

November 3rd, 2024

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

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

Re: Follow-up Report Spill #2024-463 – Release of sediment in surface runoff at the Meliadine Gold Mine

On October 5th, 2024, the Nunavut Spill Line was notified by Agnico Eagle personnel via email (spills@gov.nt.ca) of a release of surface runoff containing elevated total suspended solids (TSS) at KM8.8 of the All-Weather Access Road (AWAR) at the Meliadine Gold Mine site (coordinates: 62°52'24.2"N 92°06'31.5"W). This follow-up report provides supplemental information based on the results of the incident assessment and is being provided in accordance with:

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

Description of Incident

On October 4th, 2024, a notification was sent to CIRNAC Resource Management Officer Kyle Amsel that ponded water would be pumped across the AWAR at KM8.8 to prevent road erosion and sediment transport. Ponded water had accumulated against the road and threatened to overtop the road due to the significant quantity of rainfall experienced in the days prior to the event. Pumping started at approximately 12:00 p.m. on October 4th, 2024, through a temporary sleeve that was placed on the surface of the road.

At approximately 9:00 p.m., construction work began to excavate a shallow trench in the road for placement of a temporary 16" HDPE drainage pipe. AWAR KM8.8 is an area with a low profile relative to the adjacent terrain. A semi-circular barrier made of backfill material was constructed upstream of the excavation to prevent the flow of water through the construction workings.

At approximately 10:00 p.m., surface runoff flowing downstream of the construction area was observed to be carrying sediment, which was confirmed by field turbidity measurements (Table 1) collected at 62°52'24.2"N 92°06'31.5"W (Fig.1).



Figure 1: Location of the surface runoff containing elevated total suspended solids and proximity to waterbodies.

Response and Remediation

At approximately 10:30 p.m. on October 4th, 2024, erosion and sediment controls were installed downstream of the construction area. The pump being used to draw down ponded water was shut down to reduce the water flow downstream of the construction area. The HDPE pipe was laid in the trench and a tarp was installed over the inlet to prevent the flow of sediment laden water through the pipe. A water sample was then collected at the Water Licence monitoring station MEL-SR-15 and additional field turbidity measurements were collected (Table 1) along with a sample for internal TSS analysis. The HDPE pipe was then backfilled, and the road surface compacted.

By approximately 12:00 a.m. on October 5th, 2024, turbidity measurements showed a significant reduction from earlier readings, indicating that the mitigation measures were effective at reducing downstream sedimentation. At approximately 2:00 a.m., the upstream berm was removed. Finally, the tarp covering the HDPE pipe inlet was removed at approximately 5:00 a.m. once sediment in the ponded water had settled.

On October 5th and October 6th, 2024, the area was inspected, and additional field turbidity measurements were collected to confirm the sustained effectiveness of the installed erosion and sediment control measures (Table 1). An additional water quality sample was also collected at Water License monitoring station MEL-SR-15 on October 6th. The temporary pipe was observed to be successfully managing ponded water against the road.

Table 1 presents the field turbidity readings and TSS results from the analyses conducted internally and by the external laboratory.

Table 1: Field turbidity measurements and TSS results from monitoring location MEL-SR-15*.

Date and Time	Average Field Turbidity (FNU)	Internal TSS (mg/L)	External TSS (mg/L)
1-Oct (background)	12.8	-	-
3-Oct (background)	6.8	-	-
4-Oct 10:00 p.m.	> 1000	-	-
4-Oct 11:00 p.m.	379.0	140.0	140.0
5-Oct 12:00 a.m.	81.9	-	-
5-Oct 1:00 a.m.	86.0	-	-
6-Oct 3:00 p.m.	3.0	2.0	2.0

* Sampling location corresponds to the outflow of the stream into a downstream waterbody (outlined in blue in Figure 1, south of the AWAR).

Photos are presented in Appendix A, while results from the full suite of water quality analyses conducted for Water Licence monitoring station MEL-SR-15 are presented in Appendix B.

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:






- AWAR KM8.8 is an area of the road with poor drainage. Runoff north of this area ponds against the road where it flows over the road or seeps through it. Following high levels of precipitation, the level of ponded water in this area was near the height of the road.
- Inadvertent backfill of existing temporary HDPE drainage pipes resulted in ponding water conditions worsening and the requirement for a new, temporary pipe to be installed. The mitigation works inadvertently introduced sediment into the water flowing into the tundra.

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

- The area will be closely monitored following precipitation events and during 2025 freshet. Erosion and sediment control measures will be maintained/placed as required.
- The installation of a permanent culvert system in this area is planned to be completed in 2025. The installed temporary HDPE drainage pipe will convey water until the permanent culvert installation is completed.

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



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Agnico Eagle Mines Limited - Meliadine Mine, Suite 879 - Rankin Inlet, Nunavut,
Canada X0C 0G0
agnicoeagle.com     
Sent from Meliadine

Appendix A – Photos



Photo 1: Trench being excavated for installation of temporary HDPE drainage pipe.



Photo 2: Downstream sediment controls.

Appendix B – Certificate of Analysis



Your P.O. #: 1381216
Site Location: Meliadine
Your C.O.C. #: 975687

Attention: Reporting

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

Report Date: 2024/10/22
Report #: R8371350
Version: 2 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4V8519

Received: 2024/10/09, 10:00

Sample Matrix: Water
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity (1)	2	N/A	2024/10/12	CAM SOP-00448	SM 24 2320 B m
Chloride by Automated Colourimetry (1)	2	N/A	2024/10/15	CAM SOP-00463	SM 24 4500-Cl E m
Field Measured Dissolved Oxygen (1, 4)	2	N/A	2024/10/10		Field pH Meter
Field Measured Conductivity (1, 4)	2	N/A	2024/10/10		Field Meter
Fluoride (1)	2	2024/10/11	2024/10/12	CAM SOP-00449	SM 24 4500-F C m
Mercury (low level) (1)	2	2024/10/11	2024/10/15	CAM SOP-00453	EPA 7470 m
Low Level Chloride and Sulphate by AC (2)	2	N/A	2024/10/18	AB SOP-00020	SM24-4500-Cl/SO4-E m
Cyanide, Strong Acid Dissociable (SAD) (2)	2	2024/10/17	2024/10/17	CAL SOP-00270	SM 24 4500-CN m
Hardness (calculated as CaCO3) (3)	2	N/A	2024/10/18	BBY WI-00033	Auto Calc
Na, K, Ca, Mg, S by CRC ICPMS (diss.) (3)	2	N/A	2024/10/18	BBY WI-00033	Auto Calc
Elements by CRC ICPMS (dissolved) (3)	2	N/A	2024/10/18	BBY7SOP-00002	EPA 6020b R2 m
Na, K, Ca, Mg, S by CRC ICPMS (total) (3)	2	2024/10/11	2024/10/18	BBY WI-00033	Auto Calc
Elements by CRC ICPMS (total) (3)	2	2024/10/17	2024/10/18	BBY7SOP-00003 / BBY7SOP-00002	EPA 6020b R2 m
Silica (Reactive) (2)	2	N/A	2024/10/17	AB SOP-00011	EPA 370.1 R1978 m
Total Ammonia-N (1)	2	N/A	2024/10/15	CAM SOP-00441	USGS I-2522-90 m
Nitrate & Nitrite as Nitrogen in Water (1, 5)	2	N/A	2024/10/12	CAM SOP-00440	SM 24 4500-NO3I/NO2B
Total Oil and Grease (1)	2	2024/10/14	2024/10/14	CAM SOP-00326	EPA1664B m,SM5520B m
pH (1, 6)	2	2024/10/11	2024/10/12	CAM SOP-00413	SM 24th - 4500H+ B
Field Measured pH (1, 4)	2	N/A	2024/10/10		Field pH Meter
Orthophosphate (1)	2	N/A	2024/10/15	CAM SOP-00461	SM 24 4500-P E
Calculated Total Dissolved Solids (1)	2	N/A	2024/10/22		Auto Calc
Total Dissolved Solids (1)	2	2024/10/11	2024/10/15	CAM SOP-00428	SM 24 2540C m
Field Temperature (1, 4)	2	N/A	2024/10/10		Field Thermometer
Total Phosphorus (Colourimetric) (1)	2	2024/10/15	2024/10/15	CAM SOP-00407	SM 24 4500-P I
Low Level Total Suspended Solids (1)	2	2024/10/11	2024/10/15	CAM SOP-00428	SM 24 2540D m
Turbidity (1)	2	N/A	2024/10/11	CAM SOP-00417	SM 24 2130 B
Turbidity - On-site (1)	2	N/A	2024/10/10		

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau



Your P.O. #: 1381216
Site Location: Meliadine
Your C.O.C. #: 975687

Attention: Reporting

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

Report Date: 2024/10/22
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CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4V8519

Received: 2024/10/09, 10:00

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 Mississauga, 6740 Campobello Rd , Mississauga, ON, L5N 2L8

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

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

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

(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."

Encryption Key

Katherine Szozda

Katherine Szozda
Project Manager
22 Oct 2024 10:49:22

Please direct all questions regarding this Certificate of Analysis to:

Katherine Szozda, Project Manager

Email: Katherine.Szozda@bureauveritas.com

Phone# (613)274-0573 Ext:7063633

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

Total Cover Pages : 2

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BUREAU
VERITAS

Bureau Veritas Job #: C4V8519
Report Date: 2024/10/22

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

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		AFKX18		AFKX19			AFKX19		
Sampling Date		2024/10/04 23:00		2024/10/06 15:00			2024/10/06 15:00		
COC Number		975687		975687			975687		
	UNITS	MEL-SR15	RDL	MEL-SR15	RDL	QC Batch	MEL-SR15 Lab-Dup	RDL	QC Batch
Calculated Parameters									
Calculated TDS	mg/L	320	1.0	310	1.0	9693678			
Dissolved Hardness (CaCO ₃)	mg/L	149	0.50	139	0.50	9708755			
Field Measurements									
Field Measured Conductivity	uS/cm	-	N/A	618.9	N/A	ONSITE			
Field Measured Dissolved oxygen	mg/L	-	N/A	10.51	N/A	ONSITE			
Field Temperature	Celsius	-	N/A	10.3	N/A	ONSITE			
Field Measured Field Turbidity	NTU	379	N/A	2.97	N/A	ONSITE			
Field Measured pH	pH	-		7.61		ONSITE			
Inorganics									
Total Ammonia-N	mg/L	<0.050	0.050	<0.050	0.050	9697346			
Strong Acid Dissoc. Cyanide (CN)	mg/L	0.00059	0.00050	<0.00050	0.00050	9708508			
Total Dissolved Solids	mg/L	370	10	335	10	9697369			
Fluoride (F ⁻)	mg/L	<0.10	0.10	<0.10	0.10	9698728			
Orthophosphate (P)	mg/L	<0.010	0.010	<0.010	0.010	9698613	<0.010	0.010	9698613
pH	pH	7.68		7.77		9698726			
Total Phosphorus	mg/L	0.21	0.020	<0.020	0.020	9701024			
Reactive Silica (SiO ₂)	mg/L	2.1	0.050	1.6	0.050	9708519			
Total Suspended Solids	mg/L	140	3	2	1	9697963			
Turbidity	NTU	34	0.1	0.9	0.1	9698596			
Alkalinity (Total as CaCO ₃)	mg/L	70	1.0	62	1.0	9698725			
Dissolved Chloride (Cl ⁻)	mg/L	130	1.0	120	1.0	9699742	130	1.0	9699742
Nitrite (N)	mg/L	<0.010	0.010	<0.010	0.010	9698696			
Nitrate (N)	mg/L	<0.10	0.10	<0.10	0.10	9698696			
Dissolved Sulphate (SO ₄)	mg/L	41	0.50	39	0.50	9710480			
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	<0.10	0.10	9698696			
Metals									
Dissolved Aluminum (Al)	mg/L	0.0104	0.0030	0.0056	0.0030	9711475			
Total Aluminum (Al)	mg/L	4.98	0.0030	0.0159	0.0030	9711566			
Dissolved Arsenic (As)	mg/L	0.00223	0.00010	0.00132	0.00010	9711475			
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate N/A = Not Applicable									



BUREAU
VERITAS

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Agnico-Eagle

Site Location: Meliadine

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Sampler Initials: MW

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		AFKX18		AFKX19			AFKX19		
Sampling Date		2024/10/04 23:00		2024/10/06 15:00			2024/10/06 15:00		
COC Number		975687		975687			975687		
	UNITS	MEL-SR15	RDL	MEL-SR15	RDL	QC Batch	MEL-SR15 Lab-Dup	RDL	QC Batch
Total Arsenic (As)	mg/L	0.0151	0.00010	0.00131	0.00010	9711566			
Dissolved Barium (Ba)	mg/L	0.0377	0.0010	0.0424	0.0010	9711475			
Total Barium (Ba)	mg/L	0.0901	0.0010	0.0401	0.0010	9711566			
Dissolved Cadmium (Cd)	mg/L	0.000014	0.000010	<0.000010	0.000010	9711475			
Total Cadmium (Cd)	mg/L	0.000047	0.000010	<0.000010	0.000010	9711566			
Dissolved Chromium (Cr)	mg/L	<0.0010	0.0010	<0.0010	0.0010	9711475			
Total Chromium (Cr)	mg/L	0.0186	0.0010	<0.0010	0.0010	9711566			
Dissolved Copper (Cu)	mg/L	0.00264	0.00020	0.00172	0.00020	9711475			
Total Copper (Cu)	mg/L	0.0338	0.00050	0.00153	0.00050	9711566			
Dissolved Iron (Fe)	mg/L	0.0777	0.0050	0.0944	0.0050	9711475			
Total Iron (Fe)	mg/L	8.70	0.010	0.152	0.010	9711566			
Dissolved Lead (Pb)	mg/L	<0.00020	0.00020	<0.00020	0.00020	9711475			
Total Lead (Pb)	mg/L	0.00557	0.00020	<0.00020	0.00020	9711566			
Dissolved Manganese (Mn)	mg/L	0.0285	0.0010	0.0086	0.0010	9711475			
Total Manganese (Mn)	mg/L	0.156	0.0010	0.0093	0.0010	9711566			
Dissolved Molybdenum (Mo)	mg/L	0.0016	0.0010	<0.0010	0.0010	9711475			
Total Molybdenum (Mo)	mg/L	0.0019	0.0010	<0.0010	0.0010	9711566			
Dissolved Nickel (Ni)	mg/L	0.0020	0.0010	0.0018	0.0010	9711475			
Total Nickel (Ni)	mg/L	0.0185	0.0010	0.0017	0.0010	9711566			
Dissolved Selenium (Se)	mg/L	<0.00010	0.00010	<0.00010	0.00010	9711475			
Total Selenium (Se)	mg/L	0.00018	0.00010	<0.00010	0.00010	9711566			
Dissolved Silver (Ag)	mg/L	<0.000020	0.000020	<0.000020	0.000020	9711475			
Total Silver (Ag)	mg/L	0.000032	0.000020	<0.000020	0.000020	9711566			
Dissolved Thallium (Tl)	mg/L	0.000010	0.000010	<0.000010	0.000010	9711475			
Total Titanium (Ti)	mg/L	0.254	0.0050	<0.0050	0.0050	9711566			
Dissolved Zinc (Zn)	mg/L	<0.0050	0.0050	<0.0050	0.0050	9711475			
Total Zinc (Zn)	mg/L	0.0210	0.0050	<0.0050	0.0050	9711566			
Dissolved Calcium (Ca)	mg/L	44.6	0.050	40.1	0.050	9708756			
Total Calcium (Ca)	mg/L	42.9	0.050	36.5	0.050	9708754			
Dissolved Magnesium (Mg)	mg/L	9.08	0.050	9.38	0.050	9708756			
Total Magnesium (Mg)	mg/L	11.3	0.050	8.78	0.050	9708754			
RDL = Reportable Detection Limit									
QC Batch = Quality Control Batch									
Lab-Dup = Laboratory Initiated Duplicate									



BUREAU
VERITAS

Bureau Veritas Job #: C4V8519
Report Date: 2024/10/22

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

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		AFKX18		AFKX19			AFKX19		
Sampling Date		2024/10/04 23:00		2024/10/06 15:00			2024/10/06 15:00		
COC Number		975687		975687			975687		
	UNITS	MEL-SR15	RDL	MEL-SR15	RDL	QC Batch	MEL-SR15 Lab-Dup	RDL	QC Batch
Dissolved Potassium (K)	mg/L	7.52	0.050	4.37	0.050	9708756			
Total Potassium (K)	mg/L	8.59	0.050	4.04	0.050	9708754			
Dissolved Sodium (Na)	mg/L	52.6	0.050	55.6	0.050	9708756			
Total Sodium (Na)	mg/L	50.6	0.050	50.6	0.050	9708754			
Petroleum Hydrocarbons									
Total Oil & Grease	mg/L	<0.50	0.50	<0.50	0.50	9700067			
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate									



BUREAU
VERITAS

Bureau Veritas Job #: C4V8519
Report Date: 2024/10/22

Agnico-Eagle
Site Location: Meliadine
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Sampler Initials: MW

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		AFKX18	AFKX19		
Sampling Date		2024/10/04 23:00	2024/10/06 15:00		
COC Number		975687	975687		
	UNITS	MEL-SR15	MEL-SR15	RDL	QC Batch
Metals					
Mercury (Hg)	mg/L	<0.00001	<0.00001	0.00001	9697666
RDL = Reportable Detection Limit					
QC Batch = Quality Control Batch					



**BUREAU
VERITAS**

Bureau Veritas Job #: C4V8519
Report Date: 2024/10/22

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

TEST SUMMARY

Bureau Veritas ID: AFKX18
Sample ID: MEL-SR15
Matrix: Water

Collected: 2024/10/04
Shipped:
Received: 2024/10/09

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9698725	N/A	2024/10/12	Nachiketa Gohil
Chloride by Automated Colourimetry	SKAL	9699742	N/A	2024/10/15	Massarat Jan
Field Measured Dissolved Oxygen	PH	ONSITE	N/A	2024/10/10	Kamalpreet Kaur
Field Measured Dissolved Oxygen	PH	ONSITE	N/A	2024/10/10	Kamalpreet Kaur
Fluoride	ISE	9698728	2024/10/11	2024/10/12	Nachiketa Gohil
Mercury (low level)	CV/AA	9697666	2024/10/11	2024/10/15	Maitri PATIL
Low Level Chloride and Sulphate by AC	KONE	9710480	N/A	2024/10/18	Tyler Orr
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	9708508	2024/10/17	2024/10/17	Ye Hyun KIM
Hardness (calculated as CaCO ₃)	CALC	9708755	N/A	2024/10/18	Automated Statchk
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	ICP	9708756	N/A	2024/10/18	Automated Statchk
Elements by CRC ICPMS (dissolved)	ICP/MS	9711475	N/A	2024/10/18	Andrew An
Na, K, Ca, Mg, S by CRC ICPMS (total)	ICP	9708754	2024/10/18	2024/10/18	Automated Statchk
Elements by CRC ICPMS (total)	ICP/MS	9711566	2024/10/17	2024/10/18	Andrew An
Silica (Reactive)	KONE	9708519	N/A	2024/10/17	Tyler Orr
Total Ammonia-N	SKAL/NH ₄	9697346	N/A	2024/10/15	Muskan
Nitrate & Nitrite as Nitrogen in Water	LACH	9698696	N/A	2024/10/12	Chandra Nandlal
Total Oil and Grease	BAL	9700067	2024/10/14	2024/10/14	Kishan Patel
pH	AT	9698726	2024/10/11	2024/10/12	Nachiketa Gohil
Field Measured Dissolved Oxygen	PH	ONSITE	N/A	2024/10/10	Kamalpreet Kaur
Orthophosphate	SKAL	9698613	N/A	2024/10/15	Massarat Jan
Calculated Total Dissolved Solids	CALC	9693678	N/A	2024/10/22	Automated Statchk
Total Dissolved Solids	BAL	9697369	2024/10/11	2024/10/15	Razieh Tabesh
Field Measured Dissolved Oxygen	PH	ONSITE	N/A	2024/10/10	Kamalpreet Kaur
Total Phosphorus (Colourimetric)	SKAL/P	9701024	2024/10/15	2024/10/15	Vidhi Khatri
Low Level Total Suspended Solids	BAL	9697963	2024/10/11	2024/10/15	Razieh Tabesh
Turbidity	AT	9698596	N/A	2024/10/11	Kien Tran
Field Measured Dissolved Oxygen	TURB	ONSITE	N/A	2024/10/10	Kamalpreet Kaur

Bureau Veritas ID: AFKX19
Sample ID: MEL-SR15
Matrix: Water

Collected: 2024/10/06
Shipped:
Received: 2024/10/09

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9698725	N/A	2024/10/12	Nachiketa Gohil
Chloride by Automated Colourimetry	SKAL	9699742	N/A	2024/10/15	Massarat Jan
Field Measured Dissolved Oxygen	PH	ONSITE	N/A	2024/10/10	Kamalpreet Kaur
Field Measured Dissolved Oxygen	PH	ONSITE	N/A	2024/10/10	Kamalpreet Kaur
Fluoride	ISE	9698728	2024/10/11	2024/10/12	Nachiketa Gohil
Mercury (low level)	CV/AA	9697666	2024/10/11	2024/10/15	Maitri PATIL
Low Level Chloride and Sulphate by AC	KONE	9710480	N/A	2024/10/18	Tyler Orr
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	9708508	2024/10/17	2024/10/17	Ye Hyun KIM
Hardness (calculated as CaCO ₃)	CALC	9708755	N/A	2024/10/18	Automated Statchk
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	ICP	9708756	N/A	2024/10/18	Automated Statchk
Elements by CRC ICPMS (dissolved)	ICP/MS	9711475	N/A	2024/10/18	Andrew An
Na, K, Ca, Mg, S by CRC ICPMS (total)	ICP	9708754	2024/10/18	2024/10/18	Automated Statchk



BUREAU
VERITAS

Bureau Veritas Job #: C4V8519

Report Date: 2024/10/22

Agnico-Eagle

Site Location: Meliadine

Your P.O. #: 1381216

Sampler Initials: MW

TEST SUMMARY

Bureau Veritas ID: AFKX19
Sample ID: MEL-SR15
Matrix: Water

Collected: 2024/10/06
Shipped:
Received: 2024/10/09

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Elements by CRC ICPMS (total)	ICP/MS	9711566	2024/10/17	2024/10/18	Andrew An
Silica (Reactive)	KONE	9708519	N/A	2024/10/17	Tyler Orr
Total Ammonia-N	SKAL/NH4	9697346	N/A	2024/10/15	Muskan
Nitrate & Nitrite as Nitrogen in Water	LACH	9698696	N/A	2024/10/12	Chandra Nandlal
Total Oil and Grease	BAL	9700067	2024/10/14	2024/10/14	Kishan Patel
pH	AT	9698726	2024/10/11	2024/10/12	Nachiketa Gohil
Field Measured Dissolved Oxygen	PH	ONSITE	N/A	2024/10/10	Kamalpreet Kaur
Orthophosphate	SKAL	9698613	N/A	2024/10/15	Massarat Jan
Calculated Total Dissolved Solids	CALC	9693678	N/A	2024/10/22	Automated Statchk
Total Dissolved Solids	BAL	9697369	2024/10/11	2024/10/15	Razieh Tabesh
Field Measured Dissolved Oxygen	PH	ONSITE	N/A	2024/10/10	Kamalpreet Kaur
Total Phosphorus (Colourimetric)	SKAL/P	9701024	2024/10/15	2024/10/15	Vidhi Khatri
Low Level Total Suspended Solids	BAL	9697963	2024/10/11	2024/10/15	Razieh Tabesh
Turbidity	AT	9698596	N/A	2024/10/11	Kien Tran
Field Measured Dissolved Oxygen	TURB	ONSITE	N/A	2024/10/10	Kamalpreet Kaur

Bureau Veritas ID: AFKX19 Dup
Sample ID: MEL-SR15
Matrix: Water

Collected: 2024/10/06
Shipped:
Received: 2024/10/09

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Chloride by Automated Colourimetry	SKAL	9699742	N/A	2024/10/15	Massarat Jan
Orthophosphate	SKAL	9698613	N/A	2024/10/15	Massarat Jan



BUREAU
VERITAS

Bureau Veritas Job #: C4V8519
Report Date: 2024/10/22

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

GENERAL COMMENTS

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

Package 1	6.7°C
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Results relate only to the items tested.



Bureau Veritas Job #: C4V8519
Report Date: 2024/10/22

QUALITY ASSURANCE REPORT

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

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
9697346	Total Ammonia-N	2024/10/15	NC	75 - 125	101	80 - 120	<0.050	mg/L	1.2	20		
9697369	Total Dissolved Solids	2024/10/15			95	80 - 120	<10	mg/L	1.1	20		
9697666	Mercury (Hg)	2024/10/15	104	75 - 125	101	80 - 120	<0.00001	mg/L	NC	20		
9697963	Total Suspended Solids	2024/10/15			96	80 - 120	<1	mg/L	6.9	20		
9698596	Turbidity	2024/10/12			99	80 - 120	<0.1	NTU	1.2	20		
9698613	Orthophosphate (P)	2024/10/15	100	75 - 125	95	80 - 120	<0.010	mg/L	NC	20		
9698696	Nitrate (N)	2024/10/12	94	80 - 120	97	80 - 120	<0.10	mg/L	0.088	20		
9698696	Nitrite (N)	2024/10/12	111	80 - 120	109	80 - 120	<0.010	mg/L				
9698725	Alkalinity (Total as CaCO3)	2024/10/12			101	85 - 115	<1.0	mg/L	2.4	20		
9698726	pH	2024/10/12			102	98 - 103			0.19	N/A		
9698728	Fluoride (F-)	2024/10/12	105	80 - 120	104	80 - 120	<0.10	mg/L	NC	20		
9699742	Dissolved Chloride (Cl-)	2024/10/15	NC	80 - 120	93	80 - 120	<1.0	mg/L	3.5	20		
9700067	Total Oil & Grease	2024/10/14			98	80 - 110	<0.50	mg/L	0.25	25		
9701024	Total Phosphorus	2024/10/15	96	80 - 120	105	80 - 120	<0.020	mg/L	1.0	20	104	80 - 120
9708508	Strong Acid Dissoc. Cyanide (CN)	2024/10/17	109	80 - 120	106	80 - 120	<0.00050	mg/L				
9708519	Reactive Silica (SiO2)	2024/10/17	NC	80 - 120	106	80 - 120	<0.050	mg/L				
9710480	Dissolved Sulphate (SO4)	2024/10/18	97	80 - 120	100	80 - 120	<0.50	mg/L	NC	20		
9711475	Dissolved Aluminum (Al)	2024/10/18	98	80 - 120	100	80 - 120	<0.0030	mg/L				
9711475	Dissolved Arsenic (As)	2024/10/18	100	80 - 120	104	80 - 120	<0.00010	mg/L				
9711475	Dissolved Barium (Ba)	2024/10/18	100	80 - 120	103	80 - 120	<0.0010	mg/L				
9711475	Dissolved Cadmium (Cd)	2024/10/18	100	80 - 120	103	80 - 120	<0.000010	mg/L				
9711475	Dissolved Chromium (Cr)	2024/10/18	95	80 - 120	99	80 - 120	<0.0010	mg/L				
9711475	Dissolved Copper (Cu)	2024/10/18	93	80 - 120	96	80 - 120	<0.00020	mg/L				
9711475	Dissolved Iron (Fe)	2024/10/18	100	80 - 120	103	80 - 120	<0.0050	mg/L				
9711475	Dissolved Lead (Pb)	2024/10/18	96	80 - 120	96	80 - 120	<0.00020	mg/L				
9711475	Dissolved Manganese (Mn)	2024/10/18	94	80 - 120	98	80 - 120	<0.0010	mg/L				
9711475	Dissolved Molybdenum (Mo)	2024/10/18	101	80 - 120	107	80 - 120	<0.0010	mg/L				
9711475	Dissolved Nickel (Ni)	2024/10/18	97	80 - 120	101	80 - 120	<0.0010	mg/L				
9711475	Dissolved Selenium (Se)	2024/10/18	101	80 - 120	104	80 - 120	<0.00010	mg/L				
9711475	Dissolved Silver (Ag)	2024/10/18	97	80 - 120	100	80 - 120	<0.000020	mg/L				
9711475	Dissolved Thallium (Tl)	2024/10/18	99	80 - 120	99	80 - 120	<0.000010	mg/L				
9711475	Dissolved Zinc (Zn)	2024/10/18	101	80 - 120	104	80 - 120	<0.0050	mg/L				



Bureau Veritas Job #: C4V8519
Report Date: 2024/10/22

QUALITY ASSURANCE REPORT(CONT'D)

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

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
9711566	Total Aluminum (Al)	2024/10/18	98	80 - 120	99	80 - 120	<0.0030	mg/L	1.7	20		
9711566	Total Arsenic (As)	2024/10/18	112	80 - 120	100	80 - 120	<0.00010	mg/L	0.76	20		
9711566	Total Barium (Ba)	2024/10/18	NC	80 - 120	102	80 - 120	<0.0010	mg/L	0.19	20		
9711566	Total Cadmium (Cd)	2024/10/18	102	80 - 120	100	80 - 120	<0.000010	mg/L	2.0	20		
9711566	Total Chromium (Cr)	2024/10/18	94	80 - 120	96	80 - 120	<0.0010	mg/L	NC	20		
9711566	Total Copper (Cu)	2024/10/18	90	80 - 120	94	80 - 120	<0.00050	mg/L	0.078	20		
9711566	Total Iron (Fe)	2024/10/18	NC	80 - 120	100	80 - 120	<0.010	mg/L	0.23	20		
9711566	Total Lead (Pb)	2024/10/18	95	80 - 120	97	80 - 120	<0.00020	mg/L	0.12	20		
9711566	Total Manganese (Mn)	2024/10/18	NC	80 - 120	96	80 - 120	<0.0010	mg/L	1.0	20		
9711566	Total Molybdenum (Mo)	2024/10/18	NC	80 - 120	102	80 - 120	<0.0010	mg/L	1.0	20		
9711566	Total Nickel (Ni)	2024/10/18	93	80 - 120	98	80 - 120	<0.0010	mg/L	0.59	20		
9711566	Total Selenium (Se)	2024/10/18	104	80 - 120	100	80 - 120	<0.00010	mg/L	0.69	20		
9711566	Total Silver (Ag)	2024/10/18	99	80 - 120	99	80 - 120	<0.000020	mg/L	0.34	20		
9711566	Total Titanium (Ti)	2024/10/18	105	80 - 120	100	80 - 120	<0.0050	mg/L	NC	20		
9711566	Total Zinc (Zn)	2024/10/18	NC	80 - 120	100	80 - 120	<0.0050	mg/L	1.2	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 $\leq 2 \times \text{RDL}$).



BUREAU
VERITAS

Bureau Veritas Job #: C4V8519
Report Date: 2024/10/22

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

VALIDATION SIGNATURE PAGE

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

Cristina Carriere, Senior Scientific Specialist

David Huang, BBY Scientific Specialist

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



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