

October 28<sup>th</sup>, 2024

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

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

**Re: Follow-up Report Spill #2024-374 – Release of 2m<sup>3</sup> of contact water at the Meliadine Gold Mine**

On September 29<sup>th</sup>, 2024, the Nunavut Spill Line was notified by Agnico Eagle personnel via email (spills@gov.nt.ca) of contact water flow over a roadway at the Meliadine Gold Mine (coordinates: 63 01' 22.97" N, 92 11' 28.64" W). This follow-up report provides supplemental information based on the results of the incident assessment and is being provided in accordance with:

- Nunavut Water Board 2AM-MEL1631 Water Licence (the Licence), Part H, Item 8c.
- The Government of Canada Fisheries Act, Subsection 38(5)

**Description of Incident**

On September 28<sup>th</sup>, 2024, at approximately 1:00PM, it was noted during a routine inspection of water management infrastructure that accumulated water along the southern toe of Waste Rock Storage Facility 3 (WRSF3) was overflowing a low-profile area of the exploration camp road. An estimated 2m<sup>3</sup> of runoff water made its way into the tundra at the MEL-SR-16 location. The accumulation of water was the result of several days of heavy rainfall leading up to the event, along with record precipitation received during the month of September.

Water accumulation along the toe of WRSF3 is managed by pumping the water to the site water management ponds. During the period of heavy rainfall before the event, water levels in this area had been noted to be increasing, and as such, the existing pump was in place to draw down the ponded water. Due to the intensity of the rainfall event, it led to a rate of water accumulation higher than the pump could manage, which led to the overflow and release of contact water.

Upon further investigation following the initial spill report, the closest waterbody (J5) is approximately 90 m southeast, as seen in Figure 1.



**Figure 1:** Location of the release and proximity to waterbodies.

## **Response and Remediation**

Leading up to the event, it was observed during a routine inspection that water accumulation was increasing in the area and starting to encroach upon the road. A decision was made to substitute the existing 4" pump with a larger 6" pump and waterline to overcome the rate of accumulation before the water could overtop the roadway. The larger capacity pump was able to draw down the water level, however, water overtopped the road and was released for a short duration, from approximately 1:00PM to 4:30PM.

Upon discovering the runoff, erosion and sediment control measures were installed to prevent sedimentation in the tundra. Water quality samples and field readings were collected for analysis and an additional sample was collected for internal analysis of Total Suspended Solids (TSS) to provide an immediate indication of water quality.

Results from internal analysis indicated TSS were below criteria listed under Part D, Item 18 of the Water Licence. The internal TSS result for the MEL-SR-16 sample was 0 mg/L, and the internal TSS result for the WRSF3-South sample was 5 mg/L. Table 1 presents the results from the external accredited laboratory analyses.

**Table 1:** External laboratory results from analysis of September 28<sup>th</sup> grab samples.

Parameter	Unit	WRSF3-South	MEL-SR-16	2AM-MEL1631 Part D, Item 18	
				Maximum Authorized Monthly Mean Concentration	Maximum Authorized Concentration in a Grab Sample
Total Suspended Solids (mg/L)	(mg/L)	13	<1	50	100
Oil and Grease	(mg/L)	0.90	<0.50	No Visible Sheen	No Visible Sheen
pH	pH	7.86	7.80	Between 6.0 and 9.5	Between 6.0 and 9.5

Results from the full suite of water quality analysis, presented in Appendix B, were also compared to the effluent quality limits outlined in Water License 2AM-MEL1631 Part F, Item 3. The water quality was within acceptable limits and supports the assessment that the water was not indicative of contact water. Thus, no significant impact is expected at the location of the release.

### Root Cause and Corrective Measures

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



- The 4" pump installed at the southern toe of WRSF3 lacked the capacity to keep up with the inflows from the heavy rain event.

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

- A 6" waterline was installed at the southern toe of WRSF3.
- The 4" line was left in place should a second pump ever need to be installed at the WRSF3 to control water accumulation in the future.
- Following the runoff event, additional aggregate was placed in the low spot of the road to prevent runoff from that area.

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



**Kyle Conway** | Environment General Supervisor

kyle.conway@agnicoeagle.com | Direct 819.759.3555 x4603212 | Mobile 819.860.1033

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

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

Sent from Meliadine



## **Appendix A – Photos**



**Photo 1:** Location of the runoff event.



**Photo 2:** Location of the runoff event after the and corrective actions.

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



Your P.O. #: OL-1381216  
Site Location: Meliadine  
Your C.O.C. #: 971892

**Attention: Reporting**

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

**Report Date: 2024/10/21**  
Report #: R8369588  
Version: 6 - Revision

**CERTIFICATE OF ANALYSIS – REVISED REPORT**

**BUREAU VERITAS JOB #: C4U9666**

**Received: 2024/10/02, 15:10**

Sample Matrix: Water  
# Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity	1	N/A	2024/10/04	CAM SOP-00448	SM 24 2320 B m
Chloride by Automated Colourimetry	1	N/A	2024/10/04	CAM SOP-00463	SM 24 4500-Cl E m
Field Measured Dissolved Oxygen (3)	1	N/A	2024/10/03		Field pH Meter
Field Measured Conductivity (3)	1	N/A	2024/10/03		Field Meter
Fluoride	1	2024/10/03	2024/10/04	CAM SOP-00449	SM 24 4500-F C m
Mercury (low level)	1	2024/10/04	2024/10/04	CAM SOP-00453	EPA 7470 m
Low Level Chloride and Sulphate by AC (1)	1	N/A	2024/10/04	AB SOP-00020	SM24-4500-Cl/SO4-E m
Cyanide, Strong Acid Dissociable (SAD) (1)	1	2024/10/06	2024/10/06	CAL SOP-00270	SM 24 4500-CN m
Hardness Total (calculated as CaCO <sub>3</sub> ) (2, 4)	1	N/A	2024/10/08	BBY WI-00033	Auto Calc
Hardness (calculated as CaCO <sub>3</sub> ) (2)	1	N/A	2024/10/08	BBY WI-00033	Auto Calc
Na, K, Ca, Mg, S by CRC ICPMS (diss.) (2)	1	N/A	2024/10/08	BBY WI-00033	Auto Calc
Elements by CRC ICPMS (dissolved) (2)	1	N/A	2024/10/08	BBY7SOP-00002	EPA 6020b R2 m
Na, K, Ca, Mg, S by CRC ICPMS (total) (2)	1	2024/10/03	2024/10/08	BBY WI-00033	Auto Calc
Elements by CRC ICPMS (total) (2)	1	2024/10/04	2024/10/08	BBY7SOP-00003 / BBY7SOP-00002	EPA 6020b R2 m
Silica (Reactive) (1)	1	N/A	2024/10/08	AB SOP-00011	EPA 370.1 R1978 m
Total Ammonia-N	1	N/A	2024/10/04	CAM SOP-00441	USGS I-2522-90 m
Nitrate & Nitrite as Nitrogen in Water (5)	1	N/A	2024/10/04	CAM SOP-00440	SM 24 4500-NO3I/NO2B
Total Oil and Grease	1	2024/10/03	2024/10/04	CAM SOP-00326	EPA1664B m,SM5520B m
pH (6)	1	2024/10/03	2024/10/04	CAM SOP-00413	SM 24th - 4500H+ B
Field Measured pH (3)	1	N/A	2024/10/03		Field pH Meter
Orthophosphate	1	N/A	2024/10/04	CAM SOP-00461	SM 24 4500-P E
Calculated Total Dissolved Solids	1	N/A	2024/10/08		Auto Calc
Total Dissolved Solids	1	2024/10/03	2024/10/04	CAM SOP-00428	SM 24 2540C m
Field Temperature (3)	1	N/A	2024/10/03		Field Thermometer
Total Phosphorus (Colourimetric)	1	2024/10/03	2024/10/04	CAM SOP-00407	SM 24 4500-P I
Low Level Total Suspended Solids	1	2024/10/03	2024/10/04	CAM SOP-00428	SM 24 2540D m
Turbidity	1	N/A	2024/10/04	CAM SOP-00417	SM 24 2130 B
Turbidity - On-site	1	N/A	2024/10/03		



Your P.O. #: OL-1381216  
Site Location: Meliadine  
Your C.O.C. #: 971892

**Attention: Reporting**

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

**Report Date: 2024/10/21**  
Report #: R8369588  
Version: 6 - Revision

**CERTIFICATE OF ANALYSIS – REVISED REPORT**

**BUREAU VERITAS JOB #: C4U9666**

**Received: 2024/10/02, 15:10**

**Remarks:**

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

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

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

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

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

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

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

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

(1) This test was performed by Bureau Veritas Calgary (19th), 4000 19th Street NE, Calgary, AB, T2E 6P8

(2) This test was performed by Bureau Veritas Burnaby, 4606 Canada Way, Burnaby, BC, V5G 1K5

(3) This is a field test, therefore, the results relate to items that were not analysed at Bureau Veritas.

(4) "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).

(5) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.

(6) "The CCME method and Analytical Protocol (O. Reg 153/04, O. Reg. 406/19) requires pH to be analyzed 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 and Analytical Protocol (O. Reg 153/04, O. Reg. 406/19) holding time. Bureau Veritas endeavors to analyze samples as soon as possible after receipt."



Your P.O. #: OL-1381216  
Site Location: Meliadine  
Your C.O.C. #: 971892

**Attention: Reporting**

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

**Report Date: 2024/10/21**  
Report #: R8369588  
Version: 6 - Revision

**CERTIFICATE OF ANALYSIS – REVISED REPORT**

**BUREAU VERITAS JOB #: C4U9666**

**Received: 2024/10/02, 15:10**

Encryption Key

*Katherine Szozda*

Katherine Szozda  
Project Manager  
21 Oct 2024 10:10:09

Please direct all questions regarding this Certificate of Analysis to:

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

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





BUREAU  
VERITAS

Bureau Veritas Job #: C4U9666  
Report Date: 2024/10/21

Agnico-Eagle  
Site Location: Meliadine  
Your P.O. #: OL-1381216  
Sampler Initials: KS

## RESULTS OF ANALYSES OF WATER

<b>Bureau Veritas ID</b>		AERR96			AERR96		
<b>Sampling Date</b>		2024/09/28 05:47			2024/09/28 05:47		
<b>COC Number</b>		971892			971892		
	<b>UNITS</b>	<b>WRSF3 - South</b>	<b>RDL</b>	<b>QC Batch</b>	<b>WRSF3 - South Lab-Dup</b>	<b>RDL</b>	<b>QC Batch</b>

<b>Calculated Parameters</b>							
Calculated TDS	mg/L	1200	1.0	9678816			
Dissolved Hardness (CaCO <sub>3</sub> )	mg/L	641	0.50	9689375			
<b>Field Measurements</b>							
Field Measured Conductivity	uS/cm	2084	N/A	ONSITE			
Field Measured Dissolved oxygen	mg/L	13.20	N/A	ONSITE			
Field Temperature	Celsius	7.9	N/A	ONSITE			
Field Measured Field Turbidity	NTU	13.7	N/A	ONSITE			
Field Measured pH	pH	6.80		ONSITE			
<b>Inorganics</b>							
Total Ammonia-N	mg/L	0.37	0.050	9681581			
Strong Acid Dissoc. Cyanide (CN)	mg/L	0.00235	0.00050	9689054			
Total Dissolved Solids	mg/L	1310	10	9679051			
Fluoride (F <sup>-</sup> )	mg/L	<0.10	0.10	9680800			
Orthophosphate (P)	mg/L	<0.010	0.010	9680772			
pH	pH	7.86		9680803			
Total Phosphorus	mg/L	0.028	0.020	9680468	0.027	0.020	9680468
Reactive Silica (SiO <sub>2</sub> )	mg/L	2.1	0.050	9689004			
Total Suspended Solids	mg/L	13	1	9679307			
Turbidity	NTU	7.9	0.1	9680807	8.2	0.1	9680807
Alkalinity (Total as CaCO <sub>3</sub> )	mg/L	87	1.0	9680799			
Dissolved Chloride (Cl <sup>-</sup> )	mg/L	390	5.0	9680770			
Nitrite (N)	mg/L	0.056	0.010	9680839			
Nitrate (N)	mg/L	3.98	0.10	9680839			
Dissolved Sulphate (SO <sub>4</sub> )	mg/L	330	2.5	9689003			
Nitrate + Nitrite (N)	mg/L	4.04	0.10	9680839			
<b>Metals</b>							
Dissolved Aluminum (Al)	mg/L	0.0059	0.0030	9689377			
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate N/A = Not Applicable							



BUREAU  
VERITAS

Bureau Veritas Job #: C4U9666  
Report Date: 2024/10/21

Agnico-Eagle  
Site Location: Meliadine  
Your P.O. #: OL-1381216  
Sampler Initials: KS

### RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		AERR96			AERR96		
Sampling Date		2024/09/28 05:47			2024/09/28 05:47		
COC Number		971892			971892		
	UNITS	WRSF3 - South	RDL	QC Batch	WRSF3 - South Lab-Dup	RDL	QC Batch
Total Aluminum (Al)	mg/L	0.281	0.0030	9689374			
Dissolved Arsenic (As)	mg/L	0.00712	0.00010	9689377			
Total Arsenic (As)	mg/L	0.00822	0.00010	9689374			
Dissolved Barium (Ba)	mg/L	0.0918	0.0010	9689377			
Total Barium (Ba)	mg/L	0.0767	0.0010	9689374			
Dissolved Cadmium (Cd)	mg/L	0.000016	0.000010	9689377			
Total Cadmium (Cd)	mg/L	0.000016	0.000010	9689374			
Dissolved Chromium (Cr)	mg/L	<0.0010	0.0010	9689377			
Total Chromium (Cr)	mg/L	0.0011	0.0010	9689374			
Dissolved Copper (Cu)	mg/L	0.00163	0.00020	9689377			
Total Copper (Cu)	mg/L	0.00206	0.00050	9689374			
Dissolved Iron (Fe)	mg/L	0.0203	0.0050	9689377			
Total Iron (Fe)	mg/L	0.561	0.010	9689374			
Dissolved Lead (Pb)	mg/L	<0.00020	0.00020	9689377			
Total Lead (Pb)	mg/L	0.00050	0.00020	9689374			
Dissolved Manganese (Mn)	mg/L	0.0238	0.0010	9689377			
Total Manganese (Mn)	mg/L	0.0274	0.0010	9689374			
Dissolved Molybdenum (Mo)	mg/L	0.0031	0.0010	9689377			
Total Molybdenum (Mo)	mg/L	0.0028	0.0010	9689374			
Dissolved Nickel (Ni)	mg/L	0.0080	0.0010	9689377			
Total Nickel (Ni)	mg/L	0.0077	0.0010	9689374			
Dissolved Selenium (Se)	mg/L	0.00063	0.00010	9689377			
Total Selenium (Se)	mg/L	0.00054	0.00010	9689374			
Dissolved Silver (Ag)	mg/L	<0.000020	0.000020	9689377			
Total Silver (Ag)	mg/L	<0.000020	0.000020	9689374			
Dissolved Thallium (Tl)	mg/L	0.000010	0.000010	9689377			
Total Thallium (Tl)	mg/L	0.000012	0.000010	9689374			
Total Titanium (Ti)	mg/L	0.0085	0.0050	9689374			
Dissolved Zinc (Zn)	mg/L	<0.0050	0.0050	9689377			
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate							



## RESULTS OF ANALYSES OF WATER

<b>Bureau Veritas ID</b>		AERR96			AERR96		
<b>Sampling Date</b>		2024/09/28 05:47			2024/09/28 05:47		
<b>COC Number</b>		971892			971892		
	<b>UNITS</b>	<b>WRSF3 - South</b>	<b>RDL</b>	<b>QC Batch</b>	<b>WRSF3 - South Lab-Dup</b>	<b>RDL</b>	<b>QC Batch</b>
Total Zinc (Zn)	mg/L	<0.0050	0.0050	9689374			
Dissolved Calcium (Ca)	mg/L	185	0.050	9689376			
Total Calcium (Ca)	mg/L	157	0.050	9689373			
Dissolved Magnesium (Mg)	mg/L	43.6	0.050	9689376			
Total Magnesium (Mg)	mg/L	37.1	0.050	9689373			
Dissolved Potassium (K)	mg/L	19.2	0.050	9689376			
Total Potassium (K)	mg/L	16.7	0.050	9689373			
Dissolved Sodium (Na)	mg/L	131	0.050	9689376			
Total Sodium (Na)	mg/L	118	0.050	9689373			
<b>Petroleum Hydrocarbons</b>							
Total Oil & Grease	mg/L	0.90	0.50	9680076			
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate							



### ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		AERR96		
Sampling Date		2024/09/28 05:47		
COC Number		971892		
	UNITS	WRSF3 - South	RDL	QC Batch
Calculated Parameters				
Total Hardness (CaCO <sub>3</sub> )	mg/L	544	0.50	9689370
Metals				
Mercury (Hg)	mg/L	<0.00001	0.00001	9681509
RDL = Reportable Detection Limit				
QC Batch = Quality Control Batch				



**BUREAU  
VERITAS**

Bureau Veritas Job #: C4U9666

Report Date: 2024/10/21

Agnico-Eagle

Site Location: Meliadine

Your P.O. #: OL-1381216

Sampler Initials: KS

## TEST SUMMARY

**Bureau Veritas ID:** AERR96  
**Sample ID:** WRSF3 - South  
**Matrix:** Water

**Collected:** 2024/09/28  
**Shipped:**  
**Received:** 2024/10/02

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9680799	N/A	2024/10/04	Surinder Rai
Chloride by Automated Colourimetry	SKAL	9680770	N/A	2024/10/04	Alina Dobreanu
Field Measured Dissolved Oxygen	PH	ONSITE	N/A	2024/10/03	Ramandeep Kaur
Field Measured Dissolved Oxygen	PH	ONSITE	N/A	2024/10/03	Ramandeep Kaur
Fluoride	ISE	9680800	2024/10/03	2024/10/04	Surinder Rai
Mercury (low level)	CV/AA	9681509	2024/10/04	2024/10/04	Maitri PATIL
Low Level Chloride and Sulphate by AC	KONE	9689003	N/A	2024/10/04	Tyler Orr
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	9689054	2024/10/06	2024/10/06	Ye Hyun KIM
Hardness Total (calculated as CaCO <sub>3</sub> )	CALC	9689370	N/A	2024/10/08	Automated Statchk
Hardness (calculated as CaCO <sub>3</sub> )	CALC	9689375	N/A	2024/10/08	Automated Statchk
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	ICP	9689376	N/A	2024/10/08	Automated Statchk
Elements by CRC ICPMS (dissolved)	ICP/MS	9689377	N/A	2024/10/08	Renegie Lampong-Inactive
Na, K, Ca, Mg, S by CRC ICPMS (total)	ICP	9689373	2024/10/08	2024/10/08	Automated Statchk
Elements by CRC ICPMS (total)	ICP/MS	9689374	2024/10/04	2024/10/08	Andrew An
Silica (Reactive)	KONE	9689004	N/A	2024/10/08	Tyler Orr
Total Ammonia-N	SKAL/NH <sub>4</sub>	9681581	N/A	2024/10/04	Muskan
Nitrate & Nitrite as Nitrogen in Water	LACH	9680839	N/A	2024/10/04	Chandra Nandlal
Total Oil and Grease	BAL	9680076	2024/10/03	2024/10/04	Jay Hareshkumar Vaghasia
pH	AT	9680803	2024/10/03	2024/10/04	Surinder Rai
Field Measured Dissolved Oxygen	PH	ONSITE	N/A	2024/10/03	Ramandeep Kaur
Orthophosphate	SKAL	9680772	N/A	2024/10/04	Alina Dobreanu
Calculated Total Dissolved Solids	CALC	9678816	N/A	2024/10/08	Automated Statchk
Total Dissolved Solids	BAL	9679051	2024/10/03	2024/10/04	Razieh Tabesh
Field Measured Dissolved Oxygen	PH	ONSITE	N/A	2024/10/03	Ramandeep Kaur
Total Phosphorus (Colourimetric)	SKAL/P	9680468	2024/10/03	2024/10/04	Vidhi Khatri
Low Level Total Suspended Solids	BAL	9679307	2024/10/03	2024/10/04	Razieh Tabesh
Turbidity	AT	9680807	N/A	2024/10/04	Kien Tran
Field Measured Dissolved Oxygen	TURB	ONSITE	N/A	2024/10/03	Ramandeep Kaur

**Bureau Veritas ID:** AERR96 Dup  
**Sample ID:** WRSF3 - South  
**Matrix:** Water

**Collected:** 2024/09/28  
**Shipped:**  
**Received:** 2024/10/02

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Phosphorus (Colourimetric)	SKAL/P	9680468	2024/10/03	2024/10/04	Vidhi Khatri
Turbidity	AT	9680807	N/A	2024/10/04	Kien Tran



### GENERAL COMMENTS

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

Package 1	9.0°C
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Revised Report [2024/10/21]: PDF security changed.

Revised Report [2024/10/18]: Sampling date changed to 2024/09/28 per client request.

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





Bureau Veritas Job #: C4U9666  
Report Date: 2024/10/21

## QUALITY ASSURANCE REPORT

Agnico-Eagle  
Site Location: Meliadine  
Your P.O. #: OL-1381216  
Sampler Initials: KS

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
9679051	Total Dissolved Solids	2024/10/04			95	80 - 120	<10	mg/L	1.5	20		
9679307	Total Suspended Solids	2024/10/04			102	80 - 120	<1	mg/L	12	20		
9680076	Total Oil & Grease	2024/10/04			99	80 - 110	<0.50	mg/L	0.51	25		
9680468	Total Phosphorus	2024/10/04	97	80 - 120	100	80 - 120	<0.020	mg/L	4.0	20	97	80 - 120
9680770	Dissolved Chloride (Cl-)	2024/10/04	NC	80 - 120	98	80 - 120	<1.0	mg/L	0.96	20		
9680772	Orthophosphate (P)	2024/10/04	93	75 - 125	98	80 - 120	<0.010	mg/L	NC	20		
9680799	Alkalinity (Total as CaCO3)	2024/10/04			101	85 - 115	<1.0	mg/L	2.9	20		
9680800	Fluoride (F-)	2024/10/04	100	80 - 120	103	80 - 120	<0.10	mg/L	NC	20		
9680803	pH	2024/10/04			102	98 - 103			1.0	N/A		
9680807	Turbidity	2024/10/04			100	80 - 120	<0.1	NTU	3.1	20		
9680839	Nitrate (N)	2024/10/04	97	80 - 120	101	80 - 120	<0.10	mg/L	0.083	20		
9680839	Nitrite (N)	2024/10/04	97	80 - 120	102	80 - 120	<0.010	mg/L	NC	20		
9681509	Mercury (Hg)	2024/10/04	96	75 - 125	97	80 - 120	<0.00001	mg/L	NC	20		
9681581	Total Ammonia-N	2024/10/04	94	75 - 125	105	80 - 120	<0.050	mg/L	NC	20		
9689003	Dissolved Sulphate (SO4)	2024/10/04	NC	80 - 120	99	80 - 120	<0.50	mg/L				
9689004	Reactive Silica (SiO2)	2024/10/08	100	80 - 120	106	80 - 120	<0.050	mg/L				
9689054	Strong Acid Dissoc. Cyanide (CN)	2024/10/06	91	80 - 120	95	80 - 120	<0.00050	mg/L	3.0	20		
9689374	Total Aluminum (Al)	2024/10/08	101	80 - 120	99	80 - 120	<0.0030	mg/L				
9689374	Total Arsenic (As)	2024/10/08	103	80 - 120	100	80 - 120	<0.00010	mg/L				
9689374	Total Barium (Ba)	2024/10/08	99	80 - 120	97	80 - 120	<0.0010	mg/L				
9689374	Total Cadmium (Cd)	2024/10/08	103	80 - 120	100	80 - 120	<0.000010	mg/L				
9689374	Total Chromium (Cr)	2024/10/08	98	80 - 120	95	80 - 120	<0.0010	mg/L				
9689374	Total Copper (Cu)	2024/10/08	98	80 - 120	96	80 - 120	<0.00050	mg/L				
9689374	Total Iron (Fe)	2024/10/08	105	80 - 120	105	80 - 120	<0.010	mg/L				
9689374	Total Lead (Pb)	2024/10/08	103	80 - 120	103	80 - 120	<0.00020	mg/L				
9689374	Total Manganese (Mn)	2024/10/08	102	80 - 120	101	80 - 120	<0.0010	mg/L				
9689374	Total Molybdenum (Mo)	2024/10/08	105	80 - 120	103	80 - 120	<0.0010	mg/L				
9689374	Total Nickel (Ni)	2024/10/08	101	80 - 120	100	80 - 120	<0.0010	mg/L				
9689374	Total Selenium (Se)	2024/10/08	106	80 - 120	102	80 - 120	<0.00010	mg/L				
9689374	Total Silver (Ag)	2024/10/08	99	80 - 120	99	80 - 120	<0.000020	mg/L				
9689374	Total Thallium (Tl)	2024/10/08	105	80 - 120	104	80 - 120	<0.000010	mg/L				



BUREAU  
VERITAS  
LABORATOIRES

Bureau Veritas Job #: C4U9666  
Report Date: 2024/10/21

## QUALITY ASSURANCE REPORT(CONT'D)

Agnico-Eagle  
Site Location: Meliadine  
Your P.O. #: OL-1381216  
Sampler Initials: KS

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
9689374	Total Titanium (Ti)	2024/10/08	103	80 - 120	101	80 - 120	<0.0050	mg/L				
9689374	Total Zinc (Zn)	2024/10/08	107	80 - 120	99	80 - 120	<0.0050	mg/L				
9689377	Dissolved Aluminum (Al)	2024/10/08	97	80 - 120	101	80 - 120	<0.0030	mg/L	7.3	20		
9689377	Dissolved Arsenic (As)	2024/10/08	101	80 - 120	105	80 - 120	<0.00010	mg/L	0.27	20		
9689377	Dissolved Barium (Ba)	2024/10/08	NC	80 - 120	105	80 - 120	<0.0010	mg/L	1.2	20		
9689377	Dissolved Cadmium (Cd)	2024/10/08	98	80 - 120	105	80 - 120	<0.000010	mg/L	NC	20		
9689377	Dissolved Chromium (Cr)	2024/10/08	95	80 - 120	100	80 - 120	<0.0010	mg/L	NC	20		
9689377	Dissolved Copper (Cu)	2024/10/08	87	80 - 120	98	80 - 120	<0.00020	mg/L	4.6	20		
9689377	Dissolved Iron (Fe)	2024/10/08	93	80 - 120	100	80 - 120	<0.0050	mg/L	0.31	20		
9689377	Dissolved Lead (Pb)	2024/10/08	98	80 - 120	103	80 - 120	<0.00020	mg/L	NC	20		
9689377	Dissolved Manganese (Mn)	2024/10/08	NC	80 - 120	100	80 - 120	<0.0010	mg/L	0.15	20		
9689377	Dissolved Molybdenum (Mo)	2024/10/08	100	80 - 120	108	80 - 120	<0.0010	mg/L	0.52	20		
9689377	Dissolved Nickel (Ni)	2024/10/08	89	80 - 120	98	80 - 120	<0.0010	mg/L	NC	20		
9689377	Dissolved Selenium (Se)	2024/10/08	98	80 - 120	104	80 - 120	<0.00010	mg/L	NC	20		
9689377	Dissolved Silver (Ag)	2024/10/08	98	80 - 120	104	80 - 120	<0.000020	mg/L	NC	20		
9689377	Dissolved Thallium (Tl)	2024/10/08	97	80 - 120	103	80 - 120	<0.000010	mg/L	NC	20		
9689377	Dissolved Zinc (Zn)	2024/10/08	93	80 - 120	103	80 - 120	<0.0050	mg/L	2.2	20		

N/A = Not Applicable

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

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

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

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

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

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

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



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Bureau Veritas Job #: C4U9666  
Report Date: 2024/10/21

Agnico-Eagle  
Site Location: Meliadine  
Your P.O. #: OL-1381216  
Sampler Initials: KS

### VALIDATION SIGNATURE PAGE

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

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Cristina Carriere, Senior Scientific Specialist

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David Huang, BBY Scientific Specialist

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



Bureau Veritas Proprietary Software  
Logiciel Propriétaire de Bureau Veritas

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Automated Statchk

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



BUREAU  
VERITAS

Bureau Veritas Job #: C4U9666  
Report Date: 2024/10/21

Agnico-Eagle  
Site Location: Meliadine  
Your P.O. #: OL-1381216  
Sampler Initials: KS

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

Sample ID	Bureau Veritas 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-1381216  
Site Location: Meliadine  
Your C.O.C. #: 971967

**Attention: Reporting**

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

**Report Date: 2024/10/21**  
Report #: R8369600  
Version: 6 - Revision

**CERTIFICATE OF ANALYSIS – REVISED REPORT**

**BUREAU VERITAS JOB #: C4V0712**

**Received: 2024/10/02, 15:10**

Sample Matrix: Water  
# Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity	1	N/A	2024/10/04	CAM SOP-00448	SM 24 2320 B m
Chloride by Automated Colourimetry	1	N/A	2024/10/04	CAM SOP-00463	SM 24 4500-Cl E m
Field Measured Dissolved Oxygen (3)	1	N/A	2024/10/03		Field pH Meter
Field Measured Conductivity (3)	1	N/A	2024/10/03		Field Meter
Fluoride	1	2024/10/04	2024/10/04	CAM SOP-00449	SM 24 4500-F C m
Mercury (low level)	1	2024/10/04	2024/10/04	CAM SOP-00453	EPA 7470 m
Low Level Chloride and Sulphate by AC (1)	1	N/A	2024/10/08	AB SOP-00020	SM24-4500-Cl/SO4-E m
Cyanide, Strong Acid Dissociable (SAD) (1)	1	2024/10/08	2024/10/08	CAL SOP-00270	SM 24 4500-CN m
Hardness (calculated as CaCO3) (2)	1	N/A	2024/10/08	BBY WI-00033	Auto Calc
Na, K, Ca, Mg, S by CRC ICPMS (diss.) (2)	1	N/A	2024/10/08	BBY WI-00033	Auto Calc
Elements by CRC ICPMS (dissolved) (2)	1	N/A	2024/10/08	BBY7SOP-00002	EPA 6020b R2 m
Na, K, Ca, Mg, S by CRC ICPMS (total) (2)	1	2024/10/03	2024/10/08	BBY WI-00033	Auto Calc
Elements by CRC ICPMS (total) (2)	1	2024/10/07	2024/10/08	BBY7SOP-00003 / BBY7SOP-00002	EPA 6020b R2 m
Silica (Reactive) (1)	1	N/A	2024/10/10	AB SOP-00011	EPA 370.1 R1978 m
Total Ammonia-N	1	N/A	2024/10/04	CAM SOP-00441	USGS I-2522-90 m
Nitrate & Nitrite as Nitrogen in Water (4)	1	N/A	2024/10/04	CAM SOP-00440	SM 24 4500-NO3I/NO2B
Total Oil and Grease	1	2024/10/04	2024/10/04	CAM SOP-00326	EPA1664B m, SM5520B m
pH (5)	1	2024/10/04	2024/10/04	CAM SOP-00413	SM 24th - 4500H+ B
Field Measured pH (3)	1	N/A	2024/10/03		Field pH Meter
Orthophosphate	1	N/A	2024/10/04	CAM SOP-00461	SM 24 4500-P E
Calculated Total Dissolved Solids	1	N/A	2024/10/09		Auto Calc
Total Dissolved Solids	1	2024/10/04	2024/10/07	CAM SOP-00428	SM 24 2540C m
Field Temperature (3)	1	N/A	2024/10/03		Field Thermometer
Total Phosphorus (Colourimetric)	1	2024/10/04	2024/10/04	CAM SOP-00407	SM 24 4500-P I
Low Level Total Suspended Solids	1	2024/10/04	2024/10/04	CAM SOP-00428	SM 24 2540D m
Turbidity	1	N/A	2024/10/04	CAM SOP-00417	SM 24 2130 B
Turbidity - On-site	1	N/A	2024/10/03		

**Remarks:**



Your P.O. #: OL-1381216  
Site Location: Meliadine  
Your C.O.C. #: 971967

**Attention: Reporting**

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

**Report Date: 2024/10/21**  
Report #: R8369600  
Version: 6 - Revision

**CERTIFICATE OF ANALYSIS – REVISED REPORT**

**BUREAU VERITAS JOB #: C4V0712**

**Received: 2024/10/02, 15:10**

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

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

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

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

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

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

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

(1) This test was performed by Bureau Veritas Calgary (19th), 4000 19th Street NE, Calgary, AB, T2E 6P8

(2) This test was performed by Bureau Veritas Burnaby, 4606 Canada Way, Burnaby, BC, V5G 1K5

(3) This is a field test, therefore, the results relate to items that were not analysed at Bureau Veritas.

(4) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.

(5) "The CCME method and Analytical Protocol (O. Reg 153/04, O. Reg. 406/19) requires pH to be analyzed 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 and Analytical Protocol (O. Reg 153/04, O. Reg. 406/19) holding time. Bureau Veritas endeavors to analyze samples as soon as possible after receipt."





Your P.O. #: OL-1381216  
Site Location: Meliadine  
Your C.O.C. #: 971967

**Attention: Reporting**

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

**Report Date: 2024/10/21**  
Report #: R8369600  
Version: 6 - Revision

**CERTIFICATE OF ANALYSIS – REVISED REPORT**

**BUREAU VERITAS JOB #: C4V0712**

**Received: 2024/10/02, 15:10**

Encryption Key

*Katherine Szozda*

Katherine Szozda  
Project Manager  
21 Oct 2024 10:11:28

Please direct all questions regarding this Certificate of Analysis to:

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

=====

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BUREAU  
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Bureau Veritas Job #: C4V0712  
Report Date: 2024/10/21

Agnico-Eagle  
Site Location: Meliadine  
Your P.O. #: OL-1381216  
Sampler Initials: AT

## RESULTS OF ANALYSES OF WATER

<b>Bureau Veritas ID</b>		AETU07			AETU07		
<b>Sampling Date</b>		2024/09/28			2024/09/28		
<b>COC Number</b>		971967			971967		
	<b>UNITS</b>	<b>MEL-SR 16</b>	<b>RDL</b>	<b>QC Batch</b>	<b>MEL-SR 16 Lab-Dup</b>	<b>RDL</b>	<b>QC Batch</b>
<b>Calculated Parameters</b>							
Calculated TDS	mg/L	370	1.0	9678816			
Dissolved Hardness (CaCO <sub>3</sub> )	mg/L	248	0.50	9689375			
<b>Field Measurements</b>							
Field Measured Conductivity	uS/cm	796	N/A	ONSITE			
Field Measured Dissolved oxygen	mg/L	14.25	N/A	ONSITE			
Field Temperature	Celsius	9.9	N/A	ONSITE			
Field Measured Field Turbidity	NTU	1.14	N/A	ONSITE			
Field Measured pH	pH	7.35		ONSITE			
<b>Inorganics</b>							
Total Ammonia-N	mg/L	<0.050	0.050	9681581	<0.050	0.050	9681581
Strong Acid Dissoc. Cyanide (CN)	mg/L	<0.00050	0.00050	9691706			
Total Dissolved Solids	mg/L	510	10	9681387			
Fluoride (F <sup>-</sup> )	mg/L	<0.10	0.10	9681575	<0.10	0.10	9681575
Orthophosphate (P)	mg/L	<0.010	0.010	9681592	<0.010	0.010	9681592
pH	pH	7.80		9681576	7.85		9681576
Total Phosphorus	mg/L	<0.020	0.020	9681521	<0.020	0.020	9681521
Reactive Silica (SiO <sub>2</sub> )	mg/L	3.3	0.050	9694963			
Total Suspended Solids	mg/L	<1	1	9681384			
Turbidity	NTU	0.3	0.1	9680807			
Alkalinity (Total as CaCO <sub>3</sub> )	mg/L	92	1.0	9681570	93	1.0	9681570
Dissolved Chloride (Cl <sup>-</sup> )	mg/L	76	1.0	9681697			
Nitrite (N)	mg/L	<0.010	0.010	9681773	<0.010	0.010	9681773
Nitrate (N)	mg/L	0.29	0.10	9681773	0.28	0.10	9681773
Dissolved Sulphate (SO <sub>4</sub> )	mg/L	120 (1)	1.0	9691705	120	1.0	9691705
Nitrate + Nitrite (N)	mg/L	0.29	0.10	9681773	0.28	0.10	9681773
<b>Metals</b>							
Dissolved Aluminum (Al)	mg/L	0.0048	0.0030	9691758			
Total Aluminum (Al)	mg/L	0.0124	0.0030	9691760			
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate N/A = Not Applicable (1) Detection limits raised due to matrix interference.							



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Bureau Veritas Job #: C4V0712  
Report Date: 2024/10/21

Agnico-Eagle  
Site Location: Meliadine  
Your P.O. #: OL-1381216  
Sampler Initials: AT

## RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		AETU07			AETU07		
Sampling Date		2024/09/28			2024/09/28		
COC Number		971967			971967		
	UNITS	MEL-SR 16	RDL	QC Batch	MEL-SR 16 Lab-Dup	RDL	QC Batch
Dissolved Arsenic (As)	mg/L	0.00430	0.00010	9691758			
Total Arsenic (As)	mg/L	0.00433	0.00010	9691760			
Dissolved Barium (Ba)	mg/L	0.0459	0.0010	9691758			
Total Barium (Ba)	mg/L	0.0427	0.0010	9691760			
Dissolved Cadmium (Cd)	mg/L	<0.000010	0.000010	9691758			
Total Cadmium (Cd)	mg/L	<0.000010	0.000010	9691760			
Dissolved Chromium (Cr)	mg/L	<0.0010	0.0010	9691758			
Total Chromium (Cr)	mg/L	<0.0010	0.0010	9691760			
Dissolved Copper (Cu)	mg/L	0.00214	0.00020	9691758			
Total Copper (Cu)	mg/L	0.00201	0.00050	9691760			
Dissolved Iron (Fe)	mg/L	0.0252	0.0050	9691758			
Total Iron (Fe)	mg/L	0.045	0.010	9691760			
Dissolved Lead (Pb)	mg/L	<0.00020	0.00020	9691758			
Total Lead (Pb)	mg/L	<0.00020	0.00020	9691760			
Dissolved Manganese (Mn)	mg/L	0.0053	0.0010	9691758			
Total Manganese (Mn)	mg/L	0.0054	0.0010	9691760			
Dissolved Molybdenum (Mo)	mg/L	0.0013	0.0010	9691758			
Total Molybdenum (Mo)	mg/L	0.0012	0.0010	9691760			
Dissolved Nickel (Ni)	mg/L	0.0040	0.0010	9691758			
Total Nickel (Ni)	mg/L	0.0038	0.0010	9691760			
Dissolved Selenium (Se)	mg/L	0.00010	0.00010	9691758			
Total Selenium (Se)	mg/L	0.00011	0.00010	9691760			
Dissolved Silver (Ag)	mg/L	<0.000020	0.000020	9691758			
Total Silver (Ag)	mg/L	<0.000020	0.000020	9691760			
Dissolved Thallium (Tl)	mg/L	<0.000010	0.000010	9691758			
Total Titanium (Ti)	mg/L	<0.0050	0.0050	9691760			
Dissolved Zinc (Zn)	mg/L	<0.0050	0.0050	9691758			
Total Zinc (Zn)	mg/L	<0.0050	0.0050	9691760			
Dissolved Calcium (Ca)	mg/L	75.1	0.050	9689376			
Total Calcium (Ca)	mg/L	69.2	0.050	9691759			
Dissolved Magnesium (Mg)	mg/L	14.7	0.050	9689376			
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate							



### RESULTS OF ANALYSES OF WATER

<b>Bureau Veritas ID</b>		AETU07			AETU07		
<b>Sampling Date</b>		2024/09/28			2024/09/28		
<b>COC Number</b>		971967			971967		
	<b>UNITS</b>	<b>MEL-SR 16</b>	<b>RDL</b>	<b>QC Batch</b>	<b>MEL-SR 16 Lab-Dup</b>	<b>RDL</b>	<b>QC Batch</b>
Total Magnesium (Mg)	mg/L	13.7	0.050	9691759			
Dissolved Potassium (K)	mg/L	6.08	0.050	9689376			
Total Potassium (K)	mg/L	5.69	0.050	9691759			
Dissolved Sodium (Na)	mg/L	22.7	0.050	9689376			
Total Sodium (Na)	mg/L	21.0	0.050	9691759			
<b>Petroleum Hydrocarbons</b>							
Total Oil & Grease	mg/L	<0.50	0.50	9682332			
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate							



BUREAU  
VERITAS

Bureau Veritas Job #: C4V0712  
Report Date: 2024/10/21

Agnico-Eagle  
Site Location: Meliadine  
Your P.O. #: OL-1381216  
Sampler Initials: AT

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		AETU07		
Sampling Date		2024/09/28		
COC Number		971967		
	UNITS	MEL-SR 16	RDL	QC Batch
Metals				
Mercury (Hg)	mg/L	<0.00001	0.00001	9681509
RDL = Reportable Detection Limit				
QC Batch = Quality Control Batch				



**BUREAU  
VERITAS**

Bureau Veritas Job #: C4V0712

Report Date: 2024/10/21

Agnico-Eagle

Site Location: Meliadine

Your P.O. #: OL-1381216

Sampler Initials: AT

## TEST SUMMARY

**Bureau Veritas ID:** AETU07  
**Sample ID:** MEL-SR 16  
**Matrix:** Water

**Collected:** 2024/09/28  
**Shipped:**  
**Received:** 2024/10/02

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9681570	N/A	2024/10/04	Nachiketa Gohil
Chloride by Automated Colourimetry	SKAL	9681697	N/A	2024/10/04	Massarat Jan
Field Measured Dissolved Oxygen	PH	ONSITE	N/A	2024/10/03	Greeshma Maliyakkal Joseph
Field Measured Dissolved Oxygen	PH	ONSITE	N/A	2024/10/03	Greeshma Maliyakkal Joseph
Fluoride	ISE	9681575	2024/10/04	2024/10/04	Nachiketa Gohil
Mercury (low level)	CV/AA	9681509	2024/10/04	2024/10/04	Maitri PATIL
Low Level Chloride and Sulphate by AC	KONE	9691705	N/A	2024/10/08	Hirushi Kanewala-Appuhamilage
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	9691706	2024/10/08	2024/10/08	Ye Hyun KIM
Hardness (calculated as CaCO <sub>3</sub> )	CALC	9689375	N/A	2024/10/08	Automated Statchk
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	ICP	9689376	N/A	2024/10/08	Automated Statchk
Elements by CRC ICPMS (dissolved)	ICP/MS	9691758	N/A	2024/10/08	Andrew An
Na, K, Ca, Mg, S by CRC ICPMS (total)	ICP	9691759	2024/10/08	2024/10/08	Automated Statchk
Elements by CRC ICPMS (total)	ICP/MS	9691760	2024/10/07	2024/10/08	Andrew An
Silica (Reactive)	KONE	9694963	N/A	2024/10/10	Tyler Orr
Total Ammonia-N	SKAL/NH <sub>4</sub>	9681581	N/A	2024/10/04	Muskan
Nitrate & Nitrite as Nitrogen in Water	LACH	9681773	N/A	2024/10/04	Chandra Nandlal
Total Oil and Grease	BAL	9682332	2024/10/04	2024/10/04	Ben Benedict Manthra Honey
pH	AT	9681576	2024/10/04	2024/10/04	Nachiketa Gohil
Field Measured Dissolved Oxygen	PH	ONSITE	N/A	2024/10/03	Greeshma Maliyakkal Joseph
Orthophosphate	SKAL	9681592	N/A	2024/10/04	Massarat Jan
Calculated Total Dissolved Solids	CALC	9678816	N/A	2024/10/09	Automated Statchk
Total Dissolved Solids	BAL	9681387	2024/10/04	2024/10/07	Razieh Tabesh
Field Measured Dissolved Oxygen	PH	ONSITE	N/A	2024/10/03	Greeshma Maliyakkal Joseph
Total Phosphorus (Colourimetric)	SKAL/P	9681521	2024/10/04	2024/10/04	Vidhi Khatri
Low Level Total Suspended Solids	BAL	9681384	2024/10/04	2024/10/04	Tina Teng
Turbidity	AT	9680807	N/A	2024/10/04	Kien Tran
Field Measured Dissolved Oxygen	TURB	ONSITE	N/A	2024/10/03	Greeshma Maliyakkal Joseph

**Bureau Veritas ID:** AETU07 Dup  
**Sample ID:** MEL-SR 16  
**Matrix:** Water

**Collected:** 2024/09/28  
**Shipped:**  
**Received:** 2024/10/02

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9681570	N/A	2024/10/04	Nachiketa Gohil
Fluoride	ISE	9681575	2024/10/04	2024/10/04	Nachiketa Gohil
Low Level Chloride and Sulphate by AC	KONE	9691705	N/A	2024/10/08	Hirushi Kanewala-Appuhamilage
Total Ammonia-N	SKAL/NH <sub>4</sub>	9681581	N/A	2024/10/04	Muskan
Nitrate & Nitrite as Nitrogen in Water	LACH	9681773	N/A	2024/10/04	Chandra Nandlal
pH	AT	9681576	2024/10/04	2024/10/04	Nachiketa Gohil
Orthophosphate	SKAL	9681592	N/A	2024/10/04	Massarat Jan
Total Phosphorus (Colourimetric)	SKAL/P	9681521	2024/10/04	2024/10/04	Vidhi Khatri





### GENERAL COMMENTS

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

Package 1	13.0°C
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Revised Report [2024/10/21]: PDF security changed.

Revised Report [2024/10/18]: Sampling date modified to 2024/09/28 per client request.

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



Bureau Veritas Job #: C4V0712  
Report Date: 2024/10/21

## QUALITY ASSURANCE REPORT

Agnico-Eagle  
Site Location: Meliadine  
Your P.O. #: OL-1381216  
Sampler Initials: AT

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
9680807	Turbidity	2024/10/04			100	80 - 120	<0.1	NTU	3.1	20		
9681384	Total Suspended Solids	2024/10/04			98	80 - 120	<1	mg/L	NC	20		
9681387	Total Dissolved Solids	2024/10/07			95	80 - 120	<10	mg/L	4.3	20		
9681509	Mercury (Hg)	2024/10/04	96	75 - 125	97	80 - 120	<0.00001	mg/L	NC	20		
9681521	Total Phosphorus	2024/10/04	106	80 - 120	102	80 - 120	<0.020	mg/L	NC	20	95	80 - 120
9681570	Alkalinity (Total as CaCO3)	2024/10/04			98	85 - 115	<1.0	mg/L	1.1	20		
9681575	Fluoride (F-)	2024/10/04	99	80 - 120	103	80 - 120	<0.10	mg/L	NC	20		
9681576	pH	2024/10/04			102	98 - 103			0.68	N/A		
9681581	Total Ammonia-N	2024/10/04	94	75 - 125	105	80 - 120	<0.050	mg/L	NC	20		
9681592	Orthophosphate (P)	2024/10/04	95	75 - 125	95	80 - 120	<0.010	mg/L	NC	20		
9681697	Dissolved Chloride (Cl-)	2024/10/04	102	80 - 120	94	80 - 120	<1.0	mg/L	7.4	20		
9681773	Nitrate (N)	2024/10/04	103	80 - 120	103	80 - 120	<0.10	mg/L	3.2	20		
9681773	Nitrite (N)	2024/10/04	105	80 - 120	104	80 - 120	<0.010	mg/L	NC	20		
9682332	Total Oil & Grease	2024/10/04			98	80 - 110	<0.50	mg/L	0.25	25		
9691705	Dissolved Sulphate (SO4)	2024/10/08	NC	80 - 120	112	80 - 120	<0.50	mg/L	0.31	20		
9691706	Strong Acid Dissoc. Cyanide (CN)	2024/10/08	NC	80 - 120	98	80 - 120	<0.00050	mg/L				
9691758	Dissolved Aluminum (Al)	2024/10/08	98	80 - 120	100	80 - 120	<0.0030	mg/L				
9691758	Dissolved Arsenic (As)	2024/10/08	104	80 - 120	103	80 - 120	<0.00010	mg/L				
9691758	Dissolved Barium (Ba)	2024/10/08	98	80 - 120	100	80 - 120	<0.0010	mg/L				
9691758	Dissolved Cadmium (Cd)	2024/10/08	100	80 - 120	100	80 - 120	<0.000010	mg/L				
9691758	Dissolved Chromium (Cr)	2024/10/08	93	80 - 120	94	80 - 120	<0.0010	mg/L				
9691758	Dissolved Copper (Cu)	2024/10/08	90	80 - 120	93	80 - 120	<0.00020	mg/L				
9691758	Dissolved Iron (Fe)	2024/10/08	101	80 - 120	101	80 - 120	<0.0050	mg/L				
9691758	Dissolved Lead (Pb)	2024/10/08	98	80 - 120	100	80 - 120	<0.00020	mg/L				
9691758	Dissolved Manganese (Mn)	2024/10/08	97	80 - 120	99	80 - 120	<0.0010	mg/L				
9691758	Dissolved Molybdenum (Mo)	2024/10/08	107	80 - 120	107	80 - 120	<0.0010	mg/L				
9691758	Dissolved Nickel (Ni)	2024/10/08	94	80 - 120	97	80 - 120	<0.0010	mg/L				
9691758	Dissolved Selenium (Se)	2024/10/08	102	80 - 120	101	80 - 120	<0.00010	mg/L				
9691758	Dissolved Silver (Ag)	2024/10/08	97	80 - 120	99	80 - 120	<0.000020	mg/L				
9691758	Dissolved Thallium (Tl)	2024/10/08	100	80 - 120	101	80 - 120	<0.000010	mg/L				
9691758	Dissolved Zinc (Zn)	2024/10/08	101	80 - 120	103	80 - 120	<0.0050	mg/L				



Bureau Veritas Job #: C4V0712  
Report Date: 2024/10/21

## QUALITY ASSURANCE REPORT(CONT'D)

Agnico-Eagle  
Site Location: Meliadine  
Your P.O. #: OL-1381216  
Sampler Initials: AT

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
9691760	Total Aluminum (Al)	2024/10/08	104	80 - 120	104	80 - 120	<0.0030	mg/L				
9691760	Total Arsenic (As)	2024/10/08	109	80 - 120	107	80 - 120	<0.00010	mg/L				
9691760	Total Barium (Ba)	2024/10/08	103	80 - 120	103	80 - 120	<0.0010	mg/L				
9691760	Total Cadmium (Cd)	2024/10/08	105	80 - 120	104	80 - 120	<0.000010	mg/L				
9691760	Total Chromium (Cr)	2024/10/08	95	80 - 120	96	80 - 120	<0.0010	mg/L				
9691760	Total Copper (Cu)	2024/10/08	94	80 - 120	94	80 - 120	<0.00050	mg/L				
9691760	Total Iron (Fe)	2024/10/08	104	80 - 120	104	80 - 120	<0.010	mg/L				
9691760	Total Lead (Pb)	2024/10/08	100	80 - 120	100	80 - 120	<0.00020	mg/L				
9691760	Total Manganese (Mn)	2024/10/08	100	80 - 120	101	80 - 120	<0.0010	mg/L				
9691760	Total Molybdenum (Mo)	2024/10/08	108	80 - 120	109	80 - 120	<0.0010	mg/L				
9691760	Total Nickel (Ni)	2024/10/08	99	80 - 120	98	80 - 120	<0.0010	mg/L				
9691760	Total Selenium (Se)	2024/10/08	107	80 - 120	104	80 - 120	<0.00010	mg/L				
9691760	Total Silver (Ag)	2024/10/08	101	80 - 120	102	80 - 120	<0.000020	mg/L				
9691760	Total Titanium (Ti)	2024/10/08	103	80 - 120	103	80 - 120	<0.0050	mg/L				
9691760	Total Zinc (Zn)	2024/10/08	108	80 - 120	104	80 - 120	<0.0050	mg/L				
9694963	Reactive Silica (SiO2)	2024/10/10	NC	80 - 120	106	80 - 120	<0.050	mg/L				

N/A = Not Applicable

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

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

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

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

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

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

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



BUREAU  
VERITAS

Bureau Veritas Job #: C4V0712  
Report Date: 2024/10/21

Agnico-Eagle  
Site Location: Meliadine  
Your P.O. #: OL-1381216  
Sampler Initials: AT

## VALIDATION SIGNATURE PAGE

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

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Cristina Carriere, Senior Scientific Specialist

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David Huang, BBY Scientific Specialist

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Louise Harding, Scientific Specialist

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Sandy Yuan, M.Sc., QP, Scientific Specialist



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Automated Statchk

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Bureau Veritas Job #: C4V0712  
Report Date: 2024/10/21

Agnico-Eagle  
Site Location: Meliadine  
Your P.O. #: OL-1381216  
Sampler Initials: AT

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

Sample ID	Bureau Veritas 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.						