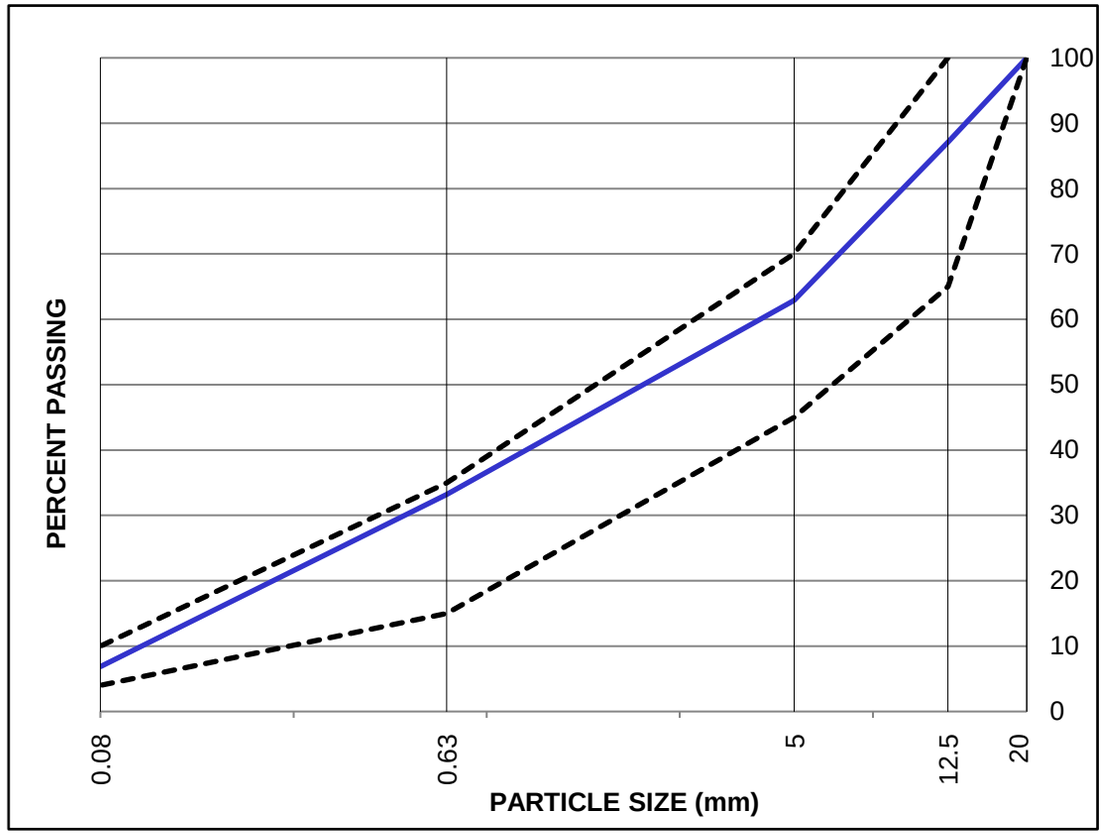
APPENDIX E2

TYPE C MATERIAL QA/QC TEST RESULTS

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	DCP-1/DCP-5	**SAMPLE NO:**	SA01 to SA53
ADDRESS:	Meliadine	**SAMPLE DESCRIPTION:**	
PROJECT NO:	E14103230-01, Task 23	Type C (20 mm minus)	
UP TO DATE:	May 15/17 By: Tetra Tech	Overall Material Average, (%)	
CLIENT:	Agnico Eagle	**NAT. MOISTURE CONT (%).:**	8.2%
		Test Req'ments = 1 sample/500 m3 production	
ATTENTION:	Duy Nguyen		

PARTICLE SIZE, mm	PERCENT PASSING
20	100.0
12.5	87.1
5	62.9
0.63	33.2
0.08	6.9



Remarks: All samples taken from Meliadine Esker.

Type C gradation specs as per Geotechnical Specifications Rev 1 Table 3 (Tetra Tech, November 9, 2016)

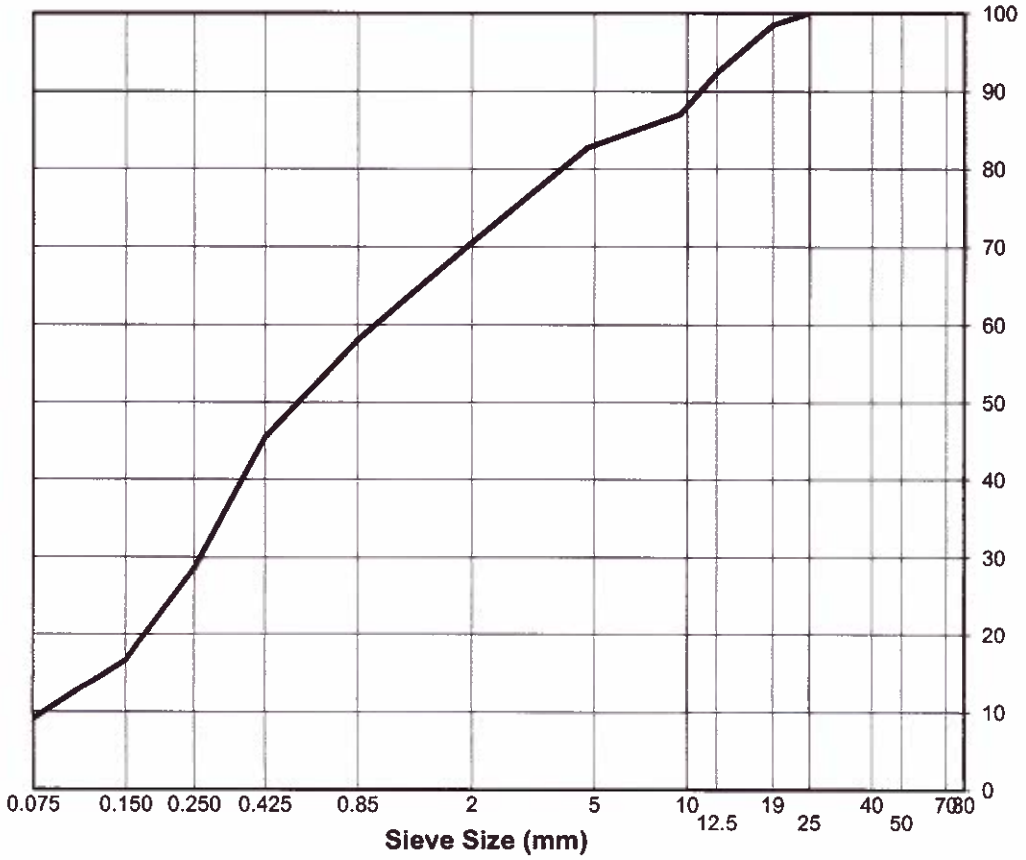
Reviewed by: _____

SIEVE ANALYSIS REPORT

Washed Sieve: ASTM C136 and C117

Project No.:	Meliadine Gold Project	Sample No.:	Type C Sample No 1
Project:	E14103230-01.023	Date Received:	October 26, 2016
Client:	Agnico Eagle Mines Ltd	Sampled by:	Dike QC Team
Attention:		Date Tested:	October 26, 2016
Email:		Tested by:	JH Office: Edmonton
Description:	SAND, some gravel, trace silt, brown	Moisture Content (as received):	3.0%
		No. Crushed Faces:	Two (2) or Three (3)
Source:	Meliadine Project, Dike Construction	By Particle Mass:	
Supplier:			
Sample Location:	Type C Stockpile		
Specification:			

Sieve Size	Percent Passing
25	100
19	98
12.5	92
10	87
5	83
2.0	71
0.85	58
0.425	45
0.250	29
0.150	17
0.075	9.1



Remarks:

Reviewed By: _____ P.Eng.

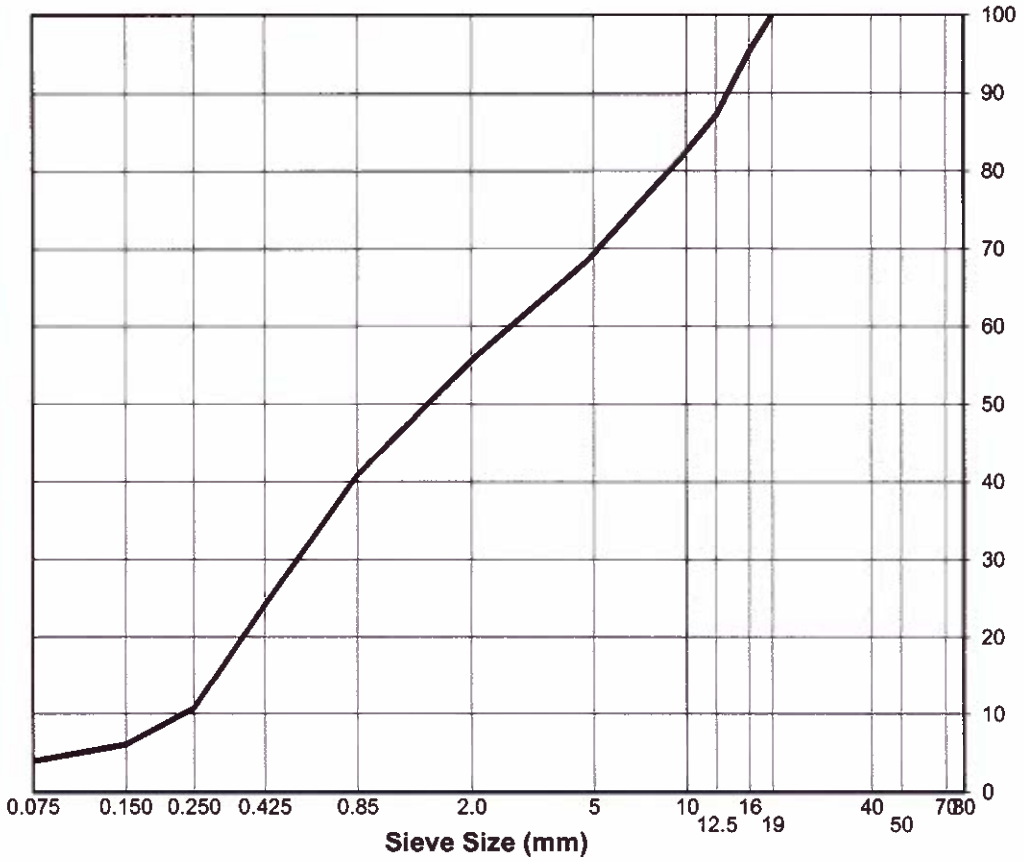
TETRA TECH

SIEVE ANALYSIS REPORT

Washed Sieve: ASTM C136 and C117

Project No.:	Meliadine Gold Project	Sample No.:	Type C Sample No 2
Project:	E14103230-01.023	Date Received:	November 21, 2016
Client:	Agnico Eagle Mines Ltd	Sampled by:	Dike QC Team
Attention:		Date Tested:	November 23, 2016
Email:		Tested by:	MC Office: Edmonton
Description:	SAND, gravelly, trace silt, grey	Moisture Content (as received):	2.1%
		No. Crushed Faces:	Two (2) or Three (3)
Source:	Meliadine Project, Dike Construction	By Particle Mass:	
Supplier:			
Sample Location:	Type C Stockpile		
Specification:			

Sieve Size	Percent Passing
19	100
16	95
12.5	87
10	81
5	68
2.0	56
0.85	41
0.425	24
0.250	11
0.150	6
0.075	3.9



Remarks:

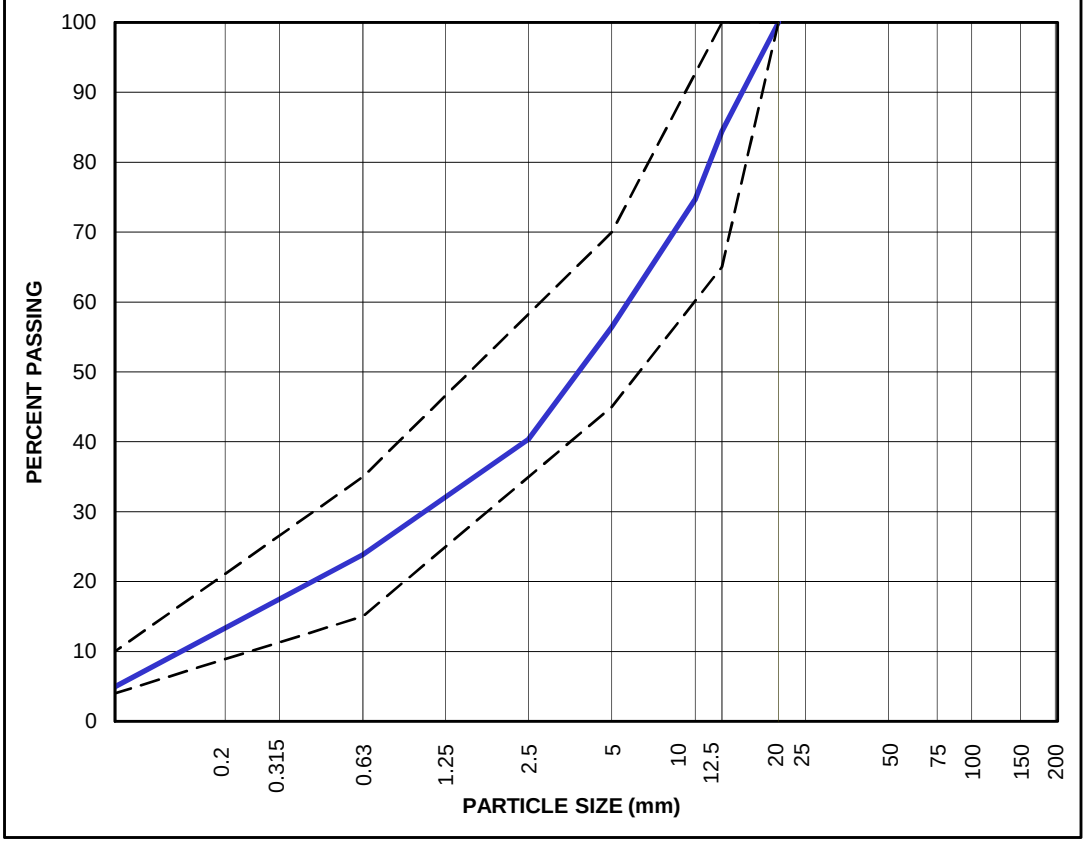
Reviewed By: _____ P.Eng.

TETRA TECH

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA02
		SAMPLE DESCRIPTION:	20 mm minus sampled from belt
ADDRESS:	Meliadine Mine		
PROJECT NO:	E14103230-01	**MOISTURE CONT. :**	7.1%
DATE SAMPLED:	Oct 22/16 **By:** TW		
CLIENT:	Agnico Eagle	**BULK REL DENSITY:**	n/a
ATTENTION:		**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	84
10	75
5	56
2.5	40
0.63	24
0.08	5



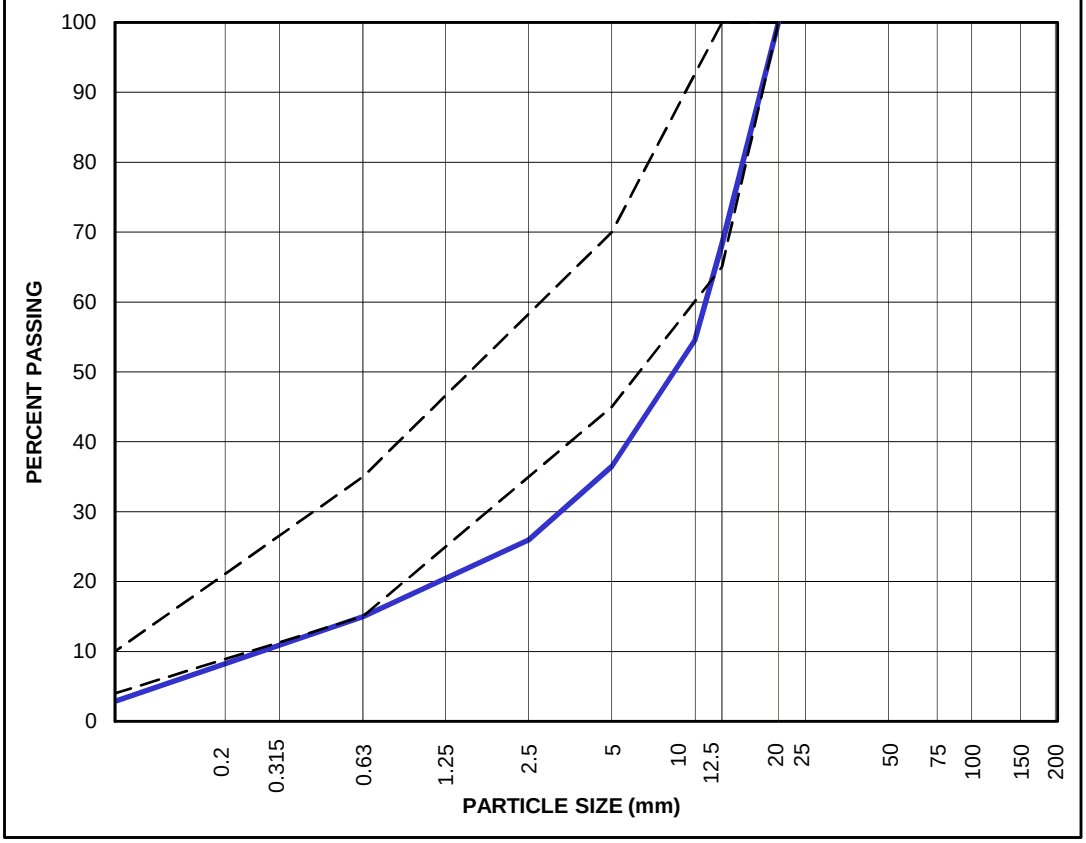
Remarks: 20 mm minus particle size distribution limits shown

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA03
		SAMPLE DESCRIPTION:	20 mm minus sampled from belt
ADDRESS:	Meliadine Mine		
PROJECT NO:	E14103230-01	**MOISTURE CONT. :**	5.4%
DATE SAMPLED:	Oct 22/16 **By:** TW		
CLIENT:	Agnico Eagle	**BULK REL DENSITY:**	n/a
ATTENTION:		**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	68
10	55
5	36
2.5	26
0.63	15
0.08	3



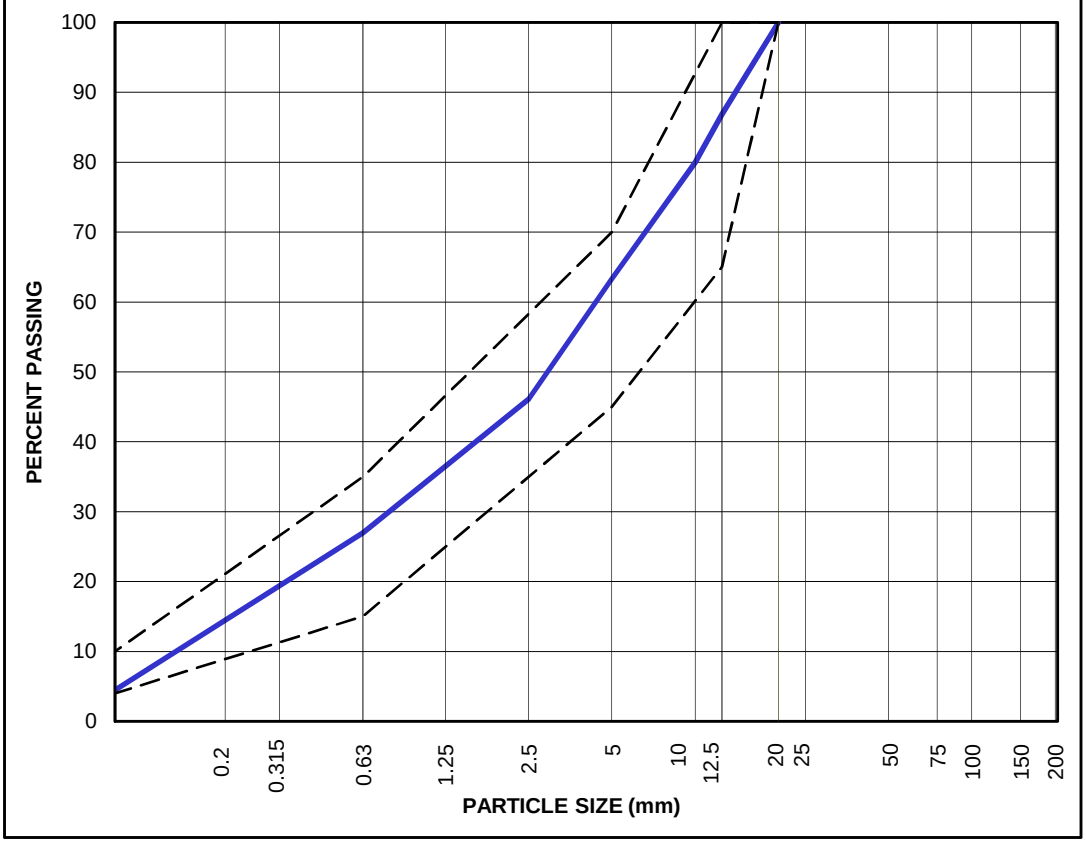
Remarks: 20 mm minus particle size distribution limits shown

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA04
		SAMPLE DESCRIPTION:	20 mm minus sampled from belt
ADDRESS:	Meliadine Mine		
PROJECT NO:	E14103230-01	**MOISTURE CONT. :**	8.7%
DATE SAMPLED:	Oct 22/16 **By:** TW		
CLIENT:	Agnico Eagle	**BULK REL DENSITY:**	n/a
ATTENTION:		**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	87
10	80
5	63
2.5	46
0.63	27
0.08	4



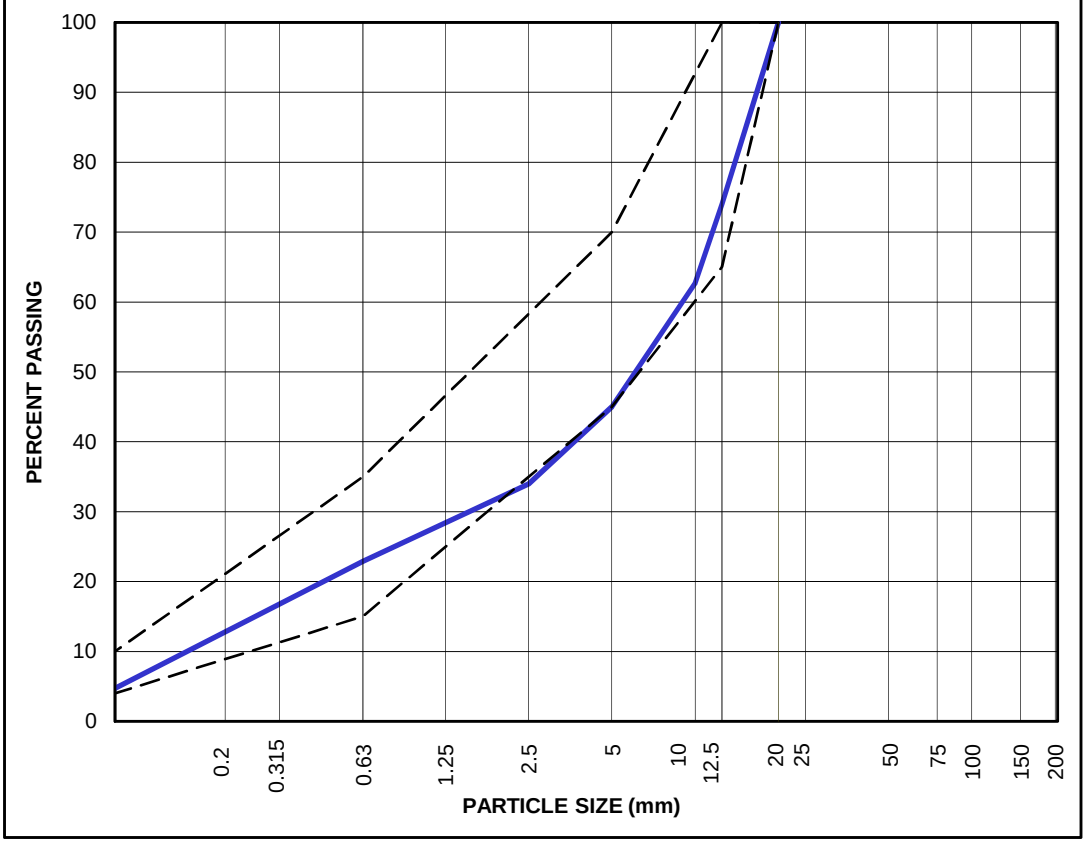
Remarks: 20 mm minus particle size distribution limits shown

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA05
		SAMPLE DESCRIPTION:	20 mm minus sampled from belt
ADDRESS:	Meliadine Mine		
PROJECT NO:	E14103230-01	**MOISTURE CONT. :**	6.0%
DATE SAMPLED:	Oct 22/16 **By:** TW		
CLIENT:	Agnico Eagle	**BULK REL DENSITY:**	n/a
ATTENTION:		**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	74
10	63
5	45
2.5	34
0.63	23
0.08	5



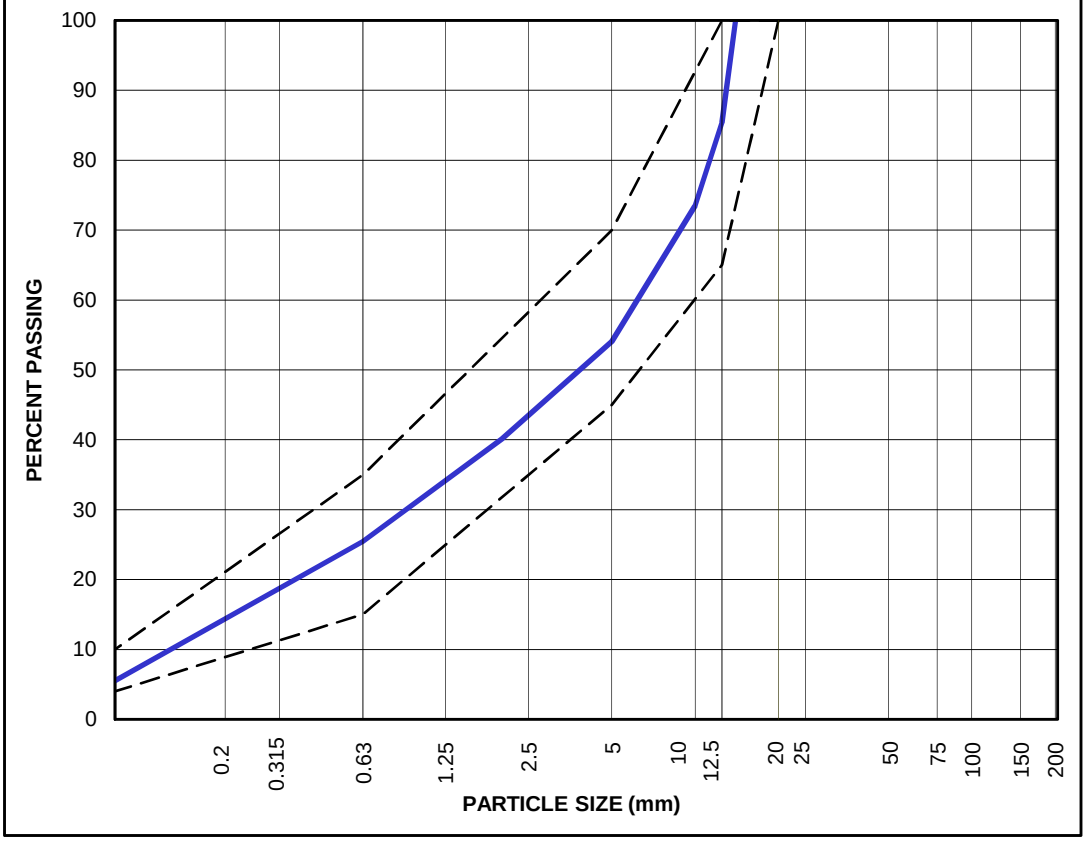
Remarks: 20 mm minus particle size distribution limits shown

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA06
		SAMPLE DESCRIPTION:	20 mm minus sampled from belt
ADDRESS:	Meliadine Mine		
PROJECT NO:	E14103230-01	**MOISTURE CONT. :**	5.5%
DATE SAMPLED:	Oct 24/16 **By:** TW		
CLIENT:	Agnico Eagle	**BULK REL DENSITY:**	n/a
ATTENTION:		**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
12.5	85
10	74
5	54
2	40
0.63	25
0.08	6



Remarks: 20 mm minus particle size distribution limits shown

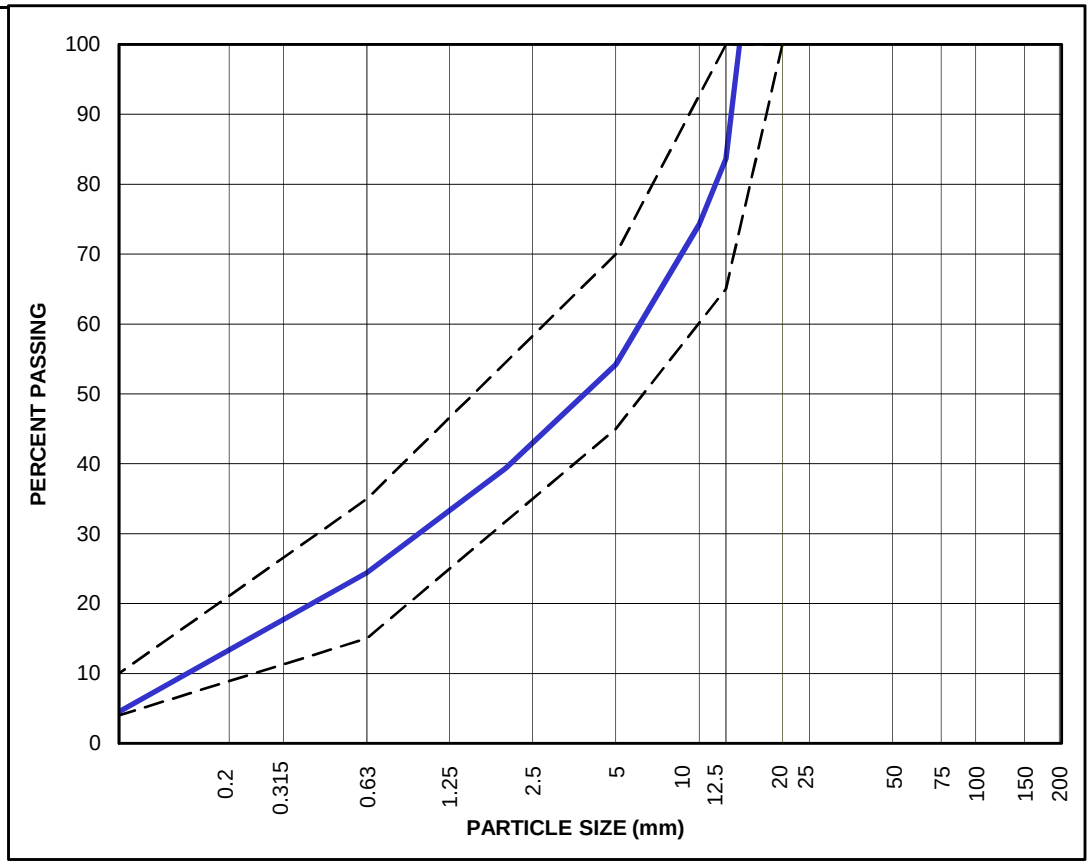
Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT: Meliadine Dike Construction
ADDRESS: Meliadine Mine
PROJECT NO: E14103230-01
DATE SAMPLED: Oct 24/16 **By:** TW
CLIENT: Agnico Eagle
ATTENTION:

SAMPLE NO: SA07
SAMPLE DESCRIPTION: 20 mm minus sampled from belt
MOISTURE CONT. : 6.3%
BULK REL DENSITY: n/a
BULK REL. DENSITY (SSD): n/a
APPARENT REL. DENSITY: n/a
ABSORPTION: n/a

PARTICLE SIZE	PERCENT PASSING
12.5	84
10	74
5	54
2	39
0.63	24
0.08	5



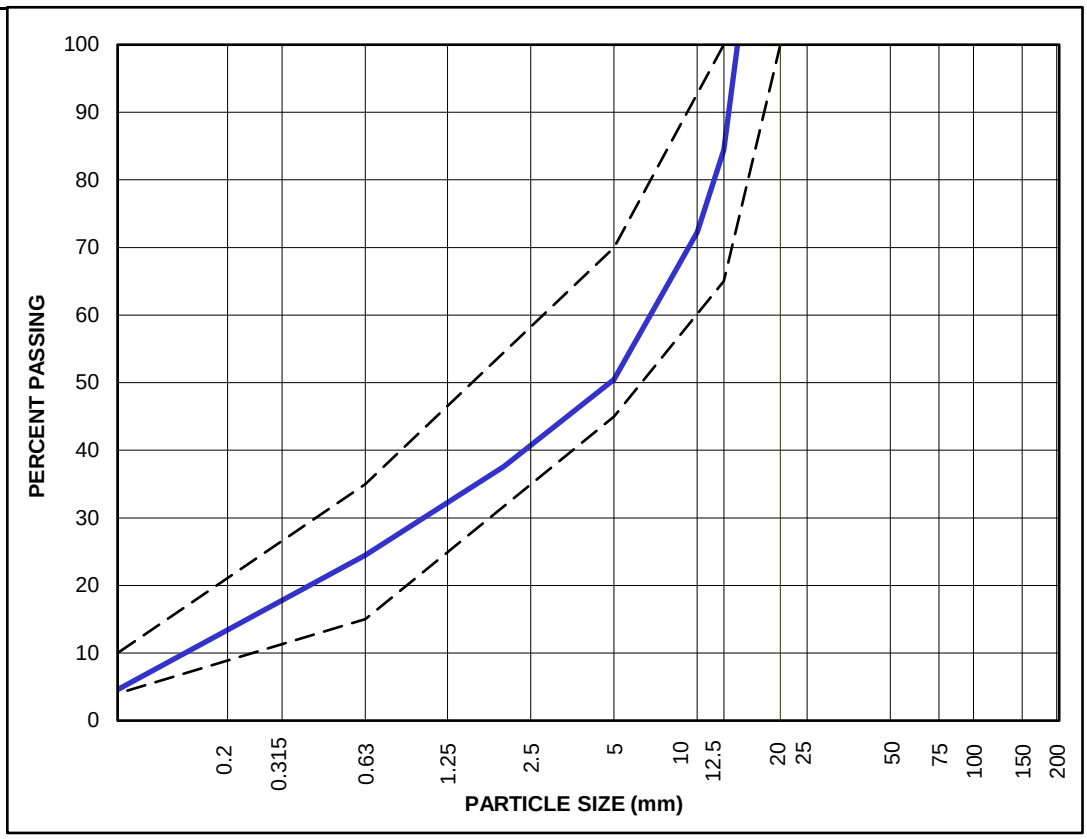
Remarks: 20 mm minus particle size distribution limits shown

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA08
		SAMPLE DESCRIPTION:	20 mm minus sampled from belt
ADDRESS:	Meliadine Mine		
PROJECT NO:	E14103230-01	**MOISTURE CONT. :**	5.0%
DATE SAMPLED:	Oct 25/16 **By:** TW		
CLIENT:	Agnico Eagle	**BULK REL DENSITY:**	n/a
ATTENTION:		**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
12.5	84
10	72
5	50
2	38
0.63	24
0.08	5



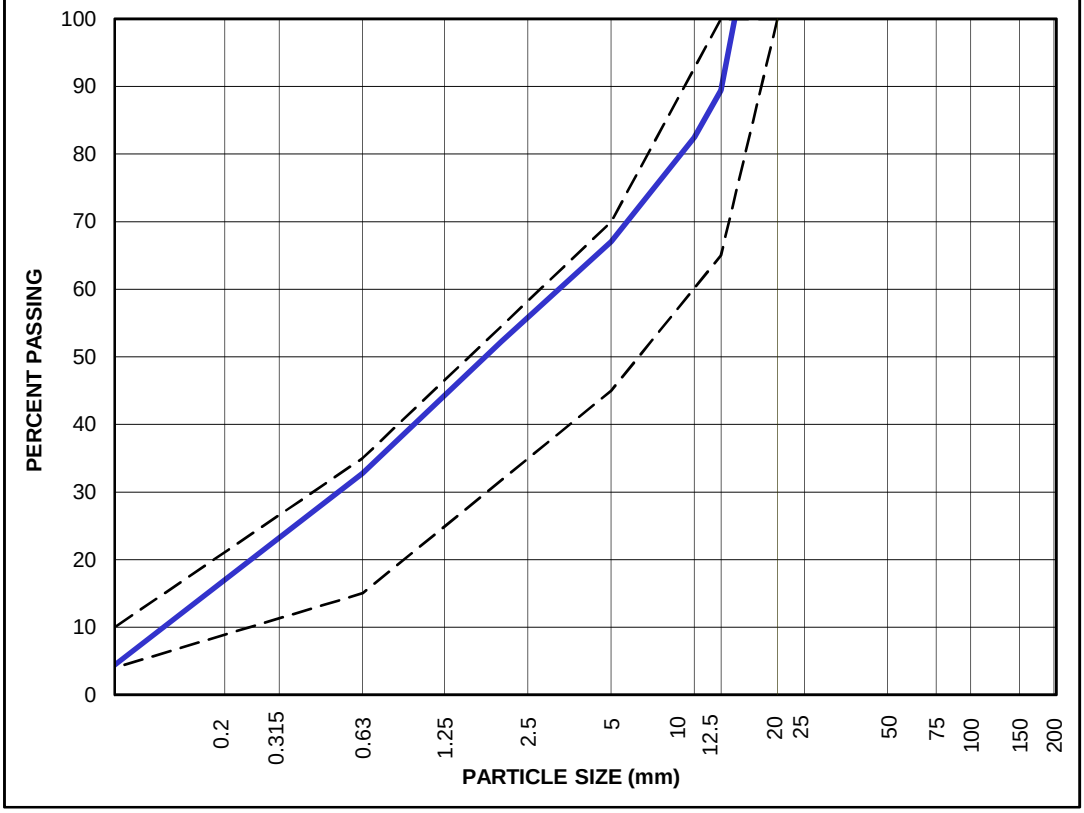
Remarks: 20 mm minus particle size distribution limits shown

Reviewed by: _____ P.Geo.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA09
		SAMPLE DESCRIPTION:	20 mm minus sampled from belt
ADDRESS:	Meliadine Mine		
PROJECT NO:	E14103230-01	**MOISTURE CONT. :**	8.4%
DATE SAMPLED:	Oct 26/16 **By:** TW		
CLIENT:	Agnico Eagle	**BULK REL DENSITY:**	n/a
ATTENTION:		**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
12.5	89
10	83
5	67
2	52
0.63	33
0.08	4



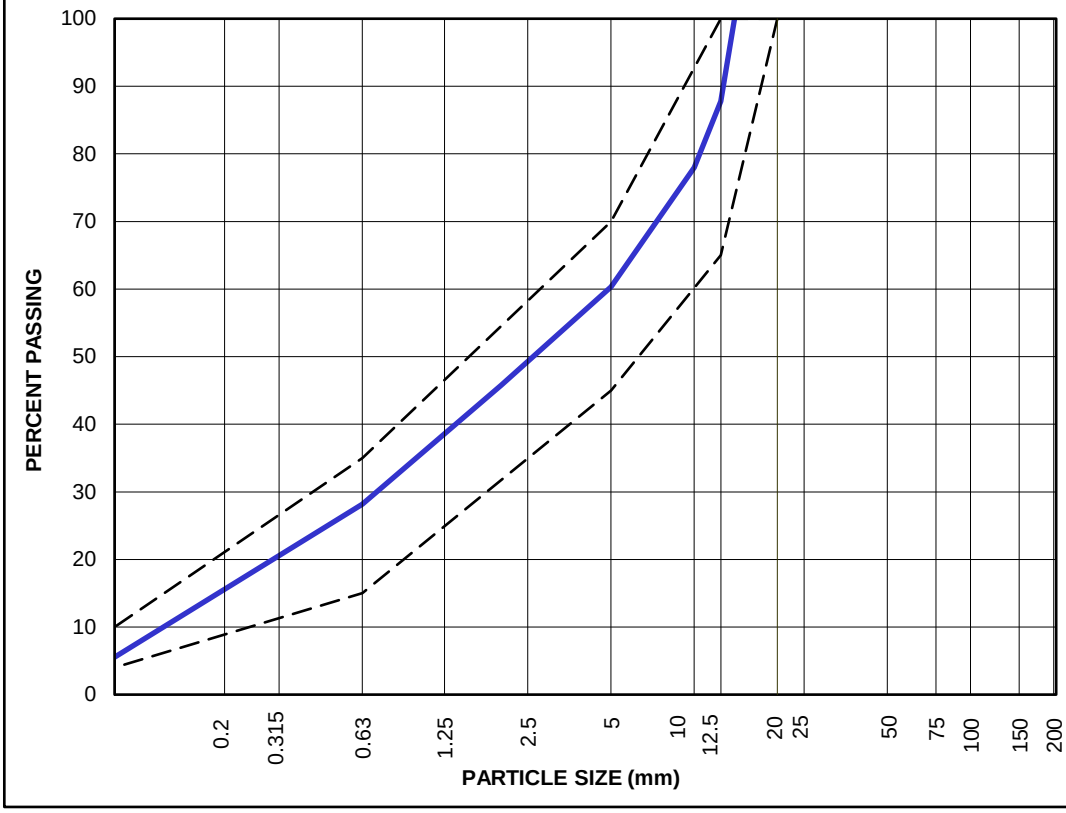
Remarks: 20 mm minus particle size distribution limits shown

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA10
		SAMPLE DESCRIPTION:	20 mm minus sampled from belt
ADDRESS:	Meliadine Mine		
PROJECT NO:	E14103230-01	**MOISTURE CONT. :**	7.1%
DATE SAMPLED:	Oct 27/16 **By:** TW		
CLIENT:	Agnico Eagle	**BULK REL DENSITY:**	n/a
ATTENTION:		**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
12.5	88
10	78
5	60
2	46
0.63	28
0.08	6



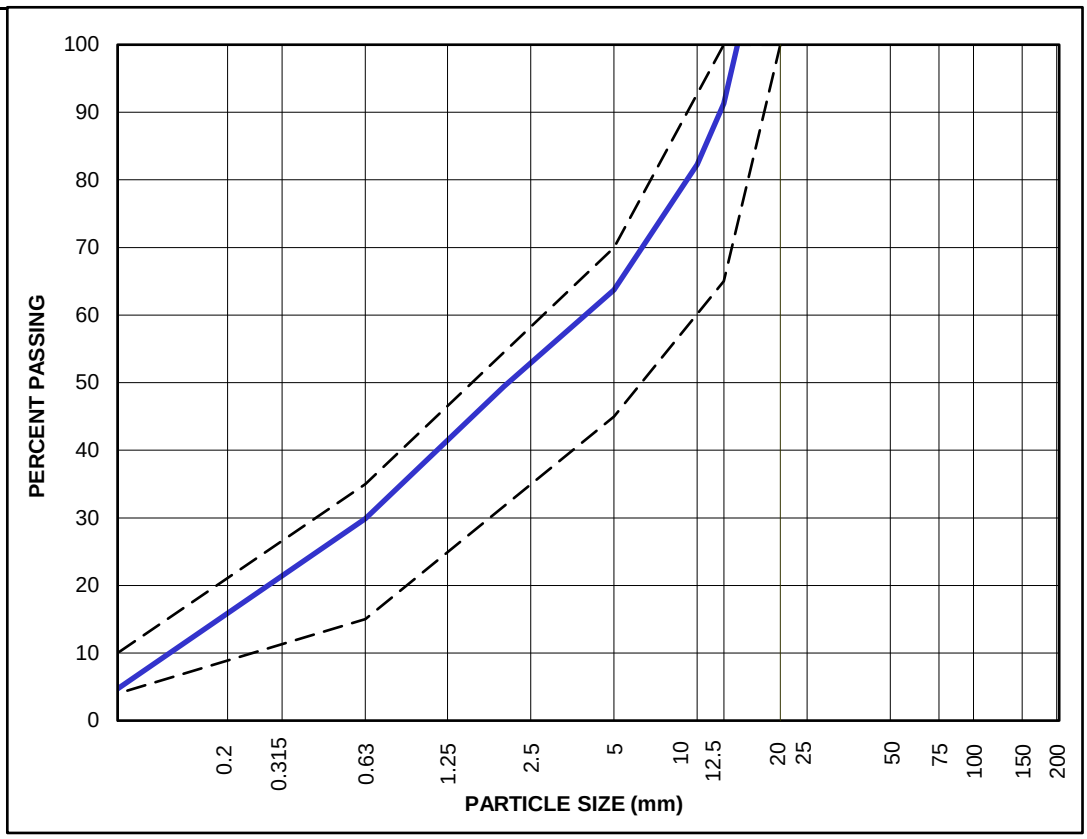
Remarks: 20 mm minus particle size distribution limits shown

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA11
		SAMPLE DESCRIPTION:	20 mm minus sampled from belt
ADDRESS:	Meliadine Mine		
PROJECT NO:	E14103230-01	**MOISTURE CONT. :**	6.1%
DATE SAMPLED:	Oct 29/16 **By:** TW		
CLIENT:	Agnico Eagle	**BULK REL DENSITY:**	n/a
ATTENTION:		**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
12.5	91
10	82
5	64
2	49
0.63	30
0.08	5



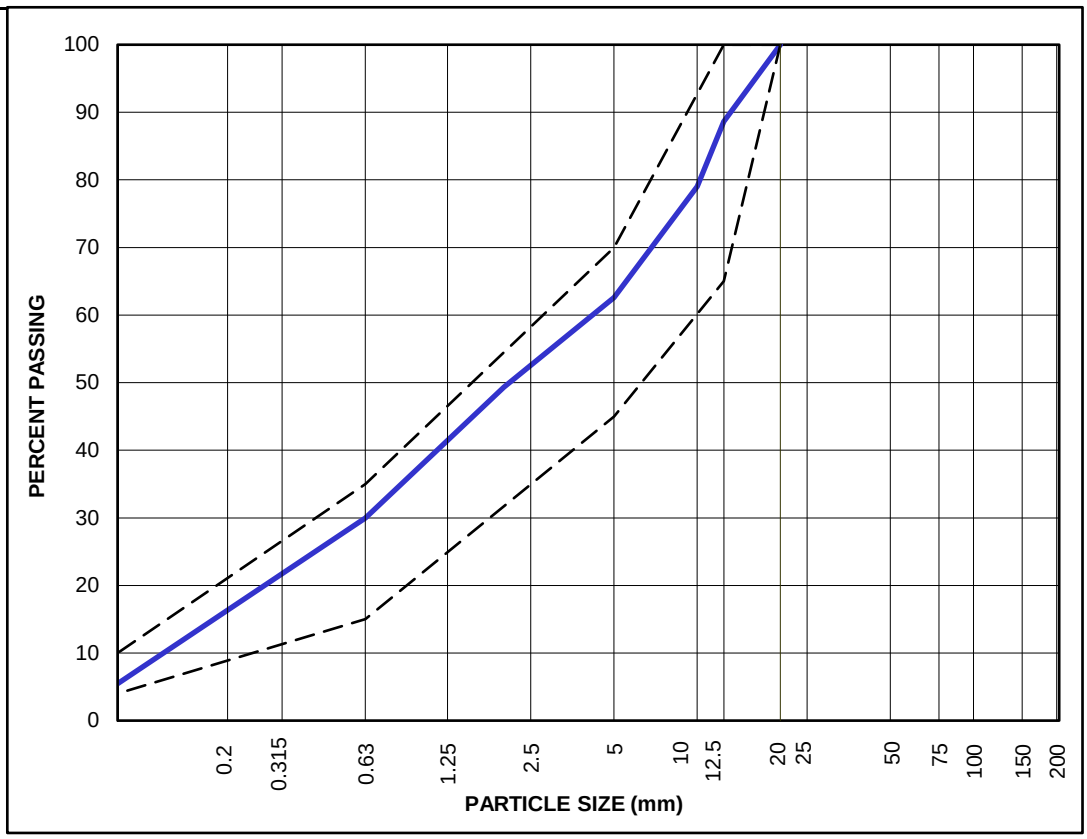
Remarks: 20 mm minus particle size distribution limits shown

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA12
		SAMPLE DESCRIPTION:	20 mm minus sampled from belt
ADDRESS:	Meliadine Mine		
PROJECT NO:	E14103230-01	**MOISTURE CONT. :**	7.6%
DATE SAMPLED:	Nov 01/16 **By:** TW		
CLIENT:	Agnico Eagle	**BULK REL DENSITY:**	n/a
ATTENTION:		**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	89
10	79
5	63
2	49
0.63	30
0.08	5



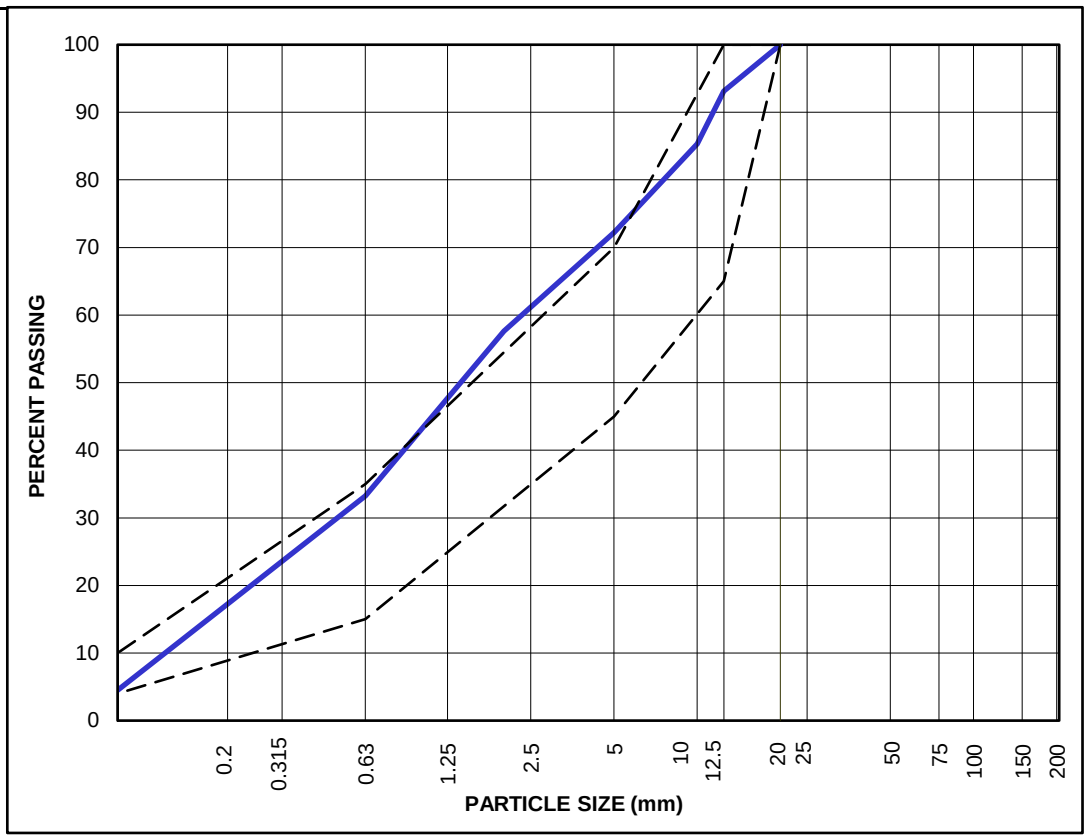
Remarks: 20 mm minus particle size distribution limits shown

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA13
		SAMPLE DESCRIPTION:	20 mm minus (Type C Mat.) Sampled from belt
ADDRESS:	Meliadine Gold Project, NU.		
PROJECT NO:	E14103230-01	**MOISTURE CONT. :**	11.0%
DATE SAMPLED:	Nov 02/16 **By:** TW		
CLIENT:	Agnico Eagle Mines Ltd.	**BULK REL DENSITY:**	n/a
ATTENTION:	Mr. Duy Nguyen	**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	93
10	85
5	72
2	58
0.63	33
0.08	4



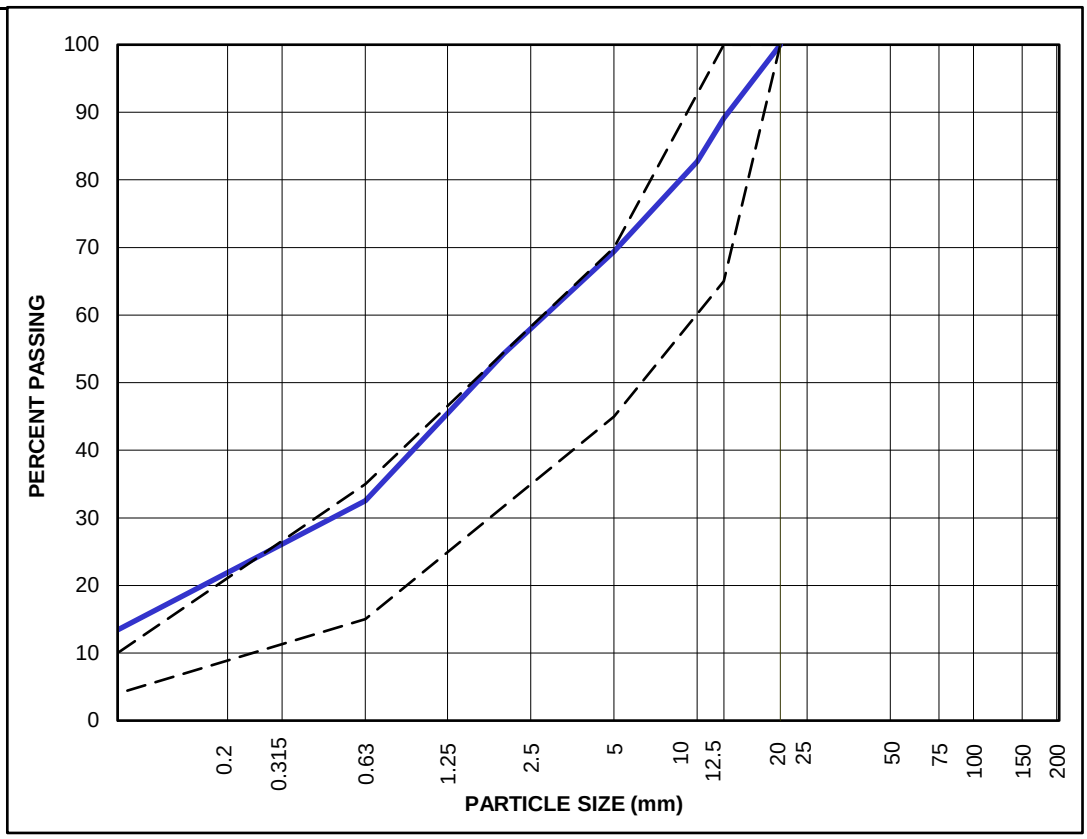
Remarks: 20 mm minus particle size distribution limits shown

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA14
		SAMPLE DESCRIPTION:	20 mm minus (Type C Mat.) Sampled from belt
ADDRESS:	Meliadine Gold Project, NU.		
PROJECT NO:	E14103230-01	**MOISTURE CONT. :**	5.3%
DATE SAMPLED:	Nov 03/16 By: TW		
CLIENT:	Agnico Eagle Mines Ltd.	**BULK REL DENSITY:**	n/a
ATTENTION:	Mr. Duy Nguyen	**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	89
10	83
5	69
2	54
0.63	33
0.08	13



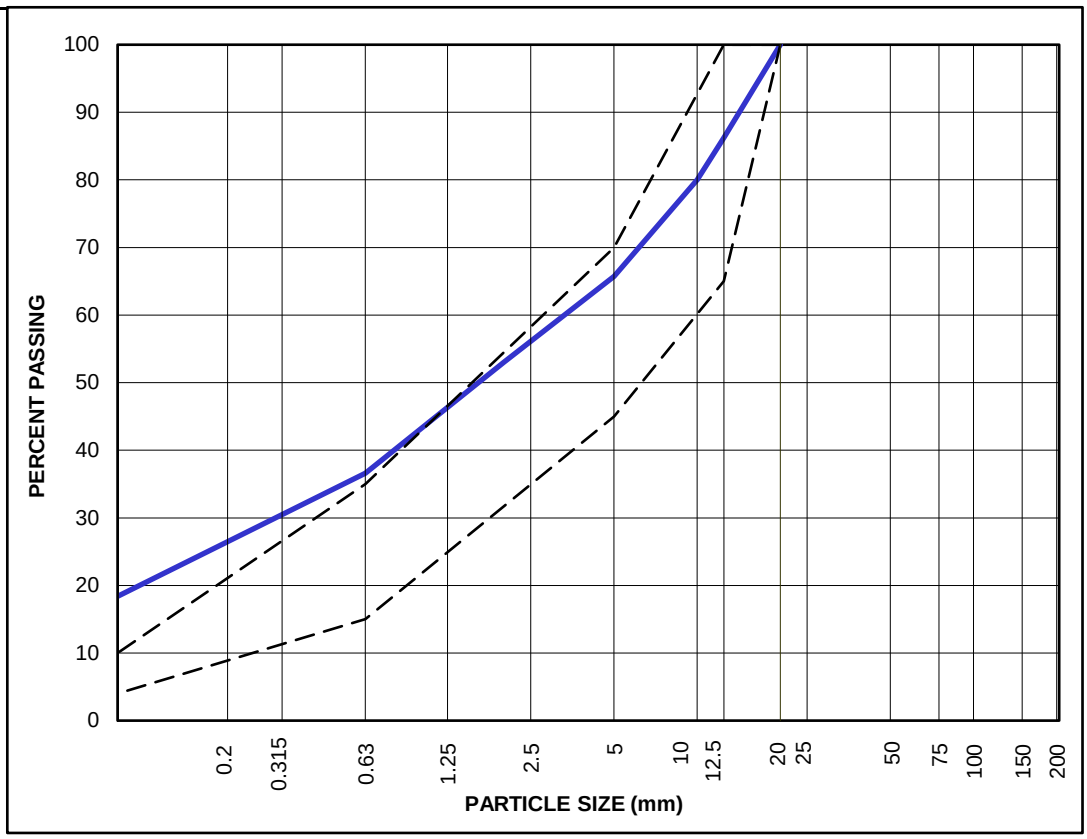
Remarks: 20 mm minus particle size distribution limits shown

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA15
		SAMPLE DESCRIPTION:	20 mm minus (Type C Mat.) Sampled from belt
ADDRESS:	Meliadine Gold Project, NU.		
PROJECT NO:	E14103230-01	**MOISTURE CONT. :**	4.2%
DATE SAMPLED:	Nov 05/16 By: TW		
CLIENT:	Agnico Eagle Mines Ltd.	**BULK REL DENSITY:**	n/a
ATTENTION:	Mr. Duy Nguyen	**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	86
10	80
5	66
2	53
0.63	37
0.08	18



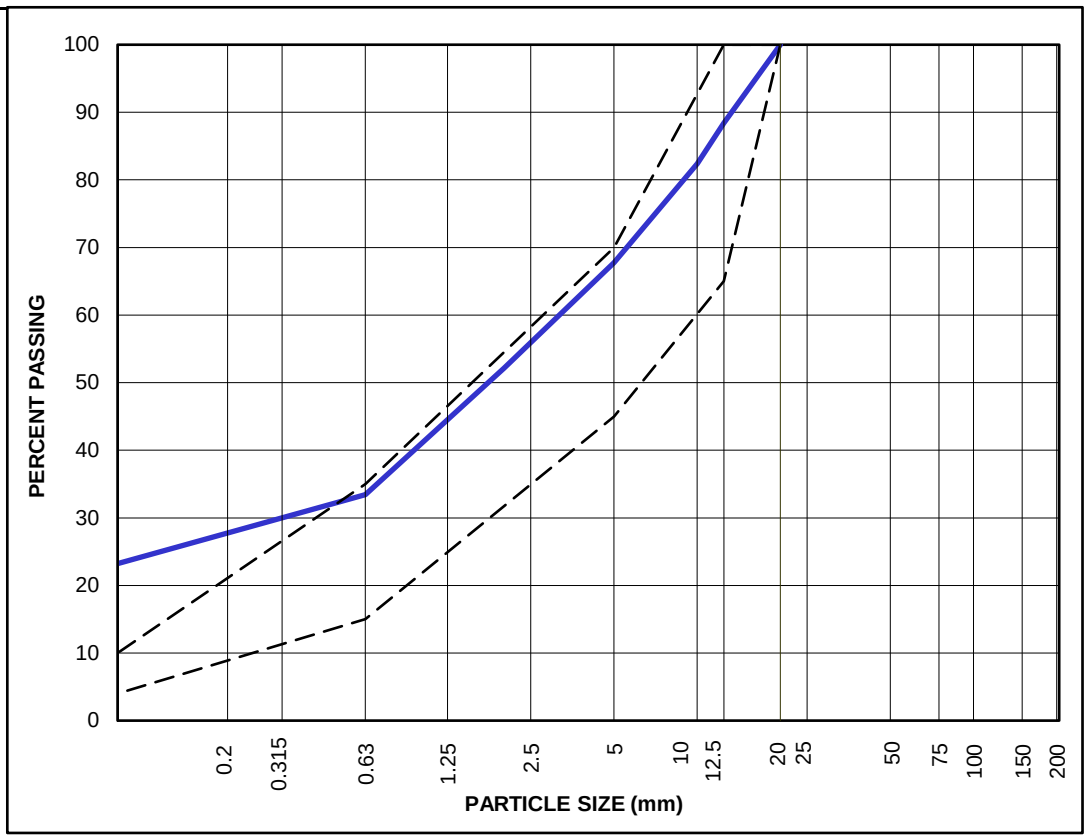
Remarks: 20 mm minus particle size distribution limits shown

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA16
		SAMPLE DESCRIPTION:	20 mm minus (Type C Mat.) Sampled from belt
ADDRESS:	Meliadine Gold Project, NU.		
PROJECT NO:	E14103230-01	**MOISTURE CONT. :**	4.9%
DATE SAMPLED:	Nov 06/16 By: TW		
CLIENT:	Agnico Eagle Mines Ltd.	**BULK REL DENSITY:**	n/a
ATTENTION:	Mr. Duy Nguyen	**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	88
10	82
5	68
2	52
0.63	33
0.08	23



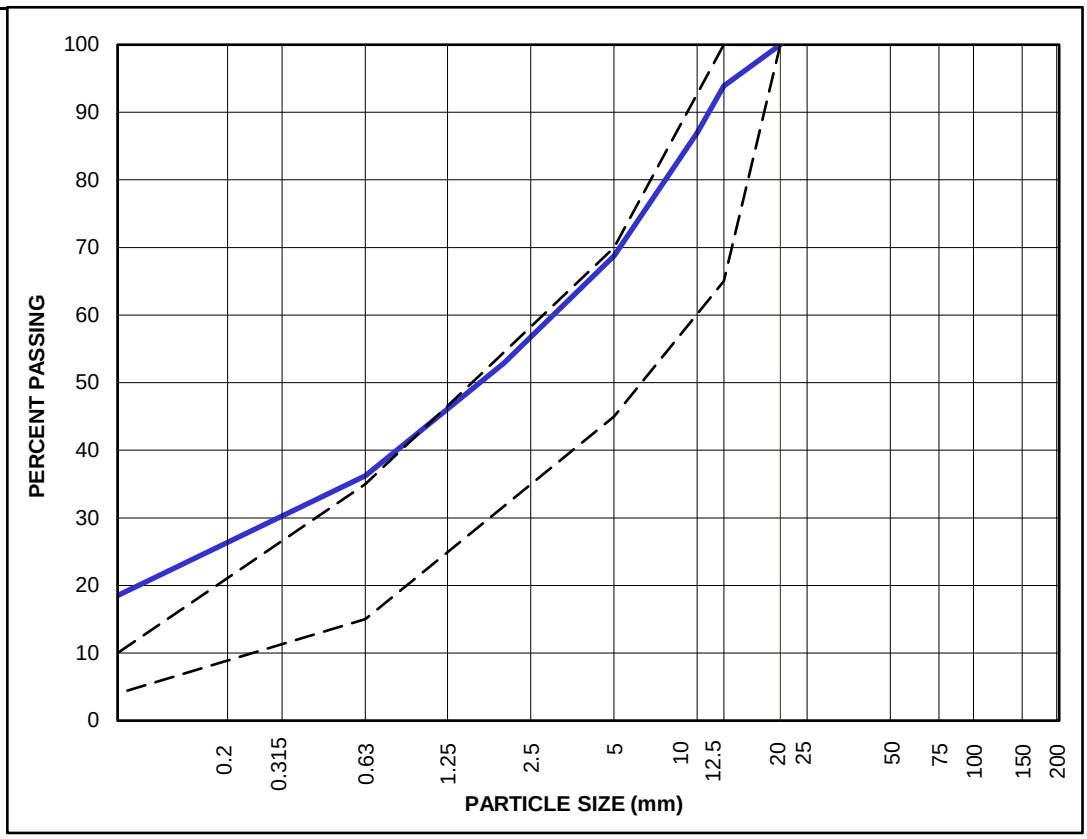
Remarks: 20 mm minus particle size distribution limits shown

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA17
		SAMPLE DESCRIPTION:	20 mm minus (Type C Mat.) Sampled from belt
ADDRESS:	Meliadine Gold Project, NU.		
PROJECT NO:	E14103230-01	**MOISTURE CONT. :**	8.0%
DATE SAMPLED:	Nov 07/16 By: TW		
CLIENT:	Agnico Eagle Mines Ltd.	**BULK REL DENSITY:**	n/a
ATTENTION:	Mr. Duy Nguyen	**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	94
10	87
5	69
2	53
0.63	36
0.08	19



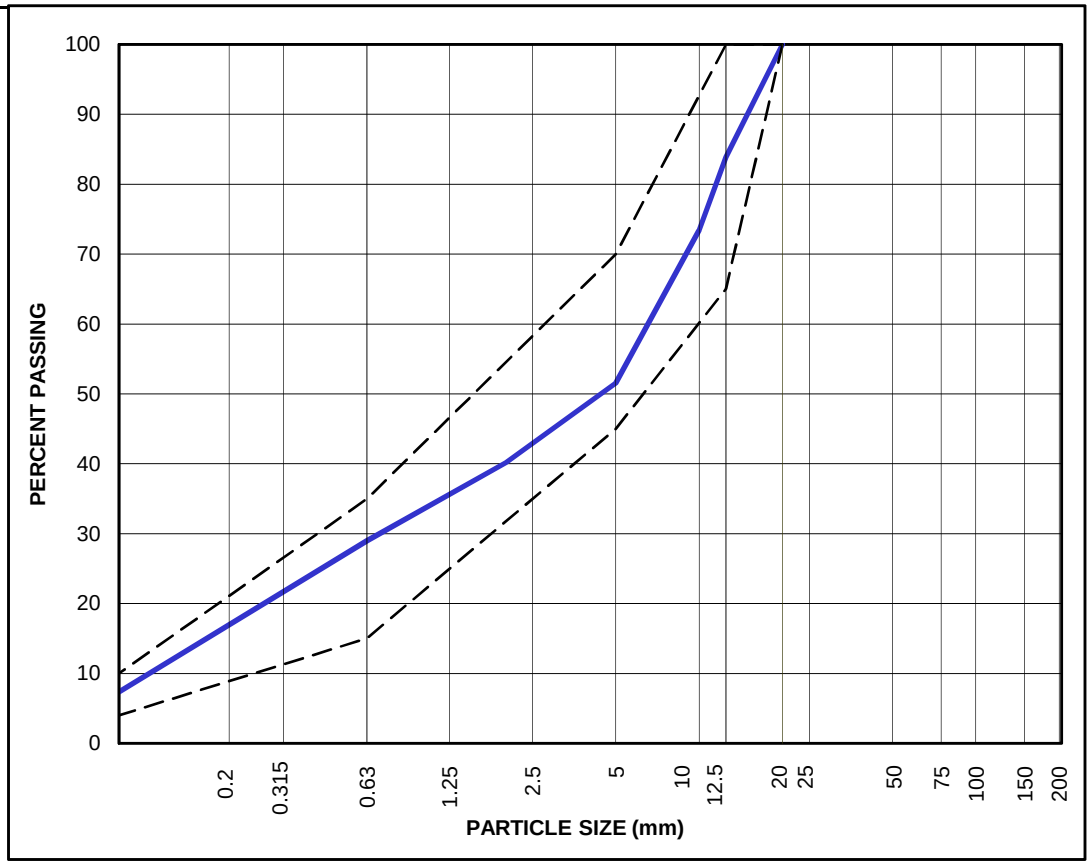
Remarks: 20 mm minus particle size distribution limits shown

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA18
		SAMPLE DESCRIPTION:	20 mm minus (Type C Mat.) Sampled from belt
ADDRESS:	Meliadine Gold Project, NU.		
PROJECT NO:	E14103230-01	**MOISTURE CONT. :**	4.5%
DATE SAMPLED:	Nov 08/16 **By:** TW		
CLIENT:	Agnico Eagle Mines Ltd.	**BULK REL DENSITY:**	n/a
ATTENTION:	Mr. Duy Nguyen	**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	84
10	73
5	52
2	40
0.63	29
0.08	7



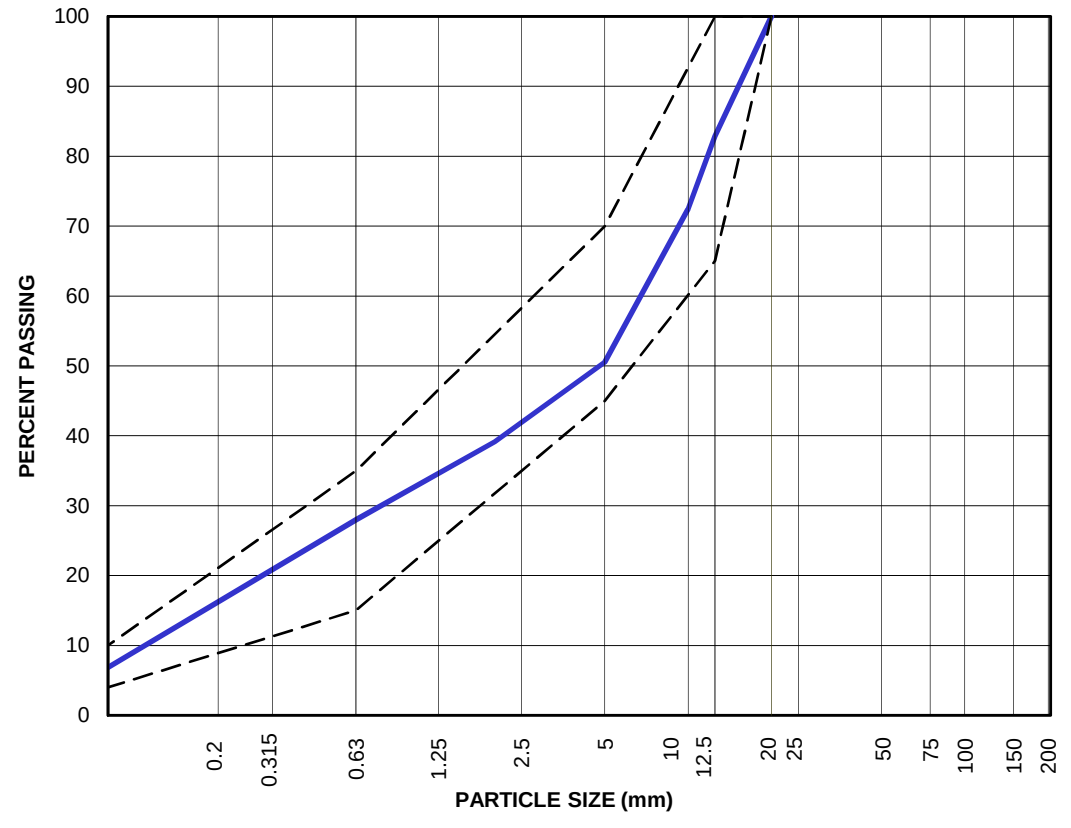
Remarks: 20 mm minus particle size distribution limits shown

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA19
		SAMPLE DESCRIPTION:	20 mm minus (Type C Mat.) Sampled from belt
ADDRESS:	Meliadine Gold Project, NU.		
PROJECT NO:	E14103230-01	**MOISTURE CONT. :**	5.4%
DATE SAMPLED:	Nov 09/16 **By:** TW		
CLIENT:	Agnico Eagle Mines Ltd.	**BULK REL DENSITY:**	n/a
ATTENTION:	Mr. Duy Nguyen	**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	83
10	72
5	51
2	39
0.63	28
0.08	7



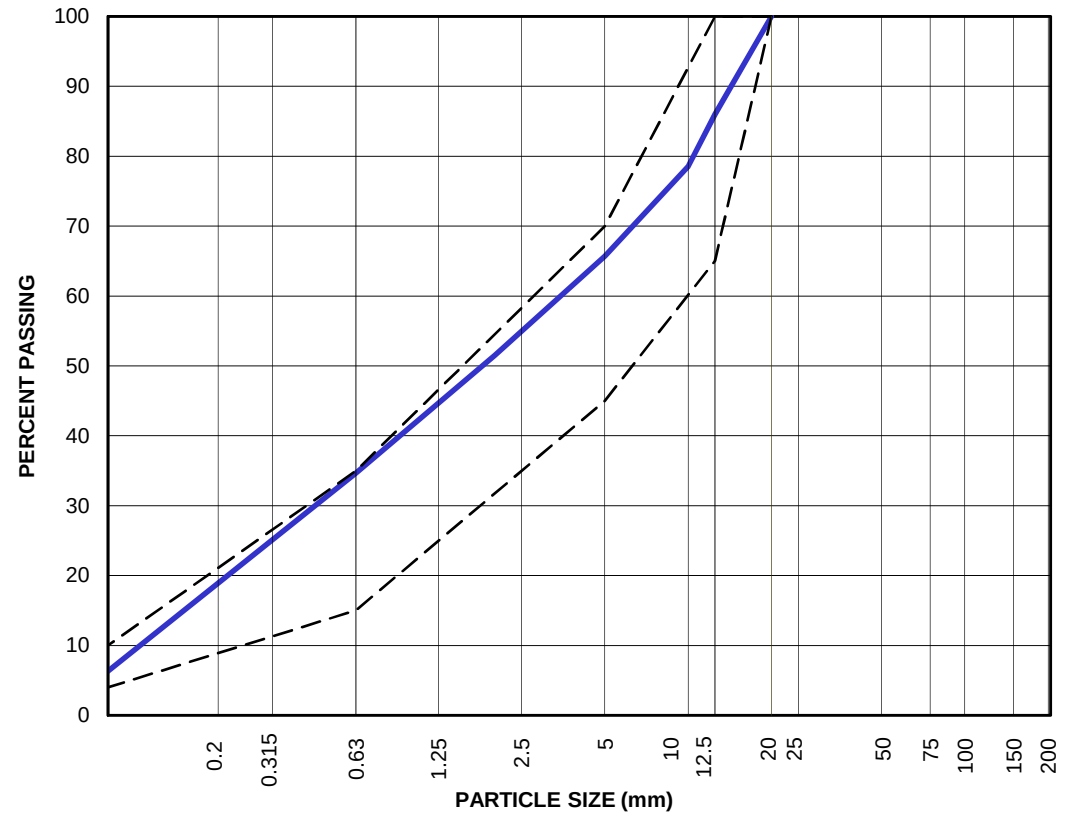
Remarks: 20 mm minus particle size distribution limits shown

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA20
		SAMPLE DESCRIPTION:	20 mm minus (Type C Mat.) Sampled from belt
ADDRESS:	Meliadine Gold Project, NU.		
PROJECT NO:	E14103230-01	**MOISTURE CONT. :**	9.4%
DATE SAMPLED:	Nov 10/16 **By:** TW		
CLIENT:	Agnico Eagle Mines Ltd.	**BULK REL DENSITY:**	n/a
ATTENTION:	Mr. Duy Nguyen	**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	86
10	79
5	66
2	51
0.63	35
0.08	6



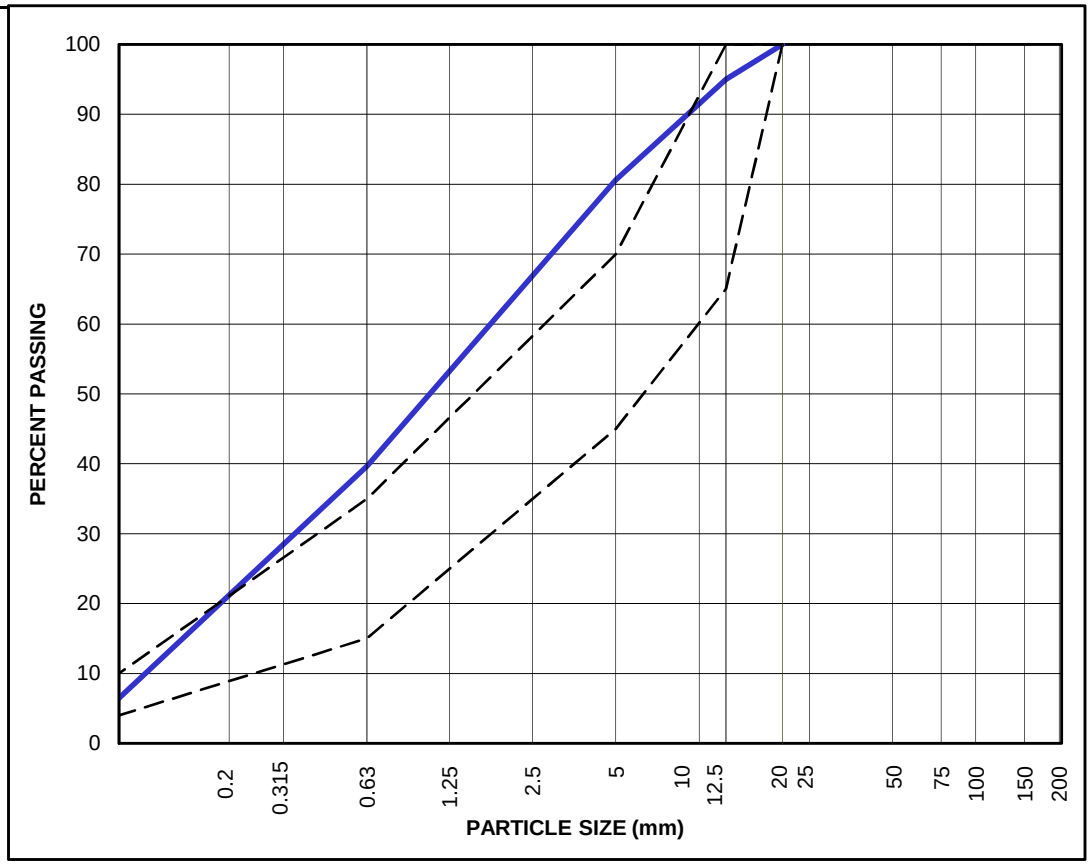
Remarks: 20 mm minus particle size distribution limits shown

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA21
		SAMPLE DESCRIPTION:	20 mm minus (Type C Mat.) Sampled from belt
ADDRESS:	Meliadine Gold Project, NU.		
PROJECT NO:	E14103230-01.023	**MOISTURE CONT. :**	10.0%
DATE SAMPLED:	Nov 12/16 **By:** IM		
CLIENT:	Agnico Eagle Mines Ltd.	**BULK REL DENSITY:**	n/a
ATTENTION:	Mr. Duy Nguyen	**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	95
5	81
0.63	40
0.08	6



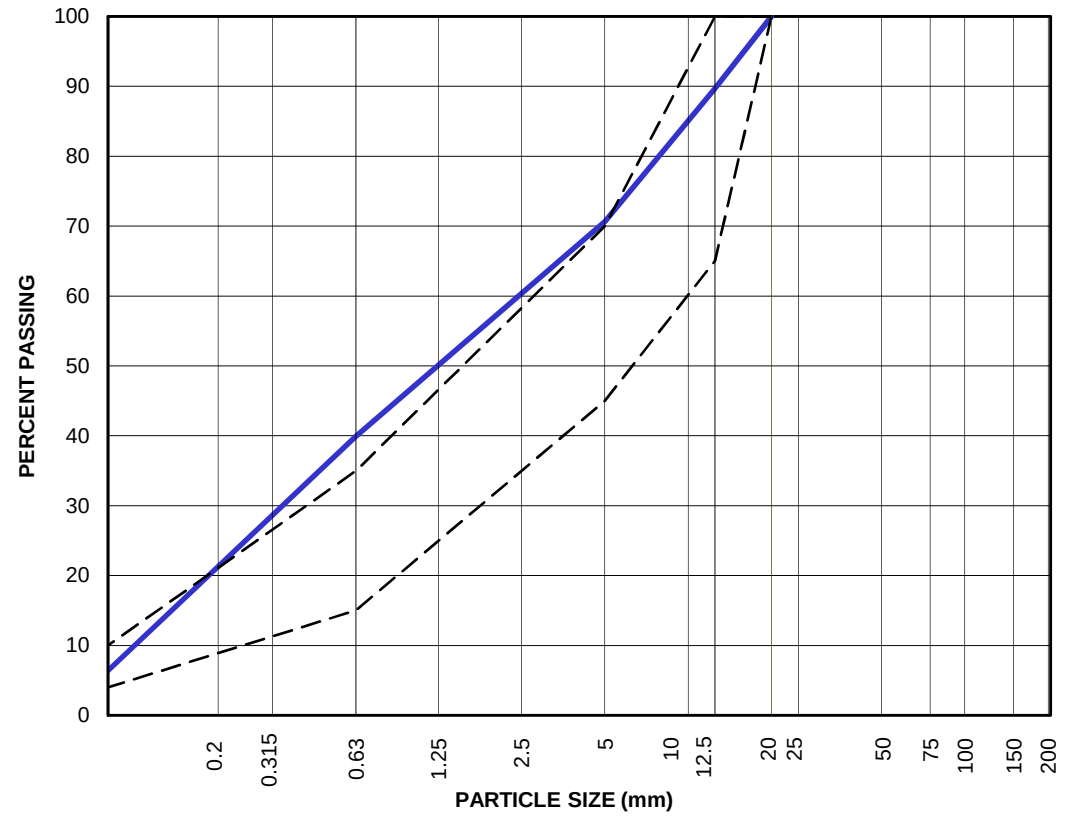
Remarks:

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA22
		SAMPLE DESCRIPTION:	20 mm minus (Type C Mat.) Sampled from belt
ADDRESS:	Meliadine Gold Project, NU.		
PROJECT NO:	E14103230-01.023	**MOISTURE CONT. :**	9.9%
DATE SAMPLED:	Nov 13/16 **By:** IM		
CLIENT:	Agnico Eagle Mines Ltd.	**BULK REL DENSITY:**	n/a
ATTENTION:	Mr. Duy Nguyen	**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	90
5	71
0.63	40
0.08	6



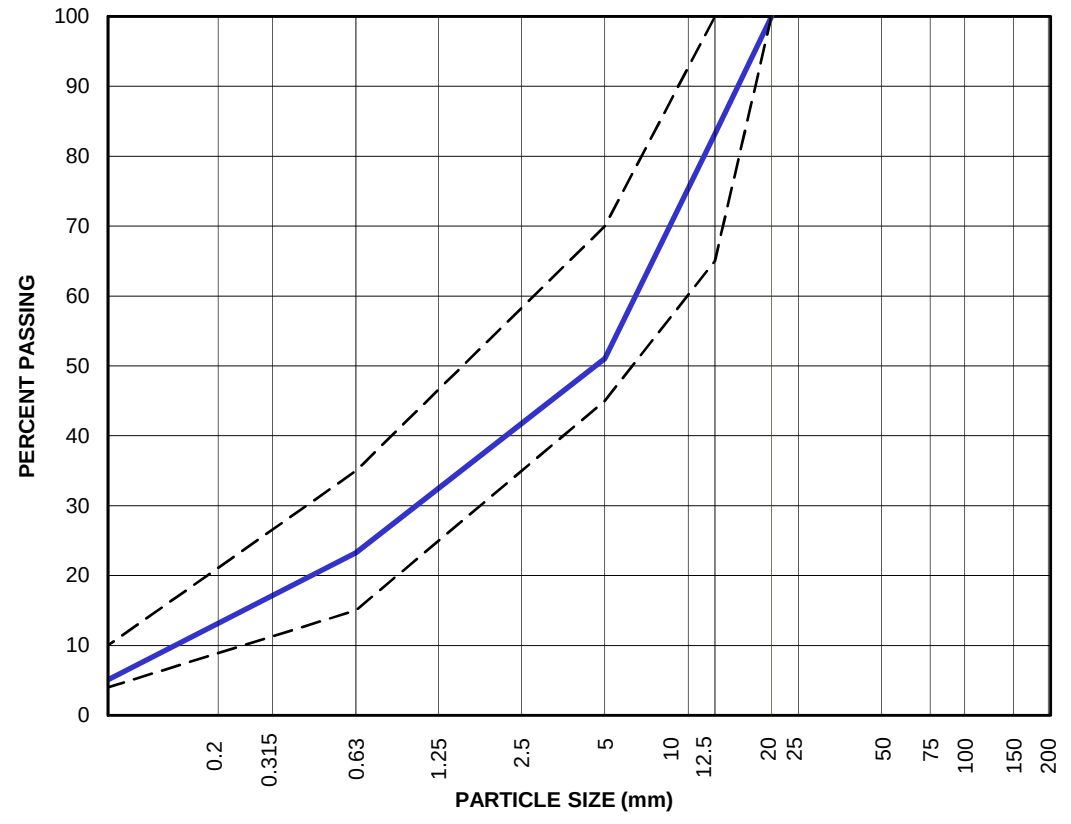
Remarks: Sampled at 22:00.

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA23
		SAMPLE DESCRIPTION:	20 mm minus (Type C Mat.) Sampled from belt
ADDRESS:	Meliadine Gold Project, NU.		
PROJECT NO:	E14103230-01.023	**MOISTURE CONT. :**	5.1%
DATE SAMPLED:	Nov 14/16 **By:** IM		
CLIENT:	Agnico Eagle Mines Ltd.	**BULK REL DENSITY:**	n/a
ATTENTION:	Mr. Duy Nguyen	**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	83
5	51
0.63	23
0.08	5



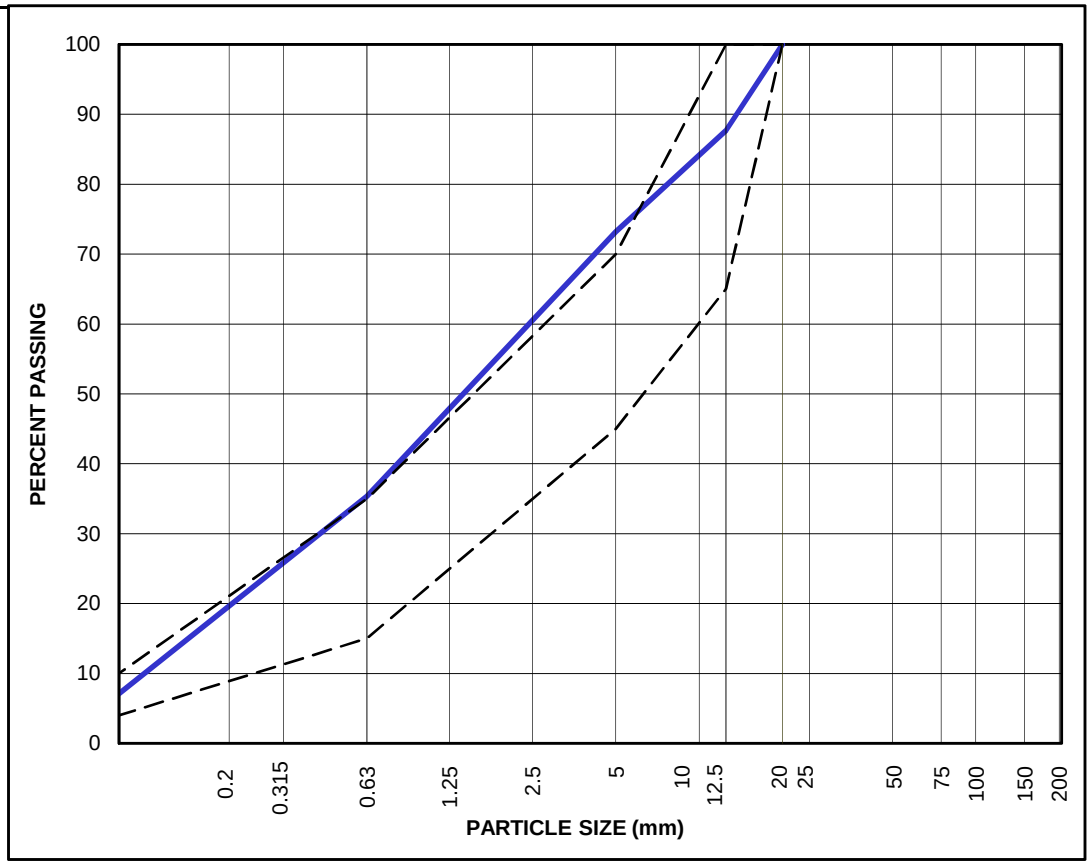
Remarks: Sampled at 17:00.

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	**Meliadine Dike Construction**	**SAMPLE NO:**	**SA24**
		SAMPLE DESCRIPTION:	**20 mm minus (Type C Mat.) Sampled from belt**
ADDRESS:	**Meliadine Gold Project, NU.**		
PROJECT NO:	**E14103230-01.023**	**MOISTURE CONT. :**	**8.2%**
DATE SAMPLED:	**Nov 17/16** **By: IM**		
CLIENT:	**Agnico Eagle Mines Ltd.**	**BULK REL DENSITY:**	**n/a**
ATTENTION:	**Mr. Duy Nguyen**	**BULK REL. DENSITY (SSD):**	**n/a**
		APPARENT REL. DENSITY:	**n/a**
		ABSORPTION:	**n/a**

PARTICLE SIZE	PERCENT PASSING
20	**100**
12.5	**88**
5	**73**
0.63	**35**
0.08	**7**



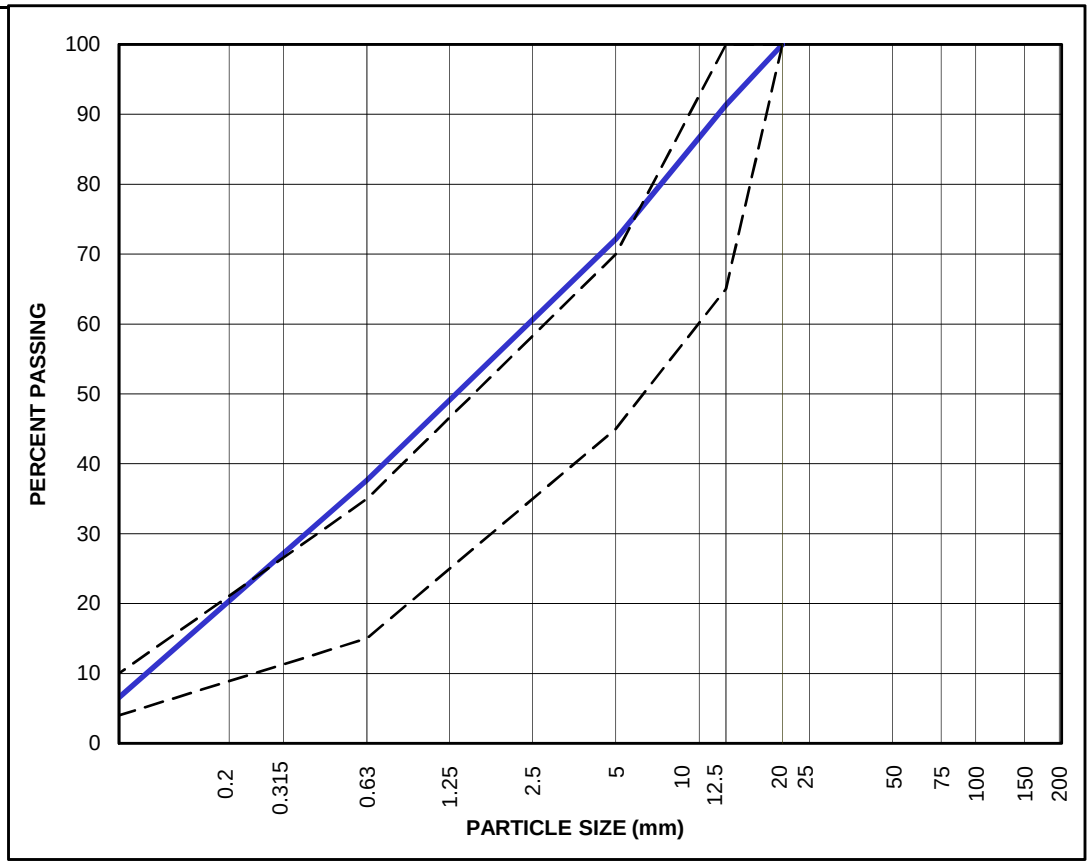
Remarks: Sampled at 19:00.

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA25
		SAMPLE DESCRIPTION:	20 mm minus (Type C Mat.) Sampled from stockpile
ADDRESS:	Meliadine Gold Project, NU.		
PROJECT NO:	E14103230-01.023	**MOISTURE CONT. :**	12.4%
DATE SAMPLED:	Nov 17/16 **By:** IM		
CLIENT:	Agnico Eagle Mines Ltd.	**BULK REL DENSITY:**	n/a
ATTENTION:	Mr. Duy Nguyen	**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	91
5	72
0.63	38
0.08	7



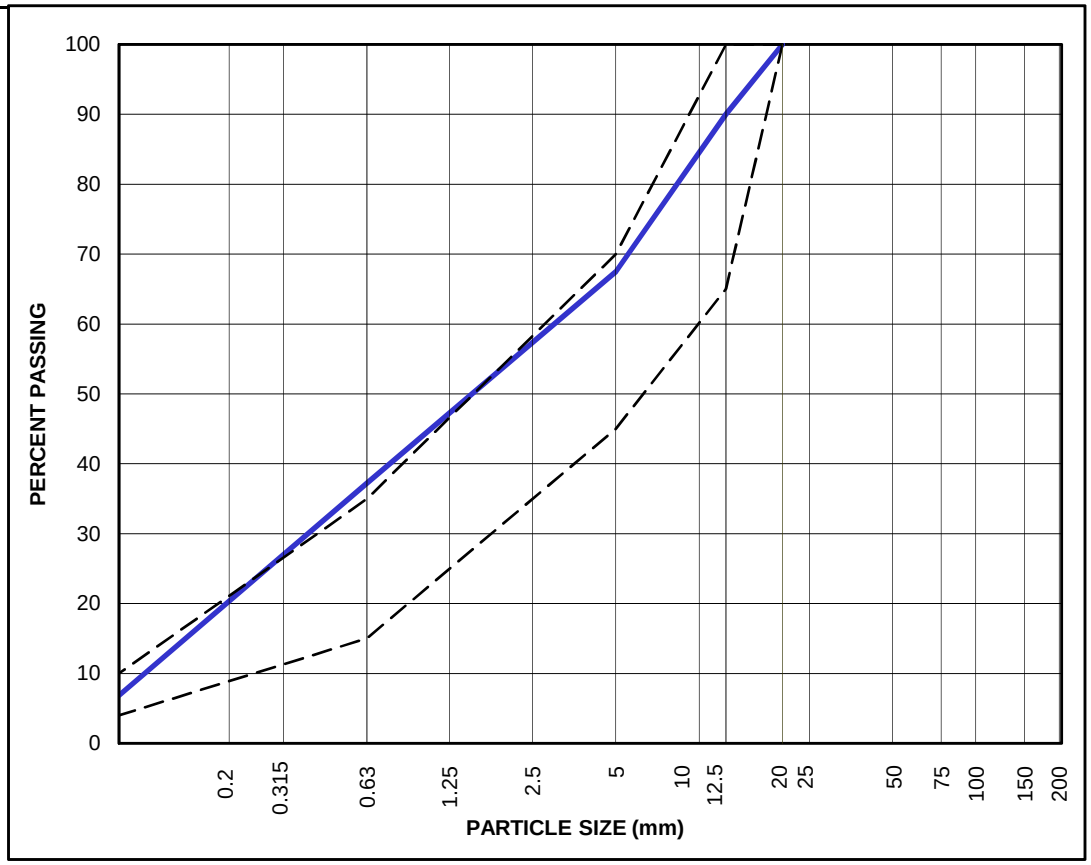
Remarks: Sampled at 19:00. Layers of snow noted in stockpile.

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA26
		SAMPLE DESCRIPTION:	20 mm minus (Type C Mat.) Sampled from stockpile
ADDRESS:	Meliadine Gold Project, NU.		
PROJECT NO:	E14103230-01.023	**MOISTURE CONT. :**	11.5%
DATE SAMPLED:	Nov 17/16 **By:** IM		
CLIENT:	Agnico Eagle Mines Ltd.	**BULK REL DENSITY:**	n/a
ATTENTION:	Mr. Duy Nguyen	**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	90
5	67
0.63	37
0.08	7



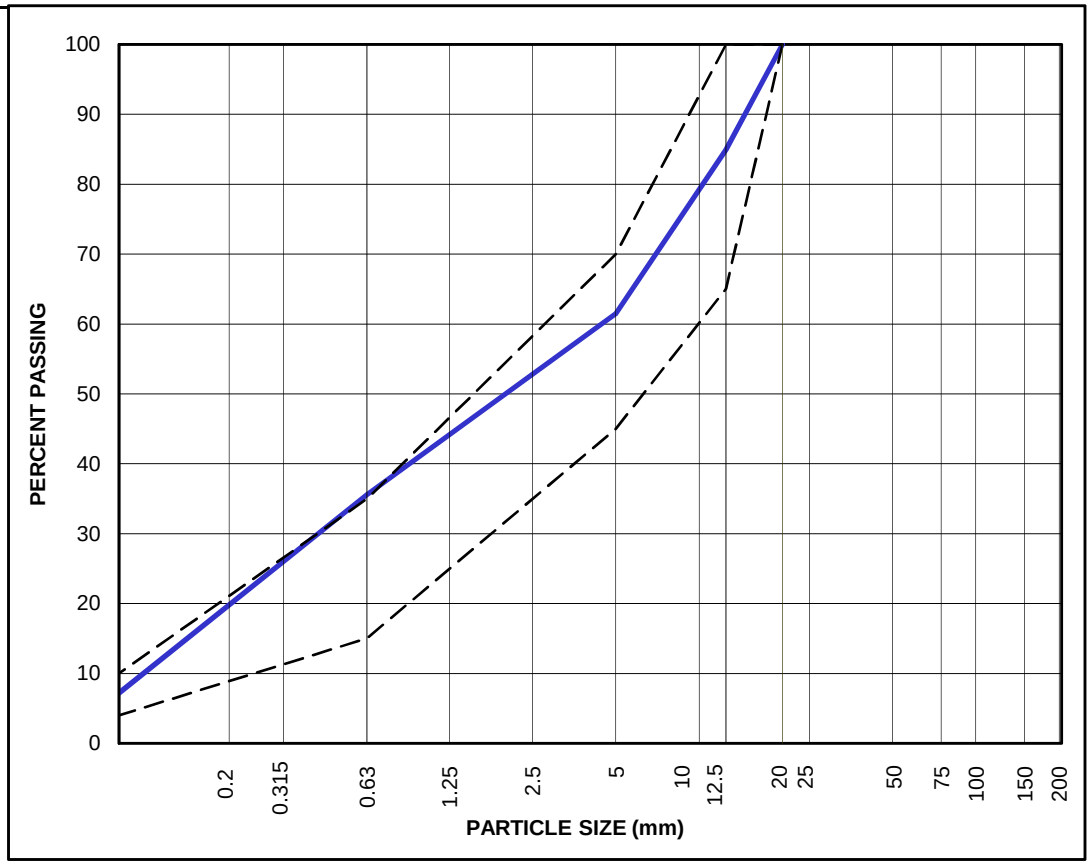
Remarks: Sampled at 19:00. Layers of snow noted in stockpile.

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA27
		SAMPLE DESCRIPTION:	20 mm minus (Type C Mat.) Sampled from stockpile
ADDRESS:	Meliadine Gold Project, NU.		
PROJECT NO:	E14103230-01.023	**MOISTURE CONT. :**	11.2%
DATE SAMPLED:	Nov 19/16 **By:** SH		
CLIENT:	Agnico Eagle Mines Ltd.	**BULK REL DENSITY:**	n/a
ATTENTION:	Mr. Duy Nguyen	**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	85
5	61
0.63	36
0.08	7



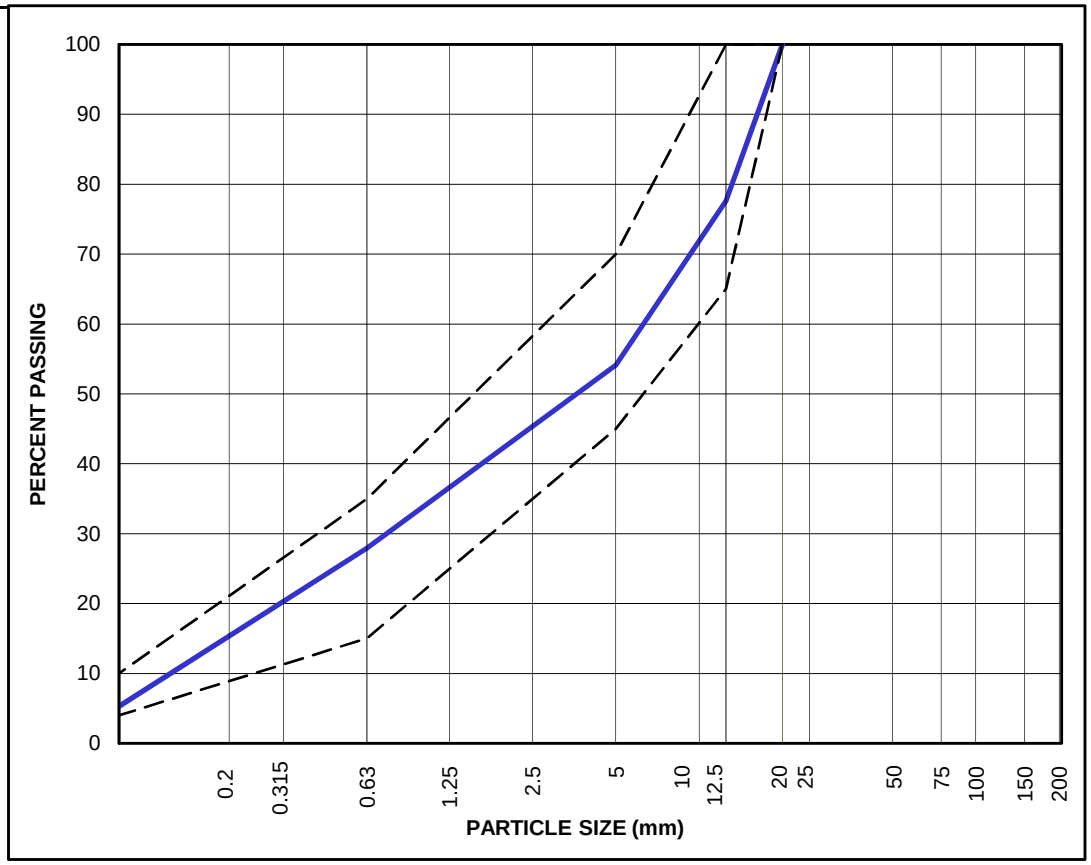
Remarks:

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA28
		SAMPLE DESCRIPTION:	20 mm minus (Type C Mat.) Sampled from stockpile
ADDRESS:	Meliadine Gold Project, NU.		
PROJECT NO:	E14103230-01.023	**MOISTURE CONT. :**	9.2%
DATE SAMPLED:	Nov 19/16 **By:** SH		
CLIENT:	Agnico Eagle Mines Ltd.	**BULK REL DENSITY:**	n/a
ATTENTION:	Mr. Duy Nguyen	**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	78
5	54
0.63	28
0.08	5



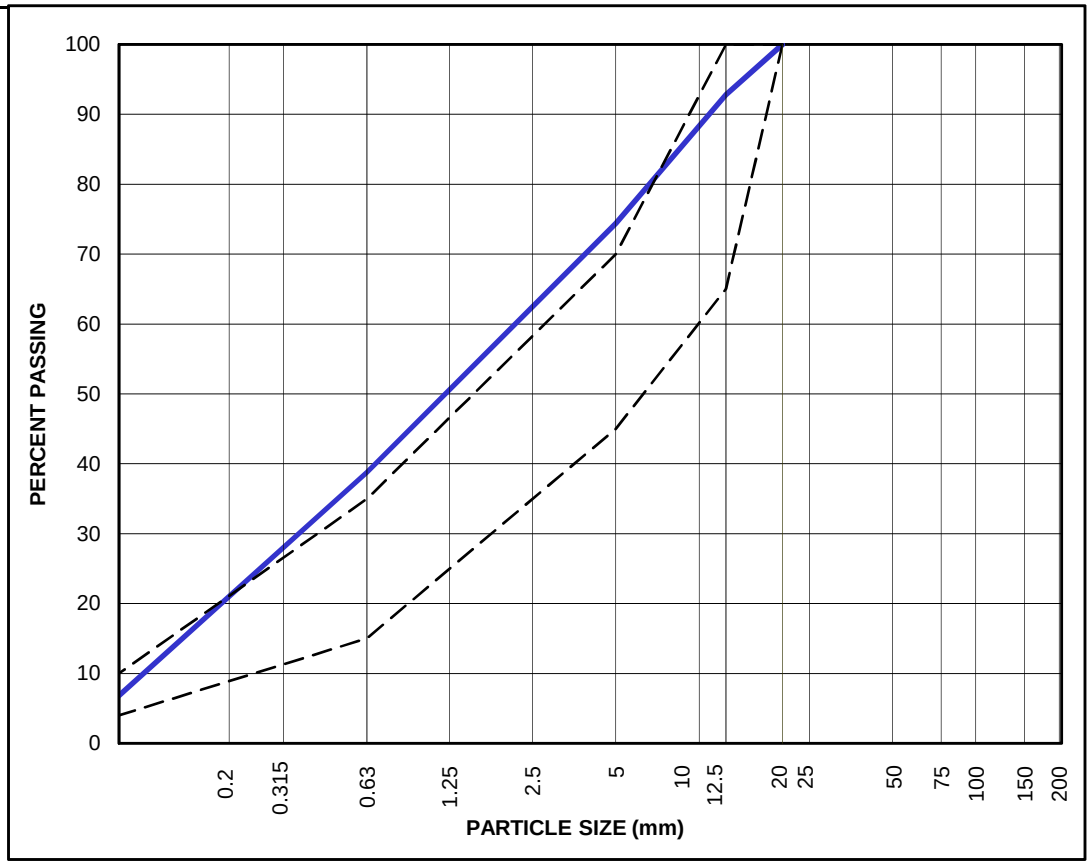
Remarks:

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA29
		SAMPLE DESCRIPTION:	20 mm minus (Type C Mat.)
			Sampled after belt (mixed by loader)
ADDRESS:	Meliadine Gold Project, NU.		
PROJECT NO:	E14103230-01.023	**MOISTURE CONT. :**	11.9%
DATE SAMPLED:	Nov 19/16 **By:** SH		
CLIENT:	Agnico Eagle Mines Ltd.	**BULK REL DENSITY:**	n/a
ATTENTION:	Mr. Duy Nguyen	**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	93
5	74
0.63	39
0.08	7



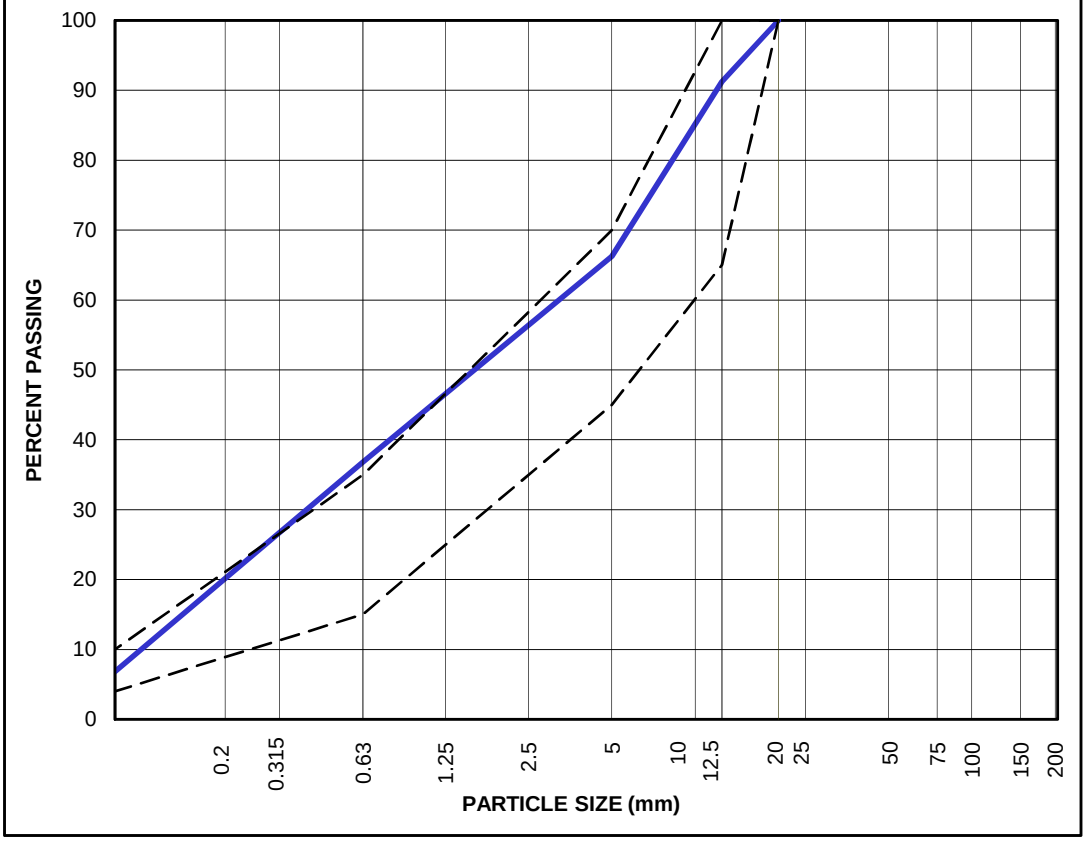
Remarks:

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT: Meliadine Dike Construction
SAMPLE NO: SA30
SAMPLE DESCRIPTION: 20 mm minus (Type C Mat.)
Sampled after belt (mixed by loader)
ADDRESS: Meliadine Gold Project, NU.
PROJECT NO: E14103230-01.023
MOISTURE CONT. : 11.1%
DATE SAMPLED: Nov 21/16 **By:** SH
CLIENT: Agnico Eagle Mines Ltd.
BULK REL DENSITY: n/a
ATTENTION: Mr. Duy Nguyen
BULK REL. DENSITY (SSD): n/a
APPARENT REL. DENSITY: n/a
ABSORPTION: n/a

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	91
5	66
0.63	37
0.08	7



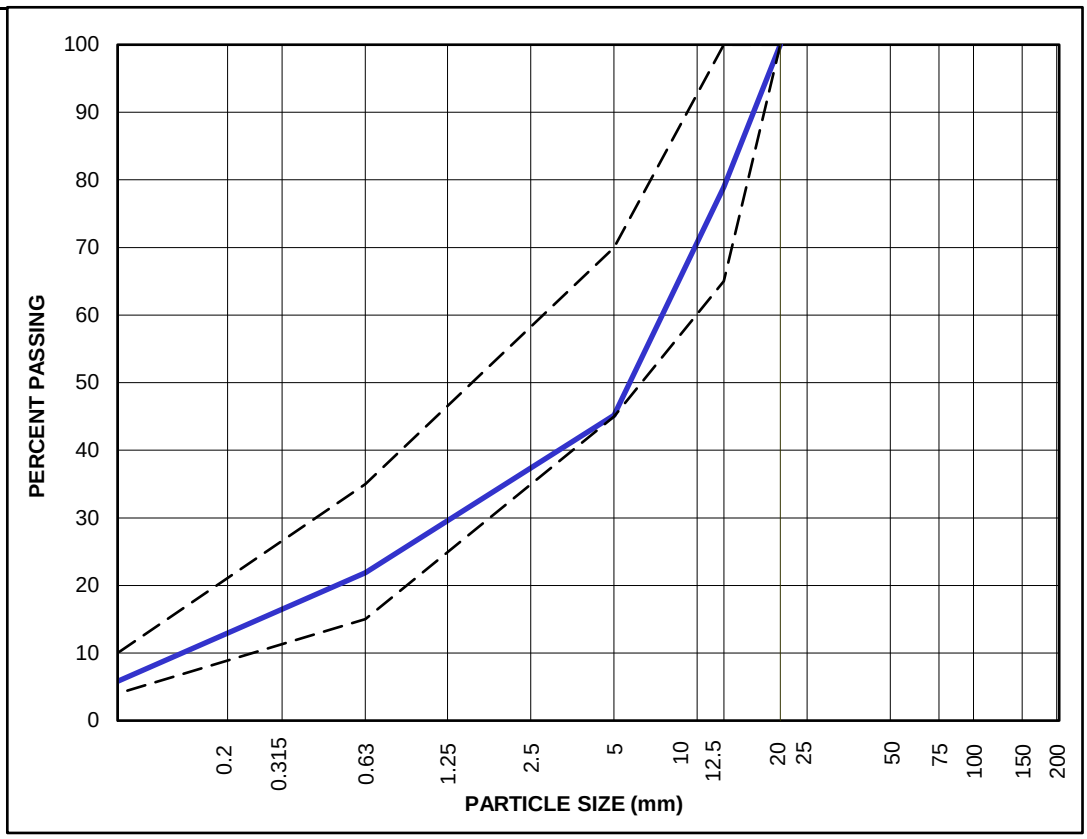
Remarks:

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA31
		SAMPLE DESCRIPTION:	20 mm minus (Type C Mat.)
			Sampled after belt (mixed by loader)
ADDRESS:	Meliadine Gold Project, NU.		
PROJECT NO:	E14103230-01.023	**MOISTURE CONT. :**	4.5%
DATE SAMPLED:	Nov 23/16 **By:** SH/IM		
CLIENT:	Agnico Eagle Mines Ltd.	**BULK REL DENSITY:**	n/a
ATTENTION:	Mr. Duy Nguyen	**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	79
5	45
0.63	22
0.08	6



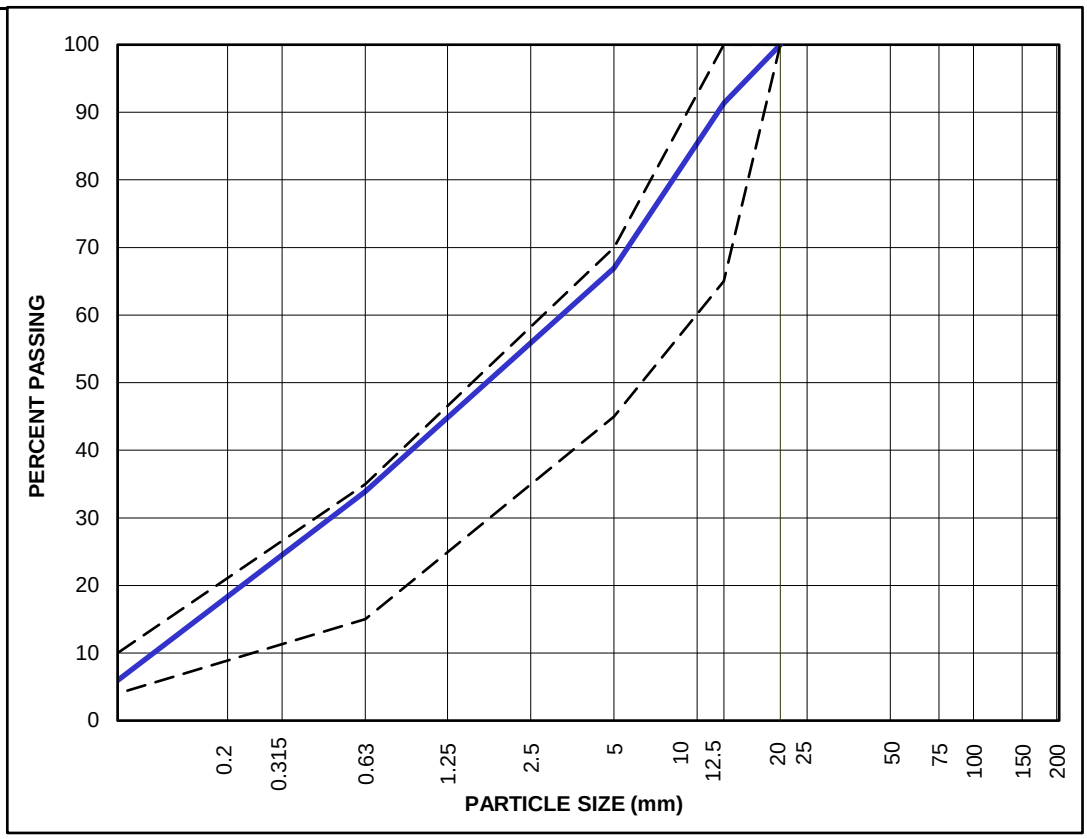
Remarks:

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA32
		SAMPLE DESCRIPTION:	20 mm minus (Type C Mat.)
			Sampled after belt
ADDRESS:	Meliadine Gold Project, NU.		
PROJECT NO:	E14103230-01.023	**MOISTURE CONT. :**	10.3%
DATE SAMPLED:	Nov 23/16 By: SH/IM		
CLIENT:	Agnico Eagle Mines Ltd.	**BULK REL DENSITY:**	n/a
ATTENTION:	Mr. Duy Nguyen	**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	91
5	67
0.63	34
0.08	6



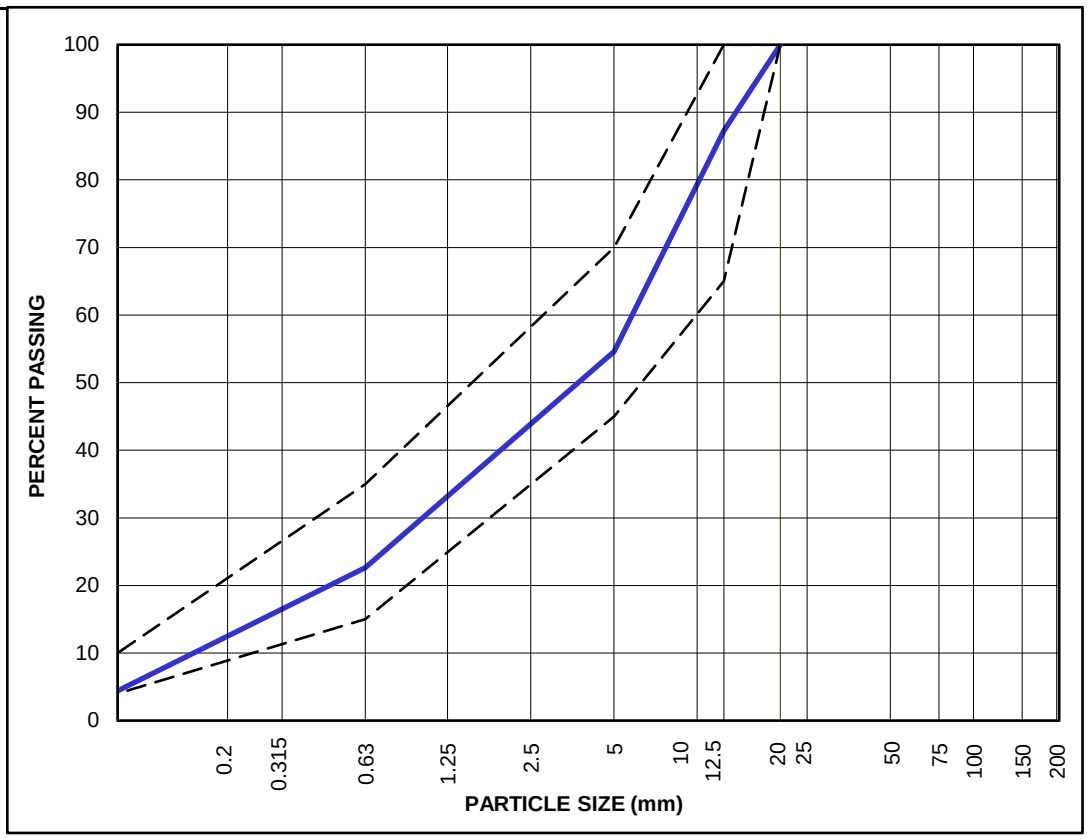
Remarks:

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA33
		SAMPLE DESCRIPTION:	Type C - 20 mm
			Sampled from Dayshift Stockpile
ADDRESS:	Meliadine Gold Project, NU.		
PROJECT NO:	E14103230-01.023	**MOISTURE CONT. :**	7.5%
DATE SAMPLED:	Nov 26/16 **By:** SH/IM		
CLIENT:	Agnico Eagle Mines Ltd.	**BULK REL DENSITY:**	n/a
ATTENTION:	Mr. Duy Nguyen	**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	87
5	55
0.63	23
0.08	4



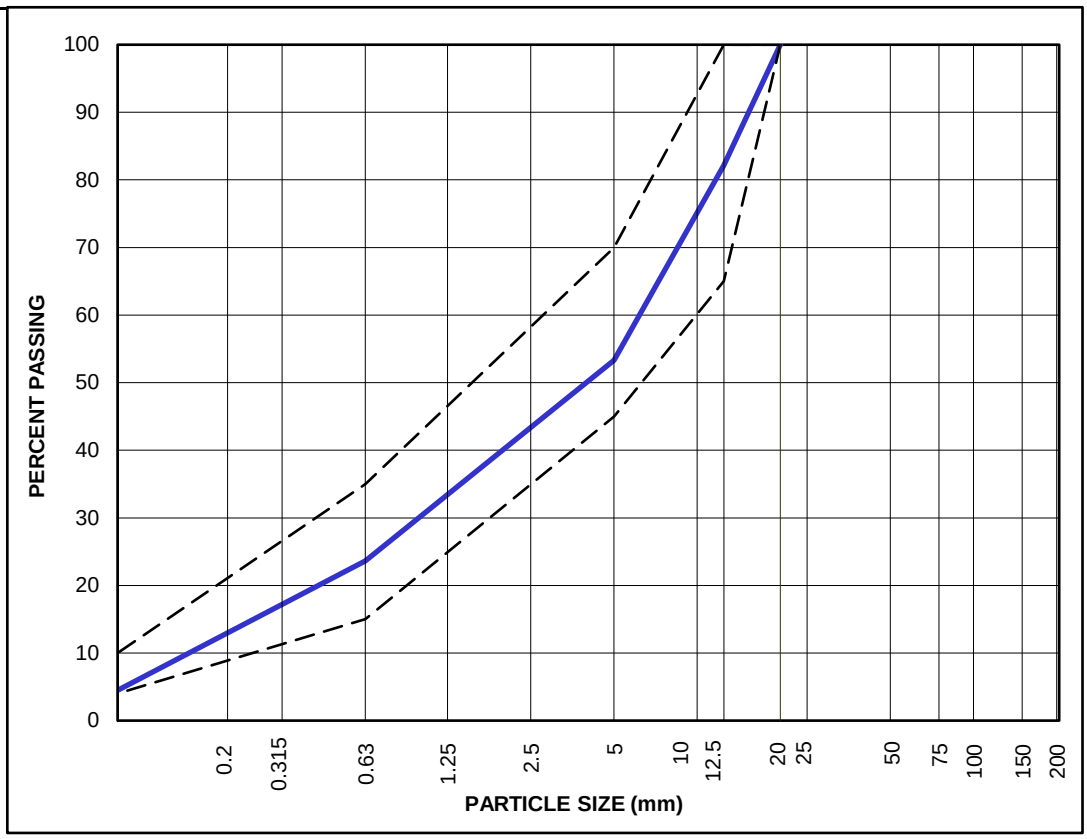
Remarks:

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA34
		SAMPLE DESCRIPTION:	Type C - 20 mm
			Sampled after belt
ADDRESS:	Meliadine Gold Project, NU.		
PROJECT NO:	E14103230-01.023	**MOISTURE CONT. :**	6.7%
DATE SAMPLED:	Nov 26/16 By: SH		
CLIENT:	Agnico Eagle Mines Ltd.	**BULK REL DENSITY:**	n/a
ATTENTION:	Mr. Duy Nguyen	**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	82
5	53
0.63	24
0.08	4



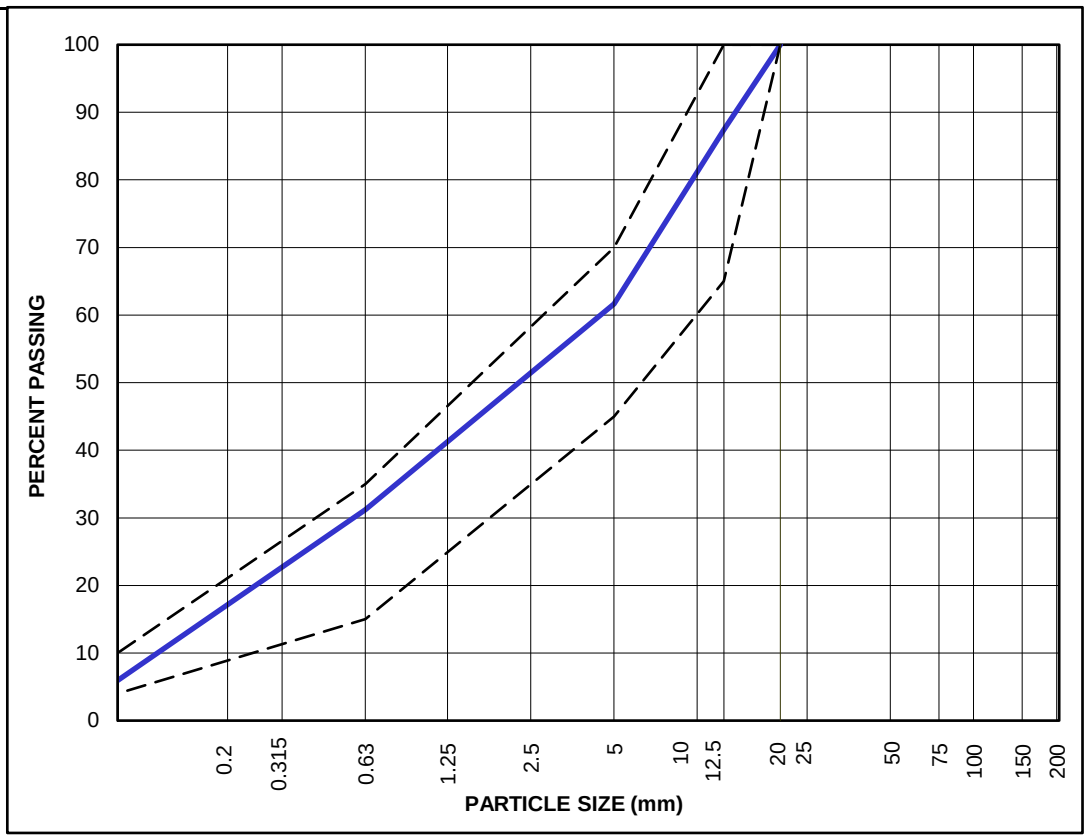
Remarks:

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA35
		SAMPLE DESCRIPTION:	Type C - 20 mm
			Sampled from Dayshift Stockpile
ADDRESS:	Meliadine Gold Project, NU.		
PROJECT NO:	E14103230-01.023	**MOISTURE CONT. :**	8.0%
DATE SAMPLED:	Nov 26/16 **By:** SH/IM		
CLIENT:	Agnico Eagle Mines Ltd.	**BULK REL DENSITY:**	n/a
ATTENTION:	Mr. Duy Nguyen	**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	87
5	62
0.63	31
0.08	6



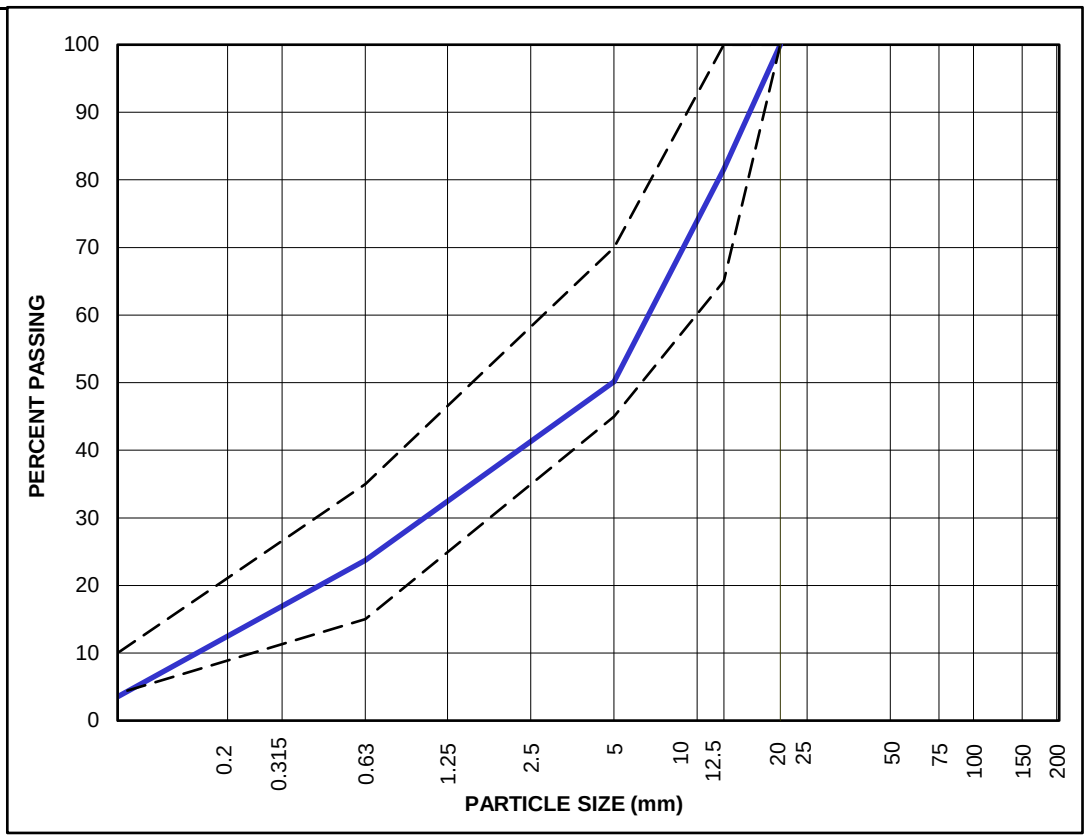
Remarks:

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA36
		SAMPLE DESCRIPTION:	Type C - 20 mm
			Sampled November 29 N/S
ADDRESS:	Meliadine Gold Project, NU.		
PROJECT NO:	E14103230-01.023	**MOISTURE CONT. :**	7.1%
DATE SAMPLED:	Nov 29/16 **By:** SH/IM		
CLIENT:	Agnico Eagle Mines Ltd.	**BULK REL DENSITY:**	n/a
ATTENTION:	Mr. Duy Nguyen	**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	82
5	50
0.63	24
0.08	4



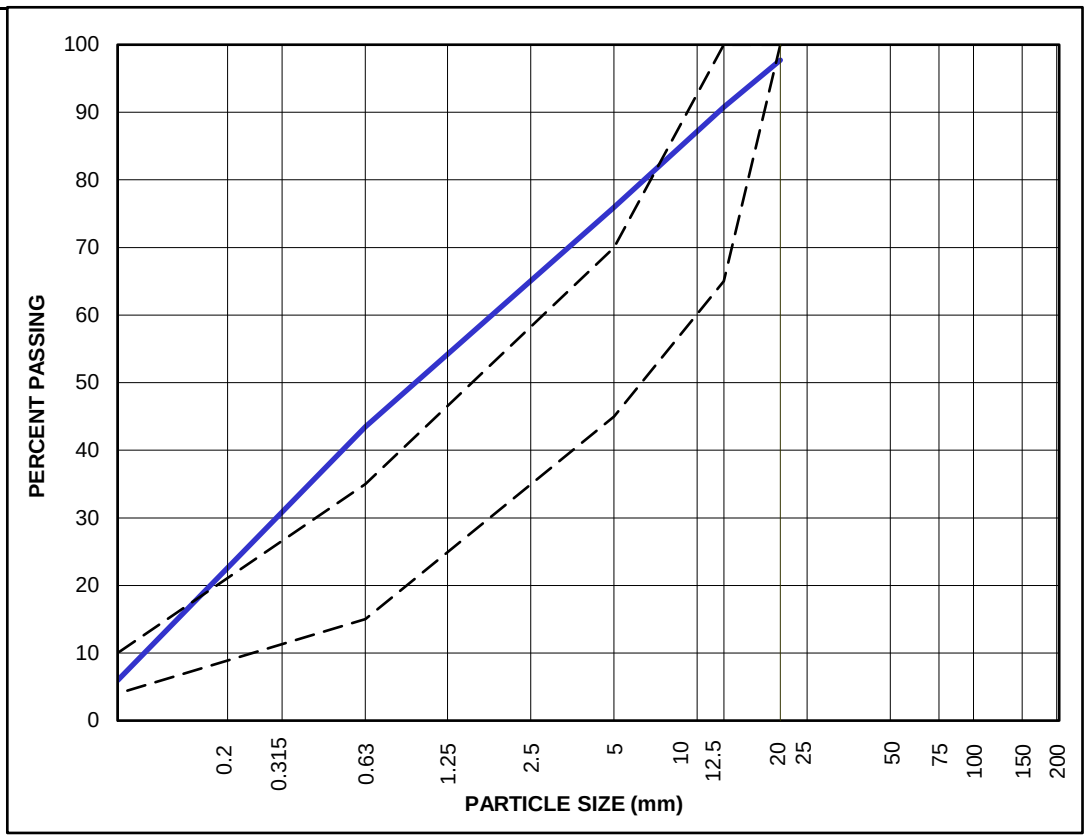
Remarks:

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA37
		SAMPLE DESCRIPTION:	Type C - 20 mm
			Sampled from Belt
ADDRESS:	Meliadine Gold Project, NU.		
PROJECT NO:	E14103230-01.023	**MOISTURE CONT. :**	14.3%
DATE SAMPLED:	Nov 30/16 **By:** SH/IM		
CLIENT:	Agnico Eagle Mines Ltd.	**BULK REL DENSITY:**	n/a
ATTENTION:	Mr. Duy Nguyen	**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
20	98
12.5	91
5	76
0.63	43
0.08	6



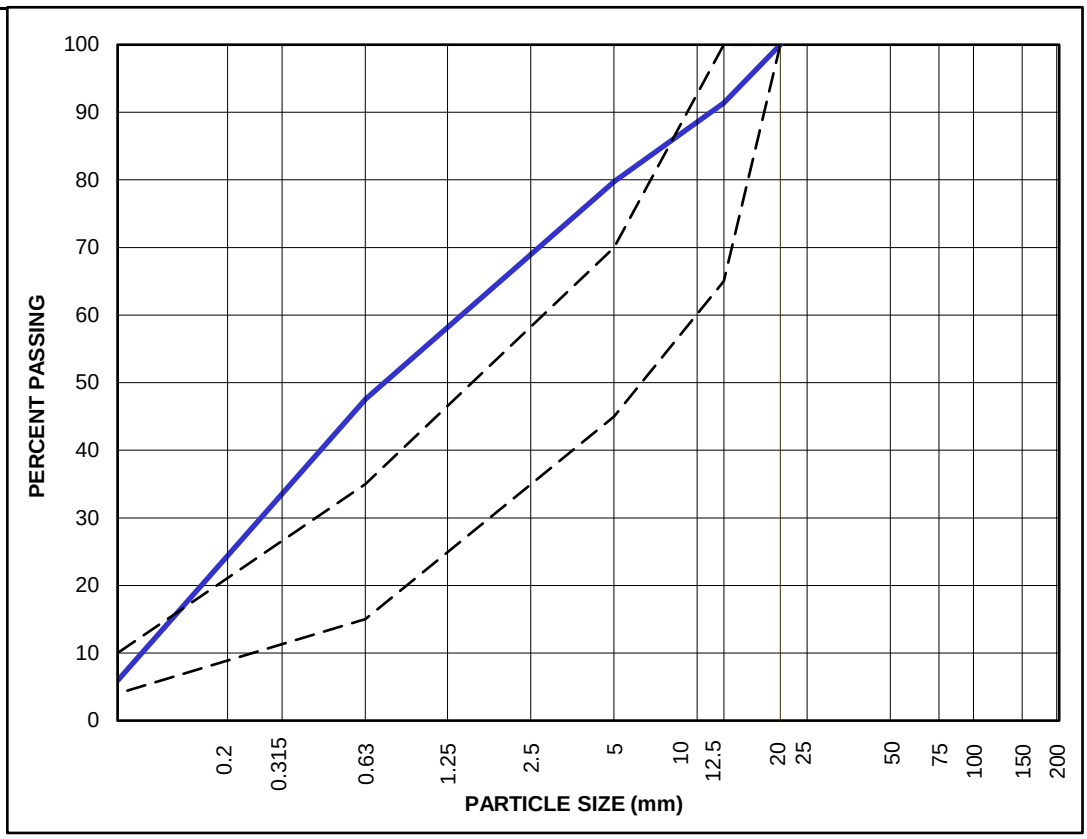
Remarks:

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA38
		SAMPLE DESCRIPTION:	Type C - 20 mm
			Sampled from Belt
ADDRESS:	Meliadine Gold Project, NU.		
PROJECT NO:	E14103230-01.023	**MOISTURE CONT. :**	13.3%
DATE SAMPLED:	Dec 02/16 **By:** SH/IM		
CLIENT:	Agnico Eagle Mines Ltd.	**BULK REL DENSITY:**	n/a
ATTENTION:	Mr. Duy Nguyen	**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	91
5	80
0.63	48
0.08	6



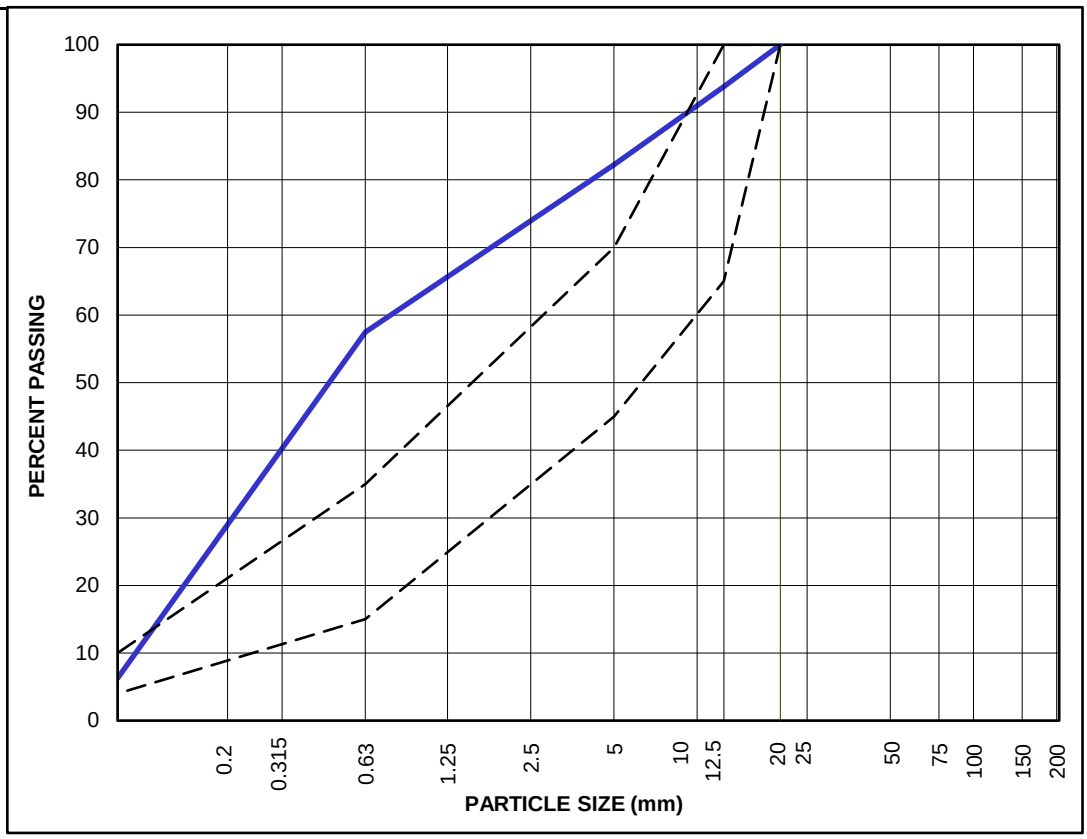
Remarks:

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA39
		SAMPLE DESCRIPTION:	Type C - 20 mm
			Sampled from Belt
ADDRESS:	Meliadine Gold Project, NU.		
PROJECT NO:	E14103230-01.023	**MOISTURE CONT. :**	13.8%
DATE SAMPLED:	Dec 03/16 **By:** IM/SH		
CLIENT:	Agnico Eagle Mines Ltd.	**BULK REL DENSITY:**	n/a
ATTENTION:	Mr. Duy Nguyen	**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	94
5	82
0.63	57
0.08	6



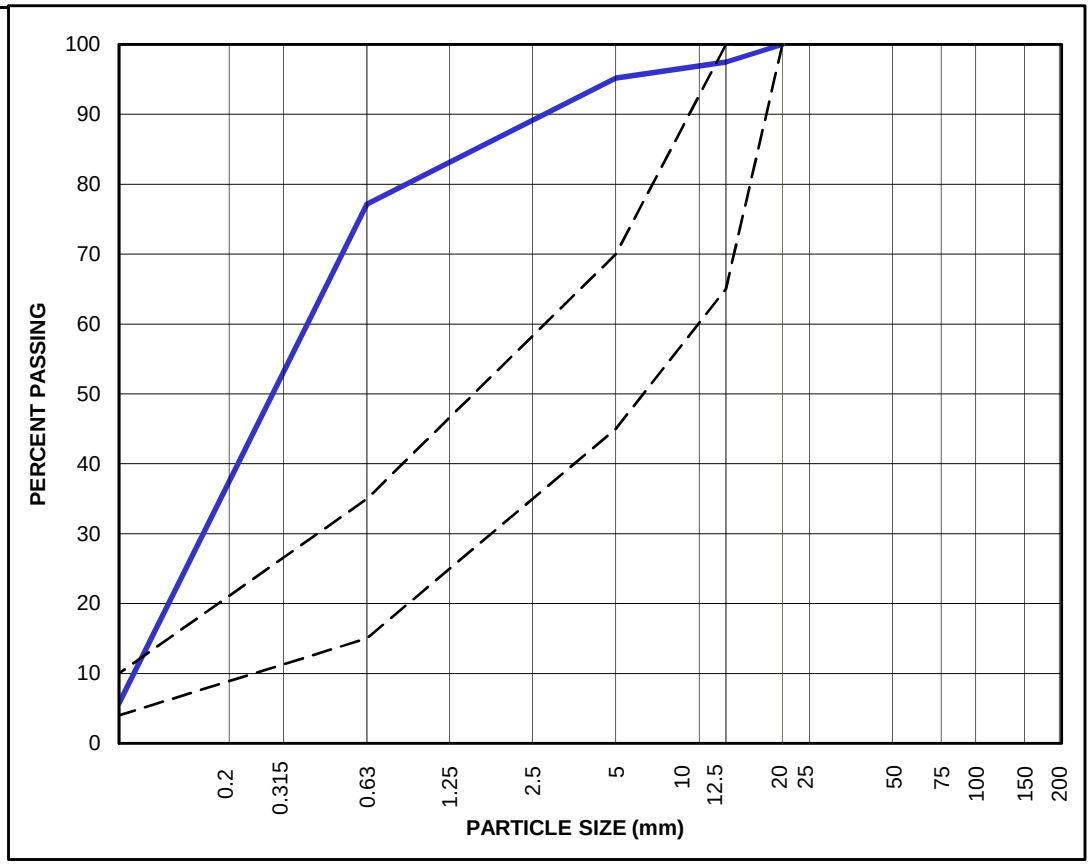
Remarks: Sampled at 02:00 (Night shift)

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA40
		SAMPLE DESCRIPTION:	Type C - 20 mm
			Sampled from Belt
ADDRESS:	Meliadine Gold Project, NU.		
PROJECT NO:	E14103230-01.023	**MOISTURE CONT. :**	14.4%
DATE SAMPLED:	Dec 05/16 **By:** IM		
CLIENT:	Agnico Eagle Mines Ltd.	**BULK REL DENSITY:**	n/a
ATTENTION:	Mr. Duy Nguyen	**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	97
5	95
0.63	77
0.08	6



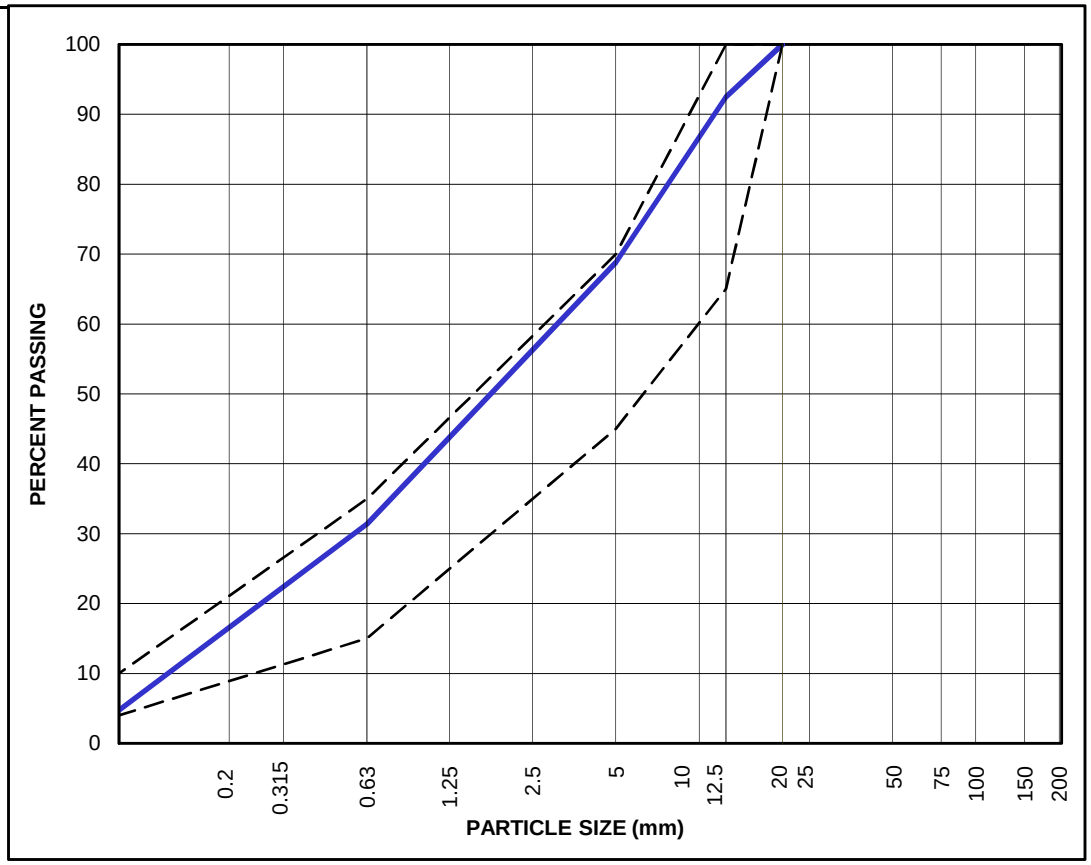
Remarks: Sampled at 03:00 (Night shift)

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA41
		SAMPLE DESCRIPTION:	Type C - 20 mm
			Sampled from stockpile
ADDRESS:	Meliadine Gold Project, NU.		
PROJECT NO:	E14103230-01.023	**MOISTURE CONT. :**	6.7%
DATE SAMPLED:	Mar 11/17 **By:** SH		
CLIENT:	Agnico Eagle Mines Ltd.	**BULK REL DENSITY:**	n/a
ATTENTION:	Mr. Duy Nguyen	**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	92
5	69
0.63	31
0.08	5



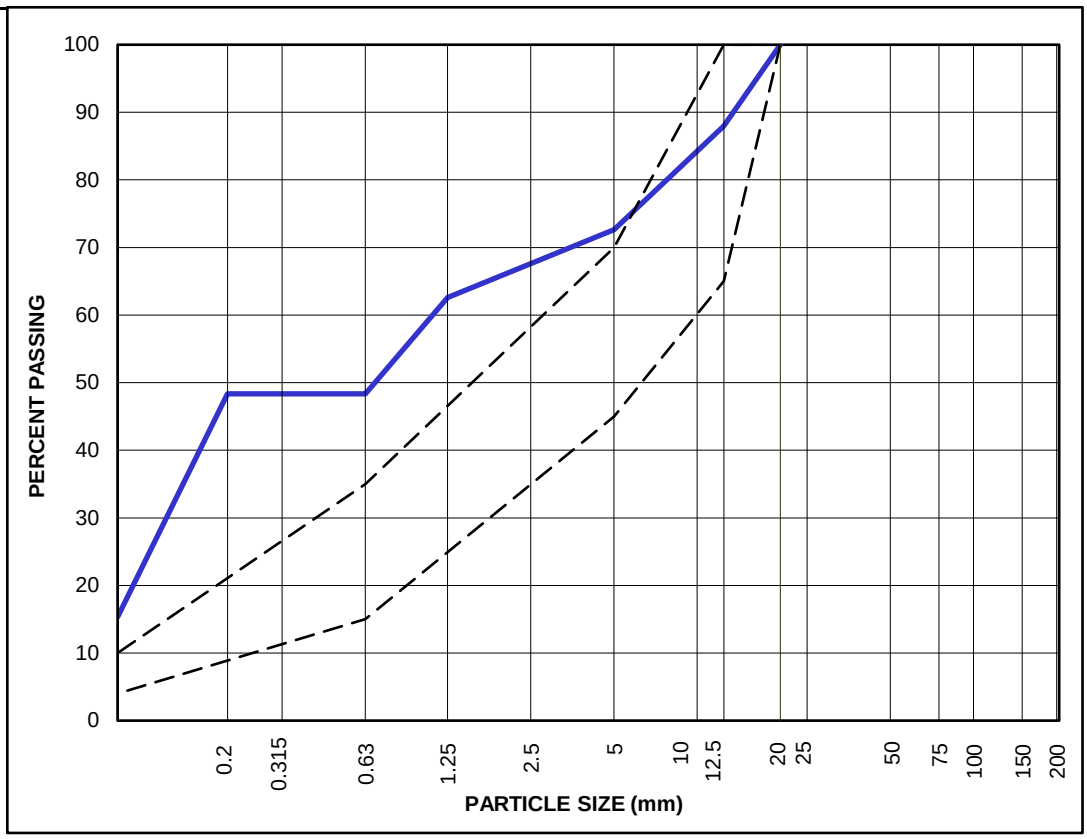
Remarks: Sampled at 02:00 (Night shift)

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA43
		SAMPLE DESCRIPTION:	Type C - 20 mm
			Sampled from u/s Type C fillet ~0+280 @ D-CP5
ADDRESS:	Meliadine Gold Project, NU.		
PROJECT NO:	E14103230-01.023	**MOISTURE CONT. :**	11.5%
DATE SAMPLED:	Apr 18/17 **By:** WW		
CLIENT:	Agnico Eagle Mines Ltd.	**BULK REL DENSITY:**	n/a
ATTENTION:	Mr. Duy Nguyen	**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	88
5	73
1.25	63
0.63	48
0.315	48
0.2	48
0.08	15



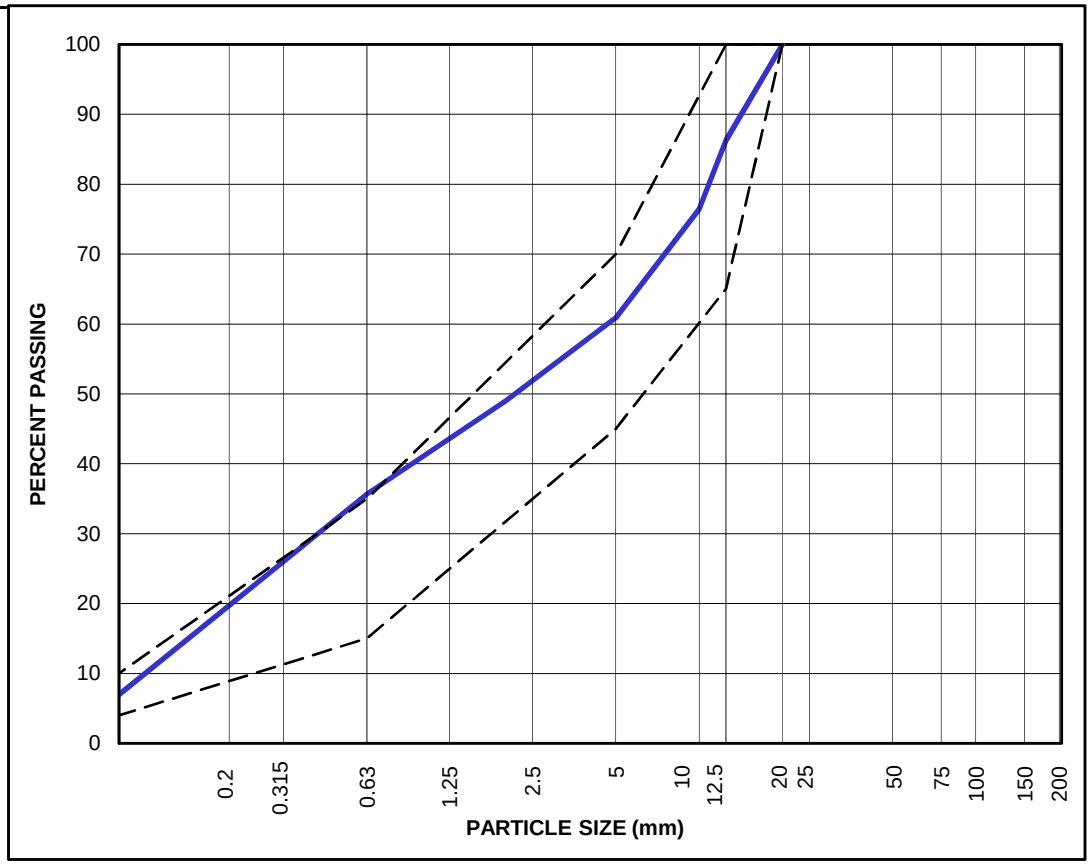
Remarks: Sampled from u/s Type C fillet ~0+280 @ D-CP5

Reviewed by: _____ P.Geo.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA44
		SAMPLE DESCRIPTION:	20 mm minus (Type C Mat.) Sampled from belt
ADDRESS:	Meliadine Gold Project, NU.		
PROJECT NO:	E14103230-01	**MOISTURE CONT. :**	8.5%
DATE SAMPLED:	Apr 29/17 **By:** TW		
CLIENT:	Agnico Eagle Mines Ltd.	**BULK REL DENSITY:**	n/a
ATTENTION:	Mr. Duy Nguyen	**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	86
10	76
5	61
2	49
0.63	36
0.08	7



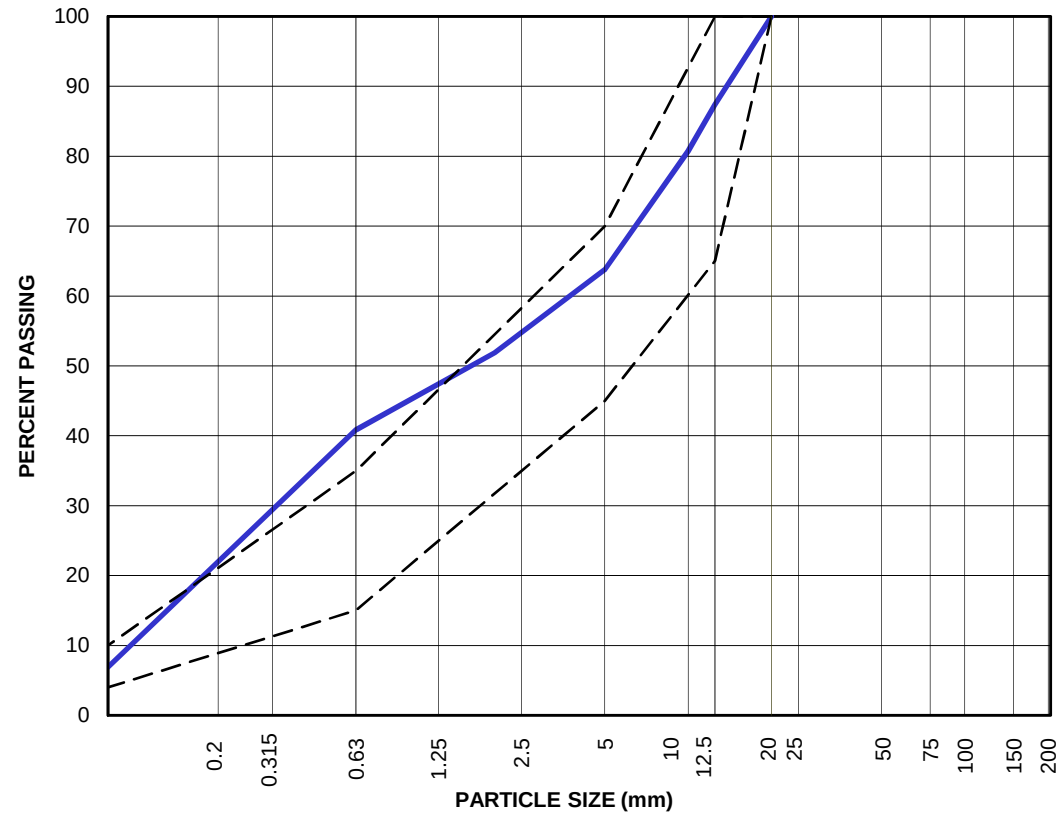
Remarks: 20 mm minus particle size distribution limits shown

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA45
		SAMPLE DESCRIPTION:	20 mm minus (Type C Mat.) Sampled from belt
ADDRESS:	Meliadine Gold Project, NU.		
PROJECT NO:	E14103230-01	**MOISTURE CONT. :**	7.8%
DATE SAMPLED:	Apr 29/17 **By:** IM		
CLIENT:	Agnico Eagle Mines Ltd.	**BULK REL DENSITY:**	n/a
ATTENTION:	Mr. Duy Nguyen	**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	87
10	81
5	64
2	52
0.63	41
0.08	7



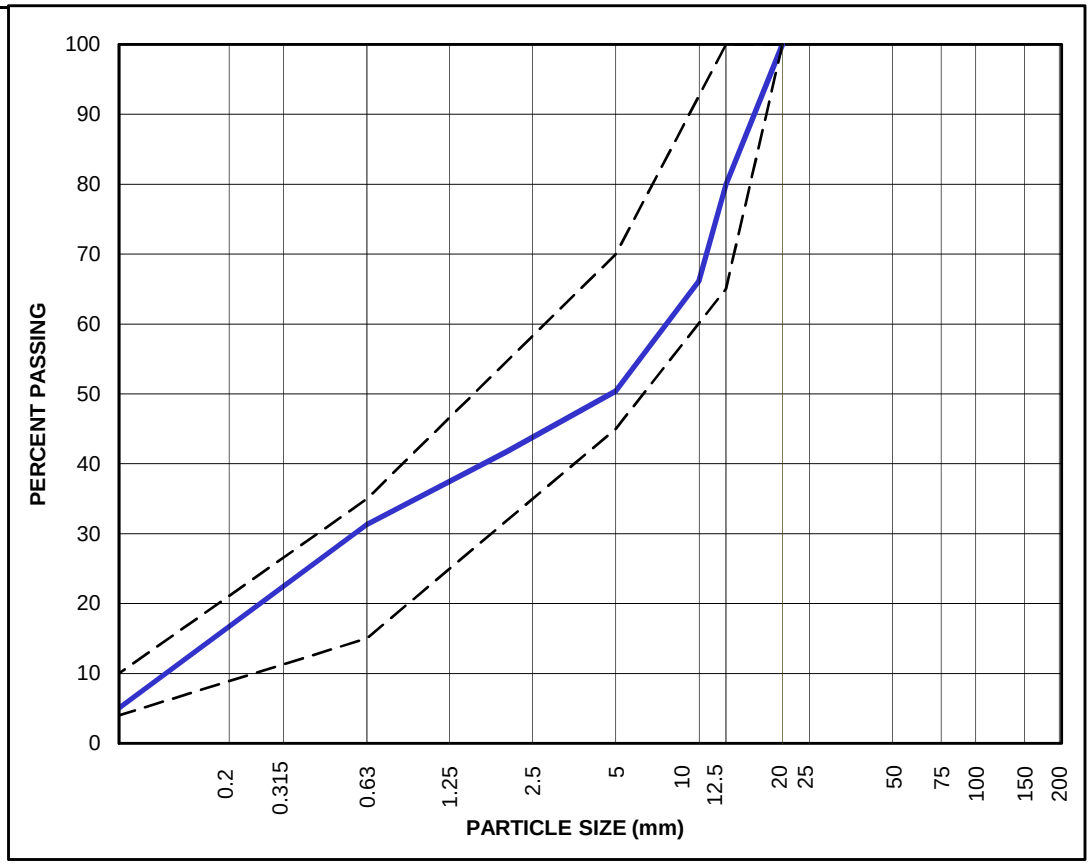
Remarks: 20 mm minus particle size distribution limits shown

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA47
		SAMPLE DESCRIPTION:	20 mm minus (Type C Mat.) Sampled from belt
ADDRESS:	Meliadine Gold Project, NU.		
PROJECT NO:	E14103230-01	**MOISTURE CONT. :**	10.9%
DATE SAMPLED:	Apr 30/17 **By:** IM		
CLIENT:	Agnico Eagle Mines Ltd.	**BULK REL DENSITY:**	n/a
ATTENTION:	Mr. Duy Nguyen	**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	80
10	66
5	50
2	42
0.63	31
0.08	5



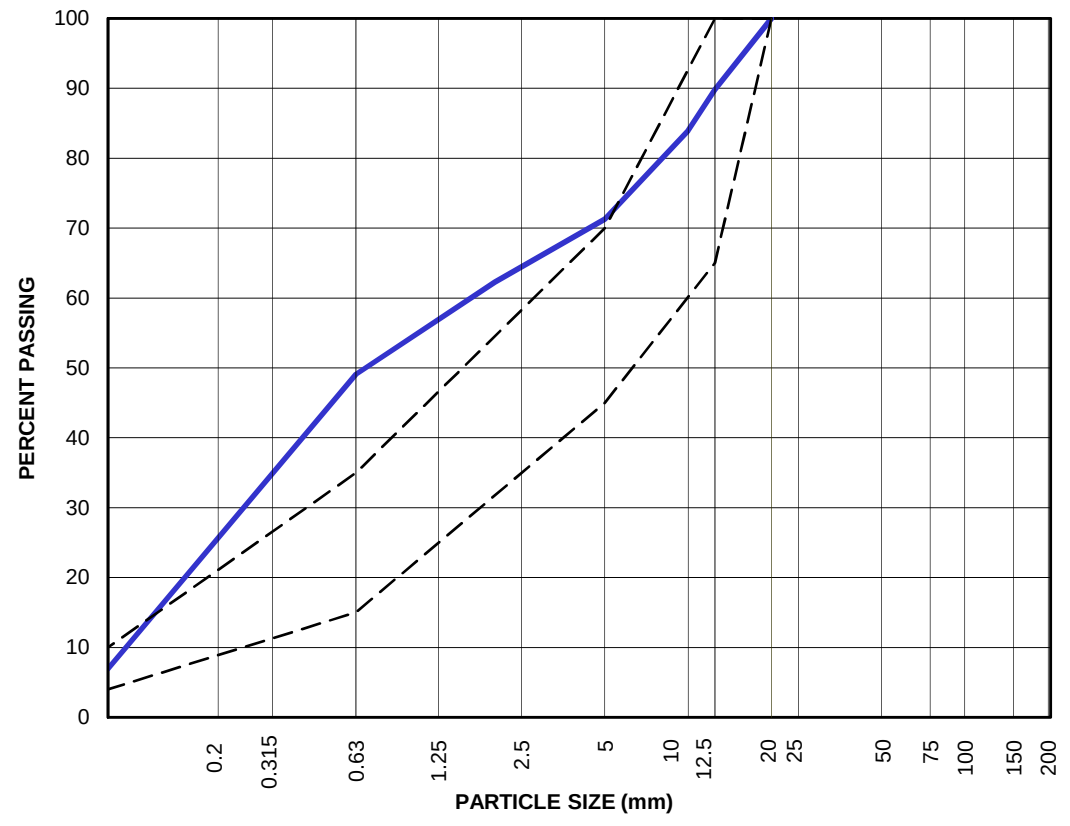
Remarks: 20 mm minus particle size distribution limits shown
Sampled on Night Shift at 02:00

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA46
		SAMPLE DESCRIPTION:	20 mm minus (Type C Mat.) Sampled from belt
ADDRESS:	Meliadine Gold Project, NU.		
PROJECT NO:	E14103230-01	**MOISTURE CONT. :**	12.6%
DATE SAMPLED:	May 01/17 **By:** TW		
CLIENT:	Agnico Eagle Mines Ltd.	**BULK REL DENSITY:**	n/a
ATTENTION:	Mr. Duy Nguyen	**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	90
10	84
5	71
2	62
0.63	49
0.08	7



Remarks: 20 mm minus particle size distribution limits shown

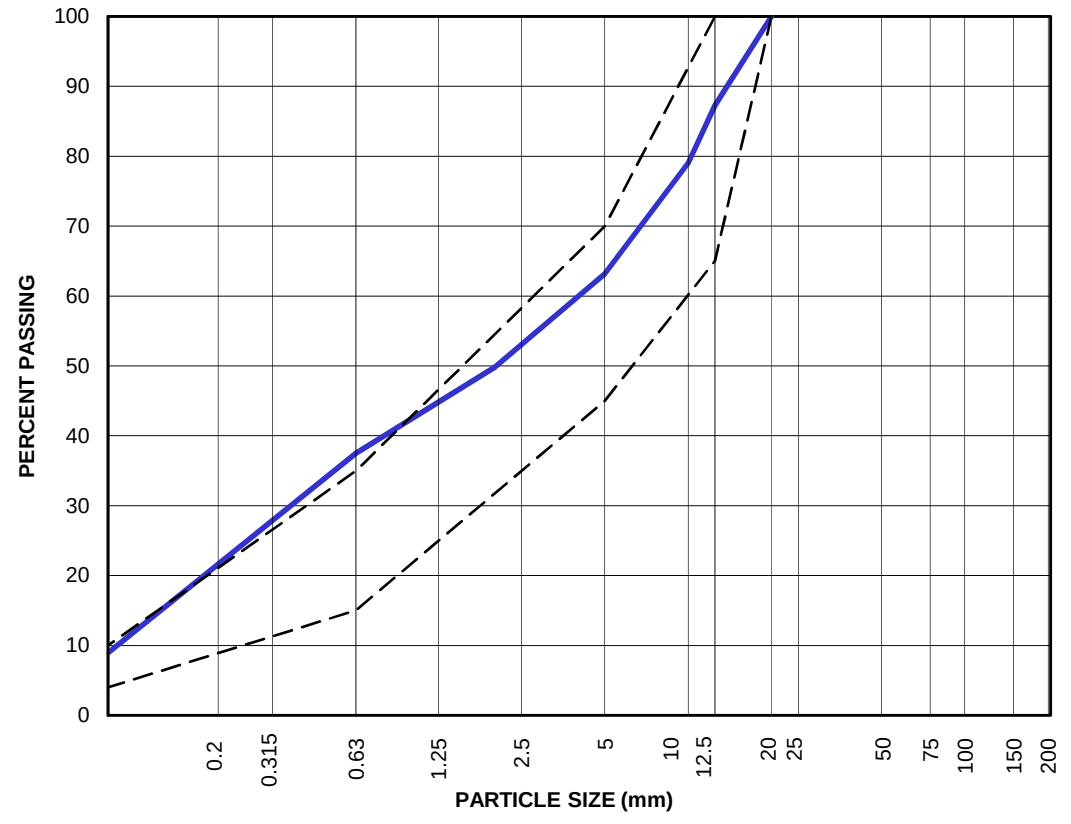
The moisture content of 12.6% is higher than the maximum moisture content of 10% specified.

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA49
		SAMPLE DESCRIPTION:	20 mm minus (Type C Mat.) Sampled from belt
ADDRESS:	Meliadine Gold Project, NU.		
PROJECT NO:	E14103230-01	**MOISTURE CONT. :**	5.6%
DATE SAMPLED:	May 01/17 **By:** TW		
CLIENT:	Agnico Eagle Mines Ltd.	**BULK REL DENSITY:**	n/a
ATTENTION:	Mr. Duy Nguyen	**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	87
10	79
5	63
2	50
0.63	38
0.08	9



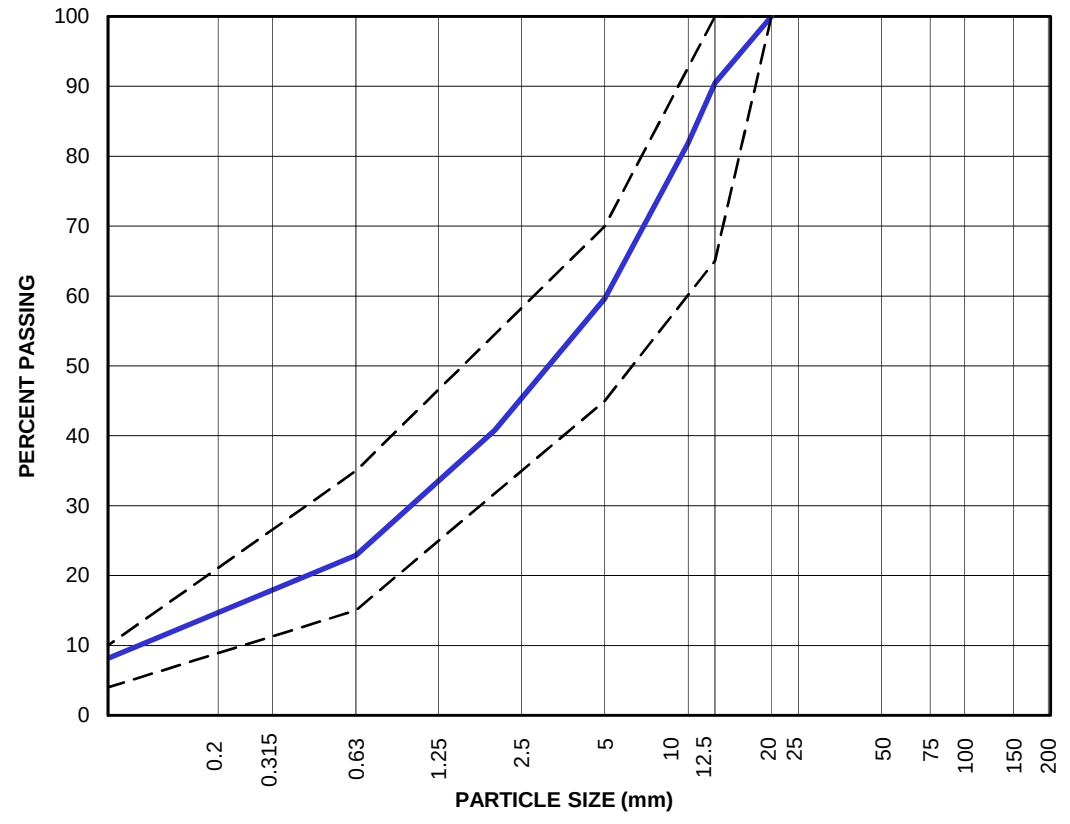
Remarks: 20 mm minus particle size distribution limits shown

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA50
		SAMPLE DESCRIPTION:	20 mm minus (Type C Mat.) Sampled from belt
ADDRESS:	Meliadine Gold Project, NU.		
PROJECT NO:	E14103230-01	**MOISTURE CONT. :**	2.4%
DATE SAMPLED:	May 09/17 **By:** TW		
CLIENT:	Agnico Eagle Mines Ltd.	**BULK REL DENSITY:**	n/a
ATTENTION:	Mr. Duy Nguyen	**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	90
10	82
5	60
2	41
0.63	23
0.08	8



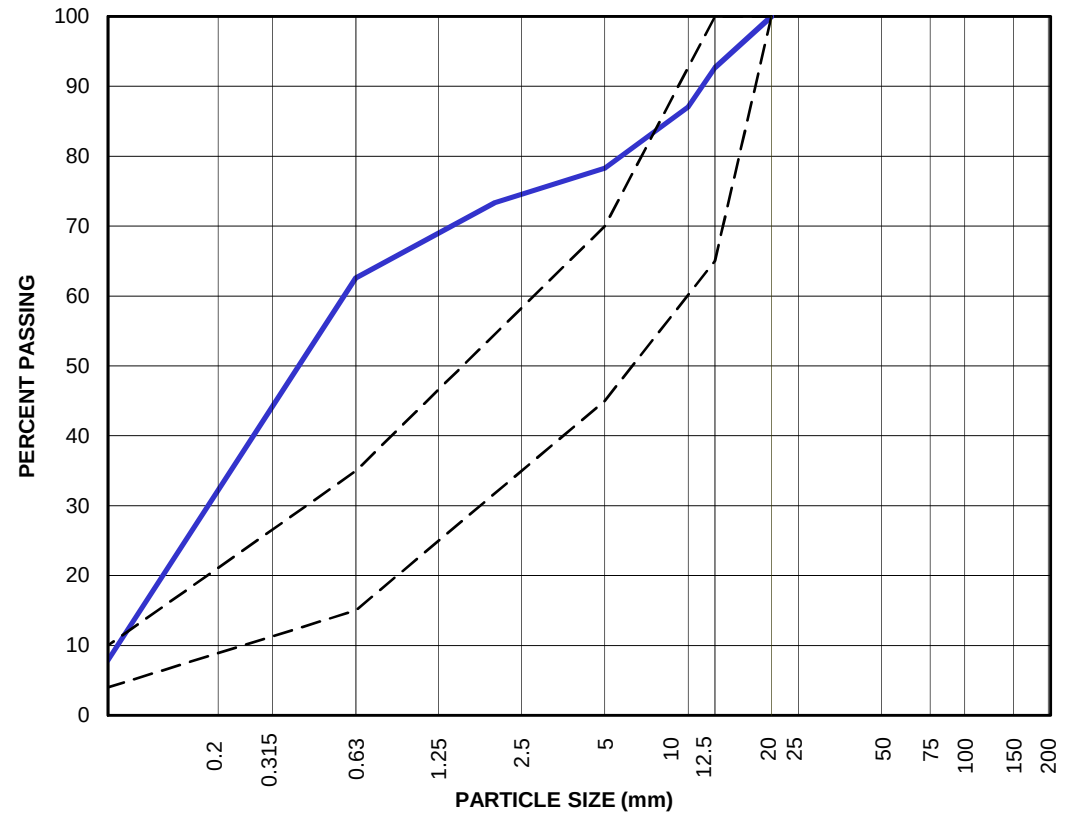
Remarks: 20 mm minus particle size distribution limits shown

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	Meliadine Dike Construction	**SAMPLE NO:**	SA51
		SAMPLE DESCRIPTION:	20 mm minus (Type C Mat.) Sampled from belt
ADDRESS:	Meliadine Gold Project, NU.		
PROJECT NO:	E14103230-01	**MOISTURE CONT. :**	14.1%
DATE SAMPLED:	May 10/17 **By:** TW		
CLIENT:	Agnico Eagle Mines Ltd.	**BULK REL DENSITY:**	n/a
ATTENTION:	Mr. Duy Nguyen	**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	93
10	87
5	78
2	73
0.63	63
0.08	8



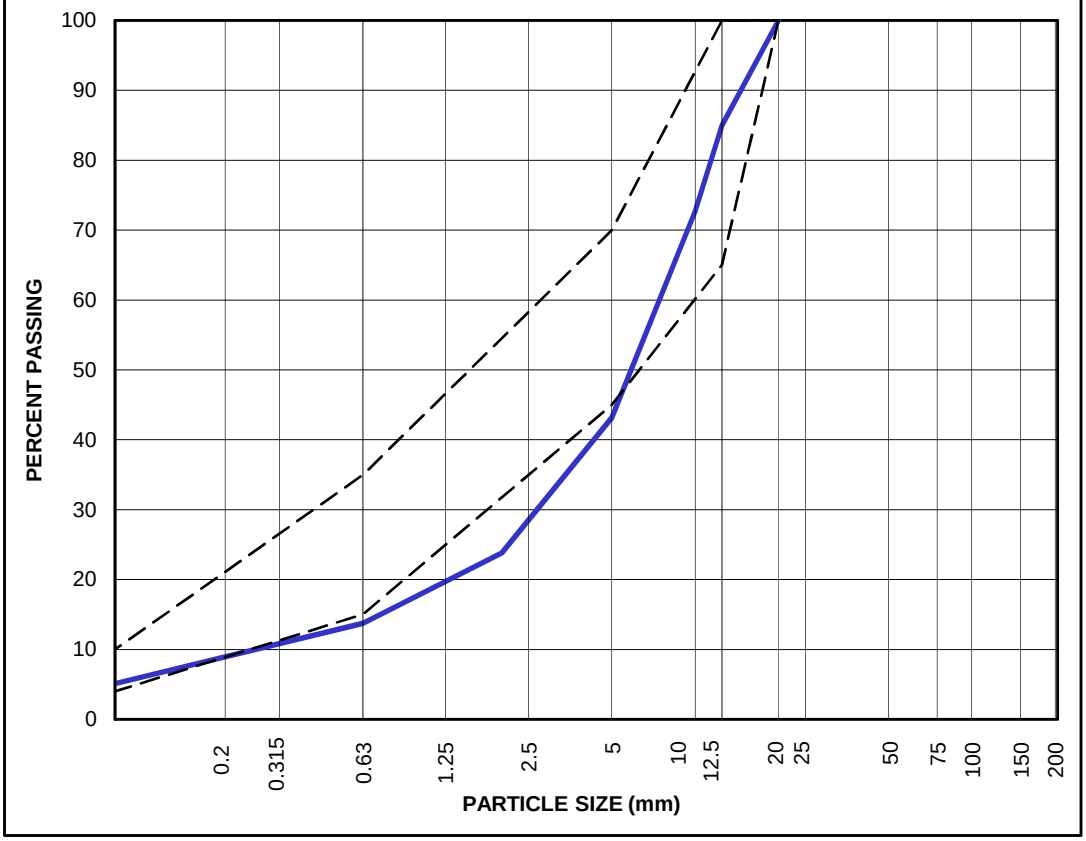
Remarks: 20 mm minus particle size distribution limits shown

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	**Meliadine Dike Construction**	**SAMPLE NO:**	**SA52**
		SAMPLE DESCRIPTION:	**20 mm minus (Type C Mat.)**
ADDRESS:	**Meliadine Gold Project, NU.**		
PROJECT NO:	**E14103230-01**	**MOISTURE CONT. :**	**1.4%**
DATE SAMPLED:	**May 14/17** **By: IM**		
CLIENT:	**Agnico Eagle Mines Ltd.**	**BULK REL DENSITY:**	**n/a**
ATTENTION:	**Mr. Duy Nguyen**	**BULK REL. DENSITY (SSD):**	**n/a**
		APPARENT REL. DENSITY:	**n/a**
		ABSORPTION:	**n/a**

PARTICLE SIZE	PERCENT PASSING
20	**100**
12.5	**85**
10	**73**
5	**43**
2	**24**
0.63	**14**
0.08	**5**



Remarks: 20 mm minus particle size distribution limits shown

Sampled from Stockpile Under Belt

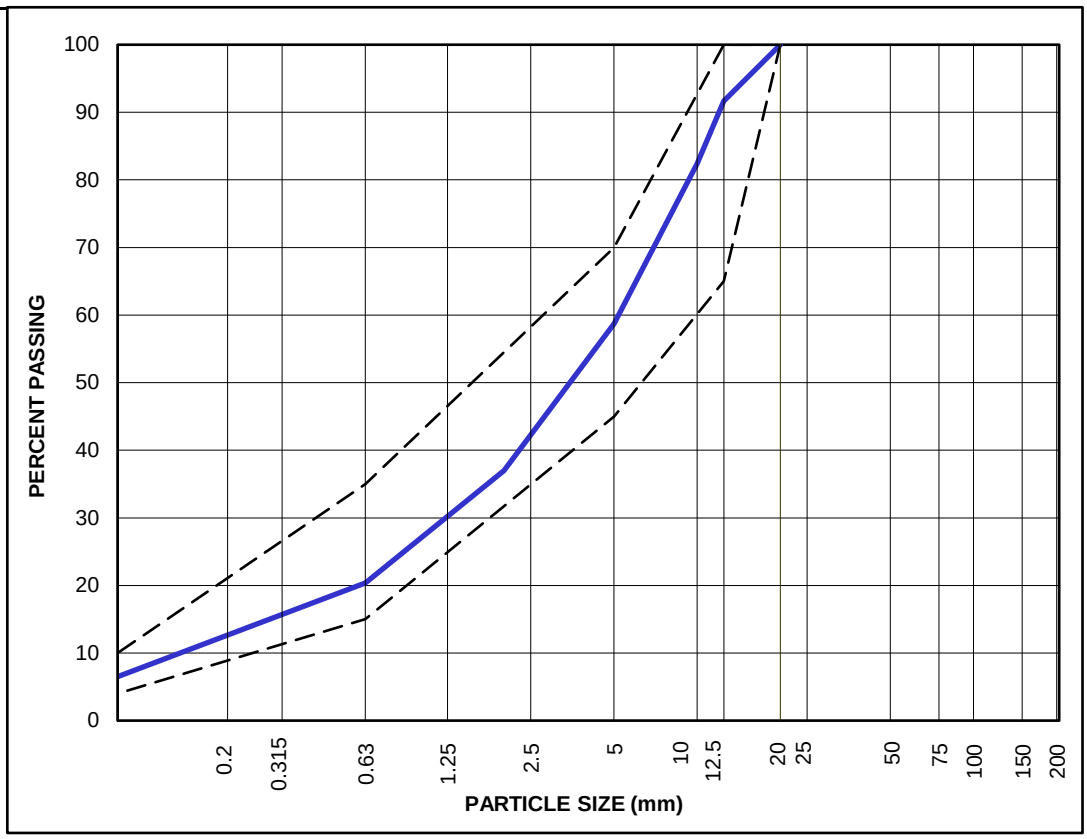
Note - Produced during dayshift

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	**Meliadine Dike Construction**	**SAMPLE NO:**	**SA53**
		SAMPLE DESCRIPTION:	**20 mm minus (Type C Mat.)**
ADDRESS:	**Meliadine Gold Project, NU.**		
PROJECT NO:	**E14103230-01**	**MOISTURE CONT. :**	**2.1%**
DATE SAMPLED:	**May 15/17** **By: IM**		
CLIENT:	**Agnico Eagle Mines Ltd.**	**BULK REL DENSITY:**	**n/a**
ATTENTION:	**Mr. Duy Nguyen**	**BULK REL. DENSITY (SSD):**	**n/a**
		APPARENT REL. DENSITY:	**n/a**
		ABSORPTION:	**n/a**

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	92
10	82
5	59
2	37
0.63	20
0.08	6



Remarks: 20 mm minus particle size distribution limits shown

Sampled from Stockpile

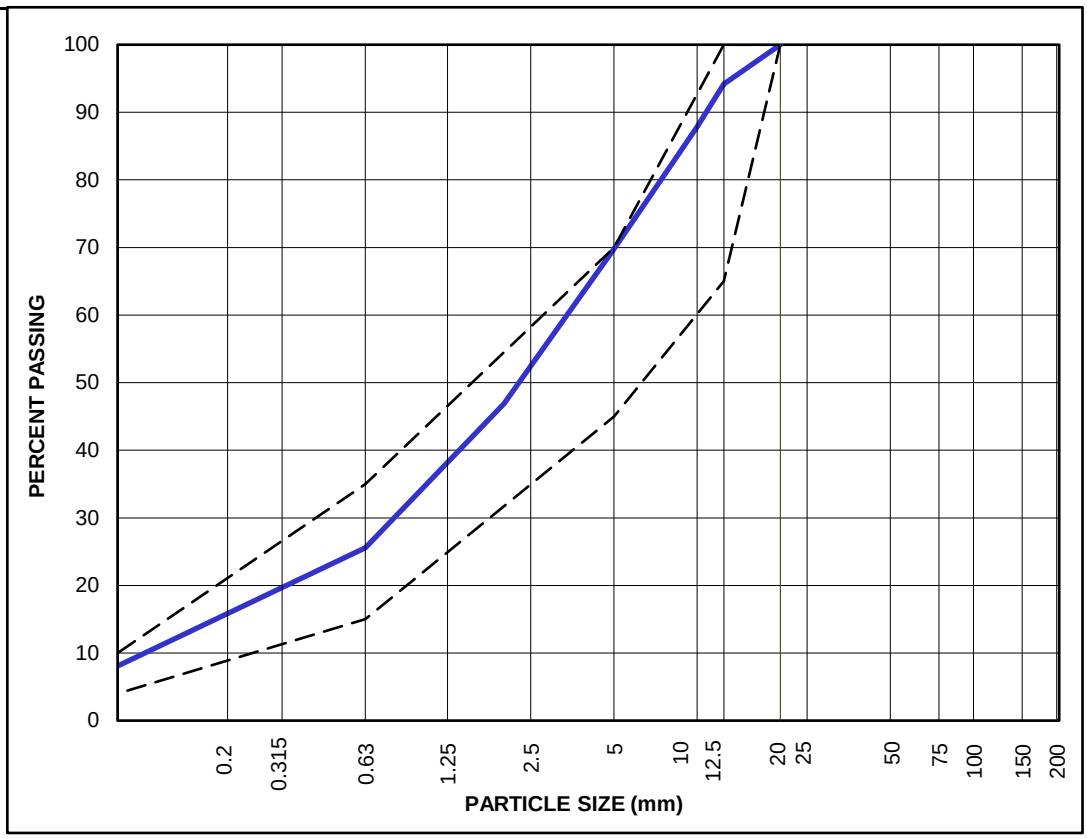
Note - Produced during dayshift

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	**Meliadine Dike Construction**	**SAMPLE NO:**	**SA54**
		SAMPLE DESCRIPTION:	**20 mm minus (Type C Mat.)**
ADDRESS:	**Meliadine Gold Project, NU.**		
PROJECT NO:	**E14103230-01**	**MOISTURE CONT. :**	**2.1%**
DATE SAMPLED:	**May 16/17** **By: IM**		
CLIENT:	**Agnico Eagle Mines Ltd.**	**BULK REL DENSITY:**	**n/a**
ATTENTION:	**Mr. Duy Nguyen**	**BULK REL. DENSITY (SSD):**	**n/a**
		APPARENT REL. DENSITY:	**n/a**
		ABSORPTION:	**n/a**

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	94
10	88
5	70
2	47
0.63	26
0.08	8



Remarks: 20 mm minus particle size distribution limits shown

Sampled from Stockpile

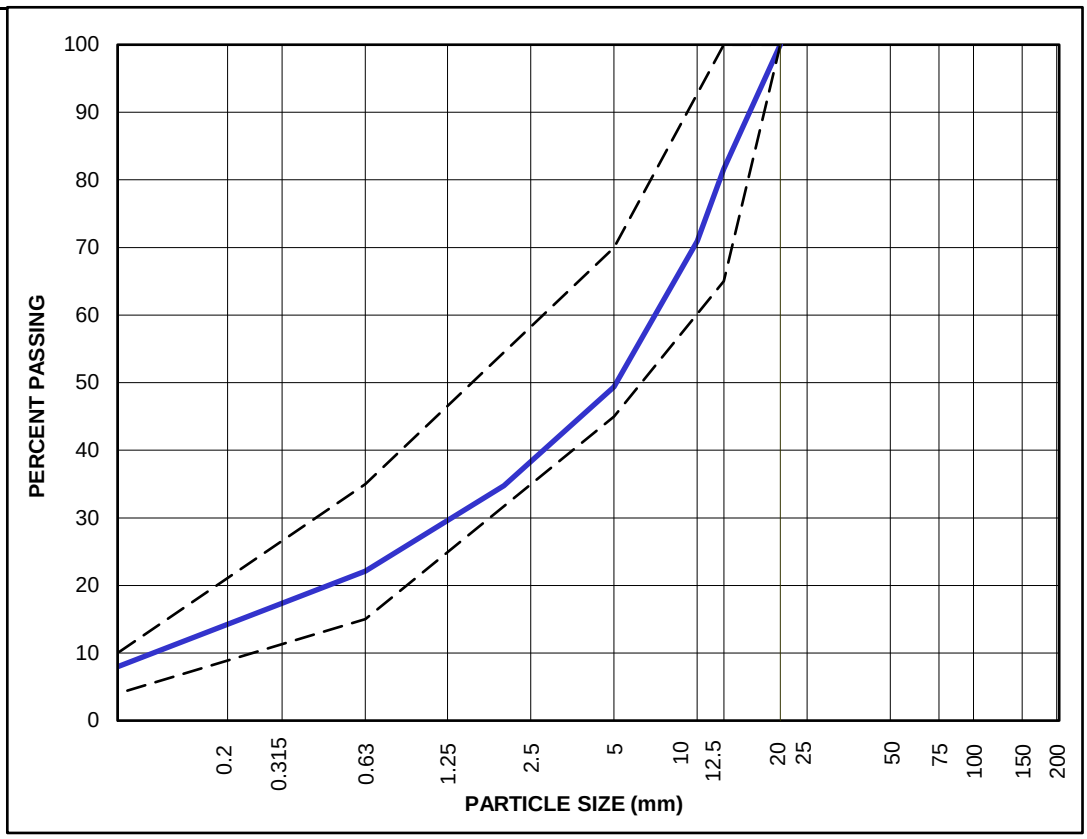
Note - Produced during dayshift

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	**Meliadine Dike Construction**	**SAMPLE NO:**	**SA55**
		SAMPLE DESCRIPTION:	**20 mm minus (Type C Mat.)**
ADDRESS:	**Meliadine Gold Project, NU.**		
PROJECT NO:	**E14103230-01**	**MOISTURE CONT. :**	**2.7%**
DATE SAMPLED:	**May 18/17** **By: IM**		
CLIENT:	**Agnico Eagle Mines Ltd.**	**BULK REL DENSITY:**	**n/a**
ATTENTION:	**Mr. Duy Nguyen**	**BULK REL. DENSITY (SSD):**	**n/a**
		APPARENT REL. DENSITY:	**n/a**
		ABSORPTION:	**n/a**

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	82
10	71
5	49
2	35
0.63	22
0.08	8



Remarks: 20 mm minus particle size distribution limits shown

Sampled from Stockpile

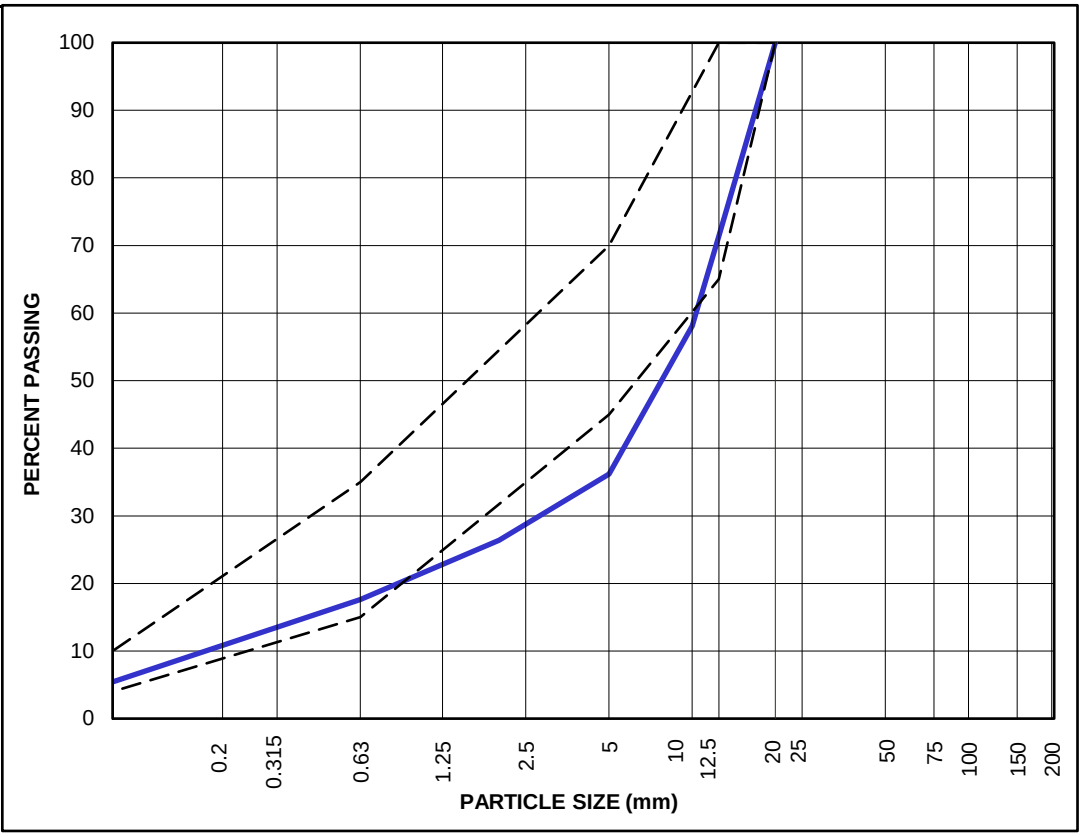
Note - Produced during nightshift

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	**Meliadine Dike Construction**	**SAMPLE NO:**	**SA56**
		SAMPLE DESCRIPTION:	**20 mm minus (Type C Mat.)**
ADDRESS:	**Meliadine Gold Project, NU.**		
PROJECT NO:	**E14103230-01**	**MOISTURE CONT. :**	**2.8%**
DATE SAMPLED:	**May 19/17** **By: IM**		
CLIENT:	**Agnico Eagle Mines Ltd.**	**BULK REL DENSITY:**	**n/a**
ATTENTION:	**Mr. Duy Nguyen**	**BULK REL. DENSITY (SSD):**	**n/a**
		APPARENT REL. DENSITY:	**n/a**
		ABSORPTION:	**n/a**

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	71
10	58
5	36
2	26
0.63	18
0.08	5



Remarks: 20 mm minus particle size distribution limits shown

Sampled from Stockpile

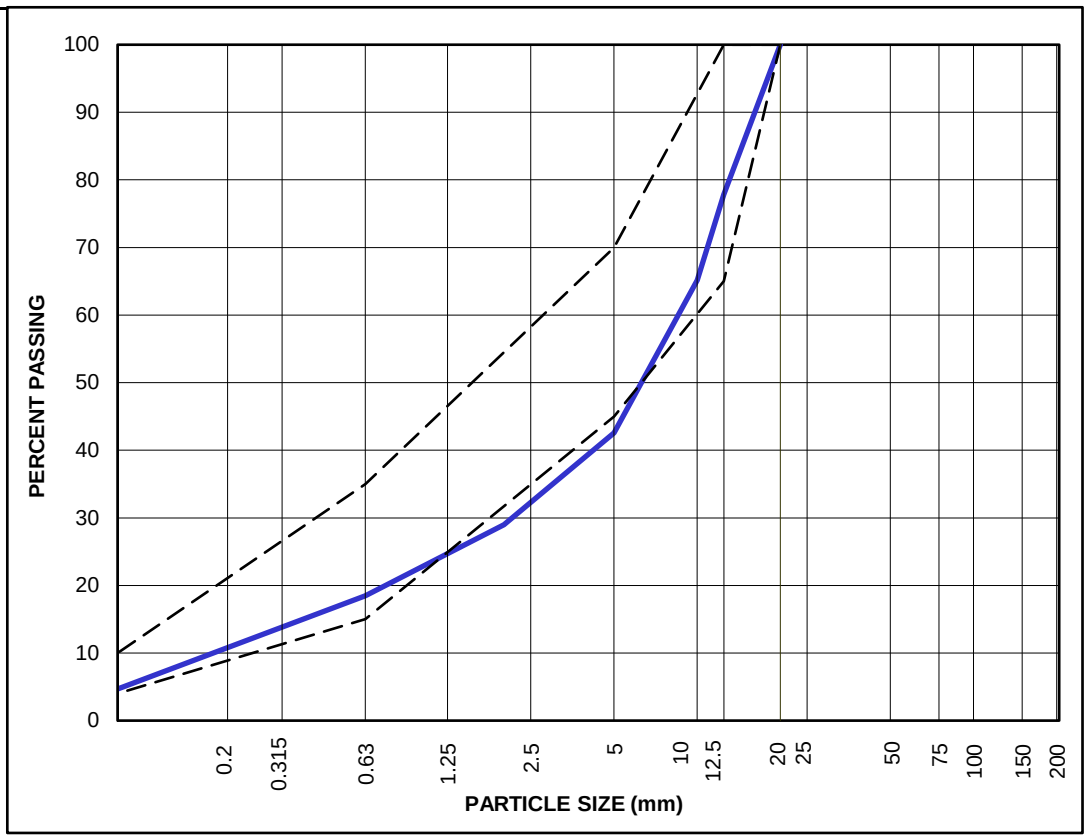
Note - Produced during dayshift

Reviewed by: _____ P.Eng.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	**Meliadine Dike Construction**	**SAMPLE NO:**	**SA57**
		SAMPLE DESCRIPTION:	**20 mm minus (Type C Mat.)**
ADDRESS:	**Meliadine Gold Project, NU.**		
PROJECT NO:	**E14103230-01**	**MOISTURE CONT. :**	**3.9%**
DATE SAMPLED:	**May 20/17** **By: IM**		
CLIENT:	**Agnico Eagle Mines Ltd.**	**BULK REL DENSITY:**	**n/a**
ATTENTION:	**Mr. Duy Nguyen**	**BULK REL. DENSITY (SSD):**	**n/a**
		APPARENT REL. DENSITY:	**n/a**
		ABSORPTION:	**n/a**

PARTICLE SIZE	PERCENT PASSING
20	100
12.5	78
10	65
5	43
2	29
0.63	18
0.08	5



Remarks: 20 mm minus particle size distribution limits shown
Sampled from Stockpile
Note - Produced during dayshift

Reviewed by: _____ P.Eng.

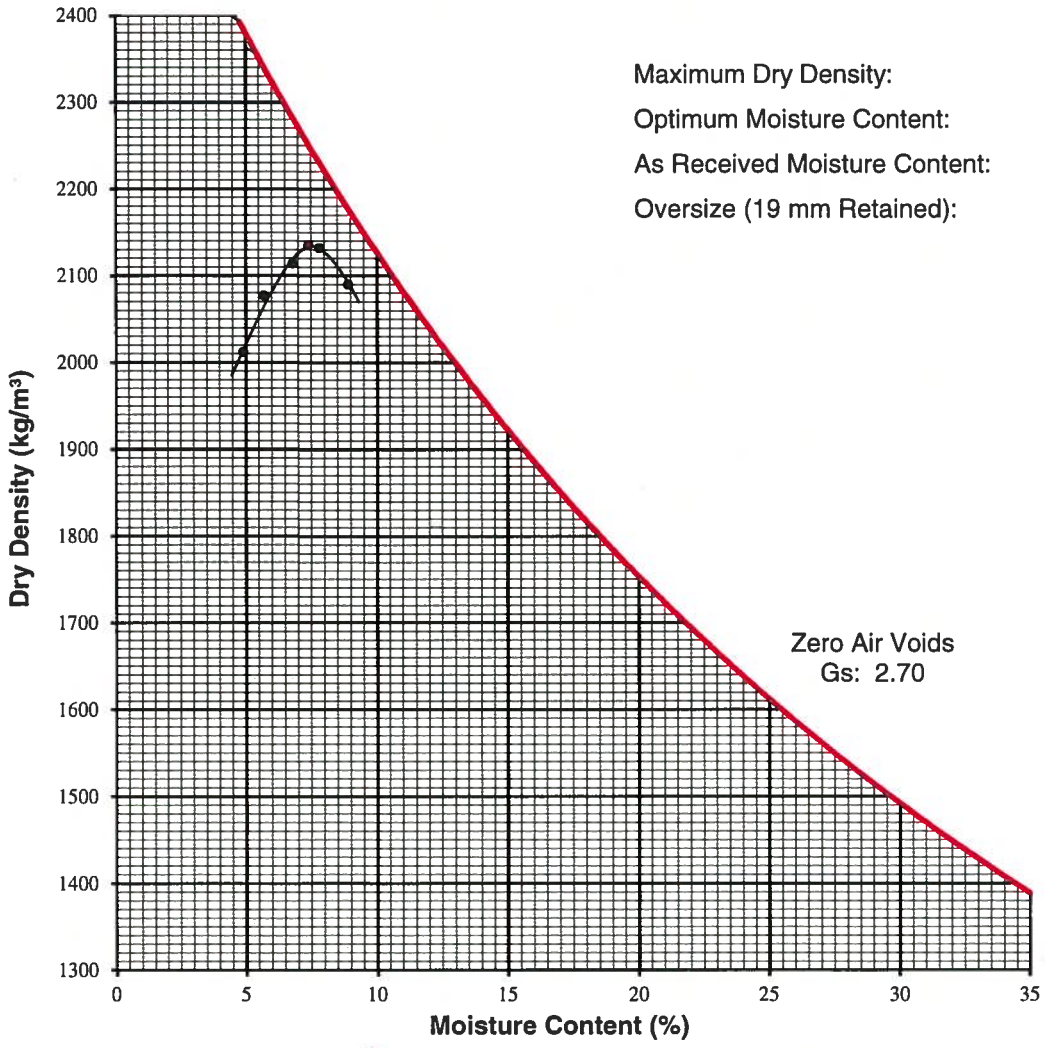
MOISTURE-DENSITY RELATIONSHIP (Proctor) REPORT

ASTM D698 (Standard Proctor)

Project:	Meliadine Gold Project	Sample No.:	Type C, Sample No 1
Project No.:	E14103230-01.023	Sampled By:	Dike QC Team
Client:	Agnico Eagle Mines Ltd	Date Received:	7-Mar-17
Attention:		Test Date:	9-Mar-17
E-mail:		Test By:	MA
Source:	Meliadine Project, Dike Construction	Test Method:	C (Manual)

Sample Location: Type C Stockpile

Sample Description: SAND, some gravel, trace silt, brown



Maximum Dry Density:	**2135**	kg/m³
Optimum Moisture Content:	**7.4**	%
As Received Moisture Content:	3.0	%
Oversize (19 mm Retained):	0	%

Remarks:

Reviewed By: _____ P.Eng.

TETRA TECH

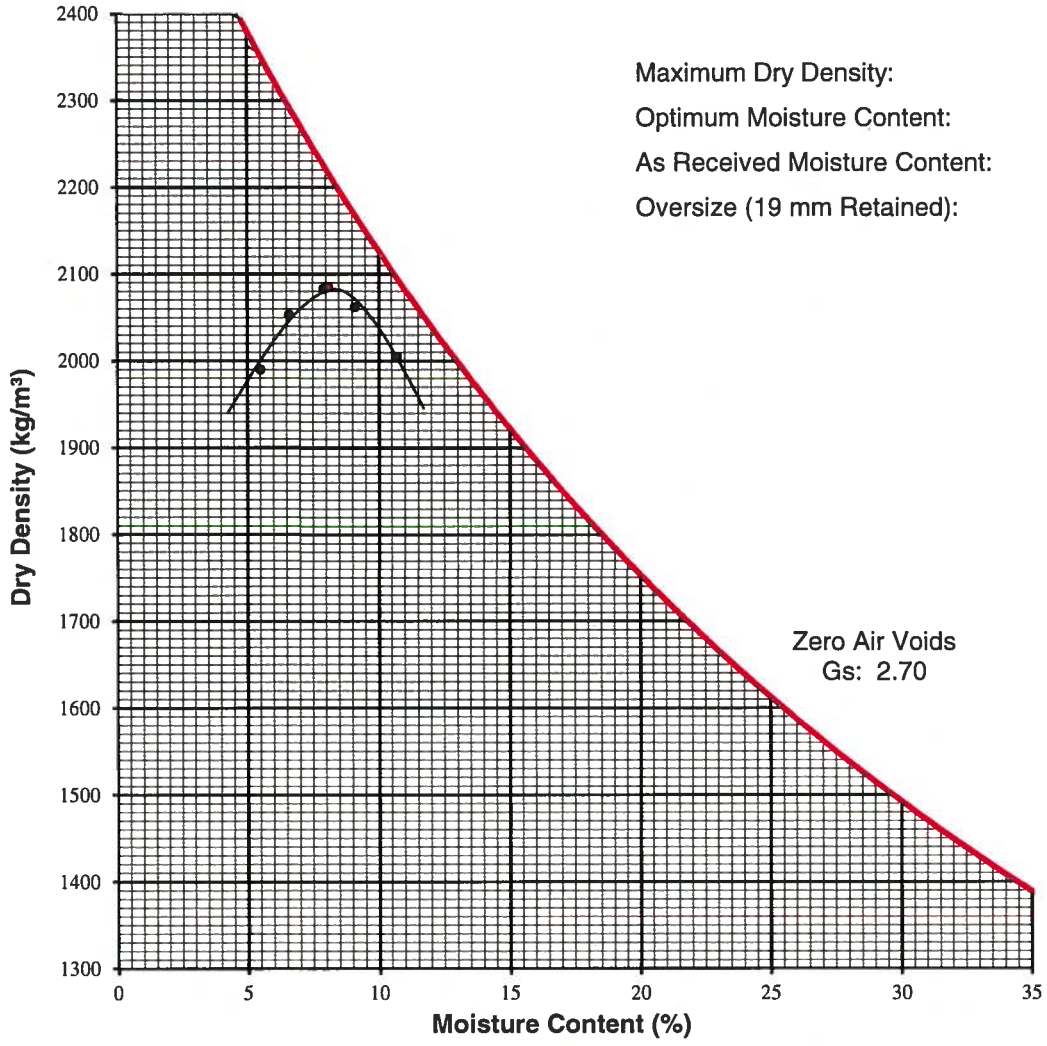
MOISTURE-DENSITY RELATIONSHIP (Proctor) REPORT

ASTM D698 (Standard Proctor)

Project:	Meliadine Gold Project	Sample No.:	Type C, Sample No 2
Project No.:	E14103230-01.023	Sampled By:	Dike QC Team
Client:	Agnico Eagle Mines Ltd	Date Received:	7-Mar-17
Attention:		Test Date:	9-Mar-17
E-mail:		Test By:	MA
Source:	Meliadine Project, Dike Construction	Test Method:	C (Manual)

Sample Location: Type C Stockpile

Sample Description: SAND, some gravel, trace silt, brown



Maximum Dry Density:	**2085**	kg/m³
Optimum Moisture Content:	**8.1**	%
As Received Moisture Content:	2.1	%
Oversize (19 mm Retained):	0	%

Remarks:

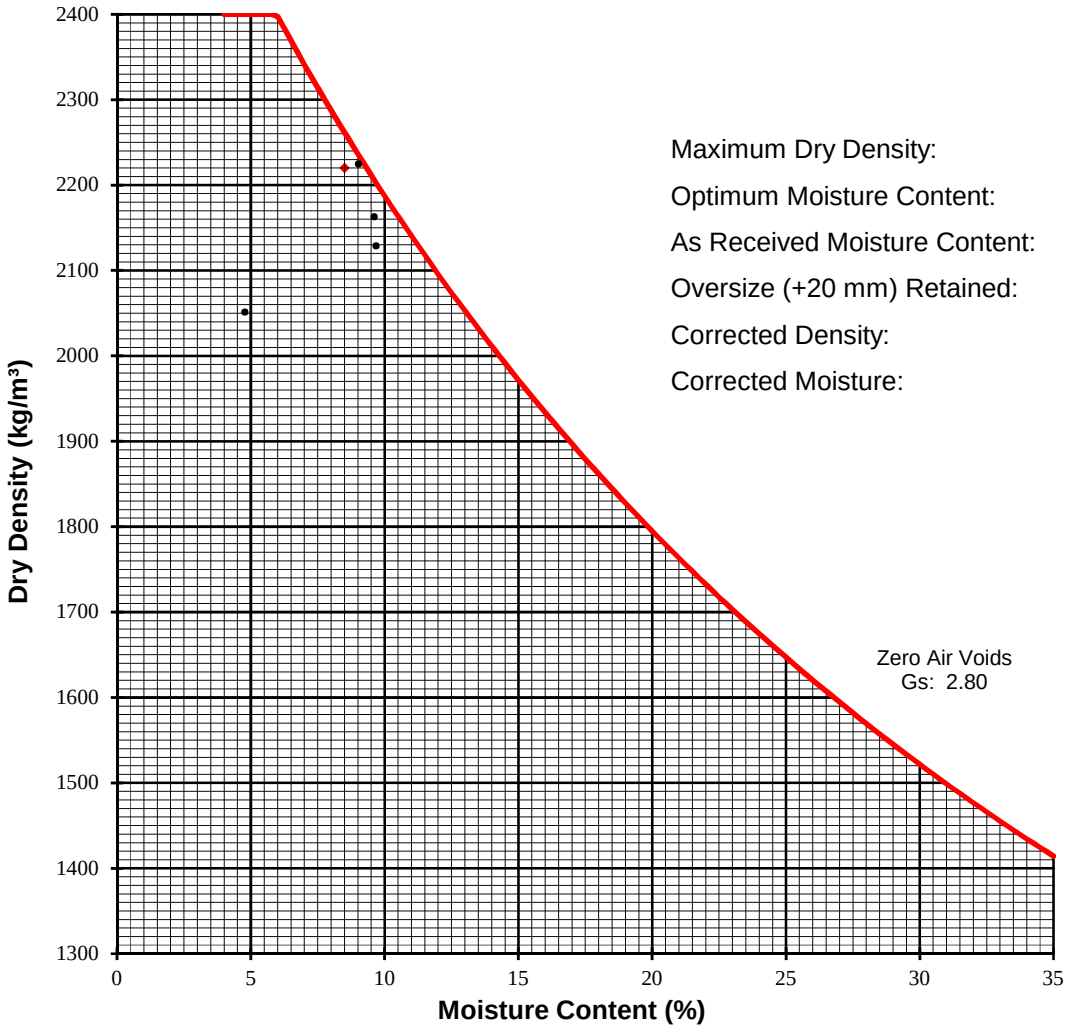
Reviewed By: _____ P.Eng.

TETRA TECH

MOISTURE-DENSITY RELATIONSHIP (Proctor) REPORT

ASTM D698 Standard

Project:	Meliadine Dike Construction	Sample No.:	SA01
Client:	Agnico Eagle	Sampled By:	TW
Attention:		Sample Date:	October 23, 2016
Project No.:	E14103230-01	Test Date:	October 23, 2016
Description:	20mm minus	Preparation:	Moist
Source:	On-Site Stockpile	Compaction:	Manual



Maximum Dry Density:	**2220**	kg/m³
Optimum Moisture Content:	**8.5**	%
As Received Moisture Content:	**5.0**	%
Oversize (+20 mm) Retained:		%
Corrected Density:		%
Corrected Moisture:	**8.5**	%

Remarks:

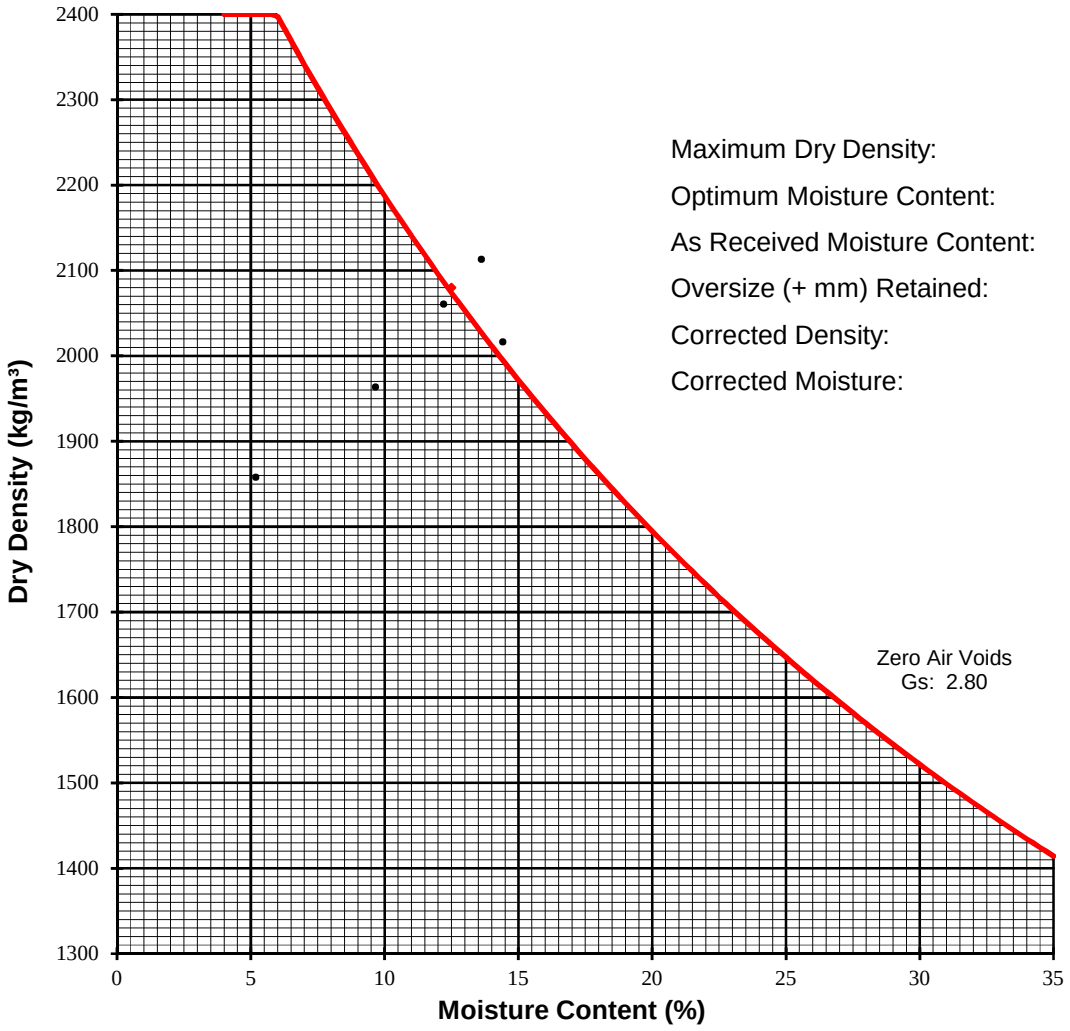
Reviewed By: _____ C.E.T.

TETRA TECH

MOISTURE-DENSITY RELATIONSHIP (Proctor) REPORT

ASTM D698 Standard

Project:	Meliadine Dike Construction	Sample No.:	SA02
Client:	Agnico Eagle	Sampled By:	TW
Attention:	Duy Nguyen	Sample Date:	November 8, 2016
Project No.:	E14103230-01	Test Date:	November 8, 2016
Description:	Type C (20mm agg.)	Preparation:	Moist
Source:	Crusher	Compaction:	Manual



Maximum Dry Density:	**2080**	kg/m³
Optimum Moisture Content:	**12.5**	%
As Received Moisture Content:		%
Oversize (+ mm) Retained:		%
Corrected Density:	**2080**	%
Corrected Moisture:	**12.5**	%

Remarks:

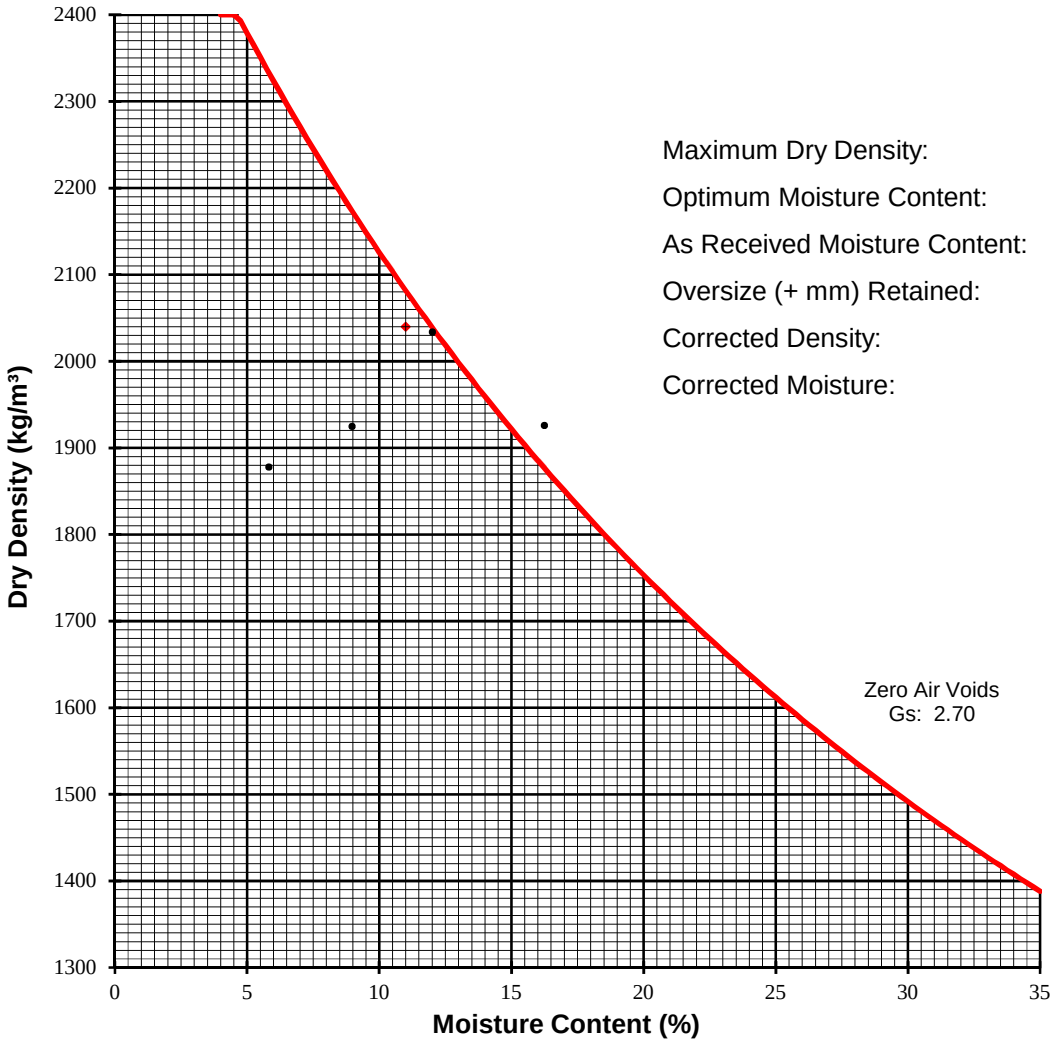
Reviewed By: _____ C.E.T.

TETRA TECH

MOISTURE-DENSITY RELATIONSHIP (Proctor) REPORT

ASTM D698 Standard

Project:	Meliadine Dike Construction	Sample No.:	SA03
Client:	Agnico Eagle	Sampled By:	IM
Attention:	Duy Nguyen	Sample Date:	November 30, 2016
Project No.:	E14103230-01.023	Test Date:	November 30, 2016
Description:	Type C (20 mm agg.)	Preparation:	Moist
Source:	Crusher	Compaction:	Manual



Maximum Dry Density:	**2040**	kg/m³
Optimum Moisture Content:	**11.0**	%
As Received Moisture Content:	**14.3**	%
Oversize (+ mm) Retained:		%
Corrected Density:		%
Corrected Moisture:	**11.0**	%

Remarks: Same material used for Sieve Sample SA37

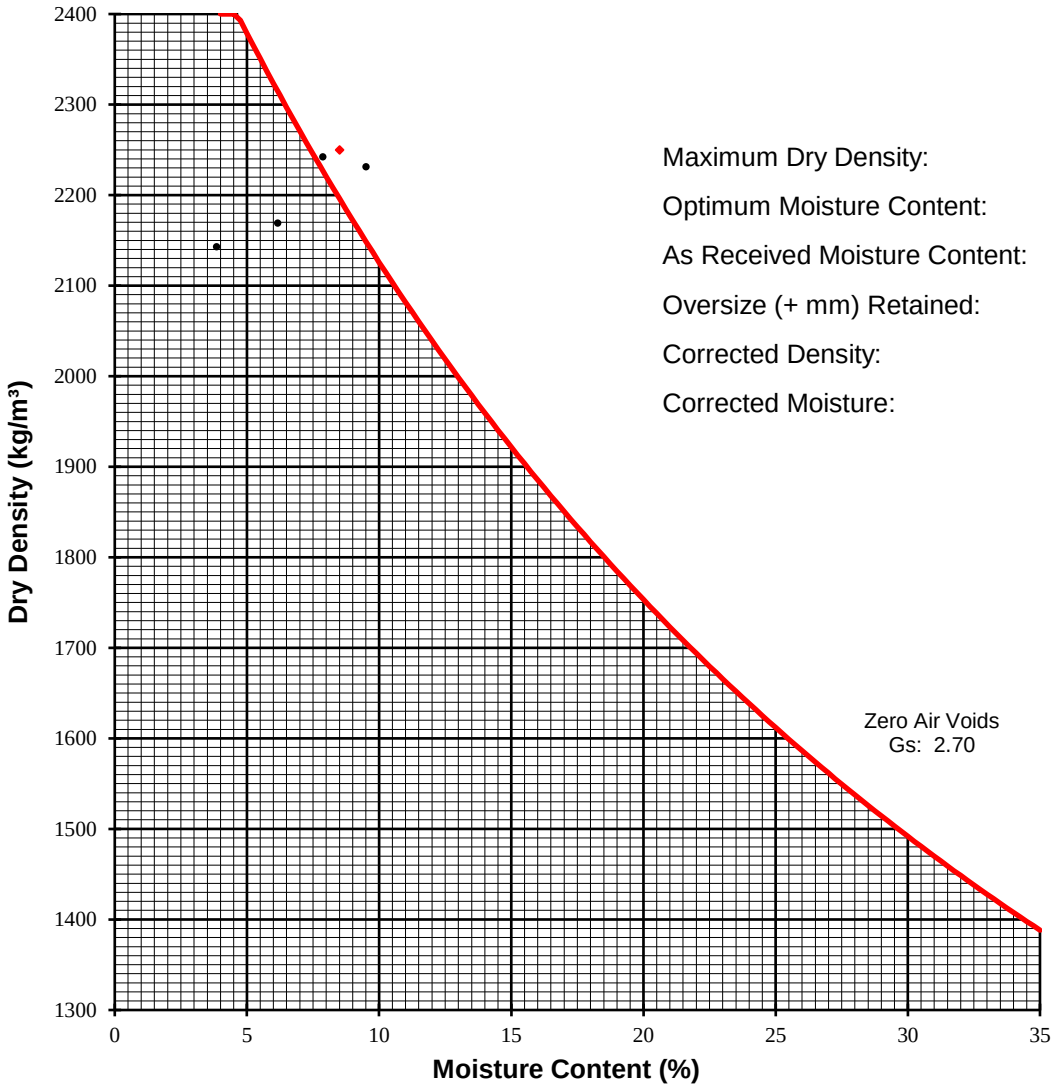
Reviewed By: _____ C.E.T.

TETRA TECH

MOISTURE-DENSITY RELATIONSHIP (Proctor) REPORT

ASTM D698 Standard

Project:	Meliadine Dike Construction	Sample No.:	SA04
Client:	Agnico Eagle	Sampled By:	TW
Attention:	Duy Nguyen	Sample Date:	March 29, 2017
Project No.:	E14103230-01	Test Date:	March 29, 2017
Description:	Type C (20mm agg.)	Preparation:	Moist
Source:	Stockpile	Compaction:	Manual



Maximum Dry Density:	**2250**	kg/m³
Optimum Moisture Content:	**8.5**	%
As Received Moisture Content:		%
Oversize (+ mm) Retained:		%
Corrected Density:	**2080**	%
Corrected Moisture:	**8.5**	%

Remarks:

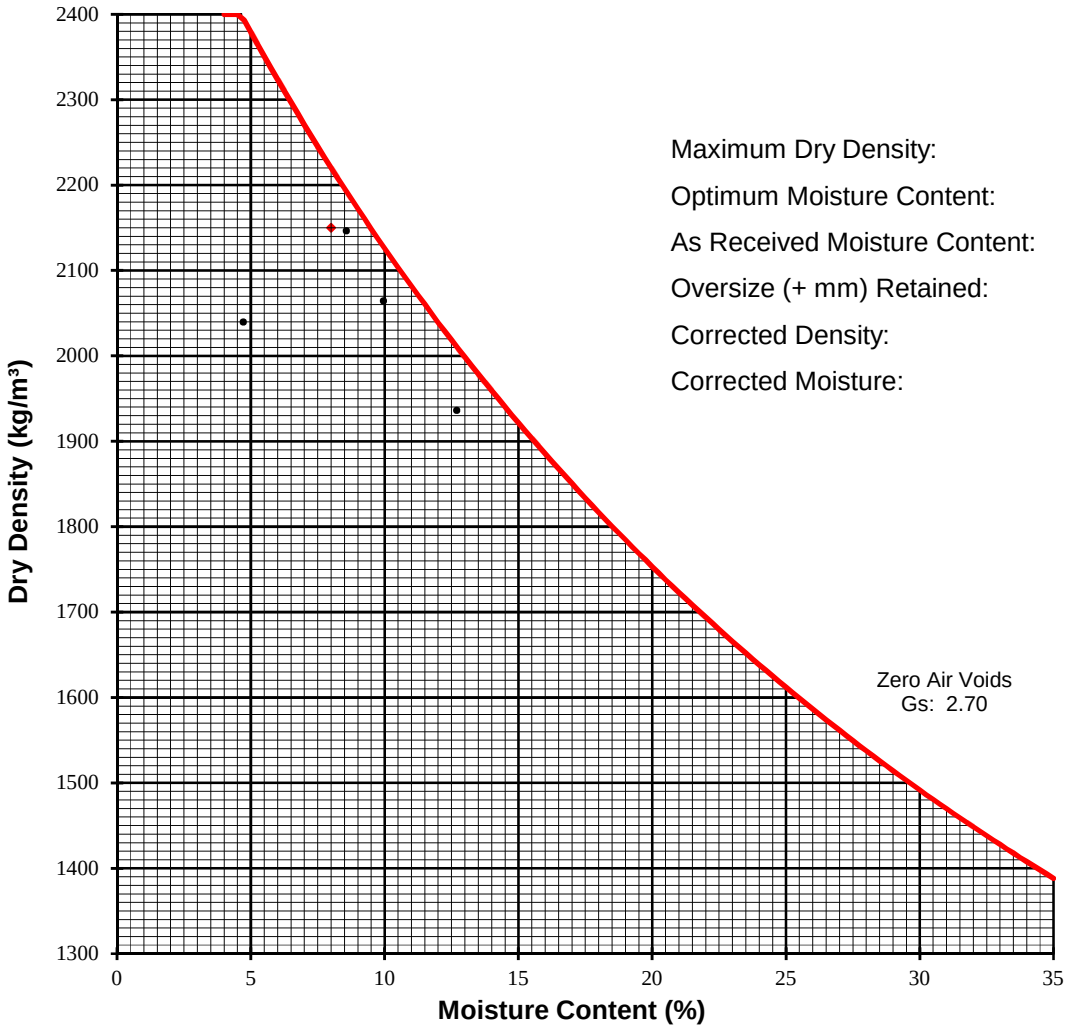
Reviewed By: _____ C.E.T.

TETRA TECH

MOISTURE-DENSITY RELATIONSHIP (Proctor) REPORT

ASTM D698 Standard

Project:	Meliadine Dike Construction	Sample No.:	SA07
Client:	Agnico Eagle	Sampled By:	TW
Attention:	Duy Nguyen	Sample Date:	May 1, 2017
Project No.:	E14103230-01 Task 023	Test Date:	May 1, 2017
Description:	Type C (20mm minus)	Preparation:	Moist
Source:	Type C Stockpile	Compaction:	Manual



Maximum Dry Density:	**2150**	kg/m³
Optimum Moisture Content:	**8.0**	%
As Received Moisture Content:	**12.7**	%
Oversize (+ mm) Retained:		%
Corrected Density:		%
Corrected Moisture:		%

Remarks:

Reviewed By: _____ C.E.T.

TETRA TECH

Table E2.1: Moisture Content Results for Granular Fill (20 mm minus) Material - Type C

Sample No.	Date Tested	Moisture Content (%)	Sample Source
SA01	22-Oct-16	9.3	sampled from belt
SA02	22-Oct-16	7.1	sampled from belt
SA03	22-Oct-16	5.4	sampled from belt
SA04	22-Oct-16	8.7	sampled from belt
SA05	22-Oct-16	6.0	sampled from belt
SA06	24-Oct-16	5.5	sampled from belt
SA07	24-Oct-16	6.3	sampled from belt
SA08	25-Oct-16	5.0	sampled from belt
SA09	26-Oct-16	8.4	sampled from belt
SA10	27-Oct-16	7.1	sampled from belt
SA11	29-Oct-16	6.1	sampled from belt
SA12	1-Nov-16	7.6	sampled from belt
SA13	2-Nov-16	11.0	sampled from belt
SA14	3-Nov-16	5.3	sampled from belt
SA15	5-Nov-16	4.2	sampled from belt
SA16	6-Nov-16	4.9	sampled from belt
SA17	7-Nov-16	8.0	sampled from belt
SA18	8-Nov-16	4.5	sampled from belt
SA19	9-Nov-16	9.4	sampled from belt
SA20	10-Nov-16	9.4	sampled from belt
SA21	12-Nov-16	10.0	sampled from belt
SA22	13-Nov-16	9.9	sampled from belt
SA23	14-Nov-16	5.1	sampled from belt
SA24	17-Nov-16	8.2	sampled from belt
SA25	17-Nov-16	12.4	sampled from stockpile
SA26	17-Nov-16	11.5	sampled from stockpile
SA27	19-Nov-16	11.2	sampled from stockpile
SA28	19-Nov-16	9.2	sampled from stockpile
SA29	19-Nov-16	11.9	sampled from belt
SA30	21-Nov-16	11.1	sampled from belt
SA31	23-Nov-16	4.5	sampled from belt
SA32	23-Nov-16	10.3	sampled from belt
SA33	26-Nov-16	7.5	sampled from stockpile
SA34	26-Nov-16	6.7	sampled from belt
SA35	26-Nov-16	8.0	sampled from stockpile
SA36	29-Nov-16	7.1	sampled from belt
SA37	30-Nov-16	14.3	sampled from belt
SA38	2-Dec-16	13.3	sampled from belt
SA39	3-Dec-16	13.8	sampled from belt
SA40	5-Dec-16	14.4	sampled from belt
SA41	11-Mar-17	6.7	sampled from stockpile
SA42	12-Mar-17	8.2	sampled from belt
SA43	18-Apr-17	11.5	sampled from spread
SA44	29-Apr-17	8.5	sampled from belt
SA45	29-Apr-17	7.8	sampled from belt
SA46	30-Apr-17	6.9	sampled from belt
SA47	30-Apr-17	10.9	sampled from belt
SA48	1-May-17	12.6	sampled from belt
SA49	1-May-17	5.6	sampled from belt

SA50	9-May-17	2.4	sampled from belt
SA51	10-May-17	14.1	sampled from belt
SA52	14-May-17	1.4	sampled from belt
SA53	15-May-17	2.1	sampled from stockpile
SP1	16-Jan-17	15.3	Sampled from stockpile at Mix Pit
SP2	16-Jan-17	15.5	Sampled from stockpile at Mix Pit
SP3	16-Jan-17	8.4	Sampled from North Crusher Stockpile
SP4	16-Jan-17	5.6	Sampled from North Crusher Stockpile
SP5	16-Jan-17	4.2	Sampled from North Crusher Stockpile
SP6	16-Jan-17	6.4	Sampled from North Crusher Stockpile
SP7	16-Jan-17	5.7	Sampled from North Crusher Stockpile
SP8	16-Jan-17	5.3	Sampled from North Crusher Stockpile
SP9	16-Jan-17	16.3	Sampled from Middle Crusher Stockpile, North End
SP10	16-Jan-17	6.2	Sampled from Middle Crusher Stockpile, North End
SP11	16-Jan-17	6.9	Sampled from South Crusher Stockpile
SP12	16-Jan-17	9.4	Sampled from South Crusher Stockpile
SP13	16-Jan-17	8.2	Sampled from South Crusher Stockpile
SP14	16-Jan-17	13.3	Sampled from East Crusher Stockpile
SP15	16-Jan-17	8.7	Sampled from East Crusher Stockpile
SP16	18-Jan-17	6.3	Sampled from Type K Mixing Station
SP17	18-Jan-17	6.8	Sampled from Type K Mixing Station
SP18	18-Jan-17	7.3	Sampled from Type K Mixing Station
SP19	29-Jan-17	10.2	Sampled from reject pile North of Type F Mixing Station
SP20	29-Jan-17	16.9	Sampled from reject pile North of Type F Mixing Station
SP21	29-Jan-17	16.3	Sampled from reject pile North of Type F Mixing Station
SP22	30-Jan-17	7.7	Sampled from stockpile North of Type F Mixing Station
SP23	30-Jan-17	6.3	Sampled from stockpile North of Type F Mixing Station
SP24	31-Jan-17	7.7	Sampled from stockpile used for Type F
SP25	31-Jan-17	7.0	Sampled from stockpile used for Type F
SP26	1-Feb-17	8.2	Sampled from stockpile North of Type F Mixing Station
SP27	11-Feb-17	6.7	Dike D-CP1 fillet zone Station 0+300, -0.3 m
SP28	11-Feb-17	7.4	Dike D-CP1 fillet zone Station 0+340, -0.3 m
SP29	11-Feb-17	6.9	Dike D-CP1 fillet zone Station 0+380, -0.3 m
SP30	16-Mar-17	8.3	Dike D-CP1 first lift over liner Station 0+425
SP31	5-Apr-17	8.2	Recyled Type C from Stockpile
SP32	5-Apr-17	9.0	Recyled Type C from Stockpile
SP33	5-Apr-17	9.1	Recyled Type C from Stockpile
SP34	7-Apr-17	9.2	Recyled Type C from Stockpile
SP35	7-Apr-17	11.8	Recyled Type C from Stockpile
SP36	8-Apr-17	11.4	Recyled Type C from Stockpile
SP37	8-Apr-17	11.5	Recyled Type C from Stockpile
SP38	9-Apr-17	9.2	Recyled Type C from Stockpile
SP39	9-Apr-17	8.6	Recyled Type C from Stockpile
SP40	2-May-17	8.2	Sampled from Type C Stockpile 1
SP41	2-May-17	7.9	Sampled from Type C Stockpile 1
SP42	2-May-17	9.3	Sampled from Type C Stockpile 5
SP43	2-May-17	16.2	Sampled from Type C Stockpile 3 - Material Rejected
SP44	2-May-17	19.8	Sampled from Type C Stockpile 3 - Material Rejected
SP45	5-May-17	6.9	Sampled from Type C stockpile floor
SP46	5-May-17	6.5	Sampled from Type C stockpile floor
SP47	5-May-17	8.4	Sampled from Type C stockpile floor

SP48	13-May-17	5.4	Sampled from Type C stockpile
SP49	13-May-17	4.2	Sampled from Type C stockpile
SP50	13-May-17	3.3	Sampled from Type C stockpile
SP51	13-May-17	4.0	Sampled from Type C stockpile

Average Moisture Content	**8.6%**

Table E2.2: Frozen / In-situ Single Point Proctors for Type C Material

Date/Shift	Material Type	Sample	Mass of Soil in Mold (g)	Mold Volume (cm2)	Frozen Compacted Density (kg/m3)	Mass of Weight Soil and Tare (g)	Mass of Tare (g)	Mass of Dry Soil and Tare (g)	Moisture Content (%)	Dry Density (kg/m3)	Comments
Nov 26, 2016 / NS	Type C	SA01	4056.8	2122.5	1911	3701.3	1650.9	3568.8	6.9	1788	
Mar 5, 2017 / DS	Type C	SA02	3844.0	2122.5	1811	410.8	15.8	382.6	7.7	1682	Type C stockpile at Type F mixing station
Mar 7, 2017 / DS	Type C	SA03	3712.0	2122.5	1749	417.0	16.7	383.7	9.1	1603	Type C stockpile at Type F mixing station
Mar 11, 2017 / DS	Type C	SA04	3874.0	2122.5	1825	670.6	16.9	629.3	6.7	1710	Type C stockpile at Type F mixing station
Mar 12, 2017 / DS	Type C	SA05	3794.0	2122.5	1788	361.5	15.8	332.5	9.2	1638	Type C stockpile at Type F mixing station
April 5, 2017 / NS	Type C	SA06	3858.9	2122.5	1818	3509.4	1651.2	3377.4	7.6	1689	Type C used at DCP5 for U/S fillet
April 17, 2017 / DS	Type C	SA07	3890.0	2122.5	1833	5508.0	1634.0	5130.0	10.8	1654	Type C used at DCP 5 for U/S fillet between Stations 0+210 and 0+270
April 18, 2017 / DS	Type C	SA08	3694.0	2122.5	1740	4334.0	690.0	3934.0	12.3	1549	Sampled from U/s Type C fillet at D-CP5; Station ~0+280
April 30, 2017 / NS	Type C	SA09	3759.0	2126.6	1768	3562.5	695.5	3281.6	10.9	1594	Sampled from crusher belt

D-CP1 Type C Material Field Density Testing (Nuclear Densometer) Summary

Date	Density Test #	Tech	Probe Depth (mm)	Station	Depth from OG (m)	Wet Density (kg/m3)	Moisture Content (%)	Dry Density (kg/m3)	Single Point Frozen Proctor Dry Density - SPFPDD (kg/m3)	% SPFPDD	Standard Proctor Maximum Dry Density - SPMDD (kg/m3)	% SPMDD	Comments
14-Feb-17	1	SH	150	0+420	0.2	1976	6.6	1834	1685	108.8	2100	87.3	Top of Type C u/s fillet (below liner, below Type F hinge point lifts)
14-Feb-17	2	SH	150	0+440	0.2	1934	6.5	1815	1685	107.7	2100	86.4	Top of Type C u/s fillet (below liner, below Type F hinge point lifts)
14-Feb-17	3	SH	150	0+460	0.2	1967	6.7	1844	1685	109.4	2100	87.8	Top of Type C u/s fillet (below liner, below Type F hinge point lifts)
23-Feb-17	4	TW	150	0+512	0.85	1577	10.8	1423	1685	84.5	2100	67.8	5th lift the the Type C u/s fillet (below liner, conducted for Sand Cone Test) Frozen.
23-Feb-17	5	TW	150	0+510	0.85	1635	10.5	1480	1685	87.8	2100	70.5	5th lift the the Type C u/s fillet (below liner, conducted for Sand Cone Test) Frozen.
23-Feb-17	6	TW	150	0+511	0.85	1520	10.5	1376	1685	81.7	2100	65.5	5th lift the the Type C u/s fillet (below liner, conducted for Sand Cone Test) Frozen.
23-Feb-17	7	TW	150	0+567	0.85	1603	9.4	1465	1685	86.9	2100	69.8	5th lift the the Type C u/s fillet (below liner, conducted for Sand Cone Test) Frozen.
23-Feb-17	8	TW	150	0+565	0.85	1564	9.3	1431	1685	84.9	2100	68.1	5th lift the the Type C u/s fillet (below liner, conducted for Sand Cone Test) Frozen.
23-Feb-17	9	TW	150	0+566	0.85	1583	8.7	1457	1685	86.5	2100	69.4	5th lift the the Type C u/s fillet (below liner, conducted for Sand Cone Test) Frozen.
19-Mar-17	10	TW	200	0+519	0.2	1797	5.8	1699	1685	100.8	2100	80.9	Final lift of Type C material u/s fillet, frozen
19-Mar-17	11	TW	200	0+520	0.2	1796	6.6	1685	1685	100.0	2100	80.2	Final lift of Type C material u/s fillet, frozen
19-Mar-17	12	TW	200	0+521	0.2	1837	6.2	1729	1685	102.6	2100	82.3	Final lift of Type C material u/s fillet, frozen
22-Mar-17	13	TW	200	0+531	0.2	1814	6.8	1698	1685	100.8	2100	80.9	Final lift of Type C material u/s fillet, frozen
22-Mar-17	14	TW	200	0+531	0.2	1784	6.8	1670	1685	99.1	2100	79.5	Final lift of Type C material u/s fillet, frozen
22-Mar-17	15	TW	150	0+532	0.2	1747	6.1	1647	1685	97.7	2100	78.4	Final lift of Type C material u/s fillet, frozen
22-Mar-17	16	TW	200	0+530	0.2	1792	6.5	1683	1685	99.9	2100	80.1	Final lift of Type C material u/s fillet, frozen
23-Mar-17	17	TW	200	0+570	0.2	1784	5.7	1689	1685	100.2	2100	80.4	Final lift of Type C material u/s fillet, frozen
23-Mar-17	18	TW	200	0+570	0.2	1780	6.1	1680	1685	99.7	2100	80.0	Final lift of Type C material u/s fillet, frozen
23-Mar-17	19	TW	200	0+571	0.2	1760	5.8	1663	1685	98.7	2100	79.2	Final lift of Type C material u/s fillet, frozen
23-Mar-17	20	TW	200	0+570	0.2	1759	6.2	1656	1685	98.3	2100	78.9	Final lift of Type C material u/s fillet, frozen
28-Mar-17	21	TW	200	0+260	1.45	1783	8.3	1646	1685	97.7	2100	78.4	3rd lift of the D/S Fillet -frozen
28-Mar-17	22	TW	200	0+280	1.45	1807	7.8	1677	1685	99.5	2100	79.9	3rd lift of the D/S Fillet -frozen
28-Mar-17	23	TW	200	0+300	1.45	1788	7.2	1668	1685	99.0	2100	79.4	3rd lift of the D/S Fillet -frozen
28-Mar-17	24	TW	200	0+370	1.15	1794	6.6	1683	1685	99.9	2100	80.1	4th lift of the D/S Fillet -frozen
28-Mar-17	25	TW	200	0+400	1.15	1742	6.5	1636	1685	97.1	2100	77.9	4th lift of the D/S Fillet -frozen
28-Mar-17	26	TW	200	0+420	1.15	1762	5.6	1669	1685	99.1	2100	79.5	4th lift of the D/S Fillet -frozen
28-Mar-17	27	TW	200	0+450	1.15	1777	7.2	1658	1685	98.4	2100	79.0	4th lift of the D/S Fillet. Used as a control strip (8 passes with 10t) -frozen
28-Mar-17	28	TW	200	0+450	1.15	1779	6.8	1665	1685	98.8	2100	79.3	4th lift of the D/S Fillet. Used as a control strip (12 passes with 10t) -frozen
28-Mar-17	29	TW	200	0+450	1.15	1812	6.9	1696	1685	100.7	2100	80.8	4th lift of the D/S Fillet. Used as a control strip (16 passes with 10t) -frozen
29-Mar-17	30	IM	200	0+360	0 (O.G)	1861	6.1	1754	1685	104.1	2100	83.5	7th Lift of D/S Fillet - Min. 8 Passes with CS563E 10t - Frozen.
29-Mar-17	31	IM	200	0+340	0 (O.G)	1848	6.6	1733	1685	102.8	2100	82.5	7th Lift of D/S Fillet - Min. 8 Passes with CS563E 10t - Frozen.
29-Mar-17	32	IM	200	0+320	0 (O.G)	1789	9.7	1631	1685	96.8	2100	77.7	7th Lift of D/S Fillet - Min. 8 Passes with CS563E 10t - Frozen.
30-Mar-17	33	TW	200	0+460	0 (O.G)	1823	7.2	1700	1685	100.9	2100	81.0	7th Lift of D/S Fillet - Min. 8 Passes with CS563E 10t - Frozen.
30-Mar-17	34	TW	200	0+485	0 (O.G)	1854	6.2	1746	1685	103.6	2100	83.1	7th Lift of D/S Fillet - Min. 8 Passes with CS563E 10t - Frozen.
30-Mar-17	35	TW	200	0+520	0 (O.G)	1844	7.3	1718	1685	102.0	2100	81.8	7th Lift of D/S Fillet - Min. 8 Passes with CS563E 10t - Frozen.
30-Mar-17	36	TW	200	0+528	0 (O.G)	1911	5.1	1819	1685	108.0	2100	86.6	7th Lift of D/S Fillet - Min. 8 Passes with CS563E 10t - Frozen.
31-Mar-17	37	WW	200	0+260	0 (O.G)	1823	6.1	1718	1685	102.0	2100	81.8	7th Lift of D/S Fillet - Min. 8 Passes with CS563E 10t - Frozen.
31-Mar-17	38	WW	200	0+280	0 (O.G)	1676	6.4	1574	1685	93.4	2100	75.0	7th Lift of D/S Fillet - Min. 8 Passes with CS563E 10t - Frozen.
26-Apr-17	39	TW	200	1+466	65.5 elev	1799	8.5	1658	1685	98.4	2100	79.0	4th lift of Type C material on U/S slope (below liner) -Frozen
26-Apr-17	40	TW	200	1+490	65.5 elev	1833	9.5	1674	1685	99.3	2100	79.7	4th lift of Type C material on U/S slope (below liner) -Frozen
26-Apr-17	41	TW	200	1+490	65.5 elev	1803	9.5	1647	1685	97.7	2100	78.4	4th lift of Type C material on U/S slope (below liner) -Frozen
26-Apr-17	42	TW	200	1+490	65.5 elev	1796	8.9	1649	1685	97.9	2100	78.5	4th lift of Type C material on U/S slope (below liner) -Frozen
26-Apr-17	43	TW	200	1+490	65.5 elev	1810	9.3	1656	1685	98.3	2100	78.9	4th lift of Type C material on U/S slope (below liner) -Frozen
26-Apr-17	44	TW	200	1+510	65.5 elev	1809	9.6	1651	1685	98.0	2100	78.6	4th lift of Type C material on U/S slope (below liner) -Frozen
26-Apr-17	45	TW	200	1+360	63.5 elev	1788	9.0	1640	1685	97.4	2100	78.1	1st lift of Type C on U/S slope (below liner) -Thawing
26-Apr-17	46	TW	200	1+400	63.5 elev	1841	9.8	1677	1685	99.5	2100	79.8	1st lift of Type C on U/S slope (below liner) -Thawing
26-Apr-17	47	TW	200	1+460	65.8 elev	1914	8.2	1769	1685	105.0	2100	84.2	5th lift of Type C on U/S slope (below liner -Thawing
26-Apr-17	48	IM	200	1+455	64.6 elev	1844	9.2	1689	1685	100.2	2100	80.4	Material Frozen, adequate and consistent compactive effort applied
26-Apr-17	49	IM	200	1+425	64.3 elev	1664	9.4	1521	1685	90.3	2100	72.4	Material Frozen, adequate and consistent compactive effort applied
26-Apr-17	50	IM	200	1+423	64.3 elev	1801	9.8	1640	1685	97.3	2100	78.1	Material Frozen, adequate and consistent compactive effort applied
26-Apr-17	51	IM	200	1+405	64 elev	1814	7.7	1684	1685	100.0	2100	80.2	Material Frozen, adequate and consistent compactive effort applied
26-Apr-17	52	IM	200	1+345	63.1 elev	1792	9.3	1640	1685	97.3	2100	78.1	Material Frozen, adequate and consistent compactive effort applied
26-Apr-17	53	IM	200	1+300	62.8 elev	1669	10.1	1516	1685	90.0	2100	72.2	Material Frozen, adequate and consistent compactive effort applied
27-Apr-17	54	TW	200	1+315	63.88 elev	1820	8.8	1673	1685	99.3	2100	79.7	Material Frozen, adequate and consistent compactive effort applied
27-Apr-17	55	TW	200	1+290	63.88 elev	1866	9.6	1703	1685	101.0	2100	81.1	Material Frozen, adequate and consistent compactive effort applied
27-Apr-17	56	TW	200	1+245	63.55 elev	1823	9.7	1662	1685	98.6	2100	79.1	Material Frozen, adequate and consistent compactive effort applied
27-Apr-17	57	TW	200	1+218	63.55 elev	1825	9.8	1662	1685	98.6	2100	79.1	Material Frozen, adequate and consistent compactive effort applied
27-Apr-17	58	IM	200	1+475	65.4 elev	1839	9.3	1683	1685	99.9	2100	80.1	Material Frozen, adequate and consistent compactive effort applied
27-Apr-17	59	IM	200	1+410	65.1 elev	1749	7.6	1625	1685	96.5	2100	77.4	Material Frozen, adequate and consistent compactive effort applied
27-Apr-17	60	IM	200	1+430	65.15 elev	1918	8.9	1761	1685	104.5	2100	83.9	Material Frozen, adequate and consistent compactive effort applied
27-Apr-17	61	IM	200	1+335	64.9 elev	1833	8.0	1697	1685	100.7	2100	80.8	Material Frozen, adequate and consistent compactive effort applied
28-Apr-17	62	TW	200	1+200	63.86 elev	1791	7.3	1669	1685	99.1	2100	79.5	Material Frozen, adequate and consistent compactive effort applied
28-Apr-17	63	TW	200	1+150	63.86 elev	1835	9.3	1679	1685	99.6	2100	79.9	Material Frozen, adequate and consistent compactive effort applied
28-Apr-17	64	TW	200	1+515	65.7 elev	1770	8.3	1634	1685	97.0	2100	77.8	Material Frozen, adequate and consistent compactive effort applied
28-Apr-17	65	TW	200	1+450	65.7 elev	1866	7.8	1731	1685	102.7	2100	82.4	Material Frozen, adequate and consistent compactive effort applied
29-Apr-17	66	IM	200	1+085	65.9 elev	1845	7.7	1713	1685	101.7	2100	81.6	Material Frozen, adequate and consistent compactive effort applied
29-Apr-17	67	IM	200	1+065	66.5 elev	1842	8.6	1696	1685	100.7	2100	80.8	Material Frozen, adequate and consistent compactive effort applied
28-May-17	68	IM	200	1+230	67.5 m	2138	3.5	2066	1685	122.6	2100	98.4	Top lift of Type C under liner
28-May-17	69	IM	200	1+255	67.5 m	2162	3.6	2087	1685	123.9	2100	99.4	Top lift of Type C under liner
28-May-17	70	IM	200	1+280	67.5 m	2127	4.9	2028	1685	120.3	2100	96.6	Top lift of Type C under liner
28-May-17	71	IM	200	1+350	67.5 m	2165	3.6	2090	1685	124.0	2100	99.5	Top lift of Type C under liner

Dike D-CP1 Type C Material Sand Cone Tests Summary

Date	Material Type	Station	Dry Density (Densometer Avg.) (kg/m3)	Densometer Moisture Content (% Avg.)	Bentonite placed (g)	Bentonite Bulk Density (kg/m3)	Pit Volume (m3)	Soil Weight (g)	Soil Bulk Density (kg/m3)	Moisture Content (%)	Soil Dry Density (kg/m3)	Comments
23-Feb-17	Type C	0+565	1426.3	10.6	3642	1056	0.00345	5412	1569.2	11.9	1402.3	TW- Type C Material was frozen
23-Feb-17	Type C	0+510	1451	9.1	4908	1056	0.00465	8132	1749.7	9.4	1599.3	TW- Type C Material was frozen
19-Mar-17	Type C	0+520	1704	6.2	5480	1056	0.00519	11268	2171.4	7.6	2018.0	TW/IM- Type C Material was frozen
22-Mar-17	Type C	0+530	1675	6.6	4868	1056	0.00461	8778	1904.2	8.1	1761.5	TW/FN- Type C Material was frozen
23-Mar-17	Type C	0+570	1672	5.95	5092	1056	0.00482	9772	2027	7.3	1888.7	TW- Type C Material was frozen
26-Apr-17	Type C	1+490	1660	9	3090	1064	0.00290	6446.0	2220	10.5	2008.7	TW- 4th lift of Type C on U/S slope (below liner) Elev. 65.5m approx.

APPENDIX E3

TYPE F MATERIAL QA/QC TEST RESULTS

Table E3.1: Moisture Content Results for Bentonite Augmented Material - Type F

Sample No.	Date Tested	Moisture Content (%)	Sample Source
SA01	29-Jan-17	8.2	20 mm minus mixed with bentonite
SA02	30-Jan-17	7.2	20 mm minus mixed with bentonite
SA03	31-Jan-17	8.4	20 mm minus mixed with bentonite
SA04	31-Jan-17	7.4	20 mm minus mixed with bentonite
SA05	1-Feb-17	8.0	20 mm minus mixed with bentonite
SA06	18-Feb-17	6.4	20 mm minus mixed with bentonite

Average Moisture Content	7.6%

Table E3.2: Frozen / In-situ Single Point Proctors for Type F Material

Date/Shift	Material Type	Sample	Mass of Soil in Mold (g)	Mold Volume (cm3)	Frozen Compacted Density (kg/m3)	Mass of Wet Soil and Tare (g)	Mass of Tare (g)	Mass of Dry Soil and Tare (g)	Moisture Content (%)	Dry Density (kg/m3)	Comments
Nov 20, 2016 / NS	Type F	SA01	3847.6	2122.5	1813	4024.1	1643.7	3850.6	7.9	1681	
Nov 26, 2016 / NS	Type F	SA02	3879.6	2122.5	1828	1961.1	681.6	1839.4	10.5	1654	
Jan 31, 2017 / DS	Type F	SA03	3662.3	2122.5	1725	2690.7	696.7	2536.2	8.4	1592	
Jan 31, 2017 / DS	Type F	SA04	3712.4	2122.5	1749	2675.5	694.8	2539.3	7.4	1629	
Jan 31, 2017 / NS	Type F	SA05	3704.5	2122.5	1736	2783.5	693.2	2629.5	8.0	1608	
Feb 1, 2017 / DS	Type F	SA06	3707.0	2122.4	1747	2965.8	697.6	2814.9	7.1	1631	
Feb 1, 2017 / NS	Type F	SA07	3704.5	2122.5	1736	2783.5	693.2	2629.5	8.0	1608	
March 14, 2017 / DS	Type F	SA08	3865.4	2122.5	1821	160.2	4.3	148.2	8.3	1681	Mixing station - sampled from batch after mixing
April 10, 2017 / DS	Type F	SA09	3804.0	2122.5	1792	1438.6	690.3	1363.0	11.2	1611	

Dike D-CP1 Type F Material Density Tests by Densometer Summary Results

Date	Density Test #	Probe Depth (mm)	Station	Depth from OG (m)	Wet Density (kg/m3)	Moisture Content (%)	Dry Density (kg/m3)	Single Point Frozen Proctor Dry Density - SPFPDD (kg/m3)	% SPFPDD	Standard Proctor Maximum Dry Density - SPMDD (kg/m3)	% SPMDD	Comments
Dec 3/16	001	150	0+110	1.8	1765	8.8	1622	1632	99.4	Not Tested	Not Tested	SH - Top of Type F below liner - frozen
Dec 3/16	002	150	0+117	1.8	1881	5.5	1783	1632	109.2	-	-	SH - Top of Type F below liner - frozen
Dec 3/16	003	150	0+155	1.8	1919	6.3	1805	1632	110.6	-	-	IM - Top of Type F below liner - frozen
Dec 3/16	004	150	0+140	1.8	1896	6.4	1782	1632	109.2	-	-	IM - Top of Type F below liner - frozen
Dec 3/16	005	150	0+125	1.8	1886	6.3	1774	1632	108.7	-	-	IM - Top of Type F below liner - frozen
Dec 11/16	006	150	0+245	-	1833	6.0	1729	1632	106.0	-	-	IM - Top of Type F at U/S hinge point below liner - Frozen
Dec 11/16	007	150	0+260	-	1862	6.3	1752	1632	107.3	-	-	IM - Top of Type F at U/S hinge point below liner - Frozen
Dec 11/16	008	150	0+275	-	1893	5.9	1788	1632	109.5	-	-	IM - Top of Type F at U/S hinge point below liner - Frozen
Feb 20/17	009	200	0+545	G	1734	7.3	1616	1632	99.0	-	-	TW- Top of Type F (below liner) SPMDD based on single point proctor avg.-Frozen
Feb 20/17	010	200	0+555	G	1727	7.5	1607	1632	98.4	-	-	TW- Top of Type F (below liner) SPMDD based on single point proctor avg.-Frozen
Feb 20/17	011	200	0+575	G	1802	7.6	1675	1632	102.6	-	-	TW- Top of Type F (below liner) SPMDD based on single point proctor avg.-Frozen
Feb 20/17	012	200	0+515	G	1879	8.7	1729	1632	105.9	-	-	TW- Top of Type F (below liner) SPMDD based on single point proctor avg.-Frozen
March 06/17	013	100	0+284		1790	7.8	1660	1632	101.7	-	-	TW- First lift of Type F fillet (above liner) between 0+290 & 0+313.-Frozen
March 06/17	014	100	0+285		1788	6.5	1679	1632	102.9	-	-	TW- First lift of Type F fillet (above liner) between 0+290 & 0+313.-Frozen
March 06/17	015	100	0+286		1782	6.8	1669	1632	102.2	-	-	TW- First lift of Type F fillet (above liner) between 0+290 & 0+313.-Frozen
March 06/17	016	150	0+304		1834	7.2	1711	1632	104.8	-	-	TW- Second lift of Type F fillet (above liner) between 0+290 & 0+313. -Frozen
March 06/17	017	150	0+305		1821	7.1	1700	1632	104.2	-	-	TW- Second lift of Type F fillet (above liner) between 0+290 & 0+313. -Frozen
March 06/17	018	150	0+305		1795	6.5	1685	1632	103.3	-	-	TW- Second lift of Type F fillet (above liner) between 0+290 & 0+313. -Frozen
March 22/17	019	150	0+542	G	1817	5.9	1716	1632	105.1	-	-	TW- Top of Type F hingepoint (below liner) between 0+525 & 0+545 -Frozen
March 22/17	020	150	0+542	G	1802	6.4	1694	1632	103.8	-	-	TW- Top of Type F hingepoint (below liner) between 0+525 & 0+545 -Frozen
March 22/17	021	150	0+543	G	1822	5.5	1727	1632	105.8	-	-	TW- Top of Type F hingepoint (below liner) between 0+525 & 0+545 -Frozen
March 22/17	022	150	0+543	G	1827	6.3	1719	1632	105.3	-	-	TW- Top of Type F hingepoint (below liner) between 0+525 & 0+545 -Frozen

Dike D-CP1 Type F Sand Cone Density Tests Summary

Date	Material Type	Dry Density (Densometer Avg.) (kg/m3)	Densometer Moisture Content (% Avg.)	Bentonite placed (g)	Bentonite Bulk Density (kg/m3)	Pit Volume (m3)	Soil weight (g)	Soil Bulk Density (kg/m3)	Moisture Content (%)	Soil Dry Density (kg/m3)	Comments
6-Mar-17	Type F	1669	7	4282	1056	0.0041	8386	2068.1	5.9	1952.9	
6-Mar-17	Type F	1699	6.9	5682	1056	0.0054	10278	1910.2	4.0	1836.7	
22-Mar-17	Type F	1714	6	5074	1056	0.0048	9662.0	2010.9	7.3	1874.0	

APPENDIX E4

TYPE H MATERIAL QA/QC TEST RESULTS

Table E4.1: Moisture Content Results for Type H Material

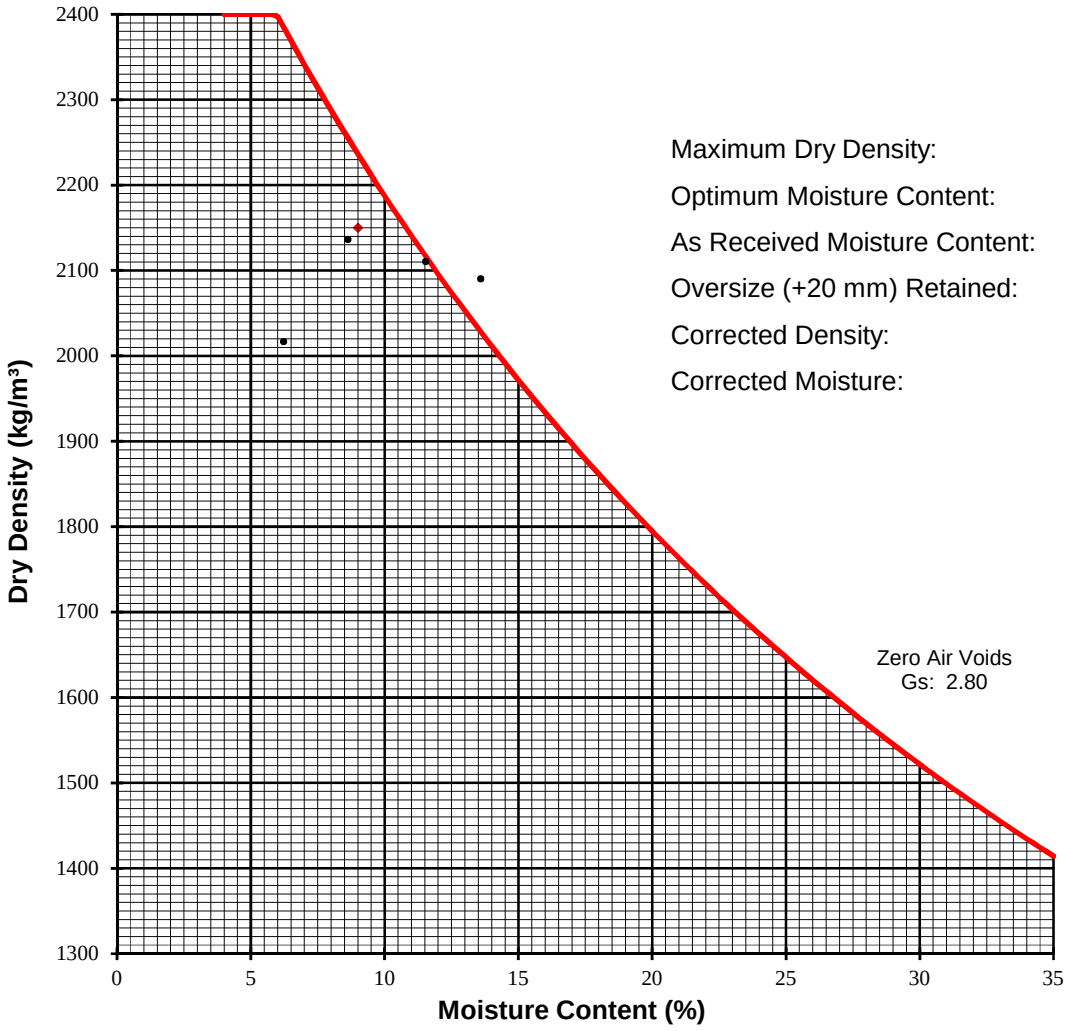
Sample No.	Date Tested	Moisture Content (%)	Sample Source
SA01	22-Oct-16	4.1	Sampled from Type H stockpile
SA02	22-Oct-16	3.7	Sampled from Type H stockpile
SA03	26-Oct-16	3.3	Sampled from Type H stockpile
SA04	26-Oct-16	3.3	Sampled from Type H stockpile
SA05	01-Dec-16	10.2	Sampled from Type H stockpile
SA06	09-Dec-16	11.2	Sampled from Type H stockpile
SA07	10-Dec-16	12.6	Sampled from Type H stockpile - rejected
SA08	11-Dec-16	9.2	Sampled from Type H stockpile
SA09	11-Dec-16	11.1	Sampled from Type H stockpile
SA10	12-Dec-16	11.3	Sampled from Type H stockpile
SA11	04-Apr-17	11.5	Sampled from Type H stockpile
SA12	04-Apr-17	15.6	Sampled from Type H stockpile - rejected
SA13	06-Apr-17	12.9	Sampled from recycled Type H stockpile - rejected
SA14	06-Apr-17	9.4	Sampled from Type H stockpile
SA15	19-Apr-17	14.1	Sampled from Type H stockpile
SA16	19-Apr-17	2.5	Sampled from Type H stockpile - rejected
SA17	19-Apr-17	10.2	Sampled from Type H stockpile
SA18	20-Apr-17	8.1	Sampled from Type H stockpile
SA19	21-Apr-17	15.8	Sampled from Type H stockpile - rejected
SA20	22-Apr-17	10.5	Sampled from Type H stockpile
SA21	23-Apr-17	9.2	Sampled from Type H stockpile
SA22	26-Apr-17	8	Sampled from Type H stockpile
SA23	27-Apr-17	12.2	Sampled from Type H stockpile
SA24	02-May-17	7.2	Sampled from Type H stockpile
SA25	03-May-17	3.7	Sampled from Type H stockpile
SA26	04-May-17	3.4	Sampled from Type H stockpile
SA27	05-May-17	3.4	Sampled from Type H stockpile
SA28	18-May-17	3.3	Sampled from Type H stockpile
SA29	19-May-17	5.6	Sampled from Type H stockpile
SA30	20-May-17	4.7	Sampled from Type H stockpile
SA31	01-Jun-17	5.3	Sampled from Type H stockpile
SA32	01-Jun-17	4.2	Sampled from Type H stockpile

Average Moisture Content	8.2%

MOISTURE-DENSITY RELATIONSHIP (Proctor) REPORT

ASTM D698 Standard

Project:	Meliadine Dike Construction	Sample No.:	SA01
Client:	Agnico Eagle	Sampled By:	TW
Attention:		Sample Date:	October 23, 2016
Project No.:	E14103230-01	Test Date:	October 23, 2016
Description:	75mm minus	Preparation:	Moist
Source:	On-Site Stockpile	Compaction:	Manual



Maximum Dry Density:	**2150**	kg/m³
Optimum Moisture Content:	**9.0**	%
As Received Moisture Content:	**6.2**	%
Oversize (+20 mm) Retained:	**40**	%
Corrected Density:	**2320**	%
Corrected Moisture:	**5.8**	%

Remarks:

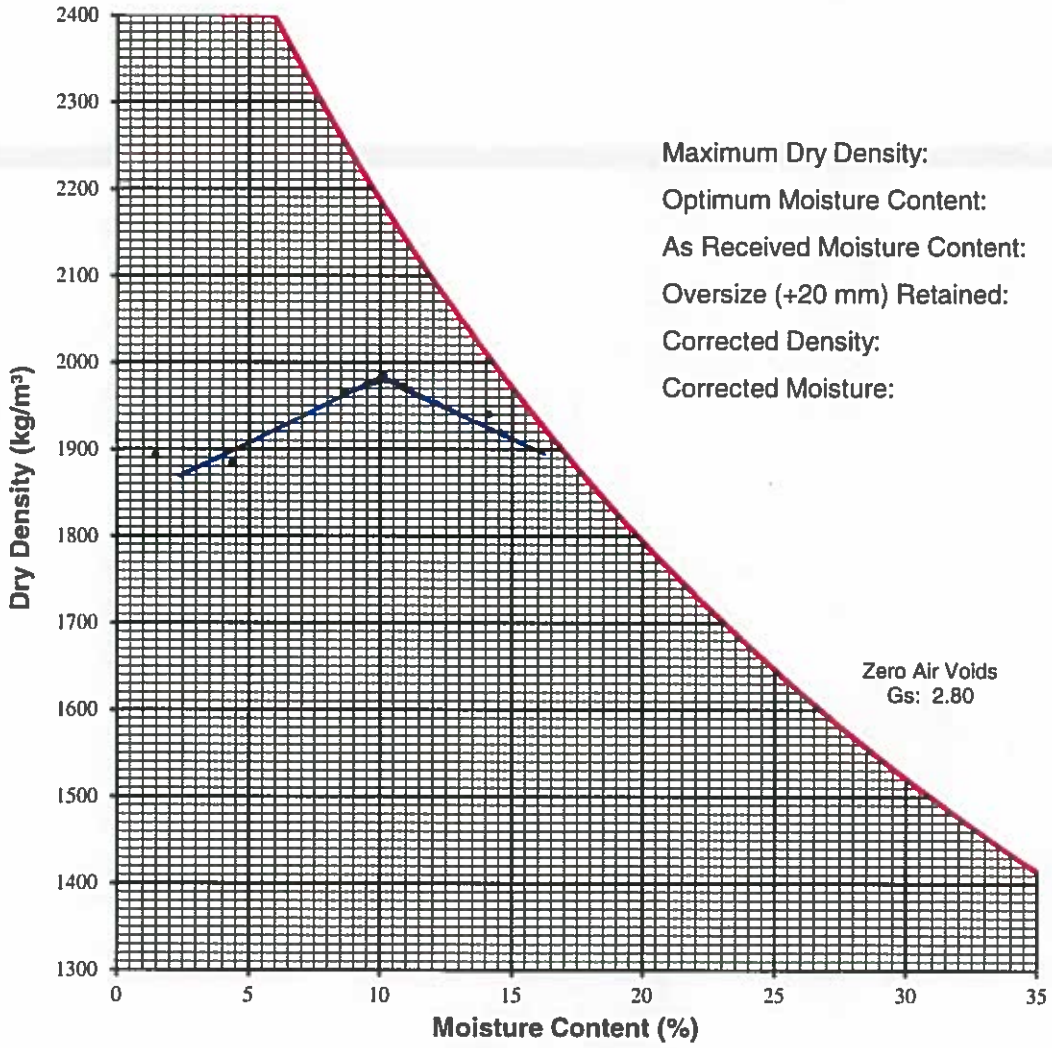
Reviewed By: _____ C.E.T.

TETRA TECH

MOISTURE-DENSITY RELATIONSHIP (Proctor) REPORT

ASTM D698 Standard

Project:	Meliadine Dike Construction	Sample No.:	SA02
Client:	Agnico Eagle	Sampled By:	TW
Attention:		Sample Date:	March 26, 2017
Project No.:	E14103230-01	Test Date:	March 26, 2017
Description:	75 mm minus (Type H Material)	Preparation:	Moist
Source:	On-Site Stockpile	Compaction:	Manual



Maximum Dry Density:	**1980**	kg/m³
Optimum Moisture Content:	**10.0**	%
As Received Moisture Content:	**8.9**	%
Oversize (+20 mm) Retained:	**35**	%
Corrected Density:	**2170**	%
Corrected Moisture:	**6.9**	%

Remarks: Sampled from Type H material stockpile produced in December 2016

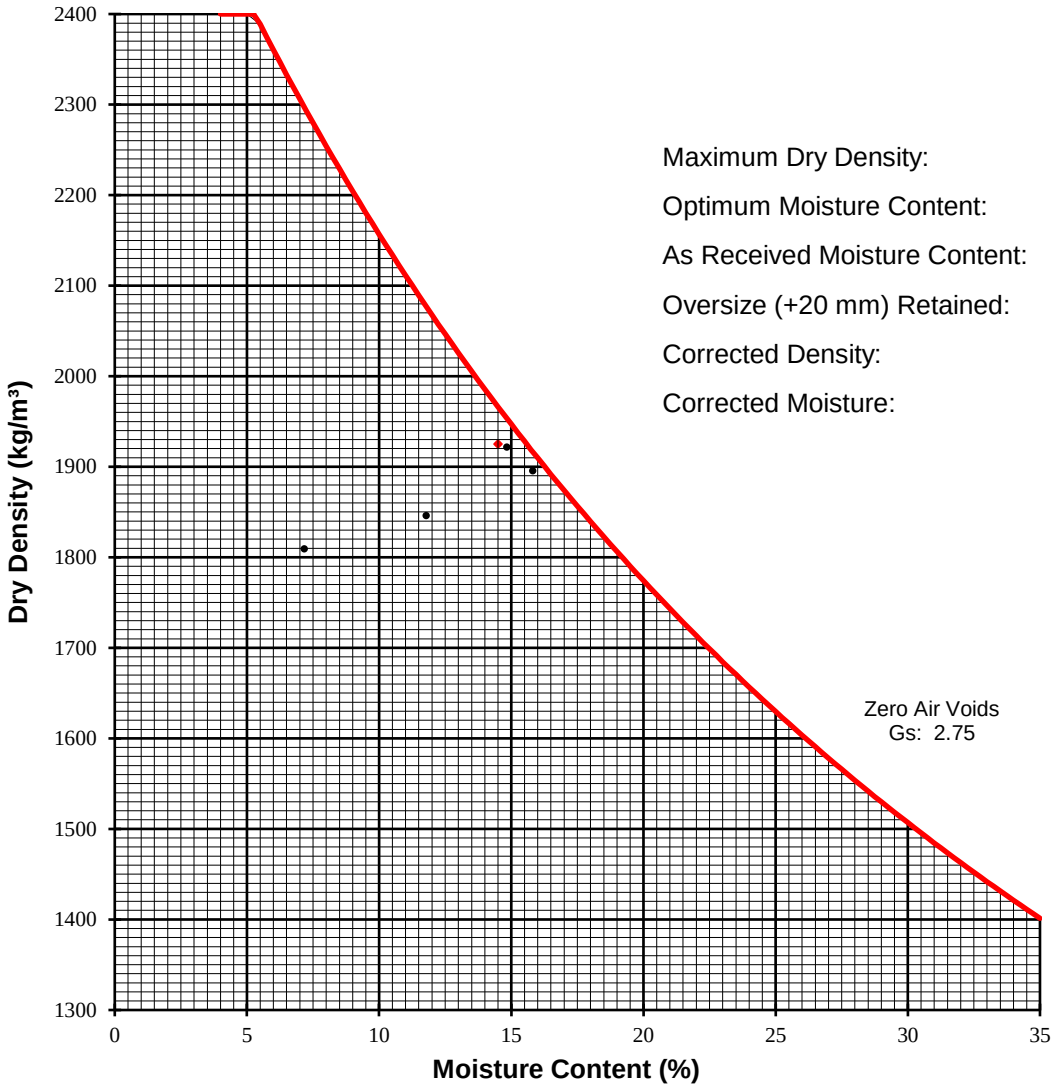
Reviewed By: _____ C.E.T.

TETRA TECH

MOISTURE-DENSITY RELATIONSHIP (Proctor) REPORT

ASTM D698 Standard

Project:	Meliadine Dike Construction	Sample No.:	SA03
Client:	Agnico Eagle	Sampled By:	TW
Attention:		Sample Date:	April 27, 2017
Project No.:	E14103230-01 Task 023	Test Date:	April 27, 2017
Description:	75 mm minus (Type H Material)	Preparation:	Moist
Source:	On-Site Stockpile	Compaction:	Manual



Maximum Dry Density:	**1925**	kg/m³
Optimum Moisture Content:	**14.5**	%
As Received Moisture Content:	**11.8**	%
Oversize (+20 mm) Retained:	**50**	%
Corrected Density:	**2230**	%
Corrected Moisture:	**7.8**	%

Remarks: Sampled from Type H material stockpile produced on April 27, 2017

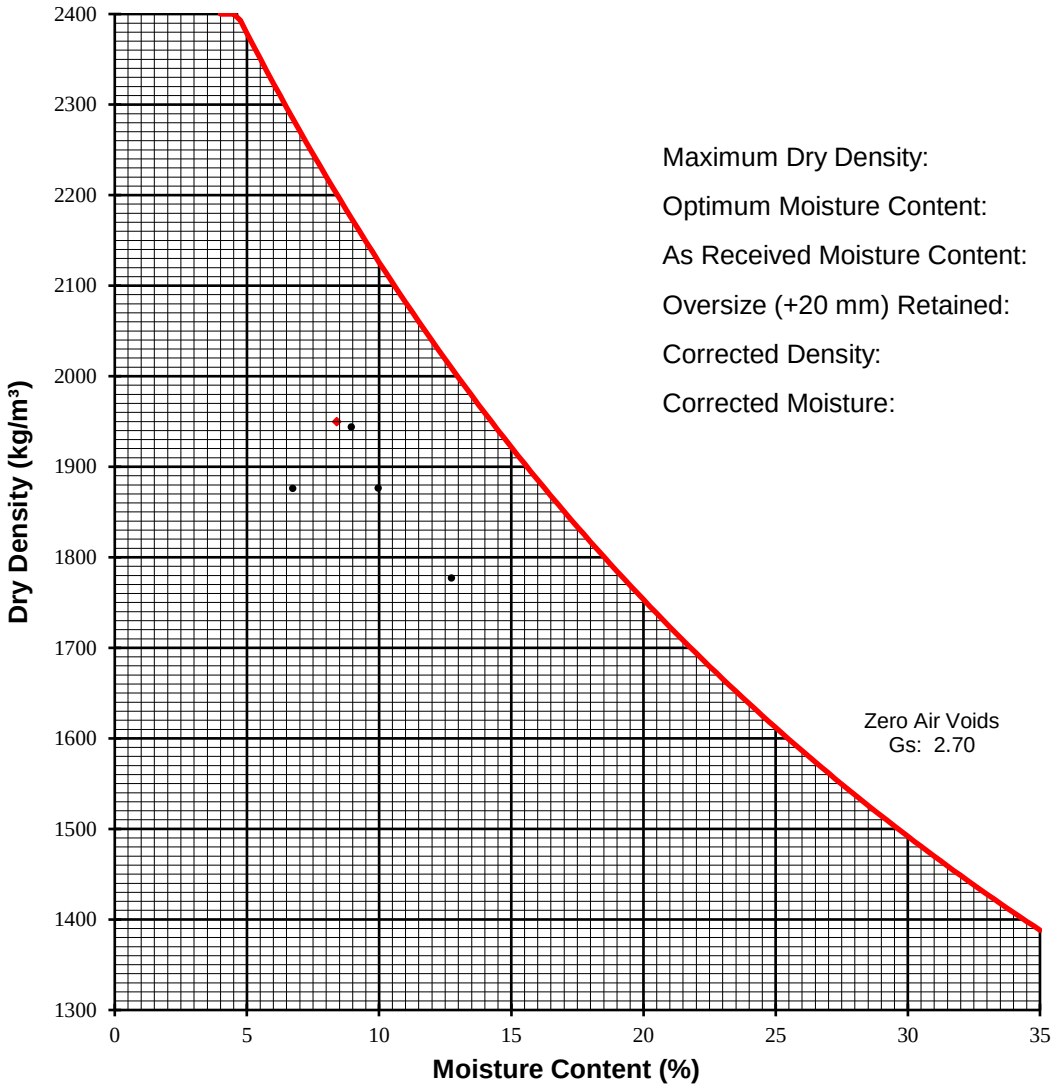
Reviewed By: _____ C.E.T.

TETRA TECH

MOISTURE-DENSITY RELATIONSHIP (Proctor) REPORT

ASTM D698 Standard

Project:	Meliadine Dike Construction	Sample No.:	SA04
Client:	Agnico Eagle	Sampled By:	TW
Attention:		Sample Date:	May 10, 2017
Project No.:	E14103230-01	Test Date:	May 11, 2017
Description:	75 mm minus (Type H Material)	Preparation:	Moist
Source:	On-Site Stockpile	Compaction:	Manual



Maximum Dry Density:	**1950**	kg/m³
Optimum Moisture Content:	**8.4**	%
As Received Moisture Content:	**11.8**	%
Oversize (+20 mm) Retained:	**40**	%
Corrected Density:	**2180**	%
Corrected Moisture:	**5.4**	%

Remarks: Sampled from Type H material stockpile

Reviewed By: _____ C.E.T.

TETRA TECH

Table E4.2: Frozen / In-situ Single Point Proctors for Type H Material

Date/Shift	Material Type	Sample	Mass of Soil in Mold (g)	Mold Volume (cm3)	Frozen Compacted Density (kg/m3)	Mass of Weight Soil and Tare (g)	Mass of Tare (g)	Mass of Dry Soil and Tare (g)	Moisture Content (%)	Dry Density (kg/m3)	Oversize Corrected Dry Density (kg/m3)	Comments
March 26, 2017 DS	Type H	SA01	3510.0	2122.5	1654	4010.3	703.3	3748.0	8.6	1523	1789	Sampled from Stockpile
March 28, 2017 DS	Type H	SA02	3614.0	2122.5	1703	3605	706.3	3346.0	9.8	1551	1814	Sampled from Stockpile

Dike D-CP1 Type H Material Density Tests by Densometer Summary Results

Date	Density Test #	Probe Depth (mm)	Station	Depth from OG (m)	Wet Density (kg/m3)	Moisture Content (%)	Dry Density (kg/m3)	Single Point Frozen Proctor Dry Density - SPFPDD (kg/m3)	% SPFPDD	Standard Proctor Maximum Dry Density - SPMDD (kg/m3)	% SPMDD	Comments
26-Mar-17	1.000	200	0+499		1764	11.7	1579	1789	88.3	2172.0	72.7	TW- Second lift of Type H Material in the ice wedge between 0+495 & 0+513
26-Mar-17	2.000	200	0+500		1732	12.1	1545	1789	86.4	2172.0	71.1	TW- Second lift of Type H Material in the ice wedge between 0+495 & 0+513
26-Mar-17	3.000	200	0+495		1828	9.8	1665	1789	93.1	2172.0	76.7	TW- Second lift of Type H Material in the ice wedge between 0+495 & 0+513
26-Mar-17	4.000	200	0+505		1832	11.5	1643	1789	91.8	2172.0	75.6	TW- Second lift of Type H Material in the ice wedge between 0+495 & 0+513
26-Mar-17	5.000	200	0+455		1839	11.2	1654	1789	92.4	2172.0	76.1	TW- Final lift of Type H Material in the ice wedge between 0+435 & 0+455
26-Mar-17	6.000	200	0+449		1879	12.7	1667	1789	93.2	2172.0	76.8	TW- Final lift of Type H Material in the ice wedge between 0+435 & 0+455
26-Mar-17	7.000	200	0+442		1830	11.6	1640	1789	91.7	2172.0	75.5	TW- Final lift of Type H Material in the ice wedge between 0+435 & 0+455
26-Mar-17	8.000	200	0+437		1818	14.3	1591	1789	88.9	2172.0	73.2	TW- Final lift of Type H Material in the ice wedge between 0+435 & 0+455
10-May-17	9.000	200	1+160		1996	6.6	1872	1789	104.7	2172.0	86.2	TW- 2nd lift of Type F Material (overliner) Control Strip-12 full passes
10-May-17	10.000	200	1+180		1982	6.8	1856	1789	103.7	2172.0	85.4	TW- 2nd lift of Type F Material (overliner)
16-May-17	11.000	200	1+500	64.9	2006	5.6	1900	1789	106.2	2200.0	86.3	
16-May-17	12.000	200	1+450	64.8	1994	5.7	1886	1789	105.4	2200.0	85.7	
16-May-17	13.000	200	1+400	64.8	2027	7.2	1891	1789	105.7	2200.0	85.9	
21-May-17	14.000	200	1+520	66.2	2119	4.5	2028	1789	113.3	2200.0	92.2	
21-May-17	15.000	200	1+475	65.7	2128	4.0	2046	1789	114.4	2200.0	93.0	
21-May-17	16.000	200	1+425	65.7	2168	3.4	2097	1789	117.2	2200.0	95.3	
21-May-17	17.000	200	1+375	65.6	2103	7.6	1954	1789	109.2	2200.0	88.8	
21-May-17	18.000	200	1+320	65.6	2119	5.2	2014	1789	112.6	2200.0	91.6	
21-May-17	19.000	200	1+320	G	2166	9.9	1971	1789	110.2	2200.0	89.6	

Dike D-CP1 Type H Sand Cone Density Tests Summary

Date	Material Type	Station	Dry Density (Densometer Avg.) (kg/m3)	Densometer Moisture Content (% Avg.)	Bentonite placed (g)	Bentonite Bulk Density (kg/m3)	Pit Volume (m3)	Soil weight (g)	Soil Bulk Density (kg/m3)	Moisture Content (%)	Soil Dry Density (kg/m3)	Comments
26-Mar-17	Type H	0+500	1608	11.3	3652	1056	0.0035	7972	2305.2	8	2134.4	

APPENDIX E5

TYPE K MATERIAL QA/QC TEST RESULTS

MOISTURE CONTENT TEST RESULTS

ASTM D2216

Project:	Meliadine Project, NU	Borehole No.:	Dike D-CP1 Type K Material
Project No.:	E14103230.01-023	Date Tested:	Nov/Dec 2016, Jan 2017
Client:	Agnico Eagle Mines Ltd.	Tested By:	SH/IM
Attention:	Mr. Duy Nguyen	Page:	

Date	Sample Number	Moisture Content (%)	Comments
11/26/2016	K1	19.8	Sampled from DCP1 mixing station
11/26/2016	K2	20.2	Sampled from DCP1 mixing station
11/27/2016	K3	13.8	Sampled from crusher mixing station
11/27/2016	K4	12.8	Sampled from crusher mixing station
11/27/2016	K5	14.6	Sampled from crusher mixing station
11/27/2016	K6	15.1	Sampled from crusher mixing station
11/28/2016	K7	16.7	Sampled from crusher mixing station
11/29/2016	K8	10.4	Sampled in key trench at 0+160
11/29/2016	K9	20.2	Sampled from DCP1 mixing station
11/30/2016	K10	17.4	Sampled in key trench at 0+200
11/30/2016	K11	15.9	Sampled in key trench at 0+205
12/1/2016	K12	17.3	Sampled in key trench at 0+145 -2.30
12/2/2016	K13	15.9	Sampled in key trench at 0+210 -2.45
12/2/2016	K14	19.1	Sampled in key trench at 0+160 -2.1 m
12/3/2016	K15	16.2	Sampled in key trench at 0+280
12/5/2016	K16	22.4	Sampled in key trench at 0+280 -1.8 m
12/5/2016	K17	25.9	Sampled in key trench at 0+285, -1.8 m
1/17/2017	K20	14.2	Sample from DCP-1 mixing station
1/18/2017	K21	16.8	Sample from DCP-1 mixing station
1/18/2017	K22	17.8	Sample from DCP-1 mixing station
1/18/2017	K23	17.9	Sample from DCP-1 mixing station

* Non-standard sample size

Reviewed By: _____ P.Eng.

TETRA TECH

D-CP1 Type K Material Densities and Water Saturation Summary

Note: Densities and saturation are based on Nuclear Gauge results which may not be accurate for frozen aggregate

Date	Density Test #	Probe Depth (mm)	Station	Depth from OG (m)	Wet Density (kg/m3)	Moisture Content (%)	Dry Density (kg/m3)	SPMDD (kg/m3)	% SPMDD	Water Saturation (%)	Comments
Nov 27/16	001	200	0+125	2.28	1677	11.3	1507	2020	74.6	38.5	IM - Frozen - Placed during previous shift.
Nov 27/16	002	200	0+120	2.34	1642	12.6	1458	2020	72.2	40.0	IM - Frozen - Placed during previous shift.
Nov 27/16	003	200	0+115	2.37	1591	11.0	1433	2020	71.0	33.6	IM - Frozen - Placed during previous shift.
Nov 27/16	004	200	0+110	2.32	1646	10.5	1490	2020	73.7	34.9	IM - Frozen - Placed during previous shift.
Nov 27/16	005	200	0+105	2.3	1711	12.4	1522	2020	75.4	43.3	IM - Frozen - Placed during previous shift.
Nov 27/16	006	150	0+135	2.56	2054	17.0	1756	2020	86.9	85.3	IM - Control Strip - 6 passes. Unfrozen to Partially frozen
Nov 27/16	007	150	0+135	2.56	2008	16.3	1727	2020	85.5	78.1	IM - Control Strip - 12 passes. Unfrozen to partially frozen
Nov 29/16	008	100	0+102	2.1	1969	18.8	1657	2020	82.0	80.7	IM - Partially Frozen.
Nov 29/16	009	200	0+102	2.1	1853	18.7	1561	2020	77.3	69.2	IM - Partially Frozen.
Nov 29/16	010	100	0+105	2.12	1982	18.7	1670	2020	82.7	81.8	IM - Partially Frozen.
Nov 29/16	011	100	0+105	2.12	1973	19.5	1651	2020	81.7	82.9	IM - Control strip (after 6 passes). Partially Frozen.
Nov 29/16	012	100	0+105	2.12	1970	17.5	1677	2020	83.0	77.4	IM - Control strip - after 12 passes. Partially Frozen.
Nov 29/16	013	100	0+105	2.25	2030	19.8	1694	2020	83.9	90.1	IM - Control strip - additional 4 passes w/ 10 tonne. Partially Frozen.
Nov 29/16	014	100	0+115	2.25	1997	22.1	1636	2020	81.0	91.7	IM - 6 Passes with 10 tonne. Partially Frozen.
Nov 30/16	015	150	0+105	2.25	2041	19.3	1711	2020	84.7	90.1	SH - 6 passes with 10 tonne. Partially frozen
Nov 30/16	016	150	0+119	2.25	1960	19.9	1635	2020	80.9	82.4	SH - 6 passes with 10 tonne. Partially frozen
Nov 30/16	017	150	0+175	2.08	1978	17.3	1686	2020	83.5	77.7	IM - Partially Frozen.
Nov 30/16	018	150	0+175	2.08	2009	19.0	1688	2020	83.6	85.6	IM - Partially Frozen. Offset 4 m D/S
Nov 30/16	019	150	0+173	2.07	2091	18.4	1766	2020	87.4	93.9	IM - Partially Frozen.
Nov 30/16	020	150	0+173	2.07	2016	14.9	1755	2020	86.9	74.7	IM - Partially Frozen.
Nov 30/16	021	150	0+173	2.07	2118	15.6	1832	2020	90.7	88.9	IM - Partially Frozen.
Nov 30/16	022	150	0+175	2.02	2066	18.8	1739	2020	86.1	91.9	IM - Partially Frozen.
Nov 30/16	023	150	0+175	2.02	2117	17.7	1799	2020	89.0	95.4	IM - Partially Frozen. Offset 4 m U/S
Nov 30/16	024	150	0+180	2.09	2169	16.7	1859	2020	92.0	99.6	IM - Partially Frozen.
Nov 30/16	025	150	0+190	2.09	1936	22.3	1583	2020	78.4	85.3	IM - Partially Frozen.
Dec 1/16	026	150	0+135	2.3	1978	15.8	1708	2020	84.6	73.5	SH - Moist surface, somewhat compact
Dec 1/16	027	150	0+155	2.3	1885	23.4	1528	2020	75.6	82.3	SH - Wet surface. Not compact. Requested more passes
Dec 1/16	028	150	0+175	2.3	2052	21.1	1694	2020	83.9	96.0	SH - Moist surface, compact
Dec 1/16	029	150	0+155	2.3	1898	24.3	1527	2020	75.6	85.4	SH - Tested after area re-packed
Dec 1/16	030	150	0+215	2.25	1951	24.2	1571	2020	77.8	90.9	IM - Recommended slight reduction in water for compaction.
Dec 1/16	031	150	0+215	2.25	1890	25.6	1505	2020	74.5	87.0	IM - Recommended slight reduction in water for compaction.
Dec 1/16	032	150	0+225	2.25	1878	25.9	1492	2020	73.8	86.3	IM - Recommended slight reduction in water for compaction.
Dec 1/16	033	150	0+240	2.1	1947	15.6	1684	2020	83.4	69.8	IM - >10 passes with CS563 10 ton packer
Dec 1/16	034	150	0+230	2.1	1973	22.9	1605	2020	79.5	90.7	IM - >10 passes with CS563 10 ton packer
Dec 1/16	035	150	0+220	2.2	1952	27.0	1537	2020	76.1	96.3	IM - >10 passes with CS563 10 ton packer
Dec 1/16	036	150	0+210	2.2	1946	23.8	1572	2020	77.8	89.5	IM - >10 passes with CS563 10 ton packer
Dec 2/16	037	150	0+110	2.1	1938	19.4	1623	2020	80.4	78.9	IM - >10 passes w/CS563 - unable to pound pin past 150 mm. -2°C when placed
Dec 2/16	038	150	0+100	2.1	1993	19.4	1669	2020	82.6	84.8	IM - >10 passes w/CS563 - unable to pound pin past 150 mm. -2°C when placed
Dec 2/16	039	100	0+95	2.1	1800	16.4	1546	2020	76.6	59.4	IM - >10 passes w/CS563 - unable to pound pin past 100 mm. -2°C when placed
Dec 2/16	040	150	0+120	2.1	1966	17.7	1670	2020	82.7	77.5	IM - >10 passes w/CS563 - unable to pound pin past 100 mm. -2°C when placed
Dec 2/16	041	150	0+130	2.1	1984	17.8	1684	2020	83.4	79.7	IM - >10 passes w/CS563 - unable to pound pin past 150 mm. -2°C when placed
Dec 2/16	042	150	0+140	2.1	1890	16.2	1627	2020	80.5	66.3	IM - >10 passes w/CS563 - unable to pound pin past 150 mm. -2°C when placed
Dec 2/16	043	150	0+160	2.1	1896	16.8	1623	2020	80.4	68.4	IM - >10 passes w/CS563 - unable to pound pin past 150 mm. -2°C when placed
Dec 2/16	044	100	0+150	2.1	1816	19.4	1521	2020	75.3	67.6	IM - >10 passes w/CS563 - unable to pound pin past 100 mm. -2°C when placed
Dec 4/16	045	150	0+203	2	1943	23.6	1572	2020	77.8	88.8	IM - >8 passes w/CS563. Material just above 0°C when placed
Dec 4/16	046	150	0+212	2	1948	22.3	1593	2020	78.9	86.6	IM - >8 passes w/CS563. Material just above 0°C when placed
Dec 4/16	047	150	0+220	2	1925	22.6	1570	2020	77.7	84.8	IM - >8 passes w/CS563. Material just above 0°C when placed
Dec 4/16	048	150	0+227	1.9	1960	18.7	1651	2020	81.7	79.5	IM - >8 passes w/CS563. Material just above 0°C when placed
Dec 4/16	049	200	0+210	1.8	1922	27.6	1506	2020	74.6	94.0	IM - >8 passes w/CS563. High moisture content discussed with KSL
Dec 4/16	050	200	0+220	1.8	1877	29.4	1451	2020	71.8	92.2	IM - >8 passes w/CS563. High moisture content discussed with KSL
Dec 5/16	051	100	0+280	1.8	1793	23.8	1448	2020	71.7	74.4	IM - > 8-10 passes with CS563, trace to some gravel, awaiting proctor
Dec 5/16	052	100	0+280	1.8	1745	24.2	1405	2020	69.6	70.9	IM - > 8-10 passes with CS563, trace to some gravel, awaiting proctor
Dec 5/16	053	100	0+286	1.8	1769	28.6	1376	2020	68.1	80.2	IM - > 8-10 passes with CS563, trace to some gravel, awaiting proctor
Dec 5/16	054	100	0+285	1.8	1748	30.6	1338	2020	66.3	81.2	IM - > 8-10 passes with CS563, trace to some gravel, awaiting proctor
Dec 5/16	055	100	0+291	1.8	1849	23.5	1497	2020	74.1	79.0	IM - > 8-10 passes with CS563, trace to some gravel, awaiting proctor
Dec 5/16	056	100	0+298	1.8	1880	21.3	1550	2020	76.7	77.5	IM - > 8-10 passes with CS563, trace to some gravel, awaiting proctor

APPENDIX E6

KEY TRENCH BASE MATERIAL JAR AND MOISTURE CONTENT TEST RESULTS

TABLE E6: DIKE D-CP1 KEY TRENCH JAR TEST SUMMARY RESULTS

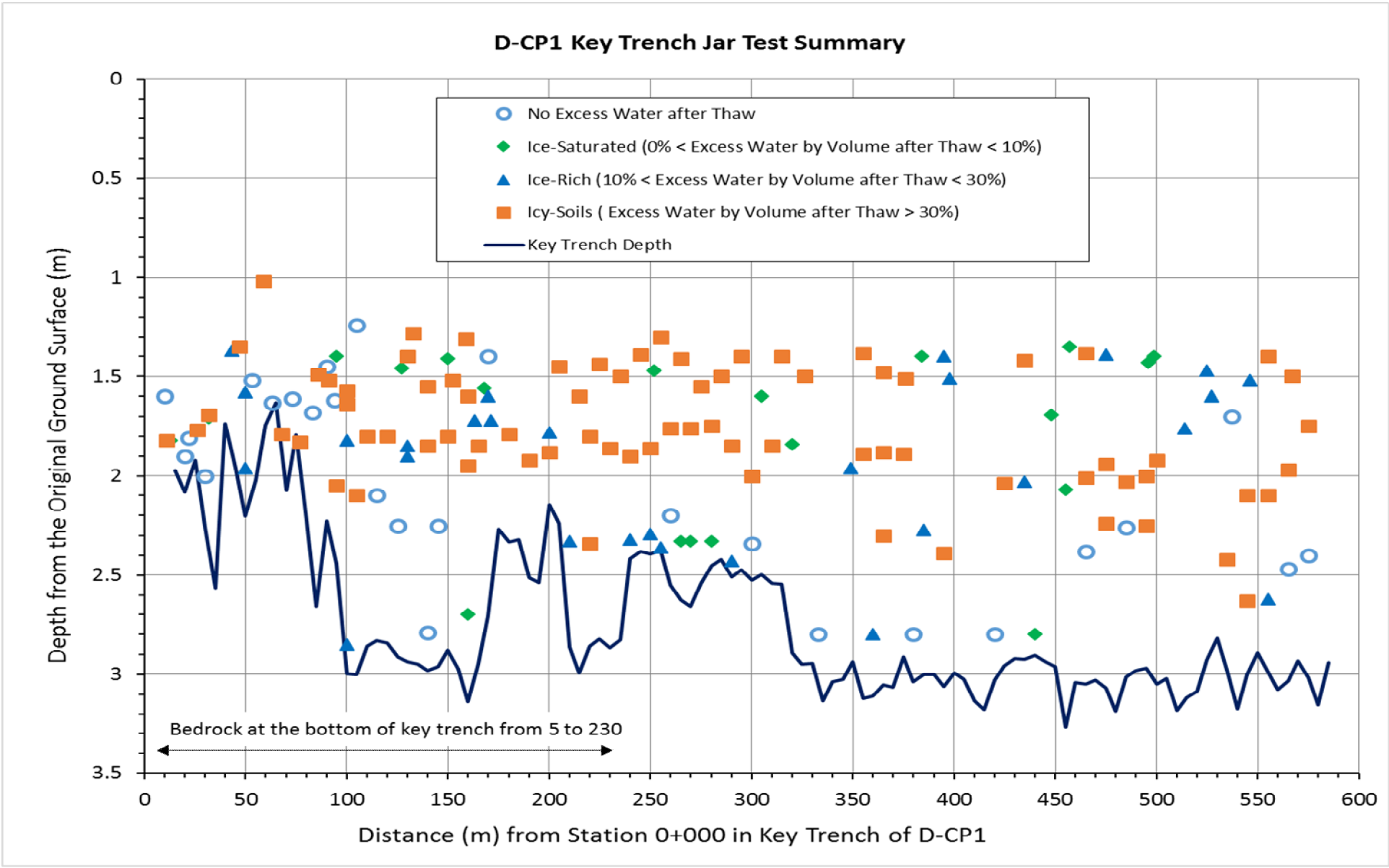
Sample #	Date Tested	Sample Type	Survey Data		Jar Test Results							Soil Description
			Approx. Station	Sample Depth (m)	Height of Supernatant Water (mm)	Height of Saturated Sediment (mm)	Percentage of Excess Supernatant Water in Thawed Soil Sample (by volume) (%)	Moisture Content (%)	Bulk Density (kg/m3)	Ice Content Description	Material Acceptance	
1	29-Oct-16	Disturbed	0+011	1.82	48	82	36.9			Icy Soil	Not Acceptable	
2	29-Oct-16	Disturbed	0+047	1.35	37	30	55.2			Icy Soil	Not Acceptable	
3	29-Oct-16	Disturbed	0+100	1.57	65	63	50.8			Icy Soil	Not Acceptable	
4	29-Oct-16	Disturbed	0+159	1.31	52	70	42.6	72.4		Icy Soil	Not Acceptable	
5	29-Oct-16	Disturbed	0+209	1.20	No Sample Obtained							
6	29-Oct-16	Disturbed	0+252	1.47	10	95	9.5	27.1		Ice-Saturated Soil	Acceptable	
7	29-Oct-16	Disturbed	0+294	1.58	No Sample Obtained							
8	29-Oct-16	Disturbed	0+349	1.96	15	57	20.8	38.0		Ice-Rich Soil	Not Acceptable	
9	29-Oct-16	Disturbed	0+398	1.51	20	75	21.1	58.3		Ice-Rich Soil	Not Acceptable	
10	29-Oct-16	Disturbed	0+448	1.69	10	95	9.5	2.7		Ice-Saturated Soil	Acceptable	
11	29-Oct-16	Disturbed	0+496	1.43	7	78	8.2	16.3		Ice-Saturated Soil	Acceptable	
12	29-Oct-16	Disturbed	0+546	1.52	23	95	19.5	35.1		Ice-Rich Soil	Not Acceptable	
13	04-Nov-16	Disturbed	0+022	1.81	0	75	0.0	9.2		Not Ice-Saturated	Not Acceptable	
14	04-Nov-16	Disturbed	0+032	1.71	3	45	6.3	11.3		Ice-Saturated Soil	Acceptable	
15	04-Nov-16	Disturbed	0+043	1.37	16	80	16.7	42.4		Ice-Rich Soil	Not Acceptable	
16	04-Nov-16	Disturbed	0+053	1.52	0	60	0.0	8.3		Not Ice-Saturated	Not Acceptable	
17	04-Nov-16	Disturbed	0+063	1.63	0	90	0.0	8.5		Not Ice-Saturated	Not Acceptable	
18	04-Nov-16	Disturbed	0+073	1.61	0	115	0.0	11.7		Not Ice-Saturated	Not Acceptable	
19	04-Nov-16	Disturbed	0+083	1.68	0	120	0.0	5.4		Not Ice-Saturated	Not Acceptable	
20	04-Nov-16	Disturbed	0+094	1.62	0	165	0.0	7.5		Not Ice-Saturated	Not Acceptable	
21	05-Nov-16	Disturbed	0+013	1.82	4	63	6.0	14.1		Ice-Saturated Soil	Aceptable	
22	05-Nov-16	Disturbed	0+026	1.77	28	30	48.3	66.9		Icy Soil	Not Acceptable	
23	05-Nov-16	Disturbed	0+032	1.69	34	36	48.6	69.7		Icy Soil	Not Acceptable	
24	06-Nov-16	Disturbed	0+050	1.58	9	50	15.3	24.6		Ice-Rich Soil	Not Acceptable	
25	06-Nov-16	Disturbed	0+059	1.02	28	42	40.0	123.1		Icy Soil	Not Acceptable	
26	06-Nov-16	Disturbed	0+068	1.79	47	28	62.7	100.7		Icy Soil	Not Acceptable	
27	06-Nov-16	Disturbed	0+077	1.83	18	41	30.5	44.1		Icy Soil	Not Acceptable	
28	06-Nov-16	Disturbed	0+086	1.49	30	35	46.2	53.8		Icy Soil	Not Acceptable	
29	06-Nov-16	Disturbed	0+095	1.40	6	55	9.8	19.4		Ice - Saturated Soil	Acceptable	
30	06-Nov-16	Disturbed	0+105	1.24	0	110	0.0	4.5		Not Ice-Saturated	Not Acceptable	
31	06-Nov-16	Disturbed	0+127	1.46	6	55	9.8	26.6		Ice - Saturated Soil	Acceptable	

32	06-Nov-16	Disturbed	0+133	1.28	41	34	54.7	84.2		Icy Soil	Not Acceptable	
33	06-Nov-16	Disturbed	0+152	1.52	32	38	45.7	60.8		Icy Soil	Not Acceptable	
34	06-Nov-16	Disturbed	0+163	1.72	17	49	25.8	29.6		Ice-Rich Soil	Not Acceptable	
35	06-Nov-16	Disturbed	0+168	1.56	3	73	3.9	8.3		Ice - Saturated Soil	Acceptable	
36	09-Nov-16	Disturbed	0+170	1.60	8	54	12.9	19.5		Ice-Rich Soil	Not Acceptable	
37	10-Nov-16	Disturbed	0+050	1.96	18	54	25.0	48.3		Ice-Rich Soil	Not Acceptable	
38	10-Nov-16	Disturbed	0+090	1.45	0	70	0.0	12.2		Not Ice-Saturated	Not Acceptable	
39	10-Nov-16	Disturbed	0+100	1.64	60	20	75.0	149.0		Icy Soil	Not Acceptable	
40	10-Nov-16	Disturbed	0+091	1.52	44	33	57.1	97.4		Icy Soil	Not Acceptable	
41	10-Nov-16	Disturbed	0+130	1.40	32	20	61.5	107.4		Icy Soil	Not Acceptable	
42	10-Nov-16	Disturbed	0+140	1.55	48	21	69.6	152.8		Icy Soil	Not Acceptable	
43	10-Nov-16	Disturbed	0+150	1.41	2	53	3.6	11.4		Ice-Saturated Soil	Acceptable	
44	10-Nov-16	Disturbed	0+160	1.60	35	25	58.3	83.5		Icy Soil	Not Acceptable	
45	10-Nov-16	Disturbed	0+170	1.40	0	95	0.0	7.6		Not Ice-Saturated	Not Acceptable	
46	11-Nov-16	Disturbed	0+100	1.82	15	45	25.0	29.8		Ice-Rich Soil	Not Acceptable	
47	11-Nov-16	Disturbed	0+130	1.90	11	58	15.9	20.9		Ice-Rich Soil	Not Acceptable	
48	11-Nov-16	Disturbed	0+140	1.85	32	35	47.8	70.7		Icy Soil	Not Acceptable	
49	11-Nov-16	Disturbed	0+150	1.80	28	34	45.2	59.5		Icy Soil	Not Acceptable	
50	11-Nov-16	Disturbed	0+160	1.95	34	28	54.8	84.7		Icy Soil	Not Acceptable	
51	11-Nov-16	Disturbed	0+165	1.85	31	36	46.3	65.1		Icy Soil	Not Acceptable	
52	12-Nov-16	Disturbed	0+130	1.85	5	20	20.0	27.3		Ice-Rich Soil	Not Acceptable	
53	12-Nov-16	Disturbed	0+120	1.80	14	28	33.3	39.2		Icy Soil	Not Acceptable	
54	12-Nov-16	Disturbed	0+110	1.80	25	23	52.1	75.8		Icy Soil	Not Acceptable	
55	12-Nov-16	Disturbed	0+030	2.00	0	75	0.0	8.9		Not Ice-Saturated	Not Acceptable	
56	12-Nov-16	Disturbed	0+020	1.90	0	110	0.0	4.5		Not Ice-Saturated	Not Acceptable	
57	12-Nov-16	Disturbed	0+010	1.60	0	115	0.0	11.9		Not Ice-Saturated	Not Acceptable	
58	13-Nov-16	Disturbed Core	0+095	2.05	20	30	40.0	35.7		Icy Soil	Not Acceptable	
59	13-Nov-16	Disturbed Core	0+105	2.10	20	25	44.4	47.3		Icy Soil	Not Acceptable	
60	13-Nov-16	Disturbed Core	0+115	2.10	0	60	0.0	7.1		Not Ice-Saturated	Not Acceptable	
61	13-Nov-16	Disturbed Core	0+125	2.25	0	40	0.0	11.0		Not Ice-Saturated	Not Acceptable	
62	13-Nov-16		0+135	2.70	No Sample Obtained (Bedrock)							
63	13-Nov-16	Disturbed Core	0+145	2.25	0	40	0.0	0.3		Not Ice-Saturated	Not Acceptable	
64	15-Nov-16	Core	0+205	1.45	95	65	59.4	75.6	1474	Icy Soil	Not Acceptable	SILT sandy some gravel to gravelly

65	15-Nov-16	Core	0+215	1.60	40	50	44.4	70.3	1395	Icy Soil	Not Acceptable	fine SAND, trace silt
66	15-Nov-16	Core	0+225	1.44	40	55	42.1	50.5	1318	Icy Soil	Not Acceptable	SAND some gravel, some silt
67	15-Nov-16	Core	0+235	1.50	70	80	46.7	78.5	1656	Icy Soil	Not Acceptable	fine SAND, trace silt
68	15-Nov-16	Disturbed Core	0+245	1.39	30	32	48.4	84.2		Icy Soil	Not Acceptable	fine SAND, some silt
69	15-Nov-16	Core	0+255	1.30	58	68	46.0	90.3	1674	Icy Soil	Not Acceptable	SAND silty trace gravel
70	15-Nov-16	Core	0+265	1.41	89	34	72.4	253.4	1295	Icy Soil	Not Acceptable	fine SAND, silty
71	16-Nov-16	Disturbed Core	0+326	1.50	34	22	60.7	123.1		Icy Soil	Not Acceptable	SAND silty, gravelly
72	16-Nov-16	Core	0+315	1.40	76	30	71.7	223.4	1012	Icy Soil	Not Acceptable	SAND, silty, trace gravel
73	16-Nov-16	Core	0+305	1.60	14	138	9.2	25.8	2011	Ice-Saturated Soil	Acceptable	SAND, trace to some silt
74	16-Nov-16	Disturbed Core	0+295	1.40	37	26	58.7	130.9		Icy Soil	Not Acceptable	SAND silty
75	16-Nov-16	Disturbed Core	0+285	1.50	31	27	53.4	27.1		Icy Soil	Not Acceptable	SILT sandy, gravelly, - cobble noted
76	16-Nov-16	Disturbed Core	0+275	1.55	39	46	45.9	82.0		Icy Soil	Not Acceptable	SAND silty
77	17-Nov-16	Core	0+200	1.78	32	109	22.7	43.3	1401	Icy Soil	Not Acceptable	fine SAND, trace silt
78	17-Nov-16	Core	0+220	1.80	34	44	43.6	56.8	1575	Icy Soil	Not Acceptable	SAND, silty, some gravel
79	17-Nov-16	Disturbed Core	0+230	1.86	69	61	53.1	72.8		Icy Soil	Not Acceptable	SAND, silty, gravelly
80	17-Nov-16	Core	0+240	1.90	76	20	79.2	340.0	1018	Icy Soil	Not Acceptable	fine SAND, some silt to silty
81	17-Nov-16	Broken Core	0+250	1.86	59	41	59.0	59.1	1424	Icy Soil	Not Acceptable	SAND, trace silt, + cored through cobble
82	17-Nov-16	Broken Core	0+260	1.76	69	43	61.6	140.2	1049	Icy Soil	Not Acceptable	SAND, trace silt
83	18-Nov-16	Broken Core	0+270	1.76	49	67	42.2	69.0	1480	Icy Soil	Not Acceptable	SAND, some silt, trace gravel; fine grained sand
84	18-Nov-16	Core	0+280	1.75	29	68	29.9	37.8	1618	Icy Soil	Not Acceptable	SAND, gravelly, some silt
85	18-Nov-16	Broken Core	0+290	1.85	42	59	41.6	32.2	1538	Icy Soil	Not Acceptable	SAND, gravelly, some silt
86	18-Nov-16	Disturbed Core	0+300	2.00	35	13	72.9	437.3		Icy Soil	Not Acceptable	SAND, some silt, some gravel
87	18-Nov-16	Core	0+310	1.85	39	60	39.4	63.4	1471	Icy Soil	Not Acceptable	SAND, some silt; poorly graded fine sand
88	18-Nov-16	Broken Core	0+320	1.84	12	120	9.1	30.2	1956	Ice-Saturated Soil	Acceptable	SAND, trace to some silt
89	20-Nov-16	Disturbed Core	0+171	1.72	11	26	29.7	43.1		Ice-Rich Soil	Not Acceptable	SAND, silty / SILT, sandy - some gravel
90	20-Nov-16	Disturbed Core	0+180	1.79	28	14	66.7	20.0		Icy Soil	Not Acceptable	SAND, silty / SILT, sandy - some gravel
91	20-Nov-16	Disturbed Core	0+190	1.92	23	20	53.5	100.8		Icy Soil	Not Acceptable	SILT, some sand, trace gravel
92	20-Nov-16	Core	0+200	1.88	19	30	38.8	48.7	1770	Icy Soil	Not Acceptable	SAND, gravelly, some silt
93	21-Nov-16	Core	0+100	2.85	10	75	11.8	7.5	2219	Ice-Rich Soil	Not Acceptable	SAND, silty, gravelly
94	21-Nov-16		0+120		No Sample Obtained (Bedrock)							
95	21-Nov-16	Disturbed Core	0+140	2.79	0	100	0.0	2.9		Not Ice-Saturated	Not Acceptable	SAND, silty, some gravel
96	21-Nov-16	Core	0+160	2.70	5	60	7.7	11.4	2026	Ice-Saturated Soil	Acceptable	SAND, silty, trace gravel; fine sand
97	22-Nov-16		0+170	2.25	No Sample Obtained (Bedrock)							
98	22-Nov-16		0+180	2.18	No Sample Obtained (Bedrock)							
99	22-Nov-16		0+190	2.35	No Sample Obtained (Bedrock)							

100	22-Nov-16		0+200	2.20	No Sample Obtained (Bedrock)							
101	22-Nov-16	Core	0+210	2.33	10	29	25.6	38.7	1184	Ice-Rich Soil	Not Acceptable	SAND, some silt
102	22-Nov-16	Core	0+220	2.34	35	30	53.8	80.1	1442	Icy Soil	Not Acceptable	SAND and SILT, some gravel
103	22-Nov-16		0+230	2.30	No Sample Obtained (Bedrock)							
104	22-Nov-16	Core	0+240	2.32	15	84	15.2	37.1	1987	Ice-Rich Soil	DRE/DE Acceptable	SAND, trace silt to silty
105	22-Nov-16	Core	0+250	2.29	14	53	20.9	25.6	2004	Ice-Rich Soil	DRE/DE Acceptable	SAND, silty, some gravel
106	22-Nov-16	Disturbed Core	0+260	2.20	0	60	0.0	7.9		Not Ice-Saturated	Confirmatory test required	SAND, trace to some silt - Appears to be bedrock at bottom of core
107	22-Nov-16	Disturbed Core	0+270	2.33	6	51	10.5	19.1		Ice-Saturated Soil	DRE/DE Acceptable	SAND, silty, gravelly
108	22-Nov-16	Disturbed Core	0+280	2.33	4	37	9.8	10.0		Ice-Saturated Soil	Acceptable	SAND, gravelly, silty
109	22-Nov-16	Disturbed Core	0+290	2.43	5	29	14.7	13.0		Ice-Rich Soil	DRE/DE Acceptable	SAND, silty, gravelly, - possible piece of bedrock
110	22-Nov-16	Core	0+300	2.34	0	110	0.0	13.2	1941	Not Ice-Saturated	DRE/DE Acceptable	SAND, trace silt - Appears to be bedrock at bottom of core
111	23-Nov-16	Broken Core	0+255	2.36	14	84	14.3	30.4	1187	Ice-Rich Soil	DRE/DE Acceptable	SAND, silty, some gravel
112	23-Nov-16	Core	0+265	2.33	0	150	0.0	21.1	2016	Ice-Saturated Soil	Acceptable	SAND, some silt; medium to fine grained sand
113	24-Nov-16	Core	0+355	1.38	32	20	61.5	139.5	1240	Icy Soil	Not Acceptable	SAND, trace to some silt, trace to some gravel
114	24-Nov-16	Broken Core	0+365	1.48	40	22	64.5	59.9	1666	Icy Soil	Not Acceptable	SAND (fine), some silt to silty, cored through cobble / boulder
115	24-Nov-16	Disturbed Core	0+376	1.51	25	33	43.1	57.8		Icy Soil	Not Acceptable	SAND, silty / SILT, sandy - some gravel
116	24-Nov-16	Broken Core	0+384	1.40	4	39	9.3	17.2	1900	Ice-Saturated Soil	Acceptable	SAND, some silt to silty, trace gravel
117	24-Nov-16	Core	0+395	1.40	29	96	23.2	34.7	1910	Ice-Rich Soil	Not Acceptable	SAND, some silt to silty, some gravel gravel to gravelly
118	24-Nov-16	Bedrock	0+405	1.38								
119	25-Nov-16		0+355	1.89	43	17	71.7	201.7	1239	Icy Soil	Not Acceptable	SAND silty / SILT sandy, trace to some gravel
120	25-Nov-16		0+365	1.88	44	16	73.3	205.6	1256	Icy Soil	Not Acceptable	SILT, some sand to sandy, trace gravel
121	25-Nov-16		0+375	1.89	41	38	51.9	63.6	1618	Icy Soil	Not Acceptable	SILT, some sand to sandy, some gravel to gravelly
122	26-Nov-16	Rocky	0+425	1.44								
123	26-Nov-16		0+435	1.42	35	35	50.0		1463	Icy Soil	Not Acceptable	SILT, sandy, bottom of core was rock
124	27-Nov-16	Broken Core	0+365	2.30	17	30	36.2	35.6	1760	Icy Soil	Not Acceptable	SILT, sandy, gravelly - NOTE VERY SMALL SAMPLE
125	27-Nov-16	Rocky	0+375	2.29								
126	27-Nov-16	Disturbed Core	0+385	2.27	12	32	27.3	23.3		Ice-Rich Soil	Not Acceptable	SILT, sandy, gravelly - NOTE VERY SMALL SAMPLE
127	27-Nov-16	Disturbed Core	0+395	2.39	15	24	38.5	38.3		Icy Soil	Not Acceptable	SAND (med-coarse, poorly grded), sm gravel, sm silt - VERY SMALL SAMPLE
128	27-Nov-16	Rocky	0+405	2.20								
129	28-Nov-16	Broken Core	0+457	1.35	5	66	7.0	17.6	2143	Ice Saturated Soil	Acceptable	SAND (medium to coarse, well graded), some gravel, trace silt - seashell incl.
130	28-Nov-16	Disturbed Core	0+465	1.38	11	11	50.0	61.2		Icy Soil	Not Acceptable	SAND, some silt to silty, trace gravel - NOTE VERY SMALL SAMPLE
131	28-Nov-16	Disturbed Core	0+475	1.39	8	21	27.6	27.7		Ice Rich	Not Acceptable	SAND (medium to coarse, poorly graded), some gravel, trace silt - seashell incl.
132	28-Nov-16	Disturbed Core	0+425	2.04	24	14	63.2	168.1		Icy Soil	Not Acceptable	SAND, some silt to silty, trace gravel - NOTE VERY SMALL SAMPLE

133	28-Nov-16	Disturbed Core	0+435	2.03	5	25	16.7	15.0		Ice-Rich Soil	Not Acceptable	Appears to be broken bedrock with cuttings
134	03-Dec-16	Broken Core	0+455	2.07	11	90	10.9	21.0	1977	Slightly Ice-Rich Soil	Acceptable	SAND (med to coarse), trace to some silt, trace gravel - seashells throughout
135	03-Dec-16	Broken Core	0+465	2.01	68	53	56.2	107.6	1129	Icy Soil	Not Acceptable	SAND, silty, to SILT, sandy - seashells throughout
136	03-Dec-16	Broken Core	0+475	1.94	59	58	50.4	83.9	1356	Icy Soil	Not Acceptable	SAND, silty, to SILT, sandy - seashells throughout
137	03-Dec-16	Disturbed Core	0+485	2.03	31	45	40.8	53.5	-	Icy Soil	Not Acceptable	SAND, silty, to SILT, sandy - seashells throughout
138	03-Dec-16	Disturbed Core	0+495	2.00	48	59	44.9	107.9	-	Icy Soil	Not Acceptable	SAND, silty, to SILT, sandy - seashells throughout
139	04-Dec-16	No Sample	0+455	2.25	Sample Not Taken							
140	04-Dec-16	Broken Core	0+465	2.38	0	--	0	24.1	2022	Not Ice-Saturated	Not Acceptable	SAND, some silt, trace gravel, organics, brown subrounded predominately coarse grained sand; large quantity (20%) shells
141	04-Dec-16	Broken Core	0+475	2.24	34	77	30.6	57.3	1709	Icy Soil	Not Acceptable	SAND, silty, trace gravel, organics, brownish grey; medium and fine grained sand with silt; 5% shells
142	04-Dec-16	Broken Core	0+485	2.26	0	--	0	38.5	-	Not Ice-Saturated	Not Acceptable	SILT, sandy, trace gravel, organics, grey, predominately fine sand and silt, shells (10%)
143	04-Dec-16	Broken Core	0+495	2.25	60	74	44.8	92.5	1449	Icy Soil	Not Acceptable	SILT, sandy, trace gravel, organics; brownish grey, 10% shells
144	06-Dec-16	Broken Core	0+537	1.70	0	--	0	13.6	-	Not Ice-Saturated	Not Acceptable	SAND - coarse, gap graded, tr. silt, tr. gravel, organics, bedrock at core bottom
145	06-Dec-16	Broken Core	0+555	1.40	33	38	46.5	57.5	-	Icy Soil	Not Acceptable	SILT, sandy (fine), some gravel to gravelly
146	06-Dec-16	Broken Core	0+567	1.50	30	61	33.0	36.9	-	Icy Soil	Not Acceptable	SILT, sandy (fine), some gravel to gravelly
147	12-Dec-16	Broken Core	0+360	2.80	24	55	30.4	31.2		Ice-Rich-Soil	Not Acceptable	SAND, silty, some gravel
148	12-Dec-16	Disturbed Core	0+333	2.80	0	--	0.0	10.5		Not Ice-Saturated	Not Acceptable	SAND, gravelly, silty
149	12-Dec-16	Disturbed Core	0+380	2.80	0	--	0.0	8.2		Not Ice-Saturated	Not Acceptable	SAND, trace to some silt
150	12-Dec-16	Disturbed Core	0+400	2.80	0	--	0.0	3.0		Not Ice-Saturated	Not Acceptable	SAND, silty, some gravel
151	12-Dec-16	Disturbed Core	0+420	2.80	0	--	0.0	8.9		Not Ice-Saturated	Not Acceptable	SAND, trace to some silt
152	12-Dec-16	Disturbed Core	0+440	2.80	4	56	6.7	13.1		Ice-Saturated Soil	Acceptable	SAND, silty, gravelly
153	12-Dec-16	Core	0+527	1.60	21	66	24.1	69.3	1477	Ice Rich	Not Acceptable	SILT, sandy / SAND silty, trace gravel, seashells throughout
154	12-Dec-16	Core	0+545	2.10	35	46	43.2	53.6	1655	Icy Soil	Not Acceptable	SAND, gravelly, silty, cored through cobble
155	12-Dec-16	Core	0+555	2.10	27	47	36.5	26.2	1864	Icy Soil	Not Acceptable	SAND, gravelly, silty, cored through cobble
156	12-Dec-16	Disturbed Core	0+565	1.97	53	79	40.2	44.8	-	Icy Soil	Not Acceptable	SILT, sandy, some gravel to gravelly
157	12-Dec-16	Disturbed Core	0+575	1.75	41	93	30.6	38.8	-	Icy Soil	Not Acceptable	SILT, sandy, some gravel to gravelly
158	17-Dec-16	Disturbed Core	0+535	2.42	35	30	53.8	101.9	-	Icy Soil	Not Acceptable	SAND, silty, to SILT, sandy
159	17-Dec-16	Disturbed Core	0+545	2.63	29	36	44.6	50.2	-	Icy Soil	Not Acceptable	SAND, silty / SILT, sandy - some gravel
160	17-Dec-16	Disturbed Core	0+555	2.62	15	55	21.4	26.4	-	Icy Soil	Not Acceptable	SAND, gravelly, silty
161	17-Dec-16	Disturbed Core	0+565	2.47	0	0	0.0	13.8	-	Not Ice-Saturated	Not Acceptable (Bulk density NA)	SAND - coarse, gap graded, tr. silt, tr. gravel
162	17-Dec-16	Disturbed Core	0+575	2.40	0	0	0.0	11.0	-	Not Ice-Saturated	Not Acceptable (Bulk density NA)	SAND, silty, trace gravel; fine sand
163	17-Jan-17	Core	0+499	1.40	5	88	5.4	35.0	1184	Ice-Saturated	Not Acceptable (high moisture content, low bulk density)	SAND, some silt to silty, some gravel gravel to gravelly
164	17-Jan-17	Core	0+525	1.47	15	70	17.6	78.0	1760	Ice Rich Soil	Not Acceptable	SILT sandy some gravel to gravelly
165	26-Jan-17	Core	0+500	1.92	40	28	58.8	178.0	1289	Icy Soil	Not Acceptable	SAND, some silt to silty, trace gravel
166	26-Jan-17	Core	0+514	1.76	19	47	28.8	278.0	1234	Ice Rich Soil	Not Acceptable	SAND, Silty, Tr Gravel


D-CP1 Key Trench Jar Test Summary
No Excess Water after Thaw
Ice-Saturated (0% < Excess Water by Volume after Thaw < 10%)
Ice-Rich (10% < Excess Water by Volume after Thaw < 30%)
Icy-Soils (Excess Water by Volume after Thaw > 30%)
Key Trench Depth
Depth from the Original Ground Surface (m)
0
0.5
1
1.5
2
2.5
3
3.5
Bedrock at the bottom of key trench from 5 to 230
0
50
100
150
200
250
300
350
400
450
500
550
600
Distance (m) from Station 0+000 in Key Trench of D-CP1