

Appendix 18

Meadowbank 2022 Quarry 22 Report



AGNICO EAGLE

MEADOWBANK COMPLEX

2022 Quarry 22 Report

Prepared by:
Agnico Eagle Mines Limited – Meadowbank Complex

March 2023

EXECUTIVE SUMMARY

This document presents the Quarry 22 remediation method program of Petroleum Hydrocarbon (PHC) for Agnico Eagle Mines Limited (Agnico), Meadowbank Complex.

Following the AANDC inspection report in 2012, this report has been prepared to provide information regarding the Quarry 22 remediation, including but not limited to the contamination cause, the quantity of contaminated material transferred to the Meadowbank landfarm, results from soil sampling campaign and the decontamination further actions.

Since 2012, Agnico have submitted yearly updates by the Agnico Eagle Annual Report. Agnico intended to scarify and sample on a year basic program. Some sampling campaigns were however postponed due to peregrine falcon nesting activities in order to minimize mining disturbance on wildlife.

The 2022 sampling results (Table 1 below) indicate the presence of contaminated remnants in Quarry 22. Results were compared to the Canadian Council of Ministers of the Environment (CCME) remediation criteria for Industrial use of Coarse material and indicated a concentration of contamination exceeding the PHC Fraction 3 limit (1,700 mg/kg) in two sections of the Quarry (Q22-1, Q22-2) both with a concentration of 3,300 mg/kg.

For the 4th consecutive sampling campaign, analysis results were below the CCME Remediation criteria for the PHC Fraction 1, 2 and 4.

Based on the degradation history of PHC's in the Meadowbank Landfarm, and upon analysing results from the Quarry 22 soil sampling campaign (2014, 2016, 2018, 2020, 2021 & 2022), Agnico Eagle is confident that the natural degradation of Petroleum Hydrocarbon related products is an effective remediation method for the Quarry 22.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	ii
SECTION 1 • INTRODUCTION	4
1.1 Background.....	4
1.2 Objectives	4
SECTION 2 • QUARRY 22	5
2.1 2022 actions	5
2.2 Sampling	5
SECTION 3 • RESULTS	6
3.1 Table 1 – Quarry 22 (2022) Sampling results	7
3.2 Table 2 – Quarry 22 (2014, 2016, 2018, 2020, 2021 & 2022) Sampling results.....	7
3.3 Figures 1 to 4 – Sampling campaign Comparative results.....	8
SECTION 4 • CONCLUSION/RECOMMENDATION	10

APPENDICES

- Appendix A:** Area Delimitation - Quarry 22
Appendix B: 2022 Analytical Certificates – Quarry 22

SECTION 1 • INTRODUCTION

1.1 BACKGROUND

The AWAR (All Weather Access Road) is used to transport material, goods, and petroleum products from the Baker Lake Marshalling Facility to the Meadowbank Complex. The quarries along the road were used as a source of road building aggregate during the construction phase of the AWAR and mainly for road maintenance during the operation phase. Quarry 22 (Q22) may potentially be used in 2023 as a source of material but the extraction will be planned in order to not impact the remediation currently in progress. Quarry 22 was historically used as a temporary storage area for contaminated materials generated from the petroleum hydrocarbon spill clean-up activities prior to the establishment of the landfarm at the Meadowbank site. The use of Q22 as a temporary storage area ceased in 2012 when the Meadowbank Landfarm construction was completed.

In accordance with the AANDC Water Licence inspection dated March 2012, Agnico Eagle prepared and submitted an action plan (dated June 2, 2012) to the Inspector. The Plan consisted of a two phased approach. The first phase included an assessment and delineation of any residual contamination due to the storage and the second phase consisted of removing identified contaminated soils and coarse rock to the Landfarm at Meadowbank.

In 2013, a total of 4,413 m³ of soil and coarse material was removed from Q22. Approximately half of this material (1,930 m³) was placed in the landfarm in windrows for soil decontamination. The remaining coarse material, which was not contaminated with PHC's, was placed in the Meadowbank Waste Rock Storage Area, located north of Portage Pit. Residual, uncontaminated coarse rocks were used as pit wall sloping in Q22 for progressive reclamation.

The final reclamation of the quarries along AWAR will be done during the closure phase of the Meadowbank mine site as described in the Meadowbank Interim Reclamation and Closure Plan (SNC-LAVALIN INC., 2020).

It should be noted that this quarry site is located on Inuit Owned Land and is subject to the conditions of a KivIA Land use lease.

1.2 OBJECTIVES

The objectives of this report are as follows:

- Evaluate the contaminated reclamation;
- Document the movement of contaminated soil;
- Analyze results of the annual sampling campaign;
- Document the remediation actions.

SECTION 2 • QUARRY 22

2.1 2022 ACTIONS

Results from the September 2022 sampling campaign indicated some remnants of contamination when compared to the CCME remediation Criteria for Industrial Use of Coarse Material. The remaining contamination was associated with Fraction 3 PHC hydrocarbons.

Taking into consideration the results from the previous sampling campaigns (2014, 2016, 2018, 2020 & 2021), Agnico Eagle intended to continue to scarify the surface of Q22 in early spring, with the back-end of a grader, allowing ground surface to be aerated thus increasing degradation of PHC. A bird deterrent cannon was deployed on May 24 to prevent falcon activities in the quarry before scarification occurred. The bird cannon was set in the interval *Random 10*, meaning a shot series is randomly chosen by the control-unit between 1 and 10 minutes, blasting at 120dB. The bird cannon was removed once peregrine falcon activity was observed in the quarry on May 29. All activity within the area, including scarification, were postponed minimizing the impact of potential nesting for this species and therefore ensure proper conditions for nesting activity.

Soil samples from Q22 were collected on September 5th, 2022, after the scarification of Quarry 22 occurred, to track the degradation of PHC with time. Results are shown in Section 3.

Regular inspections of the quarry were also performed during the year to ensure that runoff, if any, would be free of any visible sheen and would not impact the environment. No issues with runoff water inside the quarry were noted in 2022.

2.2 SAMPLING

On September 5th, 2022, the Environment department sampled the soil from the substrate to further assess PHC degradation following the clean-up actions of 2013 and to track rates of contamination reclamation.

To ensure results consistency, the same grid system was used in all previous sampling campaigns to divide the quarry in portions representing areas where contaminated material had been stored (Appendix A). As such, areas from 0 to 1 represent a smaller sampling area in size as more contaminated material was stored in this area (towards back/walls). Size increase as areas move from 1 to 2 to 3. Portions from 3 and beyond represent the largest in area. The surface includes any material that was used for sloping along the walls (see Section 1.1 above). This area sampling design was adopted to ensure that the soil characterization was well assessed; in particular, in the areas that received most of the contaminated material.

Within each separate area (Q22-1 to Q-22-8) a composite soil sample was collected from the surface at 30 centimetres intervals covering the whole area. This composite sample was collected in a clean plastic bag by an environmental technician in accordance with standard sampling techniques. The composite plastic bag was then thoroughly stirred and mixed. Following this, a 250 ml sample was obtained, placed in a standard glass sample bottle, and sent to Agnico's external accredited lab. Sampling instruments were cleaned between each sample event.

SECTION 3 • RESULTS

The 2022 sampling results (Table 1 below) indicate the presence of contamination remnants in Q22. Results were compared to the Canadian Council of Ministers of the Environment (CCME) remediation criteria for Industrial use of Coarse material, which is determined to be aligned with the definition of industrial land detailed in the Government of Nunavut Environmental Guidelines for the Management of Contaminated Sites Remediation. The results indicated a concentration exceeding the PHC Fraction 3 limit (1,700 mg/kg) with a result of 3,300 mg/kg for both sampling areas Q22-1 and Q22-2.

The PHC Fraction 3 result for the sampling area Q22-1 was slightly lower than the previous sampling campaign with a concentration of 3,300 mg/kg in 2022 compared to 4,000 mg/kg in 2021. As for the sampling area Q22-2, the result for PCH Fraction 3 was higher than the previous sampling campaign with a concentration of 3,300 mg/kg in 2022 compared to 2,100 mg/kg in 2021. This variation can be explained by the scarification work performed that may have spread some contaminated material or by the higher Petroleum Hydrocarbon (PHC) concentration grab in the samples. Even though some higher results for Q22-2 in 2022, both sampling areas Q22-1 and Q22-2, are showing a downtrend since the beginning of the remediation program.

For the fourth consecutive sampling campaign (Table 2 below), analysis results were below the CCME Remediation criteria for the PHC Fraction 1, 2 and 4.

3.1 TABLE 1 – QUARRY 22 (2022) SAMPLING RESULTS

Parameter	CCME Remediation Criteria	Unit	Sample date	Sample date	Sample date	Sample date	Sample date	Sample date	Sample date	Sample date
			Sample name	Sample name	Sample name	Sample name	Sample name	Sample name	Sample name	Sample name
Petroleum Hydrocarbons - F1 (C6-C10)	320	mg/kg	9/5/2022 Q22-1	9/5/2022 Q22-2	9/5/2022 Q22-3	9/5/2022 Q22-4	9/5/2022 Q22-5	9/5/2022 Q22-6	9/5/2022 Q22-7	9/5/2022 Q22-8
Petroleum Hydrocarbons - F2 (C10-C16)	260	mg/kg	< 10	< 10	< 10	11	< 10	< 10	< 10	< 10
Petroleum Hydrocarbons - F3 (C16-C34)	1700	mg/kg	3300	3300	790	880	170	320	440	580
Petroleum Hydrocarbons - F4 (C34-C50)	3330	mg/kg	800	880	220	250	65	110	85	160

Red values are above the CCME criteria

3.2 TABLE 2 – QUARRY 22 (2014, 2016, 2018, 2020, 2021 & 2022) SAMPLING RESULTS

Sample Location	Q22-1				Q22-2				Q22-3				Q22-4				Q22-5				Q22-6				Q22-7				Q22-8				
	F1	F2	F3	F4	F1	F2	F3	F4	F1	F2	F3	F4	F1	F2	F3	F4	F1	F2	F3	F4	F1	F2	F3	F4	F1	F2	F3	F4	F1	F2	F3	F4	
Petroleum Hydrocarbons Fraction (mg/kg)																																	
Remediation criteria (mg/Kg)	320	260	1700	3300	320	260	1700	3300	320	260	1700	3300	320	260	1700	3300	320	260	1700	3300	320	260	1700	3300	320	260	1700	3300	320	260	1700	3300	
Sampling Year	2014	0.06	400	10000	1900	0.06	130	4600	1100	0.06	10	1100	250	0.06	96	6800	1500	0.06	10	500	170	0.06	10	1600	570	0.06	10	2200	520	0.06	37	3100	660
	2016	0.06	99	7000	1400	0.06	110	8100	1600	0.06	58	3400	770	0.06	37	2100	490	0.06	<10	260	100	0.06	<10	470	180	0.06	13	450	180	0.2	<10	400	160
	2018	0.71	52	8800	2000	<0.06	16	5300	1400	0.74	<10	750	230	<0.06	<10	1700	480	<0.06	<10	170	73	<0.06	<10	1600	500	<0.06	<10	290	110	<0.06	<10	470	160
	2020	<10	<10	2000	450	<10	17	2300	670	<10	<10	180	<50	<10	18	810	210	<10	<10	260	100	<10	<10	280	71	<10	<10	160	69	<10	<10	1200	280
	2021	<10	96	4000	910	<10	32	2100	570	<10	<10	270	68	<10	<10	690	170	<10	<10	200	54	<10	<10	660	160	<10	<10	250	63	<10	<10	440	120
	2022	<10	76	3300	800	<10	38	3300	880	<10	<10	790	220	<10	11	880	250	<10	<10	170	65	<10	<10	320	110	<10	<10	440	85	<10	<10	580	160

Red Values are above the CCME criteria

3.3 FIGURES 1 TO 4 – SAMPLING CAMPAIGN COMPARATIVE RESULTS

Figure 1 – Comparative results from 2014 to 2022 – Petroleum Hydrocarbons Fraction (F1)

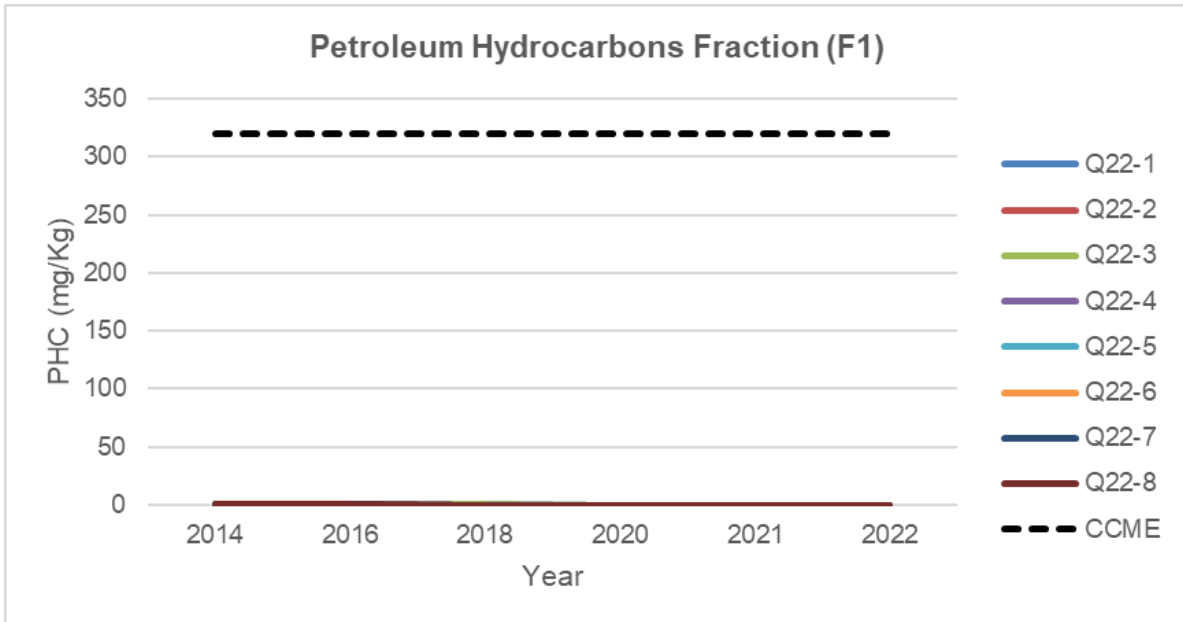


Figure 2 – Comparative results from 2014 to 2022 – Petroleum Hydrocarbons Fraction (F2)

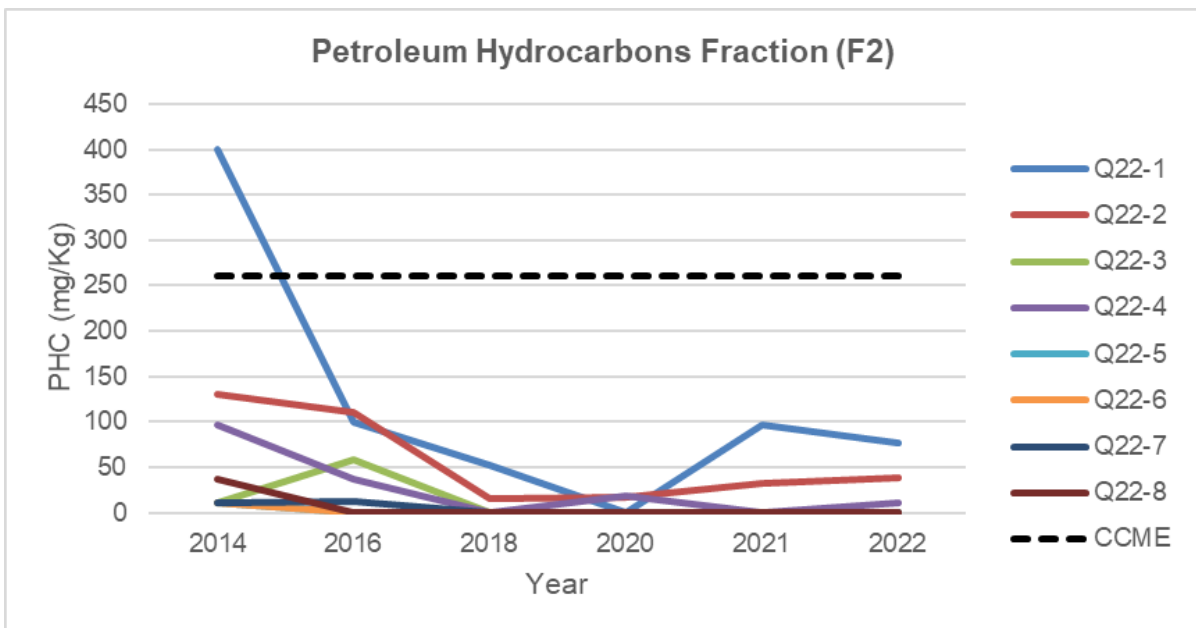


Figure 3 – Comparative results from 2014 to 2022 – Petroleum Hydrocarbons Fraction (F3)

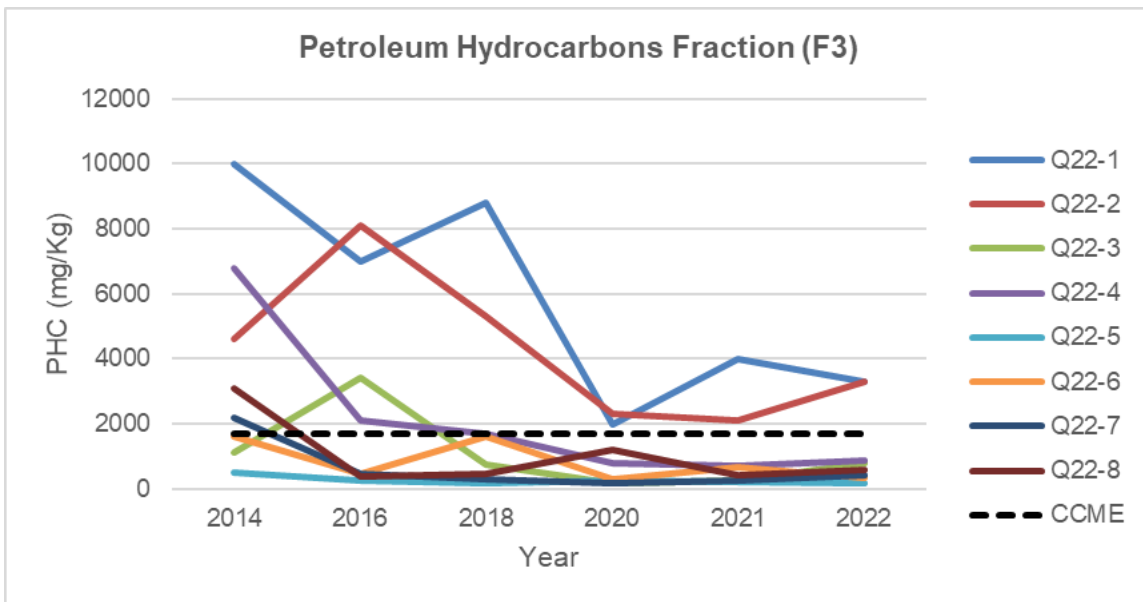
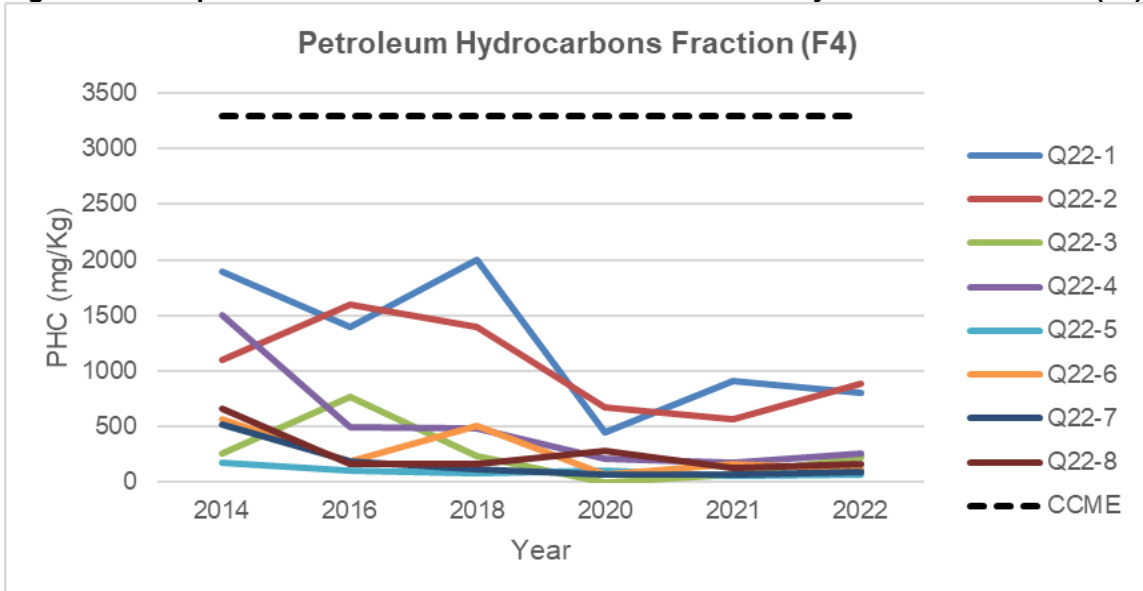


Figure 4 – Comparative results from 2014 to 2022 – Petroleum Hydrocarbons Fraction (F4)



SECTION 4 • CONCLUSION/RECOMMENDATION

Based on the degradation history of PHC's in the Meadowbank Landfarm and upon analysing results from the Q22 soil sampling campaign (2014, 2016, 2018, 2020, 2021 & 2022), Agnico Eagle is confident that the natural degradation of Petroleum Hydrocarbon (PHC) related products is an effective remediation method for Q22.

Similar to 2022, falcon deterrence activities will take place in 2023 to prevent peregrine falcon to establish their nest in the quarry to accelerate the remediation process. If recurrent peregrine falcon activities are not observed, Agnico Eagle proposes to continue scarifying the surface areas in Q22 during the summer of 2023. According to the last fourth sampling campaigns, the focus and efforts should be deployed in section Q-22-1 and Q22-2 as they are the only two results above the CCME criteria for the PHC Fraction 3.

However, if any falcon activities are observed during the weekly quarry inspections, deterrence devices will be removed. Agnico Eagle will evaluate and if needed, the area could be limited to any activity to ensure adequate bird protection management. Agnico Eagle will then postpone the scarification until late September before the freeze up season in order to minimize mining disturbance on wildlife.

Another round of sampling is planned in 2023. Agnico Eagle is proposing to sample two (2) parcels (Q22-1 and Q22-2) and to stop the annual monitoring for parcel Q22-3 to Q22-8 as the results are below the contamination guideline since the last four (4) sampling campaigns. This new practice will be implemented in 2023.

Results will then be compared to the previous data to monitor the level of degradation and compliance to the CCME criteria. Following the 2023 soil sampling results, Agnico Eagle will review the next steps to be taken. If needed, further course of action could include removal of additional material. Nonetheless, Agnico Eagle considers the actual methodology to be a satisfactory solution to the remediation of the quarry.

Agnico Eagle will continue to ensure that runoff stays within the quarry during freshet and thus not impact any watercourses or surrounding environment. This item is part of the weekly AWAR inspection. To date there have not been any impacts to water outside of this quarry.

Appendix A

Area Delimitation – Quarry 22



Appendix B

Analytical Certificates - Quarry 22



Your P.O. #: PO 1121445
 Site Location: MBK
 Your C.O.C. #: 568645

Attention: Reporting

Agnico Eagle
 Meadowbank
 Meadowbank
 Keewatin, NU
 CANADA POX 0A1

Report Date: 2022/09/19
 Report #: R7302781
 Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2Q0507

Received: 2022/09/10, 10:00

Sample Matrix: Soil
 # Samples Received: 8

Analyses	Quantity	Date	Date	Laboratory Method	Analytical Method
		Extracted	Analyzed		
Petroleum Hydrocarbons F2-F4 in Soil (1, 2)	8	2022/09/14	2022/09/15	CAM SOP-00316	CCME CWS m
Moisture (1)	8	N/A	2022/09/14	CAM SOP-00445	Carter 2nd ed 51.2 m
PAH Compounds in Soil by GC/MS (SIM) (1)	8	2022/09/15	2022/09/15	CAM SOP-00318	EPA 8270D m
Volatile Organic Compounds and F1 PHCs (1)	8	N/A	2022/09/15	CAM SOP-00230	EPA 8260C m

Remarks:

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

* 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) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following "Alberta Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Validation of Performance-Based Alternative Methods September 2003". Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.



Your P.O. #: PO 1121445
Site Location: MBK
Your C.O.C. #: 568645

Attention: Reporting

Agnico Eagle
Meadowbank
Meadowbank
Keewatin, NU
CANADA P0X 0A1

Report Date: 2022/09/19
Report #: R7302781
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2Q0507
Received: 2022/09/10, 10:00

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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For Service Group specific validation please refer to the Validation Signature Page.



BUREAU
VERITAS

Bureau Veritas Job #: C2Q0507
Report Date: 2022/09/19

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

CCME PETROLEUM HYDROCARBONS SOIL (SOIL)

Bureau Veritas ID		TRS950	TRS951	TRS952	TRS953	TRS954	TRS955		
Sampling Date		2022/09/05 11:30	2022/09/05 11:30	2022/09/05 13:00	2022/09/05 13:00	2022/09/05 14:00	2022/09/05 14:00		
COC Number		568645	568645	568645	568645	568645	568645		
	UNITS	Q22-1	Q22-2	Q22-3	Q22-4	Q22-5	Q22-6	RDL	QC Batch
Volatile Organics									
Benzene	ug/g	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	0.0060	8224167
Ethylbenzene	ug/g	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	8224167
Toluene	ug/g	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	8224167
p+m-Xylene	ug/g	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	8224167
o-Xylene	ug/g	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	8224167
Total Xylenes	ug/g	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	8224167
F1 (C6-C10)	ug/g	<10	<10	<10	<10	<10	<10	10	8224167
F1 (C6-C10) - BTEX	ug/g	<10	<10	<10	<10	<10	<10	10	8224167
F2-F4 Hydrocarbons									
F2 (C10-C16 Hydrocarbons)	ug/g	76	38	<10	11	<10	<10	10	8224720
F3 (C16-C34 Hydrocarbons)	ug/g	3300	3300	790	880	170	320	50	8224720
F4 (C34-C50 Hydrocarbons)	ug/g	800	880	220	250	65	110	50	8224720
Reached Baseline at C50	ug/g	Yes	Yes	Yes	Yes	Yes	Yes		8224720
Surrogate Recovery (%)									
o-Terphenyl	%	82	79	77	78	80	75		8224720
4-Bromofluorobenzene	%	97	96	96	96	96	96		8224167
D10-o-Xylene	%	100	105	123	93	98	116		8224167
D4-1,2-Dichloroethane	%	107	105	104	108	107	106		8224167
D8-Toluene	%	97	97	99	96	97	96		8224167
RDL = Reportable Detection Limit									
QC Batch = Quality Control Batch									



BUREAU
VERITAS

Bureau Veritas Job #: C2Q0507
Report Date: 2022/09/19

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

CCME PETROLEUM HYDROCARBONS SOIL (SOIL)

Bureau Veritas ID		TRS956			TRS956			TRS957		
Sampling Date		2022/09/05 15:00			2022/09/05 15:00			2022/09/05 15:00		
COC Number		568645			568645			568645		
	UNITS	Q22-7	RDL	QC Batch	Q22-7 Lab-Dup	RDL	QC Batch	Q22-8	RDL	QC Batch
Volatile Organics										
Benzene	ug/g	<0.0060	0.0060	8224167				<0.0060	0.0060	8224167
Ethylbenzene	ug/g	<0.010	0.010	8224167				<0.010	0.010	8224167
Toluene	ug/g	<0.020	0.020	8224167				<0.020	0.020	8224167
p+m-Xylene	ug/g	<0.020	0.020	8224167				<0.020	0.020	8224167
o-Xylene	ug/g	<0.020	0.020	8224167				<0.020	0.020	8224167
Total Xylenes	ug/g	<0.020	0.020	8224167				<0.020	0.020	8224167
F1 (C6-C10)	ug/g	<10	10	8224167				<10	10	8224167
F1 (C6-C10) - BTEX	ug/g	<10	10	8224167				<10	10	8224167
F2-F4 Hydrocarbons										
F2 (C10-C16 Hydrocarbons)	ug/g	<10	10	8224720	<10	10	8224720	<10	10	8224720
F3 (C16-C34 Hydrocarbons)	ug/g	440	50	8224720	400	50	8224720	580	50	8224720
F4 (C34-C50 Hydrocarbons)	ug/g	85	50	8224720	83	50	8224720	160	50	8224720
Reached Baseline at C50	ug/g	Yes		8224720	Yes		8224720	Yes		8224720
Surrogate Recovery (%)										
o-Terphenyl	%	80		8224720	80		8224720	76		8224720
4-Bromofluorobenzene	%	96		8224167				96		8224167
D10-o-Xylene	%	105		8224167				95		8224167
D4-1,2-Dichloroethane	%	104		8224167				106		8224167
D8-Toluene	%	97		8224167				96		8224167
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate										



**BUREAU
VERITAS**

Bureau Veritas Job #: C2Q0507
Report Date: 2022/09/19

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

RESULTS OF ANALYSES OF SOIL

Bureau Veritas ID		TRS950	TRS951	TRS952	TRS953	TRS954	TRS955	TRS956		
Sampling Date		2022/09/05 11:30	2022/09/05 11:30	2022/09/05 13:00	2022/09/05 13:00	2022/09/05 14:00	2022/09/05 14:00	2022/09/05 15:00		
COC Number		568645	568645	568645	568645	568645	568645	568645		
	UNITS	Q22-1	Q22-2	Q22-3	Q22-4	Q22-5	Q22-6	Q22-7	RDL	QC Batch
Inorganics										
Moisture	%	3.2	3.5	2.4	3.6	4.5	2.8	2.7	1.0	8223680
RDL = Reportable Detection Limit QC Batch = Quality Control Batch										

Bureau Veritas ID		TRS957		
Sampling Date		2022/09/05 15:00		
COC Number		568645		
	UNITS	Q22-8	RDL	QC Batch
Inorganics				
Moisture	%	2.3	1.0	8223680
RDL = Reportable Detection Limit QC Batch = Quality Control Batch				



BUREAU
VERITAS

Bureau Veritas Job #: C2Q0507
Report Date: 2022/09/19

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

SEMI-VOLATILE ORGANICS BY GC-MS (SOIL)

Bureau Veritas ID		TRS950	TRS951	TRS952	TRS953	TRS954	TRS955		
Sampling Date		2022/09/05 11:30	2022/09/05 11:30	2022/09/05 13:00	2022/09/05 13:00	2022/09/05 14:00	2022/09/05 14:00		
COC Number		568645	568645	568645	568645	568645	568645		
	UNITS	Q22-1	Q22-2	Q22-3	Q22-4	Q22-5	Q22-6	RDL	QC Batch
Polyaromatic Hydrocarbons									
Acenaphthene	ug/g	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	8225755
Acenaphthylene	ug/g	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	8225755
Anthracene	ug/g	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	8225755
Benzo(a)anthracene	ug/g	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	8225755
Benzo(a)pyrene	ug/g	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	8225755
Benzo(b/j)fluoranthene	ug/g	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	8225755
Benzo(g,h,i)perylene	ug/g	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	8225755
Benzo(k)fluoranthene	ug/g	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	8225755
Chrysene	ug/g	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	8225755
Dibenzo(a,h)anthracene	ug/g	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	8225755
Fluoranthene	ug/g	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	8225755
Fluorene	ug/g	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	8225755
Indeno(1,2,3-cd)pyrene	ug/g	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	8225755
1-Methylnaphthalene	ug/g	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	8225755
2-Methylnaphthalene	ug/g	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	8225755
Naphthalene	ug/g	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	8225755
Phenanthrene	ug/g	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	8225755
Pyrene	ug/g	0.0052	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	8225755
Surrogate Recovery (%)									
D10-Anthracene	%	111	108	109	110	111	110		8225755
D14-Terphenyl (FS)	%	70	72	90	87	95	94		8225755
D8-Acenaphthylene	%	94	92	94	93	93	92		8225755
RDL = Reportable Detection Limit QC Batch = Quality Control Batch									



BUREAU
VERITAS

Bureau Veritas Job #: C2Q0507

Report Date: 2022/09/19

Agnico Eagle

Site Location: MBK

Your P.O. #: PO 1121445

Sampler Initials: FQS

SEMI-VOLATILE ORGANICS BY GC-MS (SOIL)

Bureau Veritas ID		TRS956	TRS956	TRS957		
Sampling Date		2022/09/05 15:00	2022/09/05 15:00	2022/09/05 15:00		
COC Number		568645	568645	568645		
	UNITS	Q22-7	Q22-7 Lab-Dup	Q22-8	RDL	QC Batch
Polyaromatic Hydrocarbons						
Acenaphthene	ug/g	<0.0050	<0.0050	<0.0050	0.0050	8225755
Acenaphthylene	ug/g	<0.0050	<0.0050	<0.0050	0.0050	8225755
Anthracene	ug/g	<0.0050	<0.0050	<0.0050	0.0050	8225755
Benzo(a)anthracene	ug/g	<0.0050	<0.0050	<0.0050	0.0050	8225755
Benzo(a)pyrene	ug/g	<0.0050	<0.0050	<0.0050	0.0050	8225755
Benzo(b/j)fluoranthene	ug/g	<0.0050	<0.0050	<0.0050	0.0050	8225755
Benzo(g,h,i)perylene	ug/g	<0.0050	<0.0050	<0.0050	0.0050	8225755
Benzo(k)fluoranthene	ug/g	<0.0050	<0.0050	<0.0050	0.0050	8225755
Chrysene	ug/g	<0.0050	<0.0050	<0.0050	0.0050	8225755
Dibenzo(a,h)anthracene	ug/g	<0.0050	<0.0050	<0.0050	0.0050	8225755
Fluoranthene	ug/g	<0.0050	<0.0050	<0.0050	0.0050	8225755
Fluorene	ug/g	<0.0050	<0.0050	<0.0050	0.0050	8225755
Indeno(1,2,3-cd)pyrene	ug/g	<0.0050	<0.0050	<0.0050	0.0050	8225755
1-Methylnaphthalene	ug/g	<0.0050	<0.0050	<0.0050	0.0050	8225755
2-Methylnaphthalene	ug/g	<0.0050	<0.0050	<0.0050	0.0050	8225755
Naphthalene	ug/g	<0.0050	<0.0050	<0.0050	0.0050	8225755
Phenanthrene	ug/g	<0.0050	<0.0050	<0.0050	0.0050	8225755
Pyrene	ug/g	<0.0050	<0.0050	<0.0050	0.0050	8225755
Surrogate Recovery (%)						
D10-Anthracene	%	112	110	114		8225755
D14-Terphenyl (FS)	%	87	86	94		8225755
D8-Acenaphthylene	%	92	91	93		8225755
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate						



BUREAU
VERITAS

Bureau Veritas Job #: C2Q0507
Report Date: 2022/09/19

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

TEST SUMMARY

Bureau Veritas ID: TRS950
Sample ID: Q22-1
Matrix: Soil

Collected: 2022/09/05
Shipped:
Received: 2022/09/10

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	8224720	2022/09/14	2022/09/15	(Kent) Maolin Li
Moisture	BAL	8223680	N/A	2022/09/14	Mathew Bowles
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	8225755	2022/09/15	2022/09/15	Joe Paino
Volatile Organic Compounds and F1 PHCs	GC/MSFD	8224167	N/A	2022/09/15	Blair Gannon

Bureau Veritas ID: TRS951
Sample ID: Q22-2
Matrix: Soil

Collected: 2022/09/05
Shipped:
Received: 2022/09/10

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	8224720	2022/09/14	2022/09/15	(Kent) Maolin Li
Moisture	BAL	8223680	N/A	2022/09/14	Mathew Bowles
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	8225755	2022/09/15	2022/09/15	Joe Paino
Volatile Organic Compounds and F1 PHCs	GC/MSFD	8224167	N/A	2022/09/15	Blair Gannon

Bureau Veritas ID: TRS952
Sample ID: Q22-3
Matrix: Soil

Collected: 2022/09/05
Shipped:
Received: 2022/09/10

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	8224720	2022/09/14	2022/09/15	(Kent) Maolin Li
Moisture	BAL	8223680	N/A	2022/09/14	Mathew Bowles
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	8225755	2022/09/15	2022/09/15	Joe Paino
Volatile Organic Compounds and F1 PHCs	GC/MSFD	8224167	N/A	2022/09/15	Blair Gannon

Bureau Veritas ID: TRS953
Sample ID: Q22-4
Matrix: Soil

Collected: 2022/09/05
Shipped:
Received: 2022/09/10

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	8224720	2022/09/14	2022/09/15	(Kent) Maolin Li
Moisture	BAL	8223680	N/A	2022/09/14	Mathew Bowles
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	8225755	2022/09/15	2022/09/15	Joe Paino
Volatile Organic Compounds and F1 PHCs	GC/MSFD	8224167	N/A	2022/09/15	Blair Gannon

Bureau Veritas ID: TRS954
Sample ID: Q22-5
Matrix: Soil

Collected: 2022/09/05
Shipped:
Received: 2022/09/10

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	8224720	2022/09/14	2022/09/15	(Kent) Maolin Li
Moisture	BAL	8223680	N/A	2022/09/14	Mathew Bowles
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	8225755	2022/09/15	2022/09/15	Joe Paino
Volatile Organic Compounds and F1 PHCs	GC/MSFD	8224167	N/A	2022/09/15	Blair Gannon



BUREAU
VERITAS

Bureau Veritas Job #: C2Q0507
Report Date: 2022/09/19

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

TEST SUMMARY

Bureau Veritas ID: TRS955
Sample ID: Q22-6
Matrix: Soil

Collected: 2022/09/05
Shipped:
Received: 2022/09/10

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	8224720	2022/09/14	2022/09/15	(Kent) Maolin Li
Moisture	BAL	8223680	N/A	2022/09/14	Mathew Bowles
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	8225755	2022/09/15	2022/09/15	Joe Paino
Volatile Organic Compounds and F1 PHCs	GC/MSFD	8224167	N/A	2022/09/15	Blair Gannon

Bureau Veritas ID: TRS956
Sample ID: Q22-7
Matrix: Soil

Collected: 2022/09/05
Shipped:
Received: 2022/09/10

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	8224720	2022/09/14	2022/09/15	(Kent) Maolin Li
Moisture	BAL	8223680	N/A	2022/09/14	Mathew Bowles
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	8225755	2022/09/15	2022/09/15	Joe Paino
Volatile Organic Compounds and F1 PHCs	GC/MSFD	8224167	N/A	2022/09/15	Blair Gannon

Bureau Veritas ID: TRS956 Dup
Sample ID: Q22-7
Matrix: Soil

Collected: 2022/09/05
Shipped:
Received: 2022/09/10

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	8224720	2022/09/14	2022/09/15	(Kent) Maolin Li
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	8225755	2022/09/15	2022/09/15	Joe Paino

Bureau Veritas ID: TRS957
Sample ID: Q22-8
Matrix: Soil

Collected: 2022/09/05
Shipped:
Received: 2022/09/10

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	8224720	2022/09/14	2022/09/15	(Kent) Maolin Li
Moisture	BAL	8223680	N/A	2022/09/14	Mathew Bowles
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	8225755	2022/09/15	2022/09/15	Joe Paino
Volatile Organic Compounds and F1 PHCs	GC/MSFD	8224167	N/A	2022/09/15	Blair Gannon



BUREAU
VERITAS

Bureau Veritas Job #: C2Q0507
Report Date: 2022/09/19

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

GENERAL COMMENTS

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

Package 1	21.0°C
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Results relate only to the items tested.



BUREAU
VERITAS

Bureau Veritas Job #: C2Q0507

Report Date: 2022/09/19

QUALITY ASSURANCE REPORT

Agnico Eagle

Site Location: MBK

Your P.O. #: PO 1121445

Sampler Initials: FQS

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8224167	4-Bromofluorobenzene	2022/09/15	101	60 - 140	100	60 - 140	96	%		
8224167	D10-o-Xylene	2022/09/15	101	60 - 130	97	60 - 130	98	%		
8224167	D4-1,2-Dichloroethane	2022/09/15	104	60 - 140	104	60 - 140	104	%		
8224167	D8-Toluene	2022/09/15	96	60 - 140	97	60 - 140	99	%		
8224720	o-Terphenyl	2022/09/15	85	60 - 130	78	60 - 130	79	%		
8225755	D10-Anthracene	2022/09/15	105	50 - 130	106	50 - 130	114	%		
8225755	D14-Terphenyl (FS)	2022/09/15	87	50 - 130	93	50 - 130	100	%		
8225755	D8-Acenaphthylene	2022/09/15	94	50 - 130	90	50 - 130	85	%		
8223680	Moisture	2022/09/14							2.6	20
8224167	Benzene	2022/09/15	93	60 - 140	85	60 - 130	<0.0060	ug/g	NC	50
8224167	Ethylbenzene	2022/09/15	93	60 - 140	91	60 - 130	<0.010	ug/g	NC	50
8224167	F1 (C6-C10) - BTEX	2022/09/15					<10	ug/g	NC	30
8224167	F1 (C6-C10)	2022/09/15	104	60 - 140	100	80 - 120	<10	ug/g	NC	30
8224167	o-Xylene	2022/09/15	89	60 - 140	87	60 - 130	<0.020	ug/g	NC	50
8224167	p+m-Xylene	2022/09/15	97	60 - 140	96	60 - 130	<0.020	ug/g	NC	50
8224167	Toluene	2022/09/15	98	60 - 140	93	60 - 130	<0.020	ug/g	NC	50
8224167	Total Xylenes	2022/09/15					<0.020	ug/g	NC	50
8224720	F2 (C10-C16 Hydrocarbons)	2022/09/15	107	60 - 130	102	80 - 120	<10	ug/g	NC	30
8224720	F3 (C16-C34 Hydrocarbons)	2022/09/15	NC	60 - 130	100	80 - 120	<50	ug/g	11	30
8224720	F4 (C34-C50 Hydrocarbons)	2022/09/15	108	60 - 130	102	80 - 120	<50	ug/g	2.8	30
8225755	1-Methylnaphthalene	2022/09/15	107	50 - 130	105	50 - 130	<0.0050	ug/g	NC	40
8225755	2-Methylnaphthalene	2022/09/15	103	50 - 130	100	50 - 130	<0.0050	ug/g	NC	40
8225755	Acenaphthene	2022/09/15	102	50 - 130	100	50 - 130	<0.0050	ug/g	NC	40
8225755	Acenaphthylene	2022/09/15	99	50 - 130	96	50 - 130	<0.0050	ug/g	NC	40
8225755	Anthracene	2022/09/15	112	50 - 130	111	50 - 130	<0.0050	ug/g	NC	40
8225755	Benzo(a)anthracene	2022/09/15	107	50 - 130	102	50 - 130	<0.0050	ug/g	NC	40
8225755	Benzo(a)pyrene	2022/09/15	89	50 - 130	86	50 - 130	<0.0050	ug/g	NC	40
8225755	Benzo(b/j)fluoranthene	2022/09/15	99	50 - 130	100	50 - 130	<0.0050	ug/g	NC	40
8225755	Benzo(g,h,i)perylene	2022/09/15	105	50 - 130	99	50 - 130	<0.0050	ug/g	NC	40
8225755	Benzo(k)fluoranthene	2022/09/15	91	50 - 130	90	50 - 130	<0.0050	ug/g	NC	40
8225755	Chrysene	2022/09/15	106	50 - 130	101	50 - 130	<0.0050	ug/g	NC	40
8225755	Dibenzo(a,h)anthracene	2022/09/15	94	50 - 130	85	50 - 130	<0.0050	ug/g	NC	40



BUREAU
VERITAS

Bureau Veritas Job #: C2Q0507

Report Date: 2022/09/19

QUALITY ASSURANCE REPORT(CONT'D)

Agnico Eagle

Site Location: MBK

Your P.O. #: PO 1121445

Sampler Initials: FQS

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8225755	Fluoranthene	2022/09/15	101	50 - 130	106	50 - 130	<0.0050	ug/g	NC	40
8225755	Fluorene	2022/09/15	101	50 - 130	100	50 - 130	<0.0050	ug/g	NC	40
8225755	Indeno(1,2,3-cd)pyrene	2022/09/15	103	50 - 130	101	50 - 130	<0.0050	ug/g	NC	40
8225755	Naphthalene	2022/09/15	97	50 - 130	97	50 - 130	<0.0050	ug/g	NC	40
8225755	Phenanthrene	2022/09/15	105	50 - 130	102	50 - 130	<0.0050	ug/g	NC	40
8225755	Pyrene	2022/09/15	103	50 - 130	108	50 - 130	<0.0050	ug/g	NC	40

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.

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.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

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

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



BUREAU
VERITAS

Bureau Veritas Job #: C2Q0507
Report Date: 2022/09/19

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

VALIDATION SIGNATURE PAGE

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

A handwritten signature in black ink, appearing to read "Anastassia Hamanov", written over a horizontal line.

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.



BUREAU
VERITAS

Bureau Veritas Job #: C2Q0507
Report Date: 2022/09/19

Agnico Eagle
Site Location: MBK
Your P.O. #: PO 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 applicable regulatory guidelines.						