

May 24, 2022

# Re: Agnico Eagle Meadowbank Mine – East Dike Pond Discharge Total Suspended Solids Exceedance on April 9, 2022 - Follow up report

As required by Water License 2AM-MEA1530 Part H, Item 8b, Subsections 38(5) of the Fisheries Act and Section 24(1)(a) of the Metal and Diamond Mining Effluent Regulations, Agnico Eagle Mine Ltd. Meadowbank Complex reported via email on April 25, 2022, that the level of Total Suspended Solids (TSS) from the East Dike Discharge (ST-MMER-3/ST-8) exceeded the limits, set out in Water License Part F Item 7 and MDMER Schedule 4, of 30 mg/L for the maximum authorized concentration in a grab sample.

As required by Water License 2AM-MEA1530 Part H, Item 8c, MDMER Section 24 (2), and Subsection 38(7) of the Fisheries Act, this letter serves as the follow up report, describing in full details the event and the analysis results.

The East Dike Discharge effluent was sampled on April 9, 2022 at 7:10am CT. Laboratory result (laboratory certificate Appendix A attach with this letter) of the April 9 sample was received on April 25, 2022. Result for total suspended solid (TSS) of 49 mg/L exceeds the regulatory limit of 30 mg/L maximum authorized concentration in a grab sample. East Dike Discharge to Second Portage Lake effluent was also sampled on April 10 and April 11. External laboratory TSS results for both samples are 2 mg/L. Based on a total flow of 220m³ between April 9, 7:00am and April 10, 7:30am CT, the quantity of TSS release is estimated to be at most 10.78 kg.

External laboratory results of April 10, April 11, April 18, April 25, and April 26 are below the authorized limits: April 10 (TSS – 2 mg/L), April 11 (TSS – 2 mg/L), April 18 (TSS – 2 mg/L), April 25 (TSS – 2 mg/L), and April 26 (TSS – 2 mg/L) indicating the TSS spike on April 9 was a one-time event. Additionally, acute lethality testing to *Daphnia Magna* and *Rainbow Trout* was performed on April 11, and demonstrated the effluent to be non-toxic to *Rainbow Trout* and *Daphnia Magna*. The April monthly TSS average for ST-MMER-3/ST-8 was 9.8mg/L.

Moreover, as part of internal monitoring to ensure the protection of the receiving environment, Agnico analyses on a daily basis a TSS sample from the East Dike seepage collection system through the onsite laboratory, which provides real time data for guidance. Results of these samples between April 1 and April 9 were all below the authorized limit, ranging between 2.80mg/L and 6.60mg/L, for an average of 4.97mg/L not allowing to foresee the exceedance on April 9. Furthermore, the internal results on April 9 were 2.80mg/L.

In the month of April, the discharge from the East Dike Seepage to Second Portage Lake was operational between April 7<sup>th</sup> and April 30<sup>th</sup> and is only expected to resume later in the fall of 2022.



Through the analysis of all of the available data, specifically the repeated low TSS analysis results, with the exception of April 9<sup>th</sup> analysis, and the non-toxic results of the acute lethality testing performed on April 11<sup>th</sup>, Agnico Eagle is confident that the aquatic environment was protected and not impacted. The Core Receiving Environment Monitoring Program includes Second Portage Lake and will confirm these findings.

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

Regards,

Samuel Tapp

samuel.tapp@agnicoeagle.com Environment Coordinator



### LIST OF APPENDICES

Appendix A: ST-MMER-3 2022-04-09 Certificate of Analysis

Appendix B: ST-MMER-3 2022-04-10 Certificate of Analysis

Appendix C: ST-MMER-3 2022-04-11 Certificate of Analysis

Appendix D: ST-MMER-3 2022-04-11 Acute Lethality Rainbow Trout Certificate of Analysis

Appendix E: ST-MMER-3 2022-04-11 Acute Lethality Daphnia Certificate of Analysis

Appendix F: ST-MMER-3 2022-04-18 Certificate of Analysis

Appendix G: ST-MMER-3 2022-04-25 Certificate of Analysis

Appendix H: ST-MMER-3 2022-04-26 Certificate of Analysis

**Appendix I: East Dike Internal TSS Results** 



Appendix A

ST-MMER-3 2022-04-09 Certificate of Analysis



Your P.O. #: PO 1121445 Your Project #: MBK

Site#: MBK

Your C.O.C. #: 496002

**Attention: Reporting** 

Agnico Eagle Meadowbank Meadowbank Keewatin, NU CANADA POX 0A1

Report Date: 2022/04/20

Report #: R7093226 Version: 1 - Final

### **CERTIFICATE OF ANALYSIS**

BUREAU VERITAS JOB #: C299312 Received: 2022/04/13, 09:30

Sample Matrix: Water # Samples Received: 1

		Date	Date		
Analyses	Quantity	Extracted	Analyzed	<b>Laboratory Method</b>	Analytical Method
Total Ammonia-N (1)	1	N/A	2022/04/20	CAM SOP-00441	USGS I-2522-90 m
Field Measured pH (1, 2)	1	N/A	2022/04/14		Field pH Meter
Field Temperature (1, 2)	1	N/A	2022/04/14		Field Thermometer
Low Level Total Suspended Solids (1)	1	2022/04/16	2022/04/18	CAM SOP-00428	SM 23 2540D m
Un-ionized Ammonia (1)	1	2022/04/14	2022/04/20	Auto Calc.	PWQO

#### 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, MELCC, EPA, APHA.

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

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

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

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

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.

- $^{st}$  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 is a field test, therefore, the results relate to items that were not analysed at Bureau Veritas.



Your P.O. #: PO 1121445 Your Project #: MBK

Site#: MBK

Your C.O.C. #: 496002

**Attention: Reporting** 

Agnico Eagle Meadowbank Meadowbank Keewatin, NU CANADA POX 0A1

Report Date: 2022/04/20

Report #: R7093226 Version: 1 - Final

### **CERTIFICATE OF ANALYSIS**

BUREAU VERITAS JOB #: C299312 Received: 2022/04/13, 09:30

**Encryption Key** 

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

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 Signature Page.



Agnico Eagle Client Project #: MBK Your P.O. #: PO 1121445 Sampler Initials: DN

### **RESULTS OF ANALYSES OF WATER**

Bureau Veritas ID		SJC561							
Comuling Data		2022/04/09							
Sampling Date		07:10							
COC Number		496002							
	UNITS	ST-MMER-3	RDL	QC Batch					
Calculated Parameters									
Total Un-ionized Ammonia	mg/L	<0.0011	0.0011	7940782					
Field Measurements									
Field Temperature	Celsius	1.3	N/A	ONSITE					
Field Measured pH	рН	8.28		ONSITE					
Inorganics			•						
Total Ammonia-N	mg/L	<0.050	0.050	7946688					
Total Suspended Solids	mg/L	49	1	7943403					
RDL = Reportable Detection I	RDL = Reportable Detection Limit								
QC Batch = Quality Control Batch									
N/A = Not Applicable									



Matrix: Water

Agnico Eagle

Client Project #: MBK Your P.O. #: PO 1121445 Sampler Initials: DN

### **TEST SUMMARY**

Bureau Veritas ID: SJC561 Collected: 2022/04/09 Sample ID: ST-MMER-3

Shipped:

**Received:** 2022/04/13

**Test Description** Instrumentation Batch Extracted **Date Analyzed** Analyst Total Ammonia-N LACH/NH4 7946688 N/A 2022/04/20 Raiq Kashif Field Measured pH РΗ ONSITE N/A 2022/04/14 Khanh Vi Trinh Field Measured pH РΗ ONSITE N/A 2022/04/14 Khanh Vi Trinh Low Level Total Suspended Solids 2022/04/18 Shaneil Hall BAL 7943403 2022/04/16 Un-ionized Ammonia CALC/NH3 7940782 2022/04/20 2022/04/20 Automated Statchk



Agnico Eagle Client Project #: MBK Your P.O. #: PO 1121445 Sampler Initials: DN

### **GENERAL COMMENTS**

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

Package 1	12.3°C
Package 2	13.0°C
Package 3	12.3°C
Package 4	13.3°C

Results relate only to the items tested.



#### **QUALITY ASSURANCE REPORT**

Agnico Eagle

Client Project #: MBK Your P.O. #: PO 1121445 Sampler Initials: DN

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Sta	andard
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7943403	Total Suspended Solids	2022/04/18					<1	mg/L	NC	25	100	85 - 115
7946688	Total Ammonia-N	2022/04/20	91	75 - 125	101	80 - 120	<0.050	mg/L	0.70	20		

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 (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).



Agnico Eagle Client Project #: MBK Your P.O. #: PO 1121445 Sampler Initials: DN

### **VALIDATION SIGNATURE PAGE**

Custin Carriere
Cristina Carriere, Senior Scientific Specialist

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

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 Signature Page.



Agnico Eagle Client Project #: MBK Your P.O. #: PO 1121445 Sampler Initials: DN

### 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 guide	lines.								



Appendix B

ST-MMER-3 2022-04-10 Certificate of Analysis



Your P.O. #: PO 1121445 Your Project #: MBK

Site#: 65'01'11.2"N 96'02'32.0"W

Site Location: MBK Your C.O.C. #: 496003

**Attention: Reporting** 

Agnico Eagle Meadowbank Meadowbank Keewatin, NU CANADA POX 0A1

Report Date: 2022/04/20

Report #: R7092783 Version: 1 - Final

### **CERTIFICATE OF ANALYSIS**

BUREAU VERITAS JOB #: C299553 Received: 2022/04/13, 09:30

Sample Matrix: Water # Samples Received: 1

		Date	Date		
Analyses	Quantity	Extracted	Analyzed	<b>Laboratory Method</b>	Analytical Method
Total Ammonia-N (1)	1	N/A	2022/04/20	CAM SOP-00441	USGS I-2522-90 m
Field Measured pH (1, 2)	1	N/A	2022/04/14		Field pH Meter
Field Temperature (1, 2)	1	N/A	2022/04/14		Field Thermometer
Low Level Total Suspended Solids (1)	1	2022/04/16	2022/04/18	CAM SOP-00428	SM 23 2540D m
Un-ionized Ammonia (1)	1	2022/04/14	2022/04/20	Auto Calc.	PWQO

#### 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 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.

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Your P.O. #: PO 1121445 Your Project #: MBK

Site#: 65'01'11.2"N 96'02'32.0"W

Site Location: MBK Your C.O.C. #: 496003

**Attention: Reporting** 

Agnico Eagle Meadowbank Meadowbank Keewatin, NU CANADA POX 0A1

Report Date: 2022/04/20

Report #: R7092783 Version: 1 - Final

### **CERTIFICATE OF ANALYSIS**

BUREAU VERITAS JOB #: C299553 Received: 2022/04/13, 09:30

**Encryption Key** 

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Katherine Szozda, Project Manager

Email: Katherine.Szozda@bureauveritas.com

Phone# (613)274-0573 Ext:7063633

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Client Project #: MBK Site Location: MBK Your P.O. #: PO 1121445 Sampler Initials: DN

### **RESULTS OF ANALYSES OF WATER**

Bureau Veritas ID		SJD753						
Sampling Date		2022/04/10 07:30						
COC Number		496003						
	UNITS	ST-MMER-3	RDL	QC Batch				
Calculated Parameters								
Total Un-ionized Ammonia	mg/L	<0.00069	0.00069	7940782				
Field Measurements			•					
Field Temperature	Celsius	1.1	N/A	ONSITE				
Field Measured pH	рН	8.1		ONSITE				
Inorganics			•					
Total Ammonia-N	mg/L	<0.050	0.050	7946688				
Total Suspended Solids	mg/L	2	1	7943403				
RDL = Reportable Detection Limit								
QC Batch = Quality Control Batch								
N/A = Not Applicable								



Client Project #: MBK Site Location: MBK Your P.O. #: PO 1121445 Sampler Initials: DN

### **TEST SUMMARY**

Bureau Veritas ID: SJD753 Sample ID: ST-MMER-3 Matrix: Water **Collected:** 2022/04/10

Shipped: Received: 2022/04/13

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Ammonia-N	LACH/NH4	7946688	N/A	2022/04/20	Raiq Kashif
Field Measured pH	PH	ONSITE	N/A	2022/04/14	Khanh Vi Trinh
Field Measured pH	PH	ONSITE	N/A	2022/04/14	Khanh Vi Trinh
Low Level Total Suspended Solids	BAL	7943403	2022/04/16	2022/04/18	Shaneil Hall
Un-ionized Ammonia	CALC/NH3	7940782	2022/04/20	2022/04/20	Automated Statchk



Client Project #: MBK Site Location: MBK Your P.O. #: PO 1121445 Sampler Initials: DN

### **GENERAL COMMENTS**

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

Package 1	12.3°C
Package 2	13.0°C
Package 3	12.3°C
Package 4	13.3°C

Results relate only to the items tested.



### **QUALITY ASSURANCE REPORT**

Agnico Eagle

Client Project #: MBK Site Location: MBK Your P.O. #: PO 1121445

Sampler Initials: DN

			Matrix	Spike	SPIKED	BLANK	Method E	Blank	RPI	D	QC Sta	ındard
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7943403	Total Suspended Solids	2022/04/18					<1	mg/L	NC	25	100	85 - 115
7946688	Total Ammonia-N	2022/04/20	91	75 - 125	101	80 - 120	<0.050	mg/L	0.70	20		

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.

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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 (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).



Client Project #: MBK Site Location: MBK Your P.O. #: PO 1121445 Sampler Initials: DN

### **VALIDATION SIGNATURE PAGE**

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

Anastassia Hamanov, Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation please refer to the Validation Signature Page.



Client Project #: MBK Site Location: MBK Your P.O. #: PO 1121445 Sampler Initials: DN

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

Sample ID	Bureau Veritas ID	Parameter	Criteria	Result	DL	UNITS
No Exceedances						
The exceedance summary ta	' '	oses only and should no	ot be considered a comprehe	nsive listing or	statement of c	conformance to
applicable regulatory guideli	nes.					



Appendix C

ST-MMER-3 2022-04-11 Certificate of Analysis



Your P.O. #: PO 1121445 Your Project #: MBK Site Location: MBK Your C.O.C. #: 496008

**Attention: Reporting** 

Agnico Eagle Meadowbank Meadowbank Keewatin, NU CANADA POX 0A1

Report Date: 2022/04/25

Report #: R7099059 Version: 2 - Final

### **CERTIFICATE OF ANALYSIS**

BUREAU VERITAS JOB #: C299332 Received: 2022/04/13, 09:30

Sample Matrix: Water # Samples Received: 4

•		Date	Date		
Analyses	Quantity	Extracted	Analyzed	Laboratory Method	Analytical Method
Low Level Chloride and Sulphate by AC (1)	4	N/A	2022/04/21	AB SOP-00020 / AB SOP-00018	SM23 4500-CL/SO4-E m
Cyanide, Strong Acid Dissociable (SAD) (1)	4	N/A	2022/04/21	CAL SOP-00270	SM 23 4500-CN m
Elements by CRC ICPMS (total) (2)	2	2022/04/19	2022/04/21	BBY7SOP-00003/ BBY7SO -00002	PEPA 6020B R2 m
Elements by CRC ICPMS (total) (2)	2	2022/04/21	2022/04/22	BBY7SOP-00003/ BBY7SO -00002	PEPA 6020B R2 m
Total Ammonia-N (3)	4	N/A	2022/04/20	CAM SOP-00441	USGS I-2522-90 m
Field Measured pH (3, 5)	2	N/A	2022/04/14		Field pH Meter
Radium-226 Low Level (4, 6)	4	N/A	2022/04/21	BQL SOP-00006 BQL SOP-00017 BQL SOP-00032	Alpha Spectrometry
Field Temperature (3, 5)	2	N/A	2022/04/14		Field Thermometer
Low Level Total Suspended Solids (3)	4	2022/04/18	2022/04/19	CAM SOP-00428	SM 23 2540D m
Turbidity (3)	4	N/A	2022/04/14	CAM SOP-00417	SM 23 2130 B m
Un-ionized Ammonia (3)	2	2022/04/14	2022/04/20	Auto Calc.	PWQO

### 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



Your P.O. #: PO 1121445 Your Project #: MBK Site Location: MBK Your C.O.C. #: 496008

**Attention: Reporting** 

Agnico Eagle Meadowbank Meadowbank Keewatin, NU CANADA POX 0A1

Report Date: 2022/04/25

Report #: R7099059 Version: 2 - Final

### **CERTIFICATE OF ANALYSIS**

BUREAU VERITAS JOB #: C299332 Received: 2022/04/13, 09:30

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 test was performed by Bureau Veritas Mississauga, 6740 Campobello Rd , Mississauga, ON, L5N 2L8
- (4) This test was performed by Bureau Veritas Kitimat, 6790 Kitimat Road, Unit 4, Mississauga, ON, L5N 5L9
- (5) This is a field test, therefore, the results relate to items that were not analysed at Bureau Veritas.
- (6) Radium-226 results have not been corrected for blanks.

### **Encryption Key**

 ${\bf Please\ direct\ all\ questions\ regarding\ this\ Certificate\ of\ Analysis\ to\ your\ Project\ Manager.}$ 

Katherine Szozda, Project Manager

Email: Katherine.Szozda@bureauveritas.com

Phone# (613)274-0573 Ext:7063633

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Client Project #: MBK Site Location: MBK Your P.O. #: PO 1121445 Sampler Initials: LD

### **RESULTS OF ANALYSES OF WATER**

Bureau Veritas ID		SJC681	SJC682			SJC683	SJC684		
Sampling Date		2022/04/11 07:30	2022/04/11 07:30			2022/04/11 07:30	2022/04/11 07:30		
COC Number		496008	496008			496008	496008		
	UNITS	ST-MMER-3	ST-MMER-3-DUP	RDL	QC Batch	ST-MMER-3-FB	ST-MMER-3-TB	RDL	QC Batch
Calculated Parameters									-
Total Un-ionized Ammonia	mg/L	<0.00061	<0.00061	0.00061	7940782				
Field Measurements	•			•	•			•	,
Field Temperature	Celsius	1.2	1.2	N/A	ONSITE				
Field Measured pH	рН	7.35	7.35		ONSITE				
Inorganics									
Total Ammonia-N	mg/L	<0.050	<0.050	0.050	7946688	<0.050	<0.050	0.050	7946688
Strong Acid Dissoc. Cyanide (CN)	mg/L	<0.00050	<0.00050	0.00050	7955510	<0.00050	<0.00050	0.00050	7955510
Total Suspended Solids	mg/L	2	2	1	7943484	<1	<1	1	7945025
Turbidity	NTU	0.3	0.4	0.1	7941445	<0.1	<0.1	0.1	7941445
Dissolved Sulphate (SO4)	mg/L	6.6	6.6	0.50	7952956	<0.50	<0.50	0.50	7952956
Metals									
Total Aluminum (Al)	mg/L	0.0453	0.0473	0.0030	7954201	<0.0030	<0.0030	0.0030	7955256
Total Arsenic (As)	mg/L	0.00136	0.00129	0.00010	7954201	<0.00010	<0.00010	0.00010	7955256
Total Copper (Cu)	mg/L	0.00119	0.00117	0.00050	7954201	<0.00050	<0.00050	0.00050	7955256
Total Lead (Pb)	mg/L	<0.00020	<0.00020	0.00020	7954201	<0.00020	<0.00020	0.00020	7955256
Total Nickel (Ni)	mg/L	<0.0010	<0.0010	0.0010	7954201	<0.0010	<0.0010	0.0010	7955256
Total Zinc (Zn)	mg/L	<0.0050	<0.0050	0.0050	7954201	<0.0050	<0.0050	0.0050	7955256
RADIONUCLIDE									
Radium-226	Bq/L	<0.0050	<0.0050	0.0050	7944275	<0.0050	<0.0050	0.0050	7944275
DDI Danastalala Datastian Lindt		•	•						

RDL = Reportable Detection Limit QC Batch = Quality Control Batch

N/A = Not Applicable



Client Project #: MBK Site Location: MBK Your P.O. #: PO 1121445 Sampler Initials: LD

### **TEST SUMMARY**

Bureau Veritas ID: SJC681 Sample ID: ST-MMER-3 **Collected:** 2022/04/11

Matrix: Water

Shipped:

**Received:** 2022/04/13

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Low Level Chloride and Sulphate by AC	KONE	7952956	N/A	2022/04/21	Shanna McKort
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	7955510	N/A	2022/04/21	Ming Dong
Elements by CRC ICPMS (total)	ICP/MS	7954201	2022/04/19	2022/04/21	Sahar Omar Al-Abdalla-Inactive
Total Ammonia-N	LACH/NH4	7946688	N/A	2022/04/20	Raiq Kashif
Field Measured pH	PH	ONSITE	N/A	2022/04/14	Khanh Vi Trinh
Radium-226 Low Level	AS	7944275	N/A	2022/04/21	Sarah Simpson
Field Measured pH	PH	ONSITE	N/A	2022/04/14	Khanh Vi Trinh
Low Level Total Suspended Solids	BAL	7943484	2022/04/18	2022/04/19	Shaneil Hall
Turbidity	AT	7941445	N/A	2022/04/14	Roya Fathitil
Un-ionized Ammonia	CALC/NH3	7940782	2022/04/20	2022/04/20	Automated Statchk

Bureau Veritas ID: SJC682

Sample ID: ST-MMER-3-DUP

Matrix: Water

**Collected:** 2022/04/11

Shipped:

**Received:** 2022/04/13

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Low Level Chloride and Sulphate by AC	KONE	7952956	N/A	2022/04/21	Shanna McKort
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	7955510	N/A	2022/04/21	Ming Dong
Elements by CRC ICPMS (total)	ICP/MS	7954201	2022/04/19	2022/04/21	Sahar Omar Al-Abdalla-Inactive
Total Ammonia-N	LACH/NH4	7946688	N/A	2022/04/20	Raiq Kashif
Field Measured pH	PH	ONSITE	N/A	2022/04/14	Khanh Vi Trinh
Radium-226 Low Level	AS	7944275	N/A	2022/04/21	Sarah Simpson
Field Measured pH	PH	ONSITE	N/A	2022/04/14	Khanh Vi Trinh
Low Level Total Suspended Solids	BAL	7943484	2022/04/18	2022/04/19	Shaneil Hall
Turbidity	AT	7941445	N/A	2022/04/14	Roya Fathitil
Un-ionized Ammonia	CALC/NH3	7940782	2022/04/20	2022/04/20	Automated Statchk

Bureau Veritas ID: SJC683 Sample ID: ST-MMER-3-FB Matrix: Water

Shipped:

**Collected:** 2022/04/11 **Received:** 2022/04/13

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Low Level Chloride and Sulphate by AC	KONE	7952956	N/A	2022/04/21	Shanna McKort
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	7955510	N/A	2022/04/21	Ming Dong
Elements by CRC ICPMS (total)	ICP/MS	7955256	2022/04/21	2022/04/22	Sahar Omar Al-Abdalla-Inactive
Total Ammonia-N	LACH/NH4	7946688	N/A	2022/04/20	Raiq Kashif
Radium-226 Low Level	AS	7944275	N/A	2022/04/21	Sarah Simpson
Low Level Total Suspended Solids	BAL	7945025	2022/04/18	2022/04/19	Shaneil Hall
Turbidity	AT	7941445	N/A	2022/04/14	Roya Fathitil



Report Date: 2022/04/25

Agnico Eagle

Client Project #: MBK Site Location: MBK Your P.O. #: PO 1121445 Sampler Initials: LD

### **TEST SUMMARY**

Bureau Veritas ID: SJC684 **Collected:** 2022/04/11 Sample ID: ST-MMER-3-TB
Matrix: Water

Shipped: Received: 2022/04/13

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Low Level Chloride and Sulphate by AC	KONE	7952956	N/A	2022/04/21	Shanna McKort
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	7955510	N/A	2022/04/21	Ming Dong
Elements by CRC ICPMS (total)	ICP/MS	7955256	2022/04/21	2022/04/22	Sahar Omar Al-Abdalla-Inactive
Total Ammonia-N	LACH/NH4	7946688	N/A	2022/04/20	Raiq Kashif
Radium-226 Low Level	AS	7944275	N/A	2022/04/21	Sarah Simpson
Low Level Total Suspended Solids	BAL	7945025	2022/04/18	2022/04/19	Shaneil Hall
Turbidity	AT	7941445	N/A	2022/04/14	Roya Fathitil



Client Project #: MBK Site Location: MBK Your P.O. #: PO 1121445 Sampler Initials: LD

### **GENERAL COMMENTS**

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

Package 1	12.3°C
Package 2	13.0°C
Package 3	12.3°C
Package 4	13.3°C

Results relate only to the items tested.



#### **QUALITY ASSURANCE REPORT**

Agnico Eagle

Client Project #: MBK
Site Location: MBK
Your P.O. #: PO 1121445

Sampler Initials: LD

			Matrix	Spike	SPIKED	BLANK	Method E	Blank	RPI	D	QC Sta	ndard
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7941445	Turbidity	2022/04/14			112	85 - 115	<0.1	NTU	2.4	20		
7943484	Total Suspended Solids	2022/04/19					<1	mg/L	6.9	25	98	85 - 115
7944275	Radium-226	2022/04/20			90	85 - 115	<0.0050	Bq/L	NC	N/A		
7945025	Total Suspended Solids	2022/04/19					<1	mg/L	NC	25	96	85 - 115
7946688	Total Ammonia-N	2022/04/20	91	75 - 125	101	80 - 120	<0.050	mg/L	0.70	20		
7952956	Dissolved Sulphate (SO4)	2022/04/21	105	80 - 120	108	80 - 120	<0.50	mg/L	0.40	20		
7954201	Total Aluminum (Al)	2022/04/21	108	80 - 120	104	80 - 120	<0.0030	mg/L				
7954201	Total Arsenic (As)	2022/04/21	107	80 - 120	106	80 - 120	<0.00010	mg/L				
7954201	Total Copper (Cu)	2022/04/21	99	80 - 120	100	80 - 120	<0.00050	mg/L				
7954201	Total Lead (Pb)	2022/04/21	107	80 - 120	107	80 - 120	<0.00020	mg/L				
7954201	Total Nickel (Ni)	2022/04/21	100	80 - 120	100	80 - 120	<0.0010	mg/L				
7954201	Total Zinc (Zn)	2022/04/21	NC	80 - 120	102	80 - 120	<0.0050	mg/L				
7955256	Total Aluminum (Al)	2022/04/22	97	80 - 120	99	80 - 120	<0.0030	mg/L	NC	20		
7955256	Total Arsenic (As)	2022/04/22	105	80 - 120	105	80 - 120	<0.00010	mg/L				
7955256	Total Copper (Cu)	2022/04/22	95	80 - 120	97	80 - 120	<0.00050	mg/L				
7955256	Total Lead (Pb)	2022/04/22	101	80 - 120	102	80 - 120	<0.00020	mg/L				
7955256	Total Nickel (Ni)	2022/04/22	98	80 - 120	100	80 - 120	<0.0010	mg/L				
7955256	Total Zinc (Zn)	2022/04/22	114	80 - 120	113	80 - 120	<0.0050	mg/L	_			
7955510	Strong Acid Dissoc. Cyanide (CN)	2022/04/21	101	80 - 120	100	80 - 120	<0.00050	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).



Client Project #: MBK Site Location: MBK Your P.O. #: PO 1121445 Sampler Initials: LD

### **VALIDATION SIGNATURE PAGE**

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

afreene
Anastassia Hamanov, Scientific Specialist
Cuistina Camine
Cristina Carriere, Senior Scientific Specialist
A
David Huang, BBY Scientific Specialist
SEMICA TO STEPPE SEMICAL STEPPE SEMI
Steven Simpson, Lab Director
- Sul
Sze Yeung Fock, B.Sc., Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation please refer to the Validation Signature Page.



Client Project #: MBK Site Location: MBK Your P.O. #: PO 1121445 Sampler Initials: LD

## 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 purp	oses only and should no	ot be considered a compreh	nensive listing or s	statement of	conformance	to
applicable regulatory guidelines							



Appendix D
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ST-MMER-3 2022-04-11 Acute Lethality Rainbow Trout Certificate of Analysis



#### **RESULTS OF RAINBOW TROUT - LC50 (ACUTE-96H)**

Client: 6463 Agnico Eagle Mines Limited, Meadowbank Job Number: C215355

Client Project Name & Number: 65°01'11.2" N 96°02'32.0"W MBK

**Test Result:** 

96 hrs LC50 %v/v (95% CL): >100 (N/A) Statistical Method: Visual Toxic unit: <1

Sample Name: ST-MMER-3 Comment: Nontoxic Sample Matrix:

<u>Sample Name:</u> ST-MMER-3 Sample Matrix: Water
Description: Colorless, translucent, no suspended solids Sample Number: KH1465-02

Sample Collected: Apr 11, 2022 07:30 AM Sampling Method: Grab Site Collection: 65°01'11.2" N 96°02'32.0"

Sample Collected By: OJ - AB Volume Received: 31 L Avg Temp Arrival: 13 °C Storage: 2-6°C

Sample Received: Apr 14, 2022 08:30 AM pH: 8.0 Dissolved Oxygen: 100.0 %
Analysis Start: Apr 14, 2022 02:45 PM Temperature: 16.1 °C Sample Conductance: 78 μS/cm

Concentration	Temperature (°C)	pH (pH)	Conductivity (uS/cm)	Dissolved oxygen (mg/L)	Temperature (°C)	pH (pH)	Dissolved oxygen (mg/L)	Atypical Behaviour (#)	Atypical Behaviour (%)	Mortality (#)	Mortality (%)	Atypical Behaviour (#)
%v/v	0 hr	0 hr	0 hr	0 hr	96 hrs	96 hr	96 hrs	24 hrs	24 hrs	24 hrs	24 hrs	48 hrs
0	15.6	7.6	215	9.9	14.7	7.7	10.1	0	0	0	0	0
6.25	15.5	7.6	207	9.9	14.5	7.7	10.1	0	0	0	0	0
12.5	15.7	7.6	199	9.9	14.6	7.7	10.0	0	0	0	0	0
25	15.7	7.6	183	9.8	14.8	7.7	10.0	0	0	0	0	0
50	15.7	7.6	150	10.0	14.5	7.7	10.1	0	0	0	0	0
100	16.1	7.7	77	10.0	14.5	7.7	9.9	0	0	0	0	0

Concentration	Atypical Behaviour (%)	Mortality (#)	Mortality (%)	Atypical Behaviour (#)	Atypical Behaviour (%)	Mortality (#)	Mortality (%)	Atypical Behaviour (#)	Atypical Behaviour (%)	Mortality (#)	Mortality (%)
%v/v	48 hrs	48 hrs	48 hrs	72 hrs	72 hrs	72 hrs	72 hrs	96 hrs	96 hrs	96 hrs	96 hrs
0	0	0	0	0	0	0	0	0	0	0	0
6.25	0	0	0	0	0	0	0	0	0	0	0
12.5	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0	0	0	0	0
100	0	0	0	0	0	0	0	0	0	0	0

**Comments:** 

<u>Culture/Control/Dilution Water</u> Dechlorinated municipal tap water

Hardness: 87 mg/l CaCO₃ Other parameters available on request.

Test Conditions Test concentration: 0,6.25,12.5,25,50,100 (%v/v)

Organisms per Vessel : 10 Test Temperature :  $15 \pm 1$  °C Solution Depth : 35 cm

Total # of Organisms Used : 60 Pre-aeration Time : 30 min. Rate of Aeration 6.5±1 mL/min/L

Test Volume : 16 L Vessel Volume : 20L Test pH Adjusted: No

Loading Density: 0.3 g/L Photoperiod: 16 hours of of light; 8 hours of darkness

Test vessel: Plastic container with polyethylene bag.

<u>Test Organism</u>: Rainbow Trout (Oncorhynchus mykiss) Source: Piscicultures Les Arpents Verts

Culture Temperature :  $15 \pm 2$  °C Weight (Mean) +- SD :  $0.5 \pm 0.1$  g Length (Mean) +- SD :  $3.79 \pm 0.16$  cm Culture Water Renewal : 2 liters/min Weight (Range) : 0.4 - 0.7 g Length (Range) : 3.50 - 4.00 cm

Culture Photoperiod: 16 hours of of light; 8 hours of darkness % Mortality within 7 days: 0.1% Feeding rate and frequency: 1-2x a day; 1-5% of the body weights. Acclimation Time: >14 days

The results contained in this report refer only to the testing of the sample submitted. This report may not be reproduced, except in its entirety, without the written approval of the laboratory.



### **RESULTS OF RAINBOW TROUT - LC50 (ACUTE-96H)**

Client:6463Agnico Eagle Mines Limited, MeadowbankJob Number:C215355Client Project Name & Number:65°01'11.2" N96°02'32.0"WMBKSample Number:KH1465-02

Reference chemical:PhenolTest Date:Apr 12, 2022Test Endpoint 96 hrs LC50 (95% confidence interval):9.43 (6.00, 13.0)mg/LStatistical Method:Binomial

Historical Mean LC50 (warning limits): 10.2 (8.69, 12.1) mg/L Concentration: 0,4,6,9,13,18 mg/L

<u>Test Method</u> QUE SOP - 00408. Reference Method for Determining Acute Lethality of Effluents to Rainbow Trout. EPS1/RM/13

- Second Edition. Environment Canada. 2000. (Including Amendments: May 2007 and February 2016).

This is essentially a 96H static test. Ten individuals are submitted to different effluent concentrations in order to

measure the LC50 in controlled temperature, light intensity and loading density.

Method Deviations : None

Analyst: Andriy Bukhtiyarov, Wasire Konseiga

Verified By: Wael Ellamouchi, Analyste 2 Date: Apr 28, 2022 11:26 AM



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ST-MMER-3 2022-04-11 Acute Lethality Daphnia Certificate of Analysis

#### **RESULTS OF DAPHNIA - LC50 (ACUTE-48H)-FEDERAL**

Client: 6463 Agnico Eagle Mines Limited, Meadowbank Job Number: C215355 Client Project Name & Number: 65°01'11.2" N 96°02'32.0"W No. d'échantillon : MBK KH1465-01

**Test Result:** 

48 hrs LC50 %v/v (95% CL): >100 (N/A) Statistical Method: Visual Toxic unit: <1 48 hrs EC50 %v/v (95% CL): >100 (N/A) Statistical Method: Comment: Non toxic Visual

ST-MMER-3 Sample Name:

Description: Colorless, translucent, no suspended solids

Sample Prior to Analysis: Sample Collected: Apr 11, 2022 07:30 AM Sampling Method: pH: 8.0

21.7 °C Sample Collected By: OJ - AB Site Collection: 65°01'11.2" N Temperature:

96°02'32.0"W

Water

Sample Matrix:

Sample Received: Apr 14, 2022 08:30 AM Volume Received: 1 L Dissolved Oxygen: 126.0 % Sample Conductance: Analysis Start: Apr 16, 2022 12:16 PM Avg Temp Arrival: 12 °C 82 uS/cm

End: Apr 18, 2022 12:42 PM Storage: 2-6°C Hardness: 35 mg CaCO 3/L

	_	. '	. *	_				_	_	_	
Concentration	Temperature (°C)	pH (pH)	Conductivity (uS/cm)	Dissolved oxygen (mg/L)	Temperature (°C)	pH (pH)	Dissolved oxygen (mg/L)	Immobility (#)	Immobility (%)	Mortality (#)	Mortality (%)
%v/v	0 hr	0 hr	0 hr	0 hr	48 hrs	48 hr	48 hrs	48 hrs	48 hrs	48 hrs	48 hrs
0	21	7.7	376	8.7	20	7.9	9.0	0	0	0	0
6.25	20.8	7.8	365	8.8	20.8	7.9	9.1	0	0	0	0
12.5	21.3	7.8	345	8.8	20.7	7.9	9.1	0	0	0	0
25	21.3	7.8	310	8.8	20.4	7.9	9.2	0	0	0	0
50	21.4	7.9	236	8.8	20.3	7.9	9.2	0	0	0	0
100	21.5	8.0	78	9.3	20.5	8.0	9.2	1	10.0	0	0

**Comments:** After 30 minutes of aeration, dissolved oxygen is over 100% of saturation.

**Culture/Control/Dilution Water:** Reconstitued water for Daphnia

Hardness: 170 mg/I CaCO<sub>3</sub> Other parameters available on request.

**Test Conditions** Test concentration: 0,6.25,12.5,25,50,100 (%v/v)

Organisms per Vessel: 10 Pre-aeration Time: 30 min Rate of Pre-aeration: 40±5 mL/min/L

60 Total # of Organisms Used: Test Temperature: 20 ± 2 °C Test Hardness Adjusted: No Test Volume: Vessel Volume: 200 ml Test pH Adjusted: 150 mL No

Loading Density: 15.0 mL/Daphnia Photoperiod: 16 hours of of light; 8 hours of darkness

Source: Daphnia magna **BV Lab Culture Test Organism:** 

<24 hres Average Brood Size: 51.0 Age at Test Initiation: Culture Photoperiod: 16 hours of of light; 8 hours of darkness % Mortality within 7 days: 1

Culture Temperature: 20 ± 2 °C Time To First Brood: 9 Days

**Culture Diet** Fed once a day.

Reference chemical: Potassium Dichromate Test Date: Apr 24, 2022 Test Endpoint 48 hrs LC50 (95% confidence interval): 0.088 (0.063, 0.13)mg/L Statistical Method: Binomial Historical Mean LC50 (warning limits): 0.16 (0.037, 0.69) mg/L Concentration: 0,0.0625,0.125,0.25,0.5,1 mg/L

**Test Method** SPE 1/RM/14 Method Deviations: NONE

Igor Mitrofanov, Marie-Michèle Ferland, Shivia Marine Nankoo Analyst:

Verified By: Hamida Djouder, Analyst 1 Date: May 10, 2022 05:31 PM

The results contained in this report refer only to the testing of the sample submitted. Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation, including the toxicity parameters reported herein. The conductivity, dissolved oxygen and pH data contained within the toxicity report are provided for information purposes and are not individually accredited parameters. This report may not be reproduced, except in its entirety, without the written approval of the laboratory.



Appendix	F
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ST-MMER-3 2022-04-18 Certificate of Analysis



Your P.O. #: 1121445

Site#: 65'01'11.2" N 96'02'32.0"W

Your C.O.C. #: 498865

**Attention: Reporting** 

Agnico Eagle Meadowbank Meadowbank Keewatin, NU CANADA POX 0A1

Report Date: 2022/05/16

Report #: R7127155 Version: 4 - Revision

## **CERTIFICATE OF ANALYSIS – REVISED REPORT**

BUREAU VERITAS JOB #: C2A6847 Received: 2022/04/21, 10:00

Sample Matrix: Surface Water # Samples Received: 2

		Date	Date		
Analyses	Quantity	Extracted	Analyzed	<b>Laboratory Method</b>	<b>Analytical Method</b>
Alkalinity (1)	1	N/A	2022/04/28	CAM SOP-00448	SM 23 2320 B m
Chloride by Automated Colourimetry (1)	1	N/A	2022/04/27	CAM SOP-00463	SM 23 4500-Cl E m
Mercury (low level) (1)	1	2022/04/26	2022/04/26	CAM SOP-00453	EPA 7470 m
Low Level Chloride and Sulphate by AC (2)	1	N/A	2022/04/27	AB SOP-00020 / AB SOP-00018	SM23 4500-CL/SO4-E m
Hardness Total (calculated as CaCO3) (3, 4)	1	N/A	2022/04/28	BBY WI-00033	Auto Calc
Na, K, Ca, Mg, S by CRC ICPMS (total) (3)	1	2022/04/22	2022/04/28	BBY7SOP-00002	EPA 6020B R2 m
Elements by CRC ICPMS (total) (3)	1	2022/04/26	2022/04/27	BBY7SOP-00003/ BBY7SO -00002	PEPA 6020B R2 m
Total Phosphorus Low Level Total (2)	1	2022/04/27	2022/04/28	AB SOP-00024	SM 23 4500-P A,B,F m
Total Ammonia (as NH3) (1)	1	N/A	2022/04/26	Auto Calc.	
Total Ammonia-N (1)	2	N/A	2022/04/26	CAM SOP-00441	USGS I-2522-90 m
Nitrate & Nitrite as Nitrogen in Water (1, 5)	1	N/A	2022/04/28	CAM SOP-00440	SM 23 4500-NO3I/NO2B
Field Measured pH (1, 6)	2	N/A	2022/04/22		Field pH Meter
Field Temperature (1, 6)	2	N/A	2022/04/22		Field Thermometer
Low Level Total Suspended Solids (1)	1	2022/04/25	2022/04/26	CAM SOP-00428	SM 23 2540D m
Un-ionized Ammonia (1)	1	2022/04/22	2022/04/26	Auto Calc.	PWQO

#### **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, MELCC, EPA, APHA.

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

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



Your P.O. #: 1121445

Site#: 65'01'11.2" N 96'02'32.0"W

Your C.O.C. #: 498865

**Attention: Reporting** 

Agnico Eagle Meadowbank Meadowbank Keewatin, NU CANADA POX 0A1

Report Date: 2022/05/16

Report #: R7127155 Version: 4 - Revision

## **CERTIFICATE OF ANALYSIS – REVISED REPORT**

BUREAU VERITAS JOB #: C2A6847 Received: 2022/04/21, 10:00

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

### **Encryption Key**

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

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 Signature Page.



## **RESULTS OF ANALYSES OF SURFACE WATER**

Bureau Veritas ID		SKR971			SKR971			SKR972		
Sampling Date		2022/04/18			2022/04/18			2022/04/18		
Sampling Date		07:00			07:00			07:00		
COC Number		498865			498865			498865		
	UNITS	ST-MMER-3	RDL	QC Batch	ST-MMER-3 Lab-Dup	RDL	QC Batch	ST-MMER-3-EEM	RDL	QC Batch
Calculated Parameters										
Total Ammonia (as NH3)	mg/L							<0.061	0.061	7954267
Total Un-ionized Ammonia	mg/L	<0.0021	0.0021	7954265						
Field Measurements										
Field Temperature	Celsius	0.4	N/A	ONSITE				0.4	N/A	ONSITE
Field Measured pH	рН	8.62		ONSITE				8.62		ONSITE
Inorganics										
Total Ammonia-N	mg/L	<0.050	0.050	7959465				<0.050	0.050	7959465
Total Suspended Solids	mg/L	2	1	7957782	3	1	7957782			
Alkalinity (Total as CaCO3)	mg/L							34	1.0	7960462
Dissolved Chloride (Cl-)	mg/L							<1.0	1.0	7960140
Nitrite (N)	mg/L							<0.010	0.010	7959789
Nitrate (N)	mg/L							<0.10	0.10	7959789
Dissolved Sulphate (SO4)	mg/L							6.9	0.50	7966504
Nitrate + Nitrite (N)	mg/L							<0.10	0.10	7959789
Metals										
Total Aluminum (Al)	mg/L							0.0357	0.0030	7965007
Total Cadmium (Cd)	mg/L							<0.000010	0.000010	7965007
Total Chromium (Cr)	mg/L							<0.0010	0.0010	7965007
Total Cobalt (Co)	mg/L							<0.00020	0.00020	7965007
Total Iron (Fe)	mg/L							0.047	0.010	7965007
Total Manganese (Mn)	mg/L							0.0017	0.0010	7965007
Total Molybdenum (Mo)	mg/L							<0.0010	0.0010	7965007
Total Selenium (Se)	mg/L							<0.00010	0.00010	7965007
Total Thallium (TI)	mg/L							<0.000010	0.000010	7965007
Total Uranium (U)	mg/L							0.00051	0.00010	7965007
Total Calcium (Ca)	mg/L							11.1	0.050	7965006
Total Magnesium (Mg)	mg/L							1.93	0.050	7965006
Nutritional Parameters	-									
Total Phosphorus (P)	mg/L							0.0021	0.0010	7968059
RDI - Reportable Detection	limit								•	•

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

Lab-Dup = Laboratory Initiated Duplicate

N/A = Not Applicable



# **ELEMENTS BY ATOMIC SPECTROSCOPY (SURFACE WATER)**

Bureau Veritas ID		SKR972							
Carrallia a Data		2022/04/18							
Sampling Date		07:00							
COC Number		498865							
	UNITS	ST-MMER-3-EEM	RDL	QC Batch					
Calculated Parameters	Calculated Parameters								
Total Hardness (CaCO3)	mg/L	35.7	0.50	7965005					
Metals	•								
Mercury (Hg)	mg/L	<0.00001	0.00001	7959255					
RDL = Reportable Detection Limit									
QC Batch = Quality Control B	atch								



## **TEST SUMMARY**

Bureau Veritas ID: SKR971

Sample ID: ST-MMER-3

Matrix: Surface Water

**Collected:** 2022/04/18 Shipped:

**Received:** 2022/04/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Ammonia-N	LACH/NH4	7959465	N/A	2022/04/26	Amanpreet Sappal
Field Measured pH	PH	ONSITE	N/A	2022/04/22	Khanh Vi Trinh
Field Measured pH	PH	ONSITE	N/A	2022/04/22	Khanh Vi Trinh
Low Level Total Suspended Solids	BAL	7957782	2022/04/25	2022/04/26	Kristen Chan
Un-ionized Ammonia	CALC/NH3	7954265	2022/04/26	2022/04/26	Automated Statchk

Bureau Veritas ID: SKR971 Dup Sample ID: ST-MMER-3

Matrix: Surface Water

**Collected:** 2022/04/18

Shipped: **Received:** 2022/04/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Low Level Total Suspended Solids	BAL	7957782	2022/04/25	2022/04/26	Kristen Chan

**Bureau Veritas ID:** SKR972

Sample ID: ST-MMER-3-EEM

Matrix: Surface Water

**Collected:** 2022/04/18

Shipped:

**Received:** 2022/04/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	7960462	N/A	2022/04/28	Surinder Rai
Chloride by Automated Colourimetry	KONE	7960140	N/A	2022/04/27	Raiq Kashif
Mercury (low level)	CV/AA	7959255	2022/04/26	2022/04/26	Jaswinder Kaur
Low Level Chloride and Sulphate by AC	KONE	7966504	N/A	2022/04/27	Bradley Freake
Hardness Total (calculated as CaCO3)	CALC	7965005	N/A	2022/04/28	Automated Statchk
Na, K, Ca, Mg, S by CRC ICPMS (total)	ICP	7965006	2022/04/28	2022/04/28	Automated Statchk
Elements by CRC ICPMS (total)	ICP/MS	7965007	2022/04/26	2022/04/27	Sahar Omar Al-Abdalla-Inactive
Total Phosphorus Low Level Total	KONE	7968059	2022/04/27	2022/04/28	Mary Anne Dela Cruz
Total Ammonia (as NH3)	CALC	7954267	N/A	2022/04/26	Automated Statchk
Total Ammonia-N	LACH/NH4	7959465	N/A	2022/04/26	Amanpreet Sappal
Nitrate & Nitrite as Nitrogen in Water	LACH	7959789	N/A	2022/04/28	Samuel Law
Field Measured pH	PH	ONSITE	N/A	2022/04/22	Khanh Vi Trinh
Field Measured pH	PH	ONSITE	N/A	2022/04/22	Khanh Vi Trinh



## **GENERAL COMMENTS**

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

Package 1 9.3°C

Revised Report (2022/05/16): GPS coordinates added

Revised Report (2022/05/02): Split Report

Results relate only to the items tested.



#### **QUALITY ASSURANCE REPORT**

Agnico Eagle Your P.O. #: 1121445 Sampler Initials: FQS

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7957782	Total Suspended Solids	2022/04/26					<1	mg/L	NC	25	95	85 - 115
7959255	Mercury (Hg)	2022/04/26	95	75 - 125	97	80 - 120	<0.00001	mg/L	NC	20		
7959465	Total Ammonia-N	2022/04/26	98	75 - 125	100	80 - 120	<0.050	mg/L	0.0068	20		
7959789	Nitrate (N)	2022/04/28	96	80 - 120	95	80 - 120	<0.10	mg/L	NC	20		
7959789	Nitrite (N)	2022/04/28	104	80 - 120	110	80 - 120	<0.010	mg/L	NC	20		
7960140	Dissolved Chloride (Cl-)	2022/04/27	NC	80 - 120	102	80 - 120	<1.0	mg/L	2.3	20		
7960462	Alkalinity (Total as CaCO3)	2022/04/28			100	85 - 115	<1.0	mg/L	0.18	20		
7965007	Total Aluminum (Al)	2022/04/27	105	80 - 120	102	80 - 120	<0.0030	mg/L	1.4	20		
7965007	Total Cadmium (Cd)	2022/04/27	101	80 - 120	103	80 - 120	<0.000010	mg/L	NC	20		
7965007	Total Chromium (Cr)	2022/04/27	100	80 - 120	101	80 - 120	<0.0010	mg/L	1.2	20		
7965007	Total Cobalt (Co)	2022/04/27	103	80 - 120	103	80 - 120	<0.00020	mg/L				
7965007	Total Iron (Fe)	2022/04/27	108	80 - 120	102	80 - 120	<0.010	mg/L	1.1	20		
7965007	Total Manganese (Mn)	2022/04/27	NC	80 - 120	102	80 - 120	<0.0010	mg/L	2.6	20		
7965007	Total Molybdenum (Mo)	2022/04/27	107	80 - 120	105	80 - 120	<0.0010	mg/L	2.5	20		
7965007	Total Selenium (Se)	2022/04/27	105	80 - 120	102	80 - 120	<0.00010	mg/L	9.8	20		
7965007	Total Thallium (TI)	2022/04/27	107	80 - 120	104	80 - 120	<0.000010	mg/L	NC	20		
7965007	Total Uranium (U)	2022/04/27	119	80 - 120	118	80 - 120	<0.00010	mg/L	1.3	20	_	
7966504	Dissolved Sulphate (SO4)	2022/04/27	NC	80 - 120	106	80 - 120	<0.50	mg/L				
7968059	Total Phosphorus (P)	2022/04/28	67 (1)	80 - 120	98	80 - 120	<0.0010	mg/L			91	80 - 120

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).

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



### **VALIDATION SIGNATURE PAGE**

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

Anastassia Hamanov, Scientific Specialist

David Huang, BBY Scientific Specialist

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

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 Signature Page.



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ST-MMER-3 2022-04-25 Certificate of Analysis



Your P.O. #: 1121445 Site Location: MBK

Your C.O.C. #: 502257

**Attention: Reporting** 

Agnico Eagle Meadowbank Meadowbank Keewatin, NU CANADA POX 0A1

Report Date: 2022/05/03

Report #: R7109916 Version: 1 - Final

## **CERTIFICATE OF ANALYSIS**

BUREAU VERITAS JOB #: C2B2678
Received: 2022/04/27, 09:30

Sample Matrix: Surface Water # Samples Received: 1

		Date	Date		
Analyses	Quantity	Extracted	Analyzed	Laboratory Method	Analytical Method
Total Ammonia-N (1)	1	N/A	2022/05/03	CAM SOP-00441	USGS I-2522-90 m
Field Measured pH (1, 2)	1	N/A	2022/04/28		Field pH Meter
Field Temperature (1, 2)	1	N/A	2022/04/28		Field Thermometer
Low Level Total Suspended Solids (1)	1	2022/05/03	2022/05/03	CAM SOP-00428	SM 23 2540D m
Un-ionized Ammonia (1)	1	2022/04/28	2022/05/03	Auto Calc.	PWQO

### 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, MELCC, EPA, APHA.

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

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

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

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

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.

- $^{st}$  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 is a field test, therefore, the results relate to items that were not analysed at Bureau Veritas.



Your P.O. #: 1121445 Site Location: MBK Your C.O.C. #: 502257

**Attention: Reporting** 

Agnico Eagle Meadowbank Meadowbank Keewatin, NU CANADA POX 0A1

Report Date: 2022/05/03

Report #: R7109916 Version: 1 - Final

## **CERTIFICATE OF ANALYSIS**

BUREAU VERITAS JOB #: C2B2678 Received: 2022/04/27, 09:30

**Encryption Key** 

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

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 Signature Page.



Site Location: MBK Your P.O. #: 1121445 Sampler Initials: FQS

## **RESULTS OF ANALYSES OF SURFACE WATER**

Bureau Veritas ID		SLX894			SLX894			
Compling Date		2022/04/25			2022/04/25			
Sampling Date		08:10			08:10			
COC Number		502257			502257			
	UNITS	ST-MMER-3	RDL	QC Batch	ST-MMER-3 Lab-Dup	RDL	QC Batch	
Calculated Parameters								
Total Un-ionized Ammonia	mg/L	0.0011	0.00061	7964330				
Field Measurements								
Field Temperature	Celsius	0.1	N/A	ONSITE				
Field Measured pH	рН	7.86		ONSITE				
Inorganics								
Total Ammonia-N	mg/L	0.16	0.050	7971414	0.11	0.050	7971414	
Total Suspended Solids	mg/L	2	1	7971490	2	1	7971490	
RDL = Reportable Detection L	imit							
QC Batch = Quality Control Batch								
Lab-Dup = Laboratory Initiated Duplicate								
N/A = Not Applicable								



Site Location: MBK Your P.O. #: 1121445 Sampler Initials: FQS

### **TEST SUMMARY**

Bureau Veritas ID: SLX894

Collected: 2022/04/25

Sample ID: ST-MMER-3 Matrix: Surface Water Shipped:

Received:

2022/04/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Ammonia-N	LACH/NH4	7971414	N/A	2022/05/03	Amanp

preet Sappal Field Measured pH РΗ ONSITE N/A 2022/04/28 Khanh Vi Trinh Field Measured pH РΗ ONSITE 2022/04/28 N/A Khanh Vi Trinh Low Level Total Suspended Solids BAL 7971490 2022/05/03 2022/05/03 Kristen Chan CALC/NH3 2022/05/03 2022/05/03 Un-ionized Ammonia 7964330 **Automated Statchk** 

Bureau Veritas ID: SLX894 Dup

Collected: 2022/04/25

Shipped:

Sample ID: ST-MMER-3 Matrix: Surface Water

2022/04/27 Received:

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Ammonia-N	LACH/NH4	7971414	N/A	2022/05/03	Amanpreet Sappal
Low Level Total Suspended Solids	BAL	7971490	2022/05/03	2022/05/03	Kristen Chan



Site Location: MBK Your P.O. #: 1121445 Sampler Initials: FQS

## **GENERAL COMMENTS**

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

Package 1 12.3°C

Results relate only to the items tested.



Bureau Veritas Job #: C2B2678 Report Date: 2022/05/03

### **QUALITY ASSURANCE REPORT**

Agnico Eagle

Site Location: MBK Your P.O. #: 1121445 Sampler Initials: FQS

			Matrix	Spike	SPIKED	BLANK	Method E	lank	RPI	)	QC Sta	ındard
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7971414	Total Ammonia-N	2022/05/03	94	75 - 125	102	80 - 120	<0.050	mg/L	NC	20		
7971490	Total Suspended Solids	2022/05/03				·	<1	mg/L	9.5	25	98	85 - 115

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 (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).



Site Location: MBK Your P.O. #: 1121445 Sampler Initials: FQS

## **VALIDATION SIGNATURE PAGE**

Cuistina	Caniere
Cristina Carrie	re, Senior Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation please refer to the Validation Signature Page.



applicable regulatory guidelines.

Agnico Eagle

Site Location: MBK Your P.O. #: 1121445 Sampler Initials: FQS

# 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 purp	oses only and should not be	considered a comprehe	nsive listing or	statement of co	onformance to



	Ap	pen	dix	Н
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ST-MMER-3 2022-04-26 Certificate of Analysis



Your P.O. #: 1121445

Site#: 65'01'11.2" N 96'02'32.0"W

Site Location: MBK Your C.O.C. #: 502971

**Attention: Reporting** 

Agnico Eagle Meadowbank Meadowbank Keewatin, NU CANADA POX 0A1

Report Date: 2022/05/12

Report #: R7122012 Version: 1 - Final

## **CERTIFICATE OF ANALYSIS**

BUREAU VERITAS JOB #: C2B5526 Received: 2022/04/29, 09:30

Sample Matrix: Water # Samples Received: 2

# Jampies Neceived. 2					
Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
					<u> </u>
Alkalinity (1)	1	N/A		CAM SOP-00448	SM 23 2320 B m
Chloride by Automated Colourimetry (1)	1	N/A	2022/05/03	CAM SOP-00463	SM 23 4500-Cl E m
Mercury (low level) (1)	1	2022/05/03	2022/05/03	CAM SOP-00453	EPA 7470 m
Low Level Chloride and Sulphate by AC (2)	2	N/A	2022/05/09	AB SOP-00020 / AB SOP- 00018	SM23 4500-CL/SO4-E m
Cyanide, Strong Acid Dissociable (SAD) (2)	1	N/A	2022/05/03	CAL SOP-00270	SM 23 4500-CN m
Hardness Total (calculated as CaCO3) (3, 5)	1	N/A	2022/05/05	BBY WI-00033	Auto Calc
Elements by CRC ICPMS (total) (3)	2	2022/05/04	2022/05/05	BBY7SOP-00003/ BBY7SO -00002	PEPA 6020B R2 m
Total Phosphorus Low Level Total (2)	1	2022/05/05	2022/05/06	AB SOP-00024	SM 23 4500-P A,B,F m
Total Ammonia (as NH3) (1)	1	N/A	2022/05/05	Auto Calc.	
Total Ammonia-N (1)	2	N/A	2022/05/05	CAM SOP-00441	USGS I-2522-90 m
Nitrate & Nitrite as Nitrogen in Water (1, 6)	1	N/A	2022/05/04	CAM SOP-00440	SM 23 4500-NO3I/NO2B
Field Measured pH (1, 7)	2	N/A	2022/04/30		Field pH Meter
Radium-226 Low Level (4, 8)	1	N/A	2022/05/11	BQL SOP-00006 BQL SOP-00017	Alpha Spectrometry
				BQL SOP-00032	
Field Temperature (1, 7)	2	N/A	2022/04/30		Field Thermometer
Low Level Total Suspended Solids (1)	1	2022/05/03	2022/05/03	CAM SOP-00428	SM 23 2540D m
Turbidity (1)	1	N/A	2022/05/02	CAM SOP-00417	SM 23 2130 B m
Un-ionized Ammonia (1)	1	2022/04/30	2022/05/06	Auto Calc.	PWQO

### 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, MELCC, EPA, APHA.

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

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



Your P.O. #: 1121445

Site#: 65'01'11.2" N 96'02'32.0"W

Site Location: MBK Your C.O.C. #: 502971

**Attention: Reporting** 

Agnico Eagle Meadowbank Meadowbank Keewatin, NU CANADA POX 0A1

Report Date: 2022/05/12

Report #: R7122012 Version: 1 - Final

## **CERTIFICATE OF ANALYSIS**

#### **BUREAU VERITAS JOB #: C2B5526**

Received: 2022/04/29, 09:30

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.

- $^{st}$  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 test was performed by Bureau Veritas Kitimat, 6790 Kitimat Road, Unit 4, Mississauga, ON, L5N 5L9
- (5) "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).
- (6) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.
- (7) This is a field test, therefore, the results relate to items that were not analysed at Bureau Veritas.
- (8) Radium-226 results have not been corrected for blanks.

#### **Encryption Key**

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

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 Signature Page.



Site Location: MBK Your P.O. #: 1121445 Sampler Initials: FQS

## **RESULTS OF ANALYSES OF WATER**

Bureau Veritas ID		SMN430			SMN430			SMN431		
Sampling Date		2022/04/26			2022/04/26			2022/04/26		
Sampling Date		07:15			07:15			07:15		
COC Number		502971			502971			502971		
	UNITS	ST-MMER-3-EEM	RDL	QC Batch	ST-MMER-3-EEM Lab-Dup	RDL	QC Batch	ST-MMER-3	RDL	QC Batch
Calculated Parameters										
Total Ammonia (as NH3)	mg/L	<0.061	0.061	7969339						
Total Un-ionized Ammonia	mg/L							<0.00055	0.00055	7969340
Field Measurements	•			•						
Field Temperature	Celsius	0.1	N/A	ONSITE				0.1	N/A	ONSITE
Field Measured pH	рН	8.04		ONSITE				8.04		ONSITE
Inorganics						!			•	
Total Ammonia-N	mg/L	<0.050	0.050	7975264				<0.050	0.050	7976118
Strong Acid Dissoc. Cyanide (CN)	mg/L							<0.00050	0.00050	7984827
Total Suspended Solids	mg/L							2	1	7971490
Turbidity	NTU							1.1	0.1	7969418
Alkalinity (Total as CaCO3)	mg/L	32	1.0	7971492						
Dissolved Chloride (Cl-)	mg/L	<1.0	1.0	7971568						
Nitrite (N)	mg/L	<0.010	0.010	7971533						
Nitrate (N)	mg/L	<0.10	0.10	7971533						
Dissolved Sulphate (SO4)	mg/L	7.5	0.50	7984826	7.4	0.50	7984826	7.4	0.50	7984826
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	7971533						
Metals	•			•						
Total Aluminum (AI)	mg/L	0.0528	0.0030	7980449				0.0477	0.0030	7980449
Total Arsenic (As)	mg/L							0.00079	0.00010	7980449
Total Cadmium (Cd)	mg/L	<0.000010	0.000010	7980449						
Total Chromium (Cr)	mg/L	<0.0010	0.0010	7980449						
Total Cobalt (Co)	mg/L	<0.00020	0.00020	7980449						
Total Copper (Cu)	mg/L							0.00172	0.00050	7980449
Total Iron (Fe)	mg/L	0.085	0.010	7980449						
Total Lead (Pb)	mg/L							<0.00020	0.00020	7980449
Total Manganese (Mn)	mg/L	0.0020	0.0010	7980449						
Total Molybdenum (Mo)	mg/L	<0.0010	0.0010	7980449						
Total Nickel (Ni)	mg/L							<0.0010	0.0010	7980449
Total Selenium (Se)	mg/L	<0.00010	0.00010	7980449						

RDL = Reportable Detection Limit QC Batch = Quality Control Batch

Lab-Dup = Laboratory Initiated Duplicate

N/A = Not Applicable



Site Location: MBK Your P.O. #: 1121445 Sampler Initials: FQS

## **RESULTS OF ANALYSES OF WATER**

Bureau Veritas ID		SMN430			SMN430			SMN431		
Sampling Data		2022/04/26			2022/04/26			2022/04/26		
Sampling Date		07:15			07:15			07:15		
COC Number		502971			502971			502971		
	UNITS	ST-MMER-3-EEM	RDL	QC Batch	ST-MMER-3-EEM Lab-Dup	RDL	QC Batch	ST-MMER-3	RDL	QC Batch
					Lub Dup					
Total Thallium (TI)	mg/L	<0.000010	0.000010	7980449						
Total Uranium (U)	mg/L	0.00044	0.00010	7980449						
Total Zinc (Zn)	mg/L							0.0068	0.0050	7980449
Nutritional Parameters										
Total Phosphorus (P)	mg/L	0.0019	0.0010	7983010						
RADIONUCLIDE							•			
Radium-226	Bq/L							<0.0050	0.0050	7972582

RDL = Reportable Detection Limit QC Batch = Quality Control Batch

Lab-Dup = Laboratory Initiated Duplicate



Site Location: MBK Your P.O. #: 1121445 Sampler Initials: FQS

# **ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)**

		1						
Bureau Veritas ID		SMN430						
Committee Date		2022/04/26						
Sampling Date		07:15						
COC Number		502971						
	UNITS	ST-MMER-3-EEM	RDL	QC Batch				
Calculated Parameters								
Total Hardness (CaCO3)	mg/L	36.3	0.50	7980448				
Metals	•							
Mercury (Hg)	mg/L	<0.00001	0.00001	7972588				
RDL = Reportable Detection Limit								
QC Batch = Quality Control	Batch							



Site Location: MBK Your P.O. #: 1121445 Sampler Initials: FQS

### **TEST SUMMARY**

**Bureau Veritas ID:** SMN430

Sample ID: ST-MMER-3-EEM

Matrix: Water

Collected: 2022/04/26

Shipped:

**Received:** 2022/04/29

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	7971492	N/A	2022/05/03	Surinder Rai
Chloride by Automated Colourimetry	KONE	7971568	N/A	2022/05/03	Raiq Kashif
Mercury (low level)	CV/AA	7972588	2022/05/03	2022/05/03	Rupinder Gill
Low Level Chloride and Sulphate by AC	KONE	7984826	N/A	2022/05/09	Marjolen Busslinger
Hardness Total (calculated as CaCO3)	CALC	7980448	N/A	2022/05/05	Automated Statchk
Elements by CRC ICPMS (total)	ICP/MS	7980449	2022/05/04	2022/05/05	Sahar Omar Al-Abdalla-Inactive
Total Phosphorus Low Level Total	KONE	7983010	2022/05/05	2022/05/06	Mary Anne Dela Cruz
Total Ammonia (as NH3)	CALC	7969339	N/A	2022/05/05	Automated Statchk
Total Ammonia-N	LACH/NH4	7975264	N/A	2022/05/05	Amanpreet Sappal
Nitrate & Nitrite as Nitrogen in Water	LACH	7971533	N/A	2022/05/04	Samuel Law
Field Measured pH	PH	ONSITE	N/A	2022/04/30	Dipika Singh
Field Measured pH	PH	ONSITE	N/A	2022/04/30	Dipika Singh

Bureau Veritas ID: SMN430 Dup Sample ID: ST-MMER-3-EEM Matrix: Water

**Collected:** 2022/04/26

Shipped:

**Received:** 2022/04/29

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Low Level Chloride and Sulphate by AC	KONE	7984826	N/A	2022/05/09	Marjolen Busslinger

**Bureau Veritas ID:** SMN431 Sample ID: ST-MMER-3

Matrix: Water

Collected: 2022/04/26 Shipped:

**Received:** 2022/04/29

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Low Level Chloride and Sulphate by AC	KONE	7984826	N/A	2022/05/09	Marjolen Busslinger
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	7984827	N/A	2022/05/03	Taylor Mullings
Elements by CRC ICPMS (total)	ICP/MS	7980449	2022/05/04	2022/05/05	Sahar Omar Al-Abdalla-Inactive
Total Ammonia-N	LACH/NH4	7976118	N/A	2022/05/05	Amanpreet Sappal
Field Measured pH	PH	ONSITE	N/A	2022/04/30	Dipika Singh
Radium-226 Low Level	AS	7972582	N/A	2022/05/11	Sarah Simpson
Field Measured pH	PH	ONSITE	N/A	2022/04/30	Dipika Singh
Low Level Total Suspended Solids	BAL	7971490	2022/05/03	2022/05/03	Kristen Chan
Turbidity	AT	7969418	N/A	2022/05/02	Roya Fathitil
Un-ionized Ammonia	CALC/NH3	7969340	2022/05/06	2022/05/06	Automated Statchk



Results relate only to the items tested.

Agnico Eagle

Site Location: MBK Your P.O. #: 1121445 Sampler Initials: FQS

## **GENERAL COMMENTS**

Each t	emperature is the	e average of up to	:hree coole	temp	peratu	ıres tak	en at re	eceipt				
	Package 1	10.3°C										



## **QUALITY ASSURANCE REPORT**

Agnico Eagle

Site Location: MBK Your P.O. #: 1121445 Sampler Initials: FQS

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7969418	Turbidity	2022/05/02			101	85 - 115	<0.1	NTU	7.7	20		
7971490	Total Suspended Solids	2022/05/03					<1	mg/L	9.5	25	98	85 - 115
7971492	Alkalinity (Total as CaCO3)	2022/05/03			95	85 - 115	<1.0	mg/L	5.2	20		
7971533	Nitrate (N)	2022/05/04	101	80 - 120	104	80 - 120	<0.10	mg/L	0.30	20		
7971533	Nitrite (N)	2022/05/04	91	80 - 120	101	80 - 120	<0.010	mg/L	NC	20		
7971568	Dissolved Chloride (Cl-)	2022/05/03	NC	80 - 120	107	80 - 120	<1.0	mg/L	0	20		
7972582	Radium-226	2022/05/09			92	85 - 115	<0.0050	Bq/L	NC	N/A		
7972588	Mercury (Hg)	2022/05/03	88	75 - 125	94	80 - 120	<0.00001	mg/L	NC	20		
7975264	Total Ammonia-N	2022/05/05	92	75 - 125	98	80 - 120	<0.050	mg/L	3.0	20		
7976118	Total Ammonia-N	2022/05/05	98	75 - 125	97	80 - 120	<0.050	mg/L	NC	20		
7980449	Total Aluminum (Al)	2022/05/05	102	80 - 120	103	80 - 120	<0.0030	mg/L	1.8	20		
7980449	Total Arsenic (As)	2022/05/05	105	80 - 120	105	80 - 120	<0.00010	mg/L	0.97	20		
7980449	Total Cadmium (Cd)	2022/05/05	103	80 - 120	104	80 - 120	<0.000010	mg/L	11	20		
7980449	Total Chromium (Cr)	2022/05/05	103	80 - 120	104	80 - 120	<0.0010	mg/L	NC	20		
7980449	Total Cobalt (Co)	2022/05/05	106	80 - 120	104	80 - 120	<0.00020	mg/L	2.7	20		
7980449	Total Copper (Cu)	2022/05/05	103	80 - 120	102	80 - 120	<0.00050	mg/L	0.31	20		
7980449	Total Iron (Fe)	2022/05/05	105	80 - 120	105	80 - 120	<0.010	mg/L	4.4	20		
7980449	Total Lead (Pb)	2022/05/05	101	80 - 120	103	80 - 120	<0.00020	mg/L	4.3	20		
7980449	Total Manganese (Mn)	2022/05/05	103	80 - 120	104	80 - 120	<0.0010	mg/L	1.0	20		
7980449	Total Molybdenum (Mo)	2022/05/05	104	80 - 120	105	80 - 120	<0.0010	mg/L	NC	20		
7980449	Total Nickel (Ni)	2022/05/05	104	80 - 120	105	80 - 120	<0.0010	mg/L	2.3	20		
7980449	Total Selenium (Se)	2022/05/05	113	80 - 120	111	80 - 120	<0.00010	mg/L	NC	20		
7980449	Total Thallium (TI)	2022/05/05	100	80 - 120	98	80 - 120	<0.00010	mg/L	NC	20		
7980449	Total Uranium (U)	2022/05/05	105	80 - 120	106	80 - 120	<0.00010	mg/L	NC	20		
7980449	Total Zinc (Zn)	2022/05/05	110	80 - 120	105	80 - 120	<0.0050	mg/L	3.8	20		
7983010	Total Phosphorus (P)	2022/05/06	106	80 - 120	100	80 - 120	<0.0010	mg/L			93	80 - 120
7984826	Dissolved Sulphate (SO4)	2022/05/09	99	80 - 120	102	80 - 120	<0.50	mg/L	1.7	20		



Bureau Veritas Job #: C2B5526 Report Date: 2022/05/12

## QUALITY ASSURANCE REPORT(CONT'D)

Agnico Eagle

Site Location: MBK Your P.O. #: 1121445 Sampler Initials: FQS

		Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard		
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7984827	Strong Acid Dissoc. Cyanide (CN)	2022/05/03	100	80 - 120	102	80 - 120	<0.00050	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).



Site Location: MBK Your P.O. #: 1121445 Sampler Initials: FQS

## **VALIDATION SIGNATURE PAGE**

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

Cuistina	Canine
Cristina Carrie	re, Senior Scientific Specialist
W	
David Huang, E	BBY Scientific Specialist
	CHARLESCO P. COMMON PROPERTY OF THE PROPERTY O
Danish Samad	Laboratory Supervisor
5/	M

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

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applicable regulatory guidelines.

Agnico Eagle

Site Location: MBK Your P.O. #: 1121445 Sampler Initials: FQS

# 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							



Αr	pe	nd	İх	

**East Dike Internal TSS Results** 

Table 1. East Dike Seepage Station Internal Sample Results

Date	TSS (mg/L)
4/1/2022	5
4/2/2022	5
4/3/2022	4
4/4/2022	6.6
4/5/2022	5.5
4/6/2022	6
4/7/2022	3.5
4/8/2022	6.3
4/9/2022	2.8