# **Appendix 18**

# Meadowbank 2020 Quarry 22 Report



# MEADOWBANK COMPLEX

# 2020 Quarry 22 Report

Prepared by:
Agnico Eagle Mines Limited – Meadowbank Division

## **EXECUTIVE SUMMARY**

Following the AANDC inspection report in 2012, this report has been prepared to provide information regarding the clean-up of quarry 22:

- Explanation of presence of contaminated soil in Quarry 22;
- Transfer of material to Meadowbank Landfarm;
- Sampling of the soil at quarry 22; and
- Next steps for the finalization of the decontamination.

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## **APPENDICES**

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## 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. Quarry 22 (Q22) is one of these quarries and at this time it is anticipated that no additional materials will be taken from this quarry. Quarry 22 was also historically used as a temporary storage area for contaminated materials generated because of petroleum hydrocarbon spill clean-up activities prior to the establishment of the landfarm at the Meadowbank site. The site ceased to be used for this temporary storage when the Meadowbank Landfarm was completed in 2012.

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 (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 KIA Land use lease.

#### 1.2 OBJECTIVES

This report summarizes the follow aspects concerning Quarry 22:

- Presence of contaminated soil; Track rate of contaminated reclamation
- Movement of Contaminated soil; Document the movement of contaminated soil
- Analytical Results: Conduct annual sampling campaign and analyse results
- Next steps in remediation: Document the remediation actions

#### SECTION 2 • QUARRY 22

#### 2.1 2020 ACTIONS

Results from the September 2018 fall sampling campaign indicated some remnants of contamination when compared to the CCME remediation Criteria for Industrial Use of Coarse Material. Most of the contamination remaining was associated with Fraction 3 hydrocarbons. Therefore, Agnico proposed to scarify the remaining contaminated areas in Q22 during the summer of 2019 (see Q22 2018 report – 2018 Annual report). Due to the presence of falcon, scarification and sampling had to be cancel in 2019 and postponed to 2020.

Taking into consideration the results from the 2014, 2016 and 2018 campaign, Agnico Eagle intended to continue to scarify early spring the surface of Quarry 22, with the back-end of a grader, allowing ground surface to be aerated thus increasing degradation of PHC. A bird cannon was deployed on May 23 to "discourage" the peregrine falcon to establish their nest in that 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. All activity within the area, including scarification, were postponed minimizing the impact of potential nesting for this species and therefore ensure proper conditions of nesting activity.

A sampling campaign was however completed late September to track the degradation of PHC with time. Scarification work was performed on September 22, 2020 and the samples were collected on September 24, 2020. 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 guarry were noted in 2020.

#### 2.2 QUARRY 22 SAMPLING

On September 24<sup>th</sup>, 2020, the Environment department sampled the soil from the substrate to further assess PHC degradation following the clean-up action since 2013 and to track rates of contamination reclamation.

To ensure result's consistency, the same grid system was used as the previous sampling campaign 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 increased as areas move from 1 to 2 to 3. Portions from 3 and beyond represented the largest in area. The surface included 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 accredited lab. Sampling instruments were cleaned between each sample event.

As such, to ensure consistency of results, the same grid was used in all sampling events.

## **SECTION 3 • RESULTS**

Results from the 2020 sampling (Table 1) indicate the presence of contamination remnants. Results were compared to the CCME remediation Criteria for Industrial use of Coarse material. Results indicate the contamination remaining is associated with Fraction 3.

When comparing results of 2020 with the sampling done in 2014, 2016 and 2018 (Table 2 and Figures 1-8), levels of contamination appear to be trending down. For the second consecutive sampling campaign, analysis results for fraction 1, 2, and 4 did not exceed CCME.

An increased (compared to 2016 and 2018) is noted within section Q-22-8 for fraction 3, but it still below the CCME criteria.

Table 1 - Quarry 22 (2020) Sampling results

	Sam	ple date	9/24/2020	9/24/2020	9/24/2020	9/24/2020	9/24/2020	9/24/2020	9/24/2020	9/24/2020
	Samı	ole name	Q22-1	Q22-2	Q22-3	Q22-4	Q22-5	Q22-6	Q22-7	Q22-8
	CCME									
Parameter	Remediation	Unit		-	-	_		_	-	
	criteria									
Petroleum Hydrocarbons - F1 (C6-C10)	320	mg/kg	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Petroleum Hydrocarbons - F2 (C10-C16)	260	mg/kg	< 10	17	< 10	18	< 10	< 10	< 10	< 10
Petroleum Hydrocarbons - F3 (C16-C34)	1700	mg/kg	2000	2300	180	810	260	280	160	1200
Petroleum Hydrocarbons - F4 (C34-C50)	3330	mg/kg	450	670	< 10	210	100	71	69	280
Total BTEX	N/A	mg/kg	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10

Red values are above the CCME criteria

Table 2 – Quarry 22 (2014, 2016, 2018, 2020) Sampling results

Sample Location	Year 2014	Fraction 1	Fraction 2	Fraction 3	Fraction 4	Year 2016	Fraction 1	Fraction 2	Fraction 3	Fraction 4	Year 2018	Fraction 1	Fraction 2	Fraction 3	Fraction 4	Year 2020	Fraction 1	Fraction 2	Fraction 3	Fraction 4
CCME remediation criteria (mg/Kg)	Sampling Date	320	260	1700	3300	Sampling Date	320	260	1700	3300	Sampling Date	320	260	1700	3300	Sampling Date	320	260	1700	3300
Q-22-1	7/11/2014	0.06	400	10000	1900	9/5/2016	0.06	99	7000	1400	9/25/2018	0.71	52	8800	2000	9/24/2020	<10	<10	2000	450
Q-22-2	7/11/2014	0.06	130	4600	1100	9/5/2016	0.06	110	8100	1600	9/25/2018	<0.06	16	5300	1400	9/24/2020	<10	17	2300	670
Q-22-3	7/11/2014	0.06	10	1100	250	9/5/2016	0.06	58	3400	770	9/25/2018	0.74	<10	750	230	9/24/2020	<10	<10	180	<50
Q-22-4	7/11/2014	0.06	96	6800	1500	9/5/2016	0.06	37	2100	490	9/25/2018	<0.06	<10	1700	480	9/24/2020	<10	18	810	210
Q-22-5	7/11/2014	0.06	10	500	170	9/5/2016	0.06	<10	260	100	9/25/2018	<0.06	<10	170	73	9/24/2020	<10	<10	260	100
Q-22-6	7/11/2014	0.06	10	1600	570	9/5/2016	0.06	<10	470	180	9/25/2018	<0.06	<10	1600	500	9/24/2020	<10	<10	280	71
Q-22-7	7/11/2014	0.06	10	2200	520	9/6/2016	0.06	13	450	180	9/25/2018	<0.06	<10	290	110	9/24/2020	<10	<10	160	69
Q-22-8	7/11/2014	0.06	37	3100	660	9/6/2016	0.2	<10	400	160	9/25/2018	<0.06	<10	470	160	9/24/2020	<10	<10	1200	280

Red Values are above the CCME criteria

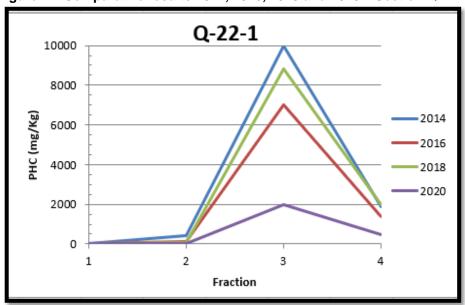
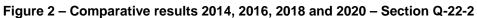
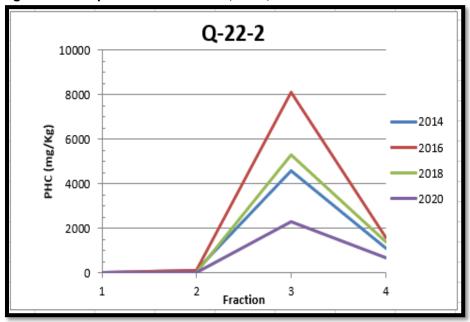


Figure 1 - Comparative results 2014, 2016, 2018 and 2020 - Section Q-22-1





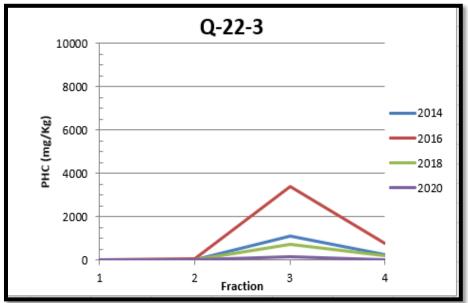
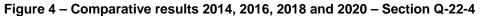
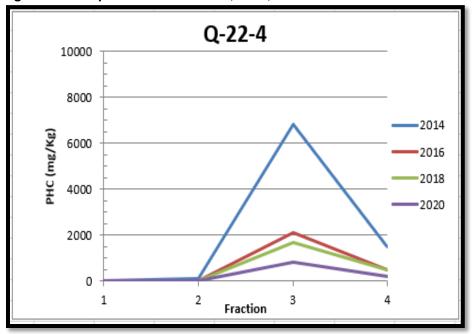


Figure 3 - Comparative results 2014, 2016, 2018 and 2020 - Section Q-22-3





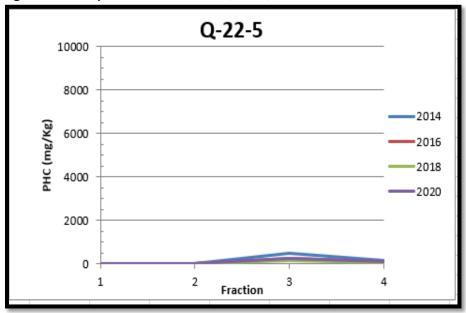
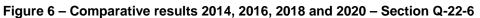
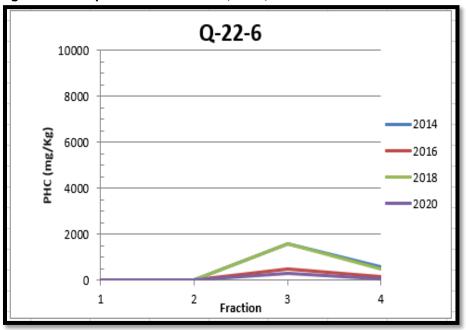


Figure 5 - Comparative results 2014, 2016, 2018 and 2020 - Section Q-22-5





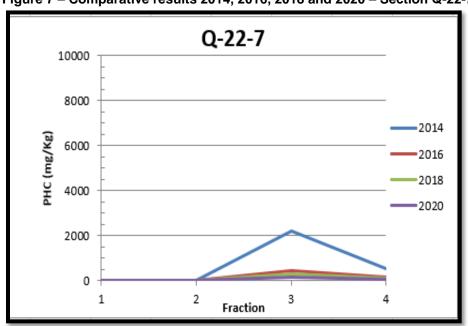
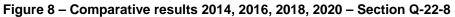
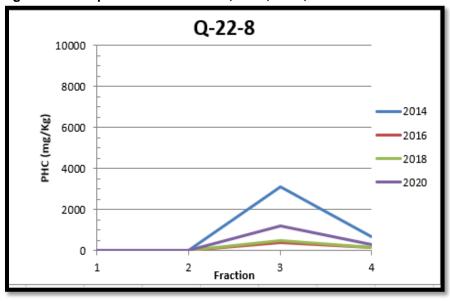


Figure 7 – Comparative results 2014, 2016, 2018 and 2020 – Section Q-22-7





#### SECTION 4 • CONCLUSION/RECOMMENDATION

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

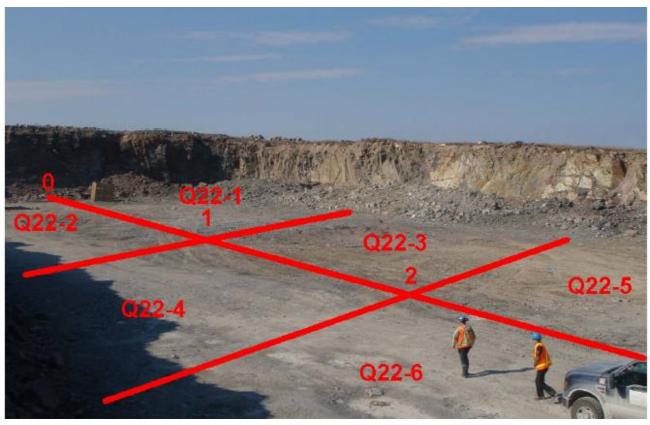
In 2021, according to the peregrine falcon activity and nesting observation during the weekly quarry inspections, Agnico will evaluate if the work could be completed without disturbance to wildlife. If needed, the area could be limited to any activity to ensure adequate bird protection and management. If no repeated peregrine falcon presences are observed, Agnico proposes to continue scarifying the surface areas in Q22 during the summer of 2021. According to the last two sampling campaigns, the focus should be on fraction 3 and efforts should be deployed especially in section Q-22-1 and Q22-2 as they are the only two results above the CCME criteria. Similar to 2020, falcon deterrence activities will take place in 2021 to ensure the work can be performed. However, if a peregrine falcon family establish their nest in the quarry, Agnico will postpone the scarification until late September before the freeze up season to minimize any mining disturbance on wildlife.

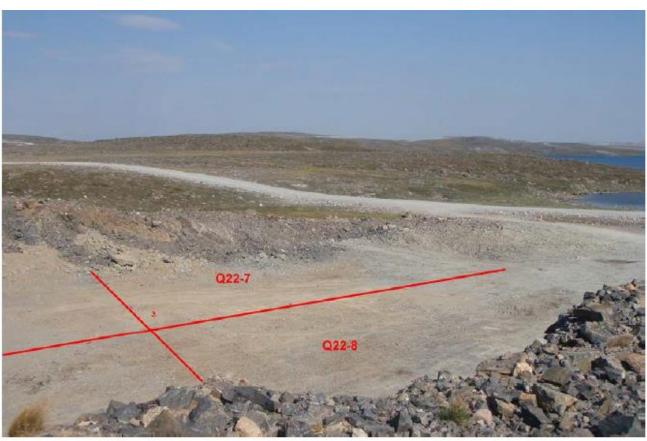
Another round of sampling is planned in 2021. Results will then be compared to the previous data (2014, 2016, 2018, and 2020) to monitor the level of degradation. Based on the 2021 soil sampling results, Agnico will analyse the next actions to be taken. If needed, further course of action could include removal of additional material. Nonetheless, Agnico considers the actual methodology to be a satisfactory solution to the remediation of the quarry

Agnico will also ensure that runoff (if any) will stay within the site of the quarry during freshet and thus not impact any watercourses and/or the 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**



Certificate #: VD06043

Client #: 990

Client Reference #: Q22-1

## **CERTIFICATE OF ANALYSIS**

**Agnico Eagle Division Meadowbank** 

General Delivery Baker Lake

Nunavut X0C 0A0

2020/09/29 Received on:

Sampled on: 2020/09/24 13:00

Solide Matrix:

Sampling site code: Q22

Samples: Q22-1

Sampler : LD

The sample's appreciation and conformity towards established norms, if applicable, is based and limited to analyzed parameters. This report can't be reproduced, unless in whole, without prior written autorization from the laboratory. The results are related only to samples submitted for testing.



Certificate emission date: 2020-10-15



Certificate #: VD06043

Client # : 990 Client Reference # : Q22-1

## **CERTIFICATE OF ANALYSIS**

## **RESULTS**

Laboratory ID		102155
Client ID		Q22-1
Matrix		Solide
Sampling site		Q22
Sampled on	unit	2020/09/24 13:00
Petroleum Hydrocarbons	s (F1 to F	4)
Hydrocarbons (F1 (BTEX) <b>st1</b>	mg/kg	<10
Hydrocarbons (F1 (C6-C10)) st1	mg/kg	<10
Petroleum Hydrocarbons F2 (C10-C16) <b>st1</b>	mg/kg	<10
Petroleum Hydrocarbons F3 (C16-34) <i>st1</i>	mg/kg	2000
Petroleum Hydrocarbons F4 (C34-50) <i>st1</i>	mg/kg	450

Certificate emission date : 2020-10-15



www.h2lab.ca

Certificate #: VD06043 Client #: 990

Client Reference # : Q22-1

## **CERTIFICATE OF ANALYSIS**

# **Quality control**

					Sta	andard		Dupl	Analyzed on	
Parameter (method)	*LDR	Unit	Blank	Name	Value	Expected	Interval	#1	#2	
Petroleum Hydrocarbons (F1 to F4) (Sous-tra	aitance (S))									
Hydrocarbons (F1 (BTEX) (Sous-traitance (S)) s	10	mg/kg								2020-10-03
Hydrocarbons (F1 (C6-C10)) (Sous-traitance (S)) s	10	mg/kg						1		2020-10-03
Petroleum Hydrocarbons F2 (C10-C16) (Sous-traitance (S)) <b>s</b>	10	mg/kg						-		2020-10-09
Petroleum Hydrocarbons F3 (C16-34) (Sous-traitance (S)) <b>s</b>	10	mg/kg								2020-10-09
Petroleum Hydrocarbons F4 (C34-50) (Sous-traitance (S)) <b>s</b>	10	mg/kg								2020-10-09

## Legend:

st1 : analyse effectuée au laboratoire 364 \*LDR : Limit of detection reported

The sample's appreciation and conformity towards established norms, if applicable, is based and limited to analyzed parameters. This report can't be reproduced, unless in whole, without prior written autorization from the laboratory. The results are related only to samples submitted for testing.

## **END OF CERTIFICATE**

Certificate emission date: 2020-10-15



Certificate #: VD06044

Client #: 990

Client Reference # : Q22-2

## **CERTIFICATE OF ANALYSIS**

**Agnico Eagle Division Meadowbank** 

General Delivery

Baker Lake Nunavut X0C 0A0

2020/09/29 Received on:

Sampled on: 2020/09/24 13:00

Solide Matrix:

Sampling site code: Q22

Samples: Q22-2

Sampler : SK

The sample's appreciation and conformity towards established norms, if applicable, is based and limited to analyzed parameters. This report can't be reproduced, unless in whole, without prior written autorization from the laboratory. The results are related only to samples submitted for testing.



Certificate emission date: 2020-10-15



Certificate #: VD06044 Client #: 990

Client Reference # : Q22-2

## **CERTIFICATE OF ANALYSIS**

## **RESULTS**

Laboratory ID		102156
Client ID		Q22-2
Matrix		Solide
Sampling site		Q22
Sampled on	unit	2020/09/24 13:00
Petroleum Hydrocarbons	s (F1 to F	4)
Hydrocarbons (F1 (BTEX) <b>st1</b>	mg/kg	<10
Hydrocarbons (F1 (C6-C10)) st1	mg/kg	<10
Petroleum Hydrocarbons F2 (C10-C16) <b>st1</b>	mg/kg	17
Petroleum Hydrocarbons F3 (C16-34) <i>st1</i>	mg/kg	2300
Petroleum Hydrocarbons F4 (C34-50) <i>st1</i>	mg/kg	670

Certificate emission date : 2020-10-15

www.h2lab.ca

Certificate #: VD06044 Client #: 990

Client Reference # : Q22-2

## **CERTIFICATE OF ANALYSIS**

## **Quality control**

					Sta	andard		Dupl	icate	Analyzed on
Parameter (method)	*LDR	Unit	Blank	Name	Value	Expected	Interval	#1	#2	
Petroleum Hydrocarbons (F1 to F4) (Sous-tra	aitance (S))									
Hydrocarbons (F1 (BTEX) (Sous-traitance (S)) s	10	mg/kg								2020-10-03
Hydrocarbons (F1 (C6-C10)) (Sous-traitance (S)) s	10	mg/kg								2020-10-03
Petroleum Hydrocarbons F2 (C10-C16) (Sous-traitance (S)) s	10	mg/kg								2020-10-09
Petroleum Hydrocarbons F3 (C16-34) (Sous-traitance (S)) s	10	mg/kg								2020-10-09
Petroleum Hydrocarbons F4 (C34-50) (Sous-traitance (S)) <b>s</b>	10	mg/kg								2020-10-09

## Legend:

st1 : analyse effectuée au laboratoire 364 \*LDR : Limit of detection reported

The sample's appreciation and conformity towards established norms, if applicable, is based and limited to analyzed parameters. This report can't be reproduced, unless in whole, without prior written autorization from the laboratory. The results are related only to samples submitted for testing.

## **END OF CERTIFICATE**

Certificate emission date: 2020-10-15



Certificate #: VD06045

Client #: 990

Client Reference #: Q22-3

## **CERTIFICATE OF ANALYSIS**

**Agnico Eagle Division Meadowbank** 

General Delivery Baker Lake

Nunavut X0C 0A0

2020/09/29 Received on:

Sampled on: 2020/09/24 13:30

Solide Matrix:

Sampling site code: Q22

Samples: Q22-3

Sampler: LD

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Certificate emission date: 2020-10-15



Certificate #: VD06045

Client #: 990 Client Reference #: Q22-3

## **CERTIFICATE OF ANALYSIS**

## **RESULTS**

	I	
Laboratory ID		102157
Client ID		Q22-3
Matrix		Solide
Sampling site		Q22
Sampled on	unit	2020/09/24 13:30
Petroleum Hydrocarbons	s (F1 to F	4)
Hydrocarbons (F1 (BTEX) st1	mg/kg	<10
Hydrocarbons (F1 (C6-C10)) st1	mg/kg	<10
Petroleum Hydrocarbons F2 (C10-C16) <i>st1</i>	mg/kg	<10
Petroleum Hydrocarbons F3 (C16-34) <i>st1</i>	mg/kg	180
Petroleum Hydrocarbons F4 (C34-50) <i>st1</i>	mg/kg	<50

Certificate emission date : 2020-10-15

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Certificate #: VD06045 Client #: 990

Client Reference #: Q22-3

## **CERTIFICATE OF ANALYSIS**

## **Quality control**

					Sta	andard		Dup	licate	Analyzed on
Parameter (method)	*LDR	Unit	Blank	Name	Value	Expected	Interval	#1	#2	
Petroleum Hydrocarbons (F1 to F4) (Sous-tr	aitance (S))									
Hydrocarbons (F1 (BTEX) (Sous-traitance (S)) s	10	mg/kg								2020-10-03
Hydrocarbons (F1 (C6-C10)) (Sous-traitance (S)) s	10	mg/kg						1		2020-10-03
Petroleum Hydrocarbons F2 (C10-C16) (Sous-traitance (S)) <b>s</b>	10	mg/kg								2020-10-09
Petroleum Hydrocarbons F3 (C16-34) (Sous-traitance (S)) <b>s</b>	10	mg/kg								2020-10-09
Petroleum Hydrocarbons F4 (C34-50) (Sous-traitance (S)) <b>s</b>	10	mg/kg								2020-10-09

## Legend:

st1 : analyse effectuée au laboratoire 364 \*LDR : Limit of detection reported

The sample's appreciation and conformity towards established norms, if applicable, is based and limited to analyzed parameters. This report can't be reproduced, unless in whole, without prior written autorization from the laboratory. The results are related only to samples submitted for testing.

## **END OF CERTIFICATE**

Certificate emission date: 2020-10-15



Certificate #: VD06046

Client # : 990

Client Reference # : Q22-4

## **CERTIFICATE OF ANALYSIS**

**Agnico Eagle Division Meadowbank** 

General Delivery Baker Lake

Nunavut X0C 0A0

Received on: 2020/09/29

Sampled on: 2020/09/24 13:30

Matrix: Solide

Sampling site code: Q22

Samples: Q22-4

Sampler : SK

The sample's appreciation and conformity towards established norms, if applicable, is based and limited to analyzed parameters. This report can't be reproduced, unless in whole, without prior written autorization from the laboratory. The results are related only to samples submitted for testing.



Certificate emission date : 2020-10-15



Certificate #: VD06046

Client #: 990 Client Reference #: Q22-4

## **CERTIFICATE OF ANALYSIS**

## **RESULTS**

Laboratory ID		102158
Client ID		Q22-4
Matrix		Solide
Sampling site		Q22
Sampled on	unit	2020/09/24 13:30
Petroleum Hydrocarbons	s (F1 to F	4)
Hydrocarbons (F1 (BTEX) st1	mg/kg	<10
Hydrocarbons (F1 (C6-C10)) st1	mg/kg	<10
Petroleum Hydrocarbons F2 (C10-C16) <i>st1</i>	mg/kg	18
Petroleum Hydrocarbons F3 (C16-34) <i>st1</i>	mg/kg	810
Petroleum Hydrocarbons F4 (C34-50) <i>st1</i>	mg/kg	210

Certificate emission date : 2020-10-15

www.h2lab.ca

Certificate #: VD06046 Client #: 990

Client Reference # : Q22-4

## **CERTIFICATE OF ANALYSIS**

## **Quality control**

					Sta	andard		Dupl	licate	Analyzed on
Parameter (method)	*LDR	Unit	Blank	Name	Value	Expected	Interval	#1	#2	
Petroleum Hydrocarbons (F1 to F4) (Sous-tra	aitance (S))									
Hydrocarbons (F1 (BTEX) (Sous-traitance (S)) s	10	mg/kg								2020-10-03
Hydrocarbons (F1 (C6-C10)) (Sous-traitance (S)) s	10	mg/kg								2020-10-03
Petroleum Hydrocarbons F2 (C10-C16) (Sous-traitance (S)) <b>s</b>	10	mg/kg				-				2020-10-09
Petroleum Hydrocarbons F3 (C16-34) (Sous-traitance (S)) <b>s</b>	10	mg/kg								2020-10-09
Petroleum Hydrocarbons F4 (C34-50) (Sous-traitance (S)) <b>s</b>	10	mg/kg				-				2020-10-09

## Legend:

st1 : analyse effectuée au laboratoire 364 \*LDR : Limit of detection reported

The sample's appreciation and conformity towards established norms, if applicable, is based and limited to analyzed parameters. This report can't be reproduced, unless in whole, without prior written autorization from the laboratory. The results are related only to samples submitted for testing.

## **END OF CERTIFICATE**

Certificate emission date: 2020-10-15



Certificate #: VD06047

Client #: 990

Client Reference #: Q22-5

## **CERTIFICATE OF ANALYSIS**

**Agnico Eagle Division Meadowbank** 

General Delivery Nunavut X0C 0A0

Baker Lake

2020/09/29 Received on:

Sampled on: 2020/09/24 14:00

Solide Matrix:

Sampling site code: Q22

Samples: Q22-5

Sampler: LD

The sample's appreciation and conformity towards established norms, if applicable, is based and limited to analyzed parameters. This report can't be reproduced, unless in whole, without prior written autorization from the laboratory. The results are related only to samples submitted for testing.



Certificate emission date: 2020-10-15



Certificate #: VD06047

Client #: 990 Client Reference #: Q22-5

## **CERTIFICATE OF ANALYSIS**

## **RESULTS**

		İ
Laboratory ID		102159
Client ID		Q22-5
Matrix		Solide
Sampling site		Q22
Sampled on	unit	2020/09/24 14:00
Petroleum Hydrocarbons	s (F1 to F	4)
Hydrocarbons (F1 (BTEX) st1	mg/kg	<10
Hydrocarbons (F1 (C6-C10)) st1	mg/kg	<10
Petroleum Hydrocarbons F2 (C10-C16) <i>st1</i>	mg/kg	<10
Petroleum Hydrocarbons F3 (C16-34) <i>st1</i>	mg/kg	260
Petroleum Hydrocarbons F4 (C34-50) <i>st1</i>	mg/kg	100

Certificate emission date : 2020-10-15

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Certificate #: VD06047 Client #: 990

Client Reference #: Q22-5

## **CERTIFICATE OF ANALYSIS**

## **Quality control**

				Standard				Duplicate		Analyzed on
Parameter (method)	*LDR	Unit	Blank	Name	Value	Expected	Interval	#1	#2	
Petroleum Hydrocarbons (F1 to F4) (Sous-tr	aitance (S))									
Hydrocarbons (F1 (BTEX) (Sous-traitance (S)) s	10	mg/kg								2020-10-03
Hydrocarbons (F1 (C6-C10)) (Sous-traitance (S)) s	10	mg/kg								2020-10-03
Petroleum Hydrocarbons F2 (C10-C16) (Sous-traitance (S)) <b>s</b>	10	mg/kg				-				2020-10-09
Petroleum Hydrocarbons F3 (C16-34) (Sous-traitance (S)) s	10	mg/kg								2020-10-09
Petroleum Hydrocarbons F4 (C34-50) (Sous-traitance (S)) <b>s</b>	10	mg/kg				-				2020-10-09

## Legend:

st1 : analyse effectuée au laboratoire 364 \*LDR : Limit of detection reported

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## **END OF CERTIFICATE**

Certificate emission date: 2020-10-15



Certificate #: VD06048

Client #: 990

Client Reference #: Q22-6

## **CERTIFICATE OF ANALYSIS**

**Agnico Eagle Division Meadowbank** 

General Delivery Baker Lake

Nunavut X0C 0A0

2020/09/29 Received on:

Sampled on: 2020/09/24 14:00

Solide Matrix:

Sampling site code: Q22

Samples: Q22-6

Sampler : SK

The sample's appreciation and conformity towards established norms, if applicable, is based and limited to analyzed parameters. This report can't be reproduced, unless in whole, without prior written autorization from the laboratory. The results are related only to samples submitted for testing.

Signataire, Val-d'Or

Certificate emission date: 2020-10-15



Certificate #: VD06048

Client # : 990

Client Reference # : Q22-6

## **CERTIFICATE OF ANALYSIS**

## **RESULTS**

		1
Laboratory ID		102160
Client ID		Q22-6
Matrix		Solide
Sampling site		Q22
Sampled on	unit	2020/09/24 14:00
Petroleum Hydrocarbons	s (F1 to F	4)
Hydrocarbons (F1 (BTEX) st1	mg/kg	<10
Hydrocarbons (F1 (C6-C10)) st1	mg/kg	<10
Petroleum Hydrocarbons F2 (C10-C16) <i>st1</i>	mg/kg	<10
Petroleum Hydrocarbons F3 (C16-34) <i>st1</i>	mg/kg	280
Petroleum Hydrocarbons F4 (C34-50) <i>st1</i>	mg/kg	71

Certificate emission date : 2020-10-15

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Certificate #: VD06048 Client #: 990

Client Reference #: Q22-6

## **CERTIFICATE OF ANALYSIS**

## **Quality control**

				Standard				Duplicate		Analyzed on
Parameter (method)	*LDR	Unit	Blank	Name	Value	Expected	Interval	#1	#2	
Petroleum Hydrocarbons (F1 to F4) (Sous-tra	aitance (S))									
Hydrocarbons (F1 (BTEX) (Sous-traitance (S)) s	10	mg/kg								2020-10-03
Hydrocarbons (F1 (C6-C10)) (Sous-traitance (S)) s	10	mg/kg						-		2020-10-03
Petroleum Hydrocarbons F2 (C10-C16) (Sous-traitance (S)) s	10	mg/kg								2020-10-09
Petroleum Hydrocarbons F3 (C16-34) (Sous-traitance (S)) <b>s</b>	10	mg/kg								2020-10-09
Petroleum Hydrocarbons F4 (C34-50) (Sous-traitance (S)) <b>s</b>	10	mg/kg								2020-10-09

#### Legend:

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## **END OF CERTIFICATE**

Certificate emission date: 2020-10-15



Certificate #: VD06049

Client # : 990

Client Reference # : Q22-7

## **CERTIFICATE OF ANALYSIS**

**Agnico Eagle Division Meadowbank** 

General Delivery
Baker Lake

Nunavut X0C 0A0

Received on: 2020/09/29

Sampled on: 2020/09/24 14:30

Matrix: Solide

Sampling site code: Q22

Samples: Q22-7

Sampler: LD

The sample's appreciation and conformity towards established norms, if applicable, is based and limited to analyzed parameters. This report can't be reproduced, unless in whole, without prior written autorization from the laboratory. The results are related only to samples submitted for testing.



Certificate emission date: 2020-10-15



Certificate #: VD06049

Client #: 990 Client Reference #: Q22-7

## **CERTIFICATE OF ANALYSIS**

## **RESULTS**

Laboratory ID		102161
Client ID		Q22-7
Matrix		Solide
Sampling site		Q22
Sampled on	unit	2020/09/24 14:30
Petroleum Hydrocarbons	s (F1 to F	4)
Hydrocarbons (F1 (BTEX) st1	mg/kg	<10
Hydrocarbons (F1 (C6-C10)) st1	mg/kg	<10
Petroleum Hydrocarbons F2 (C10-C16) <i>st1</i>	mg/kg	<10
Petroleum Hydrocarbons F3 (C16-34) <i>st1</i>	mg/kg	160
Petroleum Hydrocarbons F4 (C34-50) <i>st1</i>	mg/kg	69

Certificate emission date : 2020-10-15

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Certificate #: VD06049 Client #: 990

Client Reference #: Q22-7

## **CERTIFICATE OF ANALYSIS**

## **Quality control**

				Standard				Duplicate		Analyzed on
Parameter (method)	*LDR	Unit	Blank	Name	Value	Expected	Interval	#1	#2	
Petroleum Hydrocarbons (F1 to F4) (Sous-tra	aitance (S))									
Hydrocarbons (F1 (BTEX) (Sous-traitance (S)) s	10	mg/kg								2020-10-03
Hydrocarbons (F1 (C6-C10)) (Sous-traitance (S)) s	10	mg/kg						1		2020-10-03
Petroleum Hydrocarbons F2 (C10-C16) (Sous-traitance (S)) <b>s</b>	10	mg/kg						-		2020-10-09
Petroleum Hydrocarbons F3 (C16-34) (Sous-traitance (S)) <b>s</b>	10	mg/kg								2020-10-09
Petroleum Hydrocarbons F4 (C34-50) (Sous-traitance (S)) <b>s</b>	10	mg/kg								2020-10-09

#### Legend:

st1 : analyse effectuée au laboratoire 364 \*LDR : Limit of detection reported

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## **END OF CERTIFICATE**

Certificate emission date: 2020-10-15



Certificate #: VD06050

Client #: 990

Client Reference #: Q22-8

## **CERTIFICATE OF ANALYSIS**

**Agnico Eagle Division Meadowbank** 

General Delivery

Baker Lake Nunavut X0C 0A0

2020/09/29 Received on:

Sampled on: 2020/09/24 14:30

Solide Matrix:

Sampling site code: Q22

Samples: Q22-8

Sampler : SK

The sample's appreciation and conformity towards established norms, if applicable, is based and limited to analyzed parameters. This report can't be reproduced, unless in whole, without prior written autorization from the laboratory. The results are related only to samples submitted for testing.



Certificate emission date: 2020-10-15



Certificate #: VD06050

Client #: 990 Client Reference #: Q22-8

## **CERTIFICATE OF ANALYSIS**

## **RESULTS**

	I	
Laboratory ID		102162
Client ID		Q22-8
Matrix		Solide
Sampling site		Q22
Sampled on	unit	2020/09/24 14:30
Petroleum Hydrocarbons	s (F1 to F	4)
Hydrocarbons (F1 (BTEX) st1	mg/kg	<10
Hydrocarbons (F1 (C6-C10)) st1	mg/kg	<10
Petroleum Hydrocarbons F2 (C10-C16) <i>st1</i>	mg/kg	<10
Petroleum Hydrocarbons F3 (C16-34) <i>st1</i>	mg/kg	1200
Petroleum Hydrocarbons F4 (C34-50) <i>st1</i>	mg/kg	280

Certificate emission date : 2020-10-15

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Certificate #: VD06050 Client #: 990

Client Reference #: Q22-8

## **CERTIFICATE OF ANALYSIS**

## **Quality control**

				Standard				Duplicate		Analyzed on
Parameter (method)	*LDR	Unit	Blank	Name	Value	Expected	Interval	#1	#2	
Petroleum Hydrocarbons (F1 to F4) (Sous-tra	aitance (S))									
Hydrocarbons (F1 (BTEX) (Sous-traitance (S)) s	10	mg/kg								2020-10-03
Hydrocarbons (F1 (C6-C10)) (Sous-traitance (S)) s	10	mg/kg						-		2020-10-03
Petroleum Hydrocarbons F2 (C10-C16) (Sous-traitance (S)) s	10	mg/kg								2020-10-09
Petroleum Hydrocarbons F3 (C16-34) (Sous-traitance (S)) <b>s</b>	10	mg/kg								2020-10-09
Petroleum Hydrocarbons F4 (C34-50) (Sous-traitance (S)) <b>s</b>	10	mg/kg								2020-10-09

## Legend:

st1 : analyse effectuée au laboratoire 364 \*LDR : Limit of detection reported

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## **END OF CERTIFICATE**

Certificate emission date: 2020-10-15