

PARTICLE SIZE ANALYSIS OF SOILS

Reference

ASTM C136-06 & C117-04

Project No.: 09-1428-5007 (2000)

Client: AEM

Project: Meadowbank Gold Project

Location: Nunavut

Sample No.: **167**
Field Label: SD1 101009-05

Depth (m): NA

Lab ID No: SA 167

Remarks: Water content=1.7%

Date Sampled: October 10, 2009

Sa. Location: Saddle Dam 1, Sta. 0+280 El. 134.5m

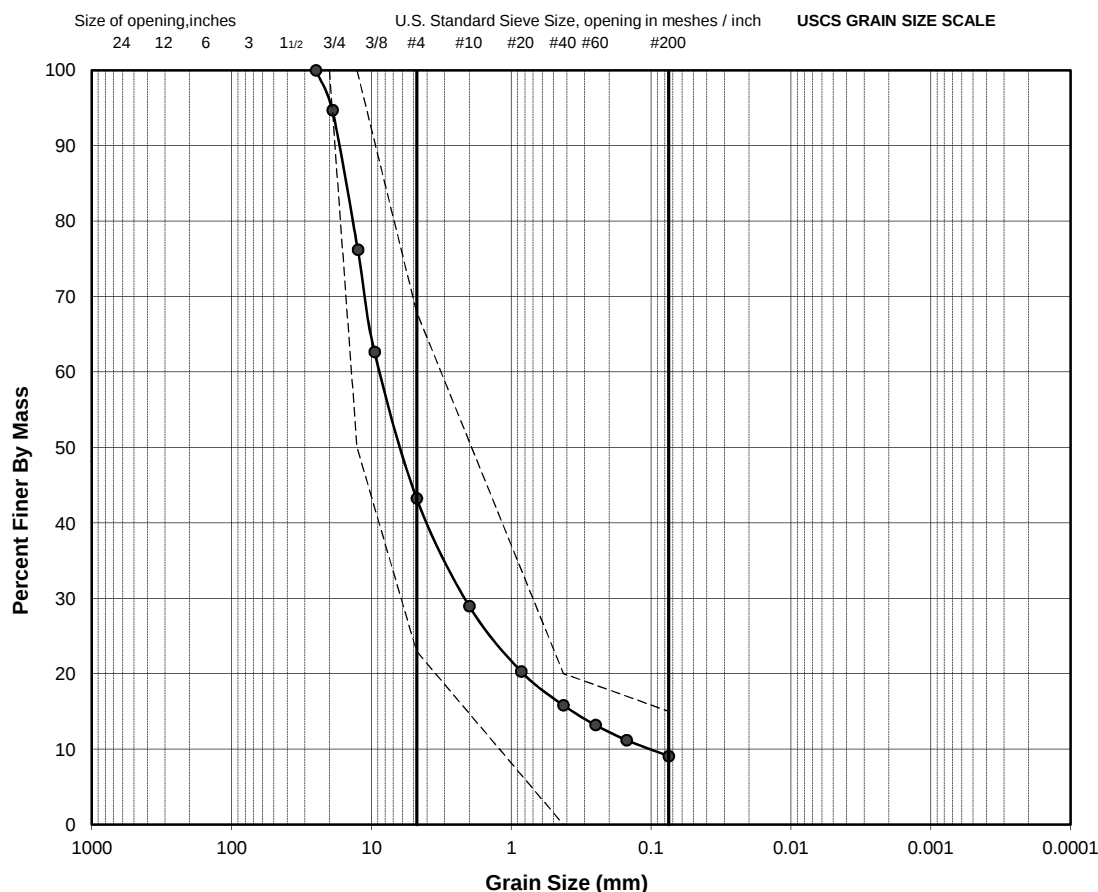
Material Specification: Fine filter

Fine filter layer in place

Method: COMBINED, WASHED

Date Tested: November 1, 2009

Sieve Size (USS)	(mm)	Passing %
3.5"	87.5	100.0
3"	75.0	100.0
2"	50.0	100.0
1.5"	37.5	100.0
1"	25.0	100.0
3/4"	19.0	94.7
1/2"	12.5	76.2
3/8"	9.5	62.7
#4	4.8	43.3
#10	2.0	29.0
#20	0.9	20.3
#40	0.4	15.8
#60	0.3	13.2
#100	0.2	11.2
#200	0.1	9.1



BOULDER	COBBLE	GRAVEL		SAND			FINES (Silt, Clay)
		Coarse	Fine	Coarse	Medium	Fine	

* The test data given herein pertain to the sample provided only. This report constitutes a testing service only. Interpretation of the data can be provided upon request.

Damian Edwards

November 1, 2009

Glen Rutherford

December 2, 2009

TESTED BY

DATE

CHECKED BY

DATE

PARTICLE SIZE ANALYSIS OF SOILS

Reference

ASTM C136-06 & C117-04

Project No.: 09-1428-5007 (2000)

Client: AEM

Project: Meadowbank Gold Project

Location: Nunavut

Remarks: Water content=1.8%

Sa. Location: SD1, Sta. 0+240, offset 55mE 15mS

Fine filter layer in place

Sample No.: **171**
Field Label: SD1 101609-01

Depth (m): NA

Lab ID No: SA171

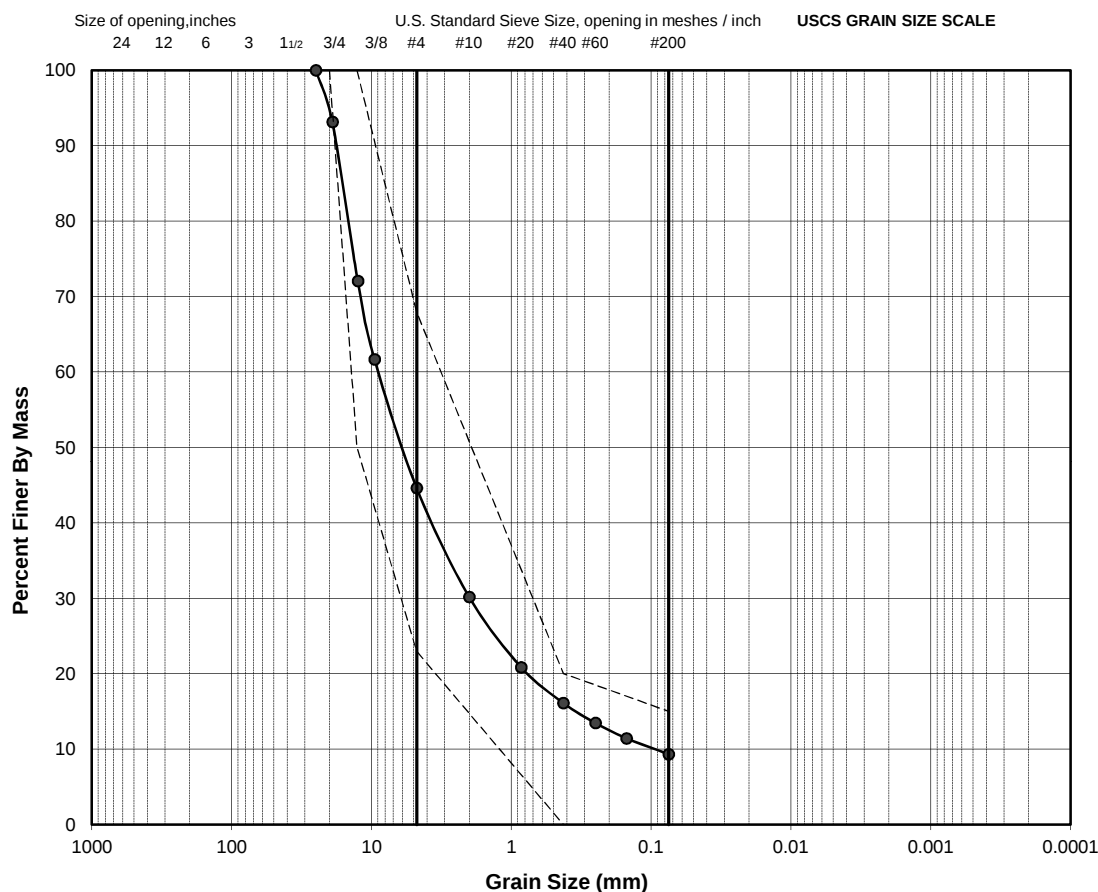
Date Sampled: October 16, 2009

Material Specification: Fine filter

Method: COMBINED, WASHED

Date Tested: October 31, 2009

Sieve Size (USS)	(mm)	Passing %
3.5"	87.5	100.0
3"	75.0	100.0
2"	50.0	100.0
1.5"	37.5	100.0
1"	25.0	100.0
3/4"	19.0	93.2
1/2"	12.5	72.1
3/8"	9.5	61.7
#4	4.8	44.6
#10	2.0	30.2
#20	0.9	20.8
#40	0.4	16.1
#60	0.3	13.5
#100	0.2	11.4
#200	0.1	9.3



BOULDER	COBBLE	GRAVEL	SAND	FINES (Silt, Clay)
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** The test data given herein pertain to the sample provided only. This report constitutes a testing service only. Interpretation of the data can be provided upon request.*

Damian Edwards

October 31, 2009

Glen Rutherford

November 9, 2009

TESTED BY

DATE

CHECKED BY

DATE

PARTICLE SIZE ANALYSIS OF SOILS

Reference

ASTM C136-06 & C117-04

Project No.: 09-1428-5007 (2000)

Client: AEM

Project: Meadowbank Gold Project

Location: Nunavut

Remarks: Water content= 1.7%

Sa. Location: Saddle Dam 1, Sta. 0+225 El. 138.6m

Fine filter layer in place

Sample No.: **172**
Field Label: SD1 101709-01

Depth (m): NA

Lab ID No: SA171

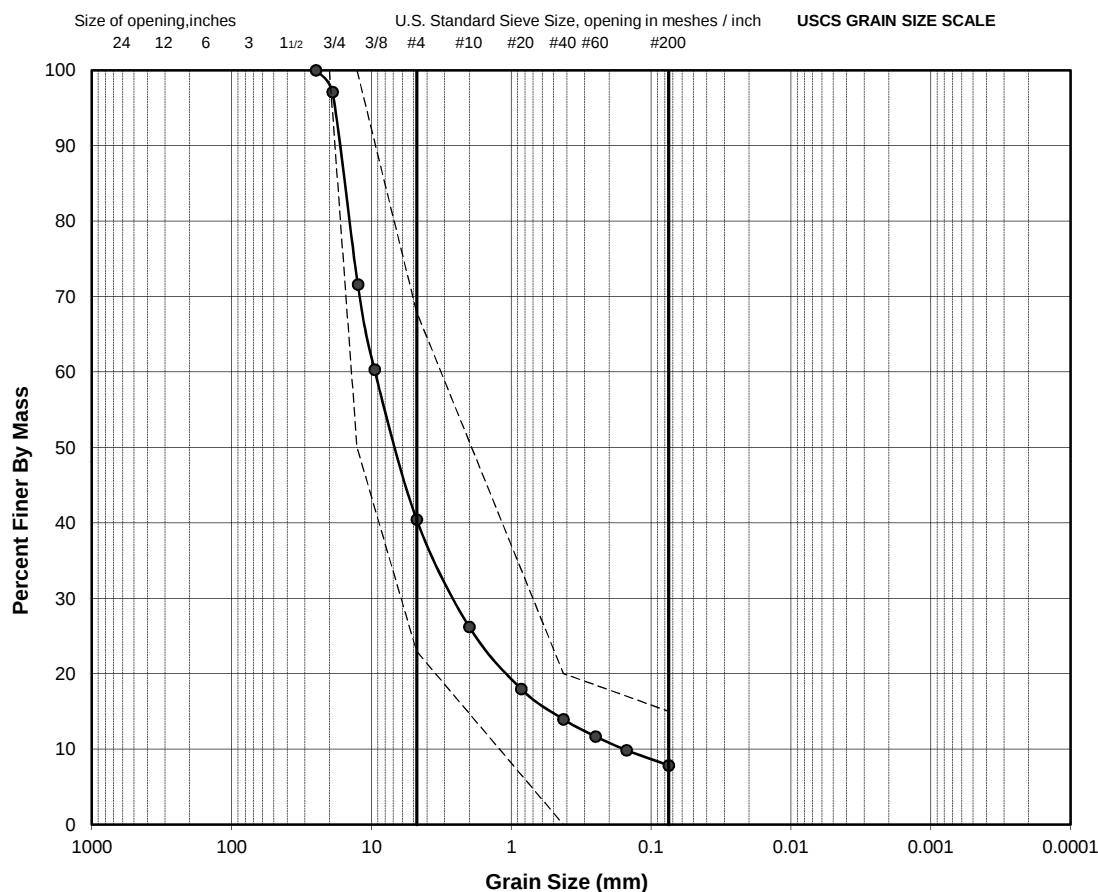
Date Sampled: October 17, 2009

Material Specification: Fine filter

Method: COMBINED, WASHED

Date Tested: November 1, 2009

Sieve Size (USS)	(mm)	Passing %
3.5"	87.5	100.0
3"	75.0	100.0
2"	50.0	100.0
1.5"	37.5	100.0
1"	25.0	100.0
3/4"	19.0	97.1
1/2"	12.5	71.6
3/8"	9.5	60.3
#4	4.8	40.4
#10	2.0	26.2
#20	0.9	18.0
#40	0.4	14.0
#60	0.3	11.7
#100	0.2	9.9
#200	0.1	7.8



BOULDER	COBBLE	GRAVEL	SAND	FINES (Silt, Clay)
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** The test data given herein pertain to the sample provided only. This report constitutes a testing service only. Interpretation of the data can be provided upon request.*

Damian Edwards

November 1, 2009

Glen Rutherford

November 9, 2009

TESTED BY

DATE

CHECKED BY

DATE

PARTICLE SIZE ANALYSIS OF SOILS

Reference

ASTM C136-06 & C117-04

Project No.: 09-1428-5007 (2000)

Client: AEM

Project: Meadowbank Gold Project

Location: Nunavut

Sample No.: **174**
Field Label: SD1 101809-01

Depth (m): NA

Lab ID No: SA174

Remarks: Water content=1.8%

Sa. Location: SANA crusher stockpile

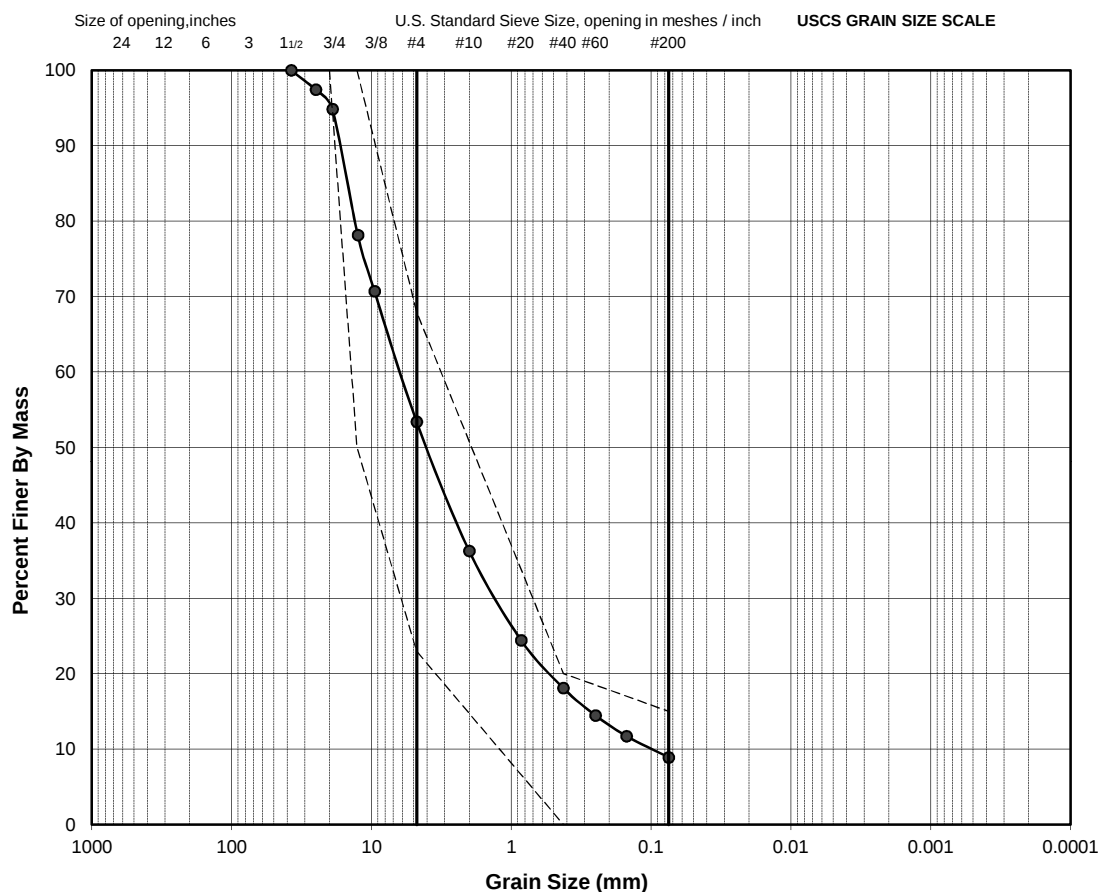
Date Sampled: October 18, 2009

Material Specification: Fine filter

Method: COMBINED, WASHED

Date Tested: October 31, 2009

Sieve Size (USS)	(mm)	Passing %
3.5"	87.5	100.0
3"	75.0	100.0
2"	50.0	100.0
1.5"	37.5	100.0
1"	25.0	97.4
3/4"	19.0	94.8
1/2"	12.5	78.1
3/8"	9.5	70.7
#4	4.8	53.4
#10	2.0	36.3
#20	0.9	24.4
#40	0.4	18.1
#60	0.3	14.5
#100	0.2	11.7
#200	0.1	8.9



BOULDER	COBBLE	GRAVEL	SAND	FINES (Silt, Clay)
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Damian Edwards

October 31, 2009

Glen Rutherford

November 9, 2009

TESTED BY

DATE

CHECKED BY

DATE

PARTICLE SIZE ANALYSIS OF SOILS

Reference

ASTM C136-06 & C117-04

Project No.: 09-1428-5007 (2000)

Client: AEM

Project: Meadowbank Gold Project

Location: Nunavut

Sample No.: **175**
Field Label: SD1 101809-02

Depth (m): NA

Lab ID No: SA175

Remarks: Water content=1.3%

Date Sampled: October 18, 2009

Sa. Location: Saddle Dam 1, Sta. 0+310 El. 137.5m

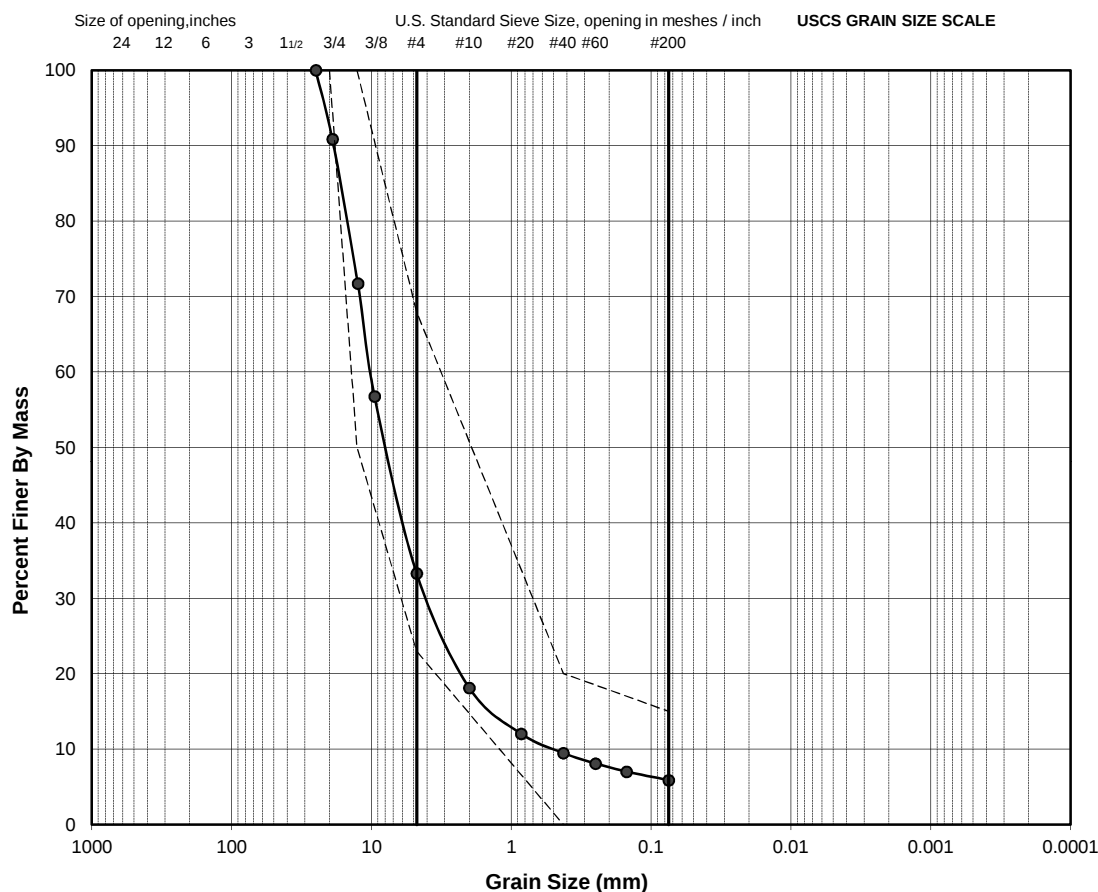
Material Specification: Fine filter

Fine filter layer in place

Method: COMBINED, WASHED

Date Tested: October 31, 2009

Sieve Size (USS)	(mm)	Passing %
3.5"	87.5	100.0
3"	75.0	100.0
2"	50.0	100.0
1.5"	37.5	100.0
1"	25.0	100.0
3/4"	19.0	90.9
1/2"	12.5	71.7
3/8"	9.5	56.8
#4	4.8	33.3
#10	2.0	18.1
#20	0.9	12.0
#40	0.4	9.5
#60	0.3	8.1
#100	0.2	7.0
#200	0.1	5.9



BOULDER	COBBLE	GRAVEL		SAND		FINES (Silt, Clay)

** The test data given herein pertain to the sample provided only. This report constitutes a testing service only. Interpretation of the data can be provided upon request.*

Damian Edwards

October 31, 2009

Glen Rutherford

November 9, 2009

TESTED BY

DATE

CHECKED BY

DATE

PARTICLE SIZE ANALYSIS OF SOILS

Reference

ASTM C136-06 & C117-04

Project No.: 09-1428-5007 (2000)

Client: AEM

Project: Meadowbank Gold Project

Location: Nunavut

Sample No.: **178**
Field Label: SD1 102009-01

Depth (m): NA

Lab ID No: SA178

Remarks: Water content=1.3%

Date Sampled: October 20, 2009

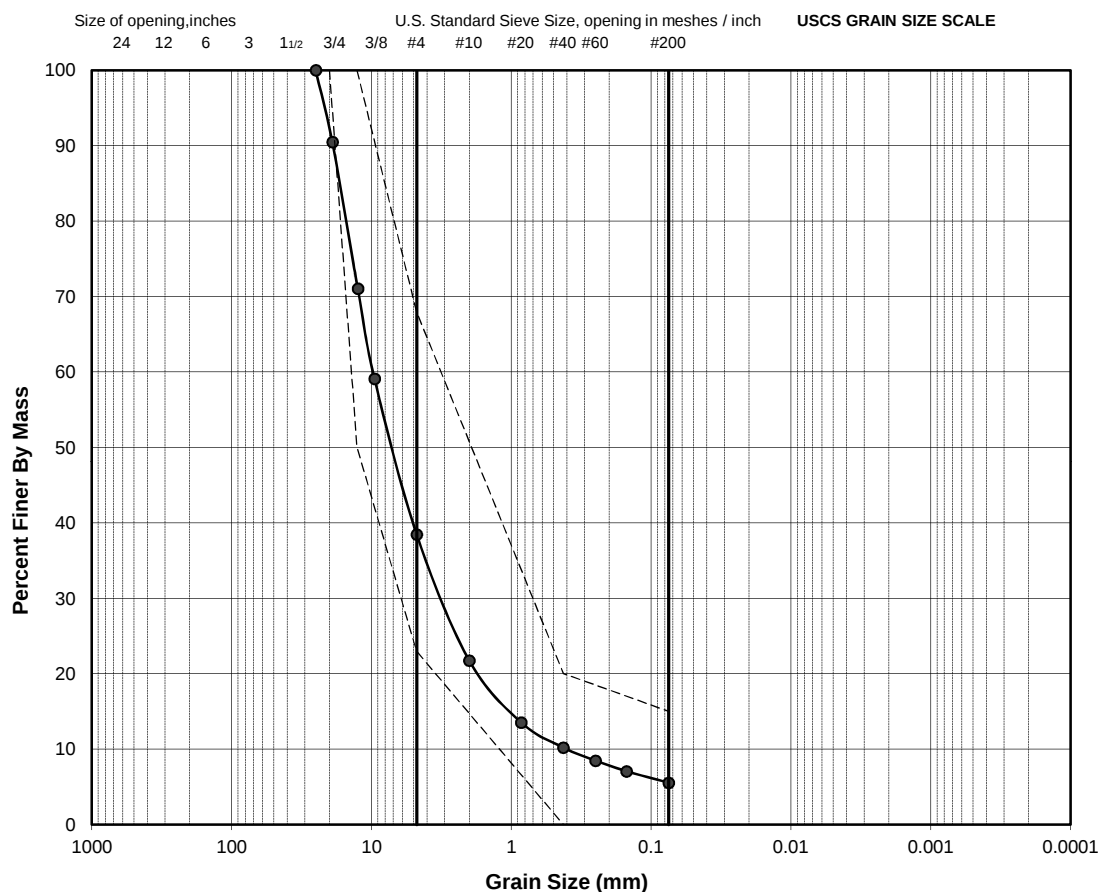
Sa. Location: SD1, Sta. 0+190 offset 45mE 10mS, El. 140.1
 Fine filter layer in place

Material Specification: Fine filter

Method: COMBINED, WASHED

Date Tested: November 1, 2009

Sieve Size (USS)	(mm)	Passing %
3.5"	87.5	100.0
3"	75.0	100.0
2"	50.0	100.0
1.5"	37.5	100.0
1"	25.0	100.0
3/4"	19.0	90.5
1/2"	12.5	71.0
3/8"	9.5	59.1
#4	4.8	38.4
#10	2.0	21.7
#20	0.9	13.5
#40	0.4	10.2
#60	0.3	8.5
#100	0.2	7.1
#200	0.1	5.5



BOULDER	COBBLE	GRAVEL	SAND	FINES (Silt, Clay)
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** The test data given herein pertain to the sample provided only. This report constitutes a testing service only. Interpretation of the data can be provided upon request.*

Damian Edwards

November 1, 2009

Glen Rutherford

November 9, 2009

TESTED BY

DATE

CHECKED BY

DATE

PARTICLE SIZE ANALYSIS OF SOILS

Reference

ASTM C136-06 & C117-04

Project No.: 09-1428-5007 (2000)

Client: AEM

Project: Meadowbank Gold Project

Location: Nunavut

Sample No.: **184**
Field Label: SD1 103009-03

Depth (m): NA

Lab ID No: SA184

Remarks: Water content=1.5%

Date Sampled: October 30, 2009

Sa. Location: SD1, Sta. 0+235 offset 70mE 15mS

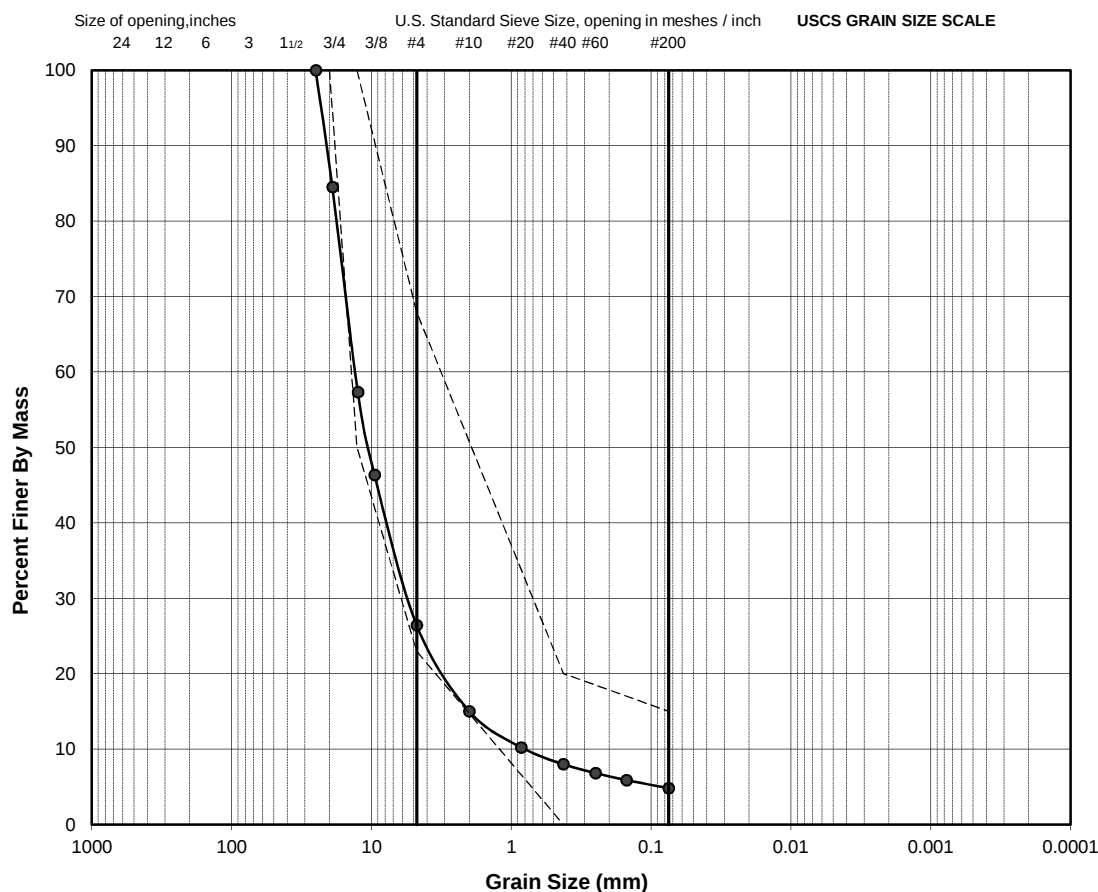
Material Specification: Fine filter

Fine filter layer in place

Method: COMBINED, WASHED

Date Tested: November 2, 2009

Sieve Size (USS)	(mm)	Passing %
3.5"	87.5	100.0
3"	75.0	100.0
2"	50.0	100.0
1.5"	37.5	100.0
1"	25.0	100.0
3/4"	19.0	84.5
1/2"	12.5	57.3
3/8"	9.5	46.4
#4	4.8	26.4
#10	2.0	15.0
#20	0.9	10.2
#40	0.4	8.0
#60	0.3	6.8
#100	0.2	5.9
#200	0.1	4.8



BOULDER	COBBLE	GRAVEL	SAND	FINES (Silt, Clay)
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Damian Edwards

November 2, 2009

Glen Rutherford

November 9, 2009

TESTED BY

DATE

CHECKED BY

DATE



ANALYSIS REPORT

SCC Accreditation No.: 40

Mrs Fiona Esford
Golder Associates Ltd

Date: October 29, 2009
Report: S785-003-38861A

IDENTIFICATION: Geomembrane seam: DT-2, DT-3, DT-7, DT-8
Project name: Meadowbank Gold
Project #: 09-1428-5007
Received: October 29, 2009

STANDARD:

TEST: Determining the Integrity of Nonreinforced Geomembrane-Seams Produced Using Thermo-Fusion Methods ASTM D6392 - 08

TEST CONDITIONS: Sample(s) not conditioned;
Apparatus used: Dynamometer with a Constant Rate of Extension (CRE);
Note: SE1= Break in outer edge of seam; BRK= Break in sheeting; SIP= Separation in the plane of the sheet;
AD-BRK= Break in first seam after some adhesion failure; AD= Adhesion failure (side A or B).
Cross head speed (mm/min.): 500; Tested October 29, 2009

RESULTS: Individual Data Avg. S.D. % CV

DT-2

SHEAR

	30.1	29.9	29.5	29.8	0.3	1.0
Maximum Strength (kN/m):	171.6	170.9	168.4	170.3	1.7	1.0
Maximum Strength (lb/in):	SE1	SE1	SE1			
Locus of break:	783	803	903			
Elongation at break (%):						

PEEL SIDE A

	25.6	25.1	25.2	25.7	25.4	25.4	0.3	1.0
Maximum Strength (kN/m):	146.3	143.5	143.9	146.7	145.2	145.1	1.4	1.0
Maximum Strength (lb/in):	SE1	SE1	SE1	SE1	SE1			
Locus of break:	0	0	0	0	0			
Separation (%):								

PEEL SIDE B

	24.9	24.7	24.7	24.6	25.0	24.8	0.2	0.7
Maximum Strength (kN/m):	142.5	140.9	140.9	140.5	142.6	141.5	1.0	0.7
Maximum Strength (lb/in):	SE1	SE1	SE1	SE1	SE1			
Locus of break:	0	0	0	0	0			
Separation (%):								

Prepared by:

Nancy Fontaine
Nancy Fontaine, Tech.
Technician

Approved by:

Eric Blond
Eric Blond, Eng., M.Sc.A.
Vice-President

Date: October 29, 2009

****For any information concerning this report, please contact Eric Blond****

The reports are identified by an alphanumeric code, the last character refers to the number of revision(s), this is emitted in ascending order. The samples in relation to this test are retained for a period of 30 days following the expedition day of the written report, unless other instructions are received. The fees for all services after the tests are 125.00 \$ per hour and for appraisal in Court, 195.00\$ per hour. The above reported results refer exclusively to the samples submitted for evaluation. This analysis report cannot be partly used or reproduced, unless in whole, without CTT Group prior written consent.



ANALYSIS REPORT

SCC Accreditation No.: 40

Mrs Fiona Esford
Golder Associates Ltd

Date: October 29, 2009
Report: S785-003-38861A

IDENTIFICATION: Geomembrane seam: DT-2, DT-3, DT-7, DT-8
Project name: Meadowbank Gold
Project #: 09-1428-5007
Received: October 29, 2009

STANDARD:

TEST: Determining the Integrity of Nonreinforced Geomembrane-Seams
Produced Using Thermo-Fusion Methods

ASTM D6392 - 08

RESULTS (CONT):

	Individual Data					Avg.	S.D.	% CV
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DT-3

SHEAR

Maximum Strength (kN/m):	29.4	29.5	29.4	29.3	29.3	29.4	0.1	0.3
Maximum Strength (lb/in):	167.6	168.6	167.7	167.4	167.5	167.8	0.5	0.3
Locus of break:	SE1	SE1	SE1	SE1	SE1			
Elongation at break (%):	1430	1477	960	1573	1357			

PEEL SIDE A

Maximum Strength (kN/m):	23.3	25.0	24.5	24.4	24.4	24.3	0.6	2.6
Maximum Strength (lb/in):	132.8	142.7	139.7	139.3	139.4	138.8	3.6	2.6
Locus of break:	SE1	SE1	SE1	SE1	SE1			
Separation (%):	0	0	0	0	0			

PEEL SIDE B

Maximum Strength (kN/m):	23.9	23.2	23.4	23.1	23.8	23.5	0.4	1.5
Maximum Strength (lb/in):	136.2	132.6	133.5	131.9	135.7	134.0	1.9	1.4
Locus of break:	SE1	SE1	SE1	SE1	SE1			
Separation (%):	0	0	0	0	0			

Prepared by:

Nancy Fontaine
Nancy Fontaine, Tech.
Technician

Approved by:

Eric Blond
Eric Blond, Eng., M.Sc.A.
Vice-President

Date: October 29, 2009

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ANALYSIS REPORT
SCC Accreditation No.: 40

Mrs Fiona Esford
Golder Associates Ltd

Date: October 29, 2009
 Report: S785-003-38861A

IDENTIFICATION: Geomembrane seam: DT-2, DT-3, DT-7, DT-8
 Project name: Meadowbank Gold
 Project #: 09-1428-5007
 Received: October 29, 2009

STANDARD:

TEST: Determining the Integrity of Nonreinforced Geomembrane-Seams
 Produced Using Thermo-Fusion Methods

ASTM D6392 - 08

RESULTS (CONT): Individual Data

Avg. S.D. % CV

DT-7

SHEAR

Maximum Strength (kN/m):	27.7	27.6	27.4	27.1	27.1	27.4	0.3	1.0
Maximum Strength (lb/in):	158.2	157.8	156.7	154.7	154.7	156.4	1.7	1.1
Locus of break:	SE1	SE1	SE1	SE1	SE1			
Elongation at break (%):	1083	1150	1087	1147	1033			

PEEL

SIDE A

Maximum Strength (kN/m):	21.0	21.2	21.0	20.8	20.3	20.9	0.3	1.6
Maximum Strength (lb/in):	120.0	120.9	120.1	118.8	116.2	119.2	1.8	1.5
Locus of break:	SE1	SE1	SE1	SE1	SE1			
Separation (%):	0	0	0	0	0			

PEEL

SIDE B

Maximum Strength (kN/m):	22.8	23.5	22.1	21.7	21.4	22.3	0.9	3.8
Maximum Strength (lb/in):	130.1	134.0	126.4	123.7	122.0	127.2	4.9	3.8
Locus of break:	SE1	SE1	SE1	SE1	SE1			
Separation (%):	0	0	0	0	0			

Prepared by:


 Nancy Fontaine, Tech.
 Technician

Approved by:


 Eric Blond, Eng., M.Sc.A.
 Vice-President

Date: October 29, 2009

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ANALYSIS REPORT

SCC Accreditation No.: 40

Mrs Fiona Esford
Golder Associates Ltd

Date: October 29, 2009
Report: S785-003-38861A

IDENTIFICATION: Geomembrane seam: DT-2, DT-3, DT-7, DT-8
Project name: Meadowbank Gold
Project #: 09-1428-5007
Received: October 29, 2009

STANDARD:

TEST: Determining the Integrity of Nonreinforced Geomembrane-Seams Produced Using Thermo-Fusion Methods ASTM D6392 - 08

RESULTS (CONT): Individual Data Avg. S.D. % CV

DT-8

SHEAR

Maximum Strength (kN/m):	27.3	27.7	27.4	27.3	27.4	27.4	0.2	0.6
Maximum Strength (lb/in):	155.8	158.1	156.7	156.0	156.2	156.6	0.9	0.6
Locus of break:	SE1	SE1	SE1	SE1	SE1			
Elongation at break (%):	1100	937	1017	1067	1027			

PEEL

SIDE A

Maximum Strength (kN/m):	22.6	23.2	21.8	22.1	22.7	22.5	0.5	2.4
Maximum Strength (lb/in):	128.8	132.4	124.6	125.9	129.6	128.3	3.1	2.4
Locus of break:	SE1	SE1	SE1	SE1	SE1			
Separation (%):	0	0	0	0	0			

PEEL

SIDE B

Maximum Strength (kN/m):	23.4	18.5	23.7	22.6	22.9	22.2	2.1	9.6
Maximum Strength (lb/in):	133.7	105.4	135.1	129.1	130.6	126.8	12.2	9.6
Locus of break:	SE1	SE1	SE1	SE1	SE1			
Separation (%):	0	0	0	0	0			

REMARKS: DT-2: The size of the sample received was not sufficient to conduct the number of specimens required by the test method.

Prepared by:

Nancy Fontaine, Tech.
Technician

Approved by:

Eric Blond, Eng., M.Sc.A.
Vice-President

Date: October 29, 2009

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ANALYSIS REPORT
SCC Accreditation No.: 40

Mrs Fiona Esford
Golder Associates Ltd

Date: November 17, 2009
 Report: S785-003-39341A

IDENTIFICATION: Geomembrane seam: DT-10, DT-12, DT-14, DT-17, DT-19, DT-21
 Project name: Meadowbank Gold
 Project #: 09-1428-5007
 Received: November 17, 2009

STANDARD:

TEST: Determining the Integrity of Nonreinforced Geomembrane-Seams Produced Using Thermo-Fusion Methods **ASTM D6392 - 08**

TEST CONDITIONS: Sample(s) not conditioned;
 Apparatus used: Dynamometer with a Constant Rate of Extension (CRE);
 Note: SE1= Break in outer edge of seam; BRK= Break in sheeting; SIP= Separation in the plane of the sheet;
 AD-BRK= Break in first seam after some adhesion failure; AD= Adhesion failure (side A or B).
 Cross head speed (mm/min.): 500; Tested November 17, 2009

RESULTS: Individual Data Avg. S.D. % CV

DT-10

SHEAR

	26.4	26.5	26.6	26.5	26.5	Avg.	S.D.	% CV
Maximum Strength (kN/m):	26.4	26.5	26.6	26.5	26.5	26.5	0.1	0.3
Maximum Strength (lb/in):	150.9	151.3	151.8	151.6	151.2	151.4	0.4	0.2
Locus of break:	SE1	SE1	SE1	SE1	SE1			
Elongation at break (%):	1087	1100	1113	1167	1020			

PEEL

SIDE A

	22.9	21.3	21.5	21.4	22.5	Avg.	S.D.	% CV
Maximum Strength (kN/m):	22.9	21.3	21.5	21.4	22.5	21.9	0.7	3.3
Maximum Strength (lb/in):	130.6	121.9	122.6	122.4	128.6	125.2	4.1	3.2
Locus of break:	SE1	SE1	SE1	SE1	SE1			
Separation (%):	0	0	0	0	0			

PEEL

SIDE B

	22.4	22.3	22.1	24.6	21.6	Avg.	S.D.	% CV
Maximum Strength (kN/m):	22.4	22.3	22.1	24.6	21.6	22.6	1.2	5.1
Maximum Strength (lb/in):	128.2	127.1	126.3	140.4	123.6	129.1	6.5	5.1
Locus of break:	SE1	SE1	SE1	SE1	SE1			
Separation (%):	0	0	0	0	0			

Prepared by:


 Nancy Fontaine, Tech.
 Technician

Approved by:


 Eric Blond, Eng., M.Sc.A.
 Vice-President

Date: November 17, 2009

****For any information concerning this report, please contact Eric Blond****

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ANALYSIS REPORT

SCC Accreditation No.: 40

Mrs Fiona Esford
Golder Associates Ltd

Date: November 17, 2009
Report: S785-003-39341A

IDENTIFICATION: Geomembrane seam: DT-10, DT-12, DT-14, DT-17, DT-19, DT-21
Project name: Meadowbank Gold
Project #: 09-1428-5007
Received: November 17, 2009

STANDARD:

TEST: Determining the Integrity of Nonreinforced Geomembrane-Seams
Produced Using Thermo-Fusion Methods

ASTM D6392 - 08

RESULTS (CONT): Individual Data Avg. S.D. % CV

DT-12

SHEAR

Maximum Strength (kN/m):	26.0	26.1	26.0	26.1	26.1	0.1	0.2
Maximum Strength (lb/in):	148.3	149.2	148.6	148.8	148.7	0.4	0.3
Locus of break:	SE1	SE1	SE1	SE1			
Elongation at break (%):	1113	880	997	1027			

PEEL SIDE A

Maximum Strength (kN/m):	21.2	19.3	20.5	20.1	19.7	20.2	0.7	3.6
Maximum Strength (lb/in):	120.9	110.1	117.2	114.6	112.3	115.0	4.2	3.7
Locus of break:	SE1	SE1	SE1	SE1	SE1			
Separation (%):	0	0	0	0	0			

PEEL SIDE B

Maximum Strength (kN/m):	24.7	24.5	24.6	24.6	23.1	24.3	0.7	2.8
Maximum Strength (lb/in):	141.3	139.9	140.8	140.4	131.6	138.8	4.1	2.9
Locus of break:	SE1	SE1	SE1	SE1	SE1			
Separation (%):	0	0	0	0	0			

Prepared by:

Nancy Fontaine
Nancy Fontaine, Tech.
Technician

Approved by:

Eric Blond
Eric Blond, Eng., M.Sc.A.
Vice-President

Date: November 17, 2009

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SCC Accreditation No.: 40

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Date: November 17, 2009
 Report: S785-003-39341A

IDENTIFICATION: Geomembrane seam: DT-10, DT-12, DT-14, DT-17, DT-19, DT-21
 Project name: Meadowbank Gold
 Project #: 09-1428-5007
 Received: November 17, 2009

STANDARD:

TEST: Determining the Integrity of Nonreinforced Geomembrane-Seams
 Produced Using Thermo-Fusion Methods

ASTM D6392 - 08

RESULTS (CONT): Individual Data Avg. S.D. % CV

DT-14

SHEAR

	28.7	28.7	28.8	28.5		28.7	0.1	0.4
Maximum Strength (kN/m):	28.7	28.7	28.8	28.5		28.7	0.1	0.4
Maximum Strength (lb/in):	163.9	164.0	164.2	162.7		163.7	0.7	0.4
Locus of break:	SE1	SE1	SE1	SE1				
Elongation at break (%):	567	1483	1080	847				

PEEL

SIDE A

	24.1	23.5	24.5	23.6	24.3		24.0	0.4	1.8
Maximum Strength (kN/m):	24.1	23.5	24.5	23.6	24.3		24.0	0.4	1.8
Maximum Strength (lb/in):	137.7	134.2	139.6	134.6	138.7		137.0	2.4	1.8
Locus of break:	SE1	SE1	SE1	SE1	SE1				
Separation (%):	0	0	0	0	0				

PEEL

SIDE B

	24.1	23.8	24.0	24.2	24.5		24.1	0.3	1.1
Maximum Strength (kN/m):	24.1	23.8	24.0	24.2	24.5		24.1	0.3	1.1
Maximum Strength (lb/in):	137.9	135.7	136.9	138.3	140.0		137.8	1.6	1.2
Locus of break:	SE1	SE1	SE1	SE1	SE1				
Separation (%):	0	0	0	0	0				

Prepared by:

Nancy Fontaine
 Nancy Fontaine, Tech.
 Technician

Approved by:

Eric Blond
 Eric Blond, Eng., M.Sc.A.
 Vice-President

Date: November 17, 2009

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ANALYSIS REPORT
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Mrs Fiona Esford
Golder Associates Ltd

Date: November 17, 2009
 Report: S785-003-39341A

IDENTIFICATION: Geomembrane seam: DT-10, DT-12, DT-14, DT-17, DT-19, DT-21
 Project name: Meadowbank Gold
 Project #: 09-1428-5007
 Received: November 17, 2009

STANDARD:

TEST: Determining the Integrity of Nonreinforced Geomembrane-Seams Produced Using Thermo-Fusion Methods ASTM D6392 - 08

RESULTS (CONT): Individual Data Avg. S.D. % CV

DT-17

SHEAR

	25.4	25.5	25.5	25.6	26.1	Avg.	S.D.	% CV
Maximum Strength (kN/m):	25.4	25.5	25.5	25.6	26.1	25.6	0.3	1.1
Maximum Strength (lb/in):	144.9	145.3	145.4	146.4	149.1	146.2	1.7	1.2
Locus of break:	SE1	SE1	SE1	SE1	SE1			
Elongation at break (%):	1887	1800	1713	1740	1880			

PEEL **SIDE A**

	21.5	21.6	21.6	21.8	21.7	Avg.	S.D.	% CV
Maximum Strength (kN/m):	21.5	21.6	21.6	21.8	21.7	21.6	0.1	0.5
Maximum Strength (lb/in):	122.6	123.6	123.3	124.4	124.0	123.6	0.7	0.6
Locus of break:	SE1	SE1	SE1	SE1	SE1			
Separation (%):	0	0	0	0	0			

PEEL **SIDE B**

	22.8	23.1	23.3	21.9	21.6	Avg.	S.D.	% CV
Maximum Strength (kN/m):	22.8	23.1	23.3	21.9	21.6	22.5	0.8	3.3
Maximum Strength (lb/in):	130.4	132.1	133.1	125.2	123.3	128.8	4.3	3.4
Locus of break:	SE1	SE1	SE1	SE1	SE1			
Separation (%):	0	0	0	0	0			

Prepared by:

Nancy Fontaine
 Nancy Fontaine, Tech.
 Technician

Approved by:

Eric Blond
 Eric Blond, Eng., M.Sc.A.
 Vice-President

Date: November 17, 2009

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ANALYSIS REPORT

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Mrs Fiona Esford
Golder Associates Ltd

Date: November 17, 2009
Report: S785-003-39341A

IDENTIFICATION: Geomembrane seam: DT-10, DT-12, DT-14, DT-17, DT-19, DT-21
Project name: Meadowbank Gold
Project #: 09-1428-5007
Received: November 17, 2009

STANDARD:

TEST: Determining the Integrity of Nonreinforced Geomembrane-Seams Produced Using Thermo-Fusion Methods ASTM D6392 - 08

RESULTS (CONT): Individual Data Avg. S.D. % CV

DT-19

SHEAR

	26.1	25.9	25.8	26.1	26.0	0.2	0.6
Maximum Strength (kN/m):	26.1	25.9	25.8	26.1	26.0	0.2	0.6
Maximum Strength (lb/in):	149.0	147.6	147.2	149.2	148.3	1.0	0.7
Locus of break:	SE1	SE1	SE1	SE1			
Elongation at break (%):	1087	1197	1183	2017			

PEEL SIDE A

	22.6	22.8	22.1	22.9	22.3	22.5	0.3	1.5
Maximum Strength (kN/m):	22.6	22.8	22.1	22.9	22.3	22.5	0.3	1.5
Maximum Strength (lb/in):	128.9	130.2	126.0	131.0	127.1	128.6	2.1	1.6
Locus of break:	SE1	SE1	SE1	SE1	SE1			
Separation (%):	0	0	0	0	0			

PEEL SIDE B

	22.5	22.5	23.0	22.9	21.4	22.5	0.6	2.8
Maximum Strength (kN/m):	22.5	22.5	23.0	22.9	21.4	22.5	0.6	2.8
Maximum Strength (lb/in):	128.7	128.4	131.4	130.6	122.2	128.3	3.6	2.8
Locus of break:	SE1	SE1	SE1	SE1	SE1			
Separation (%):	0	0	0	0	0			

Prepared by:

Nancy Fontaine
Nancy Fontaine, Tech.
Technician

Approved by:

Eric Blond
Eric Blond, Eng., M.Sc.A.
Vice-President

Date: November 17, 2009

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Golder Associates Ltd

Date: November 17, 2009
 Report: S785-003-39341A

IDENTIFICATION: Geomembrane seam: DT-10, DT-12, DT-14, DT-17, DT-19, DT-21
 Project name: Meadowbank Gold
 Project #: 09-1428-5007
 Received: November 17, 2009

STANDARD:

TEST: Determining the Integrity of Nonreinforced Geomembrane-Seams
 Produced Using Thermo-Fusion Methods

ASTM D6392 - 08

RESULTS (CONT): Individual Data Avg. S.D. % CV

DT-21

SHEAR

	26.7	26.9	26.9	26.5	26.6	26.7	0.2	0.7
Maximum Strength (kN/m):	26.7	26.9	26.9	26.5	26.6	26.7	0.2	0.7
Maximum Strength (lb/in):	152.7	153.8	153.5	151.6	151.9	152.7	1.0	0.6
Locus of break:	SE1	SE1	SE1	SE1	SE1			
Elongation at break (%):	1207	1047	963	1210	1173			

PEEL

SIDE A

	18.7	23.4	21.7	21.7	17.2	20.5	2.5	12.3
Maximum Strength (kN/m):	18.7	23.4	21.7	21.7	17.2	20.5	2.5	12.3
Maximum Strength (lb/in):	106.8	133.4	123.7	123.7	98.2	117.2	14.3	12.2
Locus of break:	AD-BRK	SE1	SE1	SE1	SE1			
Separation (%):	15	0	0	0	0			

PEEL

SIDE B

	25.4	25.7	25.3	25.3	25.0	25.3	0.3	1.0
Maximum Strength (kN/m):	25.4	25.7	25.3	25.3	25.0	25.3	0.3	1.0
Maximum Strength (lb/in):	145.3	146.7	144.4	144.6	142.9	144.8	1.4	1.0
Locus of break:	SE1	SE1	SE1	SE1	SE1			
Separation (%):	0	0	0	0	0			

REMARKS: DT-12, DT-14 and DT-19: The size of the sample received was not sufficient to conduct the number of specimens required by the test method.

Prepared by:

Nancy Fontaine, Tech.
 Technician

Approved by:

Eric Blond, Eng., M.Sc.A.
 Vice-President

Date: November 17, 2009

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PARTICLE SIZE ANALYSIS OF SOILS

Reference

ASTM C136-06 & C117-04

Project No.: 09-1428-5007 (2000)

Client: AEM

Project: Meadowbank Gold Project

Location: Nunavut

Sample No.: **187**
Field Label: SD1 103109-02

Depth (m): NA

Lab ID No: SA187

Remarks: Water content=1.5%

Date Sampled: October 31, 2009

Sa. Location: SD1, Sta. 0+265 offset 60mE 15mS

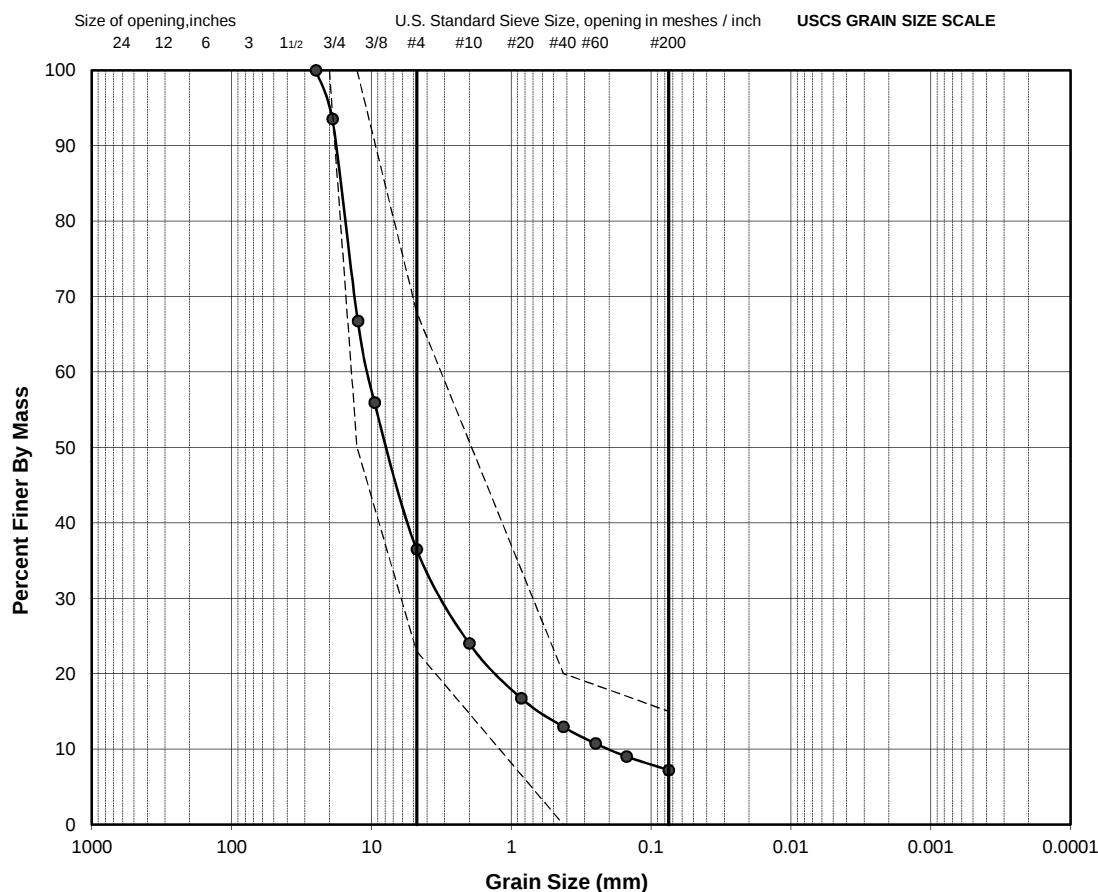
Material Specification: Fine filter

Liner cover in place

Method: COMBINED, WASHED

Date Tested: November 3, 2009

Sieve Size (USS)	(mm)	Passing %
3.5"	87.5	100.0
3"	75.0	100.0
2"	50.0	100.0
1.5"	37.5	100.0
1"	25.0	100.0
3/4"	19.0	93.6
1/2"	12.5	66.8
3/8"	9.5	56.0
#4	4.8	36.5
#10	2.0	24.0
#20	0.9	16.8
#40	0.4	13.0
#60	0.3	10.8
#100	0.2	9.0
#200	0.1	7.2



BOULDER	COBBLE	GRAVEL	SAND	FINES (Silt, Clay)
---------	--------	--------	------	--------------------

** The test data given herein pertain to the sample provided only. This report constitutes a testing service only. Interpretation of the data can be provided upon request.*

Damian Edwards

November 3, 2009

Glen Rutherford

November 9, 2009

TESTED BY

DATE

CHECKED BY

DATE

Project #:	08-1428-0029	Remarks:	Samples of till from
Short Title:	Meadowbank Gold Project		SD1 for ice rich
Client:	AEM		determination
Location:	Nunavut	Date Sampled:	September 27, 2009
Lab ID:	Samples 109 to 113		

Field Label	SD1 092709-01	SD1 092709-02	SD1 092709-03	SD1 092709-04	SD1 092709-05
Sample Number	109	110	111	112	113
Sample Location	Sta. 0+220 offset 35m	Sta. 0+220 offset 50m	Sta. 0+190 offset 55m	Sta. 0+215 offset 70m	Sta. 0+220 offset 45m
Material Spec.	SD1 subgrade	SD1 subgrade	SD1 subgrade	SD1 subgrade	SD1 subgrade
Depth (m)	surface	1.0m	surface	surface	surface
Mass of Dry Soil (g)	682.2	634.2	537.1	1204.4	878.4
Water Content W (%)	31.9	44.2	62.2	17.3	46.7

DE

September 27, 2009

TESTED BY

DATE TESTED

CHECKED BY

DATE CHECKED



Golder Associates Ltd.
500 - 4260 Still Creek Drive, Burnaby, British
Columbia, Canada V5C 6C6
Tel: +1 (604) 296 4200 Fax: +1 (604) 298 5253 www.golder.com



Project #:	09-1428-5007 (2000)	Remarks:	Samples of till from
Short Title:	Meadowbank Gold Project		SD1 for ice rich
Client:	AEM		determination
Location:	Nunavut	Date Sampled:	September 28, 2009
Lab ID:	SA 114 - 118		

Borehole	SD1 092809-01	SD1 092809-02	SD1 092809-03	SD1 092809-04	SD1 092809-05
Sample Number	114	115	116	117	118
Sample Location	Sta. 0+195 offset 30m	Sta. 0+195 offset 50m	Sta. 0+195 offset 75m	Sta. 0+210 offset 60m	Sta. 0+215 offset 20m
Material Spec.	SD1 subgrade	SD1 subgrade	SD1 subgrade	SD1 subgrade	SD1 subgrade
Depth (m)	Surface	Surface	Surface	Surface	Surface
Mass of Dry Soil (g)	1076.6	175.9	254.8	253.5	210.6
Water Content W (%)	35.9	31.4	18.3	37.0	41.7

DE

September 28, 2009

TESTED BY

DATE TESTED

CHECKED BY

DATE CHECKED



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Columbia, Canada V5C 6C6
Tel: +1 (604) 296 4200 Fax: +1 (604) 298 5253 www.golder.com



Project #:	08-1428-0029 (5000)	Remarks:	Samples of till from
Short Title:	Meadowbank Gold Project		SD1 for ice rich
Client:	AEM		determination
Location:	Nunavut	Date Sampled:	September 29, 2009
Lab ID:	SA 120 to 127		

Field Number	SD1092809-06	SD1092809-07	SD1092809-08	SD1092809-09	SD1092809-10
Sample Number	120	121	122	123	124
Sample Location	Sta. 0+215 offset 70m	Sta. 0+210 offset 55m	Sta. 0+220 offset 60m	Sta. 0+210 offset 45m	Sta. 0+220 offset 45m
Material Spec.	SD1 subgrade	SD1 subgrade	SD1 subgrade	SD1 subgrade	SD1 subgrade
Depth (m)	Surface	Surface	Surface	Surface	Surface
Mass of Dry Soil (g)	1171.7	912.2	657.1	850.4	1334.2
Water Content W (%)	12.0	25.3	32.9	19.2	25.8

Field Number	SD1092809-11	SD1092809-12	SD1092809-13		
Sample Number	125	126	127		
Sample Location	Sta. 0+205 offset 30m	Sta. 0+225 offset 40m	Sta. 0+225 offset 20m		
Material Spec.	SD1 subgrade	SD1 subgrade	SD1 subgrade		
Depth (m)	Surface	Surface	Surface		
Mass of Dry Soil (g)	474.4	617.4	619.6		
Water Content W (%)	48.8	37.8	12.3		

DE

September 29, 2009

TESTED BY

DATE TESTED

CHECKED BY

DATE CHECKED



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Project #:	09-1428-5007	Remarks:	Samples of till from
Short Title:	Meadowbank Gold Mine		SD1 for ice rich
Client:	AEM		determination
Location:	Nunavut	Date Sampled:	October 7, 2009
Lab ID:	Sheet No. 1		

Field Label	SD1071009-01	SD1071009-02	SD1071009-03	SD1071009-04	SD1071009-05	SD1071009-06
Sample Number	128	129	130	131	132	133
Sample Location	Sta. 0+208 offset 42m	Sta. 0+216 offset 41m	Sta. 0+216 offset 41m	Sta. 0+219 offset 53m	Sta. 0+219 offset 53m	Sta. 0+229 offset 53m
Material Spec.	SD1 subgrade	SD1 subgrade	SD1 subgrade	SD1 subgrade	SD1 subgrade	SD1 subgrade
Depth (m)	0.45	0.25 - 0.45	1.65	0.0 - 0.6	0.6 - 1.2	0.0 - 0.3
Mass of Dry Soil (g)	78.6	74.4	125.8	40.7	92.8	62.4
Water Content W (%)	4.8	20.7	9.6	33.9	14.8	21.8

Field Label	SD1071009-07	SD1071009-08	SD1071009-09	SD1071009-10	SD1071009-11	SD1071009-12
Sample Number	134	135	136	137	138	139
Sample Location	Sta. 0+229 offset 53m	Sta. 0+229 offset 53m	Sta. 0+228 offset 43m	Sta. 0+228 offset 43m	Sta. 0+236 offset 41m	Sta. 0+236 offset 41m
Material Spec.	SD1 subgrade	SD1 subgrade	SD1 subgrade	SD1 subgrade	SD1 subgrade	SD1 subgrade
Depth (m)	0.4 - 0.8	0.8 - 1.4	0.0 - 0.45	0.5 - 0.8	0.0 - 0.45	0.45 - 0.8
Mass of Dry Soil (g)	99.2	138.9	93.0	68.9	103.9	79.5
Water Content W (%)	16.6	12.5	17.2	20.2	15.7	16.7

Field Label	SD1071009-13	SD1071009-14	SD1071009-15	SD1071009-16	SD1071009-17	SD1071009-18
Sample Number	140	141	142	143	144	145
Sample Location	Sta. 0+243 offset 48m	Sta. 0+243 offset 48m	Sta. 0+243 offset 48m	Sta. 0+252 offset 47m	Sta. 0+252 offset 47m	Sta. 0+252 offset 47m
Material Spec.	SD1 subgrade	SD1 subgrade	SD1 subgrade	SD1 subgrade	SD1 subgrade	SD1 subgrade
Depth (m)	0.0 - 0.45	0.5 - 0.8	0.8 - 1.4	0.0 - 0.4	0.45 - 0.9	0.9 - 1.5
Mass of Dry Soil (g)	132.6	181.4	168.1	175.9	203.1	175.7
Water Content W (%)	14.9	15.2	9.5	5.5	8.8	7.7

Field Label	SD1071009-19	SD1071009-20	SD1071009-21	SD1071009-22	SD1100909-1	SD1100909-2
Sample Number	146	147	148	149	150	151
Sample Location	Sta. 0+200 offset 26m	Sta. 0+200 offset 26m	Sta. 0+200 offset 26m	Sta. 0+200 offset 26m	Sta. 0+220 offset 50m	Sta. 0+215 offset 45m
Material Spec.	SD1 subgrade	SD1 subgrade	SD1 subgrade	SD1 subgrade	SD1 subgrade	SD1 subgrade
Depth (m)	0.0 - 0.4	0.4 - 0.8	1.8 - 2.3	2.3 - 3.7	-	-
Mass of Dry Soil (g)	139.5	159.3	177.0	194.2	72.1	57.2
Water Content W (%)	6.9	13.2	10.8	9.0	111.9	83.0

JV

October 7, 2009

TESTED BY

DATE TESTED

CHECKED BY

DATE CHECKED



Golder Associates Ltd.
500 - 4260 Still Creek Drive, Burnaby, British
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Tel: +1 (604) 296 4200 Fax: +1 (604) 298 5253 www.golder.com



Project #:	09-1428-5007	Remarks:	Samples of till from
Short Title:	Meadowbank Gold Mine		SD1 for ice rich
Client:	AEM		determination
Location:	Nunavut	Date Sampled:	October 7, 2009
Lab ID:	Sheet No. 1		

Field Label	SD1100909-3	SD1100909-4	SD1100909-5	SD1100909-6	SD1100909-7	SD1100909-8
Sample Number	152	153	154	155	156	157
Sample Location	Sta. 0+210 offset 50m	Sta. 0+220 offset 60m	Sta. 0+215 offset 60m	Sta. 0+200 offset 60m	Sta. 0+190 offset 50m	Sta. 0+210 offset 70m
Material Spec.	SD1 subgrade	SD1 subgrade	SD1 subgrade	SD1 subgrade	SD1 subgrade	SD1 subgrade
Depth (m)	-	-	-	-	-	Elev. 130
Mass of Dry Soil (g)	69.5	53.9	105.2	108.8	118.6	734.1
Water Content W (%)	81.4	166.8	49.1	29.0	24.5	38.8

Field Label	SD1100909-9	SD1100909-10	SD1100909-11	SD1100909-12	SD1100909-13	SD1101009-3
Sample Number	158	159	160	161	162	165
Sample Location	Sta. 0+210 offset 72m	Sta. 0+224 offset 64m	Sta. 0+225 offset 72m	Sta. 0+227 offset 70m	Sta. 0+228 offset 60m	Sta. 0+256
Material Spec.	SD1 subgrade	SD1 subgrade	SD1 subgrade	SD1 subgrade	SD1 subgrade	SD1 subgrade
Depth (m)	-	-	-	-	-	-
Mass of Dry Soil (g)	690.3	759.4	1272.2	1031.0	1228.8	894.1
Water Content W (%)	57.3	54.8	11.4	8.0	19.0	21.8

Field Label	SD1101009-4					
Sample Number	166					
Sample Location	Sta. 0+248					
Material Spec.	SD1 subgrade					
Depth (m)	Elev. 130.4					
Mass of Dry Soil (g)	759.5					
Water Content W (%)	23.5					



JV

October 7, 2009

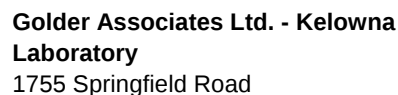
TESTED BY

DATE TESTED

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Golder Associates Ltd.
500 - 4260 Still Creek Drive, Burnaby, British
Columbia, Canada V5C 6C6
Tel: +1 (604) 296 4200 Fax: +1 (604) 298 5253 www.golder.com



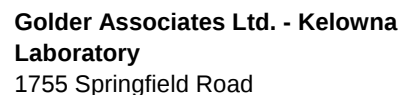
Reference
ASTM D 422-63 (2007)

Sample No.:	165
Field No.:	SD1 101009-03
Depth (m):	N/A
Lab ID No:	SA165

Material:	TILL
Sample Loc:	Saddel Dam 1, Sta. 0+256 El. 131.9m Till plug

[illegible]

DATE _____



Reference
ASTM D 422-63 (2007)

Sample No.:	166
Field No.:	SD1 101009-04
Depth (m):	N/A
Lab ID No:	SA-166

Material:	TILL
Sample Loc:	Saddle Dam 1, Sta. 0+248 El. 130.5m Till plug

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[illegible]

DATE _____

Project #: 09-1428-5007
Short Title: Meadowbank Gold Mine
Client: AEM
Location: Nunavut
Lab ID: Sheet No. 1

Field Label	SD1101009-3	SD1101009-4				
Sample Number	165	166				
Sample Location	Sta. 0+256	Sta. 0+248				
Material Spec.	SD1 Till plug	SD1 Till plug				
Depth (m)	-	Elev. 130.4				
Mass of Dry Soil (g)	894.1	759.5				
Water Content W (%)	21.8	23.5				

JV

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PARTICLE SIZE ANALYSIS OF SOILS

Reference

ASTM C136-06 & C117-04

Project No.: 09-1428-5007 (2000)

Sample No.: **169**
Client: AEM

Field Label: SD1 101109-01

Project: Meadowbank Gold Project

Depth (m): NA

Location: Nunavut

Lab ID No: SA169

Remarks: Water Content = 7.2%

Date Sampled: October 11, 2009

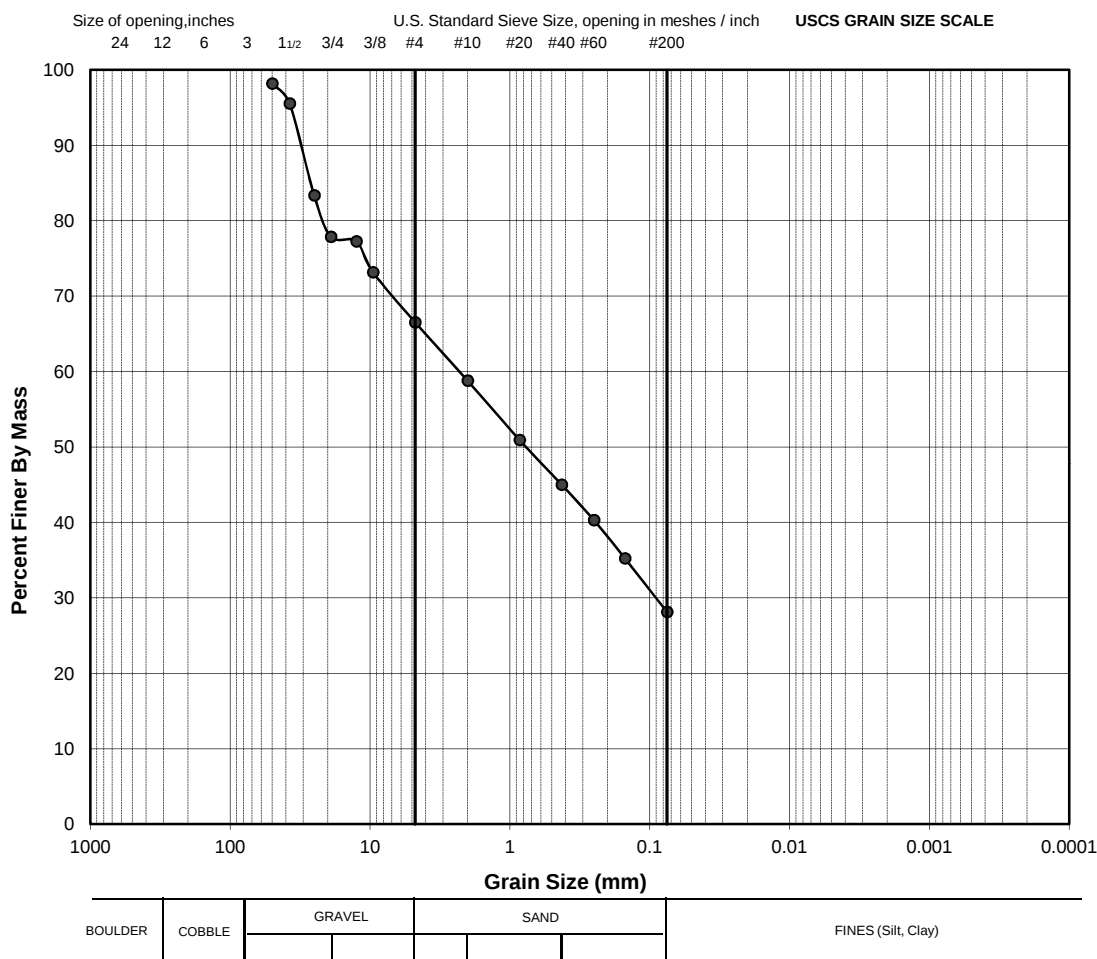
Sa. Location: Saddle Dam 1, Sta. 0+260 Till plug

Material Specification: Till borrow

Method: SPLIT, WASHED

Date Tested: November 3, 2009

Sieve Size (USS)	(mm)	Passing %
8"	200.0	100.0
6"	152.4	100.0
3"	75.0	100.0
2"	50.0	98.2
1.5"	37.5	95.5
1"	25.0	83.4
3/4"	19.0	77.9
1/2"	12.5	77.3
3/8"	9.5	73.2
#4	4.8	66.5
#10	2.0	58.8
#20	0.9	50.9
#40	0.4	45.0
#60	0.3	40.3
#100	0.2	35.2
#200	0.1	28.1



** The test data given herein pertain to the sample provided only. This report constitutes a testing service only. Interpretation of the data can be provided upon request.*

Damian Edwards

November 3, 2009

Glen Rutherford

November 9, 2009

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DATE

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DATE

PARTICLE SIZE ANALYSIS OF SOILS

Reference

ASTM C136-06 & C117-04

Project No.: 09-1428-5007 (2000)

Client: AEM

Project: Meadowbank Gold Project

Location: Nunavut

Sample No.: **170**
Field Label: SD1 101209-01

Depth (m): NA

Lab ID No: SA170

Remarks: Water Content = 7.6%

Sa. Location: SD1, Sta. 0+254 offset 70mE, Till plug

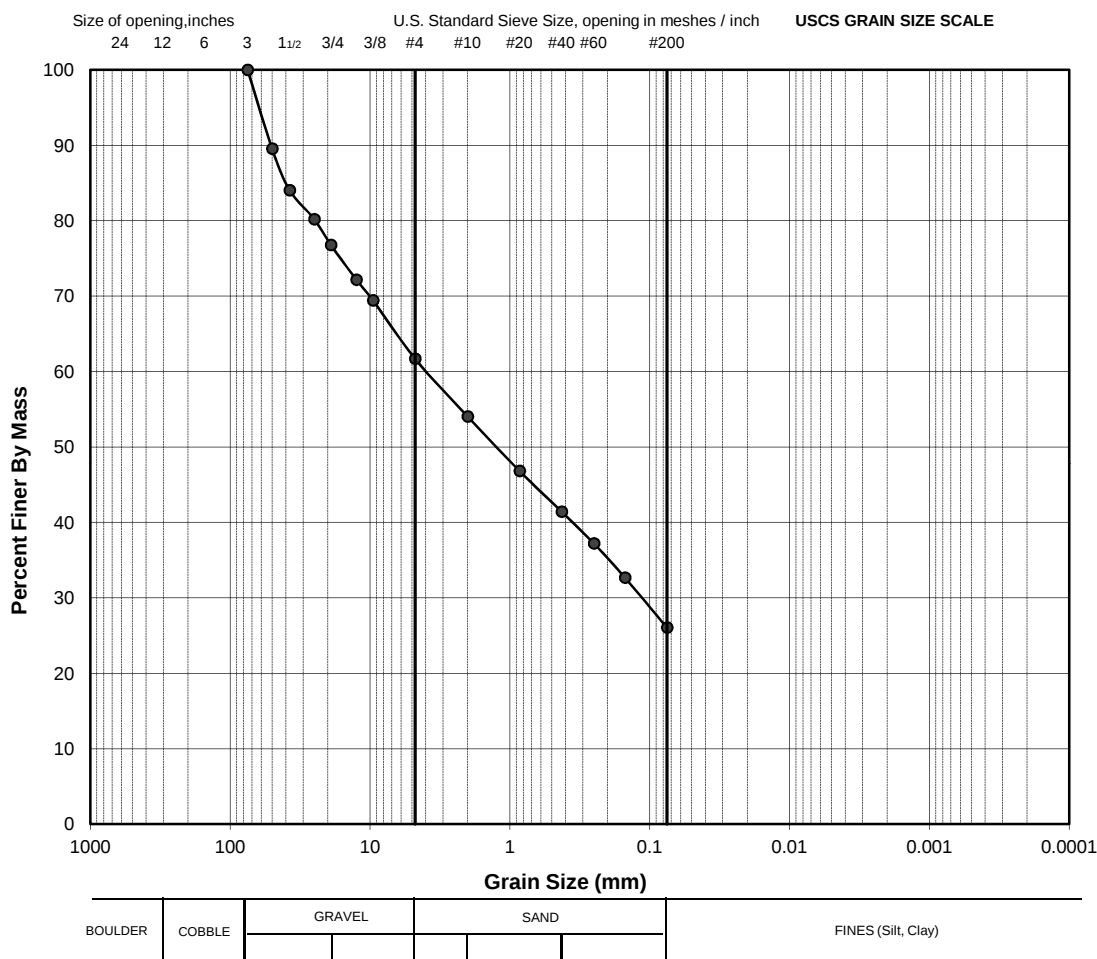
Date Sampled: October 12, 2009

Material Specification: Till borrow

Method: SPLIT, WASHED

Date Tested: November 3, 2009

Sieve Size (USS)	(mm)	Passing %
8"	200.0	100.0
6"	152.4	100.0
3"	75.0	100.0
2"	50.0	89.6
1.5"	37.5	84.0
1"	25.0	80.2
3/4"	19.0	76.8
1/2"	12.5	72.2
3/8"	9.5	69.4
#4	4.8	61.7
#10	2.0	54.1
#20	0.9	46.8
#40	0.4	41.4
#60	0.3	37.2
#100	0.2	32.7
#200	0.1	26.1



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Damian Edwards

November 3, 2009

Glen Rutherford

November 9, 2009

TESTED BY

DATE

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DATE

PARTICLE SIZE ANALYSIS OF SOILS

Reference

ASTM C136-06 & C117-04

Project No.: 09-1428-5007 (2000)

Sample No.: **173**
Client: AEM

Field Label: SD1 101709-02

Project: Meadowbank Gold Project

Depth (m): NA

Location: Nunavut

Lab ID No: SA173

Remarks: Water Content = 8.9%

Date Sampled: October 17, 2009

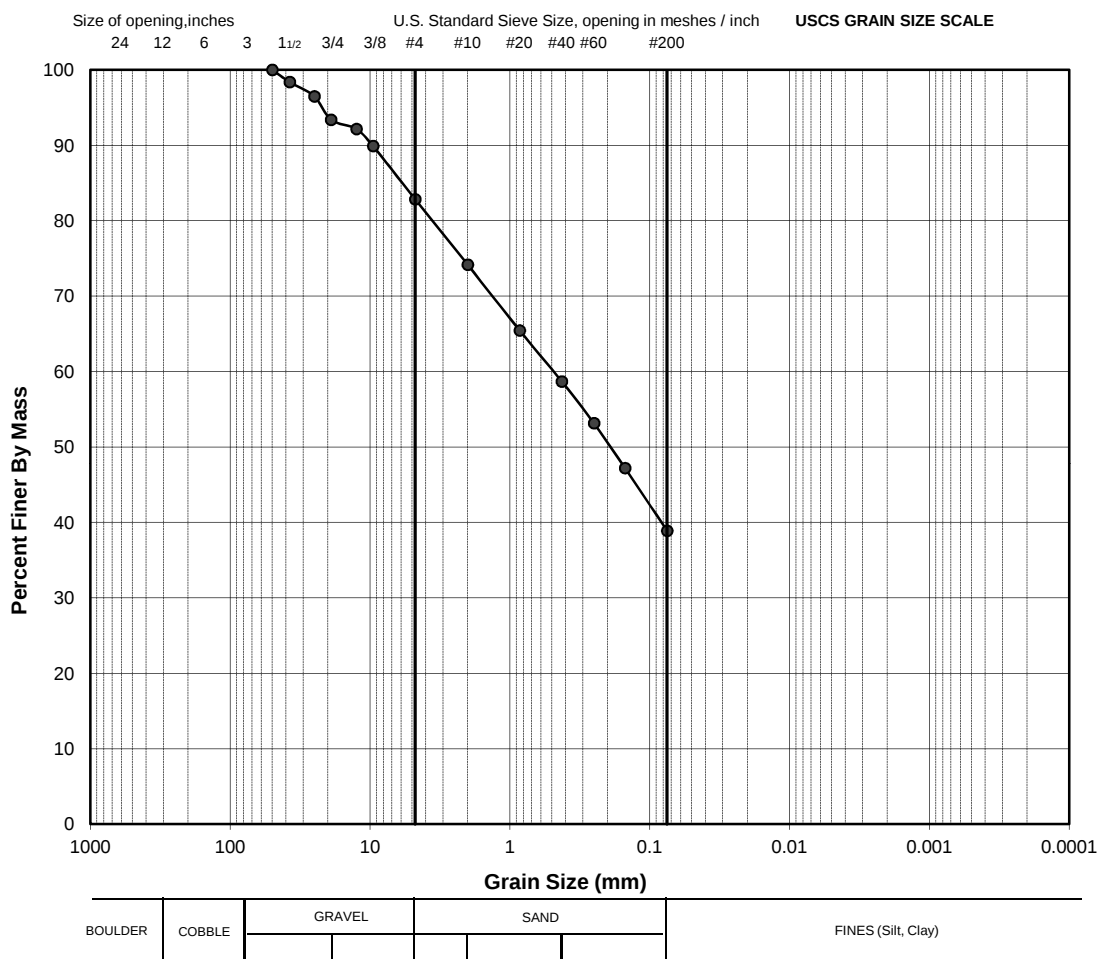
Sa. Location: Saddle Dam 1, Sta. 0+150 Till plug

Material Specification: Till borrow

Method: SPLIT, WASHED

Date Tested: November 3, 2009

Sieve Size (USS)	(mm)	Passing %
8"	200.0	100.0
6"	152.4	100.0
3"	75.0	100.0
2"	50.0	100.0
1.5"	37.5	98.4
1"	25.0	96.5
3/4"	19.0	93.4
1/2"	12.5	92.2
3/8"	9.5	89.9
#4	4.8	82.8
#10	2.0	74.2
#20	0.9	65.4
#40	0.4	58.7
#60	0.3	53.2
#100	0.2	47.2
#200	0.1	38.9



** The test data given herein pertain to the sample provided only. This report constitutes a testing service only. Interpretation of the data can be provided upon request.*

Damian Edwards

November 3, 2009

Glen Rutherford

November 9, 2009

TESTED BY

DATE

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DATE

PARTICLE SIZE ANALYSIS OF SOILS

Reference

ASTM C136-06 & C117-04

Project No.: 09-1428-5007 (2000)

Sample No.: **177**
Client: AEM

Field Label: SD1 101809-04

Project: Meadowbank Gold Project

Depth (m): NA

Location: Nunavut

Lab ID No: SA177

Remarks: Water Content = 7.8%

Date Sampled: October 18, 2009

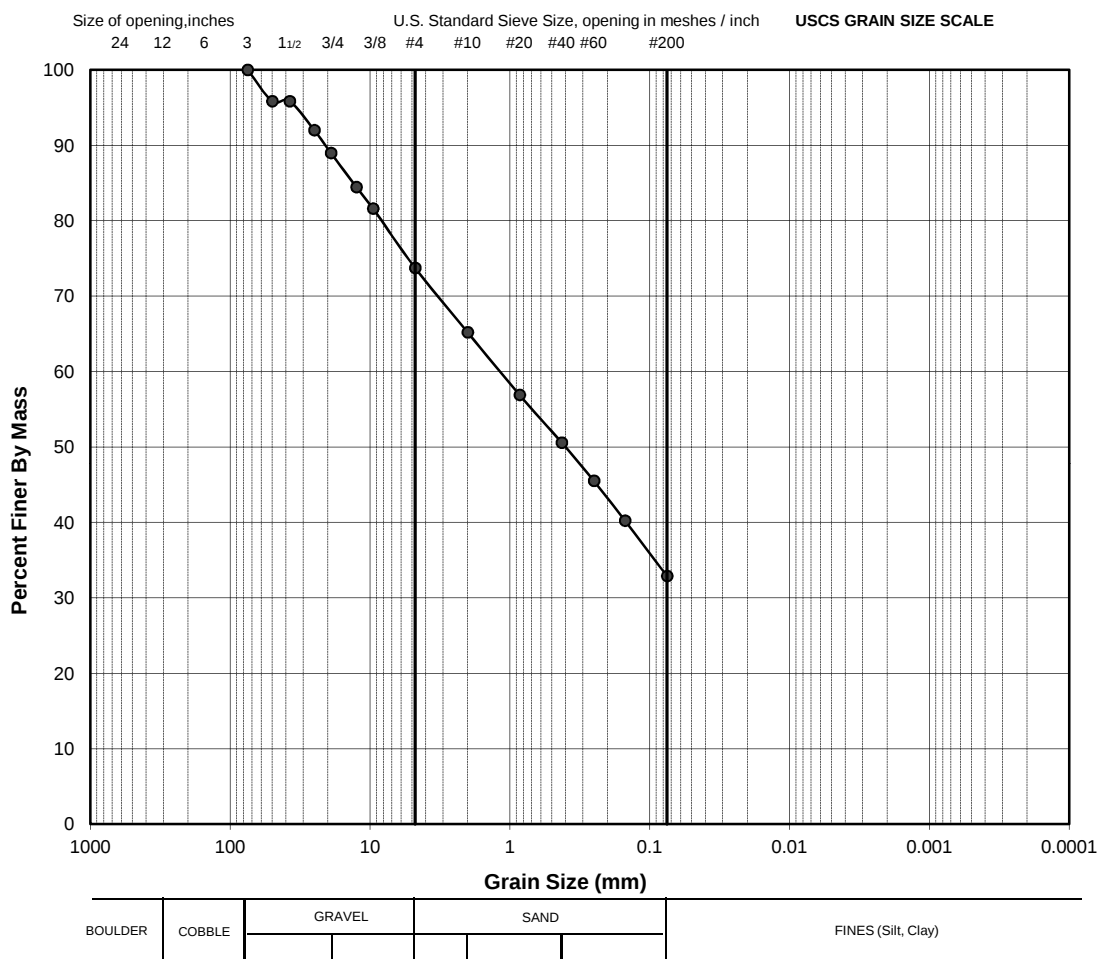
Sa. Location: Saddle Dam 1, Sta. 0+310 Till plug

Material Specification: Till borrow

Method: SPLIT, WASHED

Date Tested: November 3, 2009

Sieve Size (USS)	(mm)	Passing %
8"	200.0	100.0
6"	152.4	100.0
3"	75.0	100.0
2"	50.0	95.9
1.5"	37.5	95.9
1"	25.0	92.0
3/4"	19.0	89.0
1/2"	12.5	84.5
3/8"	9.5	81.6
#4	4.8	73.8
#10	2.0	65.2
#20	0.9	56.9
#40	0.4	50.6
#60	0.3	45.5
#100	0.2	40.2
#200	0.1	32.9



** The test data given herein pertain to the sample provided only. This report constitutes a testing service only. Interpretation of the data can be provided upon request.*

Damian Edwards

November 3, 2009

Glen Rutherford

November 9, 2009

TESTED BY

DATE

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DATE