsenic (As)	2020/09/09		107	%	80 - 120
			Total Barium (Ba)	2020/09/09		NC	%	80 - 120
			Total Beryllium (Be)	2020/09/09		103	%	80 - 120
			Total Bismuth (Bi)	2020/09/09		94	%	80 - 120
			Total Boron (B)	2020/09/09		98	%	80 - 120
			Total Cadmium (Cd)	2020/09/09		101	%	80 - 120
			Total Chromium (Cr)	2020/09/09		99	%	80 - 120
			Total Cobalt (Co)	2020/09/09		95	%	80 - 120
			Total Copper (Cu)	2020/09/09		92	%	80 - 120
			Total Iron (Fe)	2020/09/09		NC	%	80 - 120
			Total Lead (Pb)	2020/09/09		104	%	80 - 120
			Total Lithium (Li)	2020/09/09		100	%	80 - 120
			Total Manganese (Mn)	2020/09/09		NC	%	80 - 120
			Total Molybdenum (Mo)	2020/09/09		104	%	80 - 120
			Total Nickel (Ni)	2020/09/09		94	%	80 - 120
			Total Selenium (Se)	2020/09/09		106	%	80 - 120
			Total Silicon (Si)	2020/09/09		NC	%	80 - 120
			Total Silver (Ag)	2020/09/09		98	%	80 - 120
			Total Strontium (Sr)	2020/09/09		NC	%	80 - 120
			Total Thallium (Tl)	2020/09/09		98	%	80 - 120
			Total Tin (Sn)	2020/09/09		100	%	80 - 120
			Total Titanium (Ti)	2020/09/09		103	%	80 - 120
			Total Uranium (U)	2020/09/09		112	%	80 - 120
			Total Vanadium (V)	2020/09/09		102	%	80 - 120
			Total Zinc (Zn)	2020/09/09		99	%	80 - 120
			Total Zirconium (Zr)	2020/09/09		104	%	80 - 120
6935442	AD5	Spiked Blank	Total Aluminum (Al)	2020/09/09		106	%	80 - 120
			Total Antimony (Sb)	2020/09/09		99	%	80 - 120
			Total Arsenic (As)	2020/09/09		101	%	80 - 120
			Total Barium (Ba)	2020/09/09		106	%	80 - 120
			Total Beryllium (Be)	2020/09/09		107	%	80 - 120
			Total Bismuth (Bi)	2020/09/09		98	%	80 - 120
			Total Boron (B)	2020/09/09		102	%	80 - 120
			Total Cadmium (Cd)	2020/09/09		102	%	80 - 120
			Total Chromium (Cr)	2020/09/09		102	%	80 - 120
			Total Cobalt (Co)	2020/09/09		101	%	80 - 120

BV Labs - Partial/Rush Results



BUREAU
VERITAS

BV Labs Job #: COM6364

Report Date: 2020/09/10

Agnico-Eagle

Site Location: MELIADINE

Your P.O. #: OL-891917

Sampler Initials: BH

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
6935442	AD5	Method Blank	Total Copper (Cu)	2020/09/09		101	%	80 - 120
			Total Iron (Fe)	2020/09/09		102	%	80 - 120
			Total Lead (Pb)	2020/09/09		104	%	80 - 120
			Total Lithium (Li)	2020/09/09		101	%	80 - 120
			Total Manganese (Mn)	2020/09/09		102	%	80 - 120
			Total Molybdenum (Mo)	2020/09/09		100	%	80 - 120
			Total Nickel (Ni)	2020/09/09		101	%	80 - 120
			Total Selenium (Se)	2020/09/09		104	%	80 - 120
			Total Silicon (Si)	2020/09/09		103	%	80 - 120
			Total Silver (Ag)	2020/09/09		100	%	80 - 120
			Total Strontium (Sr)	2020/09/09		101	%	80 - 120
			Total Thallium (Tl)	2020/09/09		99	%	80 - 120
			Total Tin (Sn)	2020/09/09		97	%	80 - 120
			Total Titanium (Ti)	2020/09/09		104	%	80 - 120
			Total Uranium (U)	2020/09/09		108	%	80 - 120
			Total Vanadium (V)	2020/09/09		102	%	80 - 120
			Total Zinc (Zn)	2020/09/09		103	%	80 - 120
			Total Zirconium (Zr)	2020/09/09		97	%	80 - 120
			Total Aluminum (Al)	2020/09/09	<3.0		ug/L	
			Total Antimony (Sb)	2020/09/09	<0.50		ug/L	
			Total Arsenic (As)	2020/09/09	<0.10		ug/L	
			Total Barium (Ba)	2020/09/09	<1.0		ug/L	
			Total Beryllium (Be)	2020/09/09	<0.10		ug/L	
			Total Bismuth (Bi)	2020/09/09	<1.0		ug/L	
			Total Boron (B)	2020/09/09	<50		ug/L	
			Total Cadmium (Cd)	2020/09/09	<0.010		ug/L	
			Total Chromium (Cr)	2020/09/09	<1.0		ug/L	
			Total Cobalt (Co)	2020/09/09	<0.20		ug/L	
			Total Copper (Cu)	2020/09/09	<0.50		ug/L	
			Total Iron (Fe)	2020/09/09	<10		ug/L	
			Total Lead (Pb)	2020/09/09	<0.20		ug/L	
			Total Lithium (Li)	2020/09/09	<2.0		ug/L	
			Total Manganese (Mn)	2020/09/09	<1.0		ug/L	
			Total Molybdenum (Mo)	2020/09/09	<1.0		ug/L	
			Total Nickel (Ni)	2020/09/09	<1.0		ug/L	
			Total Selenium (Se)	2020/09/09	<0.10		ug/L	
			Total Silicon (Si)	2020/09/09	<100		ug/L	
			Total Silver (Ag)	2020/09/09	<0.020		ug/L	
			Total Strontium (Sr)	2020/09/09	<1.0		ug/L	
			Total Thallium (Tl)	2020/09/09	<0.010		ug/L	
			Total Tin (Sn)	2020/09/09	<5.0		ug/L	
			Total Titanium (Ti)	2020/09/09	<5.0		ug/L	
			Total Uranium (U)	2020/09/09	<0.10		ug/L	
			Total Vanadium (V)	2020/09/09	<5.0		ug/L	
			Total Zinc (Zn)	2020/09/09	<5.0		ug/L	
			Total Zirconium (Zr)	2020/09/09	<0.10		ug/L	
6935445	VBA	Matrix Spike	Dissolved Aluminum (Al)	2020/09/04		101	%	80 - 120
			Dissolved Antimony (Sb)	2020/09/04		100	%	80 - 120
			Dissolved Arsenic (As)	2020/09/04		104	%	80 - 120
			Dissolved Barium (Ba)	2020/09/04		NC	%	80 - 120
			Dissolved Beryllium (Be)	2020/09/04		99	%	80 - 120

BV Labs - Partial/Rush Results



BUREAU
VERITAS

BV Labs Job #: COM6364

Report Date: 2020/09/10

Agnico-Eagle

Site Location: MELIADINE

Your P.O. #: OL-891917

Sampler Initials: BH

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
6935445	VBA	Spiked Blank	Dissolved Bismuth (Bi)	2020/09/04		90	%	80 - 120
			Dissolved Boron (B)	2020/09/04		98	%	80 - 120
			Dissolved Cadmium (Cd)	2020/09/04		101	%	80 - 120
			Dissolved Chromium (Cr)	2020/09/04		97	%	80 - 120
			Dissolved Cobalt (Co)	2020/09/04		92	%	80 - 120
			Dissolved Copper (Cu)	2020/09/04		89	%	80 - 120
			Dissolved Iron (Fe)	2020/09/04		95	%	80 - 120
			Dissolved Lead (Pb)	2020/09/04		96	%	80 - 120
			Dissolved Lithium (Li)	2020/09/04		94	%	80 - 120
			Dissolved Manganese (Mn)	2020/09/04		NC	%	80 - 120
			Dissolved Molybdenum (Mo)	2020/09/04		106	%	80 - 120
			Dissolved Nickel (Ni)	2020/09/04		90	%	80 - 120
			Dissolved Selenium (Se)	2020/09/04		107	%	80 - 120
			Dissolved Silicon (Si)	2020/09/04		NC	%	80 - 120
			Dissolved Silver (Ag)	2020/09/04		99	%	80 - 120
			Dissolved Strontium (Sr)	2020/09/04		NC	%	80 - 120
			Dissolved Thallium (Tl)	2020/09/04		96	%	80 - 120
			Dissolved Tin (Sn)	2020/09/04		99	%	80 - 120
			Dissolved Titanium (Ti)	2020/09/04		100	%	80 - 120
			Dissolved Uranium (U)	2020/09/04		105	%	80 - 120
			Dissolved Vanadium (V)	2020/09/04		100	%	80 - 120
			Dissolved Zinc (Zn)	2020/09/04		95	%	80 - 120
			Dissolved Zirconium (Zr)	2020/09/04		104	%	80 - 120
			Dissolved Aluminum (Al)	2020/09/04		103	%	80 - 120
			Dissolved Antimony (Sb)	2020/09/04		100	%	80 - 120
			Dissolved Arsenic (As)	2020/09/04		101	%	80 - 120
			Dissolved Barium (Ba)	2020/09/04		100	%	80 - 120
			Dissolved Beryllium (Be)	2020/09/04		101	%	80 - 120
			Dissolved Bismuth (Bi)	2020/09/04		97	%	80 - 120
			Dissolved Boron (B)	2020/09/04		99	%	80 - 120
			Dissolved Cadmium (Cd)	2020/09/04		104	%	80 - 120
			Dissolved Chromium (Cr)	2020/09/04		101	%	80 - 120
			Dissolved Cobalt (Co)	2020/09/04		100	%	80 - 120
			Dissolved Copper (Cu)	2020/09/04		99	%	80 - 120
			Dissolved Iron (Fe)	2020/09/04		100	%	80 - 120
			Dissolved Lead (Pb)	2020/09/04		100	%	80 - 120
			Dissolved Lithium (Li)	2020/09/04		99	%	80 - 120
			Dissolved Manganese (Mn)	2020/09/04		102	%	80 - 120
			Dissolved Molybdenum (Mo)	2020/09/04		100	%	80 - 120
			Dissolved Nickel (Ni)	2020/09/04		100	%	80 - 120
			Dissolved Selenium (Se)	2020/09/04		103	%	80 - 120
			Dissolved Silicon (Si)	2020/09/04		101	%	80 - 120
			Dissolved Silver (Ag)	2020/09/04		101	%	80 - 120
			Dissolved Strontium (Sr)	2020/09/04		103	%	80 - 120
			Dissolved Thallium (Tl)	2020/09/04		97	%	80 - 120
			Dissolved Tin (Sn)	2020/09/04		99	%	80 - 120
			Dissolved Titanium (Ti)	2020/09/04		102	%	80 - 120
			Dissolved Uranium (U)	2020/09/04		105	%	80 - 120
			Dissolved Vanadium (V)	2020/09/04		100	%	80 - 120
			Dissolved Zinc (Zn)	2020/09/04		103	%	80 - 120
			Dissolved Zirconium (Zr)	2020/09/04		99	%	80 - 120



BUREAU
VERITAS

BV Labs Job #: COM6364

Report Date: 2020/09/10

Agnico-Eagle

Site Location: MELIADINE

Your P.O. #: OL-891917

Sampler Initials: BH

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
6935445	VBA	Method Blank	Dissolved Aluminum (Al)	2020/09/04	<3.0		ug/L	
			Dissolved Antimony (Sb)	2020/09/04	<0.50		ug/L	
			Dissolved Arsenic (As)	2020/09/04	<0.10		ug/L	
			Dissolved Barium (Ba)	2020/09/04	<1.0		ug/L	
			Dissolved Beryllium (Be)	2020/09/04	<0.10		ug/L	
			Dissolved Bismuth (Bi)	2020/09/04	<1.0		ug/L	
			Dissolved Boron (B)	2020/09/04	<50		ug/L	
			Dissolved Cadmium (Cd)	2020/09/04	<0.010		ug/L	
			Dissolved Chromium (Cr)	2020/09/04	<1.0		ug/L	
			Dissolved Cobalt (Co)	2020/09/04	<0.20		ug/L	
			Dissolved Copper (Cu)	2020/09/04	<0.20		ug/L	
			Dissolved Iron (Fe)	2020/09/04	<5.0		ug/L	
			Dissolved Lead (Pb)	2020/09/04	<0.20		ug/L	
			Dissolved Lithium (Li)	2020/09/04	<2.0		ug/L	
			Dissolved Manganese (Mn)	2020/09/04	<1.0		ug/L	
			Dissolved Molybdenum (Mo)	2020/09/04	<1.0		ug/L	
			Dissolved Nickel (Ni)	2020/09/04	<1.0		ug/L	
			Dissolved Selenium (Se)	2020/09/04	<0.10		ug/L	
			Dissolved Silicon (Si)	2020/09/04	<100		ug/L	
			Dissolved Silver (Ag)	2020/09/04	<0.020		ug/L	
			Dissolved Strontium (Sr)	2020/09/04	<1.0		ug/L	
			Dissolved Thallium (Tl)	2020/09/04	<0.010		ug/L	
			Dissolved Tin (Sn)	2020/09/04	<5.0		ug/L	
			Dissolved Titanium (Ti)	2020/09/04	<5.0		ug/L	
			Dissolved Uranium (U)	2020/09/04	<0.10		ug/L	
			Dissolved Vanadium (V)	2020/09/04	<5.0		ug/L	
			Dissolved Zinc (Zn)	2020/09/04	<5.0		ug/L	
			Dissolved Zirconium (Zr)	2020/09/04	<0.10		ug/L	

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 $\leq 2 \times \text{RDL}$).



BUREAU
VERITAS

BV Labs Job #: COM6364

Report Date: 2020/09/10

Agnico-Eagle

Site Location: MELIADINE

Your P.O. #: OL-891917

Sampler Initials: BH

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Anastassia Hamanov, Scientific Specialist

David Huang, BBY Scientific Specialist

BV Labs 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 Signature Page.

BV Labs - Partial/Rush Results



Canada

NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

NT-NU 24-HOUR SPILL REPORT LINE

TEL: (867) 920-8130

FAX: (867) 873-6924

EMAIL: spills@gov.nt.ca

REPORT LINE USE ONLY

A	REPORT DATE: MONTH – DAY – YEAR 06-09-2020		REPORT TIME 9:30		<input checked="" type="checkbox"/> ORIGINAL SPILL REPORT, OR <input type="checkbox"/> UPDATE # _____ TO THE ORIGINAL SPILL REPORT	REPORT NUMBER _____
	OCCURRENCE DATE: MONTH – DAY – YEAR 05-09-2020		OCCURRENCE TIME 11:00			
C	LAND USE PERMIT NUMBER (IF APPLICABLE) KVPL11D01			WATER LICENCE NUMBER (IF APPLICABLE) 2AM-MEL1631		
	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION Meliadine Gold Project				REGION <input type="checkbox"/> NWT <input checked="" type="checkbox"/> NUNAVUT <input type="checkbox"/> ADJACENT JURISDICTION OR OCEAN	
E	LATITUDE DEGREES 63 MINUTES 2 SECONDS 46			LONGITUDE DEGREES 92 MINUTES 14 SECONDS 17		
	RESPONSIBLE PARTY OR VESSEL NAME Agnico Eagle Mines Ltd.		RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION Meliadine, Rankin Inlet, Nunavut, X0C 0G0			
G	ANY CONTRACTOR INVOLVED None		CONTRACTOR ADDRESS OR OFFICE LOCATION			
	PRODUCT SPILLED Hydrocarbons		QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES 100 L		U.N. NUMBER N/A	
H	SECOND PRODUCT SPILLED (IF APPLICABLE) N/A		QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES N/A		U.N. NUMBER N/A	
	SPILL SOURCE Hyster RS46-36		SPILL CAUSE Human Error		AREA OF CONTAMINATION IN SQUARE METRES 100	
J	FACTORS AFFECTING SPILL OR RECOVERY N/A		DESCRIBE ANY ASSISTANCE REQUIRED N/A		HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT N/A	
	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS A Hyster RS46-36 rolled over. Some of the contents of the fuel, transmission and hydraulic oil tanks spilled to the ground, where it was confined to a drainage channel, which is part of the sites' water management system. The spill did not migrate off-site. The nearest water body (G2) is approximately 160 meters away. 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 Dan Gorton, Environment Coordinator, 819-759-3555 ext 4603996 meli.environment@agnicoeagle.com					
L	REPORTED TO SPILL LINE BY Dan Gorton	POSITION Coordinator	EMPLOYER AEM	LOCATION CALLING FROM Meliadine	TELEPHONE 819-759-3555	
	ANY ALTERNATE CONTACT Terry Ternes	POSITION General Supervisor	EMPLOYER AEM	ALTERNATE CONTACT Meliadine	ALTERNATE TELEPHONE 819-759-3555	
REPORT LINE USE ONLY						
N	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130	
	LEAD AGENCY <input type="checkbox"/> EC <input type="checkbox"/> CCG <input type="checkbox"/> GNWT <input type="checkbox"/> GN <input type="checkbox"/> ILA <input type="checkbox"/> INAC <input type="checkbox"/> NEB <input type="checkbox"/> TC			SIGNIFICANCE <input type="checkbox"/> MINOR <input type="checkbox"/> MAJOR <input type="checkbox"/> UNKNOWN		FILE STATUS <input type="checkbox"/> OPEN <input type="checkbox"/> CLOSED
AGENCY		CONTACT NAME	CONTACT TIME	REMARKS		
LEAD AGENCY						
FIRST SUPPORT AGENCY						
SECOND SUPPORT AGENCY						
THIRD SUPPORT AGENCY						

Follow Up Report: #20-316

September 5th 2020, 100 L Hydrocarbon Spill



The following information refers to a spill reported by Agnico Eagle Mines Ltd. September 5th 2020, and is being provided in accordance with:

- the Nunavut Water Board License 2AM-MEL1631 Water License, part H, item 8c
- the Government of Nunavut's, Environmental Protection Act subsection 5.1(a)

Description of Incident:

On September 5th, at approximately 11:00 pm, an estimated 100 L of mixed hydrocarbons spilled from an overturned Hyster RS46-36. The spill consisted of approximately 80 L of hydraulic oil, 15 L of transmission fluid and 5 L of diesel, which released from the vehicle due to damage sustained in the accident. The spill was confined to a drainage channel, which is part of the sites' managed water system. No contaminants migrated off-site. The closest water body (G2) is approximately 160 m away. The coordinates of the spill are 63° 2'46.00"N, 92°14'17.00"W (Figure 1).

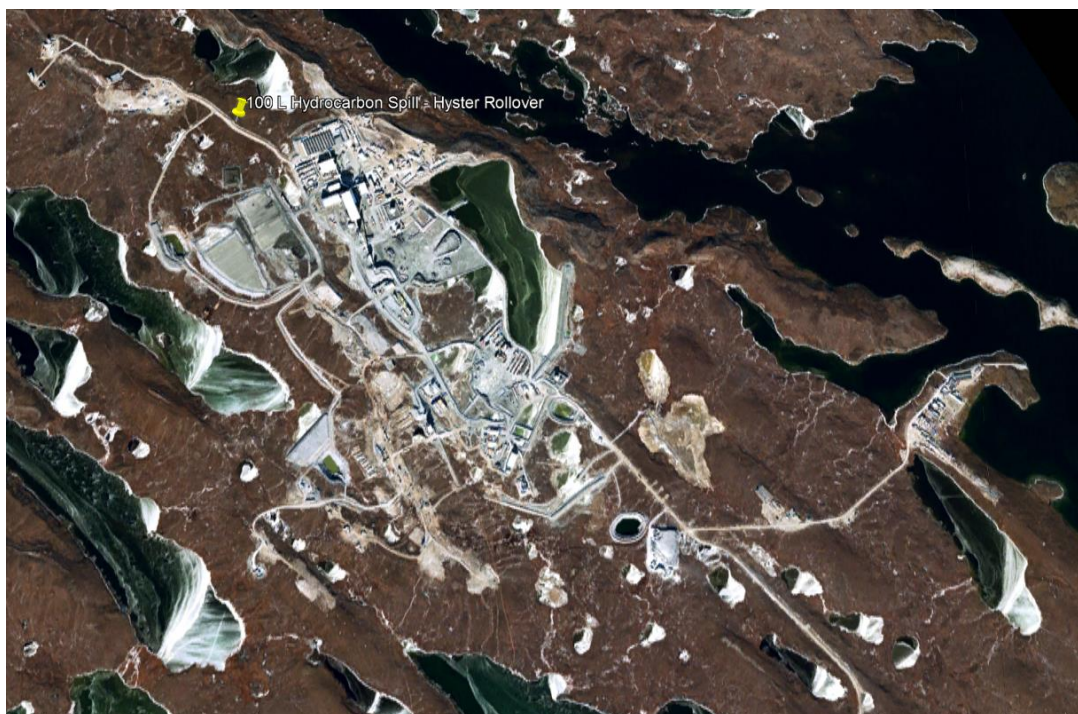


Figure 1: Location of spill 100 L hydrocarbon spill from Hyster RS46-36.

Spill Response & Cleanup:

The Environment Department and Emergency Response Team acted quickly to prevent the spill migrating downstream. A series of soil berms were rapidly constructed using an excavator, which blocked the steady flow of water in the channel, upstream and downstream of the source. The berms successfully prevented the spill migrating away from the overturned vehicle. Spill pads were deployed to absorb the hydrocarbons from the surface of the pooled water. The water was then removed and treated in the snow cell, using an oil/water separator. Soil within the channel with potential exposure to hydrocarbons was excavated and transported to the landfarm. Approximately 36 m³ of soil and gravel were removed. A Mini-RAE VOC detector was used during the excavation to verify contaminated material was removed.



Figure 2: Upstream berm being placed while mechanic drains hydraulic, fuel and transmission systems.



Figure 3: Downstream berm installed to contain spill at the source.



Figure 4: Mini RAE VOC detector used to ensure all affected soil was removed.



Figure 5: Road widened, and drainage channel restored.

Corrective Measures





The Energy and Infrastructure department widened the road and added a pull-out to allow vehicles to pass safely. The operator has been assigned to other duties until re-training is completed. Additional emergency spill response equipment is to be purchased to improve response time and capability, and replace items used during the spill response.



Dan Gorton | Environmental Coordinator

dan.gorton@agnicoeagle.com | Direct 819.759.3555 x4603996 |

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

agnicoeagle.com    

Sent from Meliadine



Canada

NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

NT-NU 24-HOUR SPILL REPORT LINE

TEL: (867) 920-8130

FAX: (867) 873-6924

EMAIL: spills@gov.nt.ca

REPORT LINE USE ONLY

A	REPORT DATE: MONTH – DAY – YEAR 09-12-2020	REPORT TIME 9:30	<input checked="" type="checkbox"/> ORIGINAL SPILL REPORT, OR <input type="checkbox"/> UPDATE # _____ TO THE ORIGINAL SPILL REPORT		REPORT NUMBER _____
B	OCCURRENCE DATE: MONTH – DAY – YEAR 09-11-2020	OCCURRENCE TIME 23:45			
C	LAND USE PERMIT NUMBER (IF APPLICABLE) KVPL11D01	WATER LICENCE NUMBER (IF APPLICABLE) 2AM-MEL1631			
D	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION Meliadine Gold Project		REGION <input type="checkbox"/> NWT <input checked="" type="checkbox"/> NUNAVUT <input type="checkbox"/> ADJACENT JURISDICTION OR OCEAN		
E	LATITUDE DEGREES 63 MINUTES 2 SECONDS 23		LONGITUDE DEGREES 92 MINUTES 13 SECONDS 41		
F	RESPONSIBLE PARTY OR VESSEL NAME Agnico Eagle Mines Ltd.	RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION Meliadine, Rankin Inlet, Nunavut, X0C 0G0			
G	ANY CONTRACTOR INVOLVED None	CONTRACTOR ADDRESS OR OFFICE LOCATION			
H	PRODUCT SPILLED Untreated Sewage	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES 1.5m3	U.N. NUMBER N.A.		
	SECOND PRODUCT SPILLED (IF APPLICABLE) None	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES	U.N. NUMBER		
I	SPILL SOURCE Sludge Filter Press	SPILL CAUSE Equipment Failure	AREA OF CONTAMINATION IN SQUARE METRES 10		
J	FACTORS AFFECTING SPILL OR RECOVERY N/A	DESCRIBE ANY ASSISTANCE REQUIRED N/A	HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT None		
K	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS The membrane in the main camp sewage treatment plant failed to maintain the appropriate filtration rate. This caused a tank to overflow, releasing approximately 1.5m3 of partially treated effluent from the sludge filter press building onto the ground. No water bodies were impacted by this release. The closest natural water body is approximately 275m away. The spill is being reported as per NWB License 2AM-MEL1631 Part H, item 8. The exact location of the spill is 63° 2'23.31"N, 92°13'41.07"W. A follow up report will be issued once an investigation has been completed. Reported by Dan Gorton, Environment Coordinator, 819-759-3555 ext 4603996 meli.environment@agnicoeagle.com				
L	REPORTED TO SPILL LINE BY Dan Gorton	POSITION Env. Coordinator	EMPLOYER AEM	LOCATION CALLING FROM Meliadine	TELEPHONE 8197593555
M	ANY ALTERNATE CONTACT Sean Arruda	POSITION Env. Coordinator	EMPLOYER AEM	ALTERNATE CONTACT Meliadine LOCATION	ALTERNATE TELEPHONE 8197593555
REPORT LINE USE ONLY					
N	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130
LEAD AGENCY <input type="checkbox"/> EC <input type="checkbox"/> CCG <input type="checkbox"/> GNWT <input type="checkbox"/> GN <input type="checkbox"/> ILA <input type="checkbox"/> INAC <input type="checkbox"/> NEB <input type="checkbox"/> TC			SIGNIFICANCE <input type="checkbox"/> MINOR <input type="checkbox"/> MAJOR <input type="checkbox"/> UNKNOWN		FILE STATUS <input type="checkbox"/> OPEN <input type="checkbox"/> CLOSED
AGENCY		CONTACT NAME	CONTACT TIME	REMARKS	
LEAD AGENCY					
FIRST SUPPORT AGENCY					
SECOND SUPPORT AGENCY					
THIRD SUPPORT AGENCY					

Follow Up Report: #20-329

September 11th, 2020 – 1.5 m³ Sewage Spill



The following information refers to a spill reported by Agnico Eagle Mines Ltd. September 11th 2020, and is being provided in accordance with:

- the Nunavut Water Board License 2AM-MEL1631 Water License, part H, item 8c
- the Government of Nunavut's, Environmental Protection Act subsection 5.1(a)

Description of Incident:

On September 11th 2020, at 11:45pm an overflow switch failed to trigger in the main camp sewage treatment plant, which caused a treatment tank to overflow, resulting in approximately 1.5m³ of untreated sewage to spill to the ground. No contaminants migrated off-site. The closest water body (Meliadine Lake) is approximately 420 m away. The coordinates of the spill were 63° 2'23.31"N, 92°13'41.07"W (Figure 1).



Figure 1: Location of main camp sewage treatment plant and proximity to Meliadine Lake.

Spill Response & Cleanup

In response to the overflow, the treatment plant operator redirected influent flow to another tank. Effluent contained within the building was removed using a vacuum truck and input back into the system. A soil berm was deployed to isolate the spill at the source (Figure 2). Effluent contaminated gravel on the industrial pad was removed and disposed of in accordance with the waste management plan (Figure 3).



Figure 2: Soil berm deployed to isolate the spill. Vacuum truck used to removed spill material.



Figure 3: Spilled material and contaminated gravel removed.

Cause of Incident and Corrective Measures

The overflow occurred when fresh liquor and mixed liquor combined to generate foam. The foam failed to trigger the overflow switch, which is designed to alternate flow between tanks. This prevented the treatment tank being isolated from inflow, leading to overflow inside the building. As the building filled, sewage flowed out of an exhaust duct onto the ground. Daily inspections and routine preventative maintenance had been completed as required prior

to the spill. System upgrades are in progress and include the addition of a larger equalizing tank, which will improve capacity and reduce the chance of overflow events (Figure 4).



Figure 4: Construction of pad for addition of new equalizing tank.



Dan Gorton | Environmental Coordinator

dan.gorton@agnicoeagle.com | Direct 819.759.3555 x4603996 |

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

agnicoeagle.com





Canada

NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

NT-NU 24-HOUR SPILL REPORT LINE

TEL: (867) 920-8130

FAX: (867) 873-6924

EMAIL: spills@gov.nt.ca

REPORT LINE USE ONLY

A	REPORT DATE: MONTH – DAY – YEAR 09-19-2020		REPORT TIME 14:25		<input checked="" type="checkbox"/> ORIGINAL SPILL REPORT, OR <input type="checkbox"/> UPDATE # _____ TO THE ORIGINAL SPILL REPORT	REPORT NUMBER _____
	B	OCCURRENCE DATE: MONTH – DAY – YEAR 09-16-2020		OCCURRENCE TIME Unknown		
C		LAND USE PERMIT NUMBER (IF APPLICABLE) KVPL11D01			WATER LICENCE NUMBER (IF APPLICABLE) 2AM-MEL1631	
	D	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION Meliadine Gold Project			REGION <input type="checkbox"/> NWT <input checked="" type="checkbox"/> NUNAVUT <input type="checkbox"/> ADJACENT JURISDICTION OR OCEAN	
E		LATITUDE DEGREES 62 MINUTES 48 SECONDS 1			LONGITUDE DEGREES 92 MINUTES 5 SECONDS 57	
	F	RESPONSIBLE PARTY OR VESSEL NAME Agnico Eagle Mines Ltd.		RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION Meliadine, Rankin Inlet, Nunavut, X0C 0G0		
G		ANY CONTRACTOR INVOLVED None		CONTRACTOR ADDRESS OR OFFICE LOCATION N/A		
	H	PRODUCT SPILLED Treated Saline Water		QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES Estimated maximum of 1445m3		U.N. NUMBER N/A
I		SECOND PRODUCT SPILLED (IF APPLICABLE) N/A		QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES N/A		U.N. NUMBER N/A
	J	SPILL SOURCE MEL-26 Final Discharge Point		SPILL CAUSE TSS Exceedance		AREA OF CONTAMINATION IN SQUARE METRES Unknown
K		FACTORS AFFECTING SPILL OR RECOVERY None		DESCRIBE ANY ASSISTANCE REQUIRED None		HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT None
	L	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS After receiving results confirming that treated effluent on site was compliant, discharge at compliance point MEL-26 was resumed and a regulatory sample was collected on September 16, 2020. Preliminary results were received on September 18, 2020, indicating TSS levels of 34 mg/L. As due diligence, Agnico Eagle Mines Ltd. has stopped discharge on September 18, 2020. Investigation into the cause of the exceedance is ongoing. Discharge will not resume until the cause of the exceedance is identified and resolved, and sampling results indicate that the discharge to sea system is within compliance. A follow-up report will be issued after a closer investigation is completed. Reported by Sean Arruda, Environment Coordinator 819-759-3555 ext. 4603996 sean.arruda@agnicoeagle.com.				
M		REPORTED TO SPILL LINE BY Sean Arruda	POSITION EnvCoordinator	EMPLOYER AEM	LOCATION CALLING FROM Meliadine	TELEPHONE 8197593555
	N	ANY ALTERNATE CONTACT Terry Ternes	POSITION Env GeneralSuperviso	EMPLOYER AEM	ALTERNATE CONTACT Meliadine	ALTERNATE TELEPHONE 8197593555
REPORT LINE USE ONLY						
N	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130	
	LEAD AGENCY <input type="checkbox"/> EC <input type="checkbox"/> CCG <input type="checkbox"/> GNWT <input type="checkbox"/> GN <input type="checkbox"/> ILA <input type="checkbox"/> INAC <input type="checkbox"/> NEB <input type="checkbox"/> TC			SIGNIFICANCE <input type="checkbox"/> MINOR <input type="checkbox"/> MAJOR <input type="checkbox"/> UNKNOWN		FILE STATUS <input type="checkbox"/> OPEN <input type="checkbox"/> CLOSED
AGENCY		CONTACT NAME		CONTACT TIME		REMARKS
LEAD AGENCY						
FIRST SUPPORT AGENCY						
SECOND SUPPORT AGENCY						
THIRD SUPPORT AGENCY						

October 21 2020

Re.: Agnico Eagle - Meliadine Project – TSS exceedance to Marine Environment
#2020-344 - Follow-up report

This letter provides additional information following the TSS exceedance reported on September 18th, 2020. Specifically, this letter includes:

- a summary of the background information on the event,
- water quality test results,
- results of the investigation of the event and additional actions taken,
- discussion of possible mechanisms leading to the event, and the proposed path forward.

Background

Agnico Eagle Mines Limited – Meliadine Division informed you via email on September 19th, 2020, that the level of Total Suspended Solids (TSS) from the Saline discharge in Melvin Bay exceeded the limits, set out in MDMER Schedule 4, of 30 mg/L, for the maximum authorized concentration in a grab sample.

The authorized monthly mean limit of 15 mg/L TSS was not exceeded for September. All other parameters were in compliance with MDMER authorized discharge criteria and the toxicity test results show the water discharged to be safe to aquatic life.

This event report was submitted in compliance with the requirements of Part H, Item 8b of Water License 2AM-MEL1631 (Water License), subsection 12(3) of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (Canada), paragraph 5.1(a) of the *Environmental Protection Act* (Nunavut), subsection 38(5) of the *Fisheries Act* (Canada) and paragraph 24(1)(a) of the *Metal and Diamond Mining Effluent Regulations* (MDMER) made under the *Fisheries Act* (Canada) and *reported as required by Meliadine Crown Surface land lease 55K/16-42-2 authorization covenant 42*".

The effluent was sampled on September 16th, 2020. Upon reception of preliminary results on September 18th from our external accredited laboratory, it was observed that Total Suspended Solids (TSS) of 34 mg/L exceeded the regulatory limit of 30 mg/L maximum authorized concentration in a grab sample. Discharge was stopped on September 18th. In order to rule out the possibility of a lab error a request was made to re-analyze the sample, which yielded a final result of 31 mg/L confirming the exceedance. Discharge resumed September 23rd once the TSS source was identified and eliminated.

The initial estimate of the quantity of water released on September 16th was 1445 m³. This calculation was based on the total daily discharge from September 16th to September 18th, when the preliminary laboratory result was received. Final results received September 27th confirmed TSS levels were compliant on September 18th (table 1). Therefore, a combined total of 798m³ of water discharged between September 16th and September 18th was potentially out of compliance for TSS, although the quantity is thought to have been far less.

The investigation identified a single truck as the source of the elevated TSS, due to the truck's tank not being pre-rinsed and inspected efficiently as per the standard operating procedure. Internal monitoring samples collected upstream of the truck loading station, at Saline Pond 3 (SP3) and the Saline Effluent Treatment Plant (SETP) outflow, confirm water loaded into the trucks on September 16th was compliant for TSS (table 2).

The truck hauled one load of treated water to the discharge point, before being taken out of service for cleaning. The sample taken on September 16th was collected from this truck. Therefore, a more accurate

estimate of potentially TSS-affected water discharged to Melvin Bay would be 37 m³, the volume of a single truck. Reception of fully compliant subsequent sampling results from September 18th, confirm the process was effectively treating TSS. No major changes had been made to the process before or after the exceedance.

Toxicity and water quality results

Toxicity tests

Samples were taken for analysis on September 23rd and 28th from the discharged water source. The toxicity test results show the effluent to be safe to aquatic life. Results can be found in Appendix A.

Water quality sampling

Samples are taken regularly to ensure compliance for MDMER related parameters. Results can be found in Appendix A.

Table 1: MDMER related water quality results

Sample Date			16 Sept 2020	18 Sept 2020
Result Received			23 Sept 2020	27 Sept 2020
Laboratory			H2Lab	H2Lab
Location			MEL-26 Discharge in Melvin Bay	
Parameter	Unit	MDMER Limits		
Total suspended solids	mg/L	30	31	6

Sampling and subsequent sample shipment were executed according to site Standard Operating Procedures and samples were sent on the same day via our charter and transported directly to an accredited laboratory (and H2Lab, Val d'Or).

Regular water samples were also collected in the receiving environment during this period and the analysis from these samples showed no exceedances of the MDMER water quality criteria.

Additional investigations, analysis and mitigation measures

Increased sampling was completed at multiple process stages to ensure the source of increased TSS had been correctly identified. Following the campaign conducted, results show that the high TSS level in the water was likely due to a single tanker truck not being thoroughly cleaned.

Mitigation measures have been implemented to prevent reoccurrence.

- All trucks were visually inspected for sediment inside their tanks prior to being filled (Appendix B). A stand down meeting was held with all team members involved, including the truck drivers, to inform them of the importance of these visual inspections and provide context for these mandatory inspections. A Pre-filling Inspection Log template is provided in Appendix B along with example photos.
- The sampling frequency was increased with daily samples taken in multiple locations of the process since August 31st to monitor more closely the compliance of the water.
- Those daily samples are analyzed on site to avoid delays in sampling results and are sent for analysis at an external accredited laboratory.
- Pressure monitoring of the filters has been installed enabling us to detect any anomaly that could arise in a timely manner, and filters are replaced at a higher frequency.

- The operating water level was raised to reduce potential for wind-induced entrainment of sediment from the bottom of SP3.

Path Forward

The action plan remained active until the discharge ceased for the winter time on October 8th, 2020.

Agnico is confident that the overall steps undertaken in understanding and correcting the overall situation that led to the observed exceedance are effective and have improved the stability and reliability of the process.

In addition, the following environmental monitoring was conducted:

- Increased internal and external sampling to determine water quality during active discharge; and.
- A receiving environment monitoring program was carried out in Melvin Bay.

Conclusion

Agnico Eagle's team responded rapidly following this event and was able to implement a series of measures when the exceedance was reported. Water quality data showed that the overall impact of this event in the receiving environment was minimal. Thus, we are confident that the aquatic environment was protected and not impacted. Agnico Eagle is committed to maintaining very close monitoring of this area.

Should you have any questions regarding this report, please do not hesitate to contact the undersigned.

Regards,



Sean Arruda / Dan Gorton | Environmental Coordinator

sean.arruda@agnicoeagle.com | dan.gorton@agnicoeagle.com

Direct 819.759.3555 x4603996 |

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

agnicoeagle.com

Sent from Meliadine



Appendix A: Sample Results

CLIENT INFORMATION

Aquatox/Agnico Eagle Mines - Meliadine
 Rankin Inlet,
 Nunavut, Canada
 Contact: Martina Rendas

TEST FACILITY INFORMATION

Harris Industrial Testing Service Ltd.
 1320 Ashdale Rd., South Rawdon
 Nova Scotia B0N 1Z0
 Ph : 902 757-0232 Fax: 902 757-2839
 office@harrisindustrial.info

SAMPLE INFORMATION (Client-provided data italicised)

Lab Identification #: 20-493-B
Sample Name/Location: MEL-26 62°48'01.99" 92°06'00.05"
Sampling Method: Grab Sample Homogenized: Yes
Sampler Name: R.S/D.O
Date & Time Sampled: Sep. 23 2020 1546 Hrs
Date & Time Received: Sep. 29 2020 1330 Hrs
 Sample Description: Yellow, transparent liquid.

GENERAL TEST INFORMATION

Reference Method:
 EPS 1/RM/10 July 1990 2nd Ed. December 2017
 Type: LC50 Tox 9B
 General Test Procedures held on file
 Test Organism: *Gasterosteus aculeatus*
 (Threespine stickleback)

PRE-TEST PARAMETERS

Pre-test Temp. (°C): 16.0
 Pre-test D.O. (mg/L): 7.9 D.O. Saturation (%): 89
 Pre-test pH: 7.1
 pH Adjusted: No

Sample Salinity¹ (‰): 17.2
 Seawater Control Salinity¹ (‰): 31.2
 Salinity adjusted Control (‰): 16.8

SAMPLE PRE-TREATMENT

Filtration of sample: No
 Adjustment of sample salinity: No

Mandatory Pre-aeration: Yes Duration: 30 minutes
 Rate: 6.5 ± 1 ml/min/L Time: 1600 hrs
 D.O. (mg/L): 7.9 D.O. saturation (%): 92

Pre-aeration Continued: No Duration: -- min. @ -- hrs
 D.O. (mg/L): -- D.O. saturation (%): --

Aeration continued throughout test by airstone @ 6.5 ± 1 ml/min/L

TEST CONDITIONS

Date & Time Test Initiated: Sep. 29 2020 1630 Hrs
 Date & Time Test Terminated: Oct. 03 2020 1630 Hrs

Deviations from Test Method: Yes
 Description: See comment section below

Fish Batch #: 63
 % Mortality over 7 days prior to test: 1.3

Loading Density (g/L): 0.46

Temperature: 15 ± 1°C

Mean Fork Length (mm): 38 ± 6.0 SD

Photoperiod: 16L/8D

Range (mm): 29 - 46

Lux: 100 – 500

Test Volume (L): 11

Depth (cm): 19.6

Replicates: No

Number of fish per vessel: 10

Mean Wet Weight (g): 0.51 ± 0.18 SD

Range (g): 0.21 – 0.75

Static Test, Duration: 96 hours

Control/Dilution Water: Natural Seawater

¹When salinity is >40‰, it is measured using refractometry method (Environment Canada, 2017). When salinity is <40‰, the salinity is measured using conductivity method (*ibid.*).

TEST PARAMETERS									
CONC. %	TEMP. °C	D.O. mg/L	INITIAL (0 hrs)			TEMP. °C	D.O. mg/L	FINAL (96 hrs)	
			D.O. %	pH	SALINITY ‰			D.O. %	pH
100	16.0	7.9	92	7.4	17.3	15.0	8.9	99	7.4
50	16.0	8.2	94	7.6	18.3	15.0	8.8	98	7.5
25	15.5	8.5	97	7.7	19.2	15.0	8.9	99	7.6
12.5	16.0	8.5	97	7.7	19.4	15.0	8.8	99	7.6
6.25	16.0	8.2	98	7.7	19.2	15.0	8.8	99	7.5
Control	16.0	7.6	97	7.8	31.2	15.0	9.1	98	7.5
Sal. Adj. Control	16.0	8.6	98	7.7	16.8	15.0	8.9	98	7.6

TEST RESULTS									
CONC. %	TOTAL MORTALITY #				PERCENT MORTALITY %				
	24 hrs	48 hrs	72 hrs	96 hrs	24 hrs	48 hrs	72 hrs	96 hrs	
100	0/10	0/10	0/10	0/10	0	0	0	0	
50	0/10	0/10	0/10	0/10	0	0	0	0	
25	0/10	0/10	0/10	0/10	0	0	0	0	
12.5	0/10	0/10	0/10	0/10	0	0	0	0	
6.25	0/10	0/10	0/10	0/10	0	0	0	0	
Control	0/10	0/10	0/10	0/10	0	0	0	0	
Sal. Adj. Control	0/10	0/10	0/10	0/10	0	0	0	0	

CONC. %	TOTAL STRESS #				PERCENT STRESS %				
	24 hrs	48 hrs	72 hrs	96 hrs	24 hrs	48 hrs	72 hrs	96 hrs	
100	0/10	0/10	0/10	0/10	0	0	0	0	
50	0/10	0/10	0/10	0/10	0	0	0	0	
25	0/10	0/10	0/10	0/10	0	0	0	0	
12.5	0/10	0/10	0/10	0/10	0	0	0	0	
6.25	0/10	0/10	0/10	0/10	0	0	0	0	
Control	0/10	0/10	0/10	0/10	0	0	0	0	
Sal. Adj. Control	0/10	0/10	0/10	0/10	0	0	0	0	

96 HR LC₅₀ RESULTS

LC₅₀ Value (%): Non-lethal
Result: Pass
95% Confidence Limits (%): N/A
Statistical Method: N/A

REFERENCE TOXICANT DATA

Performed under laboratory conditions as above, no deviations

Batch: 63 Test Date: Sep. 18 – 22 2020

Reference Substance: Phenol

LC₅₀ Value (mg/L): 12.5
 95% Confidence Limits (mg/L): 10.0 – 15.6
 Historical Mean (mg/L): 15.8
 Warning Limits \pm 2 SD (mg/L): 12.0 – 20.7

COMMENTS

Test meets all conditions for test validity. Sample received and analyzed past 5 day hold, as per client request.

TEST AUTHORIZATION AND VERIFICATION

Analyst(s): J. Fraser & K. Marks

Verified by: D. Robinson

Date: Oct. 05 2020

Signed:



REFERENCES

Tidepool Scientific Software, 2001 - 2014. Comprehensive Environmental Toxicity Information System – CETIS v1.8.7.20
Environment Canada, 2017. Biological Test Method: Reference Method for Determining Acute Lethality Using Threespine Stickleback.
Environment and Climate Change Canada, Ottawa, Ontario, Report EPS 1/RM/10, 2nd Edition December 2017.

Accredited by the Canadian Association for Laboratory Accreditation Inc. (CALA Inc.).

The test included in this report is within the scope of this accreditation.

Results apply to the sample as received. The results reported apply only to the sample tested. Results are based on nominal concentrations.

CLIENT INFORMATION	TEST FACILITY INFORMATION
Aquatox/Agnico Eagle Mines - Meliadine Rankin Inlet, Nunavut, Canada Contact: Martina Rendas	Harris Industrial Testing Service Ltd. 1320 Ashdale Rd., South Rawdon Nova Scotia B0N 1Z0 Ph : 902 757-0232 Fax: 902 757-2839 office@harrisindustrial.info

SAMPLE INFORMATION (Client-provided data italicised)	GENERAL TEST INFORMATION
Lab Identification #: 20-506 Sample Name/Location: <i>MEL-26 62°48'01.99" 92°06'00.05"</i> Sampling Method: <i>Grab</i> Sample Homogenized: Yes Sampler Name: <i>R.S</i> Date & Time Sampled: <i>Sep. 28 2020 -- Hrs</i> Date & Time Received: Oct. 01 2020 1400 Hrs Sample Description: Yellow, transparent liquid.	Reference Method: EPS 1/RM/10 July 1990 2 nd Ed. December 2017 Type: LC50 Tox 9B General Test Procedures held on file Test Organism: <i>Gasterosteus aculeatus</i> (Threespine stickleback)

PRE-TEST PARAMETERS	SAMPLE PRE-TREATMENT
Pre-test Temp. (°C): 16.0 Pre-test D.O. (mg/L): 9.2 D.O. Saturation (%): 104 Pre-test pH: 6.7 pH Adjusted: No Sample Salinity ¹ (‰): 15.3 Seawater Control Salinity ¹ (‰): 31.0 Salinity adjusted Control (‰): 15.7	Filtration of sample: No Adjustment of sample salinity: No Mandatory Pre-aeration: Yes Duration: 30 minutes Rate: 6.5 ± 1 ml/min/L Time: 1500 hrs D.O. (mg/L): 9.4 D.O. saturation (%): 103 Pre-aeration Continued: Yes Duration: 60 min. @ 1530 hrs D.O. (mg/L): 9.0 D.O. saturation (%): 100 Aeration continued throughout test by airstone @ 6.5 ± 1 ml/min/L

TEST CONDITIONS		
Date & Time Test Initiated: Oct. 03 2020 1630 Hrs Date & Time Test Terminated: Oct. 07 2020 1630 Hrs		Deviations from Test Method: No Description: N/A
Fish Batch #: 64 % Mortality over 7 days prior to test: 0	Loading Density (g/L): 0.33 Mean Fork Length (mm): 38 ± 2.8 SD Range (mm): 34 - 41	Temperature: 15 ± 1°C Photoperiod: 16L/8D Lux: 100 – 500
Test Volume (L): 13 Depth (cm): 23 Replicates: No Number of fish per vessel: 10	Mean Wet Weight (g): 0.43 ± 0.10 SD Range (g): 0.28 – 0.56	Static Test, Duration: 96 hours Control/Dilution Water: Natural Seawater

¹When salinity is >40‰, it is measured using refractometry method (Environment Canada, 2017). When salinity is <40‰, the salinity is measured using conductivity method (*ibid.*).

TEST PARAMETERS									
CONC. %	TEMP. °C	D.O. mg/L	INITIAL (0 hrs)			TEMP. °C	FINAL (96 hrs)		
			D.O. %	pH	SALINITY ‰		D.O. mg/L	D.O. %	pH
100	15.0	9.0	100	6.9	15.4	16.0	9.1	99	7.3
50	15.0	8.8	99	7.3	15.7	15.5	9.2	98	7.5
25	15.0	9.0	100	7.5	15.4	15.5	9.3	100	7.6
12.5	15.5	8.9	98	7.6	15.2	15.5	8.9	96	7.6
6.25	15.0	8.9	100	7.6	16.1	15.5	9.1	99	7.6
Control	15.0	7.7	94	7.5	31.0	15.5	8.2	99	7.6
Sal. Adj. Control	15.0	9.0	99	7.7	15.7	15.5	9.0	99	7.7

TEST RESULTS									
CONC. %	TOTAL MORTALITY #				PERCENT MORTALITY %				
	24 hrs	48 hrs	72 hrs	96 hrs	24 hrs	48 hrs	72 hrs	96 hrs	
100	0/10	0/10	0/10	0/10	0	0	0	0	
50	0/10	0/10	0/10	0/10	0	0	0	0	
25	0/10	0/10	0/10	0/10	0	0	0	0	
12.5	0/10	0/10	0/10	0/10	0	0	0	0	
6.25	0/10	0/10	0/10	0/10	0	0	0	0	
Control	0/10	0/10	0/10	0/10	0	0	0	0	
Sal. Adj. Control	0/10	0/10	0/10	0/10	0	0	0	0	

CONC. %	TOTAL STRESS #				PERCENT STRESS %				
	24 hrs	48 hrs	72 hrs	96 hrs	24 hrs	48 hrs	72 hrs	96 hrs	
100	0/10	0/10	0/10	0/10	0	0	0	0	
50	0/10	0/10	0/10	0/10	0	0	0	0	
25	0/10	0/10	0/10	0/10	0	0	0	0	
12.5	0/10	0/10	0/10	0/10	0	0	0	0	
6.25	0/10	0/10	0/10	0/10	0	0	0	0	
Control	0/10	0/10	0/10	0/10	0	0	0	0	
Sal. Adj. Control	0/10	0/10	0/10	0/10	0	0	0	0	

96 HR LC₅₀ RESULTS

LC₅₀ Value (%): Non-lethal
Result: Pass
95% Confidence Limits (%): N/A
Statistical Method: N/A

REFERENCE TOXICANT DATA

Performed under laboratory conditions as above, no deviations

Batch: 64 Test Date: Oct. 05 – 09 2020

Reference Substance: Phenol

LC₅₀ Value (mg/L): 17.7
 95% Confidence Limits (mg/L): 12.5 – 25.0
 Historical Mean (mg/L): 15.9
 Warning Limits \pm 2 SD (mg/L): 12.1 – 21.0