



APPENDIX B

Laboratory Test Results

B1: QA Results

B2: QC Results



BAY GOOSE DIKE CONSTRUCTION AS-BUILT REPORT MEADOWBANK GOLD MINE, NUNAVUT

B1 – Quality Assurance Results



BAY GOOSE DIKE CONSTRUCTION AS-BUILT REPORT MEADOWBANK GOLD MINE, NUNAVUT

Cement-Soil-Bentonite

Samples List

Sample No.:

- G4
- G1
- G2
- G3
- CSB-01
- CSB-02
- CSB-04
- CSB-05
- CSB-06
- CSB-07

CONCRETE STRENGTH TEST RESULTS

CSA A23.2

Project No.: Y14101097

Project: Meadowbank QC Services

Client: Nahanni Construction Ltd.

Att'n: Golder & Associates

Element Cast & Location Tested:
Bay Goose Dyke
Station 30+855
Elevation 136.1

Test No.: G4

Information From Delivery Ticket

Supplier: NR
Truck No: NR Batch Time: NR
Ticket No: NR Mix No: NR
Load Amount: NR m³ Cumulative: NR m³
Strength: 130 kPa Max Agg. Size: NR mm
Cement Type: CSB Slump/Flow: NR mm
Admixture: Air ☐ SP ☐ Acc. ☐ Air Content: NR %
Other: Winter Heat: ☐

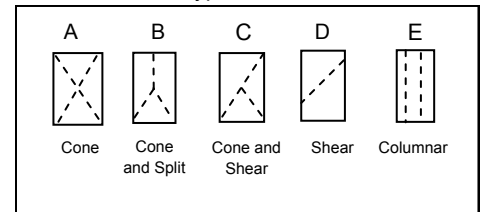
Contract Specifications as Provided

Same as Delivery Ticket: ☐ Not Available: ☐
Strength: 130 kPa Test Age: 28 days
Slump/Flow: ± mm Air Content: %
Class of Concrete: CSB Cement Type:

Field Test Data

Test Time: NR Unit Weight: 2025 kg/m³ Mould Type: plastic
Temperature*: Air: -2 °C Concrete: NR °C Diameter: 100 mm
Cast Slump/Flow: NR mm Cast Air Content: NR %
Initial Slump: NR mm Initial Air content: NR %
Concrete Setting Temperature Within CSA Limits (15-25 °C): Yes (see remarks if No)
Date Cast: September 26, 2009 By: Yves Boulianne - Golders
Date Received: September 27, 2009 By: KG

Type of Fracture



ST: Splitting Tensile F: Flexural Strength

Laboratory Test Data

Cylinder Number	Age Days	Test Date (M/D/Y)	Test By	Load kN / lbs	Strength MPa	Type of Fracture	Comments
-1	7	10/3/2009	KG	200	?	A	Cylinder mass = 3256 g
-2	26	10/22/2009	GS	170	0.000	A	Cylinder mass = 3306 g
-3	N/A	N/A					Cylinder mass = 3295 g
-4	N/A	N/A					Cylinder mass = 3273 g

Remarks:

Lab Cure Temperatures (C): Max: Min:

Reviewed By: _____

Tested for Golder and Associates on behalf of Nahanni Construction Ltd.

Golder Project No.: 08-1428-0029/5000

Golder Sample No.: BG-26-09-09-01, 2-3% Cement

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EBA Engineering
Consultants Ltd.



CONCRETE STRENGTH TEST RESULTS



Standard A 283
Concrete Testing
Category II

CSA A23.2

Project No.: Y14101097

Project: Meadowbank QC Services

Client: Nahanni Construction Ltd.

Att'n: Golder & Associates

Element Cast & Location Tested:

Bay Goose Dyke

Station 30+340 El.:136.1

Test No.: G1

Information From Delivery Ticket

Supplier: NR
Truck No: NR Batch Time: NR
Ticket No: NR Mix No: NR
Load Amount: NR m³ Cumulative: NR m³
Strength: 130 kPa Max Agg. Size: NR mm
Cement Type: CSB Slump/Flow: NR mm
Admixture: Air ☐ SP ☐ Acc. ☐ Air Content: NR %
Other: Winter Heat: ☐

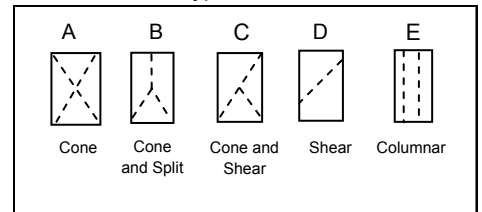
Contract Specifications as Provided

Same as Delivery Ticket: ☐ Not Available: ☐
Strength: 130 kPa Test Age: 28 days
Slump/Flow: ± mm Air Content: %
Class of Concrete: CSB Cement Type:

Field Test Data

Test Time: 9:00:00 Unit Weight: 1861 kg/m³ Mould Type: plastic
Temperature*: Air: NR °C Concrete: NR °C Diameter: 100 mm
Cast Slump/Flow: NR mm Cast Air Content: NR %
Initial Slump: NR mm Initial Air content: NR %
Concrete Setting Temperature Within CSA Limits (15-25 °C): Yes (see remarks if No)
Date Cast: September 20, 2009 By: Jeff Kwok - Golder
Date Received: September 22, 2009 By: GS

Type of Fracture



ST: Splitting Tensile F: Flexural Strength

Laboratory Test Data

Cylinder Number	Age Days	Test Date (M/D/Y)	Test By	Load kN / lbs	Strength MPa	Type of Fracture	Comments
G1-1	3	9/23/2009	GS	1140	0.627	A	Cylinder mass = 3032 g
G1-2	7	9/27/2009	KG	1680	0.917	B	Cylinder mass = 3093 g
G1-3	28	10/18/2009	GS	2180	1.200	D	Cylinder mass = 3004 g
G1-4	N/A	N/A					Cylinder mass = 2932 g

Remarks:

Lab Cure Temperatures (C): Max: 24 Min: 15

Reviewed By: _____

Tested for Golder and Associates on behalf of Nahanni Construction Ltd.

Golder Project No.: 08-1428-0029/5000

Golder Sample No.: BG-20-09-09-01

Note: The CSB cylinders were removed from molds after 2 days of curing. Material strength was low and

the edges of some cylinders broke off. May have weakened the cylinders and provided sites for stress concentration during loading.

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EBA Engineering
Consultants Ltd.



CONCRETE STRENGTH TEST RESULTS



Standard A 283
Concrete Testing
Category II

CSA A23.2

Project No.: Y14101097

Project: Meadowbank QC Services

Client: Nahanni Construction Ltd.

Att'n: Golder & Associates

Element Cast & Location Tested:

Bay Goose Dyke

Station 30+365 El.:136.1

Test No.: G2

Information From Delivery Ticket

Supplier: NR
Truck No: NR Batch Time: NR
Ticket No: NR Mix No: NR
Load Amount: NR m³ Cumulative: NR m³
Strength: 130 kPa Max Agg. Size: NR mm
Cement Type: CSB Slump/Flow: NR mm
Admixture: Air ☐ SP ☐ Acc. ☐ Air Content: NR %
Other: Winter Heat: ☐

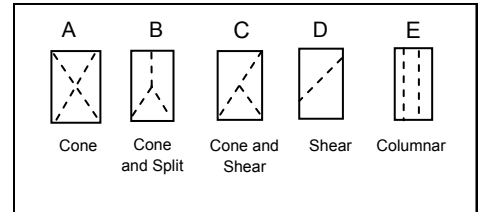
Contract Specifications as Provided

Same as Delivery Ticket: ☐ Not Available: ☐
Strength: 130 kPa Test Age: 28 days
Slump/Flow: ± mm Air Content: %
Class of Concrete: CSB Cement Type:

Field Test Data

Test Time: 20:30:00 Unit Weight: 1989 kg/m³ Mould Type: plastic
Temperature*: Air: NR °C Concrete: NR °C Diameter: 100 mm
Cast Slump/Flow: NR mm Cast Air Content: NR %
Initial Slump: NR mm Initial Air content: NR %
Concrete Setting Temperature Within CSA Limits (15-25 °C): Yes (see remarks if No)
Date Cast: September 20, 2009 By: Nicolas St-Onge - Golder
Date Received: September 22, 2009 By: GS

Type of Fracture



ST: Splitting Tensile F: Flexural Strength

Laboratory Test Data

Cylinder Number	Age Days	Test Date (M/D/Y)	Test By	Load kN / lbs	Strength MPa	Type of Fracture	Comments
G2-1	3	9/23/2009	GS	580	0.317	A	Cylinder mass = 3262 g
G2-2	7	9/27/2009	KG	1010	0.552	C	Cylinder mass = 3189 g
G2-3	28	10/18/2009	GS	1020	0.558	B	Cylinder mass = 3203 g
G2-4	N/A	N/A					Cylinder mass = 3239 g

Remarks:

Lab Cure Temperatures (C): Max: 24 Min: 15

Reviewed By: _____

Tested for Golder and Associates on behalf of Nahanni Construction Ltd.

Golder Project No.: 08-1428-0029/5000

Golder Sample No.: BG-20-09-09-02

CONCRETE STRENGTH TEST RESULTS

CSA A23.2

Project No.: Y14101097

Project: Meadowbank QC Services

Client: Nahanni Construction Ltd.

Att'n: Golder & Associates

Element Cast & Location Tested:
Bay Goose Dyke
Station 30+390

Test No.: G3

Information From Delivery Ticket

Supplier: NR
Truck No: NR Batch Time: NR
Ticket No: NR Mix No: NR
Load Amount: NR m³ Cumulative: NR m³
Strength: 130 kPa Max Agg. Size: NR mm
Cement Type: CSB Slump/Flow: NR mm
Admixture: Air ☐ SP ☐ Acc. ☐ Air Content: NR %
Other: Winter Heat: ☐

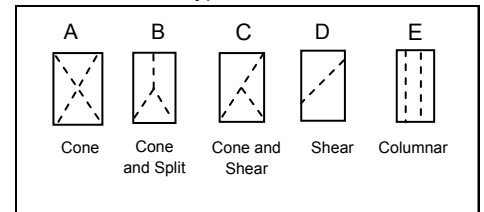
Contract Specifications as Provided

Same as Delivery Ticket: ☐ Not Available: ☐
Strength: 130 kPa Test Age: 28 days
Slump/Flow: ± mm Air Content: %
Class of Concrete: CSB Cement Type:

Field Test Data

Test Time: NR Unit Weight: 2012 kg/m³ Mould Type: plastic
Temperature*: Air: NR °C Concrete: NR °C Diameter: 100 mm
Cast Slump/Flow: NR mm Cast Air Content: NR %
Initial Slump: NR mm Initial Air content: NR %
Concrete Setting Temperature Within CSA Limits (15-25 °C): Yes (see remarks if No)
Date Cast: September 21, 2009 By: Yves Boulianne - Golders
Date Received: September 24, 2009 By: KG

Type of Fracture



ST: Splitting Tensile F: Flexural Strength

Laboratory Test Data

Cylinder Number	Age Days	Test Date (M/D/Y)	Test By	Load kN / lbs	Strength MPa	Type of Fracture	Comments
G3-1	3	9/24/2009	KG	1160	0.634	C	Cylinder mass = 3271 g
G3-2	7	9/28/2009	KG	1070	0.586	A	Cylinder mass = 3247 g
G3-3	28	10/19/2009	GS	1480	0.814	C	Cylinder mass = 3270 g
G3-4	N/A	N/A					Cylinder mass = 3258 g

Remarks:

Lab Cure Temperatures (C): Max: Min:

Reviewed By: _____

Tested for Golder and Associates on behalf of Nahanni Construction Ltd.

Golder Project No.: 08-1428-0029/5000

Golder Sample No.: BG-21-09-09-01



Qualitas

UNCONFINED COMPRESSIVE STRENGTH - ASTM D2166-06

FILE : 16338-G

SAMPLE

CSB-01

CLIENT : Golder Associés

CURE :

7 days

PROJECT : 09-1428-5007

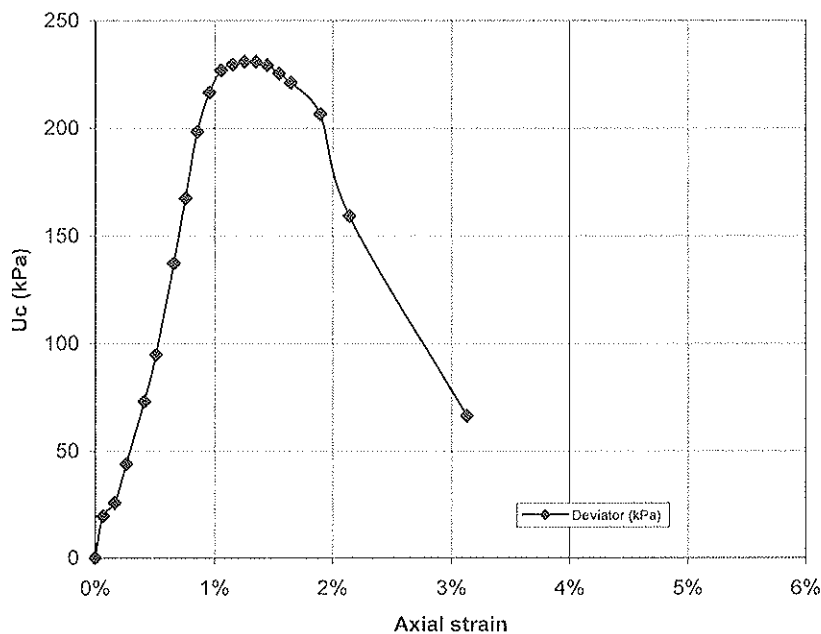
FILE :

16338-G-01Comp-A.xls

Unconfined compressive strength

Initial length, H_i (mm) :	202.06	Initial volume, V_i (cm ³) :	1633	Initial area, A_i (cm ²) :	80.82	Rate of strain (mm/min) :	1.02
Final length, H_f (mm) :	195.73	Final volume, V_f (cm ³) :	1633	Final area, A_f (cm ²) :	83.43		

No.	Data		Deformation	Area	Strength, U_c	Test results
	ΔL (0,01mm)	F_a (N)	$\Delta H/H_i$ (%)	(cm ²)	(kPa)	
1	167	0.0	0.00%	80.82	0	Shear strength :
2	180	158.0	0.06%	80.87	20	
3	200	207.0	0.16%	80.95	26	
4	220	355.0	0.26%	81.03	44	U_c (kPa) :
5	250	593.0	0.41%	81.15	73	$\Delta H/H_i$ (%) :
6	270	769.0	0.51%	81.23	95	
7	300	1116.0	0.66%	81.35	137	
8	320	1364.0	0.76%	81.43	167	
9	340	1617.0	0.86%	81.52	198	
10	360	1767.0	0.96%	81.60	217	
11	380	1853.0	1.05%	81.68	227	Physicals characteristics :
12	400	1877.0	1.15%	81.76	230	
13	420	1890.0	1.25%	81.84	231	Initial water content : 37.1 %
14	440	1892.0	1.35%	81.92	231	
15	460	1880.0	1.45%	82.01	229	Wet unit weight : 1823 kg/m ³
16	480	1850.0	1.55%	82.09	225	Dry unit weight : 1330 kg/m ³
17	500	1817.0	1.65%	82.17	221	
18	550	1702.0	1.90%	82.38	207	
19	600	1315.0	2.14%	82.59	159	Final water content : 37.0 %
20	800	554.0	3.13%	83.43	66	



Remarks :

Tested by : A. Bustamante, ing. jr.

date : 2010-09-24

Approv. by : Hélène Bilodeau, ing.

date : 2010-09-27



Qualitas

UNCONFINED COMPRESSIVE STRENGTH - ASTM D2166-06

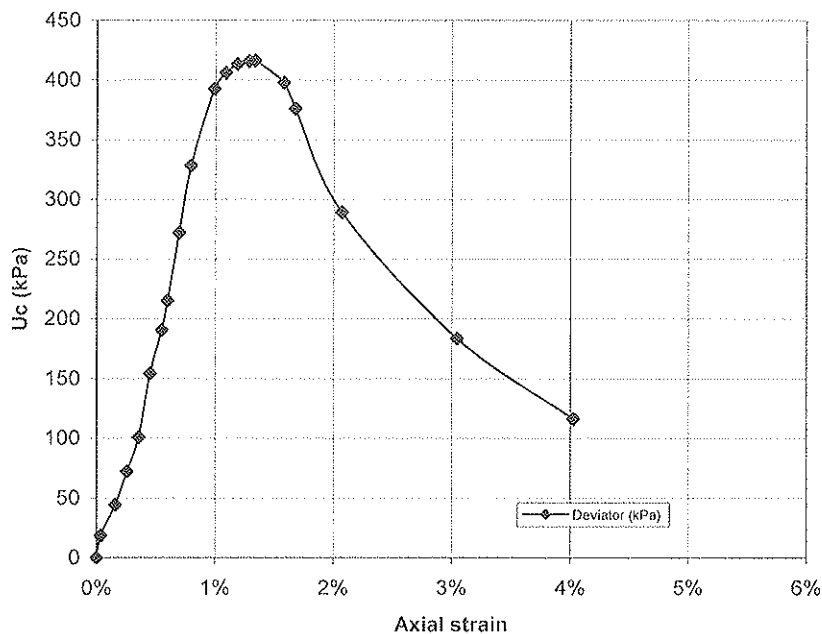
FILE : 16338-G
CLIENT : Golder Associés
PROJECT : 09-1428-5007

SAMPLE CSB-01
CURE : 28 days
FILE : 16338-G-01-28-Comp-A.xls

Unconfined compressive strength

Initial length, H_i (mm) : 204.00 Initial volume, V_i (cm³) : 1670 Initial area, A_i (cm²) : 81.86 Rate of strain (mm/min) : 1.14
Final length, H_f (mm) : 195.78 Final volume, V_f (cm³) : 1670 Final area, A_f (cm²) : 85.30

No.	Data		Deformation	Area	Strength, U_c	Test results
	ΔL (0.01mm)	F_a (N)	$\Delta H/H_i$ (%)	(cm ²)	(kPa)	
1	2478	0.0	0.00%	81.86	0	Shear strength :
2	2485	150.0	0.03%	81.89	18	
3	2510	360.0	0.16%	81.99	44	
4	2530	590.0	0.25%	82.07	72	
5	2550	826.0	0.35%	82.15	101	
6	2570	1267.0	0.45%	82.23	154	U_c (kPa) : 416 kPa
7	2590	1567.0	0.55%	82.31	190	$\Delta H/H_i$ (%) : 1.33 %
8	2600	1770.0	0.60%	82.36	215	Physicals characteristics :
9	2620	2244.0	0.70%	82.44	272	
10	2640	2710.0	0.79%	82.52	328	
11	2680	3247.0	0.99%	82.68	393	
12	2700	3360.0	1.09%	82.76	406	
13	2720	3424.0	1.19%	82.85	413	Initial water content : 38.1 %
14	2740	3446.0	1.28%	82.93	416	Wet unit weight : 1813 kg/m ³ Dry unit weight : 1312 kg/m ³
15	2750	3453.0	1.33%	82.97	416	
16	2800	3309.0	1.58%	83.18	398	Final water content : 37.8 %
17	2820	3132.0	1.68%	83.26	376	
18	2900	2416.0	2.07%	83.59	289	
19	3100	1550.0	3.05%	84.44	184	
20	3300	989.0	4.03%	85.30	116	



Remarks :

Tested by : A. Bustamante, ing. jr.
date : 2010-10-15

Approv. by : Hélène Bilodeau, ing.
date : 2010-10-18



Qualitas

UNCONFINED COMPRESSIVE STRENGTH - ASTM D2166-06

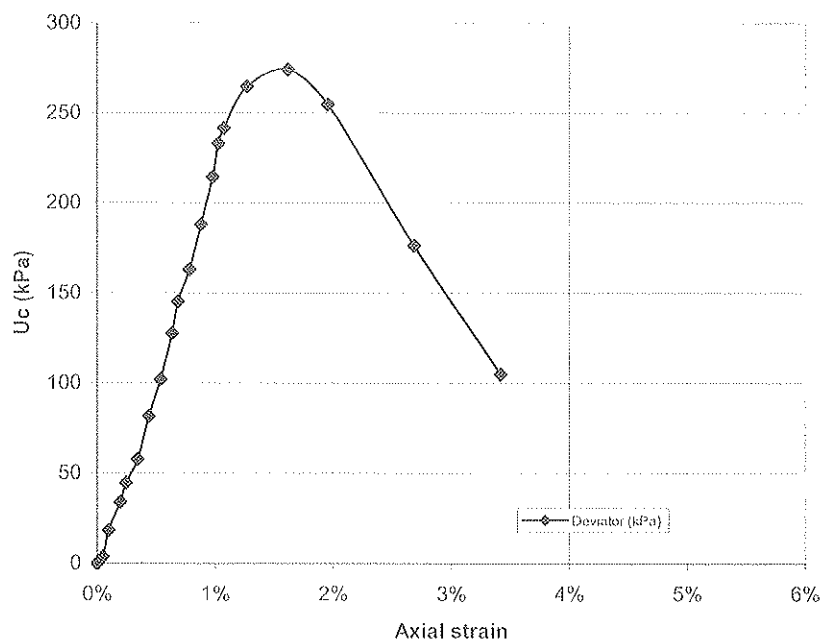
FILE : 16338-G
CLIENT : Golder Associés
PROJECT : 09-1428-5007

SAMPLE CSB-01
CURE : 56 days
FILE : 16338-G-CSB-01-56-Comp-A.xls

Unconfined compressive strength

Initial length, H_i (mm) : 204.78 Initial volume, V_i (cm³) : 1677 Initial area, A_i (cm²) : 81.89 Rate of strain (mm/min) : 1.14
Final length, H_f (mm) : 197.78 Final volume, V_f (cm³) : 1677 Final area, A_f (cm²) : 84.79

No.	Data		Deformation	Area	Strength, U_c	Test results
	ΔL (0.01mm)	F_a (N)	$\Delta H/H_i$ (%)	(cm ²)	(kPa)	
1	2350	0.0	0.00%	81.89	0	Shear strength : U_c (kPa) : 274 kPa $\Delta H/H_i$ (%) : 1.61 %
2	2360	30.0	0.05%	81.93	4	
3	2370	152.0	0.10%	81.97	19	
4	2390	279.0	0.20%	82.06	34	
5	2400	367.0	0.24%	82.09	45	
6	2420	474.0	0.34%	82.17	58	
7	2440	672.0	0.44%	82.25	82	
8	2460	840.0	0.54%	82.34	102	
9	2480	1052.0	0.63%	82.42	128	
10	2490	1198.0	0.68%	82.46	145	
11	2510	1346.0	0.78%	82.54	163	Physicals characteristics : Initial water content : 37.01 % Wet unit weight : 1823 kg/m ³ Dry unit weight : 1330 kg/m ³ Final water content : 36.75 %
12	2530	1554.0	0.88%	82.62	188	
13	2550	1773.0	0.98%	82.70	214	
14	2560	1929.0	1.03%	82.74	233	
15	2570	2000.0	1.07%	82.78	242	
16	2610	2196.0	1.27%	82.95	265	
17	2680	2282.0	1.61%	83.23	274	
18	2750	2129.0	1.95%	83.52	255	
19	2900	1485.0	2.69%	84.15	176	
20	3050	890.0	3.42%	84.79	105	



Remarks :

Tested by : A. Bustamante, ing. jr.
date : 2010-11-12

Approved by : Hélène Bilodeau, ing.
date : 2010-11-16

FILE No. : 16338-G
 CLIENT : Golder Associés
 PROJECT 09-1428-5007

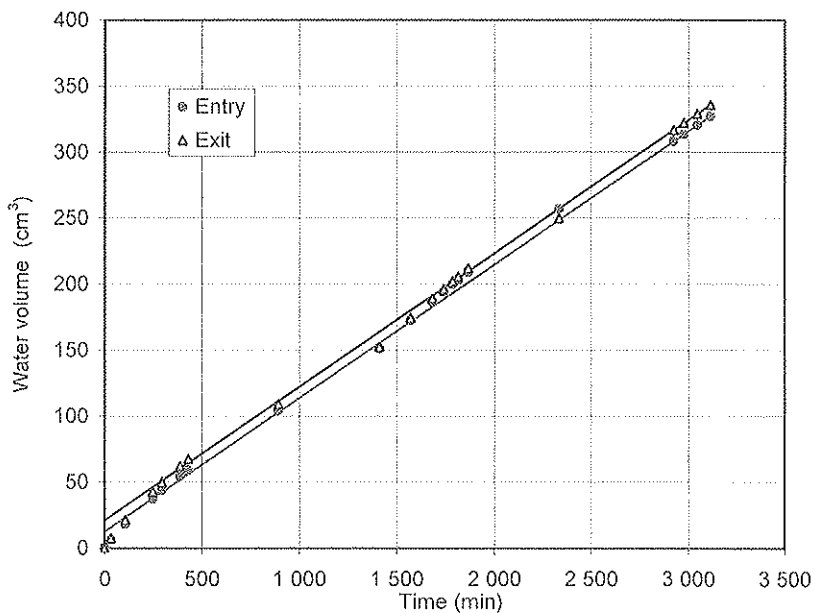
SAMPLE No. : CSB-01
 CURE : 28 days

FILE : 16338-CSB01.KTX

VOLUMETRIC CHARACTERISTICS				PHYSICAL PARAMETERS				PHYSICAL PROPERTIES	
	State	Initial	Final		State	Initial	Saturat.	Perm.	
Diameter of specimen	mm	102.1	102.1	Water content, w	%	34.09	35.89	35.89	D_{RS}
Height of specimen	mm	123.1	123.1	Dry unit weight, ρ_d	kg/m ³	1375	1367	1367	$\rho_{d\ max}$
Cross section of specimen	cm ²	81.9	81.9	Deg. of saturation, S_r	%	96	100	100	W_{opt}
Volume of specimen	cm ³	1008	1008	Porosity, n	1/1	0.489	0.492	0.492	
Wet weight	g	1856.07	1876.7	Void ratio, e	1/1	0.957	0.969	0.969	
Dry weight	g	1384.2							
Water content, w	%	34.09	35.58						

TEST CONDITIONS				WATER CONTENT				APPARATUS AND METHOD	
	State	Consol.	Saturat.	Perm.		State	Initial	Final	Initial
Cell pressure	kPa	10	510	530		Type	Auxil.	Total	Total
Top back-pressure	kPa	5	505	505	Tare no			R-6	
Base differential	cm eau	0	0	100	Wet weight			2159.9	1856.1
Effective pressure	kPa	5	5	20	Dry weight			1667.4	1384.2
Hydraulic gradient	1/1	0	0	8.1	Tare weight			283.2	
					w %			35.58	34.09
									Water temp.: 20° C

EXPERIMENTAL DATAS				
Date	Hour	dt	Water volume (cm ³)	
mm-jj	hh:mm	min	Entry	Exit
10-18	09:14	0	0.0	0.0
	09:47	33	6.6	7.4
	11:02	108	18.3	21.1
	13:23	249	37.2	42.9
	14:10	296	43.4	49.7
	15:44	390	54.4	62.2
	16:25	431	59.0	67.4
10-19	00:10	896	104.1	109.1
	08:48	1 414	151.2	152.4
	11:28	1 574	172.3	174.3
	13:18	1 684	186.5	188.9
	14:16	1 742	193.7	196.0
	15:02	1 788	199.4	201.9
	15:30	1 816	202.9	205.5
10-20	16:21	1 867	209.0	211.8
	00:10	2 336	256.7	249.5
	10:01	2 927	307.9	316.5
	10:53	2 979	313.4	322.0
	12:02	3 048	320.4	329.0
	13:11	3 117	327.1	335.7



Materiel type : Mix of soil, bentonite and concrete
 Specimen type : Intact
 Consistency :

P_{100} : mm
 P_p : kg/cm²

Remarks :

This test is realized with a commercial drinking water.

ND : no determinated

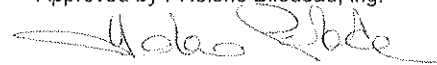
* : Estimated value

TEST RESULTS

Initial dry unit weight 1375 kg/m³
 Initial water content 34.09 %
 Initial degree of saturation 96 %

Coefficient of permeability 2.5E-06 cm/s
 Hydraulic gradient applied 8.14 1/1

Tested by : A. Bustamante, ing. jr.
 Approved by : H          , ing.



Date : 10-10-21

**Qualitas****UNCONFINED COMPRESSIVE STRENGTH - ASTM D2166-06**

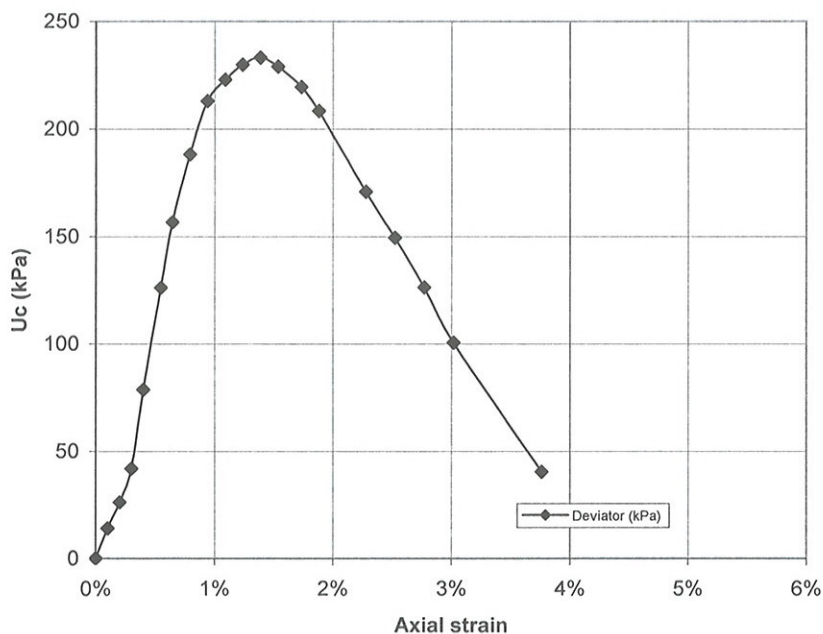
FILE : 16338-G
CLIENT : Golder Associés
PROJECT : 09-1428-5007

SAMPLE CSB-02
CURE : 7 days
FILE : 16338-G-02Comp-A.xls

Unconfined compressive strength

Initial length, H_i (mm) : 201.97 Initial volume, V_i (cm³) : 1640 Initial area, A_i (cm²) : 81.20 Rate of strain (mm/min) : 2.54
Final length, H_f (mm) : 194.37 Final volume, V_f (cm³) : 1640 Final area, A_f (cm²) : 84.38

No.	Data		Deformation	Area	Strength, U_c	Test results
	ΔL (0,01mm)	F_a (N)	$\Delta H/H_i$ (%)	(cm ²)	(kPa)	
1	40	0.0	0.00%	81.20	0	Shear strength :
2	60	113.0	0.10%	81.28	14	
3	80	212.0	0.20%	81.36	26	
4	100	340.0	0.30%	81.44	42	U_c (kPa) : 233 kPa
5	120	640.0	0.40%	81.52	79	$\Delta H/H_i$ (%) : 1.39 %
6	150	1030.0	0.54%	81.64	126	Physicals characteristics :
7	170	1280.0	0.64%	81.73	157	
8	200	1540.0	0.79%	81.85	188	
9	230	1745.0	0.94%	81.97	213	Initial water content : 36.0 %
10	260	1830.0	1.09%	82.09	223	
11	290	1890.0	1.24%	82.22	230	
12	320	1919.0	1.39%	82.34	233	Wet unit weight : 1848 kg/m ³
13	350	1888.0	1.53%	82.47	229	
14	390	1814.0	1.73%	82.63	220	
15	420	1724.0	1.88%	82.76	208	Dry unit weight : 1359 kg/m ³
16	500	1420.0	2.28%	83.09	171	Final water content : 35.9 %
17	550	1244.0	2.53%	83.30	149	
18	600	1054.0	2.77%	83.52	126	
19	650	841.0	3.02%	83.73	100	
20	800	340.0	3.76%	84.38	40	



Remarks :

Tested by : A. Bustamante, ing. jr.
date : 2010-09-24

Approv. by : Hélène Bilodeau, ing.
date : 2010-09-27



Qualitas

UNCONFINED COMPRESSIVE STRENGTH - ASTM D2166-06

FILE : 16338-G
CLIENT : Golder Associés
PROJECT : 09-1428-5007

SAMPLE CSB-02

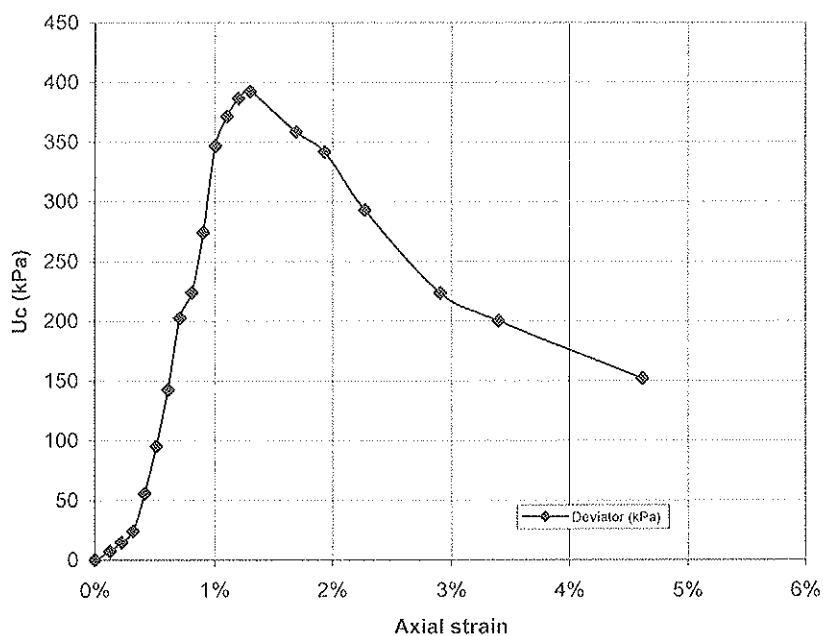
CURE : 28 days

FILE : 16338-G-02-28-Comp-A.xls

Unconfined compressive strength

Initial length, H_i (mm) : 204.81 Initial volume, V_i (cm³) : 1674 Initial area, A_i (cm²) : 81.73 Rate of strain (mm/min) : 1.14
Final length, H_f (mm) : 195.35 Final volume, V_f (cm³) : 1674 Final area, A_f (cm²) : 85.69

No.	Data		Deformation	Area	Strength, U_c	Test results
	ΔL (0.01mm)	F_a (N)	$\Delta H/H_i$ (%)	(cm ²)	(kPa)	
1	2354	0.0	0.00%	81.73	0	Shear strength :
2	2380	60.0	0.13%	81.84	7	
3	2400	120.0	0.22%	81.92	15	
4	2420	197.0	0.32%	82.00	24	U_c (kPa) : 392 kPa
5	2440	455.0	0.42%	82.08	55	$\Delta H/H_i$ (%) : 1.30 %
6	2460	780.0	0.52%	82.16	95	Physicals characteristics :
7	2480	1170.0	0.62%	82.24	142	
8	2500	1667.0	0.71%	82.32	202	
9	2520	1844.0	0.81%	82.40	224	Initial water content : 29.1 %
10	2540	2260.0	0.91%	82.48	274	
11	2560	2860.0	1.01%	82.56	346	
12	2580	3069.0	1.10%	82.65	371	Wet unit weight : 1934 kg/m ³
13	2600	3197.0	1.20%	82.73	386	
14	2620	3250.0	1.30%	82.81	392	
15	2700	2981.0	1.69%	83.14	359	Dry unit weight : 1498 kg/m ³
16	2750	2845.0	1.93%	83.35	341	Final water content : 29.0 %
17	2820	2450.0	2.28%	83.64	293	
18	2950	1882.0	2.91%	84.18	224	
19	3050	1692.0	3.40%	84.61	200	
20	3300	1300.0	4.62%	85.69	152	



Remarks :

Tested by : A. Bustamante, ing. jr.

date : 2010-10-15

Approv. by : Hélène Bilodeau, ing.

date : 2010-10-18

**Qualitas****UNCONFINED COMPRESSIVE STRENGTH - ASTM D2166-06**

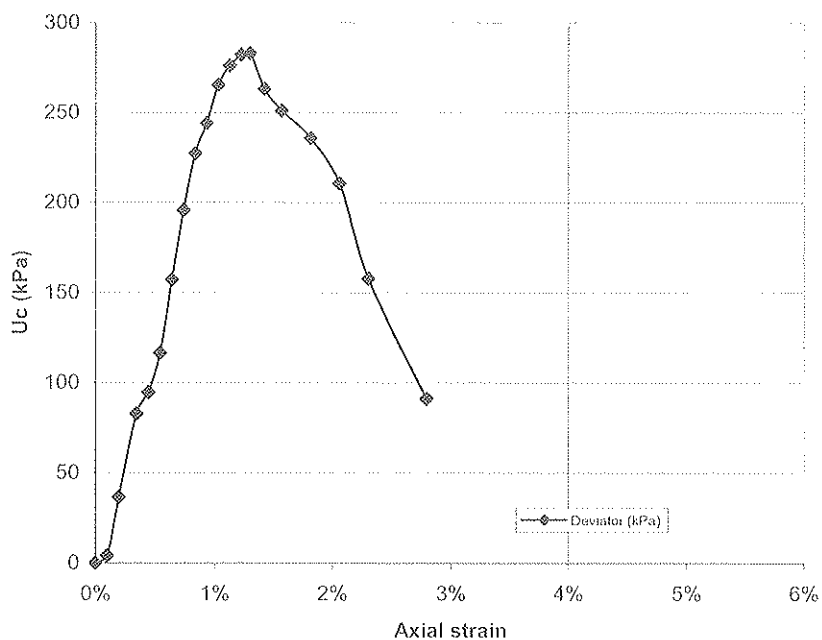
FILE : 16338-G
CLIENT : Golder Associés
PROJECT : 09-1428-5007

SAMPLE CSB-02
CURE : 56 days
FILE : 16338-G-CSB-02-56-Comp-A.xls

Unconfined compressive strength

Initial lenght, H_i (mm) :	204.02	Initial volume, V_i (cm ³) :	1653	Initial area, A_i (cm ²) :	81.02	Rate of strain (mm/min) :	1.14
Final lenght, H_f (mm) :	198.32	Final volume, V_f (cm ³) :	1653	Final area, A_f (cm ²) :	83.35		

No.	Data		Deformation	Area	Strength, U_c	Test results
	ΔL (0.01mm)	F_a (N)	$\Delta H/H_i$ (%)	(cm ²)	(kPa)	
1	2430	0.0	0.00%	81.02	0	Shear strength : U_c (kPa) : 283 kPa $\Delta H/H_i$ (%) : 1.30 %
2	2450	34.0	0.10%	81.10	4	
3	2470	297.0	0.20%	81.18	37	
4	2500	674.0	0.34%	81.30	83	
5	2520	772.0	0.44%	81.38	95	
6	2540	950.0	0.54%	81.46	117	
7	2560	1284.0	0.64%	81.54	157	
8	2580	1600.0	0.74%	81.62	196	
9	2600	1858.0	0.83%	81.70	227	
10	2620	1999.0	0.93%	81.78	244	
11	2640	2174.0	1.03%	81.86	266	Physicals characteristics : Initial water content : 38.91 % Wet unit weight : 1818 kg/m ³ Dry unit weight : 1309 kg/m ³ Final water content : 38.79 %
12	2660	2264.0	1.13%	81.95	276	
13	2680	2316.0	1.23%	82.03	282	
14	2695	2325.0	1.30%	82.09	283	
15	2720	2165.0	1.42%	82.19	263	
16	2750	2069.0	1.57%	82.31	251	
17	2800	1947.0	1.81%	82.52	236	
18	2850	1743.0	2.06%	82.72	211	
19	2900	1310.0	2.30%	82.93	158	
20	3000	760.0	2.79%	83.35	91	



Remarks :

Tested by : A. Bustamante, ing. jr.
date : 2010-11-12

Approv. by : H          , ing.
date : 2010-11-16

FILE No. : 16338-G
CLIENT : Golder Associés
PROJECT 09-1428-5007

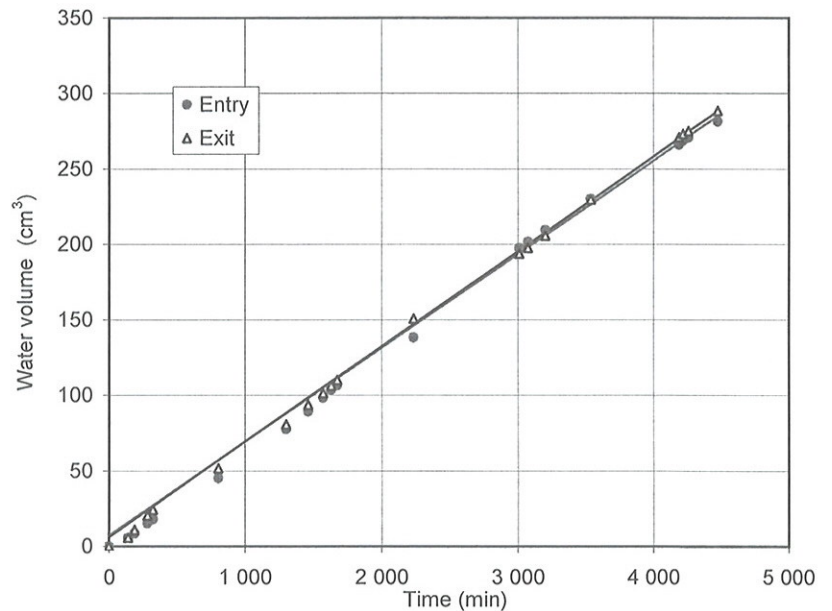
SAMPLE No. : CSB-02
CURE : 28 days

FILE : 16338-CSB02.KTX

VOLUMETRIC CHARACTERISTICS				PHYSICAL PARAMETERS				PHYSICAL PROPERTIES	
	State	Initial	Final	State	Initial	Saturat.	Perm.		
Diameter of specimen	mm	101.9	101.9	Water content , w	%	34.94	36.57	36.57	D _{RS}
Height of specimen	mm	126.0	126.0	Dry unit weight, ρ_d	kg/m ³	1363	1355	1355	$\rho_{d\max}$
Cross section of specimen	cm ²	81.6	81.6	Deg. of saturation, S _r	%	97	100	100	W _{opt}
Volume of specimen	cm ³	1028	1028	Porosity, n	1/1	0.494	0.497	0.497	
Wet weight	g	1885.13	1904.4	Void ratio, e	1/1	0.975	0.987	0.987	
Dry weight	g	1397.0							
Water content, w	%	34.94	36.32						

TEST CONDITIONS				WATER CONTENT				APPARATUS AND METHOD	
	State	Consol.	Saturat.	Perm.	State	Initial	Final	Initial	
Cell pressure	kPa	10	510	525	Type	Auxil.	Total	Total	Cell : K-2
Top back-pressure	kPa	5	505	505	Tare no		C-40		Unity : 2
Base differential	cm eau	0	0	100	Wet weight		2334.8	1885.1	Membr. : 0.4 mm
Effective pressure	kPa	5	5	15	Dry weight		1827.4	1397.0	Number : 2
Hydraulic gradient	1/1	0	0	8.0	Tare weight		430.4		Sequence : CSK
					w %		36.32	34.94	Water temp.: 20° C

EXPERIMENTAL DATAS				
Date	Hour	dt	Water volume (cm ³)	
mm-jj	hh:mm	min	Entry	Exit
10-18	11:03	0	0.0	0.0
	13:24	141	5.5	5.7
	14:11	188	8.6	10.9
	15:44	281	15.2	20.4
	16:25	322	17.8	24.3
10-19	00:30	807	45.0	51.6
	08:48	1 305	77.5	80.7
	11:28	1 465	89.2	93.6
	13:18	1 575	98.1	101.4
	14:16	1 633	103.5	106.2
10-20	15:02	1 679	106.5	110.1
	00:20	2 237	138.0	150.6
	13:13	3 010	197.6	193.6
	14:19	3 076	201.5	197.6
	16:26	3 203	209.3	205.6
10-21	22:00	3 537	230.0	229.6
	08:56	4 193	266.0	271.1
	09:28	4 225	268.4	273.1
	10:09	4 266	270.5	275.1
	13:43	4 480	281.5	288.5



Materiel type : Mix of soil, bentonite and concrete
Specimen type : Intact
Consistency :

P₁₀₀ : mm
P_p : kg/cm²

Remarks :

This test is realized with a commercial drinking water.

ND : no determinated

* : Estimated value

TEST RESULTS

Initial dry unit weight	1363	kg/m ³
Initial water content	34.94	%
Initial degree of saturation	97	%
Coefficient of permeability	1.6E-06	cm/s
Hydraulic gradient applied	7.96	1/1

Tested by : A. Bustamante, ing. jr.
Approved by : Hélène Bilodeau, ing.



Date : 10-10-22

**Qualitas****UNCONFINED COMPRESSIVE STRENGTH - ASTM D2166-06**

FILE : 16338-G

SAMPLE

CSB-04

CLIENT : Golder Associés

CURE :

7 days

PROJECT : 09-1428-5007

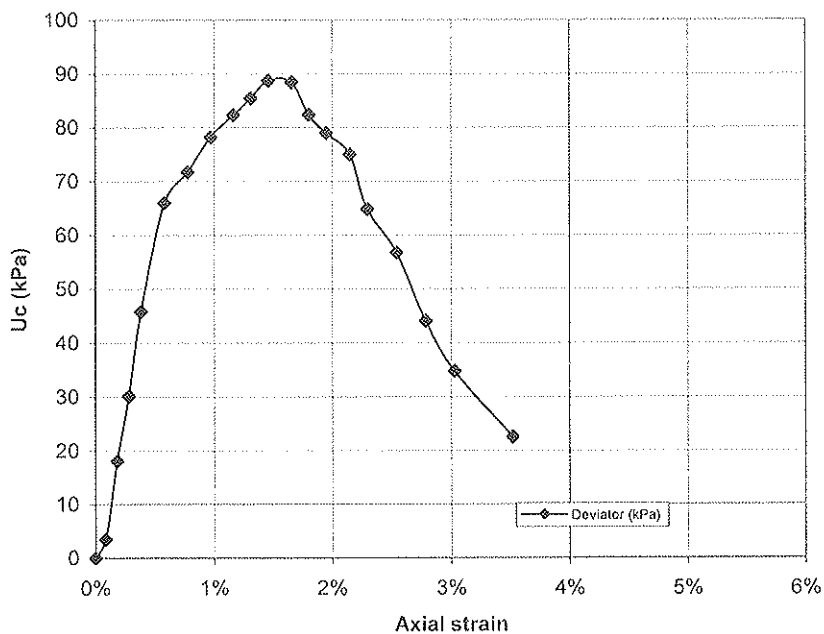
FILE :

16338-G-04Comp-A.xls

Unconfined compressive strength

Initial length, H_i (mm) :	203.82	Initial volume, V_i (cm ³) :	1660	Initial area, A_i (cm ²) :	81.44	Rate of strain (mm/min) :	1.14
Final length, H_f (mm) :	196.64	Final volume, V_f (cm ³) :	1660	Final area, A_f (cm ²) :	84.42		

No.	Data		Deformation	Area	Strength, U_c	Test results
	ΔL (0.01mm)	F_a (N)	$\Delta H/H_i$ (%)	(cm ²)	(kPa)	
1	2482	0.0	0.00%	81.44	0	
2	2500	28.0	0.09%	81.52	3	Shear strength :
3	2520	147.0	0.19%	81.60	18	
4	2540	246.0	0.28%	81.68	30	U_c (kPa) : 89 kPa
5	2560	374.0	0.38%	81.76	46	$\Delta H/H_i$ (%) : 1.46 %
6	2600	540.0	0.58%	81.92	66	
7	2640	588.0	0.78%	82.08	72	
8	2680	643.0	0.97%	82.24	78	
9	2720	678.0	1.17%	82.41	82	
10	2750	705.0	1.31%	82.53	85	
11	2780	733.0	1.46%	82.65	89	Physicals characteristics :
12	2820	732.0	1.66%	82.82	88	
13	2850	683.0	1.81%	82.94	82	Initial water content : 29.5 %
14	2880	656.0	1.95%	83.07	79	
15	2920	624.0	2.15%	83.23	75	Wet unit weight : 1923 kg/m ³
16	2960	540.0	2.30%	83.36	65	Dry unit weight : 1485 kg/m ³
17	3000	474.0	2.54%	83.57	57	
18	3050	369.0	2.79%	83.78	44	
19	3100	292.0	3.03%	83.99	35	Final water content : 28.8 %
20	3200	190.0	3.52%	84.42	23	



Remarks :

Tested by : A. Bustamante, ing. jr.

date : 2010-09-29

Approv. by : Hélène Bilodeau, ing.

date : 2010-10-01



Qualitas

UNCONFINED COMPRESSIVE STRENGTH - ASTM D2166-06

FILE : 16338-G

CLIENT : Golder Associés

PROJECT : 09-1428-5007

SAMPLE

CSB-04

CURE :

28 days

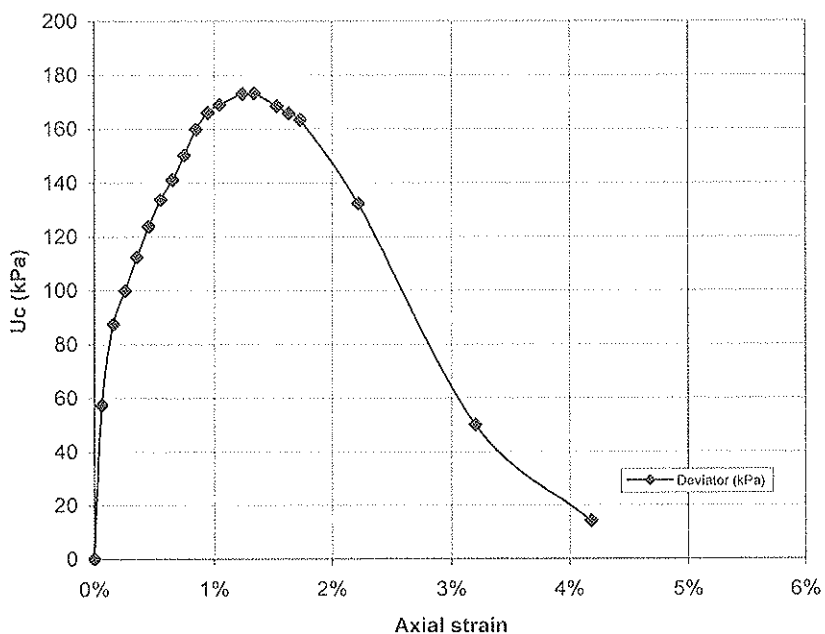
FILE :

16338-G-04-28Comp-A.xls

Unconfined compressive strength

Initial length, Hi (mm) :	203.73	Initial volume, Vi (cm³) :	1648	Initial area, Ai (cm²) :	80.89	Rate of strain (mm/min) :	1.14
Final length, Hf (mm) :	195.2	Final volume, Vf (cm³) :	1648	Final area, Af (cm²) :	84.43		

No.	Data		Deformation	Area	Strength, Uc	Test results	
	ΔL	Fa	$\Delta H/H_i$				
	(0,01mm)	(N)	(%)	(cm²)	(kPa)		
1	47	0.0	0.00%	80.89	0	Shear strength :	
2	60	464.0	0.06%	80.94	57		
3	80	709.0	0.16%	81.02	88		
4	100	811.0	0.26%	81.10	100	Uc (kPa) :	173 kPa
5	120	912.0	0.36%	81.18	112	$\Delta H/H_i$ (%) :	1.34 %
6	140	1006.0	0.46%	81.26	124		
7	160	1088.0	0.55%	81.34	134		
8	180	1149.0	0.65%	81.42	141		
9	200	1224.0	0.75%	81.50	150		
10	220	1304.0	0.85%	81.58	160		
11	240	1355.0	0.95%	81.67	166	Physicals characteristics :	
12	260	1381.0	1.05%	81.75	169		
13	300	1417.0	1.24%	81.91	173	Initial water content :	28.7 %
14	320	1420.0	1.34%	81.99	173		
15	360	1384.0	1.54%	82.15	168	Wet unit weight :	1937 kg/m³
16	380	1363.0	1.63%	82.24	166	Dry unit weight :	1505 kg/m³
17	400	1345.0	1.73%	82.32	163		
18	500	1094.0	2.22%	82.73	132		
19	700	418.0	3.21%	83.57	50	Final water content :	28.2 %
20	900	119.0	4.19%	84.43	14		



Remarks :

Tested by : A. Bustamante, ing. jr.

date : 2010-10-19

Approved by : Hélène Bilodeau, ing.

date : 2010-10-20

**Qualitas****UNCONFINED COMPRESSIVE STRENGTH - ASTM D2166-06**

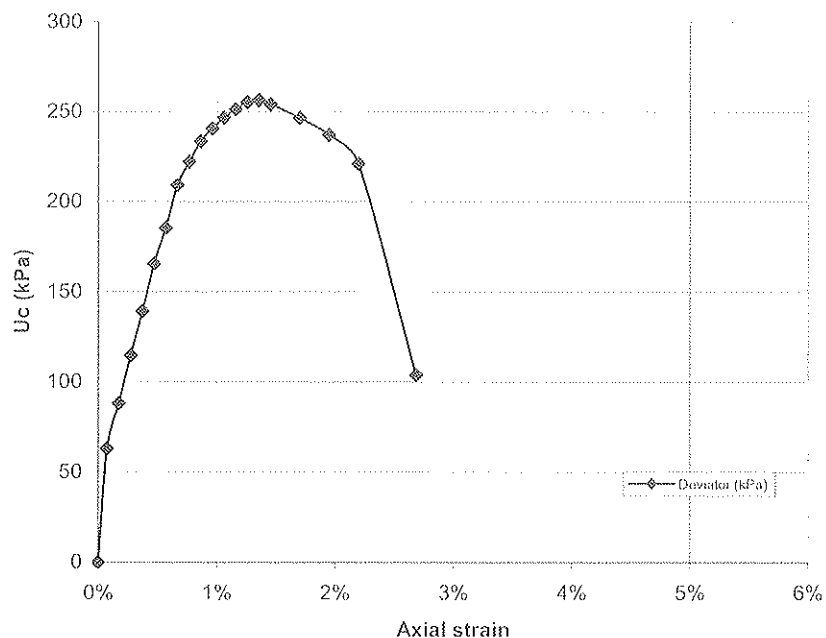
FILE : 16338-G
CLIENT : Golder Associés
PROJECT : 09-1428-5007

SAMPLE CSB-04
CURE : 56 days
FILE : 16338-G-04-56-Comp-A.xls

Unconfined compressive strength

Initial length, H_i (mm) :	202.75	Initial volume, V_i (cm ³) :	1634	Initial area, A_i (cm ²) :	80.59	Rate of strain (mm/min) :	1.14
Final length, H_f (mm) :	197.3	Final volume, V_f (cm ³) :	1634	Final area, A_f (cm ²) :	82.82		

No.	Data		Deformation	Area	Strength, U_c	Test results
	AL (0.01mm)	Fa (N)	$\Delta H/H_i$ (%)	(cm ²)	(kPa)	
1	905	0.0	0.00%	80.59	0	Shear strength : U_c (kPa) : 257 kPa $\Delta H/H_i$ (%) : 1.36 %
2	920	508.0	0.07%	80.65	63	
3	940	710.0	0.17%	80.73	88	
4	960	927.0	0.27%	80.81	115	
5	980	1127.0	0.37%	80.89	139	
6	1000	1341.0	0.47%	80.97	166	
7	1020	1504.0	0.57%	81.05	186	
8	1040	1698.0	0.67%	81.13	209	
9	1060	1805.0	0.76%	81.21	222	
10	1080	1900.0	0.86%	81.29	234	
11	1100	1960.0	0.96%	81.37	241	Physicals characteristics : Initial water content : 30.48 % Wet unit weight : 1933 kg/m ³ Dry unit weight : 1481 kg/m ³ Final water content : 30.11 %
12	1120	2010.0	1.06%	81.46	247	
13	1140	2050.0	1.16%	81.54	251	
14	1160	2085.0	1.26%	81.62	255	
15	1180	2097.0	1.36%	81.70	257	
16	1200	2080.0	1.45%	81.78	254	
17	1250	2022.0	1.70%	81.99	247	
18	1300	1950.0	1.95%	82.19	237	
19	1350	1823.0	2.19%	82.40	221	
20	1450	860.0	2.69%	82.82	104	



Remarks :

Tested by : A. Bustamante, ing. jr.
date : 2010-11-16

Approved by : Hélène Bilodeau, ing.
date : 2010-11-17

FILE No. : 16338-G
 CLIENT : Golder Associés
 PROJECT 09-1428-5007

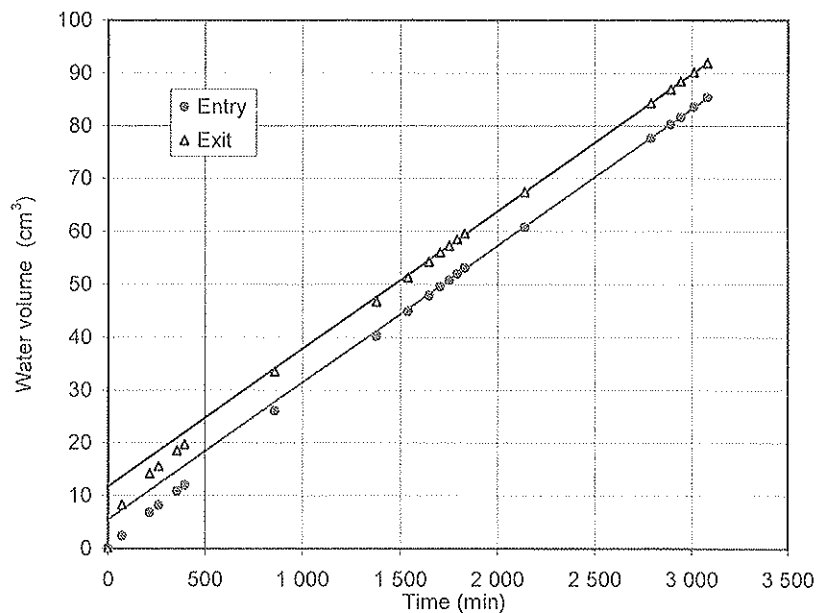
SAMPLE No. : CSB-04
 CURE : 28 days

FILE : 16338-CSB04.KTX

VOLUMETRIC CHARACTERISTICS				PHYSICAL PARAMETERS				PHYSICAL PROPERTIES	
	State	Initial	Final		State	Initial	Saturat.	Perm.	
Diameter of specimen	mm	101.6	101.6	Water content, w	%	29.12	30.60	30.60	D_{RS}
Height of specimen	mm	122.1	122.1	Dry unit weight, ρ_d	kg/m ³	1479	1474	1474	$\rho_{d\ max}$
Cross section of specimen	cm ²	81.1	81.1	Deg. of saturation, S_r	%	96	100	100	W_{opt}
Volume of specimen	cm ³	990	990	Porosity, n	1/1	0.450	0.452	0.452	
Wet weight	g	1890.13	1908.7	Void ratio, e	1/1	0.820	0.826	0.826	
Dry weight	g	1463.9							
Water content, w	%	29.12	30.38						

TEST CONDITIONS				WATER CONTENT				APPARATUS AND METHOD	
	State	Consol.	Saturat.	Perm.		State	Initial	Final	Initial
Cell pressure	kPa	10	510	525		Type	Auxil.	Total	Total
Top back-pressure	kPa	5	505	505	Tare no			MP-3	
Base differential	cm eau	0	0	100	Wet weight			2130.7	1890.1
Effective pressure	kPa	5	5	15	Dry weight			1685.9	1463.9
Hydraulic gradient	1/1	0	0	8.2	Tare weight			222.0	
					w %			30.38	29.12
									Water temp. : 20° C

EXPERIMENTAL DATAS				
Date	Hour	dt	Water volume (cm ³)	
mm-jj	hh:mm	min	Entry	Exit
10-18	09:48	0	0.0	0.0
	11:02	74	2.4	8.3
	13:24	216	6.8	14.2
	14:10	262	8.2	15.6
	15:44	356	10.9	18.5
	16:25	397	12.1	19.7
10-19	00:10	862	26.1	33.5
	08:48	1 380	40.2	46.7
	11:28	1 540	44.9	51.3
	13:18	1 650	47.9	54.3
	14:16	1 708	49.6	56.0
	15:02	1 754	50.8	57.3
	15:44	1 796	52.0	58.5
	16:21	1 833	53.1	59.6
10-20	21:30	2 142	60.8	67.4
	08:20	2 792	77.6	84.3
	10:02	2 894	80.3	86.9
	10:53	2 945	81.6	88.4
	12:02	3 014	83.6	90.2
	13:11	3 083	85.4	91.9



Materiel type : Mix of soil, bentonite and concrete
 Specimen type : Intact
 Consistency :

P_{100} : mm
 P_p : kg/cm²

Remarks :

This test is realized with a commercial drinking water.

ND : no determinated

* : Estimated value

TEST RESULTS

Initial dry unit weight	1479	kg/m ³
Initial water content	29.12	%
Initial degree of saturation	96	%
Coefficient of permeability	6.5E-07	cm/s
Hydraulic gradient applied	8.21	1/1

Tested by : A. Bustamante, ing. jr.
 Approved by : Hélène Bilodeau, ing.

Date : 10-10-21

**Qualitas****UNCONFINED COMPRESSIVE STRENGTH - ASTM D2166-06**

FILE : 16338-G

SAMPLE : CSB-05

CLIENT : Golder Associés

CURE : 9 days

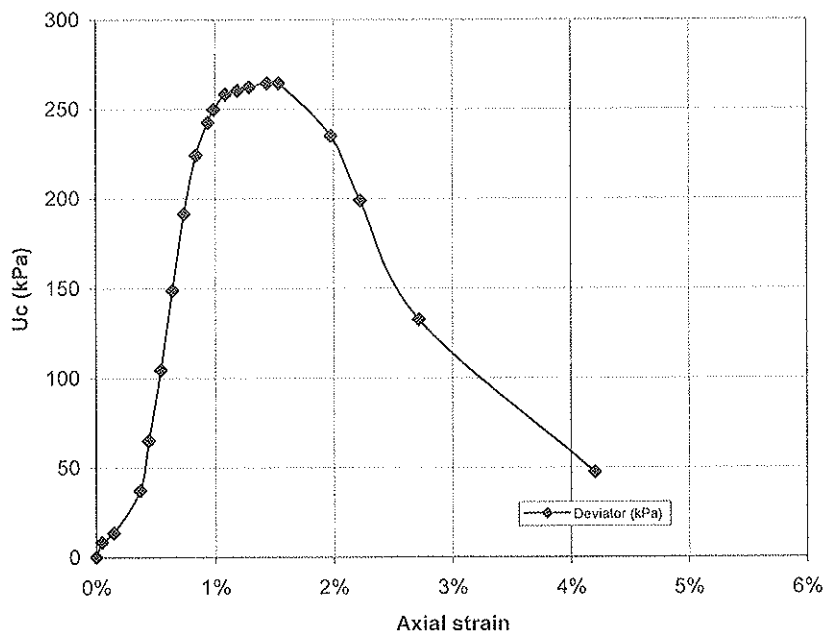
PROJECT : 09-1428-5007

FILE : 16338-G-05Comp-A.xls

Unconfined compressive strength

Initial length, Hi (mm) :	202.23	Initial volume, Vi (cm³) :	1636	Initial area, Ai (cm²) :	80.90	Rate of strain (mm/min) :	1.14
Final length, Hf (mm) :	193.73	Final volume, Vf (cm³) :	1636	Final area, Af (cm²) :	84.45		

No.	Data		Deformation	Area	Strength, Uc	Test results
	ΔL (0.01mm)	Fa (N)	$\Delta H/H_i$ (%)	(cm²)	(kPa)	
1	50	0.0	0.00%	80.90	0	
2	60	67.0	0.05%	80.94	8	Shear strength :
3	80	110.0	0.15%	81.02	14	
4	125	300.0	0.37%	81.20	37	Uc (kPa) : 265 kPa
5	140	527.0	0.45%	81.26	65	$\Delta H/H_i$ (%) : 1.43 %
6	160	849.0	0.54%	81.34	104	
7	180	1210.0	0.64%	81.42	149	
8	200	1560.0	0.74%	81.50	191	
9	220	1830.0	0.84%	81.58	224	
10	240	1980.0	0.94%	81.67	242	
11	250	2040.0	0.99%	81.71	250	Physicals characteristics :
12	270	2112.0	1.09%	81.79	258	
13	290	2132.0	1.19%	81.87	260	Initial water content : 28.9 %
14	310	2150.0	1.29%	81.95	262	
15	340	2171.0	1.43%	82.07	265	Wet unit weight : 1925 kg/m³
16	360	2173.0	1.53%	82.16	264	Dry unit weight : 1493 kg/m³
17	450	1939.0	1.98%	82.53	235	
18	500	1645.0	2.23%	82.74	199	
19	600	1102.0	2.72%	83.16	133	Final water content : 28.8 %
20	900	400.0	4.20%	84.45	47	



Remarks :

Tested by : A. Bustamante, ing. jr.

date : 2010-10-01

Approv. by : Héliène Bilodeau, ing.

date : 2010-10-05



Qualitas

UNCONFINED COMPRESSIVE STRENGTH - ASTM D2166-06

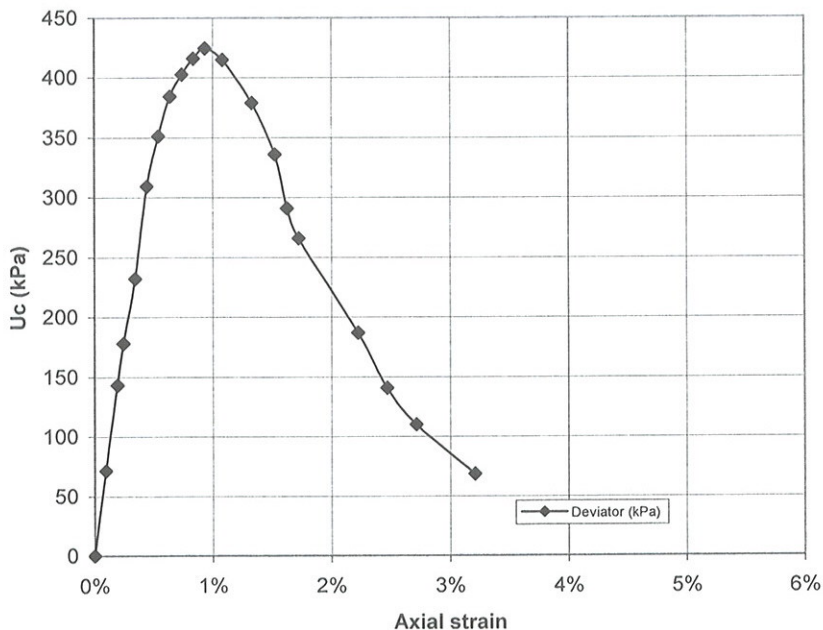
FILE : 16338-G
CLIENT : Golder Associés
PROJECT : 09-1428-5007

SAMPLE CSB-05
CURE : 28 days
FILE : 16338-G-05-28-Comp-A.xls

Unconfined compressive strength

Initial length, Hi (mm) : 202.14 Initial volume, Vi (cm³) : 1615 Initial area, Ai (cm²) : 79.90 Rate of strain (mm/min) : 1.14
Final length, Hf (mm) : 195.65 Final volume, Vf (cm³) : 1615 Final area, Af (cm²) : 82.55

No.	Data		Deformation $\Delta H/H_i$ (%)	Area (cm²)	Strength, Uc (kPa)	Test results
	ΔL (0,01mm)	Fa (N)				
1	151	0.0	0.00%	79.90	0	Shear strength :
2	170	570.0	0.09%	79.97	71	
3	190	1144.0	0.19%	80.05	143	
4	200	1424.0	0.24%	80.09	178	Uc (kPa) : 424 kPa
5	220	1860.0	0.34%	80.17	232	$\Delta H/H_i$ (%) : 0.93 %
6	240	2480.0	0.44%	80.25	309	Physicals characteristics :
7	260	2820.0	0.54%	80.33	351	
8	280	3088.0	0.64%	80.41	384	
9	300	3240.0	0.74%	80.49	403	Initial water content : 26.9 %
10	320	3350.0	0.84%	80.57	416	
11	340	3422.0	0.93%	80.65	424	
12	370	3350.0	1.08%	80.77	415	Wet unit weight : 1966 kg/m³ Dry unit weight : 1549 kg/m³
13	420	3066.0	1.33%	80.97	379	
14	460	2724.0	1.53%	81.14	336	
15	480	2362.0	1.63%	81.22	291	Final water content : 26.8 %
16	500	2160.0	1.73%	81.30	266	
17	600	1525.0	2.22%	81.71	187	
18	650	1152.0	2.47%	81.92	141	
19	700	903.0	2.72%	82.13	110	
20	800	563.0	3.21%	82.55	68	



Remarks :

Tested by : A. Bustamante, ing. jr.
date : 2010-10-20

Approv. by : Hélène Bilodeau, ing.
date : 2010-10-21



Golder Associates Ltd. - Burnaby Laboratory
4280 Still Creek Drive
Burnaby, B.C. Canada V5C 6C8

Measurements of Hydraulic Conductivity Using a Flexible Wall Permeameter				Reference: ASTM D5084-03 Method C	
Client	Agnico	Sample	CSB-05	Falling Head, rising tailwater elevation	
Project	09 Dike Construction		31+980		
Location	Nunavut		Sept-22-2010		
Project #	09-1428-5007 / 4000	Test Number	Ktest-1	Lab ID	232

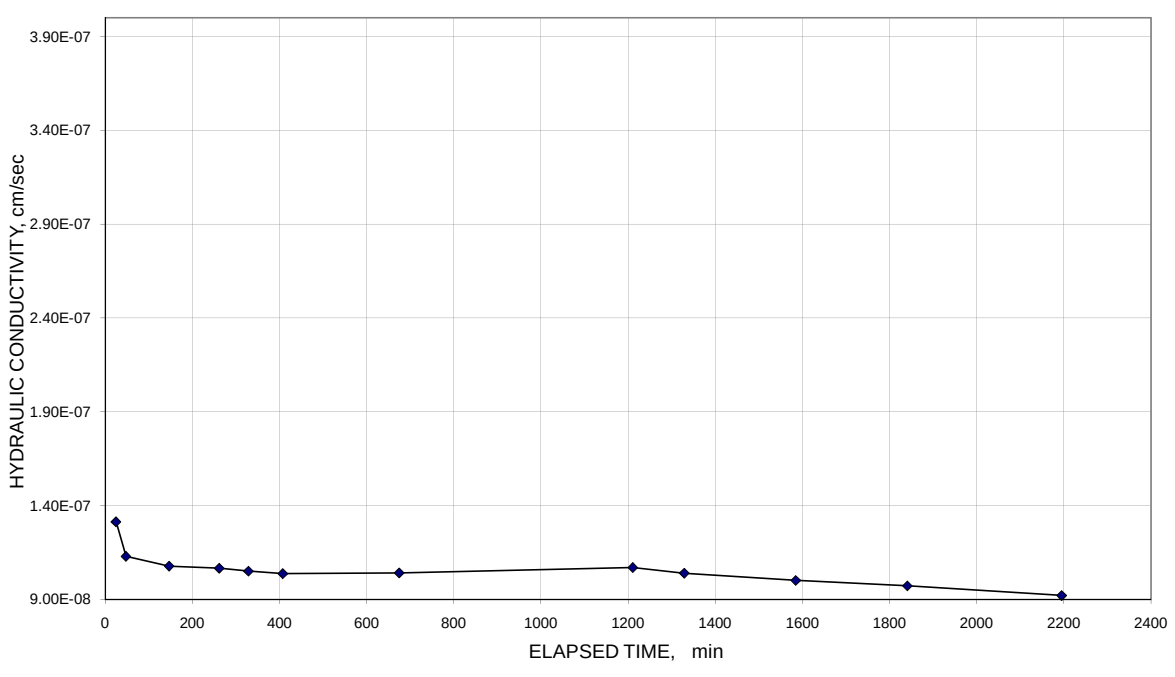
Remarks:	Sample Geometry		Test Parameters		Phase Relationships	
					Initial	Final
	Diameter =	10.10 10.10 cm	Cell Pressure =	135.0 psi	Wet Weight (g) =	3183.9 3217.1
	Length =	19.65 19.63 cm	Back Pressure =	120.0 psi	Dry Weight (g) =	2592.5 2592.5
	Area =	80.13 80.07 cm ²	σ'_{3c} =	15.0 psi	w (%) =	22.8 24.1
	Volume =	1574.3 1571.6 cm ³	δV_c =	2.6 cc	ρ_{dry} (kg/m ³) =	1647 1650
			B _{value} =	0.97	S (%) =	96.3 100.0
			a _{in} =	1.00 cm ²	e =	0.64 0.64
			a _{out} =	1.00 cm ²	G _s (assumed) =	2.70 2.70

Read #	Date (mm/dd/yy)	Time (hh:mm)	Elapsed Time (min)	Burette Readings		Applied Pressure		Head Loss			Flow Volume		Viscosity Correction		k ₂₀ (cm/sec)
				Bottom (cc)	Top (cc)	P _{bot} (psi)	P _{top} (psi)	h (cm)	h ₁ (cm)	h ₂ (cm)	V _{in} (cc)	V _{out} (cc)	Temp (°C)	R _t	
0	11/18/2010	9:58	0.0	0.8	24.8	125.0	120.0	375.5	--	--	0.0	0.0	20.0	1.000	--
1			25.0	1.2	24.6	125.0	120.0	374.9	375.5	374.9	0.4	0.2	19.8	1.005	1.31E-07
2			48.0	1.4	24.4	125.0	120.0	374.5	375.5	374.5	0.6	0.4	20.2	0.995	1.13E-07
3			147.0	2.4	23.5	125.0	120.0	372.6	375.5	372.6	1.6	1.3	20.0	1.000	1.08E-07
4			262.0	3.5	22.4	125.0	120.0	370.4	375.5	370.4	2.7	2.4	20.0	1.000	1.07E-07
5			329.0	4.1	21.8	125.0	120.0	369.2	375.5	369.2	3.3	3.0	20.0	1.000	1.05E-07
6			408.0	4.8	21.1	125.0	120.0	367.8	375.5	367.8	4.0	3.7	20.0	1.000	1.04E-07
7			675.0	7.4	18.7	125.0	120.0	362.8	375.5	362.8	6.6	6.1	20.0	1.000	1.04E-07
8			1211.0	12.4	14.3	125.0	120.0	353.4	375.5	353.4	11.6	10.5	18.2	1.046	1.07E-07
9			1329.0	13.4	13.3	125.0	120.0	351.4	375.5	351.4	12.6	11.5	19.2	1.020	1.04E-07
10			1585.0	15.4	11.2	125.0	120.0	347.3	375.5	347.3	14.6	13.6	20.2	0.995	1.00E-07
11			1841.0	17.5	9.1	125.0	120.0	343.1	375.5	343.1	16.7	15.7	21.2	0.972	9.73E-08
12			2195.0	20.0	6.8	125.0	120.0	338.3	375.5	338.3	19.2	18.0	22.2	0.949	9.21E-08
Trial-2											Average k ₂₀ (cm/sec) =		9.84E-08		

Sample Description: CSB Cylinder	Conversion from pressure to water head:
Comments :	1 psi = 70.305 cm of H ₂ O
Permeant Liquid : Tap water	

TM	November 18, 2010	LP	November 22, 2010
Tested By	Date	Reviewed By	Date

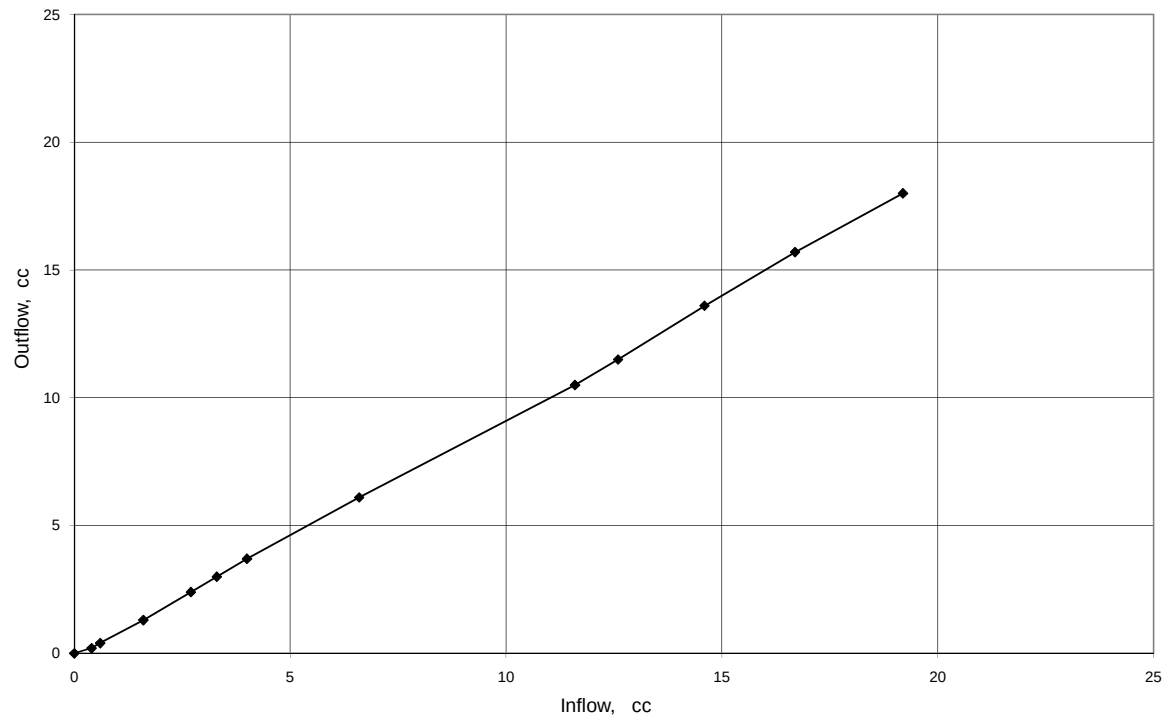
Measurements of Hydraulic Conductivity Using a Flexible Wall Permeameter				Reference: ASTM D5084-03 Method C	
Client	Agnico	Sample	CSB-05	Falling Head, rising tailwater elevation	
Project	09 Dike Construction		31+980		
Location	Nunavut		Sept-22-2010		
Project #	09-1428-5007 / 4000	Test Number	Ktest-1	Lab ID	232



HYDRAULIC CONDUCTIVITY, cm/sec

ELAPSED TIME, min

Elapsed Time (min)	Hydraulic Conductivity (cm/sec)
0	1.30E-07
20	1.10E-07
100	1.05E-07
200	1.02E-07
300	1.01E-07
400	1.00E-07
700	1.00E-07
1200	1.02E-07
1300	1.00E-07
1600	9.8E-08
1800	9.5E-08
2200	9.2E-08



Outflow, cc

Inflow, cc

Inflow (cc)	Outflow (cc)
0	0
0.5	0.5
1	1
2	2
3	3
4	4
7	6
12	10.5
13	11.5
14.5	13.5
17	15.5
19	18

TM	November 18, 2010	LP	November 22, 2010
Tested By	Date	Reviewed By	Date



Qualitas

UNCONFINED COMPRESSIVE STRENGTH - ASTM D2166-06

FILE : 16338-G

CLIENT : Golder Associés

PROJECT : 09-1428-5007

SAMPLE

CSB-06

CURE :

9 days

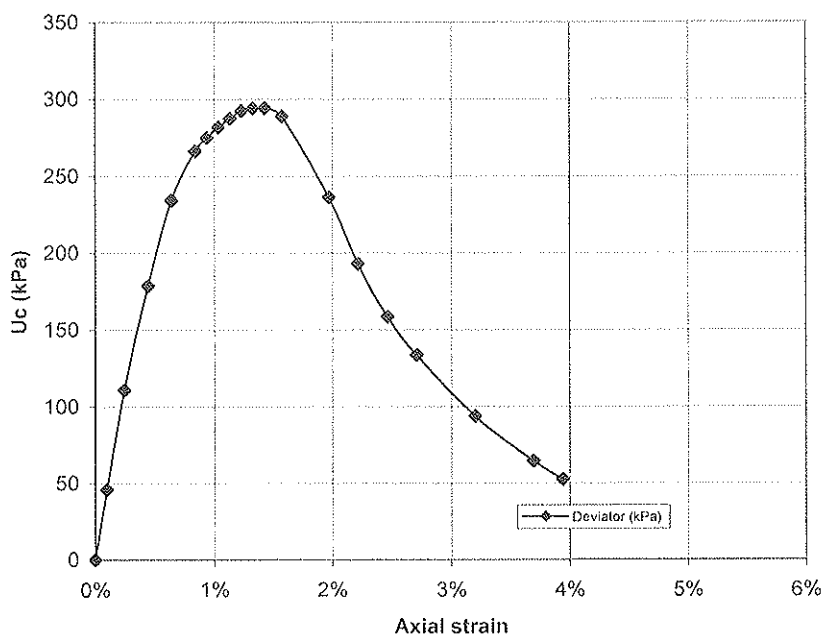
FILE :

16338-G-06Comp-A.xls

Unconfined compressive strength

Initial lenght, Hi (mm) :	202.96	Initial volume, Vi (cm³) :	1637	Initial area, Ai (cm²) :	80.66	Rate of strain (mm/min) :	1.14
Final lenght, Hf (mm) :	194.96	Final volume, Vf (cm³) :	1637	Final area, Af (cm²) :	83.97		

No.	Data		Deformation	Area	Strength, Uc	Test results
	ΔL (0,01mm)	Fa (N)	$\Delta H/H_i$ (%)		(kPa)	
1	100	0.0	0.00%	80.66	0	
2	120	370.0	0.10%	80.74	46	Shear strength :
3	150	896.0	0.25%	80.86	111	
4	190	1447.0	0.44%	81.02	179	Uc (kPa) : 294 kPa
5	230	1901.0	0.64%	81.18	234	$\Delta H/H_i$ (%) : 1.43 %
6	270	2165.0	0.84%	81.34	266	
7	290	2238.0	0.94%	81.42	275	
8	310	2296.0	1.03%	81.50	282	
9	330	2345.0	1.13%	81.58	287	
10	350	2388.0	1.23%	81.66	292	
11	370	2403.0	1.33%	81.74	294	Physicals characteristics :
12	390	2407.0	1.43%	81.83	294	
13	420	2366.0	1.58%	81.95	289	Initial water content : 27.4 %
14	500	1945.0	1.97%	82.28	236	
15	550	1591.0	2.22%	82.49	193	Wet unit weight : 1948 kg/m³
16	600	1311.0	2.46%	82.69	159	Dry unit weight : 1529 kg/m³
17	650	1108.0	2.71%	82.90	134	
18	750	782.0	3.20%	83.32	94	
19	850	541.0	3.70%	83.75	65	Final water content : 27.2 %
20	900	441.0	3.94%	83.97	53	



Remarks :

Tested by : A. Bustamante, ing. jr.

date : 2010-10-01

Approv. by : Hélène Bilodeau, ing.

date : 2010-10-05



Qualitas

UNCONFINED COMPRESSIVE STRENGTH - ASTM D2166-06

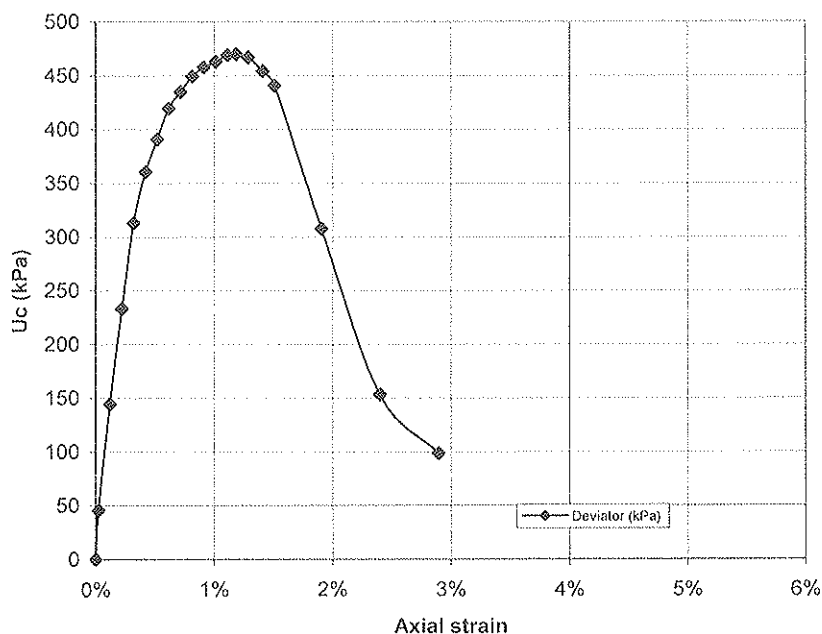
FILE : 16338-G
CLIENT : Golder Associés
PROJECT : 09-1428-5007

SAMPLE CSB-06
CURE : 28 days
FILE : 16338-G-06-28-Comp-A.xls

Unconfined compressive strength

Initial length, H_i (mm) : 201.89 Initial volume, V_i (cm³) : 1635 Initial area, A_i (cm²) : 80.98 Rate of strain (mm/min) : 1.14
Final length, H_f (mm) : 196.04 Final volume, V_f (cm³) : 1635 Final area, A_f (cm²) : 83.40

No.	Data		Deformation	Area	Strength, U_c	Test results
	ΔL (0,01mm)	F_a (N)	$\Delta H/H_i$ (%)	(cm ²)	(kPa)	
1	215	0.0	0.00%	80.98	0	Shear strength :
2	220	370.0	0.02%	81.00	46	
3	240	1170.0	0.12%	81.09	144	
4	260	1890.0	0.22%	81.17	233	
5	280	2542.0	0.32%	81.25	313	
6	300	2930.0	0.42%	81.33	360	Uc (kPa) : 470 kPa $\Delta H/H_i$ (%) : 1.19 %
7	320	3180.0	0.52%	81.41	391	
8	340	3418.0	0.62%	81.49	419	
9	360	3547.0	0.72%	81.57	435	
10	380	3667.0	0.82%	81.65	449	
11	400	3740.0	0.92%	81.73	458	Physicals characteristics :
12	420	3786.0	1.02%	81.82	463	
13	440	3839.0	1.11%	81.90	469	
14	455	3850.0	1.19%	81.96	470	
15	475	3830.0	1.29%	82.04	467	
16	500	3730.0	1.41%	82.14	454	Wet unit weight : 1894 kg/m ³ Dry unit weight : 1449 kg/m ³
17	520	3624.0	1.51%	82.23	441	
18	600	2541.0	1.91%	82.56	308	
19	700	1272.0	2.40%	82.98	153	
20	800	820.0	2.90%	83.40	98	



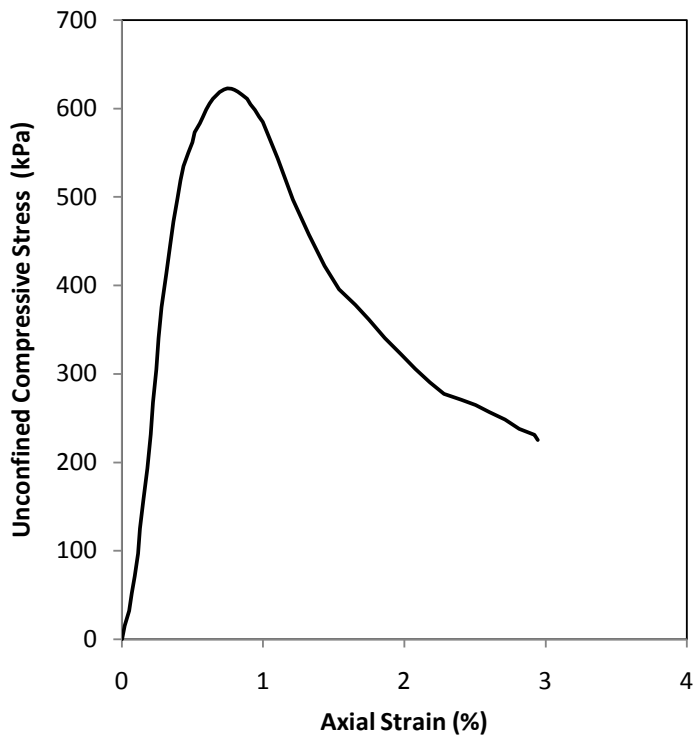
Remarks :

Tested by : A. Bustamante, ing. jr.
date : 2010-10-20

Approv. by : Hélène Bilodeau, ing.
date : 2010-10-21



O:\Active\ 2009\1428\09-1428-5007 Meadowbank 2009 Dike Construction\Lab\Phase 4000 Oct 2010\Ktest CSB-06 31+994.xlsx

Unconfined Compressive Stress of Cohesive Soils				Reference ASTM D 2166-06	
Client:	AGNICO		Sample No.	CSB-07	
Project:	Dike Construction		Cast Date:	Sept-25-2010 2;30AM	
Location:	Nunavut		Test Date:	Oct-19-2010	
Project No.:	09-1428-5007/4000		Lab ID No:	210	
Sample Type :	CSB (Cement/Soil/Bentonite)		AGE	24 days	
Curing	N/A		CSB ratio	N/A	
Sample Data			Equipment		
	Initial	Final	Machine:	System-2 SIGMA-10K	
			Chamber:	N/A	
Height (cm):	19.02	18.46	Load Cell:	118536	
Diameter (cm):	9.72	9.86	Axial DCDT:	LP-175	
Area (cm²):	74.15	76.40	Feed Rate (%/min):	1.00	
Volume (cm³):	1411	1411	Strength Results		
Wet Weight (g):	3006.2	3004.0			
Dry Weight (g):	2325.3	2325.3			
Water content, w (%):	29.3	29.2			
γ_{wet} (kN/m³):	20.90	20.88	Unconfined Compressive Stress, q_u (kPa):	623	
γ_{dry} (kN/m³):	16.16	16.16	Shear Strength, S_u (kPa):	311	
Saturation (%):	N/A	N/A	Strain at Failure, ϵ_f:	0.75	
Void ratio, e:	1.05	1.05	Initial Height/Diameter Ratio	1.96	
Specific Gravity (assumed):	2.70	2.70	SAMPLE DESCRIPTION		
			CSB - 4.0 inch diameter cylinder casted in the field by INQUIP		
					
TM		October 19,2010		ROB	
TESTED BY		DATE		CHECKED BY	
				October 21, 2010	
				DATE	



Golder Associates Ltd. - Burnaby Laboratory
4280 Still Creek Drive
Burnaby, B.C. Canada V5C 6C8

Measurements of Hydraulic Conductivity Using a Flexible Wall Permeameter				Reference: ASTM D5084-03 Method C	
Client	Agnico	Sample	CSB-07	Falling Head, rising tailwater elevation	
Project	09 Dike Construction		Goose Bay Mine		
Location	Nunavut		Sept-25-2010		
Project #	09-1428-5007 / 4000	Test Number	Ktest-3	Lab ID	232

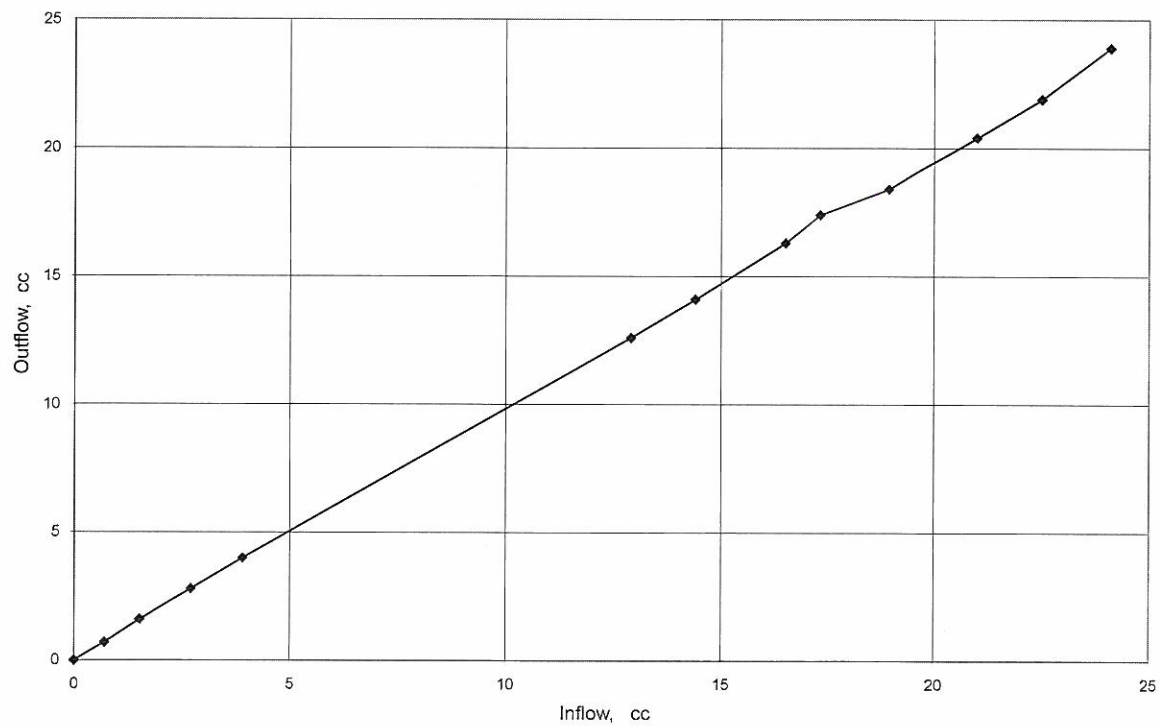
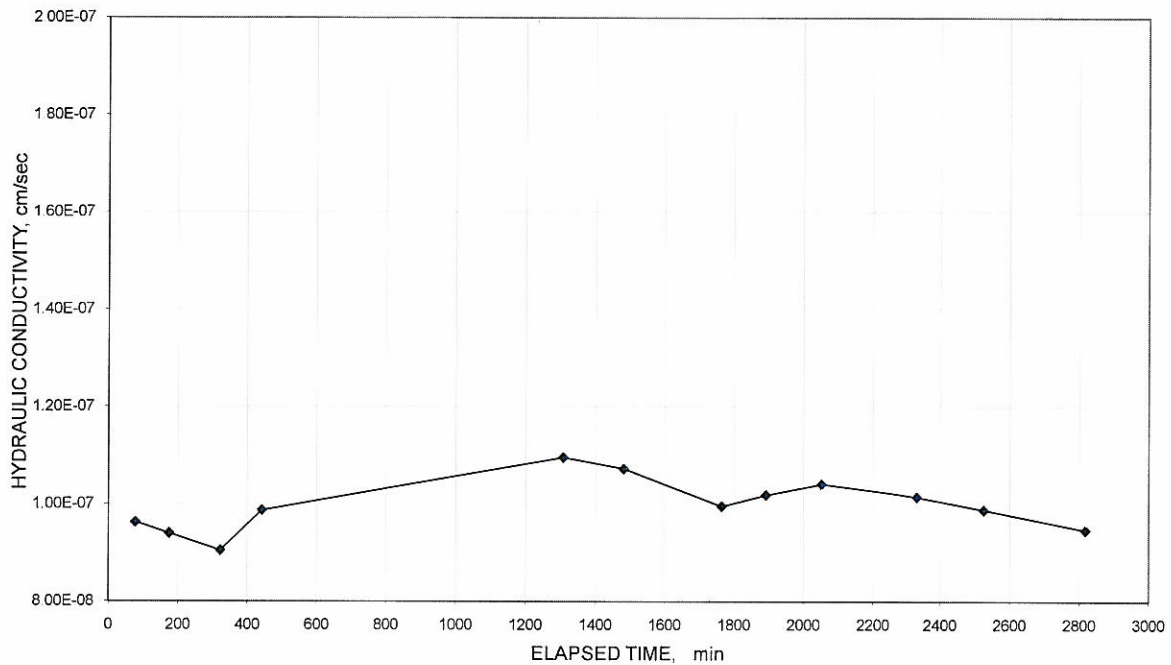
Remarks:	Sample Geometry				Test Parameters			Phase Relationships		
		Initial	Final		Cell Pressure =	165.0	psi		Initial	Final
	Diameter =	10.09	10.09	cm	Back Pressure =	150.0	psi	Wet Weight (g) =	2979.2	3008.2
	Length =	19.51	19.51	cm	σ'_{3c} =	15.0	psi	Dry Weight (g) =	2264.2	2264.2
	Area =	79.98	79.98	cm ²	δV_c =	1.6	cc	w (%) =	31.6	32.9
	Volume =	1560.2	1560.2	cm ³	B _{value} =	0.99		ρ_{dry} (kg/m ³) =	1451	1451
								S (%) =	99.1	100.0
					a _{in} =	1.00	cm ²	e =	0.86	0.86
					a _{out} =	1.00	cm ²	G _s (assumed) =	2.70	2.70

Read #	Date (mm/dd/yy)	Time (hh:mm)	Elapsed Time (min)	Burette Readings		Applied Pressure		Head Loss			Flow Volume		Viscosity Correction		k ₂₀ (cm/sec)
				Bottom (cc)	Top (cc)	P _{bot} (psi)	P _{top} (psi)	h (cm)	h ₁ (cm)	h ₂ (cm)	V _{in} (cc)	V _{out} (cc)	Temp (°C)	R _t	
0	11/09/2010	8:20	0.0	0.5	24.8	155.0	150.0	375.8	--	--	0.0	0.0	21.0	0.976	--
1			77.0	1.2	24.1	155.0	150.0	374.4	375.8	374.4	0.7	0.7	21.0	0.976	9.62E-08
2			175.0	2.0	23.2	155.0	150.0	372.7	375.8	372.7	1.5	1.6	21.0	0.976	9.39E-08
3			322.0	3.2	22.0	155.0	150.0	370.3	375.8	370.3	2.7	2.8	21.2	0.972	9.04E-08
4			442.0	4.4	20.8	155.0	150.0	367.9	375.8	367.9	3.9	4.0	19.6	1.010	9.87E-08
5			1307.0	13.4	12.2	155.0	150.0	350.3	375.8	350.3	12.9	12.6	19.9	1.003	1.10E-07
6			1481.0	14.9	10.7	155.0	150.0	347.3	375.8	347.3	14.4	14.1	20.4	0.991	1.07E-07
7			1765.0	17.0	8.5	155.0	150.0	343.0	375.8	343.0	16.5	16.3	22.3	0.947	9.96E-08
8			1892.0	17.8	7.4	155.0	150.0	341.1	375.8	341.1	17.3	17.4	20.9	0.979	1.02E-07
9			2052.0	19.4	6.4	155.0	150.0	338.5	375.8	338.5	18.9	18.4	19.8	1.005	1.04E-07
10			2333.0	21.5	4.4	155.0	150.0	334.4	375.8	334.4	21.0	20.4	20.1	0.998	1.01E-07
11			2526.0	23.0	2.9	155.0	150.0	331.4	375.8	331.4	22.5	21.9	21.0	0.976	9.88E-08
12			2818.0	24.6	0.9	155.0	150.0	327.8	375.8	327.8	24.1	23.9	21.7	0.960	9.46E-08
Trial-2											Average k ₂₀ (cm/sec) =		9.97E-08		

Sample Description: CSB Cylinder	Conversion from pressure to water head:
Comments :	1 psi = 70.305 cm of H ₂ O
Permeant Liquid : Tap water	

TM	November 9, 2010	LP	November 22, 2010
Tested By	Date	Reviewed By	Date

Measurements of Hydraulic Conductivity Using a Flexible Wall Permeameter				Reference: ASTM D5084-03 Method C	
Client	Agnico	Sample	CSB-07	Falling Head, rising tailwater elevation	
Project	09 Dike Construction		Goose Bay Mine		
Location	Nunavut		Sept-25-2010		
Project #	09-1428-5007 / 4000	Test Number	Ktest-3	Lab ID	232



TM	November 9, 2010	<i>7Eford</i>	<i>July 18/12</i>
Tested By	Date	Reviewed By	Date



BAY GOOSE DIKE CONSTRUCTION AS-BUILT REPORT MEADOWBANK GOLD MINE, NUNAVUT

Coarse Filter

Samples List

Sample No.:

- 24
- 29
- 256
- 268
- 276
- 287
- 291
- 295
- 309
- 343

PARTICLE SIZE ANALYSIS OF SOILS

Reference
 ASTM C136-06 & C117-04

Project No.: 08-1428-0029
Client: AEM
Project: Meadowbank Gold Project
Location: Nunavut

Sample No.: **24**
Field Label: BG083009-01
Depth (m): NA
Lab ID No: SA24

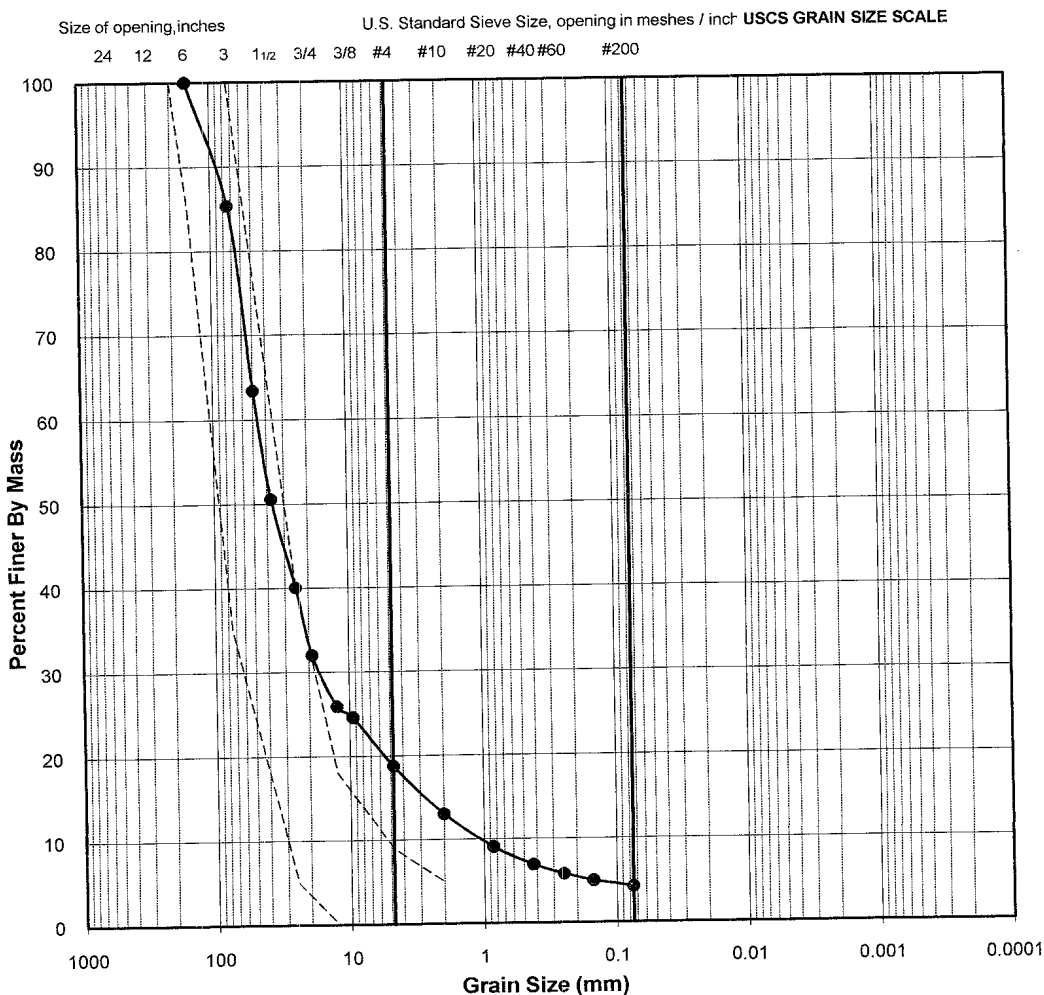
Remarks: Water Content = 4.5%
Sa. Location: Bay Goose 30+250 in place

Sampling Date: August 30, 2009
Material Specification: COARSE FILTER

Material split on 12.5mm sieve

Method: SPLIT, WASHED
Date Tested: August 31, 2009

Sieve Size (USS)	(mm)	Passing %
8"	200.0	100.0
6"	152.4	100.0
3"	75.0	85.3
2"	50.0	63.5
1.5"	37.5	50.6
1"	25.0	40.1
3/4"	19.0	32.0
1/2"	12.5	25.9
3/8"	9.5	24.6
#4	4.8	18.8
#10	2.0	13.0
#20	0.9	9.1
#40	0.4	6.9
#60	0.3	5.8
#100	0.2	5.0
#200	0.1	4.3



* 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.

DE

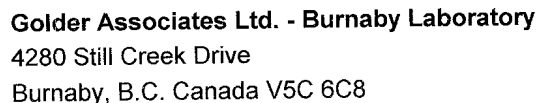
August 31, 2009

TESTED BY

DATE

CHECKED BY

DATE



Reference
ASTM C136-06 & C117-04

Lab ID No: SA29

Material Specification: COARSE FILTER

Date Tested: September 7, 2009

Size of opening, inches: 24 12 6 3 1 1/2 3/4 3/8 #4 #10 #20 #40 #60 #200

U.S. Standard Sieve Size, opening in meshes / inch

USCS GRAIN SIZE SCALE

Percent Finer By Mass

Grain Size (mm)

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

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: Sample might contain particles larger than 6".
 Particles over 3" were not sieved.

Sa. Location: Bay-Goose Dike Sta. 31+372.

Sample No.: **256**
Field Label: BG080610-3

Depth (m): NA

Lab ID No: SA 256

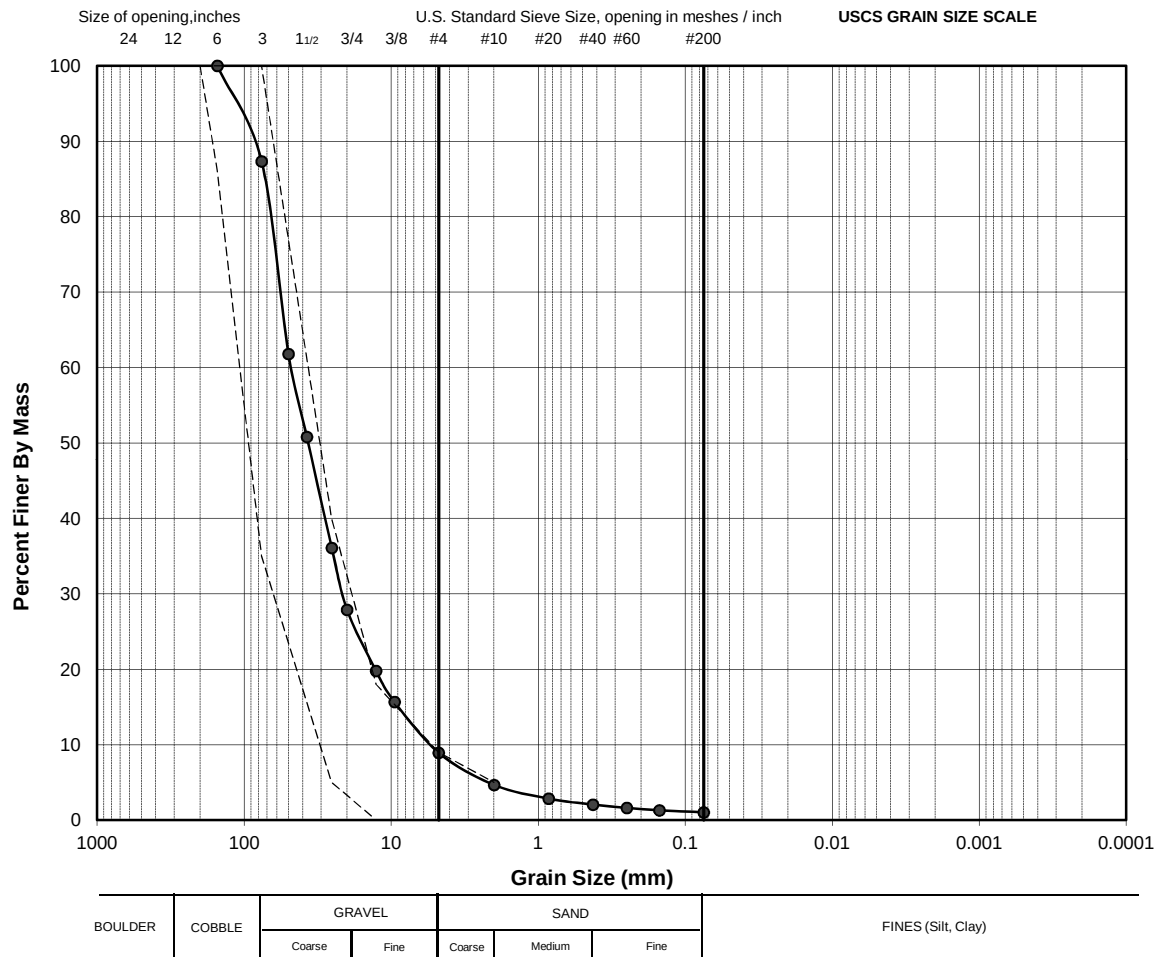
Date Sampled: August 6, 2010

Material Specification: COARSE FILTER

Method: COMBINED, WASHED

Date Tested: August 12, 2010

Sieve Size (USS)	(mm)	Passing %
8"	200.0	100.0
6"	152.4	100.0
3"	76.2	87.3
2"	50.0	61.8
1.5"	37.5	50.8
1"	25.4	36.1
3/4"	20.0	27.9
1/2"	12.7	19.8
3/8"	9.5	15.7
#4	4.760	8.9
#10	2.000	4.7
#20	0.850	2.8
#40	0.425	2.1
#60	0.250	1.6
#100	0.150	1.3
#200	0.075	1.0



* 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.

DB	August 12, 2010	YB	Sept. 23, 2010
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:
Sa. Location: Bay-Goose Dike Sta. 31+804.

Sample No.: **268**
Field Label: BG081110

Depth (m): NA

Lab ID No: SA 268

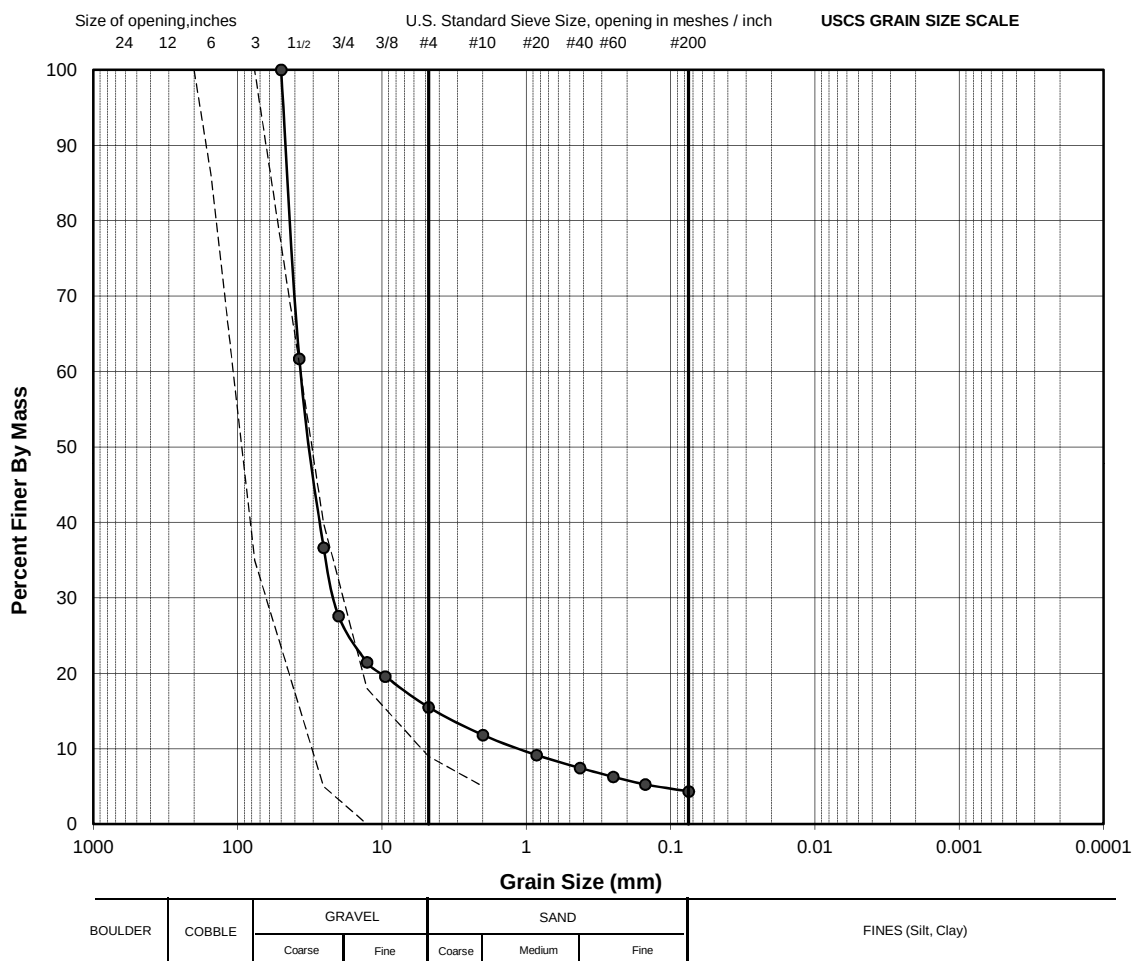
Date Sampled: August 11, 2010

Material Specification: COARSE FILTER

Method: COMBINED, WASHED

Date Tested: August 13, 2010

Sieve Size (USS)	(mm)	Passing %
8"	200.0	100.0
6"	152.4	100.0
3"	76.2	100.0
2"	50.0	100.0
1.5"	37.5	61.7
1"	25.4	36.6
3/4"	20.0	27.6
1/2"	12.7	21.5
3/8"	9.5	19.6
#4	4.760	15.5
#10	2.000	11.8
#20	0.850	9.2
#40	0.425	7.4
#60	0.250	6.3
#100	0.150	5.3
#200	0.075	4.3



* 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.

DB	August 13, 2010	YB	Sept. 24, 2010
TESTED BY	DATE	CHECKED BY	DATE



Reference

ASTM C136-06 & C117-04

Sample No.:	276
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Field Label:	BG081710-2
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Depth (m):	NA
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Lab ID No: SA 276

Date Sampled:	August 17, 2010
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Material Specification: COARSE FILTER

Method:	COMBINED, WASHED
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Date Tested: August 19, 2010

Sa. Location: Bay-Goose Dike Sta. 31+835.

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.*

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: Sample might contain particules larger than 6".
 Particles over 3" were not sieved.

Sa. Location: Bay-Goose Dike Sta. 31+897, 3m under water.

Sample No.: **287**
Field Label: BG082210-2

Depth (m): NA

Lab ID No: SA 287

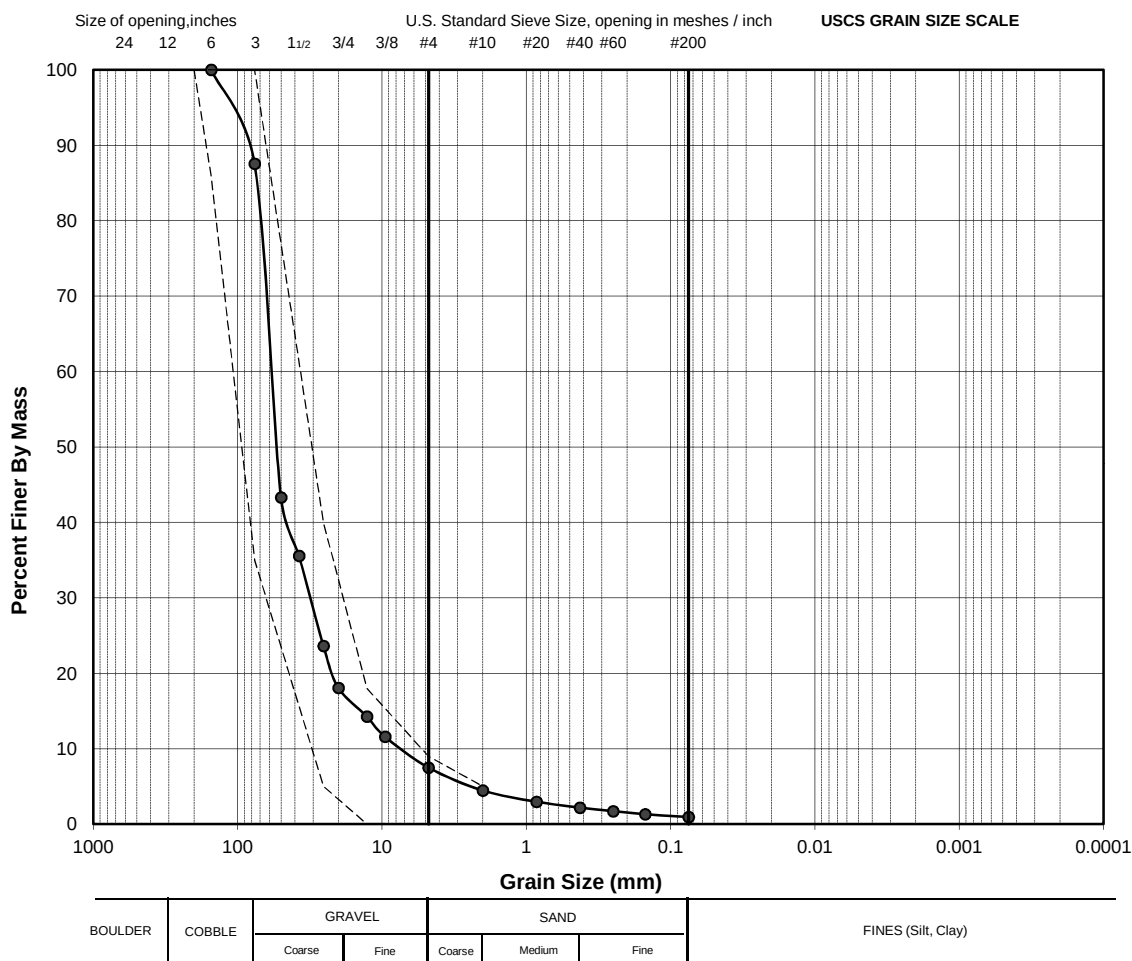
Date Sampled: August 22, 2010

Material Specification: COARSE FILTER

Method: COMBINED, WASHED

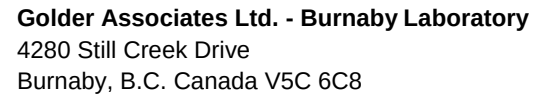
Date Tested: August 25, 2010

Sieve Size (USS)	(mm)	Passing %
8"	200.0	100.0
6"	152.4	100.0
3"	76.2	87.5
2"	50.0	43.3
1.5"	37.5	35.6
1"	25.4	23.6
3/4"	20.0	18.1
1/2"	12.7	14.3
3/8"	9.5	11.6
#4	4.760	7.5
#10	2.000	4.5
#20	0.850	3.0
#40	0.425	2.2
#60	0.250	1.7
#100	0.150	1.3
#200	0.075	0.9



* 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.

Dieudonné BARAHEBURA	August 25, 2010	YB	Sept. 25, 2010
TESTED BY	DATE	CHECKED BY	DATE



Reference

ASTM C136-06 & C117-04

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

Sample No.: 291

Client: AEM

Field Label: BG082410-3

Project: Meadowbank Gold Project

Depth (m):	NA
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Location: Nunavut

Lab ID No: SA 291

Re	Sample might contain particles larger than 6". Particles over 3" were not sieved.
----	--

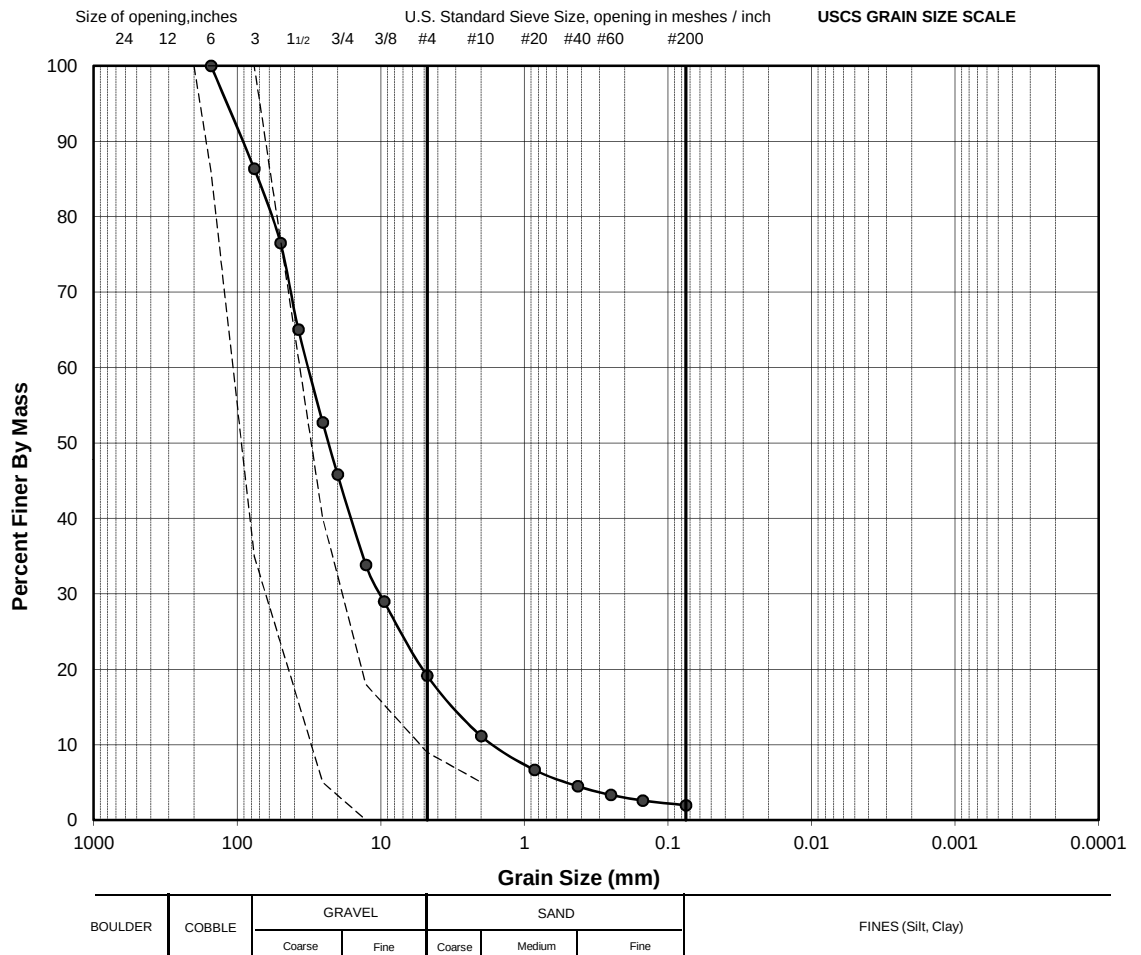
Date Sampled:	August 24, 2010
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Material Specification: COARSE FILTER

Sa. Location: Bay-Goose Dike Sta. 31+945.

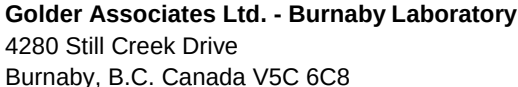
Method:	COMBINED, WASHED
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Date Tested: August 26, 2010

[illegible]

** 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.*

M.O	August 26, 2010	YB	Sept. 25, 2010
TESTED BY	DATE	CHECKED BY	DATE



Reference
ASTM C136-06 & C117-04

Sample No.: **295**

Field Label: BG082410

Depth (m): NA

Lab ID No: SA 295

Date Sampled: August 25, 2010

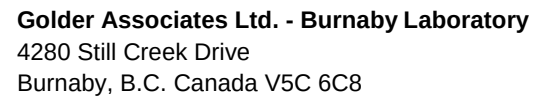
Material Specification: COARSE FILTER

Method: COMBINED, WASHED

Date Tested: August 27, 2010

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.*



Reference

ASTM C136-06 & C117-04

Sample No.: 343

Field Label:	BG091910-1
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Depth (m): NA

Lab ID No: SA 343

Date Sampled:	September 19, 2010
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Material Specification: COARSE FILTER

Method:	SPLIT, WASHED
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Date Tested: September 27, 2010

Grain Size Distribution Data

Grain Size (mm)	Percent Finer (%)
475	100
425	90
375	75
300	62
250	54
200	47
150	36
125	30
100	26
75	21
60	16
47.5	13
37.5	11
30	9.5
25	8.5
20	7.5

Soil Classification Table

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.*

October 7, 2010

DATE _____



BAY GOOSE DIKE CONSTRUCTION AS-BUILT REPORT MEADOWBANK GOLD MINE, NUNAVUT

Core Backfill

Samples List

Sample No.:

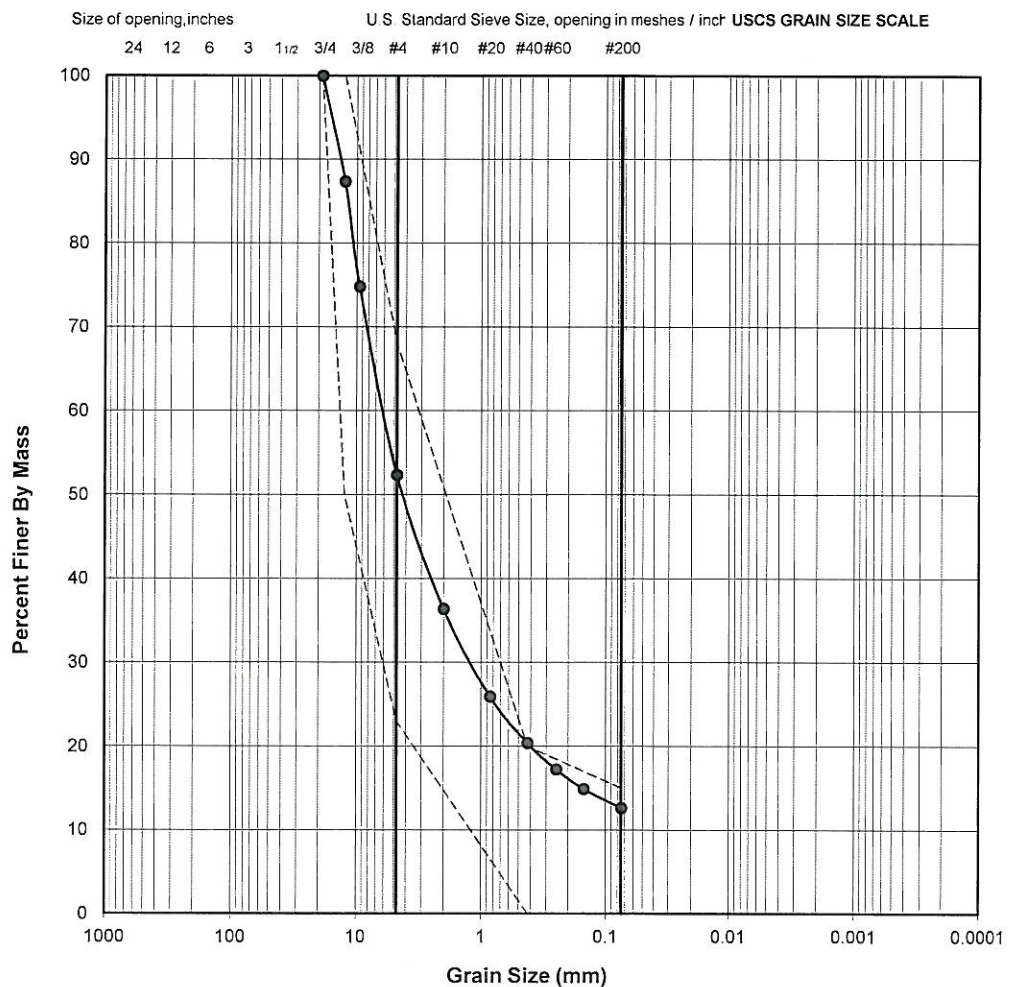
■ 16	■ 258
■ 17	■ 261
■ 18	■ 262
■ 19	■ 264
■ 20	■ 265
■ 21	■ 270
■ 22	■ 273
■ 23	■ 279
■ 24	■ 280
■ 27	■ 283
■ 29	■ 285
■ 32	■ 286
■ 34	■ 288
■ 50	■ 290
■ 51	■ 292
■ 54	■ 293
■ 55	■ 294
■ 56	■ 298
■ 57	■ 299
■ 201	■ 300
■ 202	■ 303
■ 204	■ 307
■ 206	■ 318
■ 249	■ 323
■ 251	■ 330
■ 252	■ 342
■ 253(2)	

PARTICLE SIZE ANALYSIS OF SOILS

Reference
ASTM C136-06 & C117-04

Project No.: 08-1428-0029	Sample No.: 16
Client: AEM	Field Label: BG-081809-01
Project: Meadowbank Gold Project	Depth (m): NA
Location: Nunavut	Lab ID No: SA-16
Remarks: Water content = 5.7%	Sampling Date: August 18, 2009
Bay Goose Dike STA 30+096, El. 134.0m (Approx.)	Material Specification: CORE BACKFILL
Centreline core trench	Method: SPLIT, WASHED
	Date Tested: August 19, 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	100.0
1/2"	12.5	87.4
3/8"	9.5	74.8
#4	4.8	52.4
#10	2.0	36.4
#20	0.9	25.9
#40	0.4	20.4
#60	0.3	17.3
#100	0.2	14.9
#200	0.1	12.6



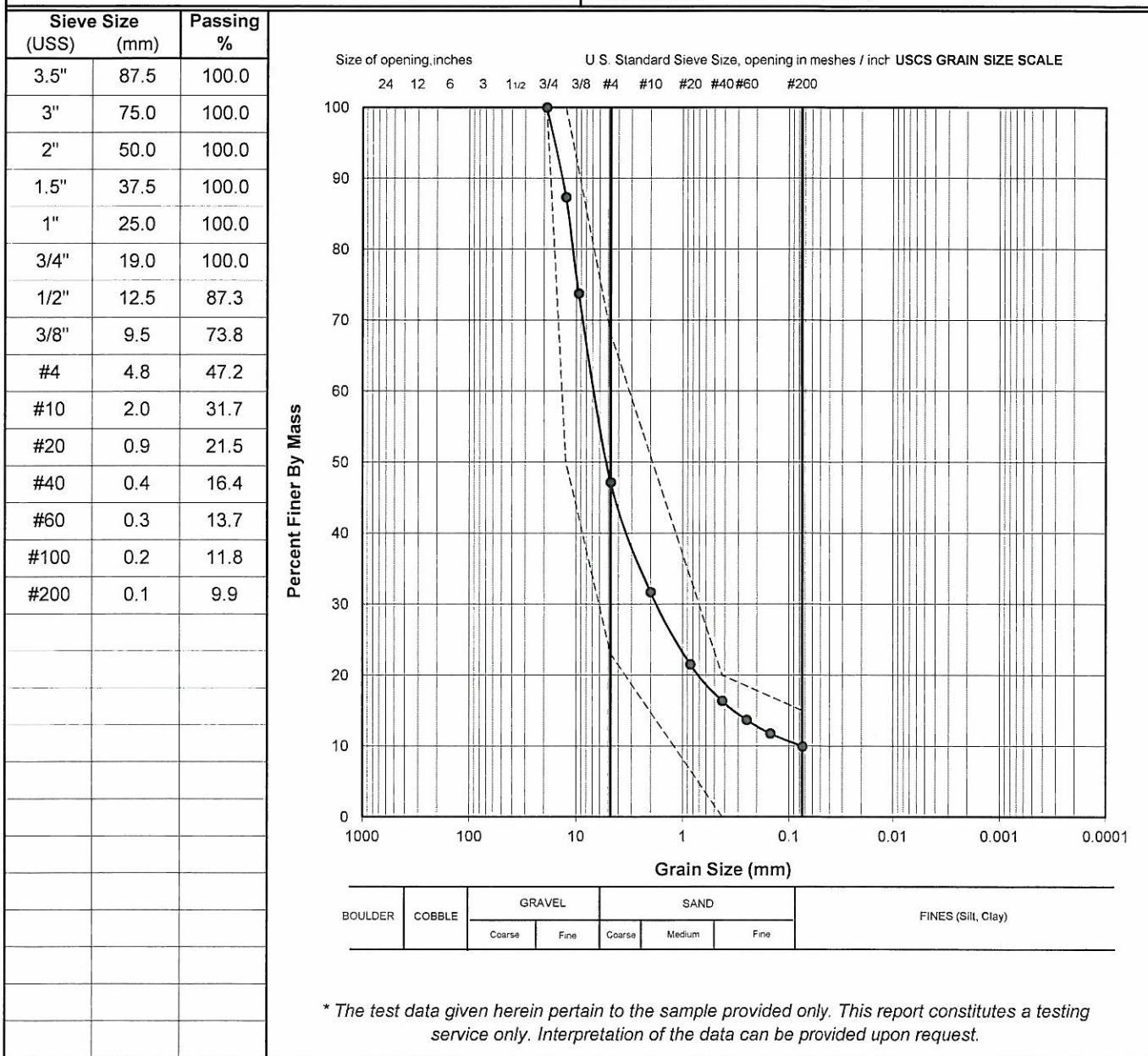
* The test data given herein pertain to the sample provided only. This report constitutes a testing service only. Interpretation of the data can be provided upon request.

RB	August 19, 2009	<i>FE</i>	<i>July 18/12</i>
TESTED BY	DATE	CHECKED BY	DATE

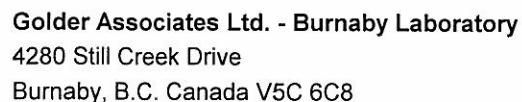
PARTICLE SIZE ANALYSIS OF SOILS

Reference
ASTM C136-06 & C117-04

Project No.: 08-1428-0029 Client: AEM Project: Meadowbank Gold Project Location: Nunavut	Sample No.: 17 Field Label: BG-081909-01 Depth (m): NA Lab ID No: SA-17
Remarks: Water content = not conducted Bay Goose Dike STA 30+120, El. 134.0m (Approx.) Centreline core trench	Sampling Date: August 19, 2009 Material Specification: CORE BACKFILL Method: SPLIT, WASHED Date Tested: August 19, 2009



RB	August 19, 2009	<i>Handwritten Signature</i>	<i>Handwritten Signature</i>
TESTED BY	DATE	CHECKED BY	DATE



Reference
ASTM C136-06 & C117-04

Sample No.: 18

Field Label:	BG-081909-02
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Depth (m): NA

Lab ID No: SA-18

Sampling Date:	August 19, 2009
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Material Specification: CORE BACKFILL

Method:	SPLIT, WASHED
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Date Tested: August 21, 2009

Size of opening, inches: 24 12 6 3 1 1/2 3/4 3/8 #4 #10 #20 #40 #60 #200

U.S. Standard Sieve Size, opening in meshes / inch

USCS GRAIN SIZE SCALE

Percent Finer By Mass

Grain Size (mm)

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

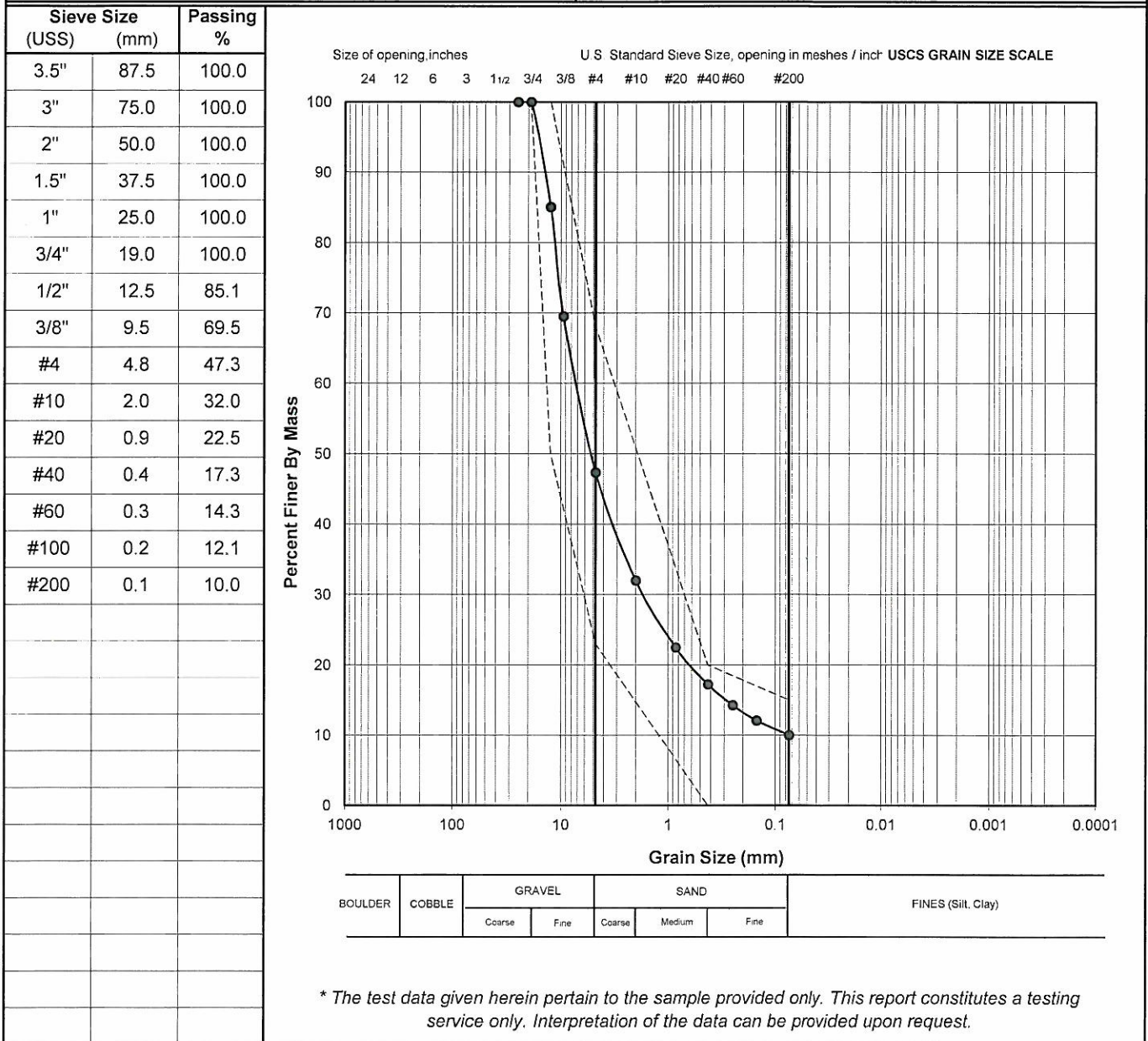
** The test data given herein pertain to the sample provided only. This report constitutes a testing service only. Interpretation of the data can be provided upon request.*

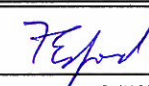
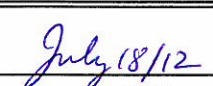
RB	August 21, 2009	<i>F. Espinal</i>	<i>July 18/12</i>
TESTED BY	DATE	CHECKED BY	DATE

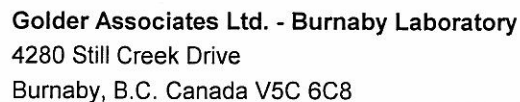
PARTICLE SIZE ANALYSIS OF SOILS

Reference
ASTM C136-06 & C117-04

Project No.: 08-1428-0029 Client: AEM Project: Meadowbank Gold Project Location: Nunavut	Sample No.: 19 Field Label: BG-082109-01 Depth (m): NA Lab ID No: SA-19
Remarks: Water content = not conducted Bay Goose Dike STA 30+229, El. 133.2m (Approx.) Centreline core trench	Sampling Date: August 21, 2009 Material Specification: CORE BACKFILL Method: SPLIT, WASHED Date Tested: August 22, 2009



RB	August 22, 2009		
TESTED BY	DATE	CHECKED BY	DATE



Reference
ASTM C136-06 & C117-04

Sample No.: 20

Field Label:	BG-082209-01
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Depth (m):	NA
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Lab ID No: SA-20

Sampling Date:	August 22, 2009
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Material Specification: CORE BACKFILL

Method:	SPLIT, WASHED
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Date Tested: August 23, 2009

Size of opening, inches: 24 12 6 3 1 1/2 3/4 3/8 #4 #10 #20 #40 #60 #200

U.S. Standard Sieve Size, opening in meshes / inch

USCS GRAIN SIZE SCALE

Percent Finer By Mass

Grain Size (mm)

Grain Size (mm)	Percent Finer By Mass (%)
4.75	100
3.75	100
2.5	83
1.18	67
0.85	42
0.425	26
0.25	15
0.15	10
0.106	7
0.075	5
0.053	4

** 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.*

July 18/12

DATE _____

PARTICLE SIZE ANALYSIS OF SOILS

Reference
ASTM C136-06 & C117-04

Project No.: 08-1428-0029

Client: AEM

Project: Meadowbank Gold Mine

Location: Nunavut

Sample No.: **21**
Field Label: BG-082409-01

Depth (m): NA

Lab ID No: SA-21

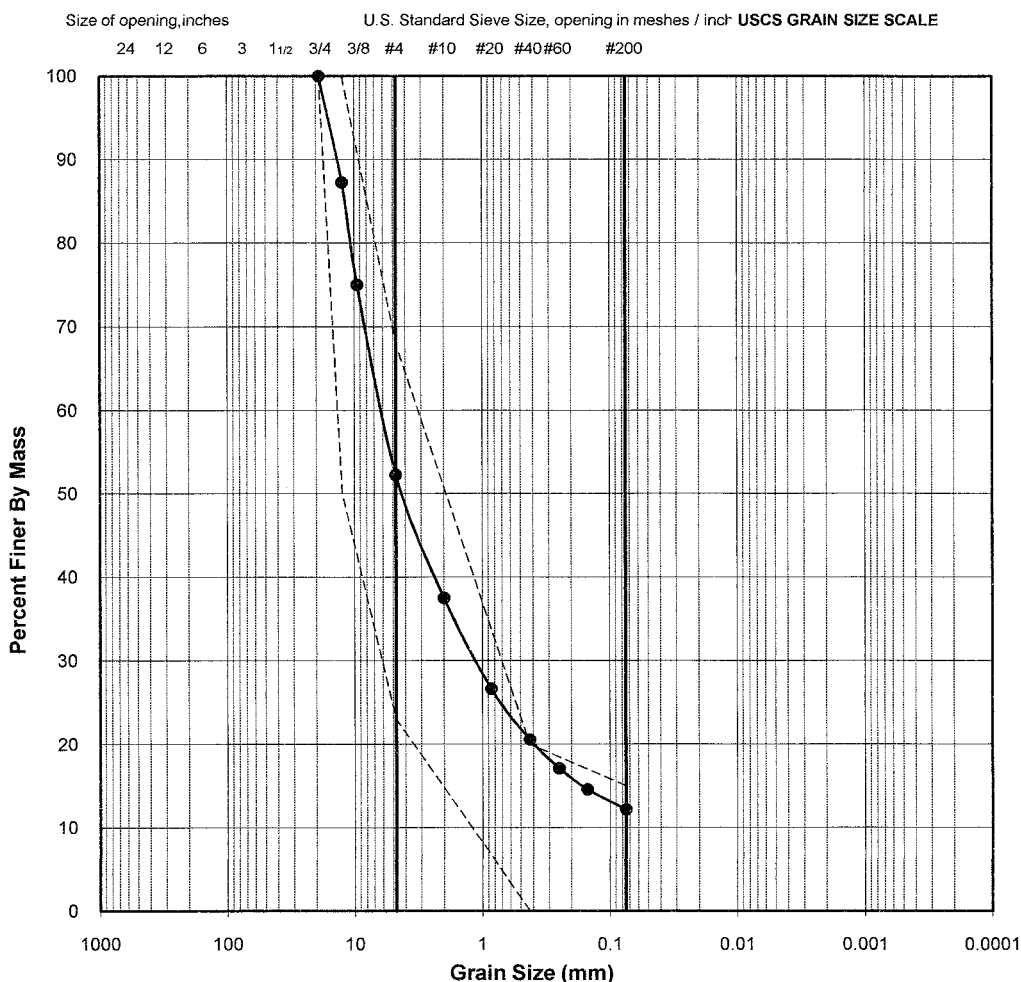
Remarks: Water content = not conducted
 Bay Goose Dike STA 30+355, at Stockpile, Pit side

Other:
Material Specification: CORE BACKFILL

Method: SPLIT, WASHED

Date Tested: August 25, 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	100.0
1/2"	12.5	87.3
3/8"	9.5	75.0
#4	4.8	52.3
#10	2.0	37.5
#20	0.9	26.6
#40	0.4	20.5
#60	0.3	17.1
#100	0.2	14.6
#200	0.1	12.2



* 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.

RB
August 25, 2009

Sept 2/09

TESTED BY

DATE

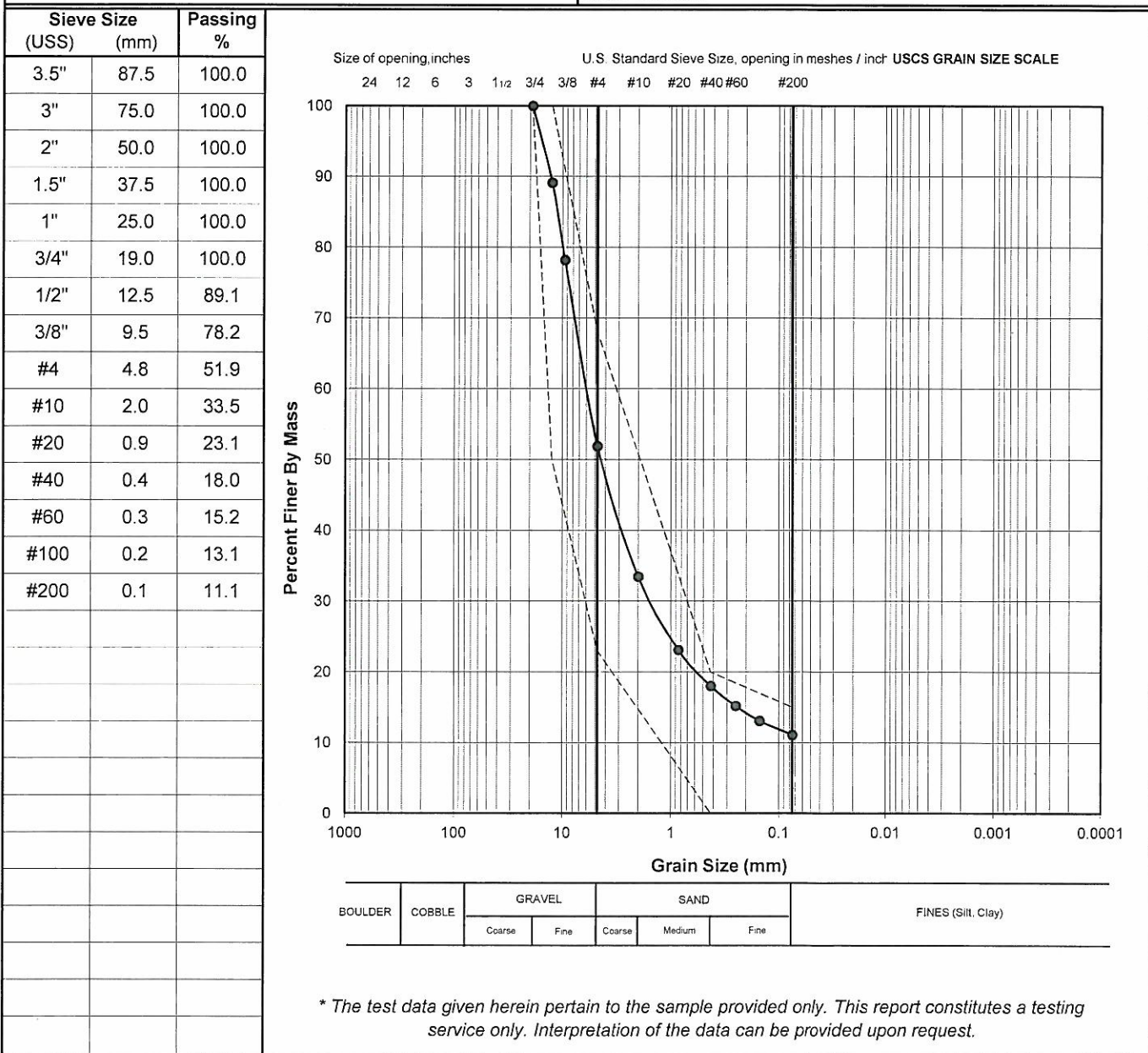
CHECKED BY

DATE

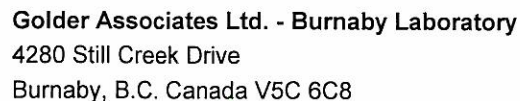
PARTICLE SIZE ANALYSIS OF SOILS

Reference
ASTM C136-06 & C117-04

Project No.: 08-1428-0029 Client: AEM Project: Meadowbank Gold Project Location: Nunavut	Sample No.: 22 Field Label: BG 082709-01 Depth (m): NA Lab ID No: 22
Remarks: Water content = 8.3% Sa. Location: Bay Goose core backfill 30+402	Sampling Date: August 27, 2009 Material Specification: CORE BACKFILL Method: COMBINED, WASHED Date Tested: August 28, 2009



DE	August 27, 2009	<i>7/28/09</i>	<i>July 18/12</i>
TESTED BY	DATE	CHECKED BY	DATE



Reference
ASTM C136-06 & C117-04

Date Tested: August 29, 2009

Size of opening, inches: 24 12 6 3 1 1/2 3/4 3/8 #4 #10 #20 #40 #60 #200

U.S. Standard Sieve Size, opening in meshes / inch

USCS GRAIN SIZE SCALE

Percent Finer By Mass

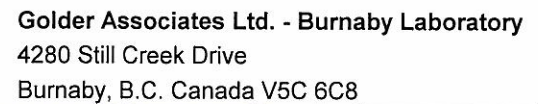
Grain Size (mm)

Grain Size (mm)	Percent Finer By Mass (%)
4.75	99
2.5	88
1.18	74
0.85	49
0.425	32
0.25	22
0.15	17
0.106	14
0.075	12
0.0475	10

** 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.*

July 18/12

DATE _____



Reference
ASTM C136-06 & C117-04

Date Tested: August 31, 2009

** 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.*

July 18/12

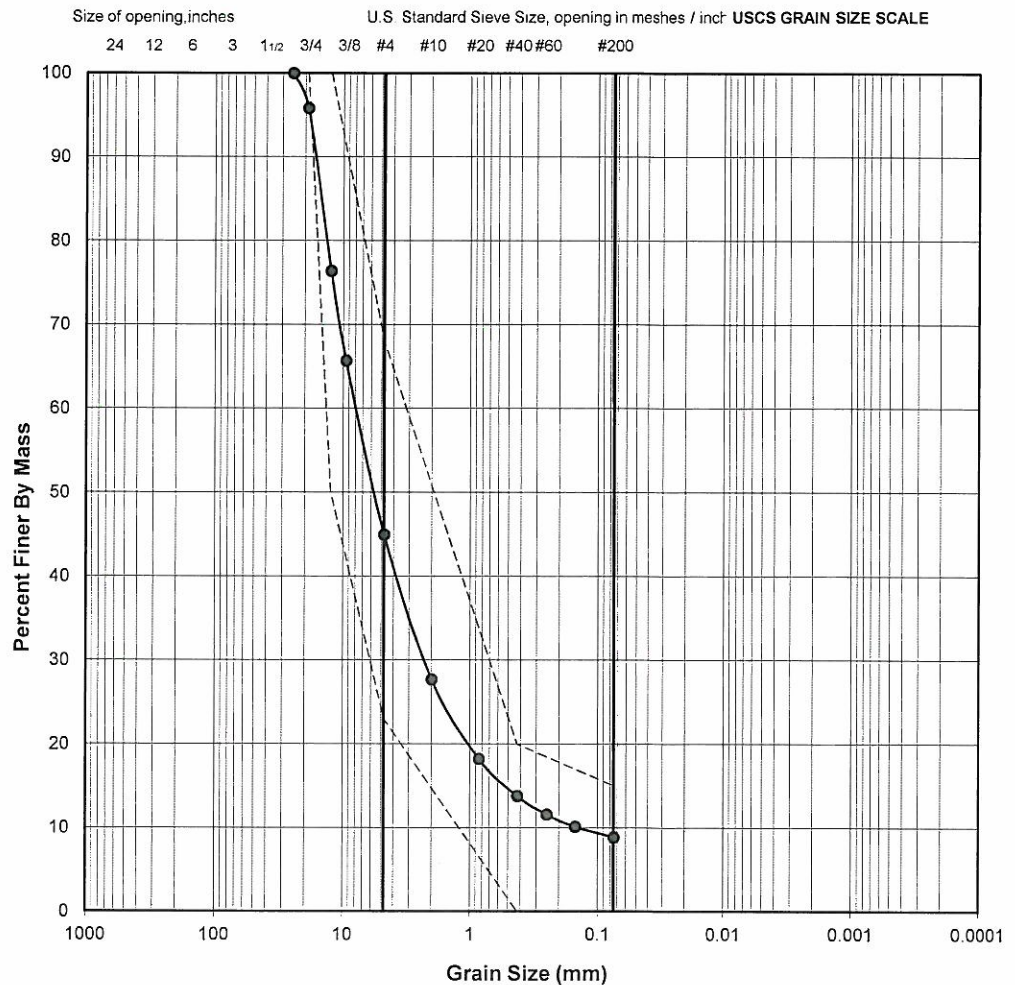
DATE _____

PARTICLE SIZE ANALYSIS OF SOILS

Reference
ASTM C136-06 & C117-04

Project No.: 08-1428-0029 Client: AEM Project: Meadowbank Gold Project Location: Nunavut	Sample No.: 27 Field Label: BG090309-01 Depth (m): 1.0m below WL Lab ID No: SA27
Remarks: Water content 13.3% Sa. Location: Bay Goose 30+431 in place @ CL on current CB face	Date Sampled: September 3, 2009 Material Specification: CORE BACKFILL Method: COMBINED, WASHED Date Tested: September 5, 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	95.8
1/2"	12.5	76.4
3/8"	9.5	65.7
#4	4.8	45.0
#10	2.0	27.7
#20	0.9	18.2
#40	0.4	13.8
#60	0.3	11.6
#100	0.2	10.1
#200	0.1	8.9



** 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.*

DE	September 5, 2009	<i>Thompson</i>	<i>July 18/12</i>
TESTED BY	DATE	CHECKED BY	DATE

PARTICLE SIZE ANALYSIS OF SOILS

Reference
ASTM C136-06 & C117-04

Project No.: 08-1428-0029

Sample No.: **29**
Client: AEM

Field Label: BG090309-02

Project: Meadowbank Gold Project

Depth (m): 1.0m below WL

Location: Nunavut

Lab ID No: SA29

Remarks: Water Content = 0.9%

Date Sampled: September 3, 2009

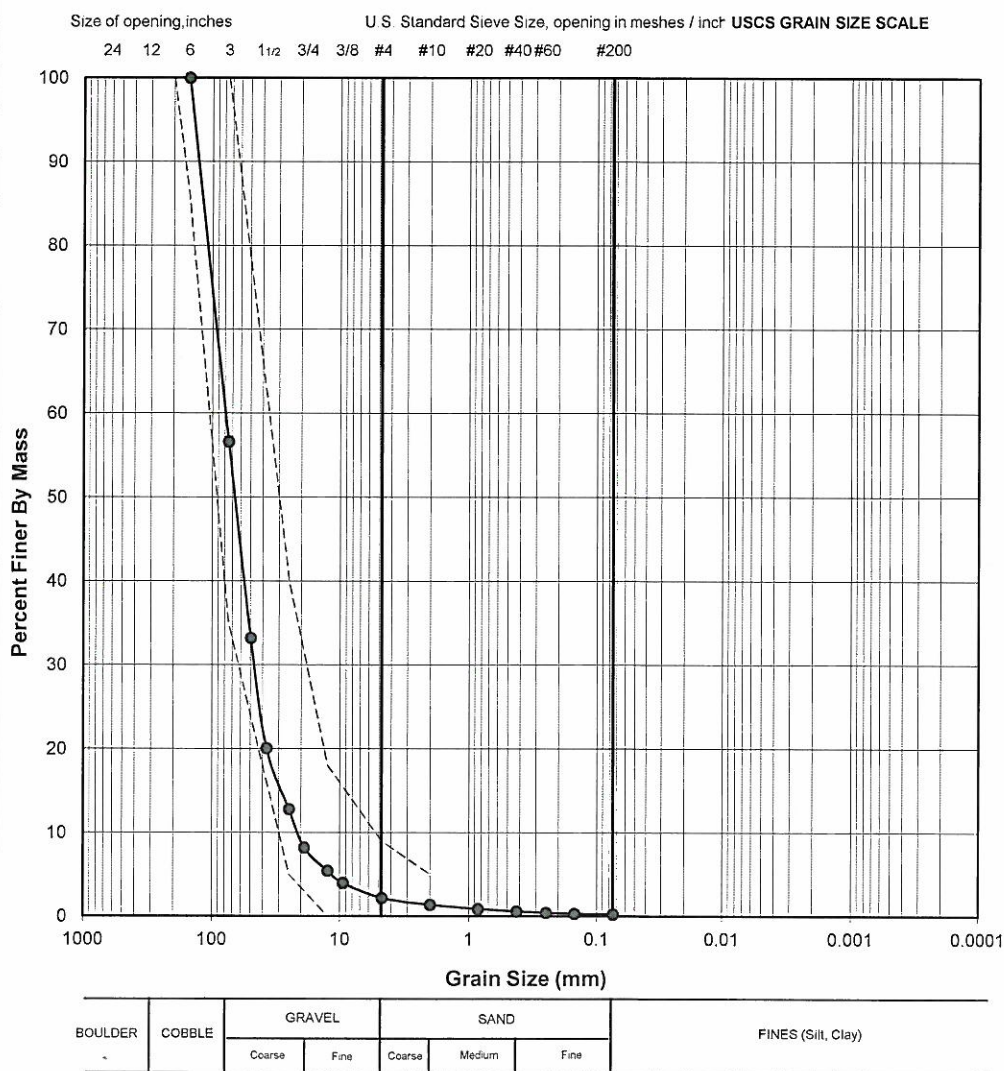
Sa. Location: Bay Goose 30+430 in place @ CL on current
CB face

Material Specification: COARSE FILTER

Method: SPLIT, WASHED

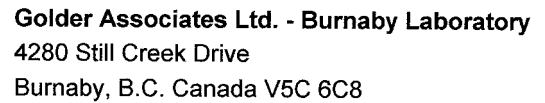
Date Tested: September 7, 2009

Sieve Size (USS)	(mm)	Passing %
8"	200.0	100.0
6"	152.4	100.0
3"	75.0	56.6
2"	50.0	33.2
1.5"	37.5	20.1
1"	25.0	12.8
3/4"	19.0	8.2
1/2"	12.5	5.5
3/8"	9.5	4.0
#4	4.8	2.2
#10	2.0	1.4
#20	0.9	0.9
#40	0.4	0.6
#60	0.3	0.4
#100	0.2	0.3
#200	0.1	0.3



* 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.

DE	September 7, 2009	<i>7 Esp</i>	<i>July 18/12</i>
TESTED BY	DATE	CHECKED BY	DATE



Reference
ASTM C136-06 & C117-04

Sample No.: 32

Field Label: BG090409-01

Depth (m): 4.0 below WL

Lab ID No: SA32

Date Sampled: September 4, 2009

Material Specification: CORE BACKFILL

Method: COMBINED, WASHED

Date Tested: September 7, 2009

Size of opening, inches: 24 12 6 3 1 1/2 3/4 3/8 #4 #10 #20 #40 #60 #200

U.S. Standard Sieve Size, opening in meshes / inch

USCS GRAIN SIZE SCALE

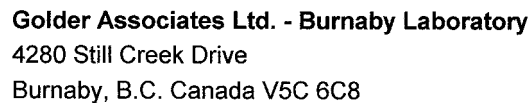
Percent Finer By Mass

Grain Size (mm)

Grain Size (mm)	Percent Finer By Mass (%)
19	100
9.5	92
4.75	58
2.0	45
0.85	25
0.425	12
0.25	7
0.15	5
0.075	3
0.0475	2
0.025	1
0.015	1
0.0075	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.*

DATE _____



Reference
ASTM C136-06 & C117-04

Lab ID No: SA34

Date Tested: September 8, 2009

Size of opening, inches

24 12 6 3 1 1/2 3/4 3/8 #4 #10 #20 #40 #60 #200

U.S. Standard Sieve Size, opening in meshes / inch

USCS GRAIN SIZE SCALE

1000 100 10 1 0.1 0.01 0.001 0.0001

Grain Size (mm)

Percent Finer By Mass

0 10 20 30 40 50 60 70 80 90 100

BOULDER

COBBLE

GRAVEL

SAND

FINES (Silt, Clay)

Coarse

Fine

Coarse

Medium

Fine

Grain Size (mm)	Percent Finer By Mass (%)
30	100
25	96
20	84
15	76
10	55
5	37
2.5	25
1.25	19
0.6	15
0.3	13
0.15	11

** 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.*

DATE _____

PARTICLE SIZE ANALYSIS OF SOILS

Reference
ASTM C136-06 & C117-04

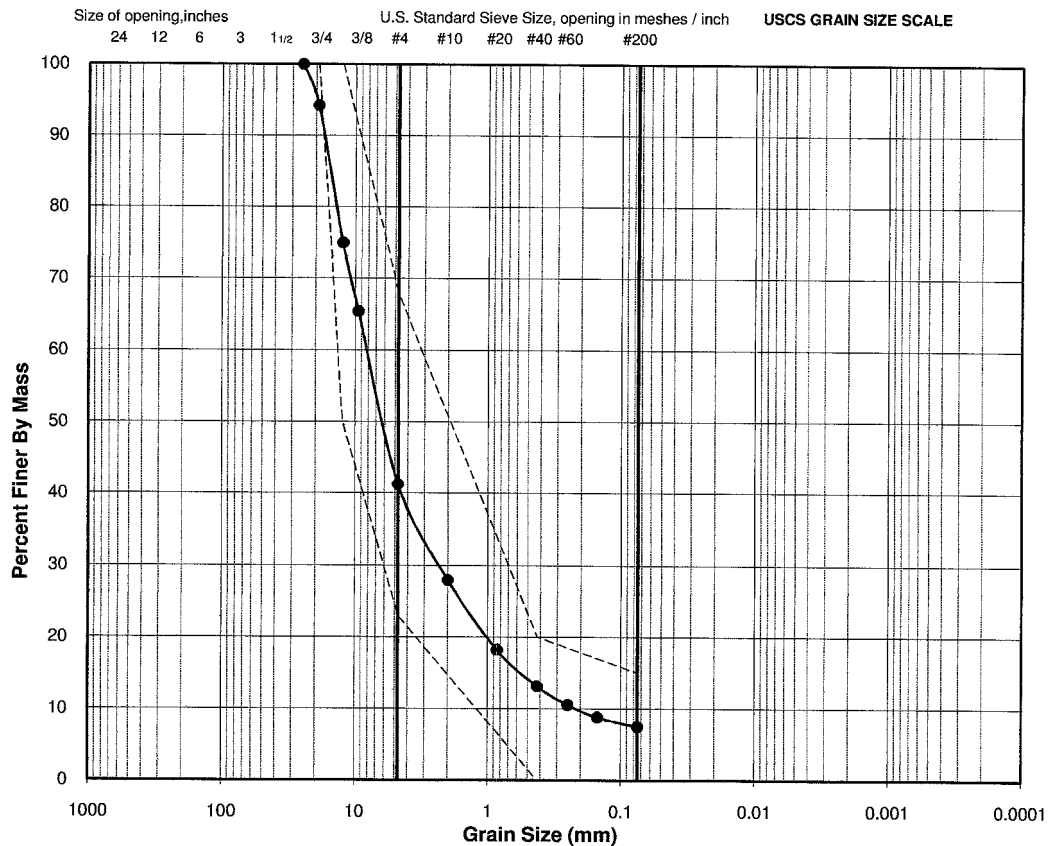
Project No.: 08-1428-0029 (5000)
Client: AEM
Project: Meadowbank Gold Project
Location: Nunavut

Sample No.: **50**
Field Label: BG-090809-11
Depth (m): NA
Lab ID No: SA-50

Remarks:
 Bay Goose Dike STA 30+550, Densification platform
 Centreline core trench

Sampling Date: September 8, 2009
Material Specification: CORE BACKFILL
Method: SPLIT, WASHED
Date Tested: September 10, 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	94.2
1/2"	12.5	74.9
3/8"	9.5	65.5
#4	4.8	41.2
#10	2.0	28.0
#20	0.9	18.2
#40	0.4	13.2
#60	0.3	10.6
#100	0.2	8.8
#200	0.1	7.5



** 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.*

OM	September 10, 2009		
TESTED BY	DATE	CHECKED BY	DATE

PARTICLE SIZE ANALYSIS OF SOILS

Reference

ASTM C136-06 & C117-04

Project No.: 08-1428-0029 (5000)

Sample No.: 51

Client: AEM

Field Label: BG-082209-12

Project: Meadowbank Gold Project

Depth (m): 3 m below water level

Location: Nunavut

Lab ID No: SA-51

Remarks:

Bay Goose Dike STA 30+605, El. 131.7m (Approx.)

Centreline core trench

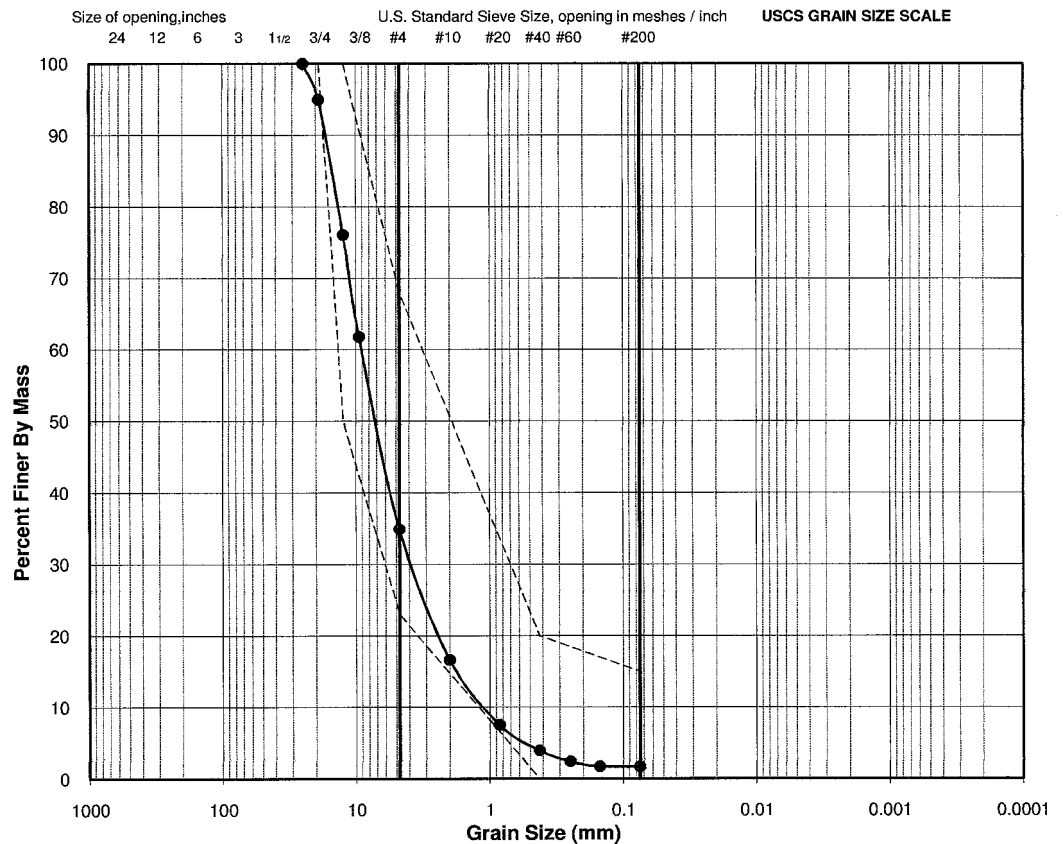
Sampling Date: September 8, 2009

Material Specification: CORE BACKFILL

Method: SPLIT, WASHED

Date Tested: September 13, 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	95.0
1/2"	12.5	76.1
3/8"	9.5	61.8
#4	4.8	34.9
#10	2.0	16.7
#20	0.9	7.6
#40	0.4	4.0
#60	0.3	2.4
#100	0.2	1.7
#200	0.1	1.7



* 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.

OM

TESTED BY

September 13, 2009

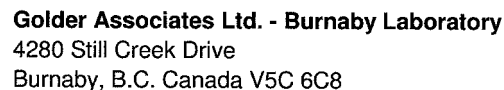
DATE



CHECKED BY



DATE



Reference
ASTM C136-06 & C117-04

Sample No.: 54

Field Label: BG-091009-13

Depth (m): NA

Lab ID No: SA-54

Sampling Date: September 10, 2009

Material Specification: CORE BACKFILL

Method: SPLIT, WASHED

Date Tested: September 12, 2009

Size of opening, inches: 24, 12, 6, 3, 1 1/2, 3/4, 3/8, #4, #10, #20, #40, #60, #200

U.S. Standard Sieve Size, opening in meshes / inch

USCS GRAIN SIZE SCALE

Percent Finer By Mass

Grain Size (mm)

Grain Size (mm)	Percent Finer By Mass (%)
4.75	100
2.5	94
1.18	77
0.85	68
0.425	51
0.25	37
0.15	26
0.075	19
0.06	15
0.0425	13
0.03	13

Grain Size Classification: SAND (Medium)

Soil Classification: SP (Poorly Sorted Sand)

** 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.*

September 12, 2009

TESTED BY

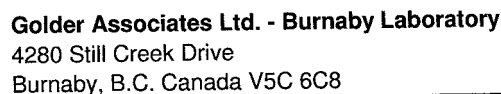
DATE _____


CHECKED BY

CHECKED BY

Sept 30/01
DATE

DATE _____



Reference
ASTM C136-06 & C117-04

Sample No.:	56
Field Label:	BG-091209-15
Depth (m):	2.0m below WL
Lab ID No:	SA-56
Sampling Date:	September 12, 2009
Material Specification:	CORE BACKFILL
Method:	SPLIT, WASHED
Date Tested:	September 16, 2009

Size of opening, inches
24 12 6 3 1 1/2 3/4 3/8 #4 #10 #20 #40 #60 #200

U.S. Standard Sieve Size, opening in meshes / inch

USCS GRAIN SIZE SCALE

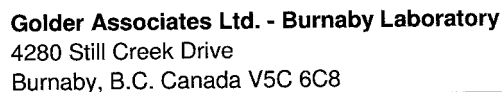
Percent Finer By Mass

Grain Size (mm)

Grain Size (mm)	Percent Finer By Mass (%)
4.75	100
2.5	96
1.18	81
0.85	72
0.425	51
0.25	35
0.15	21
0.075	13
0.0475	10
0.025	7
0.015	7

** 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.*

DATE _____



Reference
ASTM C136-06 & C117-04

Sample No.:	57
Field Label:	BG-091209-16
Depth (m):	N/A
Lab ID No:	SA-57

Sampling Date:	September 12, 2009
Material Specification:	CORE BACKFILL
Method:	SPLIT, WASHED
Date Tested:	September 14, 2009

Size of opening, inches: 24, 12, 6, 3, 1 1/2, 3/4, 3/8, #4, #10, #20, #40, #60, #200

U.S. Standard Sieve Size, opening in meshes / inch

USCS GRAIN SIZE SCALE

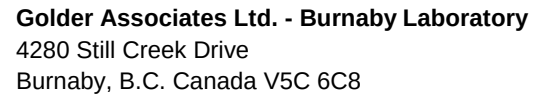
Percent Finer By Mass

Grain Size (mm)

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.*

Sept 30/69
DATE



Reference

ASTM C136-06 & C117-04

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

Client: AEM

Project: Meadowbank Gold Project

Location: Nunavut

Sample No.: **201**

Field Label:	BG072810-2
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Depth (m):	NA
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Lab ID No: SA 201

Remarks:	Water Content =	1.5%
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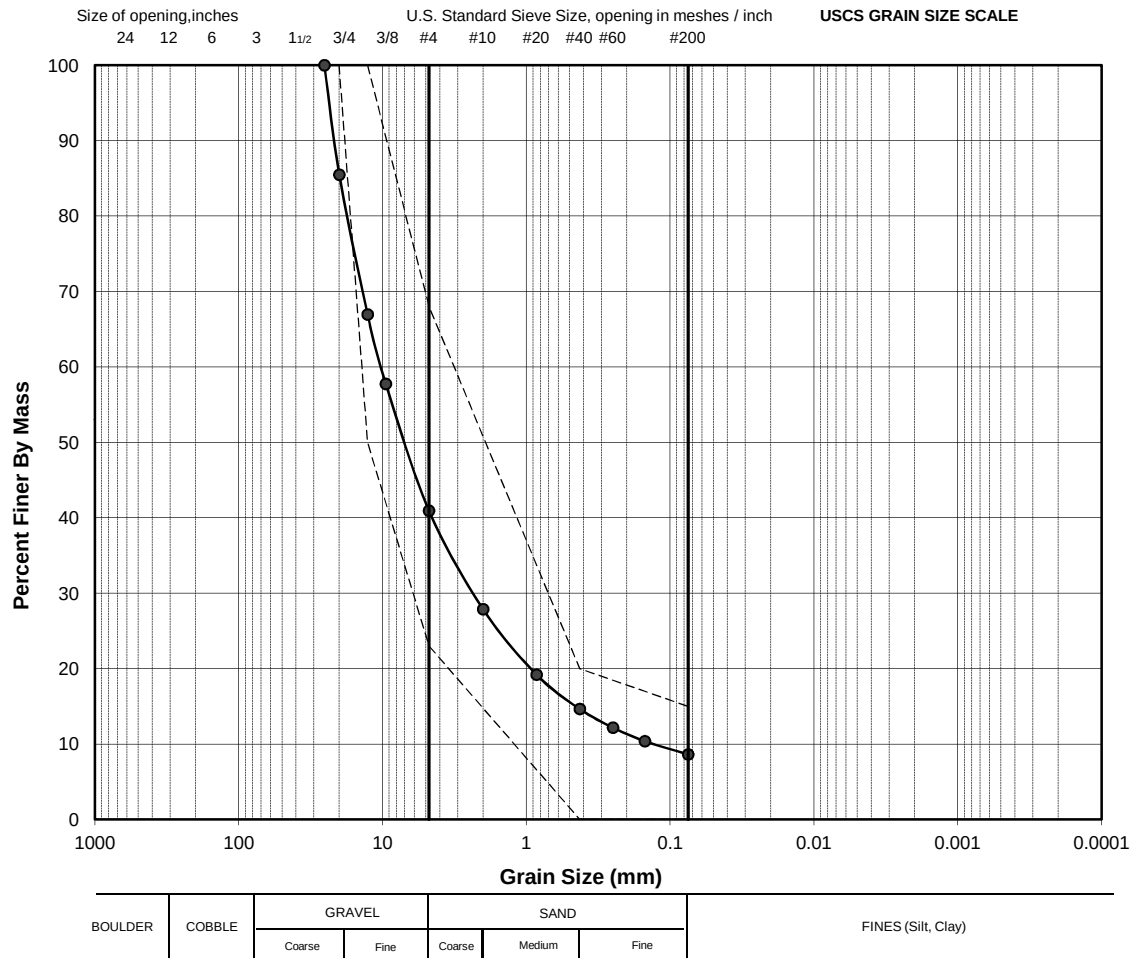
Location: NPAG STOCKPILE 2

Date Sampled:	July 28, 2010
----------------------	---------------

Material Specification: 0-20 mm crushed stone

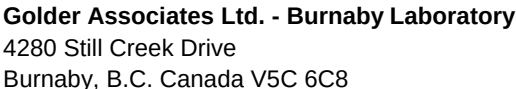
Method: COMBINED, WASHED

Date Tested: August 7, 2010

[illegible]

** 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.*

MO	August 7, 2010	YB	Sept. 21, 2010
TESTED BY	DATE	CHECKED BY	DATE



Reference
ASTM C136-06 & C117-04

Sample No.:	202
Field Label:	BG072810-3
Depth (m):	NA
Lab ID No:	SA 202

Date Sampled:	July 28, 2010
Material Specification:	0-20 mm crushed stone
Method:	COMBINED, WASHED
Date Tested:	August 6, 2010

Size of opening, inches
24 12 6 3 1 1/2 3/4 3/8 #4 #10 #20 #40 #60 #200

U.S. Standard Sieve Size, opening in meshes / inch

USCS GRAIN SIZE SCALE

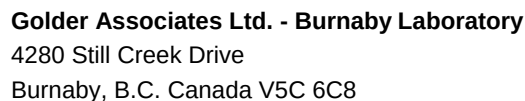
Percent Finer By Mass

Grain Size (mm)

Boulder	Cobble	Gravel		Sand			Fines (Silt, Clay)
		Coarse	Fine	Coarse	Medium	Fine	
75 mm to > 250 mm	4.75 mm to 75 mm	4.75 mm to 2.0 mm	2.0 mm to 0.075 mm	0.075 mm to 0.425 mm	0.425 mm to 0.250 mm	0.250 mm to 0.075 mm	< 0.075 mm

** 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.*

MO	August 6, 2010	YB	Sept. 21, 2010
TESTED BY	DATE	CHECKED BY	DATE



Reference
ASTM C136-06 & C117-04

Sample No.: 204

Field Label:	BG072910-1
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Depth (m): NA

Lab ID No: SA-204

Date Sampled: July 29, 2010

Material Specification: CORE BACKFILL

Method: COMBINED, WASHED

Date Tested: August 6, 2010

Size of opening, inches

U.S. Standard Sieve Size, opening in meshes / inch

USCS GRAIN SIZE SCALE

Percent Finer By Mass

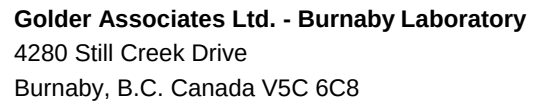
Grain Size (mm)

Grain Size (mm)	Percent Finer By Mass (%)
4.75	100
2.5	85
1.18	67
0.85	58
0.425	41
0.25	28
0.15	20
0.075	15
0.0425	12
0.025	10
0.015	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.*

Sept. 21, 2010

DATE _____



Reference
ASTM C136-06 & C117-04

Sample No.: 206

Field Label:	BG072910-3
--------------	------------

Depth (m): NA

Lab ID No: SA-206

Date Sampled: July 29, 2010

Material Specification: CORE BACKFILL

Method: COMBINED, WASHED

Date Tested: August 7, 2010

Size of opening, inches

U.S. Standard Sieve Size, opening in meshes / inch

USCS GRAIN SIZE SCALE

24 12 6 3 1 1/2 3/4 3/8 #4 #10 #20 #40 #60 #200

Percent Finer By Mass

Grain Size (mm)

Grain Size (mm)	Percent Finer By Mass (%)
4.75	100
2.5	92
1.18	70
0.85	61
0.425	42
0.25	26
0.15	17
0.075	12
0.0475	9
0.025	7
0.015	6

** 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.*

Sept. 22, 2010

DATE _____

PARTICLE SIZE ANALYSIS OF SOILS

Reference

ASTM C136-06 & C117-04

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

Sample No.: 249

Client: AEM

Field Label: BG080210-1

Project: Meadowbank Gold Project

Depth (m): NA

Location: Nunavut

Lab ID No: SA-249

Remarks:
Date Sampled: August 2, 2010

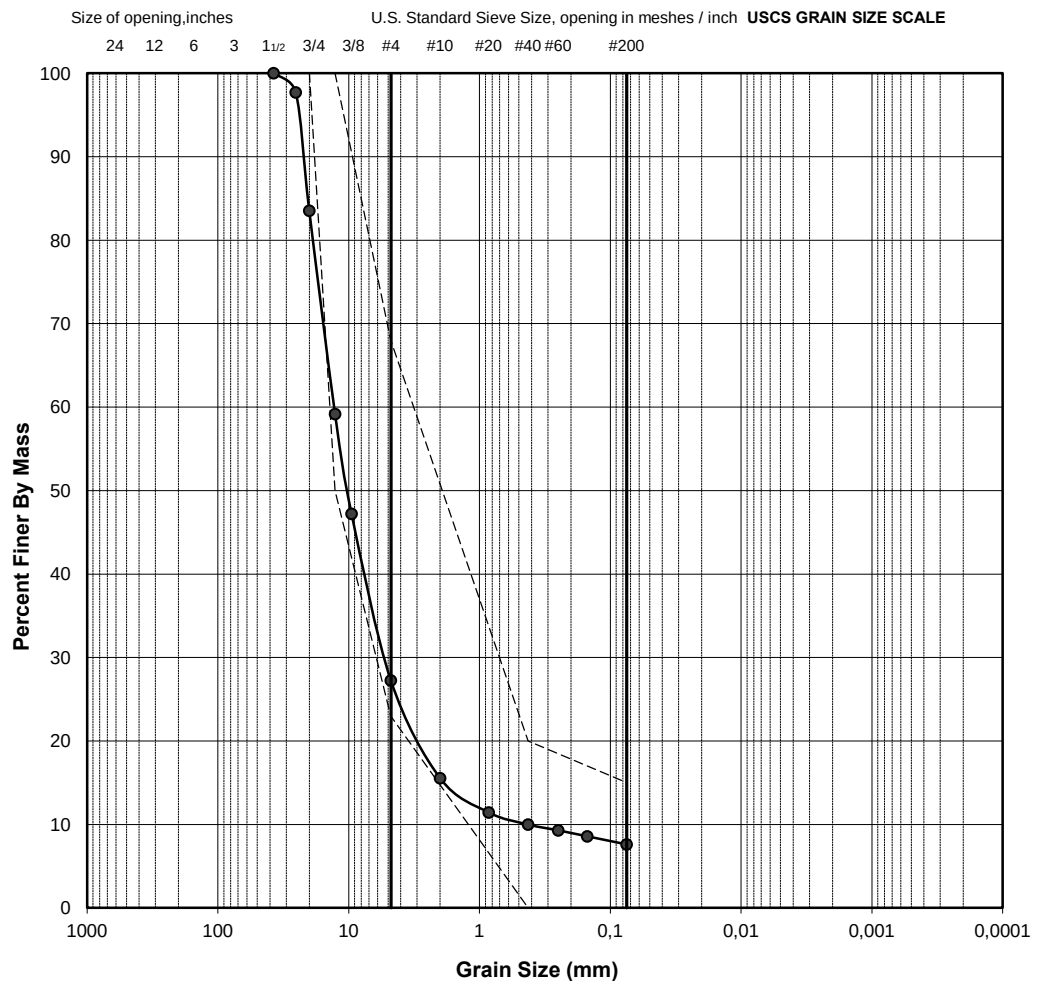
Sa. Location: Bay-Goose Dike Sta. 31+169.

Material Specification: CORE BACKFILL

Method: COMBINED, WASHED

Date Tested: August 6, 2010

Sieve Size (USS)	(mm)	Passing %
8"	200,0	100,0
6"	152,4	100,0
3"	76,2	100,0
2"	50,0	100,0
1.5"	37,5	100,0
1"	25,4	97,7
3/4"	20,0	83,5
1/2"	12,7	59,2
3/8"	9,500	47,2
#4	4,760	27,3
#10	2,000	15,5
#20	0,850	11,4
#40	0,425	10,0
#60	0,250	9,3
#100	0,150	8,6
#200	0,075	7,6



* 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.

MO	August 6, 2010	YB	Sept. 23, 2010
TESTED BY	DATE	CHECKED BY	DATE

PARTICLE SIZE ANALYSIS OF SOILS

Reference

ASTM C136-06 & C117-04

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

Sample No.: **251**
Client: AEM

Field Label: BG080410-1

Project: Meadowbank Gold Project

Depth (m): NA

Location: Nunavut

Lab ID No: SA-251

Remarks:
Date Sampled: August 4, 2010

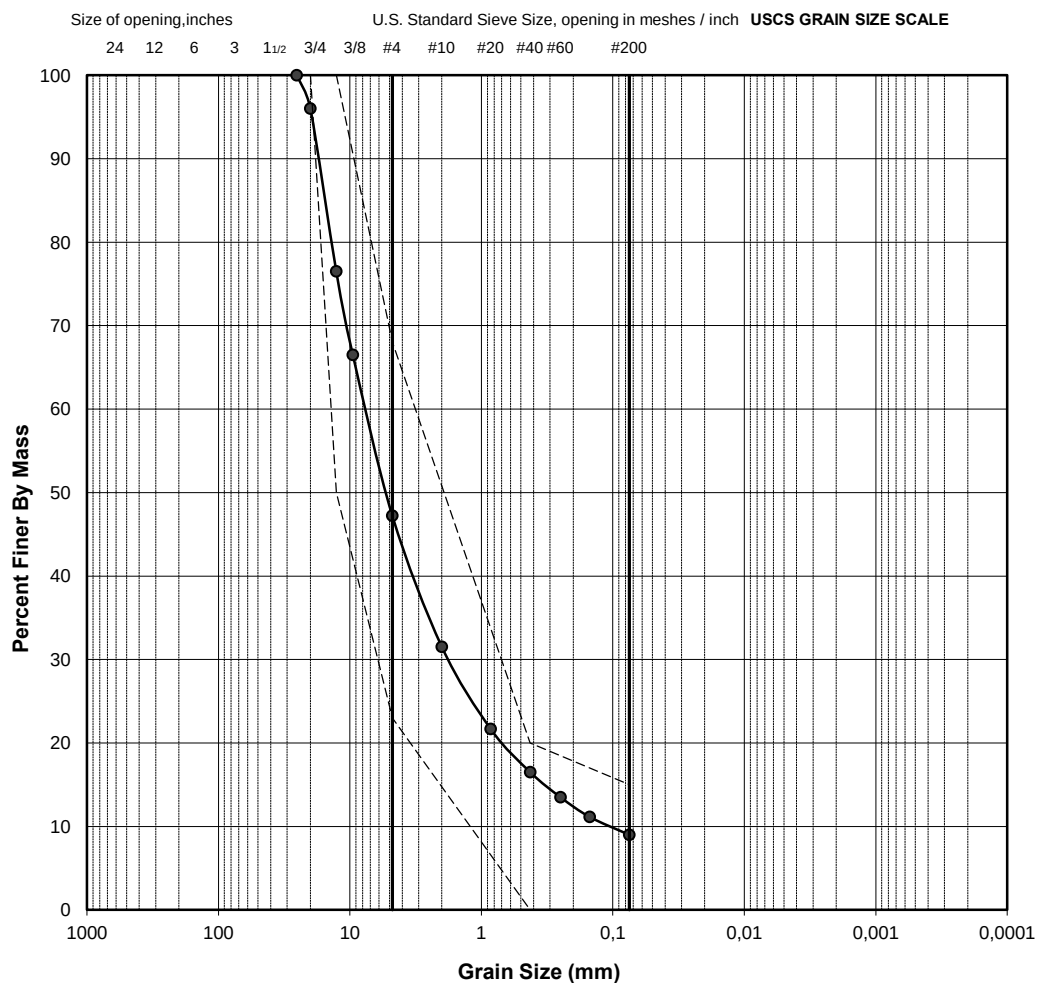
Sa. Location: Bay-Goose Dike Sta. 31+685.

Material Specification: CORE BACKFILL

Method: COMBINED, WASHED

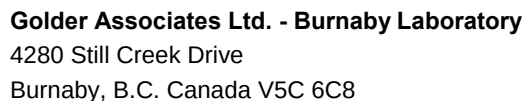
Date Tested: August 6, 2010

Sieve Size (USS)	(mm)	Passing %
8"	200,0	100,0
6"	152,4	100,0
3"	76,2	100,0
2"	50,0	100,0
1.5"	37,5	100,0
1"	25,4	100,0
3/4"	20,0	96,0
1/2"	12,7	76,5
3/8"	9,5	66,5
#4	4,760	47,2
#10	2,000	31,5
#20	0,850	21,7
#40	0,425	16,5
#60	0,250	13,5
#100	0,150	11,2
#200	0,075	9,0



** 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.*

MO	August 6, 2010	YB	Sept. 9, 2010
TESTED BY	DATE	CHECKED BY	DATE



Reference
ASTM C136-06 & C117-04

Sample No.: 252

Field Label:	BG080510-1
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Depth (m):	NA
------------	----

Lab ID No: SA-252

Date Sampled: August 5, 2010

Material Specification: CORE BACKFILL

Method: COMBINED, WASHED

Date Tested: August 7, 2010

Size of opening, inches: 24 12 6 3 1 1/2 3/4 3/8 #4 #10 #20 #40 #60 #200

U.S. Standard Sieve Size, opening in meshes / inch

USCS GRAIN SIZE SCALE

Percent Finer By Mass

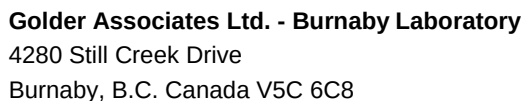
Grain Size (mm)

Grain Size (mm)	Percent Finer By Mass (%)
4.75	100
2.5	90
1.18	71
0.85	61
0.425	43
0.25	29
0.15	20
0.075	15
0.0475	13
0.025	10
0.015	8

** 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.*

Sept. 23, 2010

DATE _____



Reference
ASTM C136-06 & C117-04

Sample No.: 253 (2)

Field Label:	BG080510-2
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Depth (m):	NA
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Lab ID No: SA-253 (2)

Date Sampled: August 5, 2010

Material Specification: CORE BACKFILL

Method:	COMBINED, WASHED
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Date Tested: August 9, 2010

Size of opening, inches

24 12 6 3 1 1/2 3/4 3/8 #4 #10 #20 #40 #60 #200

U.S. Standard Sieve Size, opening in meshes / inch

USCS GRAIN SIZE SCALE

Percent Finer By Mass

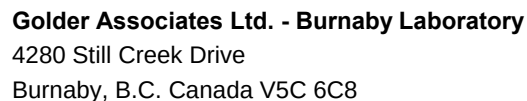
Grain Size (mm)

Grain Size (mm)	Percent Finer By Mass (%)
2.0	100
1.5	98
1.0	80
0.75	62
0.6	50
0.425	36
0.3	26
0.25	19
0.15	15
0.106	12
0.075	11
0.06	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.*

Sept. 23, 2010

DATE _____



Reference
ASTM C136-06 & C117-04

Sample No.: 258

Field Label:	BG080710-1
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Depth (m):	NA
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Lab ID No: SA-258

Date Sampled: August 7, 2010

Material Specification: CORE BACKFILL

Method: COMBINED, WASHED

Date Tested: August 9, 2010

Size of opening, inches

24 12 6 3 1 1/2 3/4 3/8 #4 #10 #20 #40 #60 #200

U.S. Standard Sieve Size, opening in meshes / inch

USCS GRAIN SIZE SCALE

Percent Finer By Mass

100 90 80 70 60 50 40 30 20 10 0

Grain Size (mm)

1000 100 10 1 0.1 0.01 0.001 0.0001

BOULDER

COBBLE

GRAVEL

Coarse

Fine

SAND

Coarse

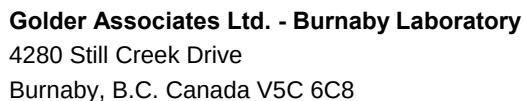
Medium

Fine

FINES (Silt, Clay)

Grain Size (mm)	Percent Finer By Mass (%)
300	100
250	99
150	88
100	66
75	56
4.75	40
2.0	27
1.0	19
0.6	15
0.425	12
0.25	10
0.075	8

** 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.*



Reference
ASTM C136-06 & C117-04

Sample No.: 261

Field Label:	BG080710-4
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Depth (m): NA

Lab ID No: SA-261

Date Sampled: August 7, 2010

Material Specification: CORE BACKFILL

Method: COMBINED, WASHED

Date Tested: August 9, 2010

Size of opening, inches

U.S. Standard Sieve Size, opening in meshes / inch

USCS GRAIN SIZE SCALE

24 12 6 3 1 1/2 3/4 3/8 #4 #10 #20 #40 #60 #200

Percent Finer By Mass

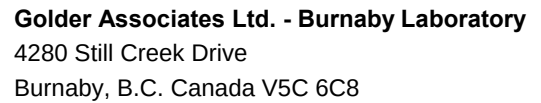
Grain Size (mm)

Grain Size (mm)	Percent Finer By Mass (%)
4.75	100
2.5	85
1.18	68
0.85	58
0.425	41
0.25	28
0.15	20
0.075	15
0.0425	12
0.025	10
0.015	8

** 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.*

Sept. 24, 2010

DATE _____



Reference
ASTM C136-06 & C117-04

Sample No.: 262

Field Label:	BG080810-1
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Depth (m): NA

Lab ID No: SA-262

Date Sampled: August 7, 2010

Material Specification: CORE BACKFILL

Date Tested: August 9, 2010

Size of opening, inches
24 12 6 3 1 1/2 3/4 3/8 #4 #10 #20 #40 #60 #200

U.S. Standard Sieve Size, opening in meshes / inch

USCS GRAIN SIZE SCALE

Percent Finer By Mass

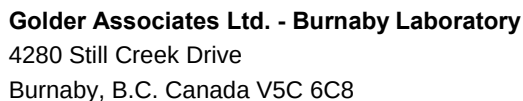
Grain Size (mm)

Grain Size (mm)	Percent Finer By Mass (%)
4.75	100
2.5	85
1.18	68
0.85	58
0.425	42
0.25	28
0.15	20
0.075	15
0.0475	12
0.025	10
0.015	8

** 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.*

Sept. 24, 2010

DATE _____



Reference
ASTM C136-06 & C117-04

Sample No.: 264

Field Label:	BG080810-3
--------------	------------

Depth (m): NA

Lab ID No: SA-264

Date Sampled: August 8, 2010

Material Specification: CORE BACKFILL

Method:	COMBINED, WASHED
----------------	------------------

Date Tested: August 10, 2010

Size of opening, inches
24 12 6 3 1 1/2 3/4 3/8 #4 #10 #20 #40 #60 #200

U.S. Standard Sieve Size, opening in meshes / inch

USCS GRAIN SIZE SCALE

Percent Finer By Mass

Grain Size (mm)

Grain Size (mm)	Percent Finer By Mass (%)
4.75	100
2.5	95
1.18	74
0.85	64
0.425	43
0.25	25
0.15	16
0.075	11
0.0425	9
0.025	7
0.015	6

** 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.*

Sept. 24, 2010

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.: **265**
Field Label: BG080910

Depth (m): NA

Lab ID No: SA-265

Remarks:
Sa. Location: Bay-Goose Dike Sta. 31+520.

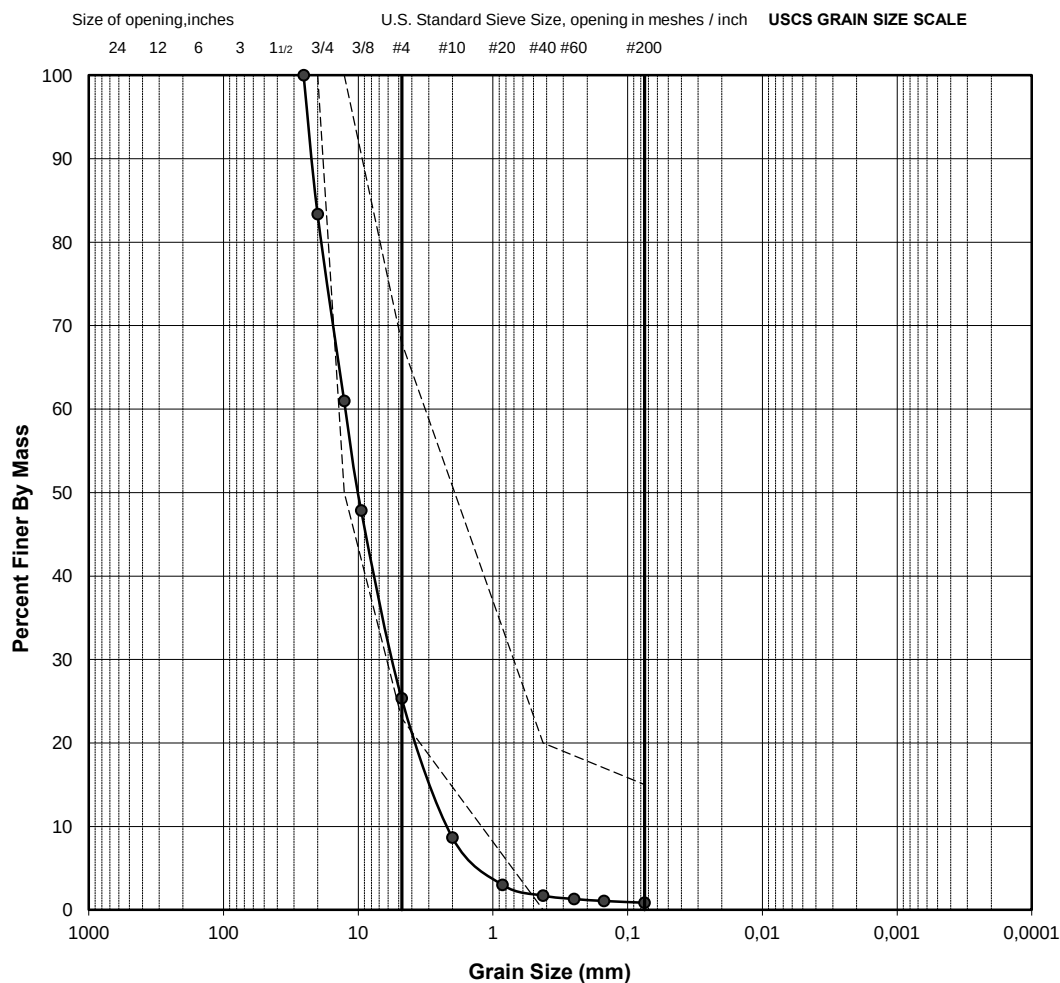
Date Sampled: August 9, 2010

Material Specification: CORE BACKFILL

Method: COMBINED, WASHED

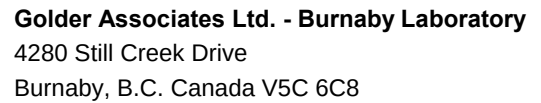
Date Tested: August 10, 2010

Sieve Size (USS)	(mm)	Passing %
8"	200,0	100,0
6"	152,4	100,0
3"	76,2	100,0
2"	50,0	100,0
1.5"	37,5	100,0
1"	25,4	100,0
3/4"	20,0	83,4
1/2"	12,7	61,0
3/8"	9,5	47,9
#4	4,760	25,4
#10	2,000	8,7
#20	0,850	3,0
#40	0,425	1,7
#60	0,250	1,3
#100	0,150	1,1
#200	0,075	0,9



** 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.*

MO	August 10, 2010	YB	Sept. 24, 2010
TESTED BY	DATE	CHECKED BY	DATE



Reference
ASTM C136-06 & C117-04

Sample No.: 270

Field Label:	BG081010
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Depth (m):	NA
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Lab ID No: SA-270

Date Sampled: August 10, 2010

Material Specification: CORE BACKFILL

Date Tested: August 16, 2010

Size of opening, inches
24 12 6 3 1 1/2 3/4 3/8 #4 #10 #20 #40 #60 #200

U.S. Standard Sieve Size, opening in meshes / inch

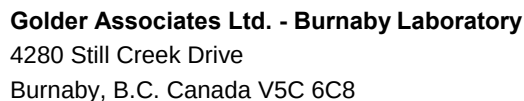
USCS GRAIN SIZE SCALE

Percent Finer By Mass

Grain Size (mm)

Grain Size (mm)	GRAVEL		SAND			FINES (Silt, Clay)
	Coarse	Fine	Coarse	Medium	Fine	
4.75	0	0	100	0	0	0
2.5	0	0	100	0	0	
1.18	0	0	100	0	0	
0.6	0	0	100	0	0	
0.425	0	0	100	0	0	
0.25	0	0	100	0	0	0
0.15	0	0	100	0	0	
0.075	0	0	100	0	0	
0.0475	0	0	100	0	0	
0.025	0	0	100	0	0	

** 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.*



Reference
ASTM C136-06 & C117-04

Sample No.: 273

Field Label:	BG081610-2
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Depth (m):	NA
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Lab ID No: SA-273

Date Sampled:	August 16, 2010
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Material Specification: CORE BACKFILL

Method: COMBINED, WASHED

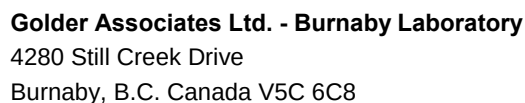
Date Tested: August 21, 2010

Grain Size Distribution Data

Grain Size (mm)	Percent Finer (%)
250	100
150	99
75	93
47.5	71
25	61
12.5	43
6.25	29
3.125	21
1.56	16.5
0.78	14
0.39	12
0.25	10

** 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.*

DB	August 21, 2010	YB	Sept. 24, 2010
TESTED BY	DATE	CHECKED BY	DATE



Reference
ASTM C136-06 & C117-04

Sample No.:	279
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Field Label:	BG081910-2
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Depth (m):	NA
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Lab ID No: SA 279

Date Sampled: August 19, 2010

Material Specification: CORE BACKFILL

Method:	COMBINED, WASHED
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Date Tested: August 22, 2010

Size of opening, inches: 24 12 6 3 1 1/2 3/4 3/8 #4 #10 #20 #40 #60 #200

U.S. Standard Sieve Size, opening in meshes / inch

USCS GRAIN SIZE SCALE

Percent Finer By Mass

Grain Size (mm)

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.*

DB	August 22, 2010	YB	Sept. 24, 2010
TESTED BY	DATE	CHECKED BY	DATE

PARTICLE SIZE ANALYSIS OF SOILS

Reference

ASTM C136-06 & C117-04

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

Sample No.: **280**
Client: AEM

Field Label: BG082010-1

Project: Meadowbank Gold Project

Depth (m): NA

Location: Nunavut

Lab ID No: SA-280

Remarks:
Date Sampled: August 20, 2010

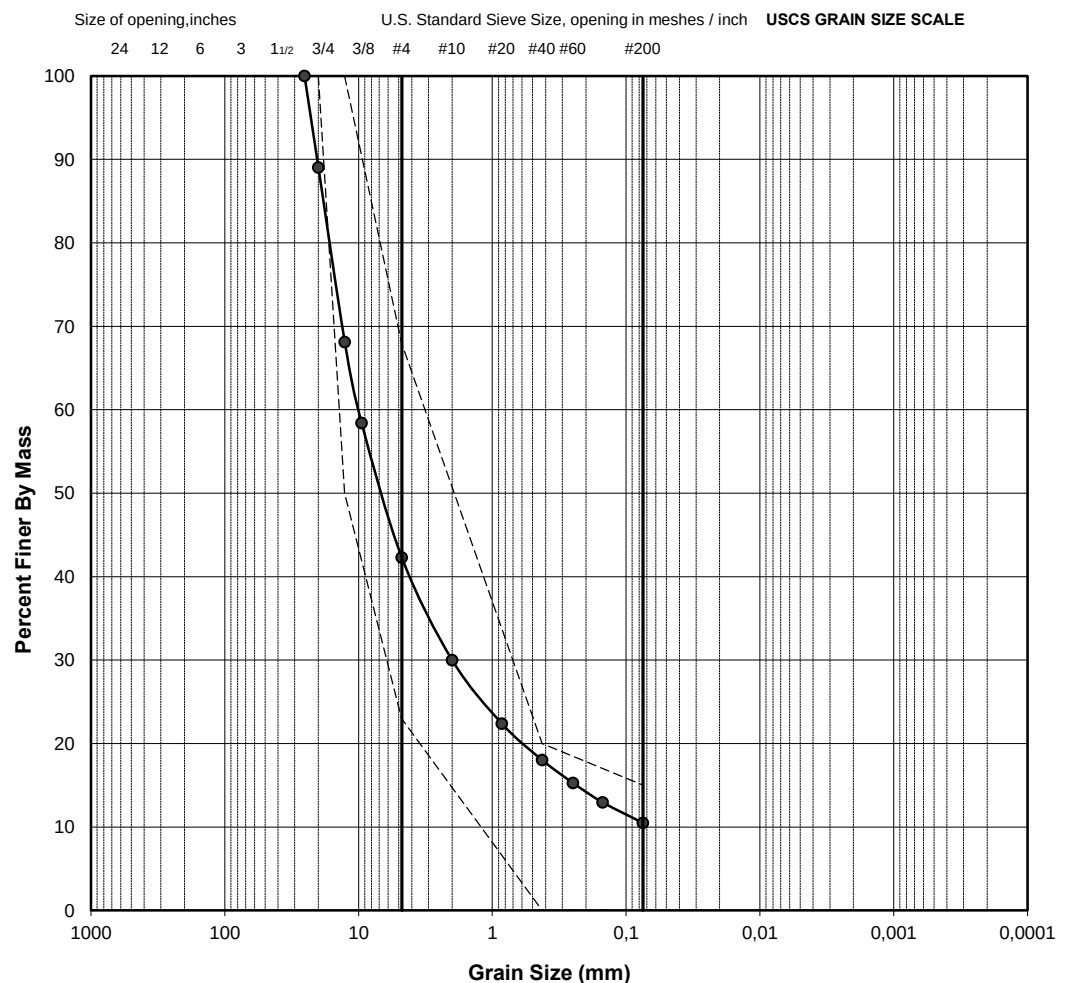
Sa. Location: Bay-Goose Dike Sta. 31+866, 1.5m under water.

Material Specification: CORE BACKFILL

Method: COMBINED, WASHED

Date Tested: August 22, 2010

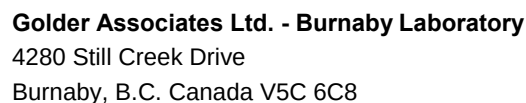
Sieve Size (USS)	(mm)	Passing %
3.5"	87,5	100,0
3"	76,2	100,0
2"	50,0	100,0
1.5"	37,5	100,0
1"	25,4	100,0
3/4"	20,0	89,0
1/2"	12,7	68,1
3/8"	9,5	58,4
#4	4,76	42,3
#10	2,00	30,0
#20	0,850	22,4
#40	0,425	18,0
#60	0,250	15,3
#100	0,150	12,9
#200	0,075	10,5



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.*

DB	August 22, 2010	YB	Sept. 24, 2010
TESTED BY	DATE	CHECKED BY	DATE



Reference
ASTM C136-06 & C117-04

Sample No.: 283

Field Label:	BG082110-2
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Depth (m):	NA
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Lab ID No: SA-283

Date Sampled: August 21, 2010

Material Specification: CORE BACKFILL

Method: COMBINED, WASHED

Date Tested: August 24, 2010

Size of opening, inches: 24, 12, 6, 3, 1 1/2, 3/4, 3/8, #4, #10, #20, #40, #60, #200

U.S. Standard Sieve Size, opening in meshes / inch

USCS GRAIN SIZE SCALE

Percent Finer By Mass

Grain Size (mm)

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.*

Sept. 25, 2010

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.: **285**
Field Label: BG082110-3

Depth (m): NA

Lab ID No: SA-285

Remarks:
Sa. Location: Bay-Goose Dike Sta. 31+887, 1m under water

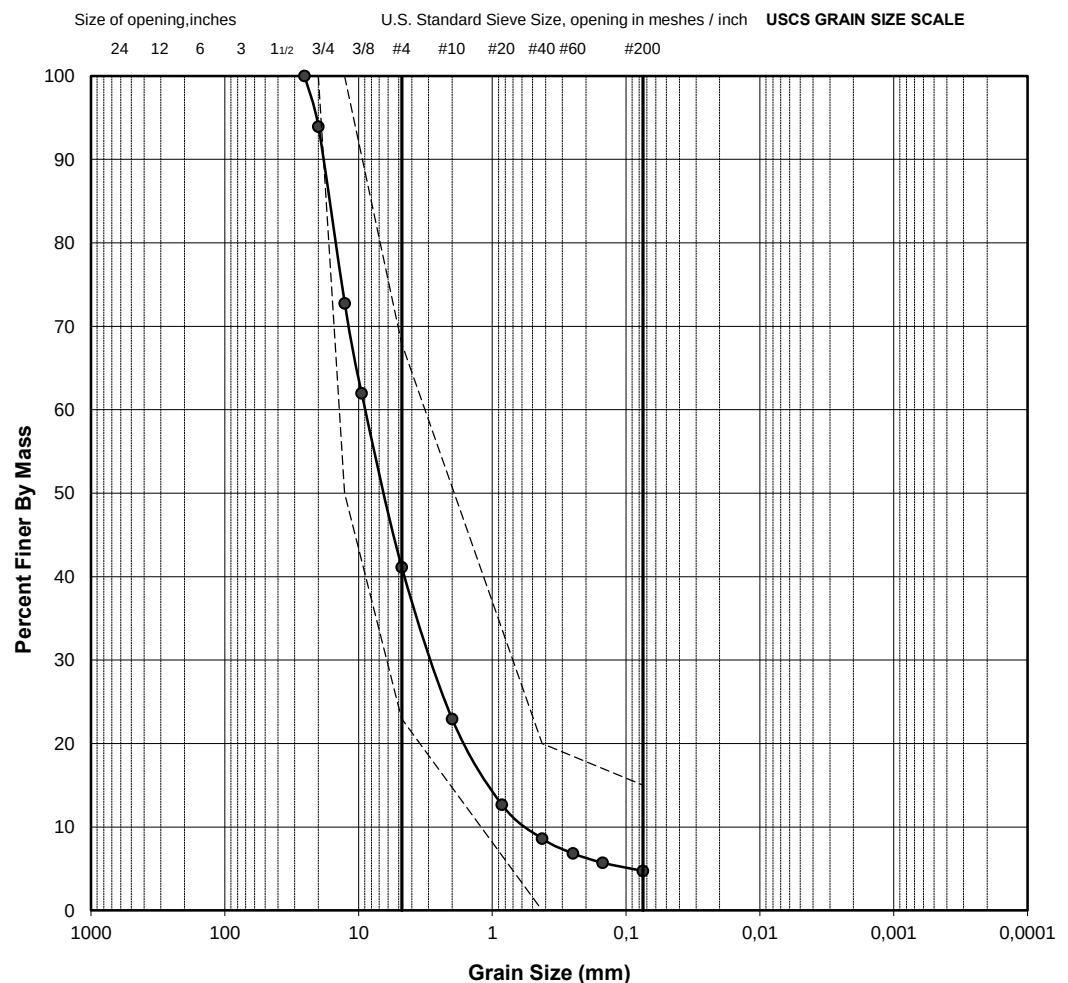
Date Sampled: August 21, 2010

Material Specification: CORE BACKFILL

Method: COMBINED, WASHED

Date Tested: August 22, 2010

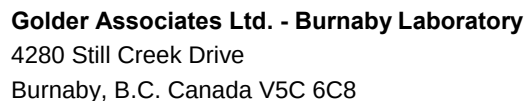
Sieve Size (US)	(mm)	Passing %
3.5"	87,5	100,0
3"	76,2	100,0
2"	50,0	100,0
1.5"	37,5	100,0
1"	25,4	100,0
3/4"	20,0	93,9
1/2"	12,7	72,7
3/8"	9,5	62,0
#4	4,76	41,1
#10	2,00	22,9
#20	0,850	12,7
#40	0,425	8,6
#60	0,250	6,8
#100	0,150	5,7
#200	0,075	4,7



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.*

DB	August 22, 2010	YB	Sept. 25, 2010
TESTED BY	DATE	CHECKED BY	DATE



Reference
ASTM C136-06 & C117-04

Sample No.: 286

Field Label:	BG082010-1
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Depth (m):	NA
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Lab ID No: SA-286

Date Sampled: August 22, 2010

Material Specification: CORE BACKFILL

Method: COMBINED, WASHED

Date Tested: August 22, 2010

Size of opening, inches

24 12 6 3 1 1/2 3/4 3/8 #4 #10 #20 #40 #60 #200

U.S. Standard Sieve Size, opening in meshes / inch

USCS GRAIN SIZE SCALE

1000 100 10 1 0.1 0.01 0.001 0.0001

Grain Size (mm)

Percent Finer By Mass

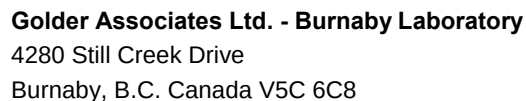
0 10 20 30 40 50 60 70 80 90 100

Sieve Size (mm)	Percent Finer (%)
4.75	100
2.5	92
1.18	83
0.85	76
0.425	60
0.25	41
0.15	25
0.075	15
0.0475	10
0.025	7
0.015	5

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.*

DB	August 22, 2010	YB	Sept. 25, 2010
TESTED BY	DATE	CHECKED BY	DATE



Reference
ASTM C136-06 & C117-04

Sample No.: 288

Field Label:	BG082310
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Depth (m):	NA
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Lab ID No: SA-288

Date Sampled: August 23, 2010

Material Specification: CORE BACKFILL

Method: COMBINED, WASHED

Date Tested: August 25, 2010

Size of opening, inches: 24, 12, 6, 3, 1 1/2, 3/4, 3/8, #4, #10, #20, #40, #60, #200

U.S. Standard Sieve Size, opening in meshes / inch

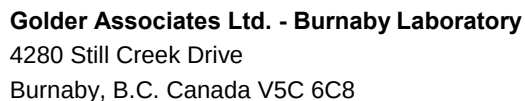
USCS GRAIN SIZE SCALE

Percent Finer By Mass

Grain Size (mm)

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.*



Reference
ASTM C136-06 & C117-04

Sample No.: 290

Field Label: BG082410-2

Depth (m): NA

Lab ID No: SA-290

Date Sampled: August 24, 2010

Material Specification: CORE BACKFILL

Method: COMBINED, WASHED

Date Tested: August 25, 2010

Size of opening, inches

U.S. Standard Sieve Size, opening in meshes / inch

USCS GRAIN SIZE SCALE

Percent Finer By Mass

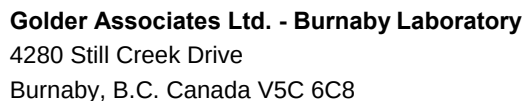
Grain Size (mm)

Grain Size (mm)	Percent Finer By Mass (%)
2.0	100
1.18	92
0.85	84
0.60	78
0.425	60
0.25	39
0.15	23
0.075	14
0.0425	9
0.025	6
0.015	4

** 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.*

Sept. 25, 2010

DATE _____



Reference
ASTM C136-06 & C117-04

Sample No.: 292

Field Label: BG082410-4

Depth (m): NA

Lab ID No: SA-292

Date Sampled: August 24, 2010

Material Specification: CORE BACKFILL

Method: COMBINED, WASHED

Date Tested: August 26, 2010

Size of opening, inches: 24 12 6 3 1 1/2 3/4 3/8 #4 #10 #20 #40 #60 #200

U.S. Standard Sieve Size, opening in meshes / inch

USCS GRAIN SIZE SCALE

Percent Finer By Mass

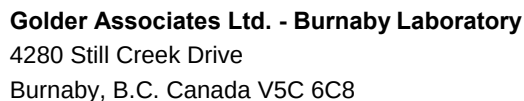
Grain Size (mm)

Grain Size (mm)	Percent Finer By Mass (%)
2.0	100
1.18	99
0.85	79
0.60	57
0.425	50
0.30	37
0.25	26
0.15	19
0.106	15
0.075	13
0.053	11
0.0425	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.*

Sept. 27, 2010

DATE _____



Reference
ASTM C136-06 & C117-04

Sample No.: 293

Field Label:	BG082510-1
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Depth (m): NA

Lab ID No: SA-293

Date Sampled: August 25, 2010

Material Specification: CORE BACKFILL

Method: COMBINED, WASHED

Date Tested: August 27, 2010

Size of opening, inches

U.S. Standard Sieve Size, opening in meshes / inch

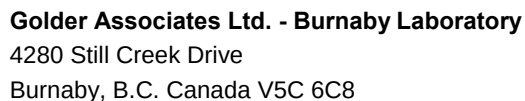
USCS GRAIN SIZE SCALE

Percent Finer By Mass

Grain Size (mm)

Grain Size (mm)	Percent Finer (%)
4.75	100
2.0	100
1.18	86
0.85	65
0.6	55
0.425	38
0.3	26
0.25	19
0.18	15
0.15	13
0.125	11
0.106	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.*



Reference
ASTM C136-06 & C117-04

Sample No.: 294

Field Label:	BG082510-2
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Depth (m):	NA
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Lab ID No: SA-294

Date Sampled: August 25, 2010

Material Specification: CORE BACKFILL

Method: COMBINED, WASHED

Date Tested: August 27, 2010

Size of opening, inches

U.S. Standard Sieve Size, opening in meshes / inch

USCS GRAIN SIZE SCALE

Percent Finer By Mass

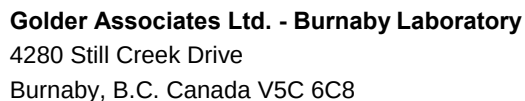
Grain Size (mm)

Grain Size (mm)	Percent Finer By Mass (%)
4.75	100
2.5	95
1.18	85
0.85	77
0.425	56
0.25	35
0.15	21
0.075	13
0.0425	9
0.025	6
0.015	4

** 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.*

Sept. 27, 2010

DATE _____



Reference
ASTM C136-06 & C117-04

Sample No.: 298

Field Label:	BG082510-1
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Depth (m): NA

Lab ID No: SA-298

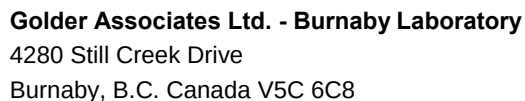
Date Sampled: August 28, 2010

Material Specification: CORE BACKFILL - After Densification.

Date Tested: August 29, 2010

Size of opening, inches		U.S. Standard Sieve Size, opening in meshes / inch										USCS GRAIN SIZE SCALE
24	12	6	3	1 1/2	3/4	3/8	#4	#10	#20	#40	#60	#200
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.*



Reference
ASTM C136-06 & C117-04

Sample No.: 299

Field Label:	BG082510-2
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Depth (m): NA

Lab ID No: SA-299

Date Sampled: August 28, 2010

Material Specification: CORE BACKFILL - After Densification.

Method: COMBINED, WASHED

Date Tested: August 29, 2010

Grain Size Distribution Plot

Size of opening, inches
24 12 6 3 1 1/2 3/4 3/8 #4 #10 #20 #40 #60 #200

U.S. Standard Sieve Size, opening in meshes / inch

USCS GRAIN SIZE SCALE

Percent Finer By Mass

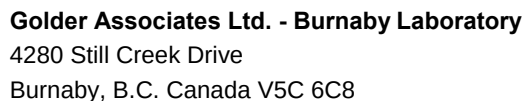
Grain Size (mm)

Classification: SAND

Grain Size (mm)	Percent Finer By Mass (%)
4.75	100
2.5	98
1.18	88
0.85	74
0.6	65
0.425	49
0.25	36
0.15	28
0.075	22
0.0425	19
0.025	16
0.015	13

** 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.*

\\Burl-s-filesrv1\data\Active_2009\1428\09-1428-5007 Meadowbank 2009 Dike Construction\Bay Goose Dike\As-Built Report and Appendixes\Appendix B - Lab Test Results\QA Results\Core Backfill\2010\SA 299



Reference
ASTM C136-06 & C117-04

Sample No.: 300

Field Label: BG082510-3

Depth (m): NA

Lab ID No: SA-300

Date Sampled: August 28, 2010

Material Specification: CORE BACKFILL - After Densification

Method: COMBINED, WASHED

Date Tested: August 29, 2010

Size of opening, inches
24 12 6 3 1 1/2 3/4 3/8 #4 #10 #20 #40 #60 #200

U.S. Standard Sieve Size, opening in meshes / inch

USCS GRAIN SIZE SCALE

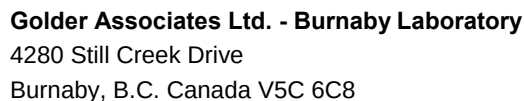
Percent Finer By Mass

Grain Size (mm)

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.*

MO	August 29, 2010	YB	Sept. 27, 2010
TESTED BY	DATE	CHECKED BY	DATE



Reference
ASTM C136-06 & C117-04

Sample No.: 307

Field Label:	BG090810
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Depth (m):	NA
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Lab ID No: SA-307

Date Sampled: September 8, 2010

Material Specification: CORE BACKFILL

Method: COMBINED, WASHED

Date Tested: September 9, 2010

Size of opening, inches: 24 12 6 3 1 1/2 3/4 3/8 #4 #10 #20 #40 #60 #200

U.S. Standard Sieve Size, opening in meshes / inch

USCS GRAIN SIZE SCALE

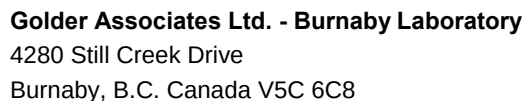
Percent Finer By Mass

Grain Size (mm)

BOULDER		COBBLE		GRAVEL		SAND			FINES (Silt, Clay)	
				Coarse	Fine	Coarse	Medium	Fine		
1000		250		4.75		0.85	0.425	0.25	0.075	

** 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.*

DB	September 9, 2010	YB	Sept. 27, 2010
TESTED BY	DATE	CHECKED BY	DATE



Reference
ASTM C136-06 & C117-04

Sample No.: 318

Field Label:	BG091110-1
--------------	------------

Depth (m):	NA
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Lab ID No: SA-318

Date Sampled: September 11, 2010

Material Specification: CORE BACKFILL

Method: COMBINED, WASHED

Date Tested: September 12, 2010

Size of opening, inches: 24 12 6 3 1 1/2 3/4 3/8 #4 #10 #20 #40 #60 #200

U.S. Standard Sieve Size, opening in meshes / inch

USCS GRAIN SIZE SCALE

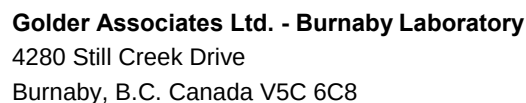
Percent Finer By Mass

Grain Size (mm)

Grain Size (mm)	Percent Finer By Mass (%)
2.0	100
0.85	82
0.425	55
0.25	43
0.15	25
0.075	13
0.0475	8
0.025	6
0.015	4
0.0075	3

** 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.*

DB	September 12, 2010	YB	Sept. 27, 2010
TESTED BY	DATE	CHECKED BY	DATE



Reference
ASTM C136-06 & C117-04

Sample No.: 323

Field Label:	BG091310-1
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Depth (m):	NA
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Lab ID No: SA 323

Date Sampled: September 13, 2010

Material Specification: CORE BACKFILL

Method:	COMBINED, WASHED
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Date Tested: September 15, 2010

Size of opening, inches

24 12 6 3 1 1/2 3/4 3/8 #4 #10 #20 #40 #60 #200

U.S. Standard Sieve Size, opening in meshes / inch

USCS GRAIN SIZE SCALE

Percent Finer By Mass

1000 100 10 1 0.1 0.01 0.001 0.0001

Grain Size (mm)

BOULDER

COBBLE

GRAVEL

SAND

FINES (Silt, Clay)

Coarse

Fine

Coarse

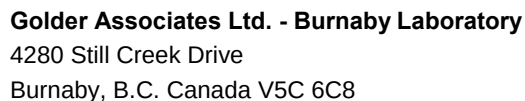
Medium

Fine

Sieve Size (mm)	Percent Finer (%)
25	100
19	98
12.5	79
7.5	62
4.75	52
2.5	35
1.5	23
0.85	15
0.6	12
0.425	9
0.3	7
0.25	6

** 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.*

DB	September 15, 2010	YB	Sept. 27, 2010
TESTED BY	DATE	CHECKED BY	DATE



Reference
ASTM C136-06 & C117-04

Sample No.: 330

Field Label:	BG091410-6
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Depth (m):	NA
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Lab ID No: SA 330

Date Sampled: September 14, 2010

Material Specification: CORE BACKFILL

Method: COMBINED, WASHED

Date Tested: September 16, 2010

Size of opening, inches: 24 12 6 3 1 1/2 3/4 3/8 #4 #10 #20 #40 #60 #200

U.S. Standard Sieve Size, opening in meshes / inch

USCS GRAIN SIZE SCALE

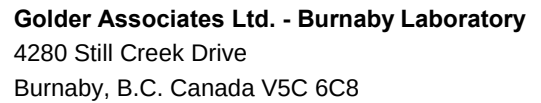
Percent Finer By Mass

Grain Size (mm)

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.*

DB	September 16, 2010	YB	Sept. 27, 2010
TESTED BY	DATE	CHECKED BY	DATE



Reference
ASTM C136-06 & C117-04

Sample No.: 342

Field Label:	BG091810
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Depth (m): NA

Lab ID No: SA-342

Date Sampled: September 18, 2010

Material Specification: CORE BACKFILL

Date Tested: September 24, 2010

Grain Size (mm)

Grain Size (mm)	Percent Finer (%)
4.75	100
2.5	89
1.18	71
0.85	62
0.425	44
0.25	30
0.15	22
0.106	17
0.075	14
0.053	12
0.0375	10

USCS GRAIN SIZE SCALE

Grain Size (mm)	USCS Classification
4.75	GRAVEL
2.0	GRAVEL
0.85	GRAVEL
0.425	SAND
0.25	SAND
0.15	SAND
0.106	SAND
0.075	SAND
0.053	SAND
0.0375	SAND

** 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.*



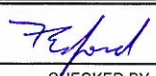
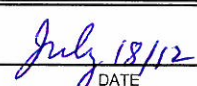
BAY GOOSE DIKE CONSTRUCTION AS-BUILT REPORT MEADOWBANK GOLD MINE, NUNAVUT

Lakebed Till

Samples List

Sample No.:

- 70
- 209 (2)
- 250 (2)
- 254
- 255 (2)
- 259
- 260
- 263
- 266
- 267
- 269
- 271
- 272
- 274
- 275
- 277
- 278
- 281
- 282
- 284
- 308
- 310
- 311
- 312
- 313
- 320
- 324
- 325
- 327
- 348

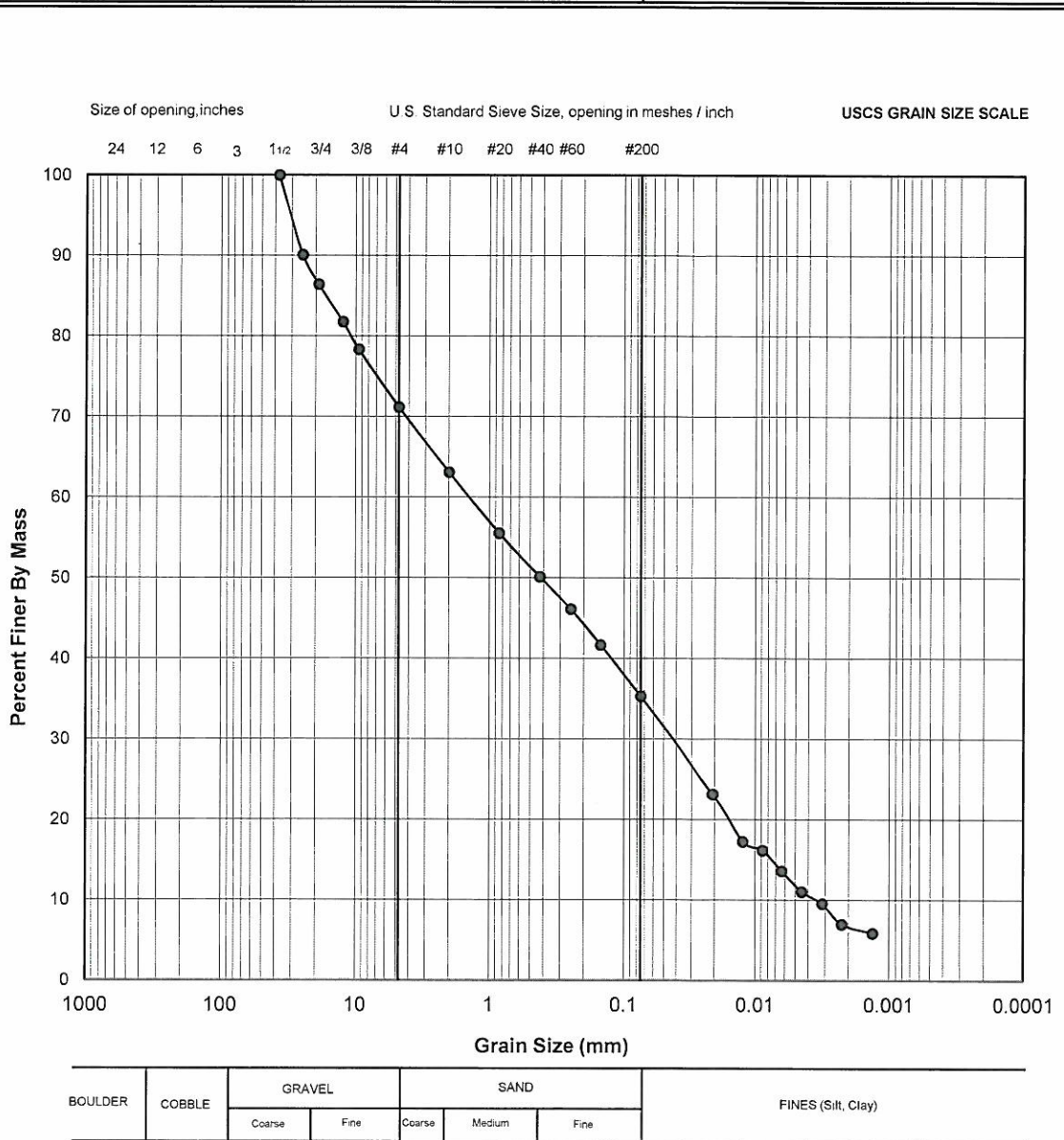
Liquid Limit, Plastic Limit and Plasticity Index of Soils				Reference ASTM D 4318-05																	
Project No.:	09-1428-5007 (2000)	Sample No.:	70																		
Client:	AEM	Field No.:	BG 091909-02																		
Project:	Meadowbank Gold Project	Sa. Location:	Bay Goose 30+378 11m depth																		
Location:	Nunavut	Date Sampled	September 19, 2009																		
Method:	A-Multi Point	Preparation Method:	Air-Dried																		
Sample Description:	CL-ML	Classification Definition <i>Inorganic clays of low to medium plasticity --- Inorganic silts and very fine sands, clayey silts with slight plasticity</i>																			
<table border="1" style="margin: auto; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center; padding: 5px;">Test Summary</th> <th style="text-align: center; padding: 5px;">Remarks</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">Percent passing #40 Sieve (%)</td> <td style="text-align: center; padding: 5px;"><u>50.1</u></td> <td rowspan="5" style="padding: 5px; vertical-align: top;">TILL sampled from Bay Goose 30+378 11m depth</td> </tr> <tr> <td style="padding: 5px;">Liquid Limit</td> <td style="text-align: center; padding: 5px;"><u>Non Plastic</u></td> </tr> <tr> <td style="padding: 5px;">Plastic Limit</td> <td style="text-align: center; padding: 5px;"><u>11</u></td> </tr> <tr> <td style="padding: 5px;">Plasticity Index</td> <td style="text-align: center; padding: 5px;"><u>5</u></td> </tr> <tr> <td style="padding: 5px;">Natural water content (%)</td> <td style="text-align: center; padding: 5px;"><u>23</u></td> </tr> <tr> <td style="padding: 5px;">Liquidity Index</td> <td style="text-align: center; padding: 5px;"><u>2.4</u></td> <td></td> </tr> </tbody> </table>					Test Summary		Remarks	Percent passing #40 Sieve (%)	<u>50.1</u>	TILL sampled from Bay Goose 30+378 11m depth	Liquid Limit	<u>Non Plastic</u>	Plastic Limit	<u>11</u>	Plasticity Index	<u>5</u>	Natural water content (%)	<u>23</u>	Liquidity Index	<u>2.4</u>	
Test Summary		Remarks																			
Percent passing #40 Sieve (%)	<u>50.1</u>	TILL sampled from Bay Goose 30+378 11m depth																			
Liquid Limit	<u>Non Plastic</u>																				
Plastic Limit	<u>11</u>																				
Plasticity Index	<u>5</u>																				
Natural water content (%)	<u>23</u>																				
Liquidity Index	<u>2.4</u>																				
* The test data given herein pertain to the sample provided only. This report constitutes a testing service only.																					
DE	October 3, 2009																				
TESTED BY	DATE	CHECKED BY	DATE																		

PARTICLE SIZE ANALYSIS OF SOILS

Reference
ASTM D 422-63 (2007)

Project No.:	09-1428-5007 (2000)	Sample No.:	70
Client:	AEM	Field No.:	BG 091909-02
Project:	Meadowbank Gold Project	Depth (m):	11m
Location:	Nunavut	Lab ID No.:	SA70
Specific Gravity : (assumed):	2.70	Other	TILL from Bay Goose 30+378
Date Sampled:	September 19, 2009	Remarks:	
Dispersion Method:	Stirring		
Dispersion Period (min):	960.00		

Sieve Size (US)	(mm)	% Passing
3.5"	87.50	100.0
3"	75.00	100.0
2"	50.00	100.0
1.5"	37.50	100.0
1"	25.00	90.1
3/4"	19.00	86.4
1/2"	12.50	81.8
3/8"	9.50	78.3
#4	4.75	71.2
#10	2.00	63.1
#20	0.850	55.5
#40	0.425	50.1
#60	0.250	46.1
#100	0.150	41.7
#200	0.075	35.3
-	0.0207	23.1
-	0.0124	17.3
-	0.0088	16.2
-	0.0063	13.6
-	0.0045	11.0
-	0.0032	9.5
-	0.0023	7.0
-	0.0013	5.9



* 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.

DE	October 2, 2009	<i>T. Ford</i>	<i>July 15/12</i>
TESTED BY	DATE	CHECKED BY	DATE



Reference
ASTM C136-06 & C117-04

Sample No.:	209 (2)
Field Label:	BG080110-1
Depth (m):	NA
Lab ID No:	SA 209 (2)

Date Sampled:	August 1, 2010
Material Specification:	Till from trench bottom
Method:	COMBINED, WASHED
Date Tested:	August 6, 2010

Grain Size Distribution Data

Grain Size (mm)	Percent Finer (%)
75	100
47.5	87
30	79
25	77
15	74
10	71
4.75	60
2.0	49
1.0	41
0.6	34
0.425	28
0.25	22
0.15	15

USCS Grain Size Scale

Grain Size (mm)	USCS Scale
75	24
47.5	12
30	6
25	3
15	1 1/2
10	3/4
7.5	3/8
4.75	#4
2.0	#10
1.0	#20
0.6	#40
0.425	#60
0.25	#200

Soil Classification

Grain Size (mm)	Soil Classification
75	BOULDER
47.5	COBBLE
30	GRAVEL
25	GRAVEL
15	GRAVEL
10	GRAVEL
4.75	GRAVEL
2.0	SAND
1.0	SAND
0.6	SAND
0.425	SAND
0.25	SAND
0.15	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.*



Reference
ASTM C136-06 & C117-04

Sample No.:	250 (2)
Field Label:	BG080210-2
Depth (m):	NA
Lab ID No:	SA 250

Date Sampled:	August 2, 2010
Material Specification:	Till from initial trench bottom
Method:	COMBINED, WASHED
Date Tested:	August 7, 2010

Size of opening, inches
24 12 6 3 1 1/2 3/4 3/8 #4 #10 #20 #40 #60 #200

U.S. Standard Sieve Size, opening in meshes / inch

USCS GRAIN SIZE SCALE

Percent Finer By Mass

Grain Size (mm)

Grain Size (mm)	Percent Finer By Mass (%)
1000	100
750	100
600	100
475	98
425	94
375	91
300	87
250	80
200	71
150	63
125	57
100	53
75	47
60	41

** 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.*

Sept. 23, 2010
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 = 8.4%

Sa. Location: BG STA.31 +588

Sample No.: **254**
Field Label: BG080610-1

Depth (m): NA

Lab ID No: SA 254

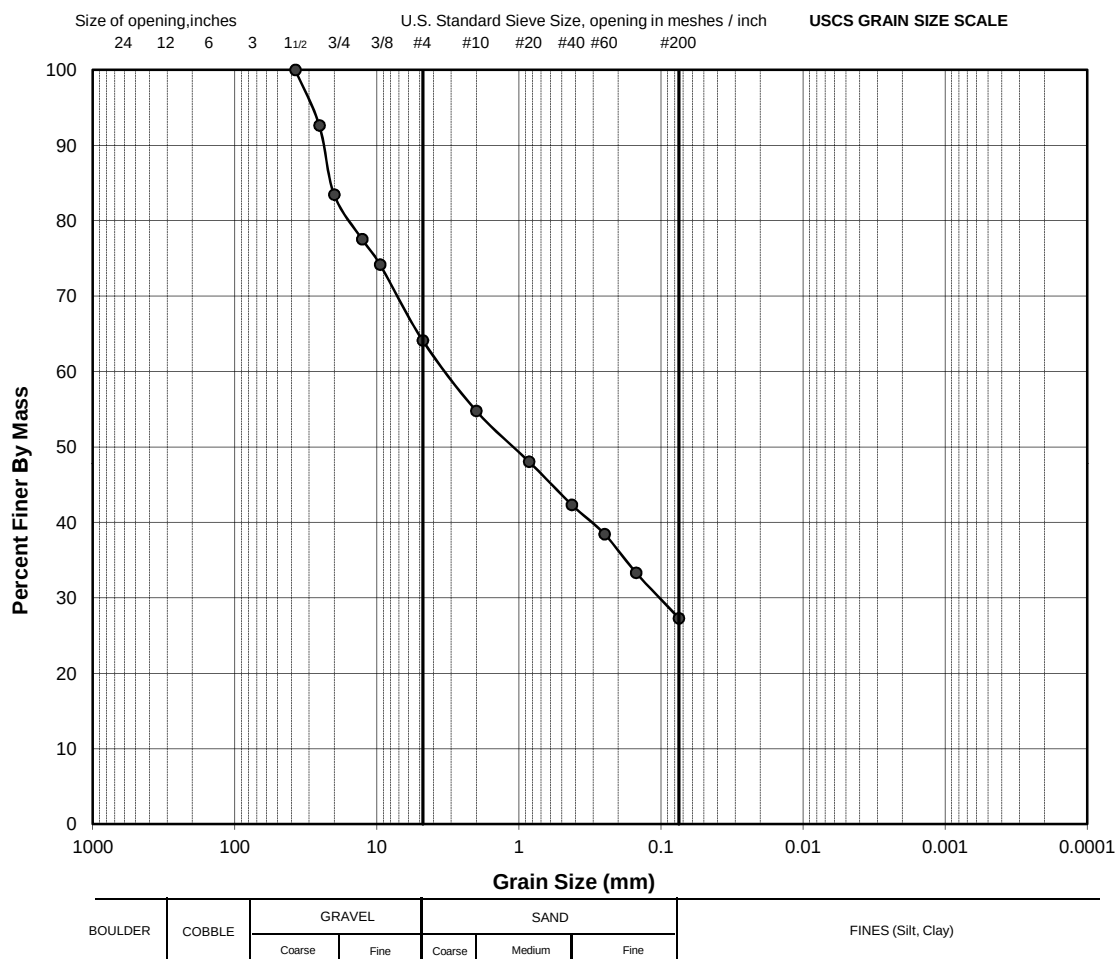
Date Sampled: August 6, 2010

Material Specification: Till from initial trench bottom

Method: COMBINED, WASHED

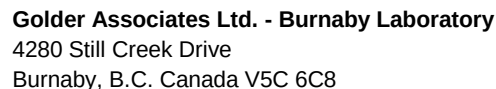
Date Tested: August 7, 2010

Sieve Size (USS)	(mm)	Passing %
6"	152.4	100.0
3"	76.2	100.0
2"	50.0	100.0
1.5"	37.5	100.0
1"	25.4	92.6
3/4"	20.0	83.5
1/2"	12.7	77.6
3/8"	9.5	74.2
#4	4.760	64.1
#10	2.000	54.8
#20	0.850	48.1
#40	0.425	42.3
#60	0.250	38.5
#100	0.150	33.3
#200	0.075	27.3



** 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.*

MO	August 7, 2010	YB	Sept. 23, 2010
TESTED BY	DATE	CHECKED BY	DATE



Reference
ASTM C136-06 & C117-04

Sample No.:	255 (2)
Field Label:	BG080610-2
Depth (m):	NA
Lab ID No:	SA 255 (2)

Date Sampled:	August 6, 2010
Material Specification:	Till from initial trench bottom
Method:	COMBINED, WASHED
Date Tested:	August 7, 2010

Grain Size Distribution Data

Grain Size (mm)	Percent Finer By Mass (%)
1000	100
750	100
600	100
425	93
300	89
250	86
150	82
75	71
42.5	63
25	55
15	49
7.5	44
4.75	39
2.5	33

Soil Classification Ranges

Soil Type	Grain Size Range (mm)
Boulder	75 - 1000
Cobble	4.75 - 75
	0.075 - 4.75
Gravel	0.075 - 4.75
	0.075 - 4.75
Sand	0.075 - 4.75
	0.075 - 4.75
	0.075 - 4.75
Fines (Silt, Clay)	0.075 - 4.75

** 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.*



Reference

ASTM C136-06 & C117-04

Sample No.:	259
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Field Label:	BG080710-2
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Depth (m): 10

Lab ID No: SA 259

Date Sampled: August 7, 2010

Material Specification: Till from initial trench bottom

Method:	COMBINED, WASHED
---------	------------------

Date Tested: August 9, 2010

Size of opening, inches
24 12 6 3 1 1/2 3/4 3/8 #4 #10 #20 #40 #60 #200

U.S. Standard Sieve Size, opening in meshes / inch

USCS GRAIN SIZE SCALE

Percent Finer By Mass

Grain Size (mm)

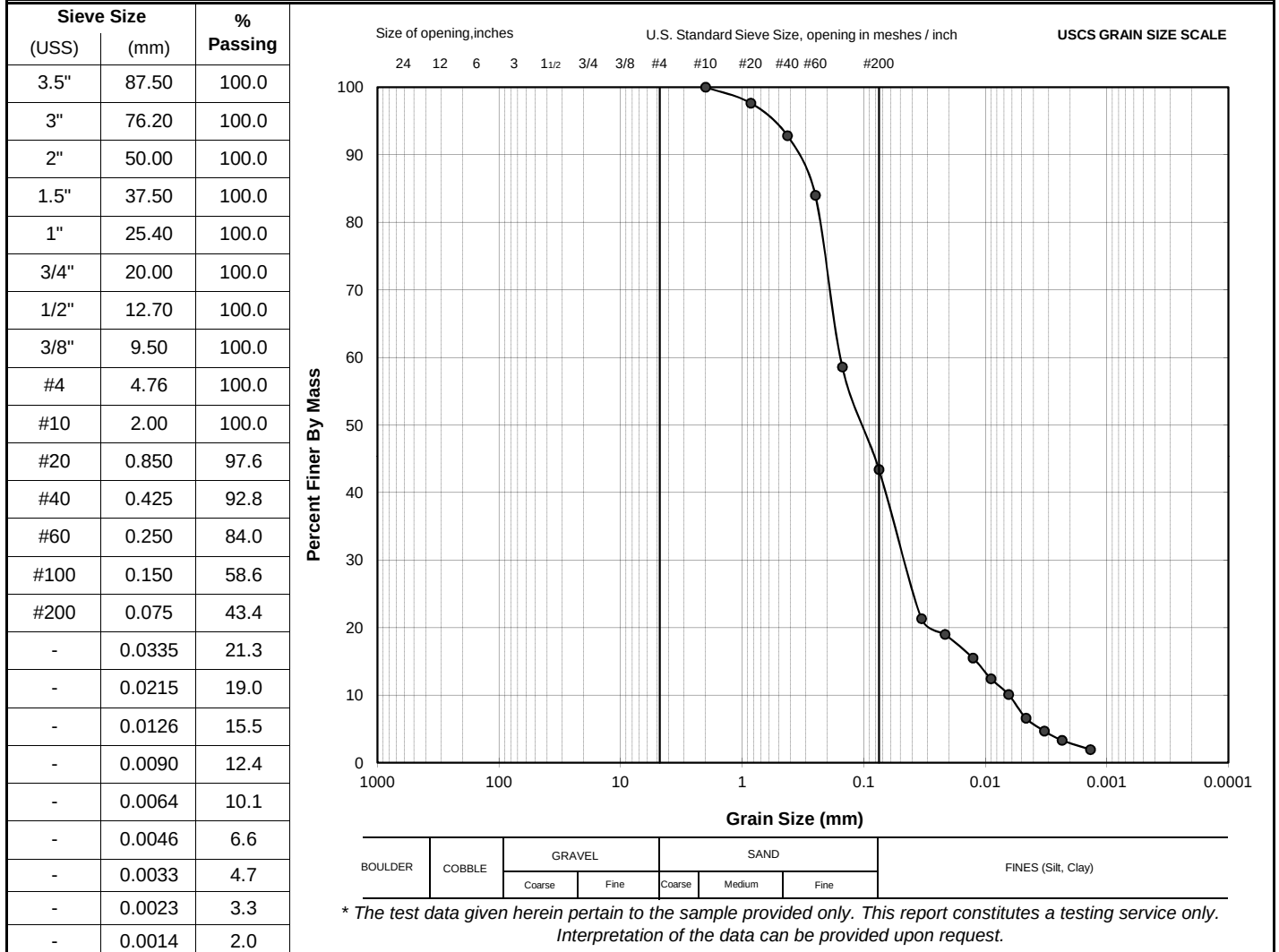
BOULDER	COBBLE	GRAVEL		SAND			FINES (Silt, Clay)
		Coarse	Fine	Coarse	Medium	Fine	

** 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.*

PARTICLE SIZE ANALYSIS OF SOILS

Reference
ASTM D 422-63 (2007)

Project No.:	09-1428-5007 (2000)	Sample No.:	260
Client:	AEM	Field Label	BG080710-3
Project:	Meadowbank Gold Project	Depth (m):	9-10
Location:	Nunavut	Lab ID No:	SA 260
Specific Gravity (assumed):	2.70	Other	BG STA. 31+600, Silty sand, water content = 20.7%
Date sampled:	August 7, 2010	Remarks:	Initial trench bottom, 9-10 m under water
Dispersion Method:	Stirring		
Dispersion Period (min):	5.00		

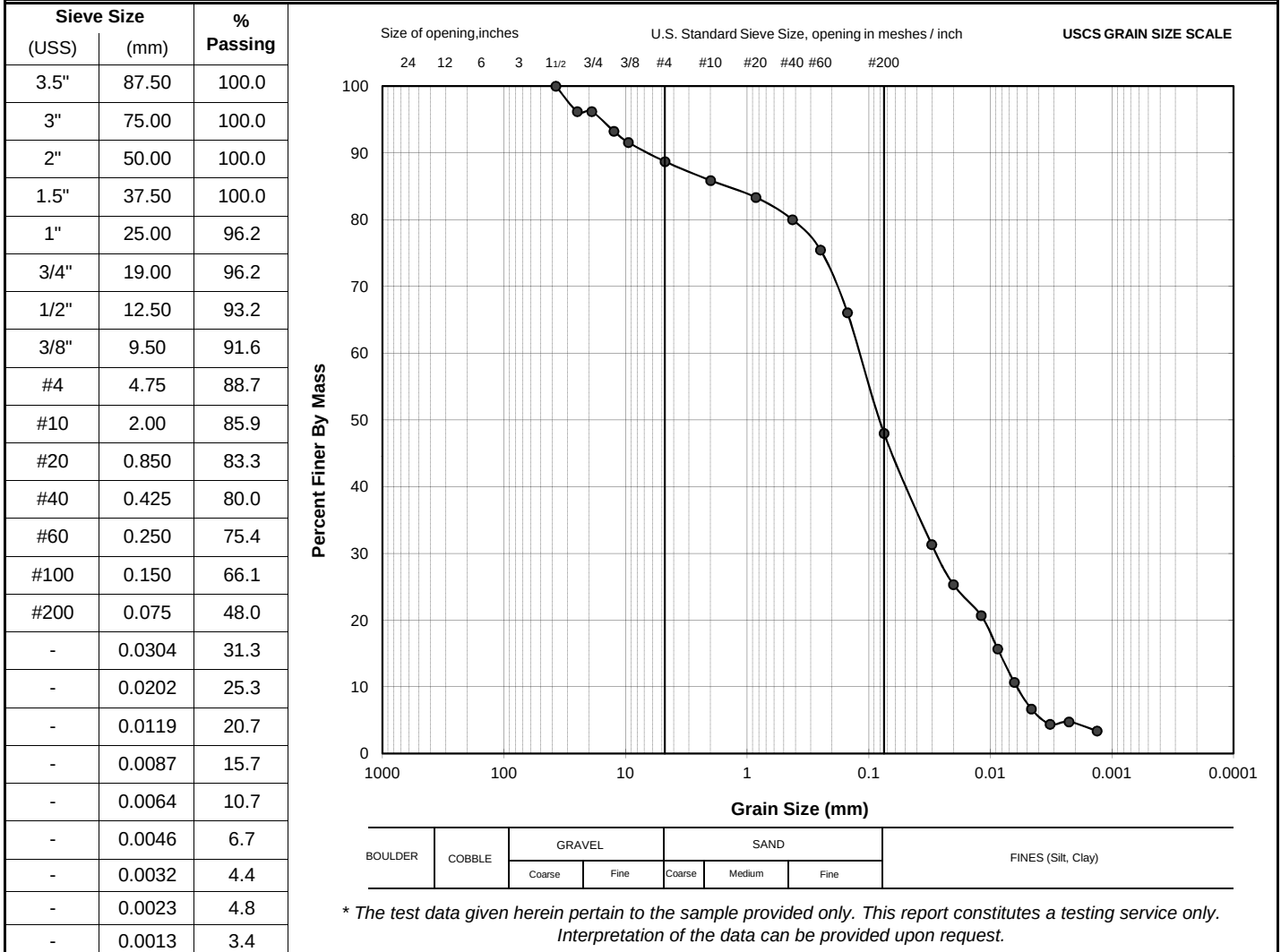


B.Dieudonné	August 21, 2010	YB	Sept. 24, 2010
TESTED BY	DATE	CHECKED BY	DATE

PARTICLE SIZE ANALYSIS OF SOILS

Reference
ASTM D 422-63 (2007)

Project No.:	09-1428-5007 (2000)	Sample No.:	263
Client:	AEM	Field label	BG080810-2
Project:	Meadowbank Gold Project	Depth (m):	9
Location:	Nunavut	Lab ID No:	SA 263
Specific Gravity (assumed):	2.70	Other	BG STA.31 +600 to 31+603, Silty Clay
Date sampled:	August 7, 2010	Remarks:	Water content: 17.15% but taken under water
Dispersion Method:	Stirring		
Dispersion Period (min):	5.00		



B.Dieudonné	Aug.21, 2010	YB	Sept. 24, 2010
TESTED BY	DATE	CHECKED BY	DATE



Reference
ASTM C136-06 & C117-04

Sample No.:	266
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Field Label:	BG080810-4
--------------	------------

Depth (m): 9-10

Lab ID No: SA 266

Date Sampled:	August 8, 2010
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Material Specification: Till from initial trench bottom

Method:	COMBINED, WASHED
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Date Tested: August 9, 2010

Size of opening, inches
24 12 6 3 1 1/2 3/4 3/8 #4 #10 #20 #40 #60 #200

U.S. Standard Sieve Size, opening in meshes / inch

USCS GRAIN SIZE SCALE

Percent Finer By Mass

Grain Size (mm)

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.*



Reference

ASTM C136-06 & C117-04

Sample No.:	267
-------------	-----

Field Label:	BG081210-1
--------------	------------

Depth (m): 12

Lab ID No: SA 267

Date Sampled: August 12, 2010

Material Specification: Till from initial trench bottom

Method:	COMBINED, WASHED
----------------	------------------

Date Tested: August 12, 2010

Size of opening, inches
24 12 6 3 1 1/2 3/4 3/8 #4 #10 #20 #40 #60 #200

U.S. Standard Sieve Size, opening in meshes / inch

USCS GRAIN SIZE SCALE

Percent Finer By Mass

Grain Size (mm)

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.*

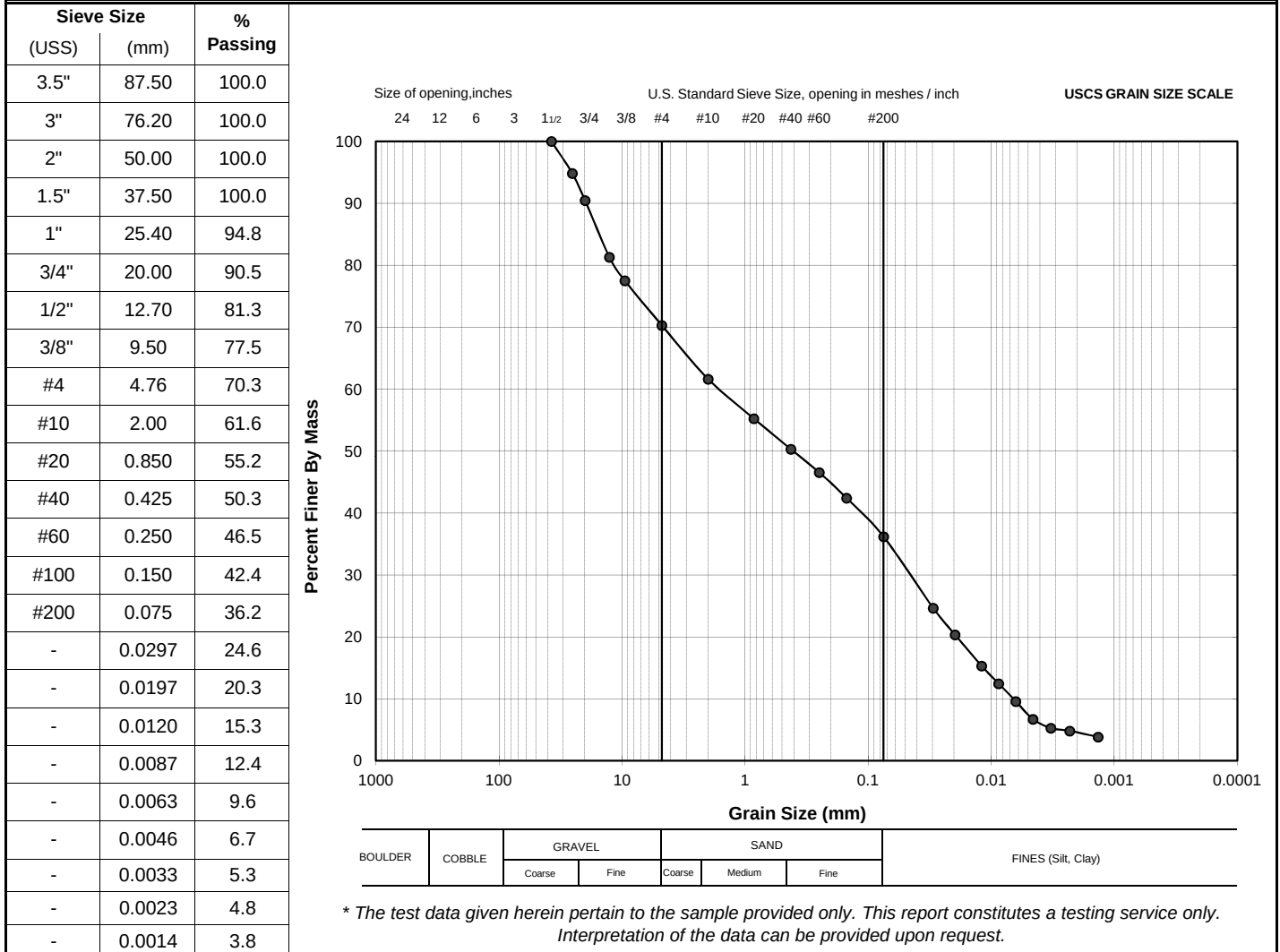
Sept. 24, 2010

DATE _____

PARTICLE SIZE ANALYSIS OF SOILS

Reference
ASTM D 422-63 (2007)

Project No.:	09-1428-5007 (2000)	Sample No.:	269
Client:	AEM	Field Label	BG081210-2
Project:	Meadowbank Gold Project	Depth (m):	12.5
Location:	Nanavut	Lab ID No:	SA 269
Specific Gravity (assumed):	2.70	Other	BG STA.31+839, 12m under water
Date sampled:	August 12, 2010	Remarks:	Till from initial bottom trench, Water content: 9.5%
Dispersion Method:	Stirring		
Dispersion Period (min):	5.00		



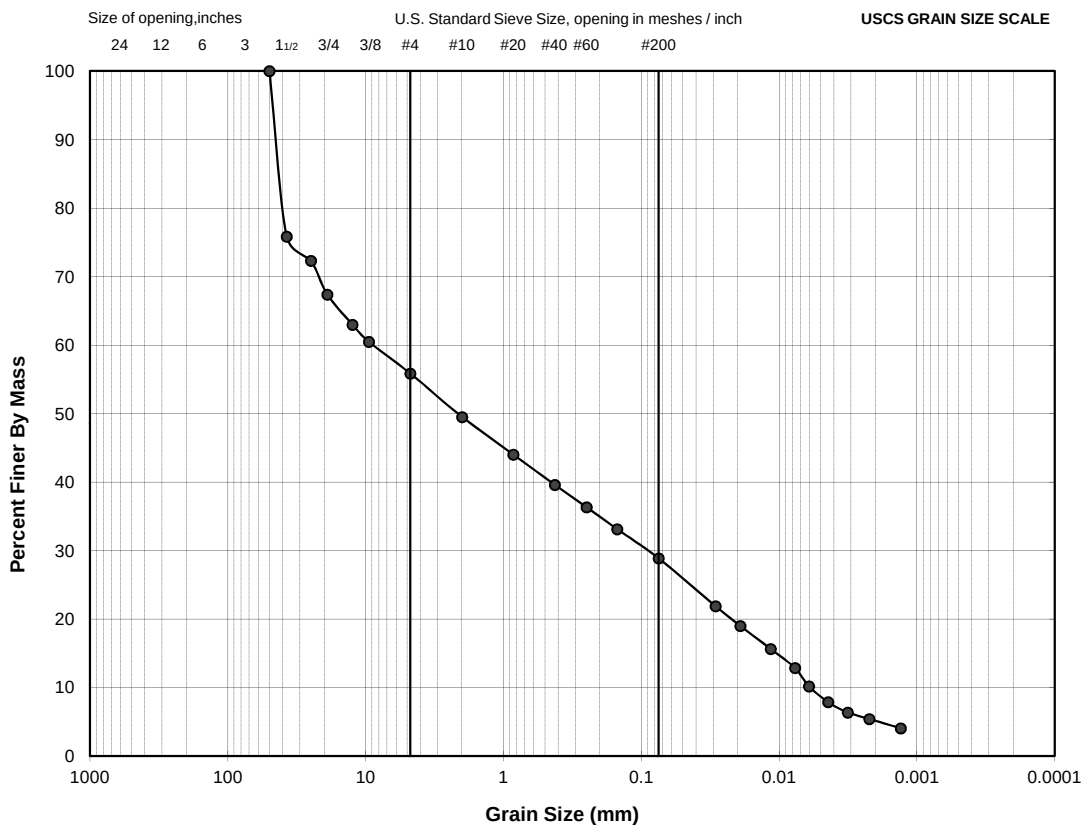
B.Dieudonné	Aug.21, 2010	YB	Sept. 24, 2010
TESTED BY	DATE	CHECKED BY	DATE

PARTICLE SIZE ANALYSIS OF SOILS

Reference
ASTM D 422-63 (2007)

Project No.:	09-1428-5007 (2000)	Sample No.:	271
Client:	AEM	Field Label	BG081510
Project:	Meadowbank Gold Project	Depth (m):	14
Location:	Nunavut	Lab ID No:	SA 271
Specific Gravity (assumed):	2.70	Other	BG STA.31+855, 14m under water
Date sampled:	August 15, 2010	Remarks:	Till from initial trench bottom, water content: 10.4%
Dispersion Method:	Stirring		
Dispersion Period (min):	5.00		

Sieve Size (USS)	(mm)	% Passing
3.5"	87.50	100.0
3"	75.00	100.0
2"	50.00	100.0
1.5"	37.50	75.8
1"	25.00	72.3
3/4"	19.00	67.4
1/2"	12.50	63.0
3/8"	9.50	60.5
#4	4.75	55.8
#10	2.00	49.5
#20	0.850	44.0
#40	0.425	39.6
#60	0.250	36.3
#100	0.150	33.1
#200	0.075	28.9
-	0.0290	21.9
-	0.0192	19.0
-	0.0115	15.6
-	0.0077	12.9
-	0.0061	10.2
-	0.0044	7.9
-	0.0032	6.4
-	0.0022	5.4
-	0.0013	4.1



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Interpretation of the data can be provided upon request.

B.Dieudonné	August 22, 2010	YB	Sept. 24, 2010
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= 12.5%

Sa. Location: BG STA.31+863, 14m under water

Sample No.: **272**
Field Label: BG081610-1

Depth (m): 14

Lab ID No: SA 272

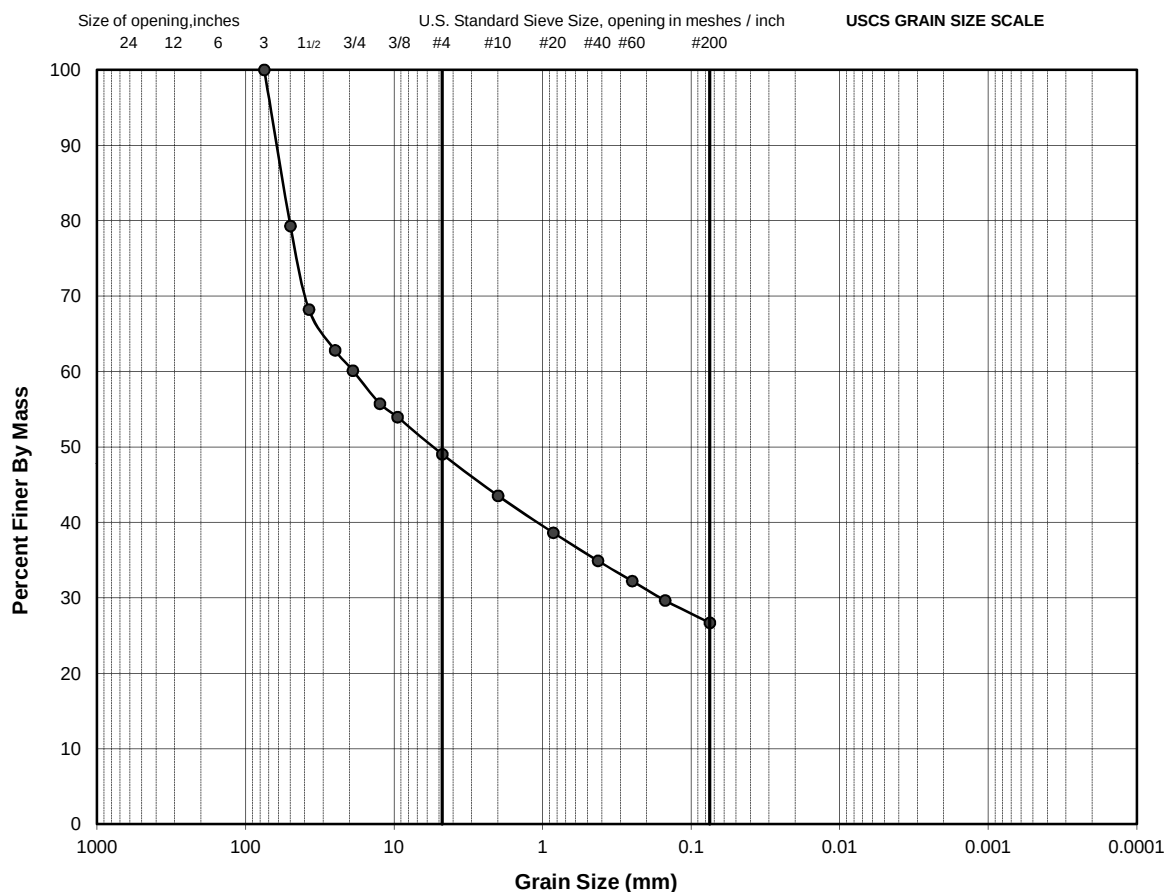
Date Sampled: August 16, 2010

Material Specification: Till from initial trench bottom

Method: COMBINED, WASHED

Date Tested: August 19, 2010

Sieve Size (USS)	(mm)	Passing %
6"	152.4	100.0
3"	75.0	100.0
2"	50.0	79.3
1.5"	37.5	68.2
1"	25.0	62.8
3/4"	19.0	60.1
1/2"	12.5	55.7
3/8"	9.5	54.0
#4	4.75	49.0
#10	2.00	43.5
#20	0.850	38.6
#40	0.425	34.9
#60	0.250	32.2
#100	0.150	29.7
#200	0.075	26.7



* 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.

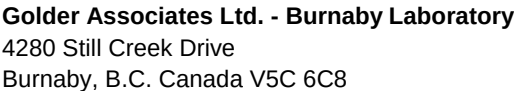
B.Dieudonné
August 19, 2010
YB
Sept. 24, 2010

TESTED BY

DATE

CHECKED BY

DATE



Reference
ASTM C136-06 & C117-04

Sample No.:	274
Field Label:	BG081710-1
Depth (m):	13
Lab ID No:	SA 274
Date Sampled:	August 17, 2010
Material Specification:	Till from initial bottom trench
Method:	COMBINED, WASHED
Date Tested:	September 1, 2010

USCS GRAIN SIZE SCALE

Grain Size (mm)	USCS Classification
> 75	Boulder
25 - 75	Cobble
4.75 - 25	Gravel
0.075 - 4.75	Sand
< 0.075	Fines (Silt, Clay)

Grain Size (mm)

Percent Finer By Mass

Size of opening, inches
24 12 6 3 1 1/2 3/4 3/8 #4 #10 #20 #40 #60 #200

U.S. Standard Sieve Size, opening in meshes / inch

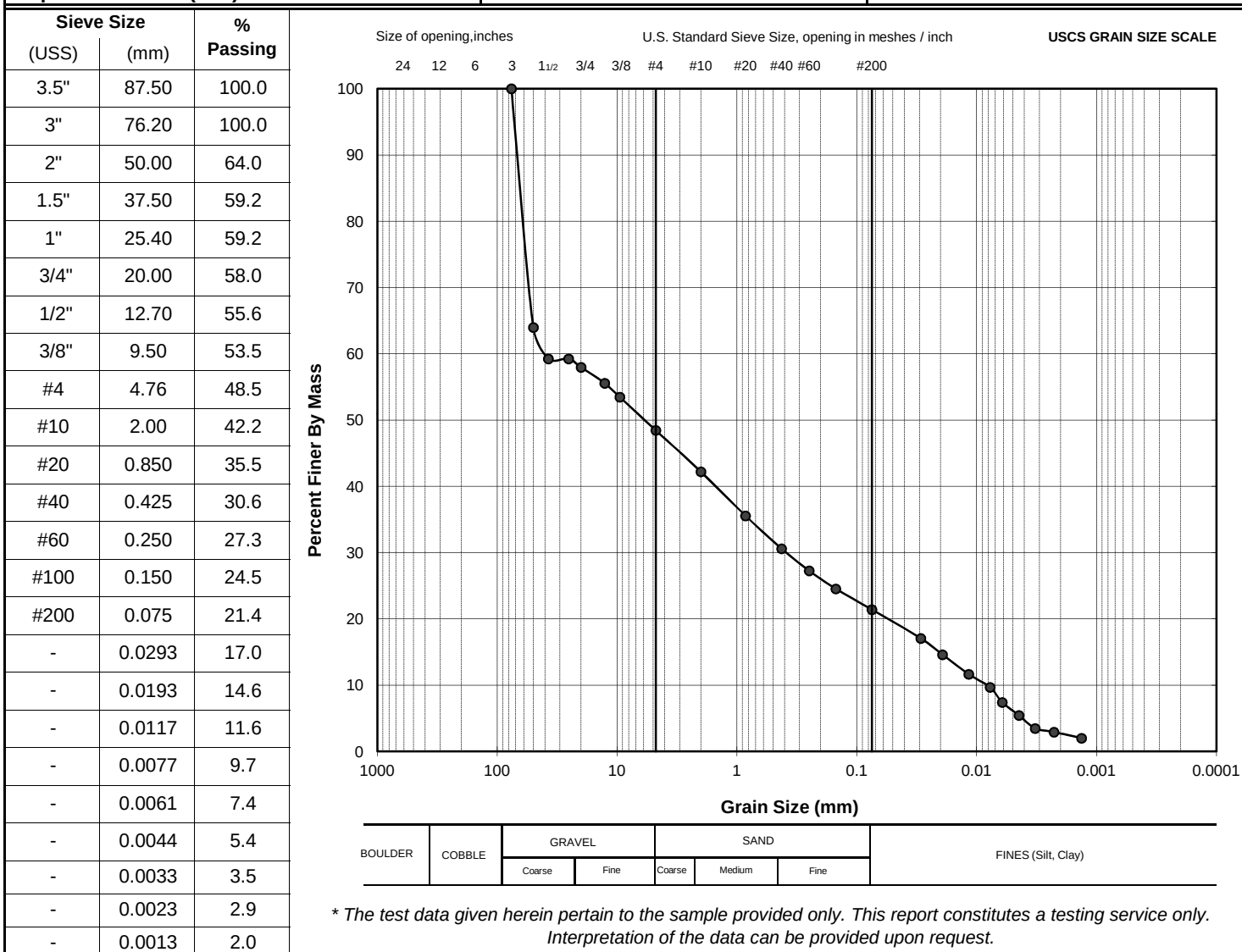
MO	September 1, 2010	YB	Sept. 24, 2010
TESTED BY	DATE	CHECKED BY	DATE

PARTICLE SIZE ANALYSIS OF SOILS

Reference

ASTM D 422-63 (2007)

Project No.:	09-1428-5007 (2000)	Sample No:	277
Client:	AEM	Field Label.:	BG081810
Project:	Meadowbank Gold Project	Depth (m):	13
Location:	Nunavut	Lab ID No:	SA 277
Specific Gravity (assumed):	2.70	Other	BG STA.31+883, under water
Date sampled:	August 18, 2010	Remarks:	Till from initial bottom trench, Water content=10.8 %
Dispersion Method:	Stirring	Remark #2: This analysis indicate an error of sampling.	Remark #3: 25.4mm sieve do not retained any particles.
Dispersion Period (min):	5.00		



* 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.

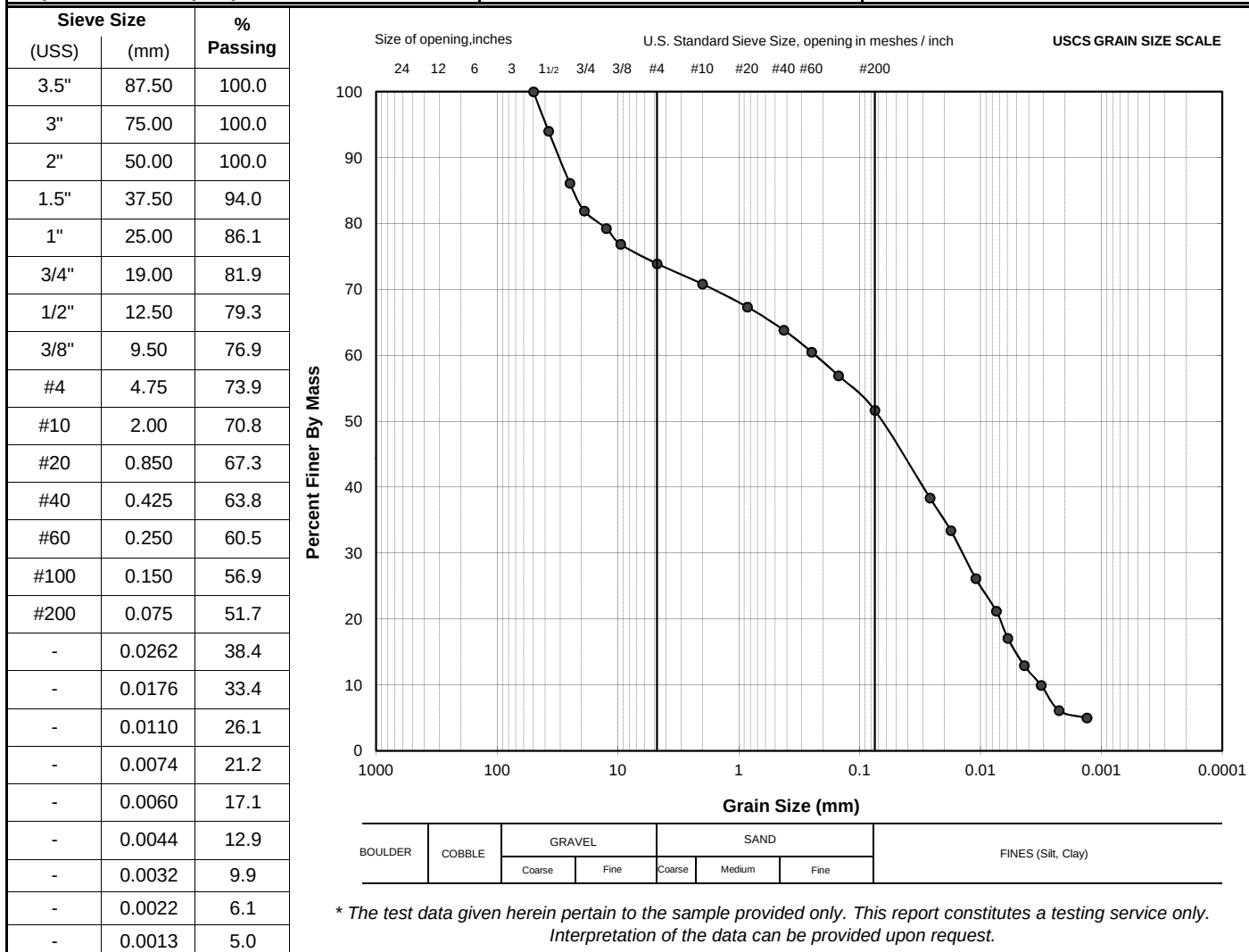
B.Dieudonné	August 24, 2010	YB	Sept. 24, 2010
TESTED BY	DATE	CHECKED BY	DATE

PARTICLE SIZE ANALYSIS OF SOILS

Reference
ASTM D 422-63 (2007)

Project No.:	09-1428-5007 (2000)	Sample No:	278
Client:	AEM	Field Label	BG081910-1
Project:	Meadowbank Gold Project	Depth (m):	13
Location:	Nunavut	Lab ID No:	SA 278
Specific Gravity (assumed):	2.70	Other	BG STA.31+893, 13m under water
Date sampled:	August 19, 2010	Remarks:	Till from initial bottom trench, Water content : 17.5%

Dispersion Method:	Stirring		
Dispersion Period (min):	5.00		



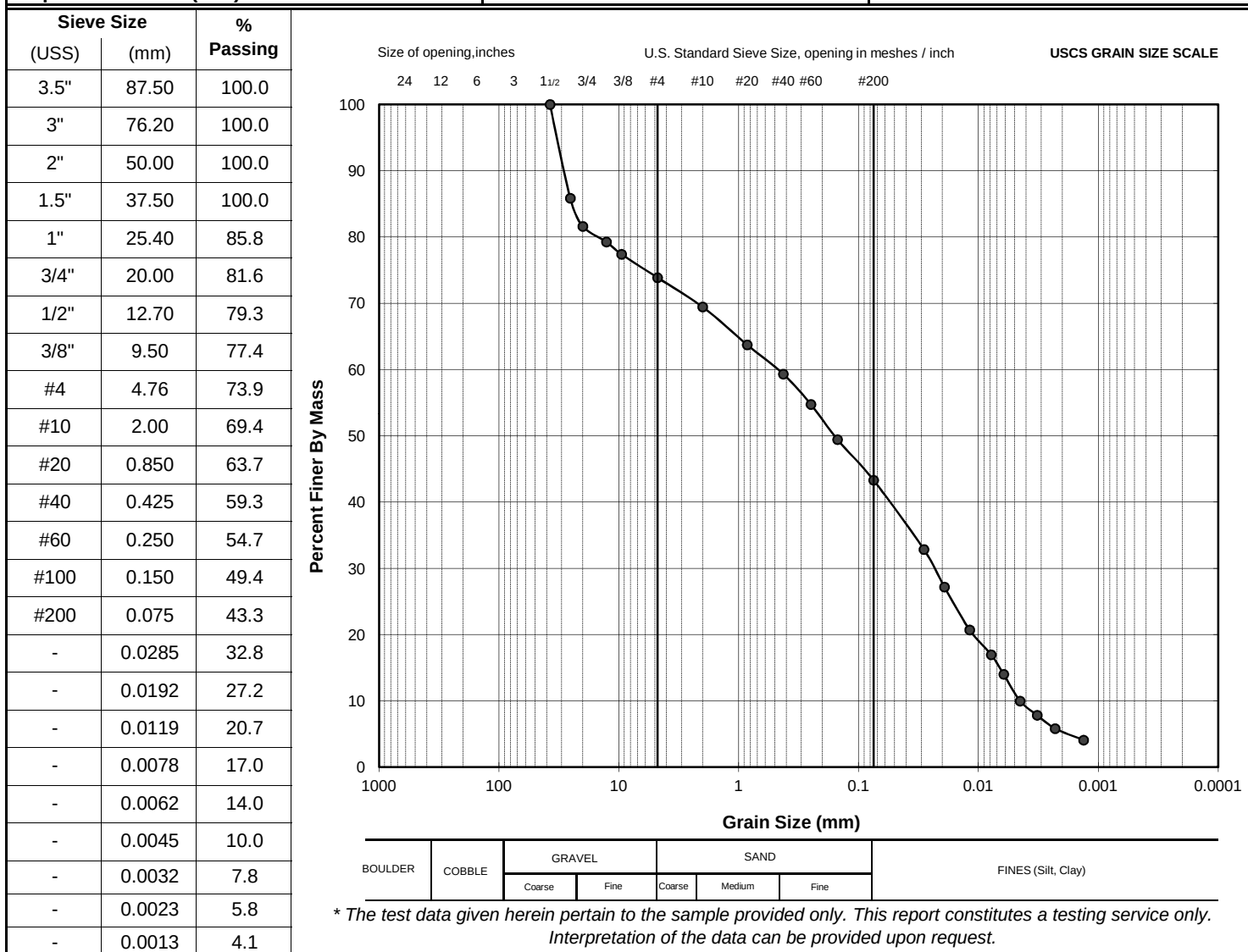
DB	August 25,10	YB	Sept. 24, 2010
TESTED BY	DATE	CHECKED BY	DATE

PARTICLE SIZE ANALYSIS OF SOILS

Reference

ASTM D 422-63 (2007)

Project No.:	09-1428-5007 (2000)	Sample No:	281
Client:	AEM	Field Label.:	BG082010-2
Project:	Meadowbank Gold Project	Depth (m):	12
Location:	Nunavut	Lab ID No:	SA 281
Specific Gravity (assumed):	2.70	Other	BG STA.31+907, 12m under water
Date sampled:	August 20, 2010	Remarks:	Till from initial bottom trench, Water content = 17 %
Dispersion Method:	Stirring		
Dispersion Period (min):	5.00		



* 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.

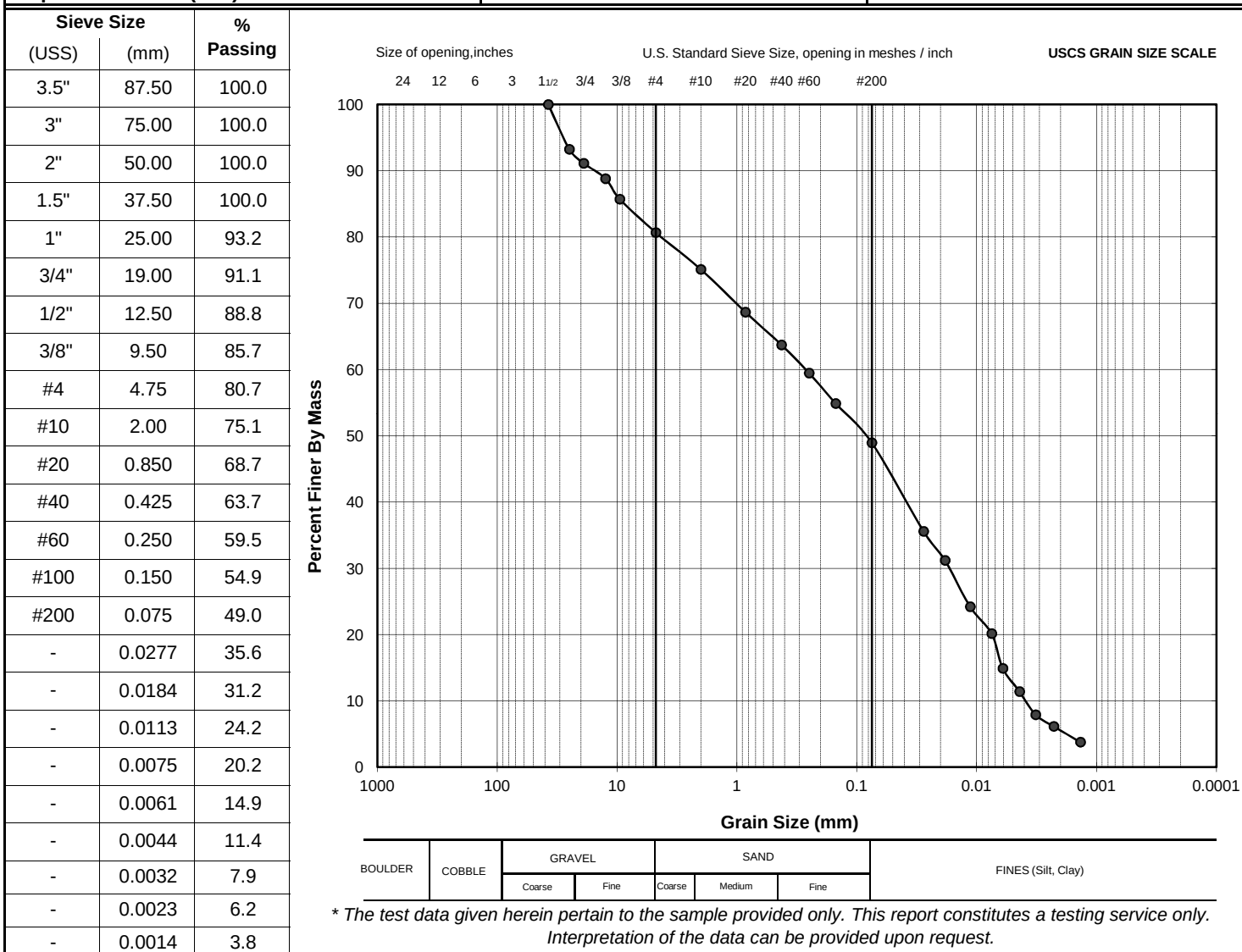
MO	August 26, 2010	YB	Sept. 25, 2010
TESTED BY	DATE	CHECKED BY	DATE

PARTICLE SIZE ANALYSIS OF SOILS

Reference

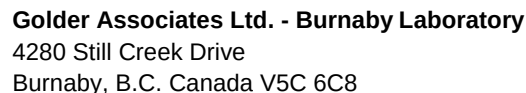
ASTM D 422-63 (2007)

Project No.:	09-1428-5007 (2000)	Sample No:	282
Client:	AEM	Field Label.:	BG082010-2
Project:	Meadowbank Gold Project	Depth (m):	10
Location:	Nunavut	Lab ID No:	SA 282
Specific Gravity (assumed):	2.70	Other	BG STA.31+923, 10m under water
Date sampled:	August 20, 2010	Remarks:	Till from initial trench bottom, Water content=18.1 %
Dispersion Method:	Stirring		
Dispersion Period (min):	5.00		



* 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.

MO	August 29, 2010	YB	Sept. 25, 2010
TESTED BY	DATE	CHECKED BY	DATE



Reference

ASTM C136-06 & C117-04

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

Sample No.:	284
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Client: AEM

Field Label: BG080910

Project: Meadowbank Gold Project

Depth (m): 10

Location: Nunavut

Lab ID No: SA 284

Remarks:	Water Content =	9.9%
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Date Sampled: August 09, 2010

Sa. Location: BG STA.31+825, 10m under water

Material Specification: Till from initial trench bottom

Method:	COMBINED, WASHED
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Date Tested: August 21, 2010

Grain Size Distribution Data

Grain Size (mm)	Percent Finer (%)
1000	100
600	100
425	100
300	100
250	80
200	74
150	69
125	67
100	62
75	59
60	53
425	47
300	41
250	37
200	33
150	29
125	25

Soil Classification: SAND (Coarse Sand)

** 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.*

B.Dieudonné

August 21, 2010

YB

Sept. 25, 2010

TESTED BY

DATE _____

CHECKED BY

DATE _____

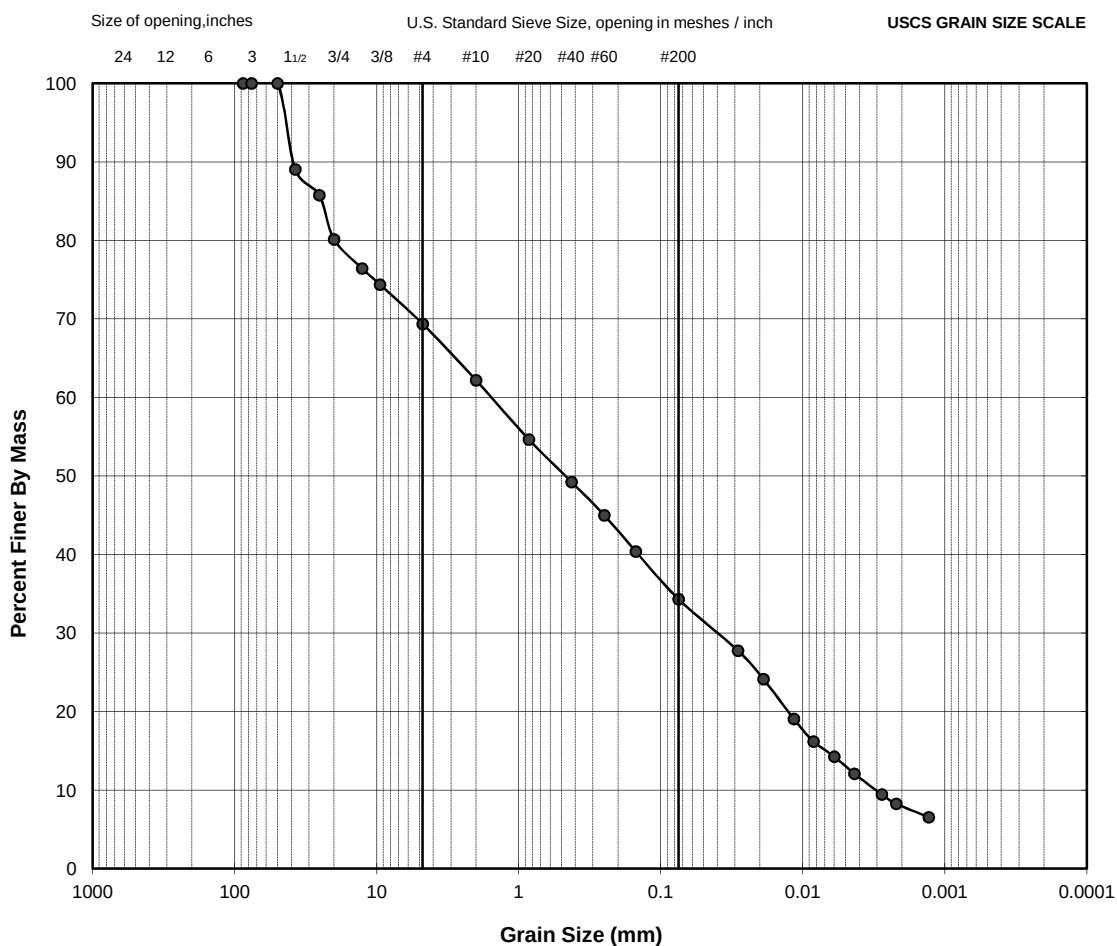
PARTICLE SIZE ANALYSIS OF SOILS

Reference

ASTM D 422-63 (2007)

Project No.:	09-1428-5007 (2000)	Field ID	BG090910-1
Client:	AEM	Sample No.:	308
Project:	Meadowbank Gold Project	Depth (m):	8
Location:	Nunavut	Lab ID No:	SA 308
Specific Gravity (assumed):	2.70	Other	Till from initial trench bottom, water content=9.4%
Date sampled:	September 9, 2010	Remarks:	BG 32+032, center line, 8m below water lever
Dispersion Method:	Stirring		
Dispersion Period (min):	5.00		

Sieve Size (US)	(mm)	% Passing
3.5"	87.50	100.0
3"	76.20	100.0
2"	50.00	100.0
1.5"	37.50	89.1
1"	25.40	85.8
3/4"	20.00	80.1
1/2"	12.70	76.4
3/8"	9.50	74.4
#4	4.75	69.4
#10	2.00	62.2
#20	0.850	54.7
#40	0.425	49.2
#60	0.250	45.0
#100	0.150	40.4
#200	0.075	34.3
-	0.0286	27.8
-	0.0189	24.1
-	0.0116	19.1
-	0.0084	16.2
-	0.0060	14.3
-	0.0043	12.1
-	0.0028	9.4
-	0.0022	8.3
-	0.0013	6.6



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

B.Dieudonne	September 14, 2010	YB	Sept. 27, 2010
TESTED BY	DATE	CHECKED BY	DATE

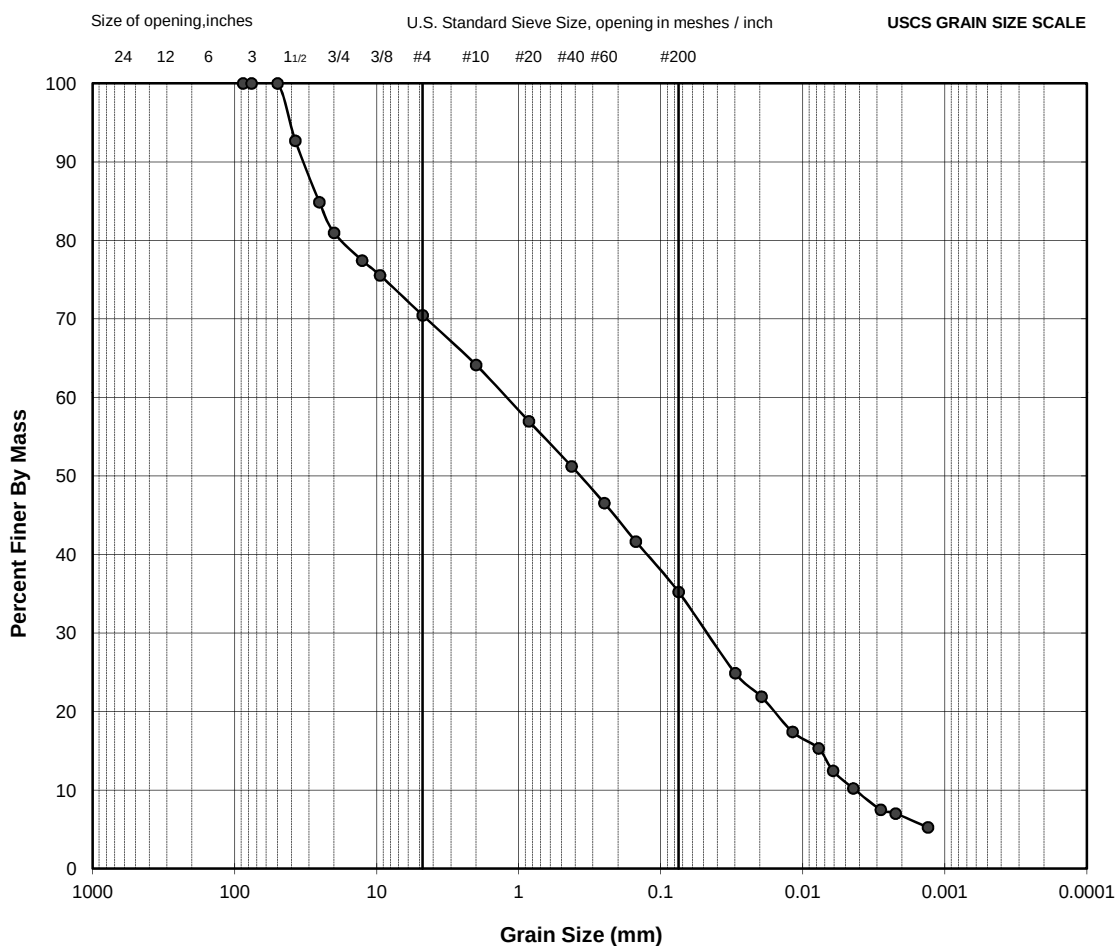
PARTICLE SIZE ANALYSIS OF SOILS

Reference

ASTM D 422-63 (2007)

Project No.:	09-1428-5007 (2000)	Field ID	BG090910-3
Client:	AEM	Sample No.:	310
Project:	Meadowbank Gold Project	Depth (m):	8.5
Location:	Nunavut	Lab ID No:	SA 310
Specific Gravity (assumed):	2.70	Other	Till from initial trench bottom, water content = 9.6%
Date sampled:	September 9, 2010	Remarks:	BG STA. 32+029, 8.5m below water level
Dispersion Method:	Stirring		
Dispersion Period (min):	5.00		

Sieve Size (US)	(mm)	% Passing
3.5"	87.50	100.0
3"	76.20	100.0
2"	50.00	100.0
1.5"	37.50	92.7
1"	25.40	84.9
3/4"	20.00	81.0
1/2"	12.70	77.4
3/8"	9.50	75.6
#4	4.76	70.5
#10	2.00	64.1
#20	0.850	57.0
#40	0.425	51.2
#60	0.250	46.6
#100	0.150	41.7
#200	0.075	35.2
-	0.0299	24.9
-	0.0196	21.9
-	0.0118	17.4
-	0.0077	15.3
-	0.0061	12.5
-	0.0044	10.2
-	0.0028	7.5
-	0.0022	7.0
-	0.0013	5.3



B. Dieudonne	September 14, 2010	YB	Sept. 27, 2010
TESTED BY	DATE	CHECKED BY	DATE

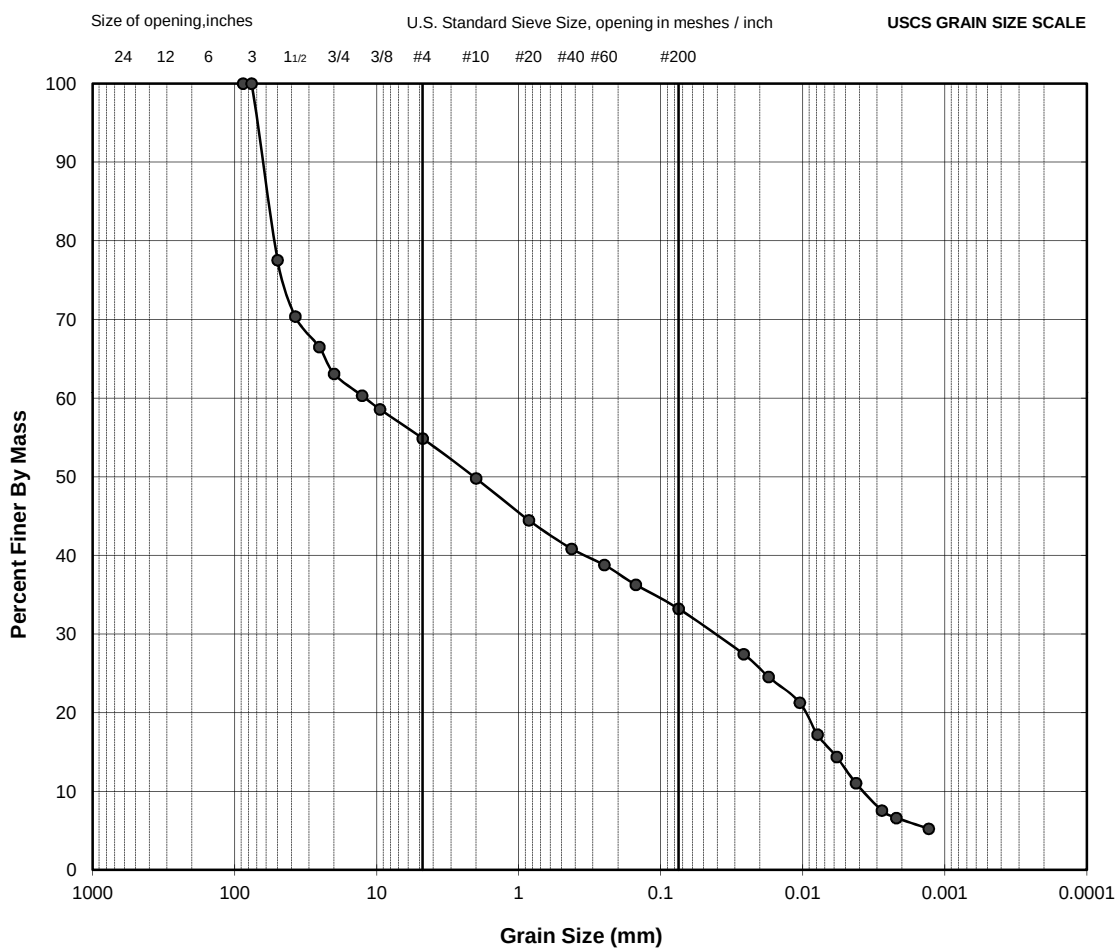
PARTICLE SIZE ANALYSIS OF SOILS

Reference

ASTM D 422-63 (2007)

Project No.:	09-1428-5007 (2000)	Field ID	BG091010-1
Client:	AEM	Sample No.:	311
Project:	Meadowbank Gold Project	Depth (m):	9
Location:	Nunavut	Lab ID No:	SA 311
Specific Gravity (assumed):	2.70	Other	Till from initial trench bottom, water content=17.9%
Date sampled:	September 10, 2010	Remarks:	BG STA. 32+048, 9.0m below water level
Dispersion Method:	Stirring		
Dispersion Period (min):	5.00		

Sieve Size (USS)	(mm)	% Passing
3.5"	87.50	100.0
3"	76.20	100.0
2"	50.00	77.5
1.5"	37.50	70.4
1"	25.40	66.5
3/4"	20.00	63.1
1/2"	12.70	60.3
3/8"	9.50	58.6
#4	4.76	54.9
#10	2.00	49.8
#20	0.850	44.5
#40	0.425	40.8
#60	0.250	38.8
#100	0.150	36.3
#200	0.075	33.2
-	0.0261	27.4
-	0.0174	24.5
-	0.0105	21.3
-	0.0079	17.2
-	0.0058	14.4
-	0.0042	11.0
-	0.0028	7.6
-	0.0022	6.6
-	0.0013	5.2



B. Dieudonne	September 15, 2010	YB	Sept. 27, 2010
TESTED BY	DATE	CHECKED BY	DATE

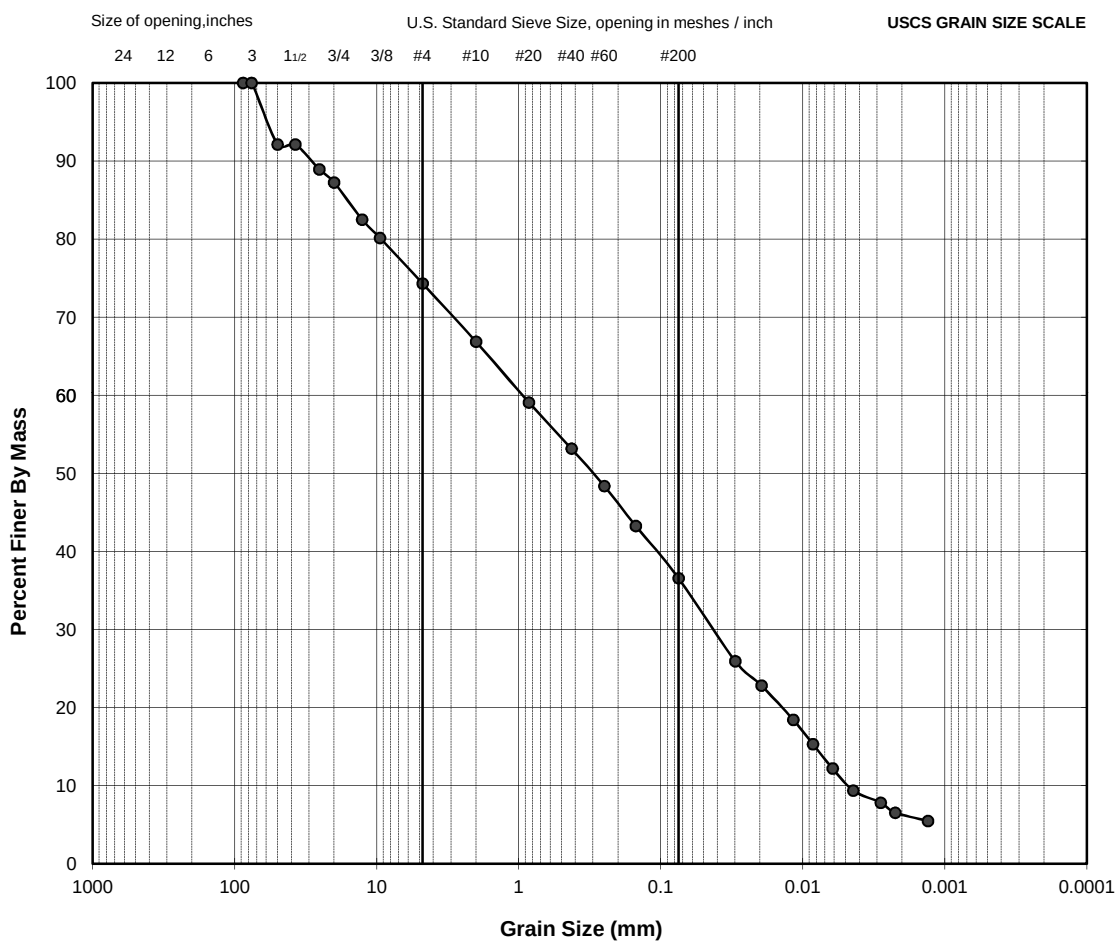
PARTICLE SIZE ANALYSIS OF SOILS

Reference

ASTM D 422-63 (2007)

Project No.:	09-1428-5007 (2000)	Field ID	BG091010-2
Client:	AEM	Sample No.:	312
Project:	Meadowbank Gold Project	Depth (m):	8
Location:	Nunavut	Lab ID No:	SA 312
Specific Gravity (assumed):	2.70	Other	Till from initial trench bottom, Water content=10%
Date sampled:	September 10, 2010	Remarks:	BG STA. 32+031, 8.0m below water level
Dispersion Method:	Stirring		
Dispersion Period (min):	5.00		

Sieve Size (US)	(mm)	% Passing
3.5"	87.50	100.0
3"	76.20	100.0
2"	50.00	92.1
1.5"	37.50	92.1
1"	25.40	88.9
3/4"	20.00	87.2
1/2"	12.70	82.5
3/8"	9.50	80.1
#4	4.76	74.3
#10	2.00	66.9
#20	0.850	59.1
#40	0.425	53.2
#60	0.250	48.4
#100	0.150	43.3
#200	0.075	36.6
-	0.0299	26.0
-	0.0196	22.8
-	0.0117	18.4
-	0.0085	15.3
-	0.0062	12.2
-	0.0044	9.4
-	0.0028	7.8
-	0.0022	6.5
-	0.0013	5.5



B.Dieudonne	September 15, 2010	YB	Sept. 27, 2010
TESTED BY	DATE	CHECKED BY	DATE

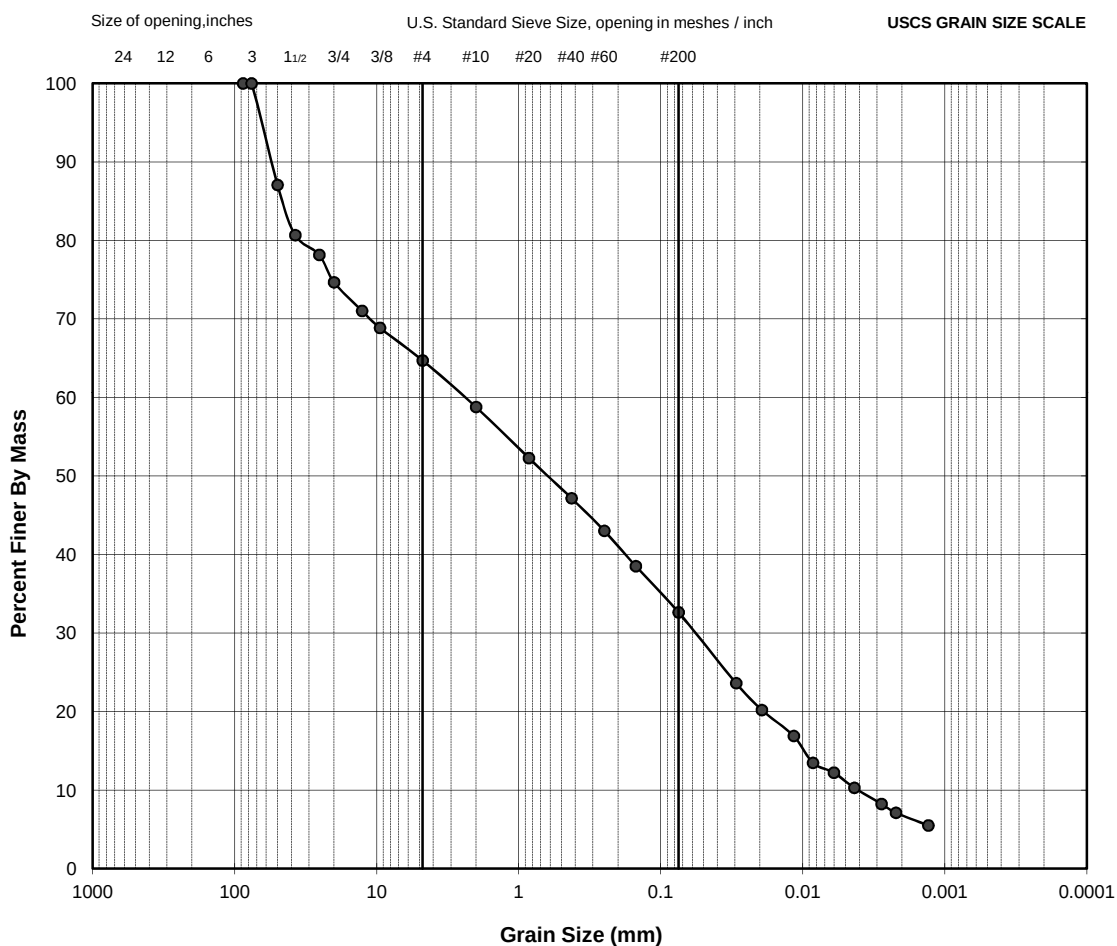
PARTICLE SIZE ANALYSIS OF SOILS

Reference

ASTM D 422-63 (2007)

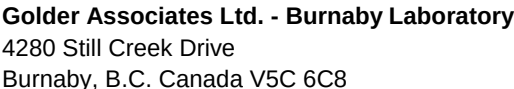
Project No.:	09-1428-5007 (2000)	Field ID	BG091010-3
Client:	AEM	Sample No.:	313
Project:	Meadowbank Gold Project	Depth (m):	8
Location:	Nunavut	Lab ID No:	SA 313
Specific Gravity (assumed):	2.70	Other	Till from initial trench bottom, water content = 8.2%
Date sampled:	September 10, 2010	Remarks:	BG STA. 32+037, 8.0m below water level
Dispersion Method:	Stirring		
Dispersion Period (min):	5.00		

Sieve Size (US)	(mm)	% Passing
3.5"	87.50	100.0
3"	76.20	100.0
2"	50.00	87.1
1.5"	37.50	80.7
1"	25.40	78.2
3/4"	20.00	74.7
1/2"	12.70	71.0
3/8"	9.50	68.9
#4	4.76	64.7
#10	2.00	58.8
#20	0.850	52.3
#40	0.425	47.2
#60	0.250	43.0
#100	0.150	38.5
#200	0.075	32.6
-	0.0295	23.6
-	0.0194	20.2
-	0.0116	16.9
-	0.0085	13.5
-	0.0060	12.2
-	0.0043	10.3
-	0.0028	8.2
-	0.0022	7.1
-	0.0013	5.5



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

B. Dieudonne	September 16, 2010	YB	Sept. 27, 2010
TESTED BY	DATE	CHECKED BY	DATE



Reference
ASTM C136-06 & C117-04

Sample No.:	320
Field Label:	BG091110
Depth (m):	7.5-8
Lab ID No:	SA 320

Date Sampled:	September 11, 2010
Material Specification:	Till from initial trench bottom
Method:	COMBINED, WASHED
Date Tested:	September 12, 2010

Grain Size Distribution Data

Grain Size (mm)	Percent Finer (%)
1000	100
600	100
425	100
300	85
250	76
200	75
150	72
106	67
75	65
425	61
300	55
250	50
200	46
150	43
106	39
75	34

USCS Grain Size Scale

Grain Size (mm)	U.S. Standard Sieve Size, opening in meshes / inch
24	6
12	3
6	1/2
3	3/4
1.5	3/8
0.75	#4
0.425	#10
0.25	#20
0.15	#40
0.106	#60
0.075	#200

Soil Classification

Grain Size (mm)	Soil Classification
1000	BOULDER
600	COBBLE
425	GRAVEL
300	GRAVEL
250	GRAVEL
200	GRAVEL
150	GRAVEL
106	GRAVEL
75	GRAVEL
425	SAND
300	SAND
250	SAND
200	SAND
150	SAND
106	SAND
75	SAND
0.075	FINES (Silt, Clay)
0.0001	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.*

B.Dieudonné	September 12, 2010	YB	Sept. 27, 2010
TESTED BY	DATE	CHECKED BY	DATE

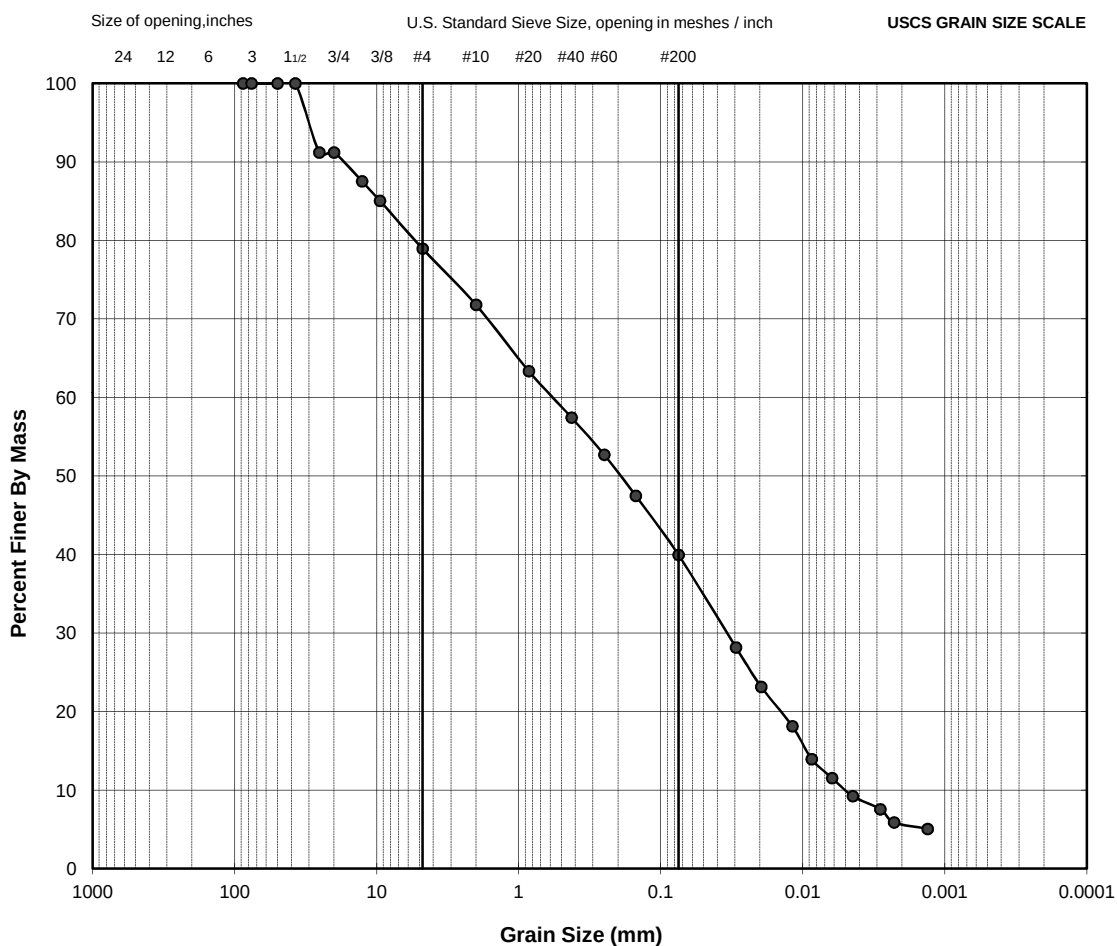
PARTICLE SIZE ANALYSIS OF SOILS

Reference

ASTM D 422-63 (2007)

Project No.:	09-1428-5007 (2000)	Field ID	BG091310-2
Client:	AEM	Sample No.:	324
Project:	Meadowbank Gold Project	Depth (m):	8.5
Location:	Nunavut	Lab ID No:	SA 324
Specific Gravity (assumed):	2.70	Other	Till from initial trench bottom, Water content = 7.9%
Date sampled:	September 13, 2010	Remarks:	BG STA. 32+082, 8.5m below water level
Dispersion Method:	Stirring		
Dispersion Period (min):	5.00		

Sieve Size (US)	(mm)	% Passing
3.5"	87.50	100.0
3"	76.20	100.0
2"	50.00	100.0
1.5"	37.50	100.0
1"	25.40	91.2
3/4"	20.00	91.2
1/2"	12.70	87.5
3/8"	9.50	85.1
#4	4.76	79.0
#10	2.00	71.8
#20	0.850	63.4
#40	0.425	57.4
#60	0.250	52.7
#100	0.150	47.5
#200	0.075	40.0
-	0.0295	28.2
-	0.0196	23.2
-	0.0118	18.1
-	0.0087	14.0
-	0.0062	11.5
-	0.0044	9.2
-	0.0028	7.6
-	0.0023	5.9
-	0.0013	5.1



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

B. Dieudonne	September 18, 2010	YB	Sept. 27, 2010
TESTED BY	DATE	CHECKED BY	DATE

PARTICLE SIZE ANALYSIS OF SOILS

Reference

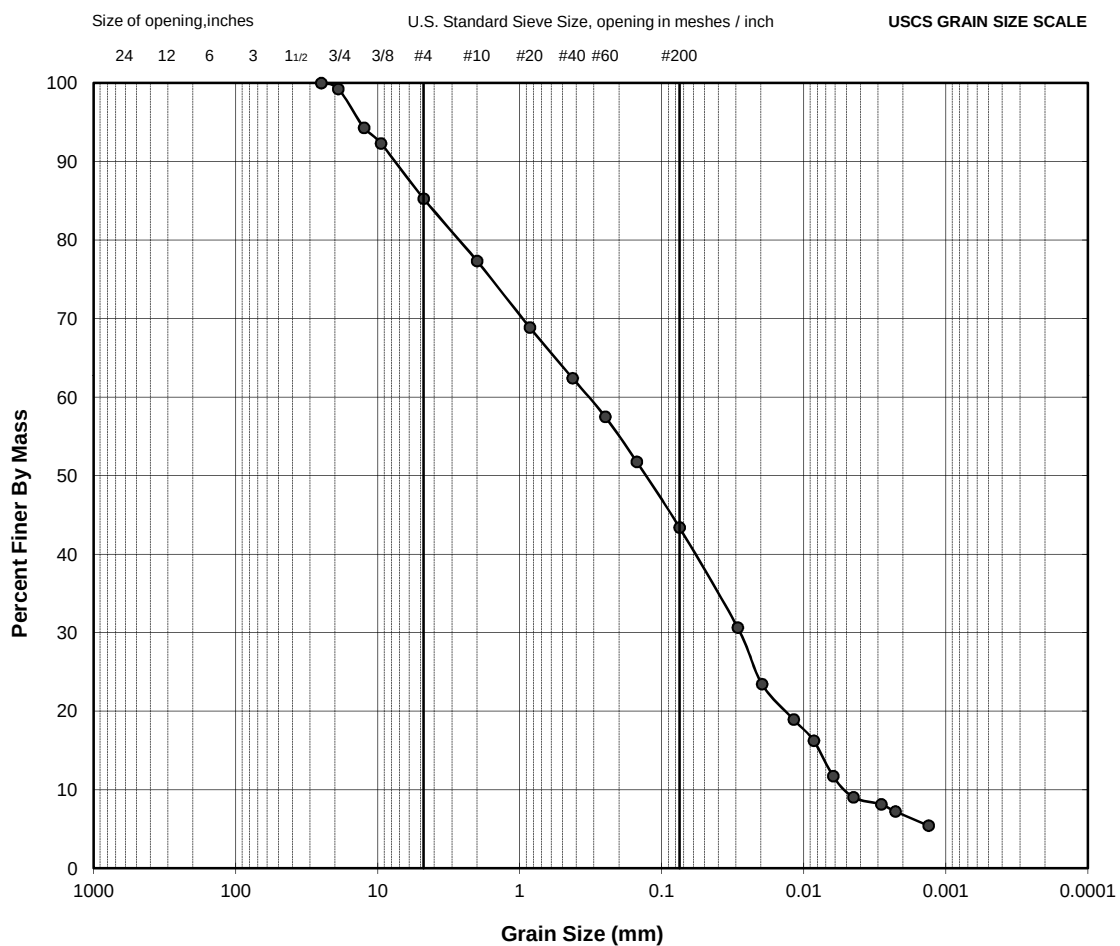
ASTM D 422-63 (2007)

Project No.:	09-1428-5007 (2000)	Sample No.:	325
Client:	AEM	Field ID:	BG091410-1
Project:	Meadowbank Gold Project	Depth (m):	2.5
Location:	Nanavut	Lab ID No:	SA 325

Specific Gravity (assumed):	2.70	Other	Water content = 16.2% + 325ml from thawed ice
		Remarks:	STN 32+127 (A), 2.5m center line

Dispersion Method:	Stirring	Comments:	Sample from frozen till during initial trench excavation. As such, no criteria envelope has been plotted.
Dispersion Period (min):	0.00		

Sieve Size (US)	(mm)	% Passing
3.5"	87.50	100.0
3"	75.00	100.0
2"	50.00	100.0
1.5"	37.50	100.0
1"	25.00	100.0
3/4"	19.00	99.3
1/2"	12.50	94.3
3/8"	9.50	92.3
#4	4.75	85.3
#10	2.00	77.3
#20	0.850	68.9
#40	0.425	62.4
#60	0.250	57.5
#100	0.150	51.8
#200	0.075	43.4
-	0.0292	30.7
-	0.0197	23.5
-	0.0118	19.0
-	0.0085	16.3
-	0.0062	11.7
-	0.0045	9.0
-	0.0028	8.1
-	0.0023	7.2
-	0.0013	5.4



B.Dieudonne	Sept-19-10	Grant Burns	October 6, 2010
TESTED BY	DATE	CHECKED BY	DATE

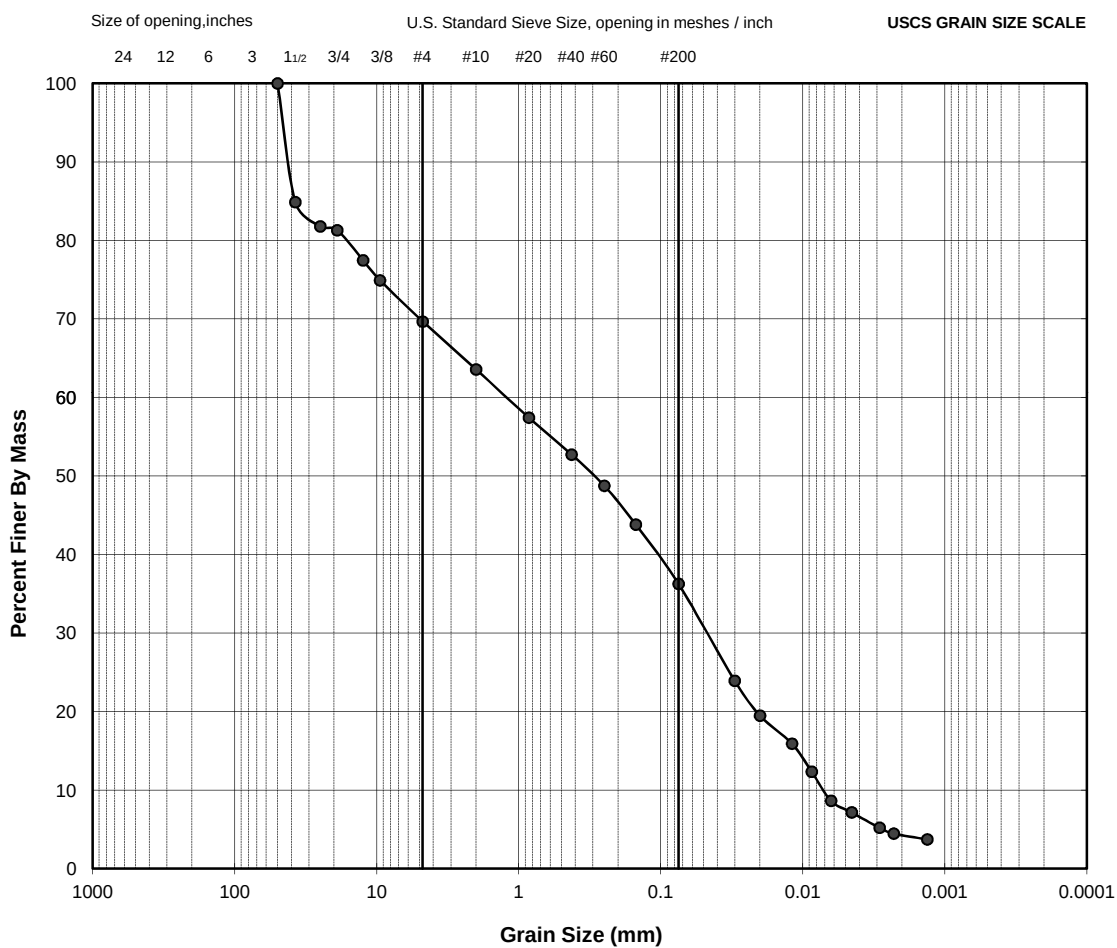
PARTICLE SIZE ANALYSIS OF SOILS

Reference

ASTM D 422-63 (2007)

Project No.:	09-1428-5007 (2000)	Sample No.:	327
Client:	AEM	Field ID:	BG091410-3
Project:	Meadowbank Gold Project	Depth (m):	2.5
Location:	Nanavut	Lab ID No:	SA 327
Specific Gravity (assumed):	2.70	Other	Water content = 12.4% + 648ml from thawed ice
		Remarks:	STN 32+132 (A), 2.5m center line
Dispersion Method:	Stirring	Comments:	No particles larger than 1.5in where within the sample collected.
Dispersion Period (min):	0.00		

Sieve Size (US)	(mm)	% Passing
3.5"	87.50	100.0
3"	75.00	100.0
2"	50.00	100.0
1.5"	37.50	84.9
1"	25.00	81.8
3/4"	19.00	81.3
1/2"	12.50	77.5
3/8"	9.50	74.9
#4	4.75	69.7
#10	2.00	63.6
#20	0.850	57.4
#40	0.425	52.7
#60	0.250	48.8
#100	0.150	43.8
#200	0.075	36.3
-	0.0302	23.9
-	0.0200	19.5
-	0.0119	15.9
-	0.0087	12.4
-	0.0063	8.7
-	0.0045	7.2
-	0.0029	5.2
-	0.0023	4.5
-	0.0013	3.7



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

B. Dieudonne	Sept-19-10	Grant Burns	October 6, 2010
TESTED BY	DATE	CHECKED BY	DATE



Reference
ASTM C136-06 & C117-04

Sample No.:	348
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Field Label:	BG092210
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Depth (m): NA

Lab ID No: SA 348

Date Sampled: September 22, 2010

Material Specification: TILL

Method:	SPLIT, WASHED
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Date Tested: September 26, 2010

Size of opening, inches

U.S. Standard Sieve Size, opening in meshes / inch

USCS GRAIN SIZE SCALE

Percent Finer By Mass

Grain Size (mm)

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.*

YB

DATE _____



BAY GOOSE DIKE CONSTRUCTION AS-BUILT REPORT MEADOWBANK GOLD MINE, NUNAVUT

Silt- from Lakebed Sediments

Samples List

Sample No.:

- 25
- 26
- 39
- 62
- 64
- 207
- 208
- 257
- 340
- 349

Liquid Limit, Plastic Limit and Plasticity Index of Soils				Reference ASTM D 4318-05
Project No.:	08-1428-0029	Sample No.:	25	
Client:	AEM	Field No.:	BG083009-02	
Project:	Meadowbank Gold Project	Sa. Location:	BG sediment removed from trench	
Location:	Nunavut	Date Sampled:	August 30, 2009	
Method:	A-Multi Point	Preparation Method:	Air-Dried	
Sample Description:	ML	Classification Definition	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity	

Test Summary		Remarks
Percent passing #40 Sieve (%)	<u>95.3</u>	Sediment material removed from bottom of trench at 30+420
Liquid Limit	<u>27</u>	
Plastic Limit	<u>23</u>	
Plasticity Index	<u>4</u>	
Natural water content (%)	<u>39</u>	
Liquidity Index	<u>4.0</u>	

* The test data given herein pertain to the sample provided only. This report constitutes a testing service only.

DE	September 3, 2009	<i>TE</i>	<i>July 18/12</i>
TESTED BY	DATE	CHECKED BY	DATE

Liquid Limit, Plastic Limit and Plasticity Index of Soils				Reference ASTM D 4318-05	
Project No.: 08-1428-0029		Sample No.: 26			
Client: AEM		Field No.: BG083009-01			
Project: Meadowbank Gold Project		Sa. Location: BG sediment removed from trench			
Location: Nunavut		Date Sampled: August 30, 2009			
Method: A-Multi Point		Preparation Method: Air-Dried			
Sample Description: ML		Classification Definition <i>Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity</i>			

Test Summary		Remarks
Percent passing #40 Sieve (%)	<u>04-Apr-00</u>	Sediment material removed from bottom of trench at 30+420
Liquid Limit	<u>27</u>	
Plastic Limit	<u>25</u>	
Plasticity Index	<u>2</u>	
Natural water content (%)	<u>46</u>	
Liquidity Index	<u>10.5</u>	

* The test data given herein pertain to the sample provided only. This report constitutes a testing service only.

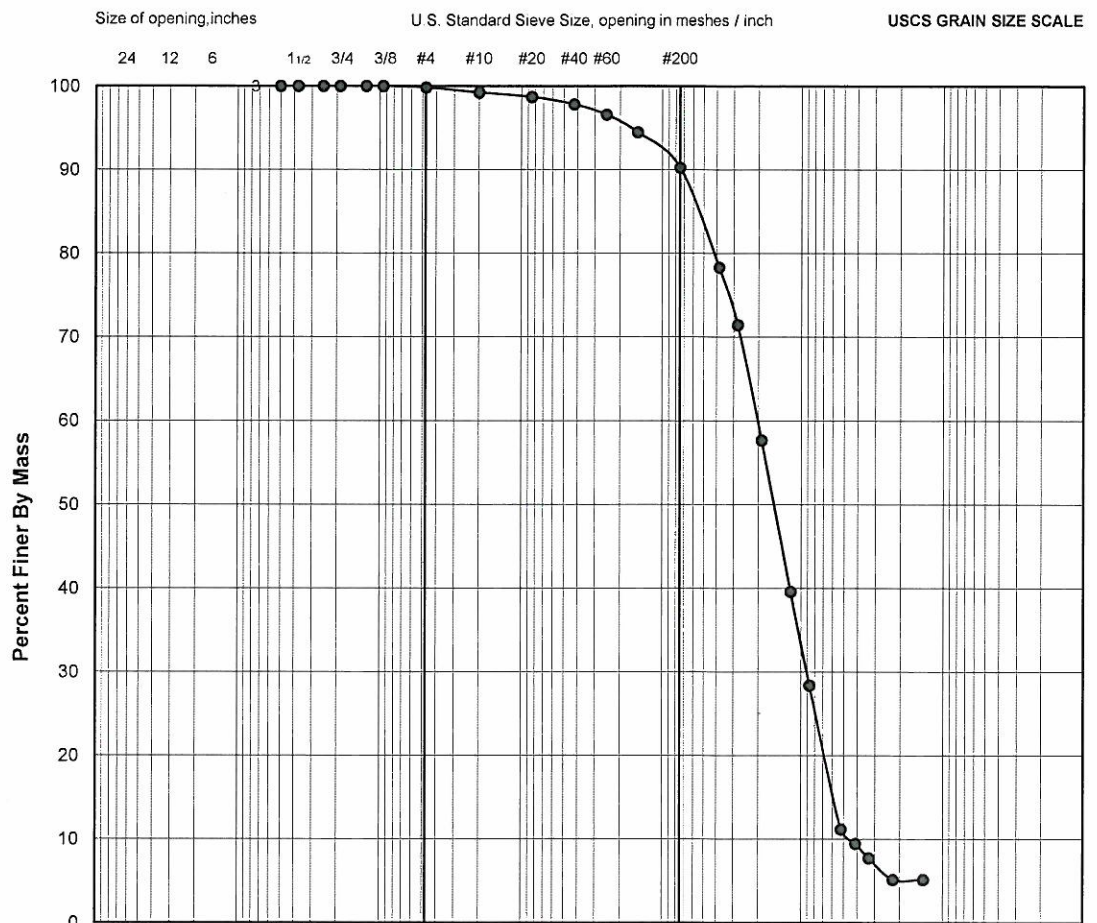
DE	September 3, 2009	<i>FE</i>	<i>July 18/12</i>
TESTED BY	DATE	CHECKED BY	DATE

PARTICLE SIZE ANALYSIS OF SOILS

Reference
ASTM D 422-63 (2007)

Project No.:	08-1428-0029 (5000)	Sample:	25
Client:	AEM	Field No.:	BG083009-02
Project:	Meadowbank Gold Project	Depth (m):	N/A
Location:	Nunavut	Lab ID No:	SA25
Specific Gravity (assumed):	2.76	Other	Sample collected from Bay Goose at 30+420 -
Date Sampled:	August 30, 2009	Remarks:	material removed from base of trench
Dispersion Method:	Stirring		
Dispersion Period (min):	960.00		

Sieve Size (US)	(mm)	% Passing
3.5"	87.50	100.0
3"	75.00	100.0
2"	50.00	100.0
1.5"	37.50	100.0
1"	25.00	100.0
3/4"	19.00	100.0
1/2"	12.50	100.0
3/8"	9.50	100.0
#4	4.75	99.8
#10	2.00	99.2
#20	0.850	98.7
#40	0.425	97.8
#60	0.250	96.6
#100	0.150	94.5
#200	0.075	90.2
-	0.0384	78.3
-	0.0282	71.4
-	0.0191	57.7
-	0.0119	39.6
-	0.0088	28.4
-	0.0052	11.2
-	0.0041	9.5
-	0.0033	7.7
-	0.0023	5.2
-	0.0014	5.2



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.

DE	September 6, 2009	<i>Tested</i>	<i>July 18/12</i>
TESTED BY	DATE	CHECKED BY	DATE

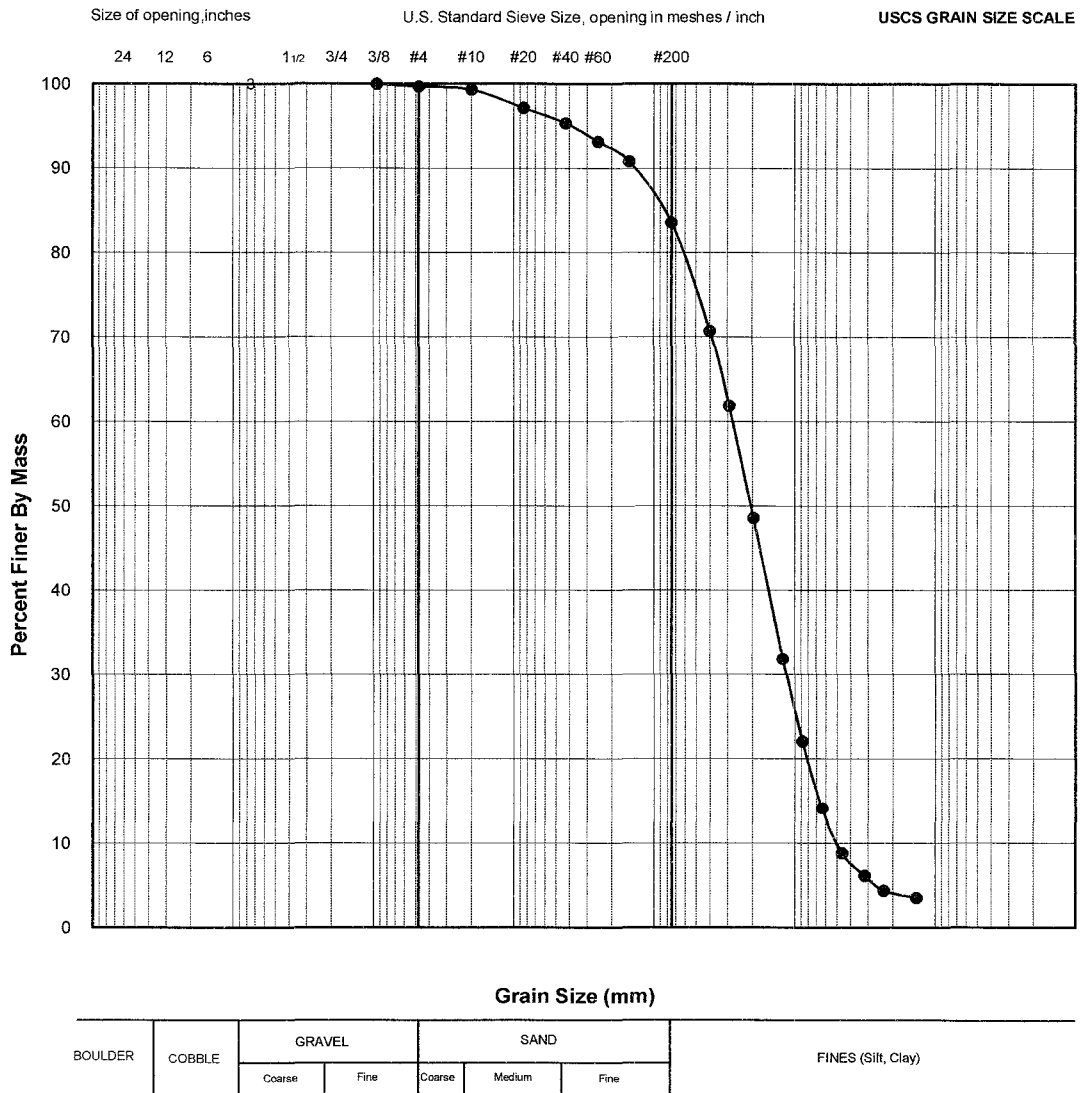
PARTICLE SIZE ANALYSIS OF SOILS

Reference

ASTM D 422-63 (2007)

Project No.: 08-1428-0028 Client: AEM Project: Meadowbank Gold Location: Nunavut	Sample: 26 Field No.: BG083009-03 Depth (m): N/A Lab ID No: SA26
Specific Gravity (assumed): 2.76	Other Remarks: Sample collected from Bay Goose at 30+420 - Material removed from base of trench
Dispersion Method: Stirring Dispersion Period (min): 960.00	

Sieve Size (US) (mm)	% Passing
3.5"	87.50
3"	75.00
2"	50.00
1.5"	37.50
1"	25.00
3/4"	19.00
1/2"	12.50
3/8"	9.50
#4	4.75
#10	2.00
#20	0.850
#40	0.425
#60	0.250
#100	0.150
#200	0.075
-	0.0398
-	0.0293
-	0.0196
-	0.0121
-	0.0088
-	0.0064
-	0.0046
-	0.0032
-	0.0023
-	0.0014



* 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.

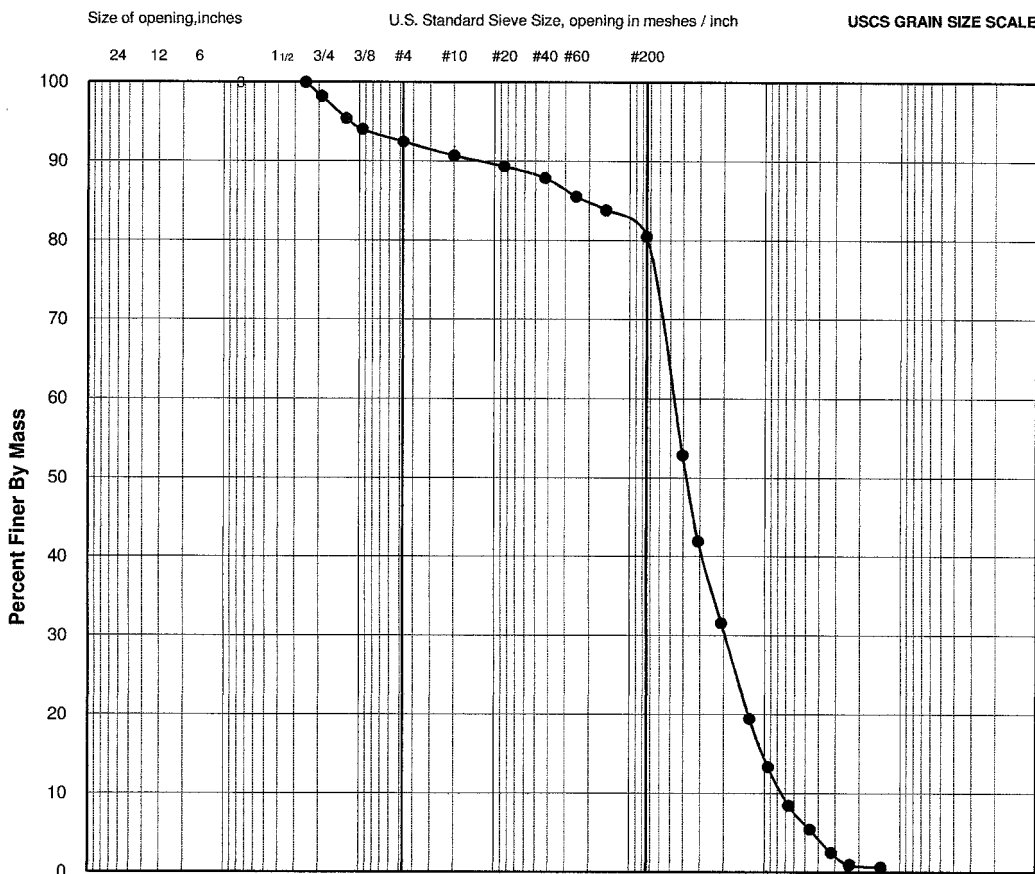
DE	Sep 4-09		Sept 4/09
TESTED BY	DATE	CHECKED BY	DATE

PARTICLE SIZE ANALYSIS OF SOILS

Reference
ASTM D 422-63 (2007)

Project No.:	08-1428-0029 (5000)	Sample:	39
Client:	AEM	Field No.:	BG090609-06
Project:	Meadowbank Gold Project	Depth (m):	Trench bottom 30 +365
Location:	Nunavut	Lab ID No:	SA39
Specific Gravity (assumed):	2.70	Other	Sediment removed from bottom of trench
Date Sampled:	Sept 7, 2009	Remarks:	at Bay Goose 30+365
Dispersion Method:	Stirring	+ #200 due to contamination from core backfill	
Dispersion Period (min):	960.00		

Sieve Size (US) (mm)	% Passing
3.5"	87.50
3"	75.00
2"	50.00
1.5"	37.50
1"	25.00
3/4"	19.00
1/2"	12.50
3/8"	9.50
#4	4.75
#10	2.00
#20	0.850
#40	0.425
#60	0.250
#100	0.150
#200	0.075
-	0.0406
-	0.0310
-	0.0209
-	0.0129
-	0.0094
-	0.0066
-	0.0046
-	0.0032
-	0.0024
-	0.0014



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.

OM	Sep 16-09		Sept 30/09
TESTED BY	DATE	CHECKED BY	DATE

PARTICLE SIZE ANALYSIS OF SOILS

Reference
ASTM D 422-63 (2007)

Project No.: 08-1428-0028
Client: AEM
Project: Meadowbank Gold
Location: Nunavut

Sample: 62
Field No.: BG091209-21
Depth (m): N/A
Lab ID No: SA62

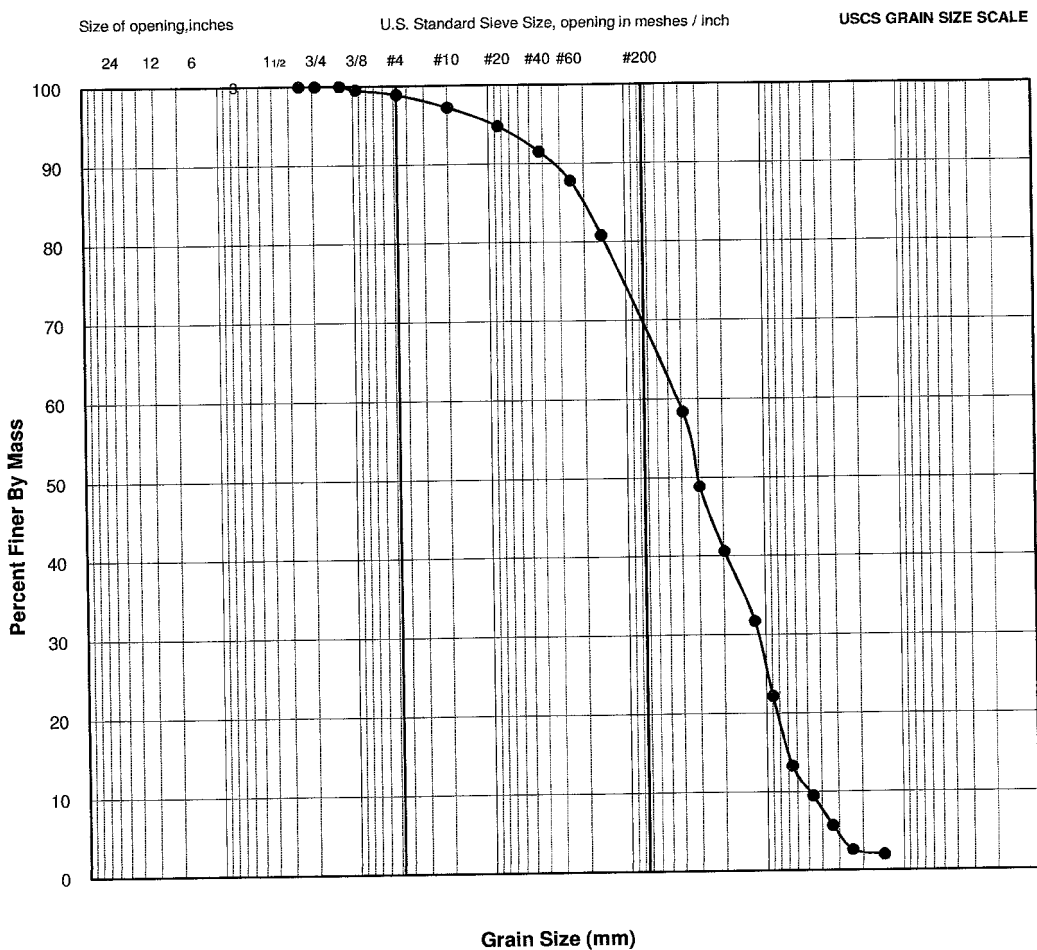
Specific Gravity (assumed): 2.73
Date Sampled: Sept 18, 2009

Other Sediments from bottom of Bay goose core trench
Remarks: 30+352

Dispersion Method: Stirring
Dispersion Period (min): 960.00

**+#200 material due to contamination
from core backfill**

Sieve Size (USS)	(mm)	% Passing
3.5"	87.50	100.0
3"	75.00	100.0
2"	50.00	100.0
1.5"	37.50	100.0
1"	25.00	100.0
3/4"	19.00	100.0
1/2"	12.50	100.0
3/8"	9.50	99.5
#4	4.75	98.9
#10	2.00	97.2
#20	0.850	94.8
#40	0.425	91.6
#60	0.250	87.8
#100	0.150	80.9
-	0.0390	58.4
-	0.0296	48.9
-	0.0198	40.6
-	0.0120	31.7
-	0.0090	22.2
-	0.0065	13.3
-	0.0046	9.5
-	0.0033	5.7
-	0.0024	2.5
-	0.0014	1.9



* 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.

OM	Sep 18-09		Sept 30/09
TESTED BY	DATE	CHECKED BY	DATE

PARTICLE SIZE ANALYSIS OF SOILS

Reference
 ASTM D 422-63 (2007)

Project No.: 08-1428-0028
Client: AEM
Project: Meadowbank Gold
Location: Nunavut

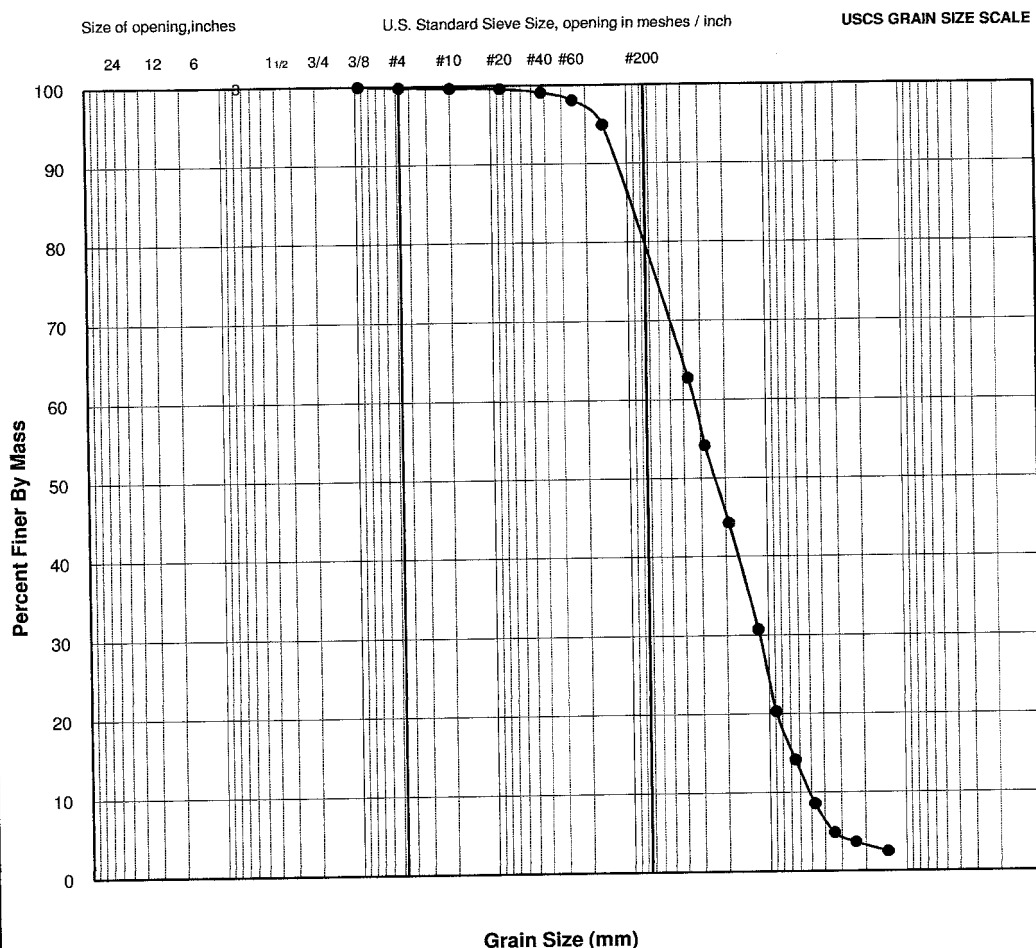
Sample: 64
Field No.: BG091209-23
Depth (m): N/A
Lab ID No: SA64

Specific Gravity (assumed): 2.73
Date Sampled: Sept 20, 2009

Other Sediment from bottom of Bay Goose core trench
Remarks: 30+356.

Dispersion Method: Stirring
Dispersion Period (min): 960.00

Sieve Size (USS)	(mm)	% Passing
3.5"	87.50	100.0
3"	75.00	100.0
2"	50.00	100.0
1.5"	37.50	100.0
1"	25.00	100.0
3/4"	19.00	100.0
1/2"	12.50	100.0
3/8"	9.50	100.0
#4	4.75	99.8
#10	2.00	99.7
#20	0.850	99.6
#40	0.425	99.1
#60	0.250	98.1
#100	0.150	95.0
-	0.0370	62.8
-	0.0282	54.2
-	0.0191	44.3
-	0.0119	30.8
-	0.0089	20.3
-	0.0065	14.2
-	0.0047	8.6
-	0.0034	4.9
-	0.0024	3.7
-	0.0014	2.5



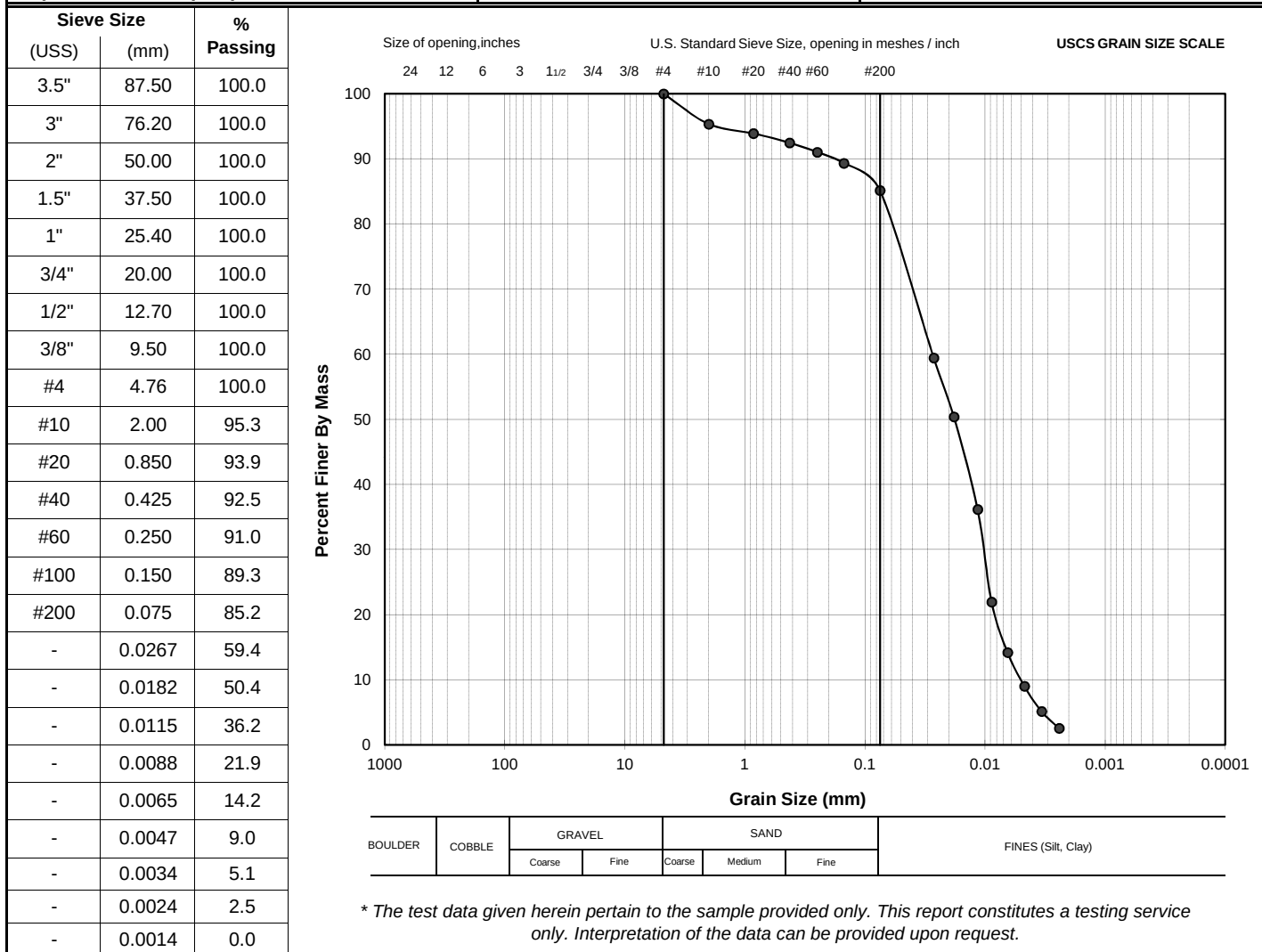
* The test data given herein pertain to the sample provided only. This report constitutes a testing service only.
 Interpretation of the data can be provided upon request.

OM	Sep 20-09		Sept 30/09
TESTED BY	DATE	CHECKED BY	DATE

PARTICLE SIZE ANALYSIS OF SOILS

Reference
ASTM D 422-63 (2007)

Project No.:	09-1428-5007 (2000)	Sample No:	207
Client:	AEM	Field Label:	BG073010-1
Project:	Meadowbank Gold Project	Depth (m):	5
Location:	Nunavut	Lab ID No:	SA 207
Specific Gravity (assumed):	2.70	Other	STA. 31+115
Date sampled:	July 30, 2010	Remarks:	BG - Soft sediment at trench bottom
Dispersion Method:	Stirring		
Dispersion Period (min):	5.00		

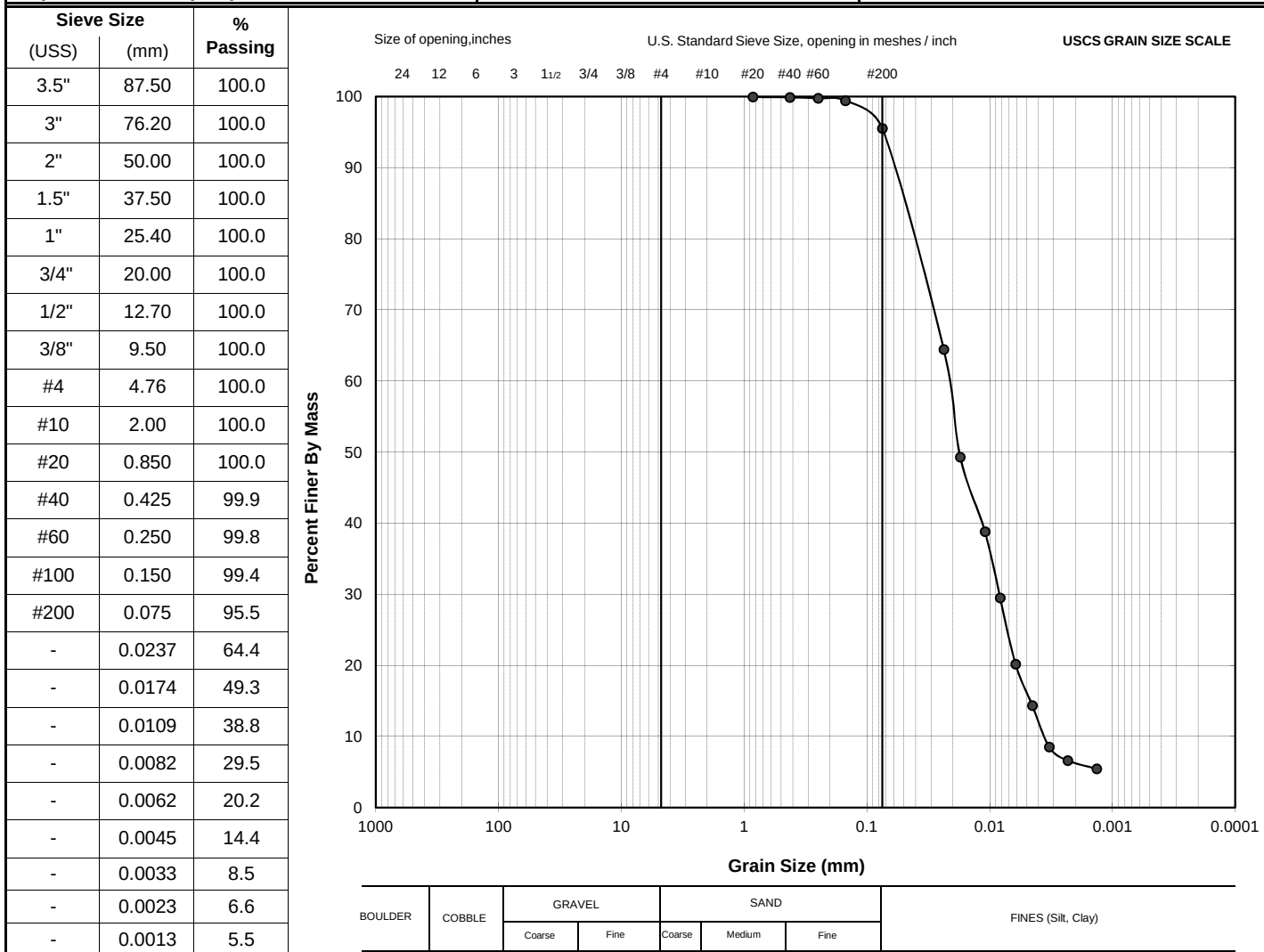


MO	August 8, 2010	YB	Sept. 23, 2010
TESTED BY	DATE	CHECKED BY	DATE

PARTICLE SIZE ANALYSIS OF SOILS

Reference
ASTM D 422-63 (2007)

Project No.: 09-1428-5007 (2000) Client: AEM Project: Meadowbank Gold Project Location: Nunavut	Sample No: 208 Field Label: BG073010-2 Depth (m): 5 Lab ID No: SA 208
Specific Gravity (assumed): 2.70 Date sampled: July 30, 2010	Other: STA. 31+115 Remarks: BG-Soft sediment at trench bottom, Water content: 64.4%
Dispersion Method: Stirring	
Dispersion Period (min): 5.00	

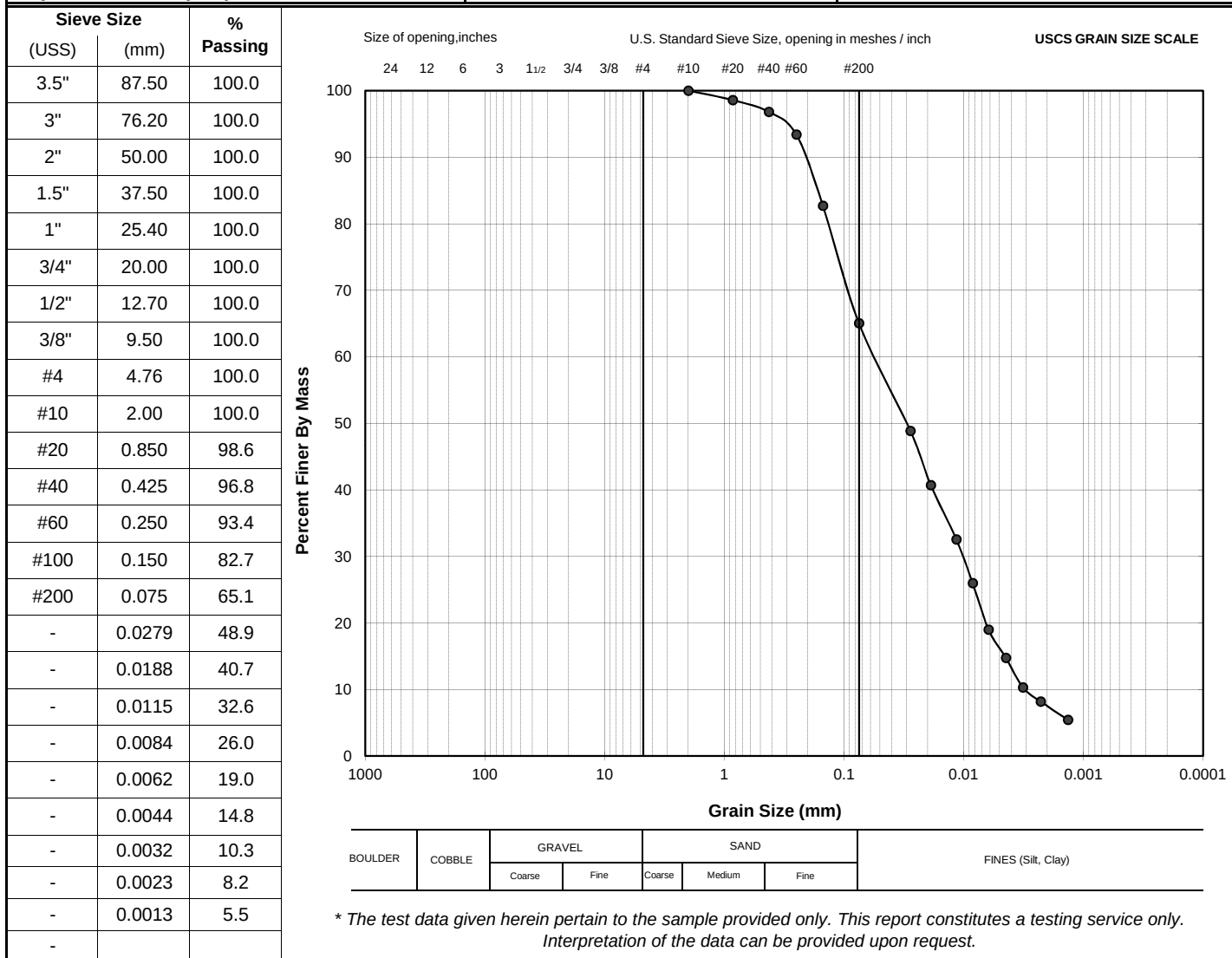


B.Dieudonné	August 17, 2010	YB	Sept. 23, 2010
TESTED BY	DATE	CHECKED BY	DATE

PARTICLE SIZE ANALYSIS OF SOILS

Reference
ASTM D 422-63 (2007)

Project No.: 09-1428-5007 (2000) Client: AEM Project: Meadowbank Gold Project Location: Nunavut	Sample No.: 257 Field Label BG080610-4 Depth (m): 7 Lab ID No: SA 257
Specific Gravity (assumed): 2.70 Date sampled: August 6, 2010	Other BG STA. 31+585; fine material from trench bottom Remarks: Water content: 20.4%
Dispersion Method: Stirring Dispersion Period (min): 5.00	



B.Dieudonné	August 21, 2010	YB	Sept. 23, 2010
TESTED BY	DATE	CHECKED BY	DATE

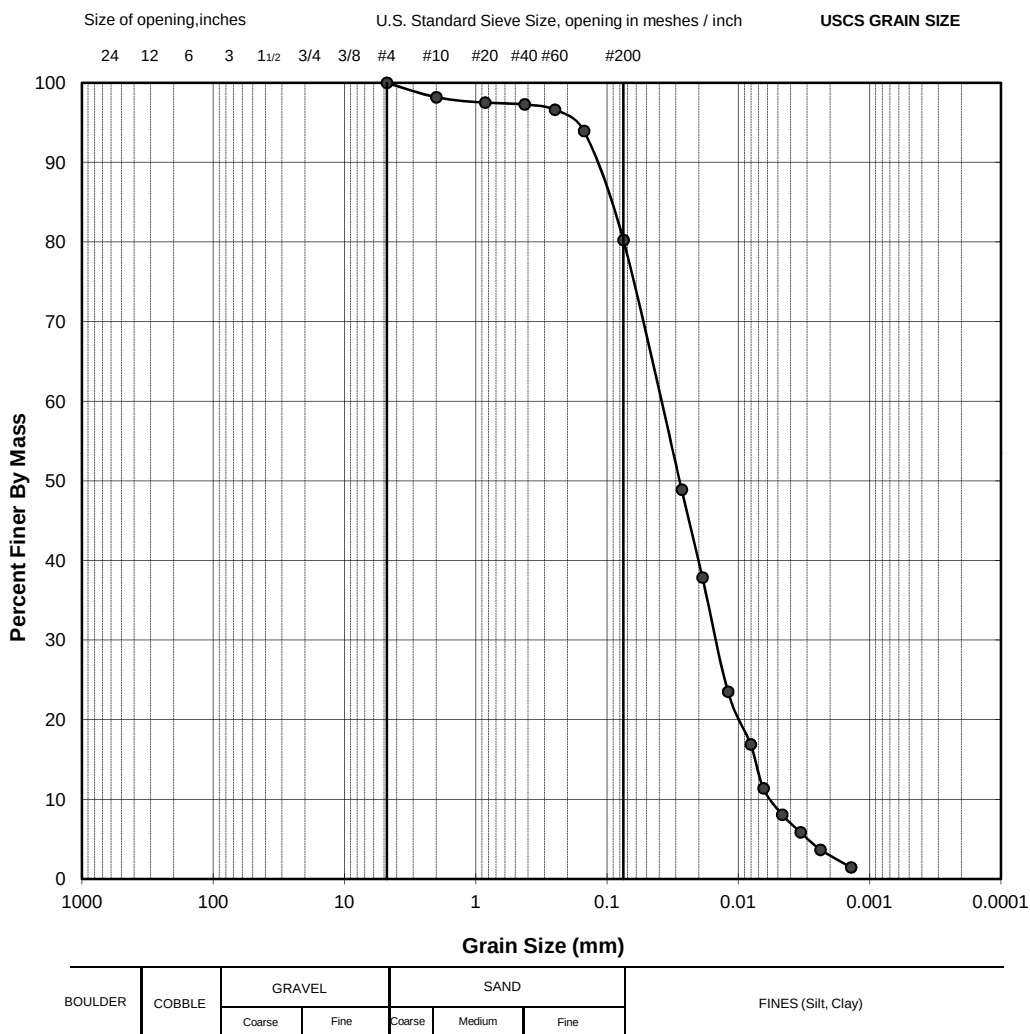
PARTICLE SIZE ANALYSIS OF SOILS

Reference

ASTM D 422-63 (2007)

Project No.:	09-1428-5007 (2000)	Field label:	BG091810
Client:	AEM	Sample No.:	340
Project:	Meadowbank Gold Project	Depth (m):	NA
Location:	Nunavut	Lab ID No:	SA 340
Specific Gravity (assumed):	2.70	Other	Sandy silt,
Date sampled:	September 18, 2010	Remarks:	STA.31+912, Elev.121m; Water content: 29.8%
Dispersion Method:	Stirring		
Dispersion Period (min):	5.00		

Sieve Size (US)	(mm)	% Passing
8"	200.00	100.0
6"	152.40	100.0
3"	76.20	100.0
2"	50.00	100.0
1.5"	37.50	100.0
1"	25.40	100.0
3/4"	20.00	100.0
1/2"	12.70	100.0
3/8"	9.50	100.0
#4	4.76	100.0
#10	2.00	98.2
#20	0.850	97.5
#40	0.425	97.3
#60	0.250	96.6
#100	0.150	93.9
#200	0.075	80.2
-	0.0270	48.9
-	0.0188	37.9
-	0.0120	23.5
-	0.0081	16.9
-	0.0064	11.4
-	0.0046	8.1
-	0.0034	5.9
-	0.0024	3.7
-	0.0014	1.5



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 Interpretation of the data can be provided upon request.

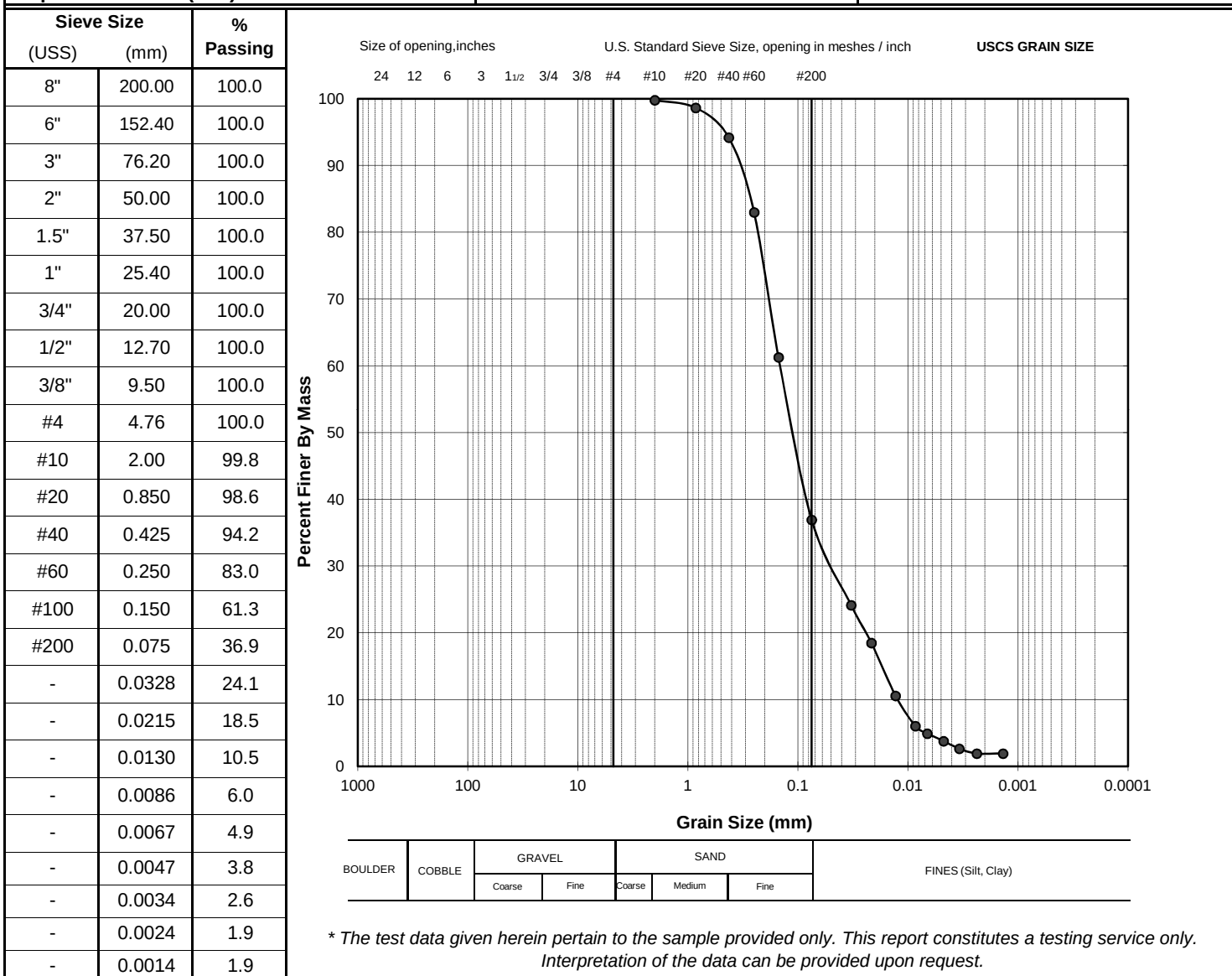
MO	September 28, 2010	Grant Burns	October 6, 2010
TESTED BY	DATE	CHECKED BY	DATE

PARTICLE SIZE ANALYSIS OF SOILS

Reference

ASTM D 422-63 (2007)

Project No.:	09-1428-5007 (2000)	Field label:	BG092210-1
Client:	AEM	Sample No.:	349
Project:	Meadowbank Gold Project	Depth (m):	NA
Location:	Nunavut	Lab ID No:	SA 349
Specific Gravity (assumed):	2.70	Other	Silty sand from slurry trench bottom (Bay-Goose)
Date sampled	September 22, 2010	Remarks:	STA. 32+084; Water content: 19.1%
Dispersion Method:	Stirring		
Dispersion Period (min):	5.00		



MO	September 28, 2010	Grant Burns	October 7, 2010
TESTED BY	DATE	CHECKED BY	DATE



BAY GOOSE DIKE CONSTRUCTION AS-BUILT REPORT MEADOWBANK GOLD MINE, NUNAVUT

Soil-Bentonite

Samples List

Sample No.

- 58
- 59
- 61
- 85
- 105
- 302
- 314
- 315
- 316
- 317

PARTICLE SIZE ANALYSIS OF SOILS

Reference
 ASTM D 422-63 (2007)

Project No.: 08-1428-0028 (5000)

Client: AEM

Project: Meadowbank Gold

Location: Nunavut

Sample: 58

Field No.: BG091209-17

Depth (m): N/A

Lab ID No: SA58

Specific Gravity (assumed): 2.70

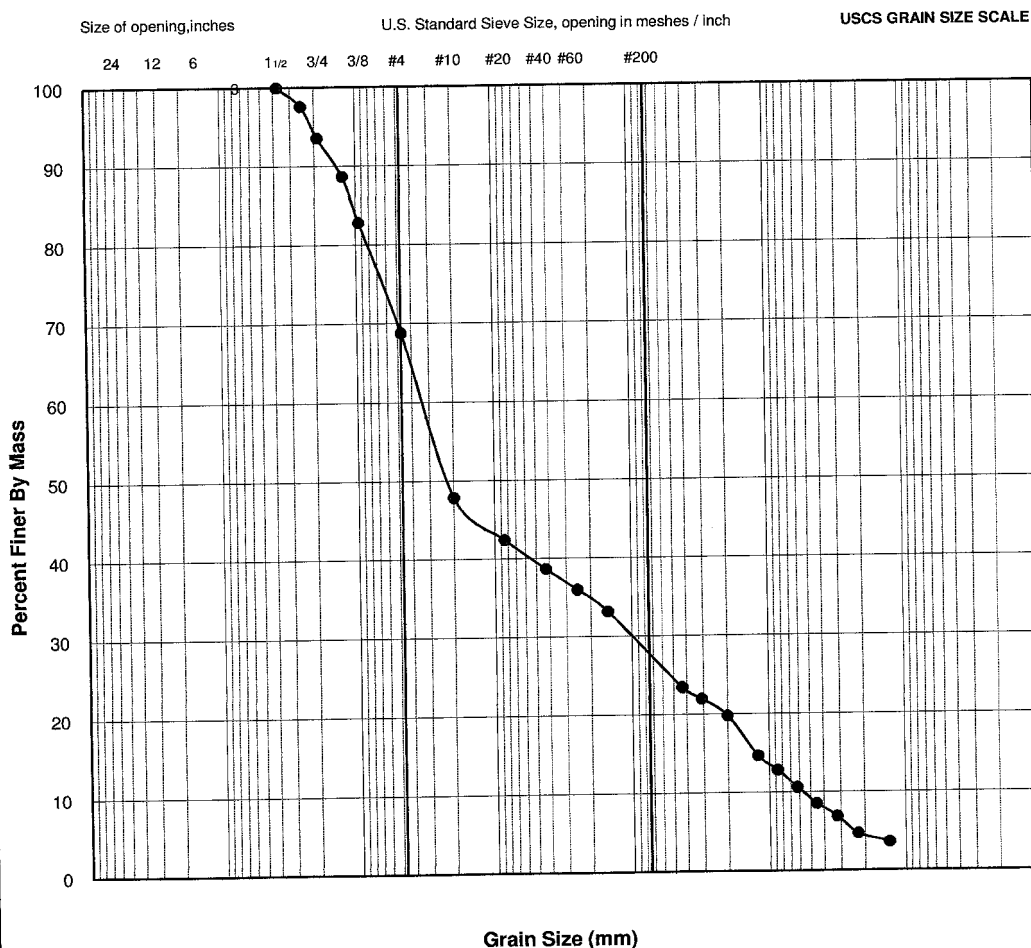
Date Sampled: Sept 15, 2009

Other Soil/Bentonite (SB) 30 +064, 5.0 m offset West

Remarks:
Dispersion Method: Stirring

Dispersion Period (min): 960.00

Sieve Size (US) (mm)	% Passing
3.5"	87.50
3"	75.00
2"	50.00
1.5"	37.50
1"	25.00
3/4"	19.00
1/2"	12.50
3/8"	9.50
#4	4.75
#10	2.00
#20	0.850
#40	0.425
#60	0.250
#100	0.150
-	0.0432
-	0.0310
-	0.0201
-	0.0121
-	0.0087
-	0.0063
-	0.0045
-	0.0032
-	0.0022
-	0.0013



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 Interpretation of the data can be provided upon request.

OM

TESTED BY

September 17, 2009

DATE



CHECKED BY

Sept 30/09

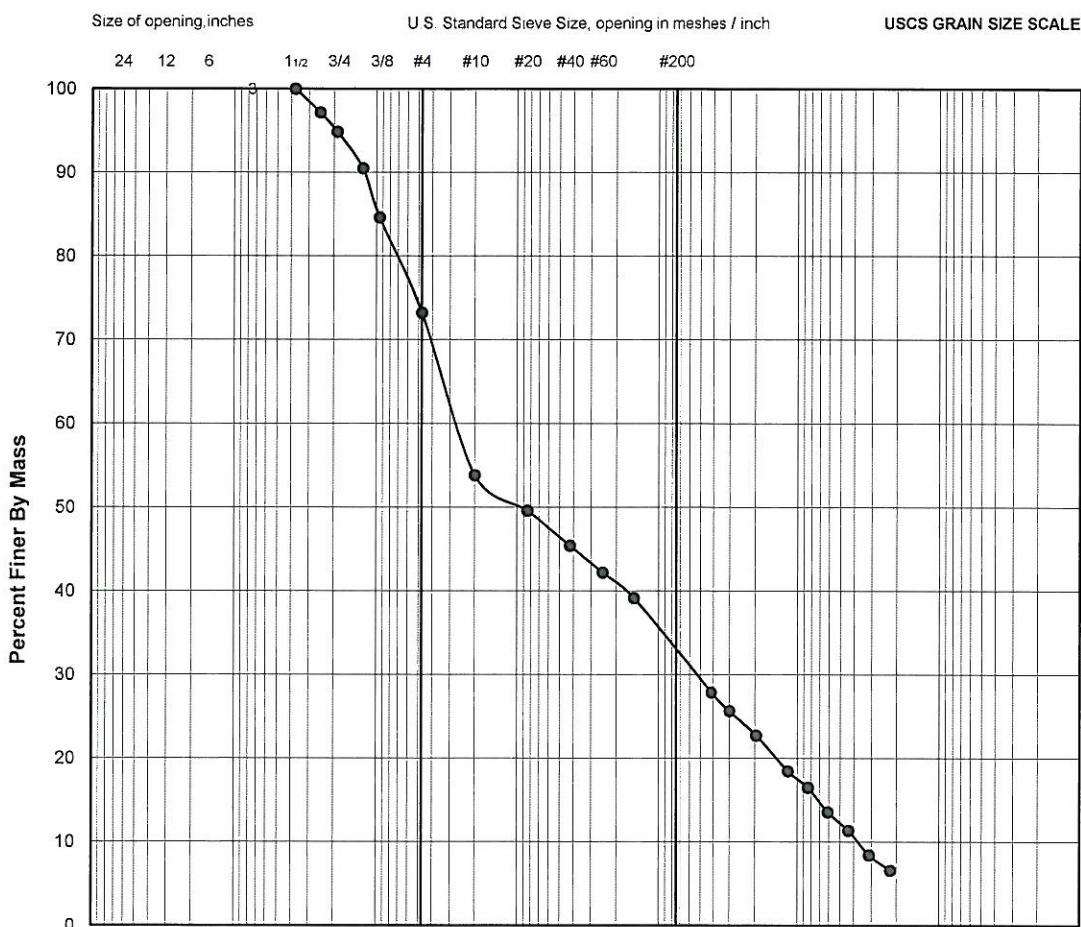
DATE

PARTICLE SIZE ANALYSIS OF SOILS

Reference
ASTM D 422-63 (2007)

Project No.:	08-1428-0028	Sample:	59
Client:	AEM	Field No.:	BG091209-18
Project:	Meadowbank Gold	Depth (m):	N/A
Location:	Nunavut	Lab ID No:	SA59
Specific Gravity (assumed):	2.73	Other	Soil/Bentonite (SB) 30 +096
Date Sampled:	Sept 17, 2009	Remarks:	
Dispersion Method:	Stirring		
Dispersion Period (min):	960.00		

Sieve Size (US)	(mm)	% Passing
3.5"	87.50	100.0
3"	75.00	100.0
2"	50.00	100.0
1.5"	37.50	100.0
1"	25.00	97.2
3/4"	19.00	94.9
1/2"	12.50	90.5
3/8"	9.50	84.6
#4	4.75	73.2
#10	2.00	53.8
#20	0.850	49.6
#40	0.425	45.4
#60	0.250	42.2
#100	0.150	39.1
-	0.0415	27.9
-	0.0301	25.7
-	0.0197	22.7
-	0.0117	18.5
-	0.0085	16.5
-	0.0061	13.6
-	0.0044	11.4
-	0.0031	8.4
-	0.0022	6.6
-	0.0014	3.7



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

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OM	Sep 17-09	<i>FE</i>	<i>July 18/12</i>
TESTED BY	DATE	CHECKED BY	DATE



Golder Associates Ltd. - Burnaby Laboratory
4280 Still Creek Drive
Burnaby, B.C. Canada V5C 6C6

PARTICLE SIZE ANALYSIS OF SOILS

Reference
ASTM D 422-63 (2007)

Project No.: 08-1428-0028
Client: AEM
Project: Meadowbank Gold
Location: Nunavut

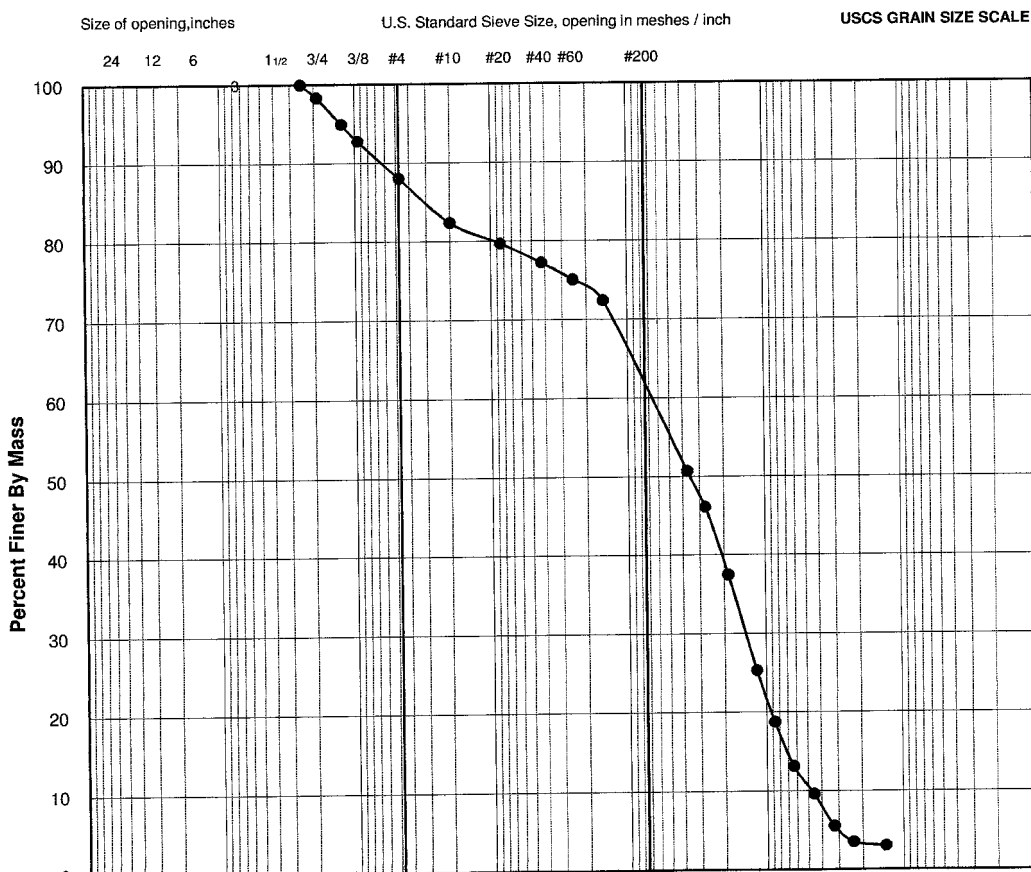
Sample: 61
Field No.: BG091209-20
Depth (m): N/A
Lab ID No: SA61

Specific Gravity (assumed): 2.73
Date Sampled: Sept 16, 2009

Other Soil/Bentonite
Remarks:

Dispersion Method: Stirring
Dispersion Period (min): 960.00

Sieve Size (USS)	(mm)	% Passing
3.5"	87.50	100.0
3"	75.00	100.0
2"	50.00	100.0
1.5"	37.50	100.0
1"	25.00	100.0
3/4"	19.00	98.3
1/2"	12.50	95.0
3/8"	9.50	92.8
#4	4.75	88.1
#10	2.00	82.4
#20	0.850	79.7
#40	0.425	77.3
#60	0.250	75.1
#100	0.150	72.4
-	0.0370	50.7
-	0.0274	46.1
-	0.0187	37.5
-	0.0117	25.3
-	0.0087	18.8
-	0.0064	13.2
-	0.0045	9.6
-	0.0032	5.6
-	0.0023	3.5
-	0.0014	3.0



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.

OM	Sep 16-09		Sept 30/09
TESTED BY	DATE	CHECKED BY	DATE

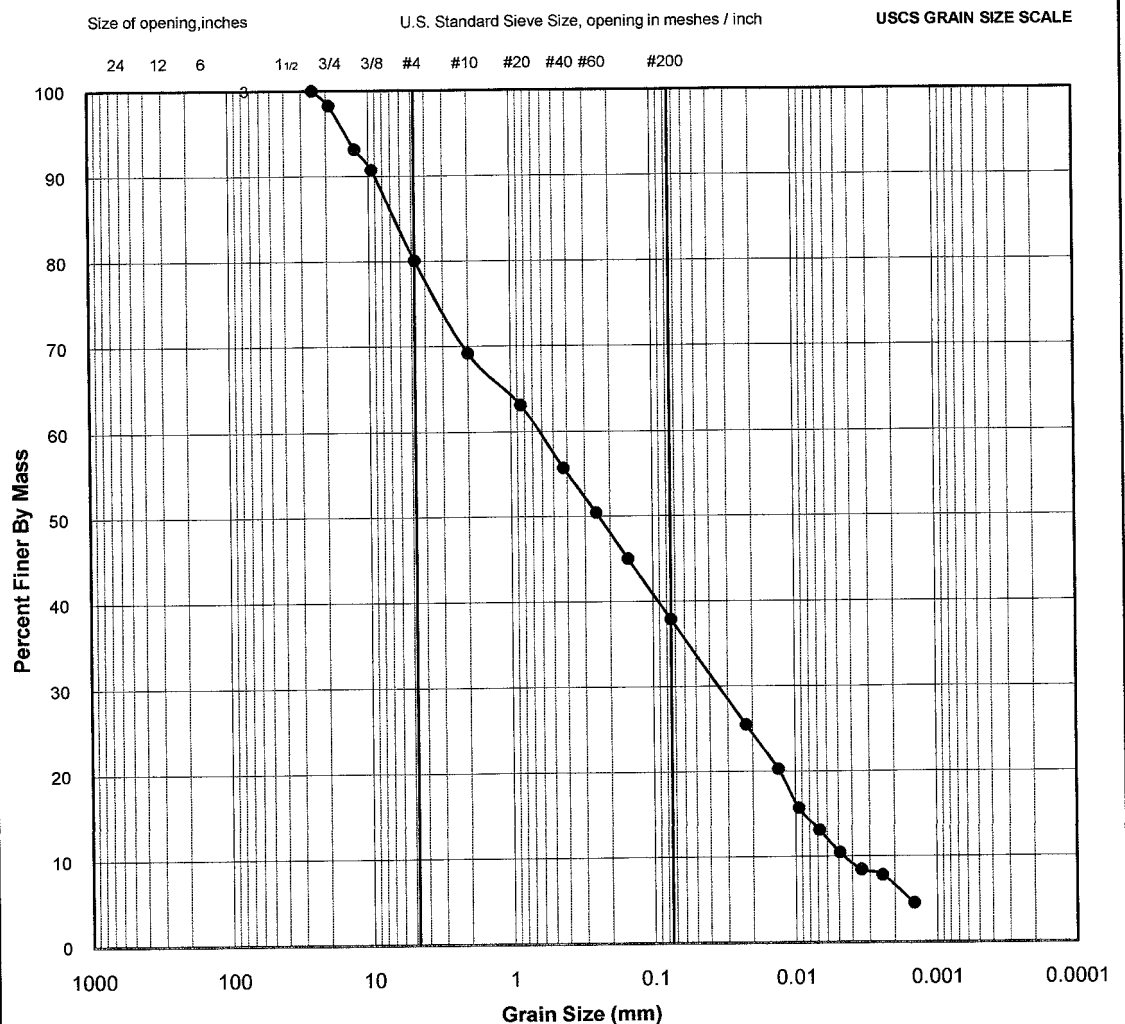
PARTICLE SIZE ANALYSIS OF SOILS

Reference

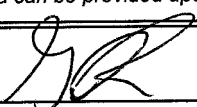
ASTM D 422-63 (2007)

Project No.:	09-1428-5007 (2000)	Sample No:	85
Client:	AEM	Field No.:	BG 092409-02
Project:	Meadowbank Gold Project	Depth (m):	N/A
Location:	Nunavut	Lab ID No:	SA85
Specific Gravity (assumed):	2.70	Other Soil/Bentonite sampled in place from	
Date Sampled:	September 24, 2009	Remarks: Bay Goose 30+665	
Dispersion Method:	Stirring		
Dispersion Period (min):	960.00		

Sieve Size (USC)	(mm)	% Passing
3.5"	87.50	100.0
3"	75.00	100.0
2"	50.00	100.0
1.5"	37.50	100.0
1"	25.00	100.0
3/4"	19.00	98.2
1/2"	12.50	93.2
3/8"	9.50	90.8
#4	4.75	80.1
#10	2.00	69.2
#20	0.850	63.1
#40	0.425	55.7
#60	0.250	50.4
#100	0.150	45.0
#200	0.075	37.9
-	0.0223	25.5
-	0.0132	20.3
-	0.0095	15.7
-	0.0068	13.1
-	0.0049	10.5
-	0.0034	8.5
-	0.0024	7.8
-	0.0015	4.6



* 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.

DE	September 30, 2009		Sept 30/09
TESTED BY	DATE	CHECKED BY	DATE

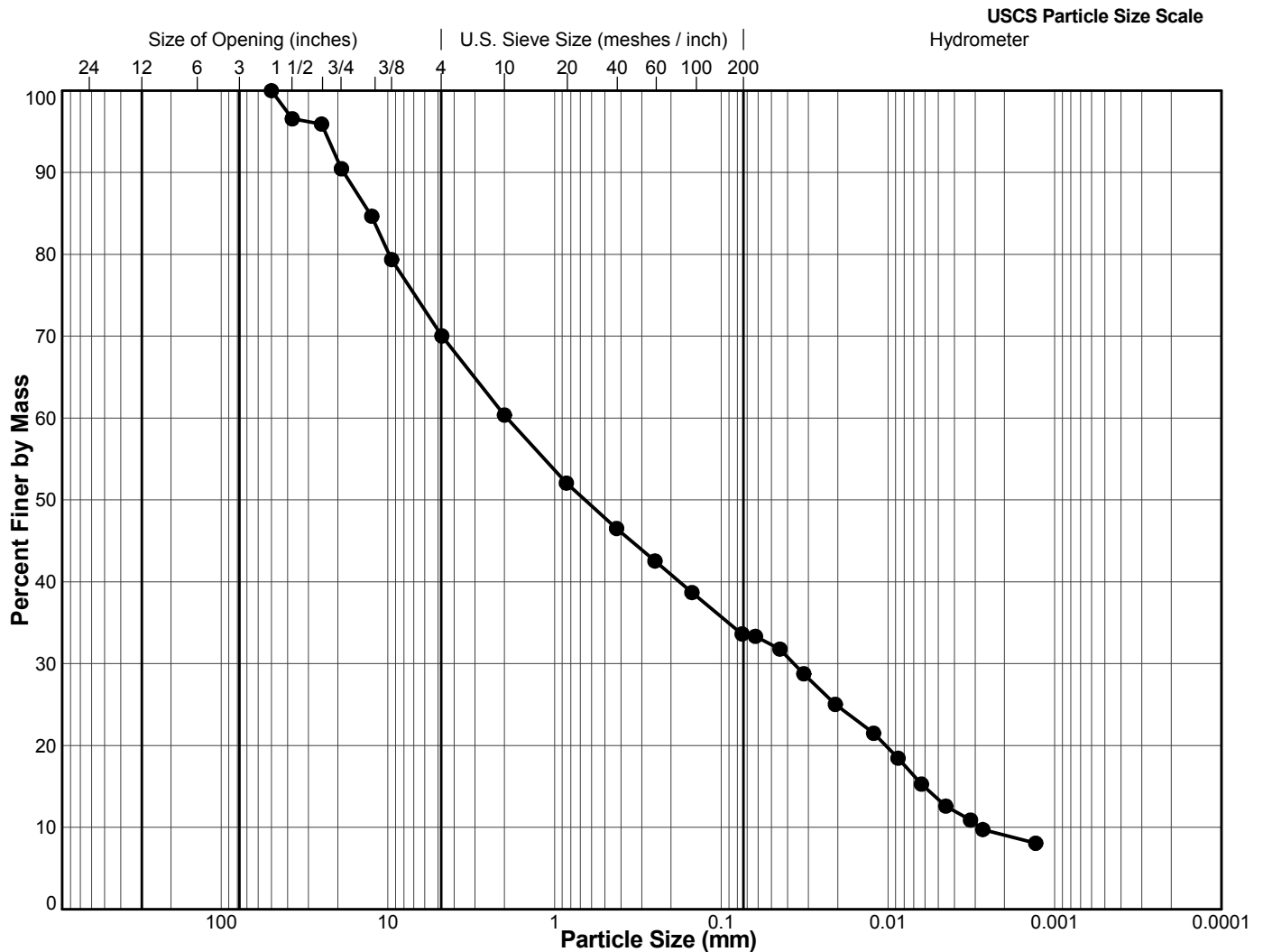
PARTICLE SIZE ANALYSIS OF SOILS

Reference(s)
ASTM D 422-63 (2007)

Client: Agnico	Sample Location: SB from Bucket 2011 testing
Project: 2009 Dike Construction	Sample No.: 105
Location: Nunavut	Depth Interval (m): N/A
Project No.: 09-1428-5007 Phase: 4000	Lab Schedule No.: 195

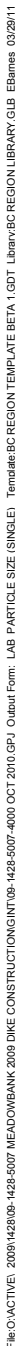
Other Remarks: N/A

Specific Gravity (assumed): 2.78	Shape: N/A
Max. Particle Size Passing (mm): 50	Hardness: N/A
Method: Split, Washed	Dispersion Method: Stirring
Hydrometer ID: BURNABY - 87024	Dispersion Period (min): 1



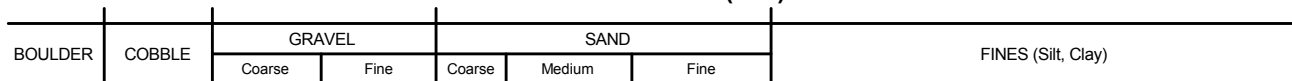
Boulder	Cobble	Gravel		Sand			Fines (Silt, Clay)
		Coarse	Fine	Coarse	Medium	Fine	

SK	3/8/2011	LP	3/21/2011
Tech	Date	Checked	Date



Reference(s)
ASTM D 422-63 (2007)

Hydrometer ID: BURNABY - 541360	Dispersion Period (min): 1
---------------------------------	----------------------------



Date _____

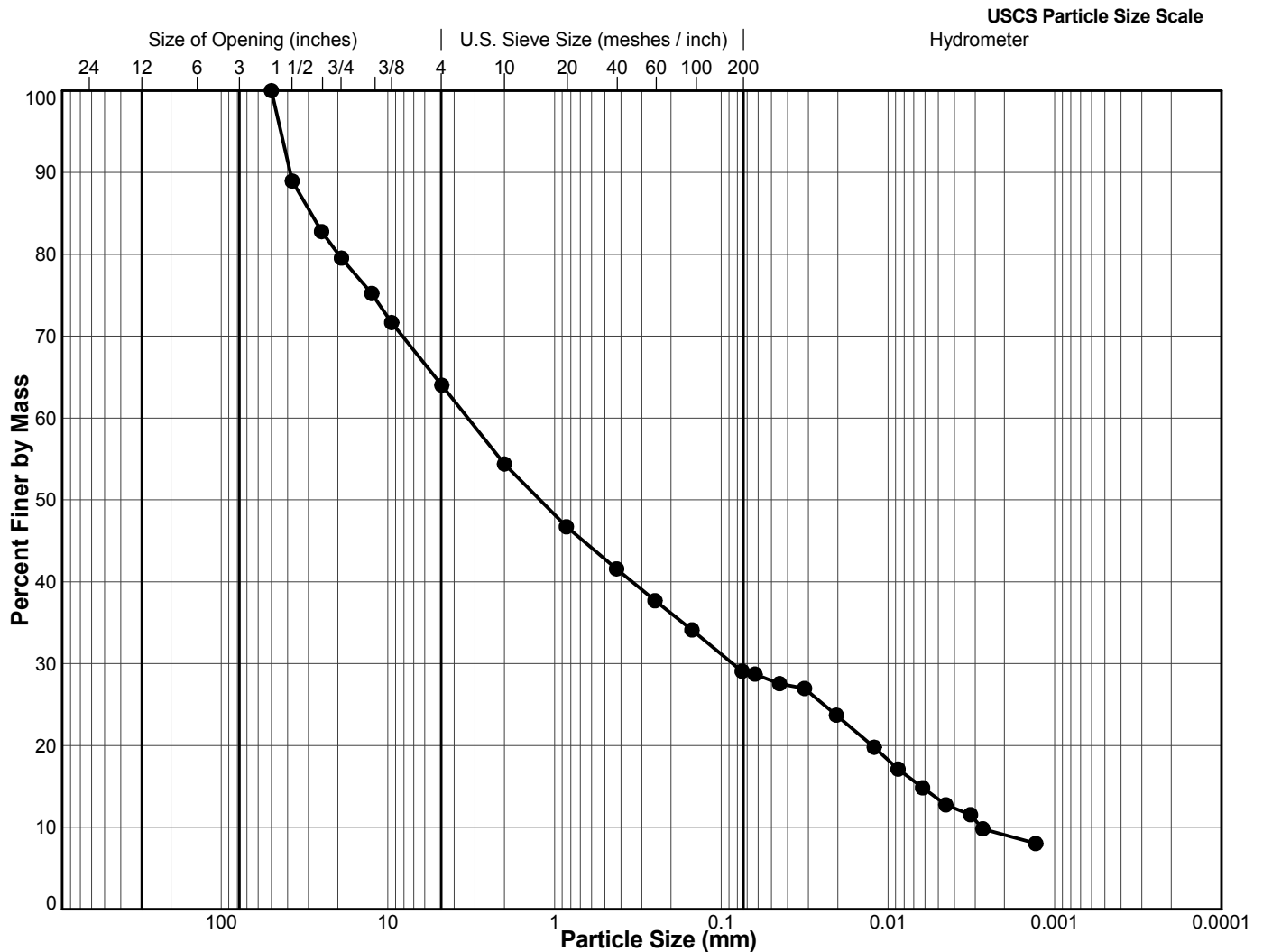
PARTICLE SIZE ANALYSIS OF SOILS

Reference(s)
ASTM D 422-63 (2007)

Client: Agnico	Sample Location: SB from Bucket 2011 testing
Project: 2009 Dike Construction	Sample No.: 314
Location: Nunavut	Depth Interval (m): N/A
Project No.: 09-1428-5007 Phase: 4000	Lab Schedule No.: 195

Other Remarks: N/A

Specific Gravity (assumed): 2.76	Shape: N/A
Max. Particle Size Passing (mm): 50	Hardness: N/A
Method: Split, Washed	Dispersion Method: Stirring
Hydrometer ID: BURNABY - 87024	Dispersion Period (min): 1



Boulder	Cobble	Gravel		Sand			Fines (Silt, Clay)
		Coarse	Fine	Coarse	Medium	Fine	

SK	3/8/2011	LP	3/21/2011
Tech	Date	Checked	Date

File: O:\ACTIVE_2009\1428\09-1428-5007 MEADOWBANK 2009 DIKE CONSTRUCTION\GINT\09-1428-5007-4000 OCT 2010.GPJ Output Form: LAB_PARTICLE SIZE (SINGLE) Template: BC REGION TEMPLATE BETA.1.GDT Library: BC REGION LIBRARY.GLB EBarnes 03/28/11

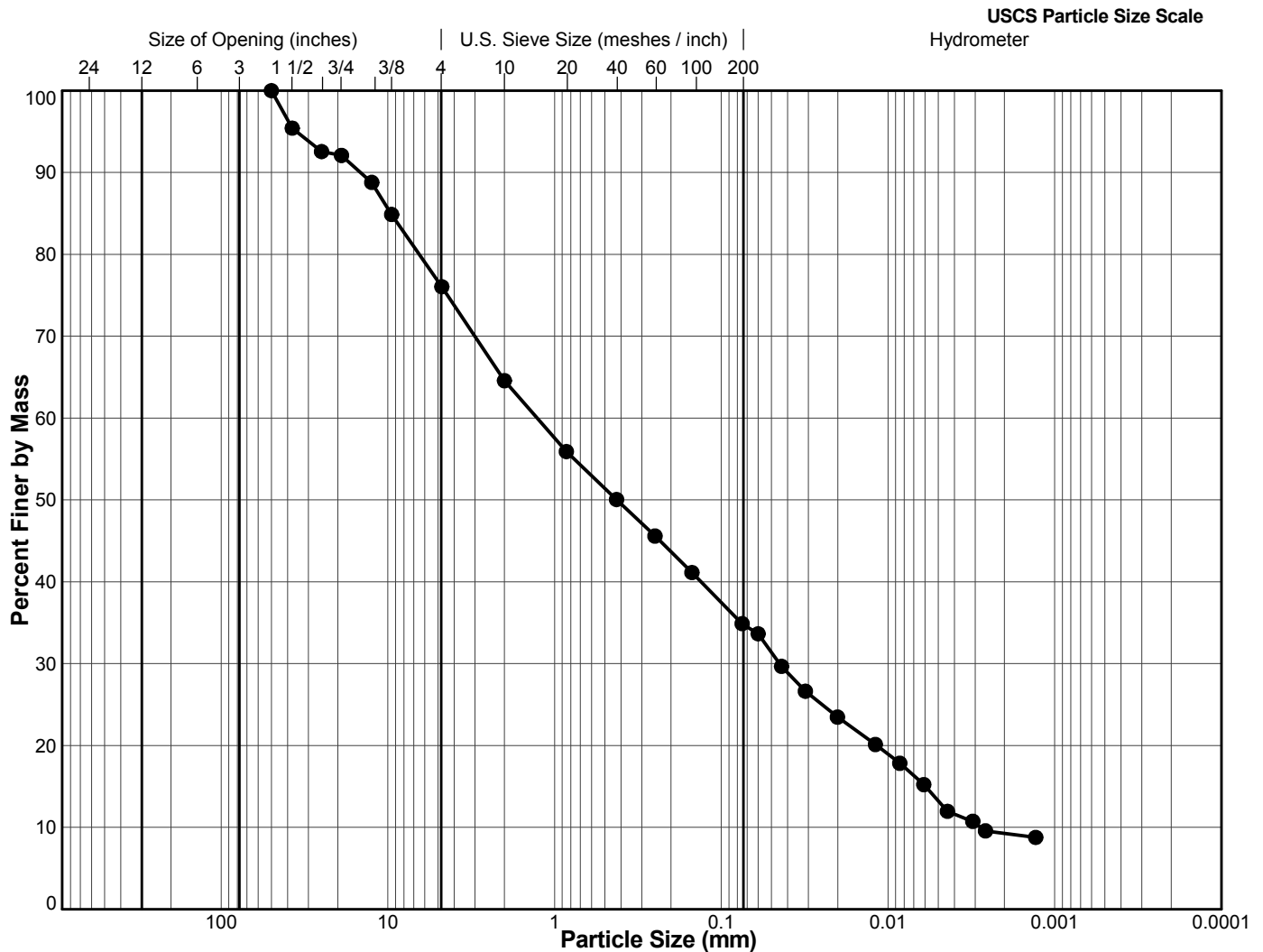
PARTICLE SIZE ANALYSIS OF SOILS

Reference(s)
ASTM D 422-63 (2007)

Client: Agnico	Sample Location: SB from Bucket 2011 testing
Project: 2009 Dike Construction	Sample No.: 315
Location: Nunavut	Depth Interval (m): N/A
Project No.: 09-1428-5007 Phase: 4000	Lab Schedule No.: 195

Other Remarks: N/A

Specific Gravity (assumed): 2.74	Shape: N/A
Max. Particle Size Passing (mm): 50	Hardness: N/A
Method: Split, Washed	Dispersion Method: Stirring
Hydrometer ID: BURNABY - 87024	Dispersion Period (min): 1



Boulder	Cobble	Gravel		Sand			Fines (Silt, Clay)
		Coarse	Fine	Coarse	Medium	Fine	

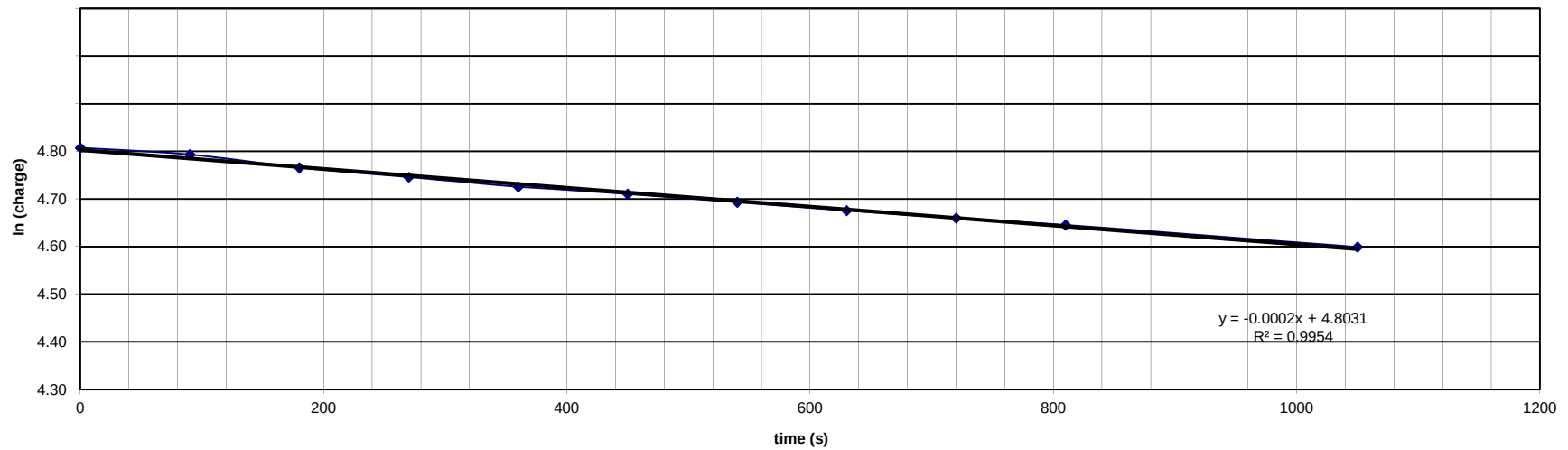
SK	3/8/2011	LP	3/21/2011
Tech	Date	Checked	Date

Measurements of Hydraulic Conductivity Using a Flexible Wall Permeameter											Reference: ASTM D5084-03 Method C																																												
Client		AEM		Location		SB from bucket		Falling Head, rising tailwater elevation																																															
Project		Bay Goose Dyke		Sample		#105																																																	
Location		Meadowbank		Depth																																																			
Project #		09-1428-5007/3000		Test Number		Ktest-1		Lab ID		226																																													
Remarks: Test specimen was taking water in during the end of primary consolidation Sample Geometry <table style="width:100%; border-collapse: collapse;"> <tr> <th></th> <th>Initial</th> <th>Final</th> <th></th> </tr> <tr> <td>Diameter =</td> <td>10.19</td> <td>10.30</td> <td>cm</td> </tr> <tr> <td>Length =</td> <td>8.82</td> <td>8.57</td> <td>cm</td> </tr> <tr> <td>Area =</td> <td>81.55</td> <td>83.29</td> <td>cm²</td> </tr> <tr> <td>Volume =</td> <td>719.3</td> <td>713.8</td> <td>cm³</td> </tr> </table> Test Parameters Cell Pressure = 40.0 psi Back Pressure = 30.0 psi s'_{3c} = 10.0 psi dV_c = 4.9 cc B_{value} = 0.96 a_{in} = 1.00 cm² a_{out} = 1.00 cm² Phase Relationships <table style="width:100%; border-collapse: collapse;"> <tr> <th></th> <th>Initial</th> <th>Final</th> </tr> <tr> <td>Wet Weight (g) =</td> <td>1512.7</td> <td>1466.4</td> </tr> <tr> <td>Dry Weight (g) =</td> <td>1311.2</td> <td>1311.2</td> </tr> <tr> <td>w (%) =</td> <td>15.4</td> <td>11.8</td> </tr> <tr> <td>r_{dry} (kg/m³) =</td> <td>1823</td> <td>1837</td> </tr> <tr> <td>S (%) =</td> <td>81.4</td> <td>---</td> </tr> <tr> <td>e =</td> <td>0.53</td> <td>0.51</td> </tr> <tr> <td>G_s (measured) =</td> <td>2.78</td> <td>2.78</td> </tr> </table>													Initial	Final		Diameter =	10.19	10.30	cm	Length =	8.82	8.57	cm	Area =	81.55	83.29	cm ²	Volume =	719.3	713.8	cm ³		Initial	Final	Wet Weight (g) =	1512.7	1466.4	Dry Weight (g) =	1311.2	1311.2	w (%) =	15.4	11.8	r_{dry} (kg/m ³) =	1823	1837	S (%) =	81.4	---	e =	0.53	0.51	G_s (measured) =	2.78	2.78
	Initial	Final																																																					
Diameter =	10.19	10.30	cm																																																				
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e =	0.53	0.51																																																					
G_s (measured) =	2.78	2.78																																																					
Read #	Date (dd/mm/yy)	Time (hh:mm)	Elapsed Time (min)	Burette Readings		Applied Pressure		Head Loss			Flow Volume		Viscosity Correction		k ₂₀ (cm/sec)																																								
				Bottom (cc)	Top (cc)	P _{bot} (psi)	P _{top} (psi)	h (cm)	h ₁ (cm)	h ₂ (cm)	V _{in} (cc)	V _{out} (cc)	Temp (°C)	R _t																																									
Trial#1																																																							
0	12/8/2009 7:45		0	0.1	24.9	33.5	30.0	270.9	--	--	0.0	0.0	24.9	0.976	--																																								
1	12/8/2009 9:15		90	0.3	24.8	33.5	30.0	270.6	270.9	270.6	0.2	0.1	24.9	0.976	1.0E-08																																								
2	12/8/2009 10:30		165	0.5	24.6	33.5	30.0	270.2	270.9	270.2	0.4	0.3	24.7	0.983	1.3E-08																																								
3	12/8/2009 16:10		505	1.1	23.9	33.5	30.0	268.9	270.9	268.9	1.0	1.0	25.2	0.981	1.2E-08																																								
4	12/9/2009 6:50		1385	3.0	22.6	33.5	30.0	265.7	270.9	265.7	2.9	2.3	24.1	0.979	1.2E-08																																								
5	12/10/2009 6:55		2830	8.1	17.8	33.5	30.0	255.8	270.9	255.8	8.0	7.1	25.0	0.979	1.7E-08																																								
6	12/11/2009 7:15		4290	10.6	15.5	33.5	30.0	251.0	270.9	251.0	10.5	9.4	22.3	0.979	1.5E-08																																								
7	12/14/2009 7:10		8605	17.5	8.8	33.5	30.0	237.4	270.9	237.4	17.4	16.1	22.9	0.979	1.3E-08																																								
8	12/15/2009 7:40		10075	19.7	6.9	33.5	30.0	233.3	270.9	233.3	19.6	18.0	21.8	0.979	1.2E-08																																								
											Average k₂₀ (cm/sec) =			1.4E-08																																									
														(Reading 2 to 8)																																									
Sample Description: Soil Bentonite Comments : Range of hydraulic gradient = 31.6 to 27.2 Permeant Liquid : Tap water Conversion from pressure to water head: 1 psi = 70.305 cm of H₂O * The test data given herein pertain to the sample provided only. * This report constitutes a testing service only. Interpretation of the data given here may be provided upon request.																																																							
LL Tested By				Tuesday, December 15, 2009 Date				LP Reviewed By				Thursday, December 17, 2009 Date																																											

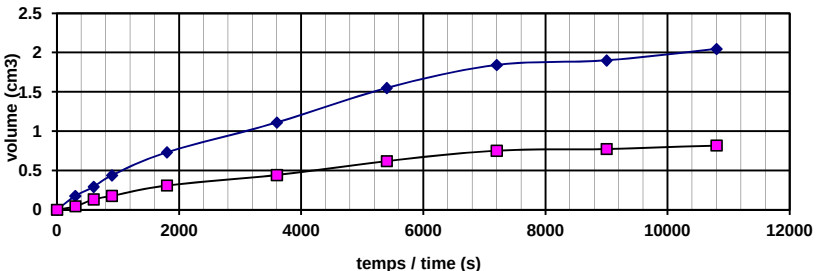
Measurement of Hydraulic Conductivity of Porous Material Using a Rigid-Wall, Compaction-Mold Permeameter - ASTM D 5856-95

Project No. :	08-1428-0029/5000	Client :	AEM	BH :																																								
Sch#		Project :	Bay Goose Dike Construction	Sample :SA58																																								
Lab Work:	OM	Source:	Native	Depth :																																								
Method:	Falling Head Test																																											
Geometry		Mass	g																																									
Init. Thickness (cm)		Mass of init. wet soil	g		6215.3																																							
Diameter (cm)		Mass of final wet soil	g		6250.0																																							
Area (cm)		Mass of dry soil	g		5472.6																																							
Volume (cm ³)		Specific gravity			2.756																																							
Test conditions																																												
Saturation (%)				Wet density (g/cm ³)	2.453																																							
By initial drying				Dry density (g/cm ³)	2.160																																							
By final drying				Opt. Mod. Proctor (g/cm ³)																																								
Init. water content (%)				Opt. water content (%)																																								
Final water content (%)				% of opt. Mod. Proctor (%)																																								
Calibration (cm)				Sect. burette / sect. Test tube																																								
	head 99.00	Test tube used		0.442	0.292																																							
	base 66.10			Temperature	17.0																																							
<table border="1"> <tr> <td colspan="3">Result</td></tr> <tr> <td></td><td>Variable head test</td><td></td></tr> <tr> <td></td><td></td><td></td></tr> <tr> <td></td><td>Void ratio (e)</td><td>0.276</td></tr> <tr> <td></td><td>Porosity (n)</td><td>0.216</td></tr> <tr> <td></td><td>Permeability (cm/s)</td><td>2.53E-06</td></tr> <tr> <td></td><td></td><td></td></tr> <tr> <td colspan="3">Comments:</td></tr> <tr> <td></td><td></td><td></td></tr> <tr> <td></td><td></td><td></td></tr> <tr> <td></td><td></td><td></td></tr> <tr> <td></td><td></td><td></td></tr> <tr> <td></td><td></td><td></td></tr> </table>						Result				Variable head test						Void ratio (e)	0.276		Porosity (n)	0.216		Permeability (cm/s)	2.53E-06				Comments:																	
Result																																												
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Comments:																																												

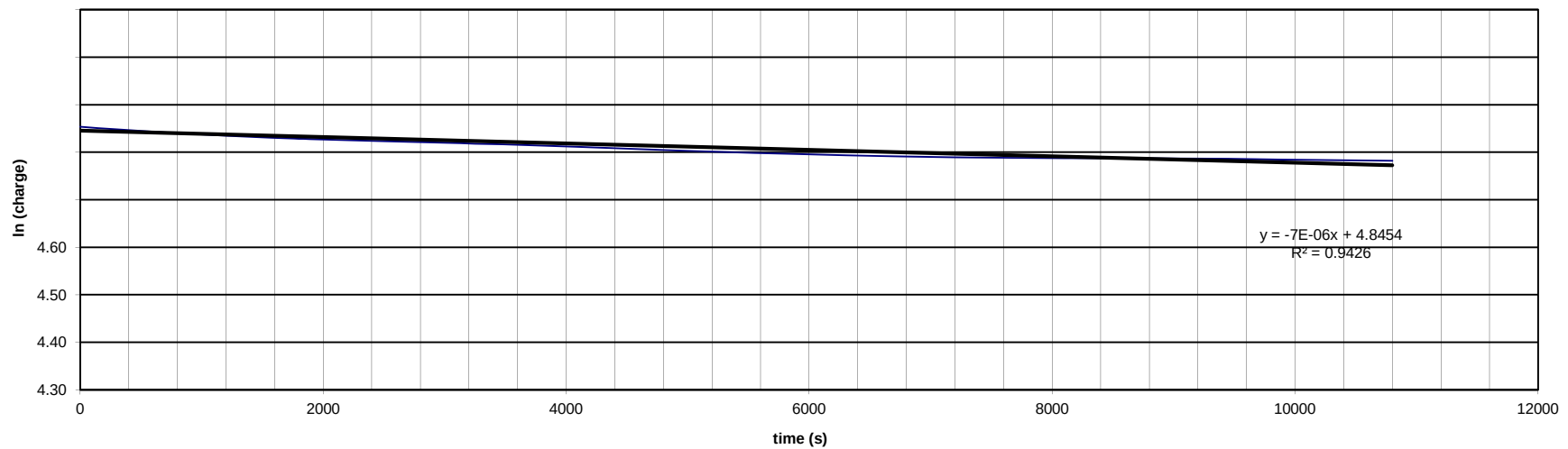
15/09/2009			0		0	page 2			
time	time	reading	reading	in	out	water	diff.	k	k20
min	s	head		Volume	Volume	head	s	cm/s	cm/s
								k	k20
						cm	s	cm/s	cm/s
		cm	cm	cm3	cm3				
0.00	0.00	97.00	7.5	0	0	122.4	0.00	-	-
1.50	90.00	95.80	8.00	0.35	0.22	120.7	90.00	1.79E-06	1.93E-06
3.00	180.00	93.00	8.50	1.17	0.44	117.4	180.00	2.68E-06	2.88E-06
4.50	270.00	91.00	8.80	1.75	0.57	115.1	270.00	2.63E-06	2.84E-06
6.00	360.00	89.20	9.30	2.28	0.80	112.8	360.00	2.62E-06	2.82E-06
7.50	450.00	88.20	10.00	2.57	1.10	111.1	450.00	2.49E-06	2.68E-06
9.00	540.00	86.80	10.50	2.98	1.33	109.2	540.00	2.44E-06	2.63E-06
10.50	630.00	85.50	11.10	3.36	1.59	107.3	630.00	2.41E-06	2.60E-06
12.00	720.00	84.30	11.60	3.71	1.81	105.6	720.00	2.37E-06	2.55E-06
13.50	810.00	83.20	12.00	4.03	1.99	104.1	810.00	2.31E-06	2.49E-06
17.50	1050.00	80.50	14.00	4.82	2.87	99.4	1050.00	2.29E-06	2.47E-06
21.00	1260.00	77.80	15.00	5.61	3.31	95.7	1260.00	2.25E-06	2.43E-06
25.00	1500.00	75.50	16.00	6.28	3.76	92.4	1500.00	2.16E-06	2.33E-06
33.00	1980.00	71.00	17.50	7.60	4.42	86.4	1980.00	2.03E-06	2.19E-06
								Average	2.53E-06



Measurement of Hydraulic Conductivity of Porous Material Using a Rigid-Wall, Compaction-Mold Permeameter - ASTM D 5856-95

Project No. :	08-1428-0029/5000	Client :	AEM	BH :																													
Sch#		Project :	Bay Goose Dike Construction	Sample :	SA59																												
Lab Work:	OM	Source:	Native	Depth :																													
Method:	Falling Head Test																																
Lab Work:	OM	Source:	Native	Depth :																													
Method:	Falling Head Test																																
	Geometry			Mass	g																												
	Init. Thickness (cm)	14.467		Mass of init. wet soil	g																												
	Diameter (cm)	15.100		Mass of final wet soil	g																												
	Area (cm)	179.079		Mass of dry soil	g																												
	Volume (cm ³)	2590.67		Specific gravity																													
	Test conditions																																
	Saturation (%)			Wet density (g/cm ³)	2.378																												
	By initial drying			Dry density (g/cm ³)	2.067																												
	By final drying			Opt. Mod. Proctor (g/cm ³)																													
	Init. water content (%)	15.0		Opt. water content (%)																													
	Final water content (%)	16.6		% of opt. Mod. Proctor (%)																													
Calibration (cm)				Sect. burette / sect. Test tube																													
	head 98.00			0.442	0.292																												
	base 62.00			Temperature	14.0																												
																																	
<table border="1"> <thead> <tr> <th colspan="2">Result</th> </tr> </thead> <tbody> <tr> <td>Variable head test</td> <td></td> </tr> <tr> <td>Void ratio (e)</td> <td>0.333</td> </tr> <tr> <td>Porosity (n)</td> <td>0.250</td> </tr> <tr> <td>Permeability (cm/s)</td> <td>1.65E-07</td> </tr> <tr> <td colspan="2">Comments:</td> </tr> <tr><td colspan="2"> </td></tr> <tr><td colspan="2"> </td></tr> <tr><td colspan="2"> </td></tr> <tr><td colspan="2"> </td></tr> <tr><td colspan="2"> </td></tr> <tr><td colspan="2"> </td></tr> <tr><td colspan="2"> </td></tr> <tr><td colspan="2"> </td></tr> </tbody> </table>						Result		Variable head test		Void ratio (e)	0.333	Porosity (n)	0.250	Permeability (cm/s)	1.65E-07	Comments:																	
Result																																	
Variable head test																																	
Void ratio (e)	0.333																																
Porosity (n)	0.250																																
Permeability (cm/s)	1.65E-07																																
Comments:																																	

20/09/2009					page 2				
time	time	reading	reading	in	out	water	diff.	k	k20
min	s	head	base	Volume	Volume	head	s	cm/s	cm/s
		cm	cm	cm3	cm3	cm			
0.00	0.00	97.50	5.3	0	0	128.2	0.00	-	-
5.00	300.00	96.90	5.40	0.18	0.04	127.5	300.00	2.15E-07	2.48E-07
10.00	600.00	96.50	5.60	0.29	0.13	126.9	600.00	2.01E-07	2.31E-07
15.00	900.00	96.00	5.70	0.44	0.18	126.3	900.00	1.96E-07	2.26E-07
30.00	1800.00	95.00	6.00	0.73	0.31	125.0	1800.00	1.66E-07	1.91E-07
60.00	3600.00	93.70	6.30	1.11	0.44	123.4	3600.00	1.25E-07	1.44E-07
90.00	5400.00	92.20	6.70	1.55	0.62	121.5	5400.00	1.17E-07	1.35E-07
120.00	7200.00	91.20	7.00	1.84	0.75	120.2	7200.00	1.06E-07	1.22E-07
150.00	9000.00	91.00	7.05	1.90	0.77	120.0	9000.00	8.72E-08	1.00E-07
180.00	10800.00	90.50	7.15	2.05	0.82	119.4	10800.00	7.82E-08	9.00E-08
								Average	1.65E-07



Measurement of Hydraulic Conductivity of Porous Material Using a Rigid-Wall, Compaction-Mold Permeameter

Reference
ASTM D 5856-95 (2002)

Project No: 09-1428-5007 Phs 4000

Client: Agnico

Project: 09 Dike Construction

Location: Nunavut

Borehole: Stn 30+884

Sample No.: 302

Depth (m):
Lab ID No: 195

Preparation Notes

scooped and rodded into mold at natural water content

Sample Compaction: scoop and rod

Target Compaction Degree: N/A

 r_{dry} Max (kg/m³): N/A

Permeameter Type: Single Ring Base Plate

Initial Dimensions
 w_o %: 14.84

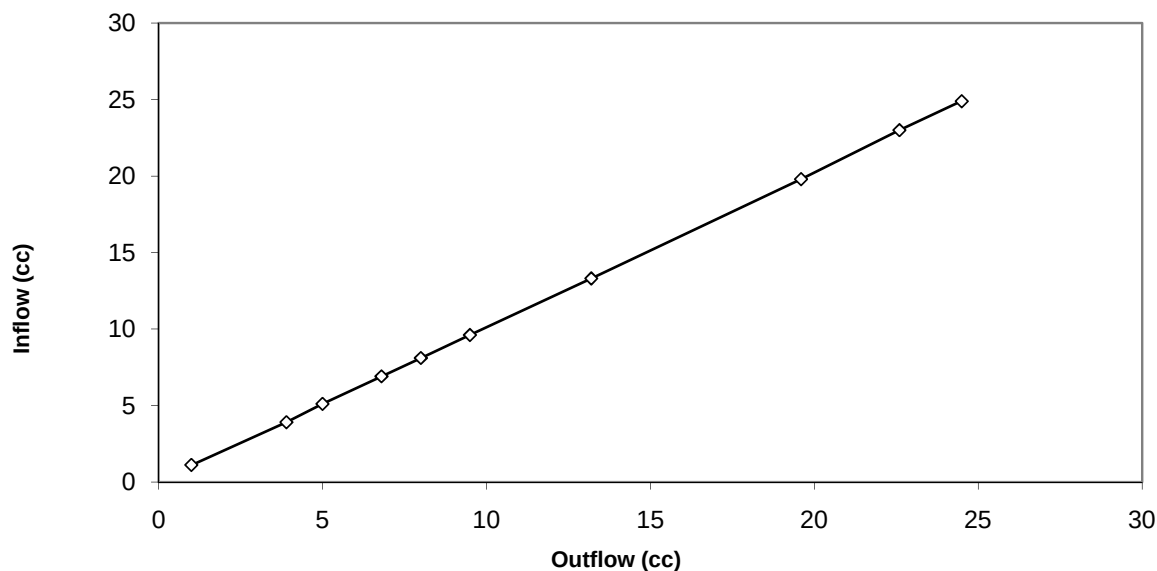
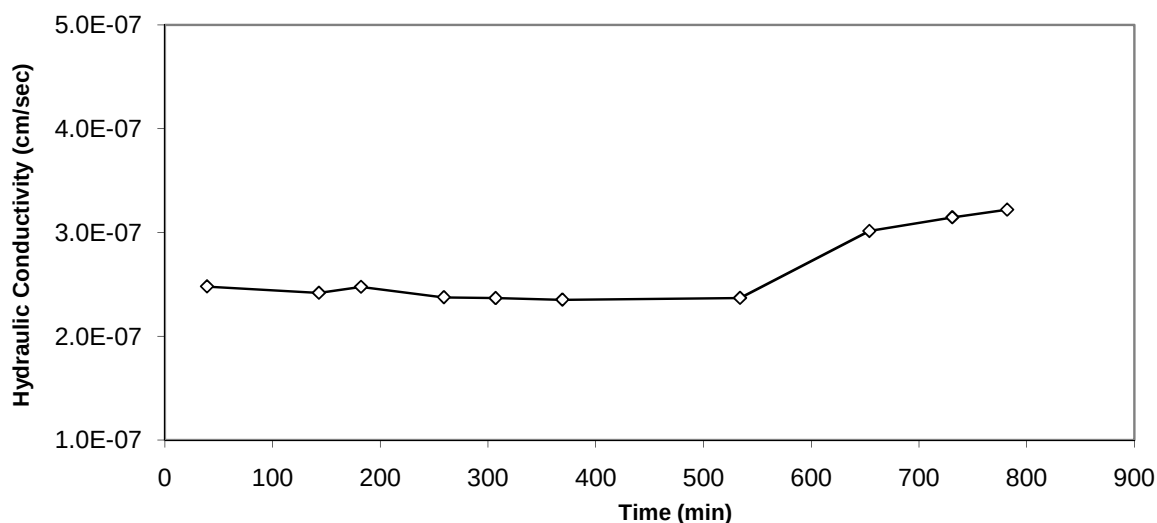
 r_{dry} (kg/m³): N/A

Permeant Liquid:
 D_o (cm): 15.25

 H_o (cm): 10.31

 V_o (cm³): 1883.2

De-aired Tap Water

Test Method: C:Rising Tailwater (Falling Head)

Test Comments:
Amount of Swelling Measured: 0.0%

Duration of Test (min): 534

Final Dimensions
 w_f %: 15.20

 r_{dry} (kg/m³): 1964

Gs (assumed): 2.70

 D_f (cm): 15.25

 H_f (cm): 10.31

 V_f (cm³): #####

Saturation % 109.5

Total Number of Pore Volumes 0.222

Range of Hydraulic Gradient: 8.87-10.02

Average Conductivity k (cm/s): 2.71E-07

Average Conductivity k_{20} (cm/s): **2.48E-07**

TM

08-Nov-10

LP

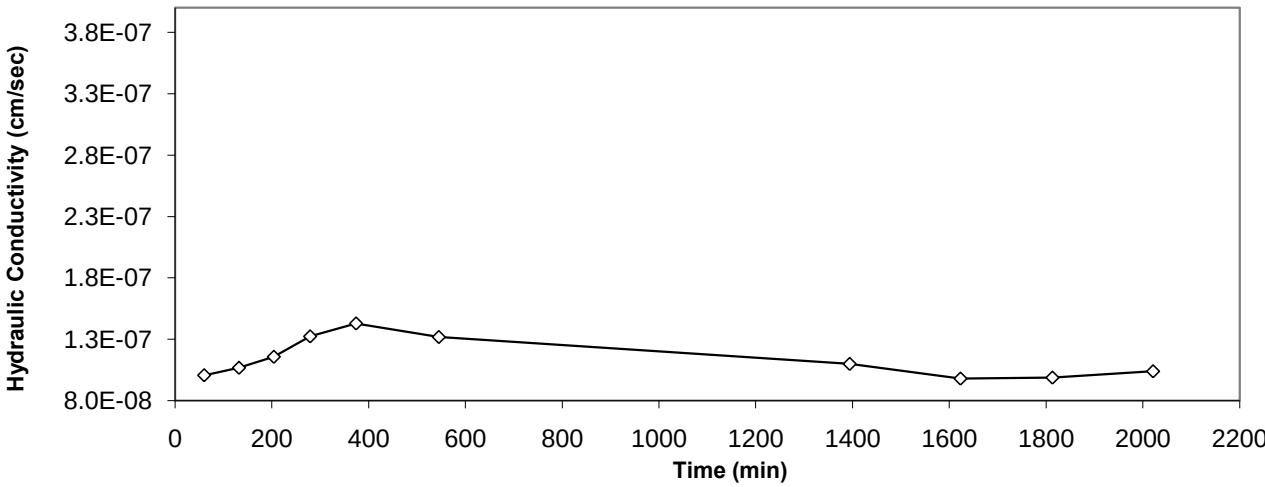
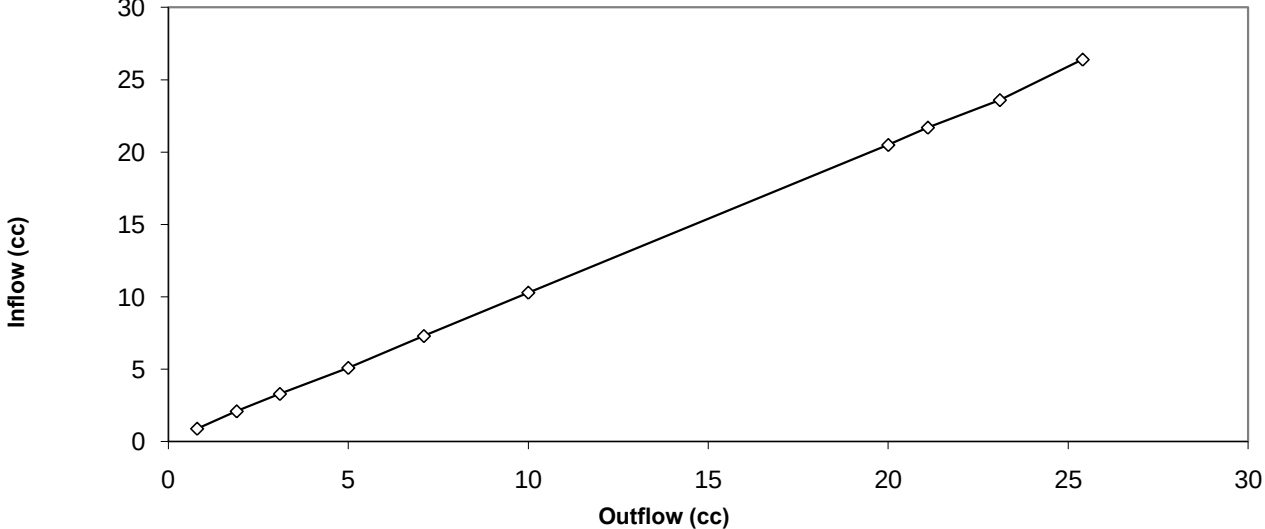
November 22, 2010

TESTED BY

DATE

CHECKED BY

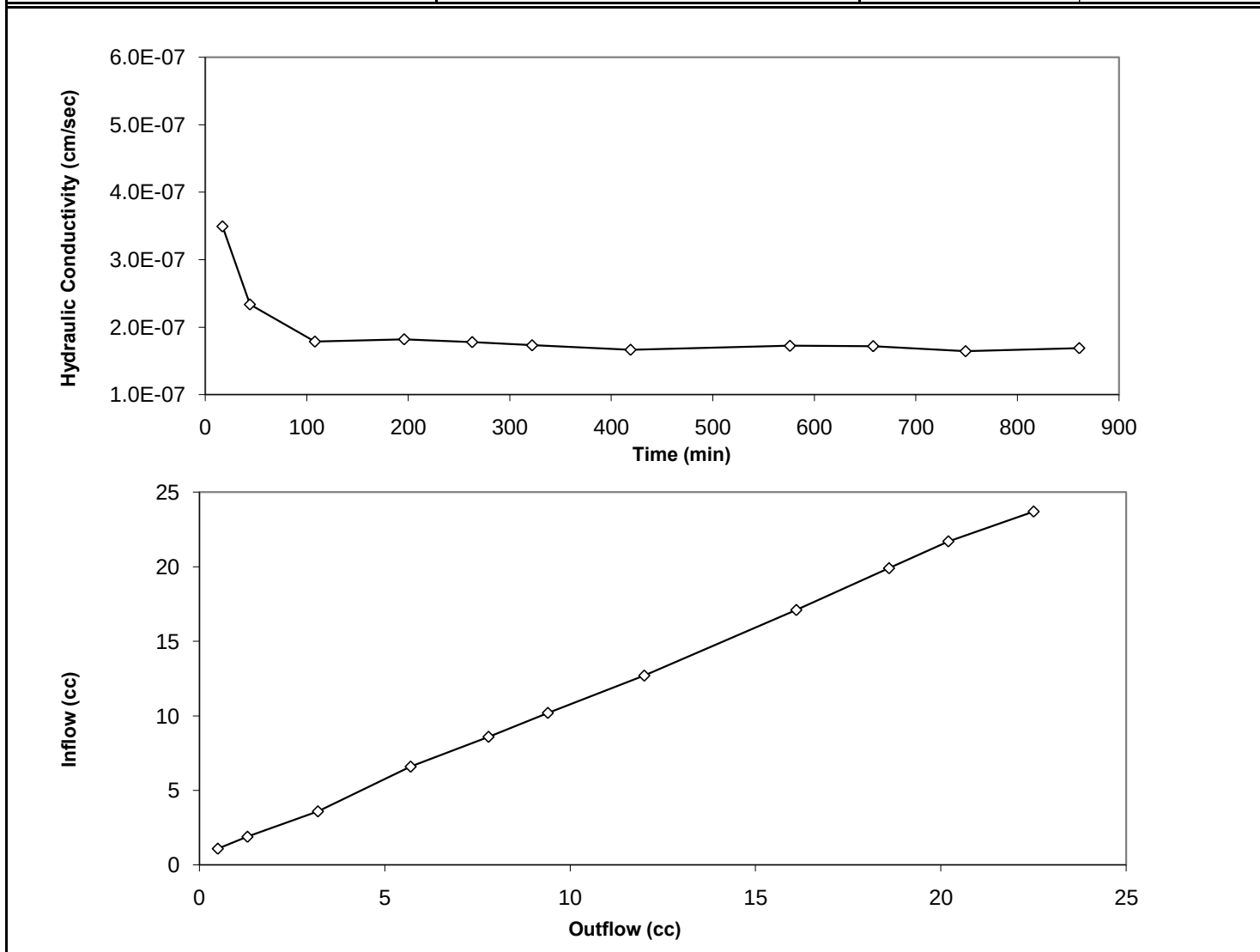
DATE

Measurement of Hydraulic Conductivity of Porous Material Using a Rigid-Wall, Compaction-Mold Permeameter				Reference ASTM D 5856-95 (2002)	
Project No: 09-1428-5007 Phs 4000 Client: Agnico Project: 09 Dike Construction Location: Nunavut			Borehole: Stn 31+668 Sample No.: 314 Depth (m): Lab ID No: 195		
Preparation Notes scooped and rodded into mold at natural water content		Sample Compaction: scoop and rod Target Compaction Degree: N/A ρ_{dry} Max (kg/m³): N/A Permeameter Type: Single Ring Base Plate		Initial Dimensions w_o %: 16.98 ρ_{dry} (kg/m³): N/A Permeant Liquid: De-aired Tap Water D_o (cm): 15.24 H_o (cm): 10.31 V_o (cm³): 1880.3	
Test Method: C:Rising Tailwater (Falling Head)					
 					
Test Comments: Amount of Swelling Measured: 0.0% Duration of Test (min): 1394		Final Dimensions w_f %: 17.31 ρ_{dry} (kg/m³): 1855 Gs (assumed): 2.70		D_f (cm): 15.24 H_f (cm): 10.31 V_f (cm³): 1880.0 Saturation %: 102.5 Total Number of Pore Volumes: 0.200 Range of Hydraulic Gradient: 12.21-13.45 Average Conductivity k (cm/s): 1.12E-07 Average Conductivity k20 (cm/s): 1.17E-07	
TM	26-Oct-10	LP	November 22, 2010		
TESTED BY	DATE	CHECKED BY	DATE		

Measurement of Hydraulic Conductivity of Porous Material Using a Rigid-Wall, Compaction-Mold Permeameter	Reference ASTM D 5856-95 (2002)
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Project No: 09-1428-5007 Phs 4000 Client: Agnico Project: 09 Dike Construction Location: Nunavut	Borehole: Stn 31+532 Sample No.: 315 Depth (m): Lab ID No: 195
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Preparation Notes scooped and rodded into mold at natural water content	Sample Compaction: scoop and rod Target Compaction Degree: N/A ρ_{dry} Max (kg/m³): N/A Permeameter Type: Single Ring Base Plate	Initial Dimensions w_o %: 20.31 ρ_{dry} (kg/m³): N/A Permeant Liquid: De-aired Tap Water
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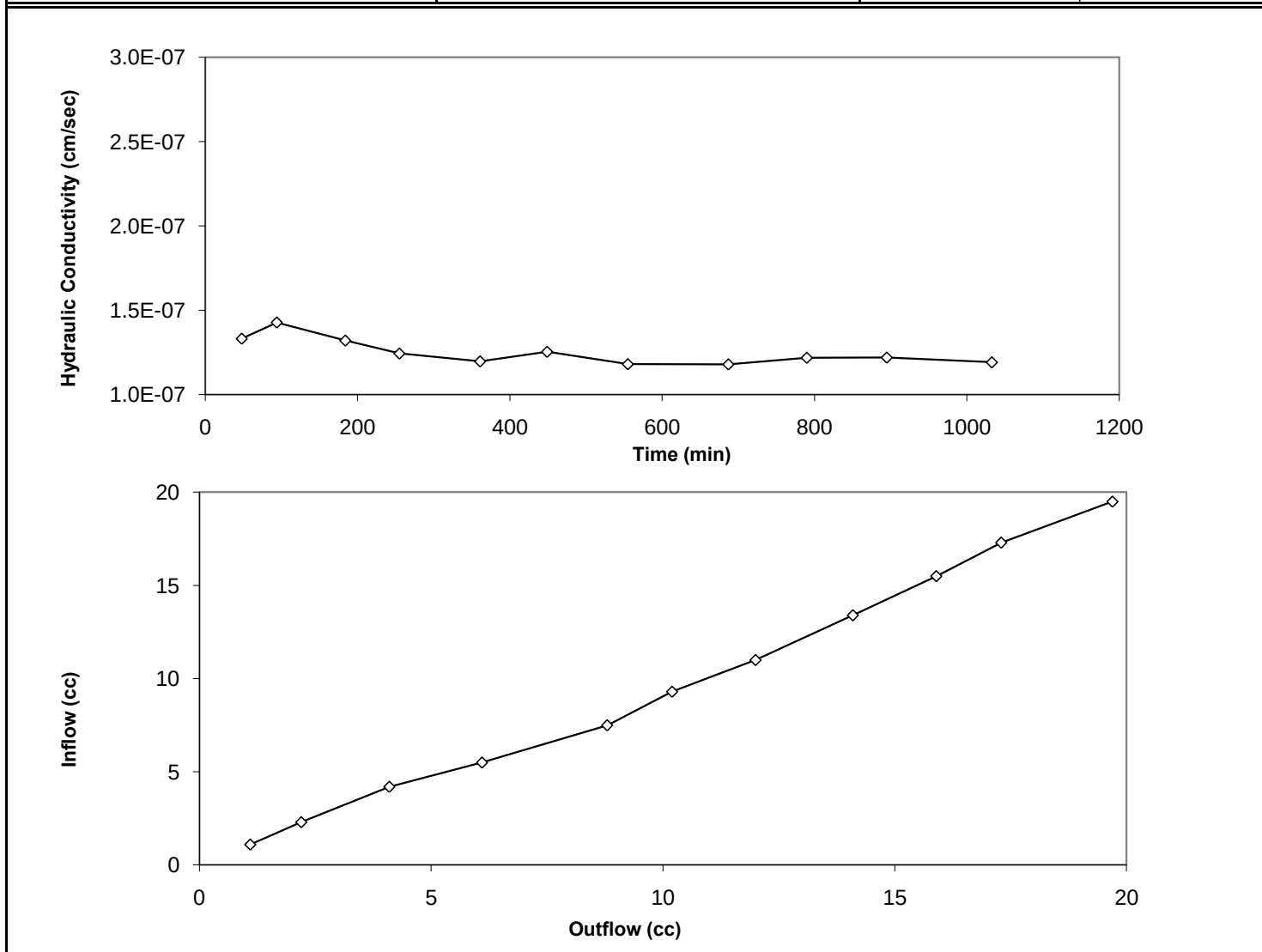
Test Comments: Amount of Swelling Measured: 0.0% Duration of Test (min): 419	Final Dimensions w_f %: 20.26 ρ_{dry} (kg/m³): 1761 Gs (assumed): 2.70	D_f (cm): 15.25 H_f (cm): 10.31 V_f (cm³): 1883.2 Saturation %: 102.6	Total Number of Pore Volumes: 0.179 Range of Hydraulic Gradient: 15.78-16.86 Average Conductivity k (cm/s): 1.95E-07 Average Conductivity k20 (cm/s): 2.04E-07
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TM	20-Oct-10	LP	November 22, 2010
TESTED BY	DATE	CHECKED BY	DATE

Measurement of Hydraulic Conductivity of Porous Material Using a Rigid-Wall, Compaction-Mold Permeameter	Reference ASTM D 5856-95 (2002)
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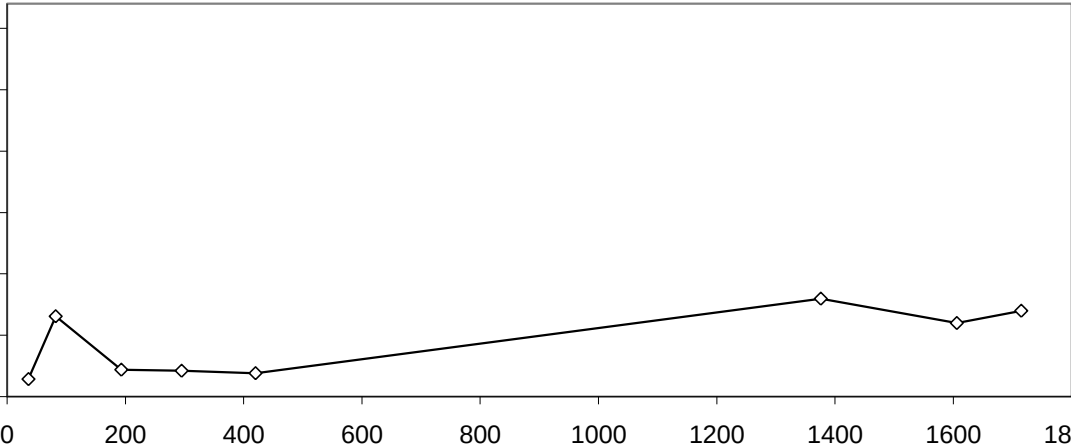
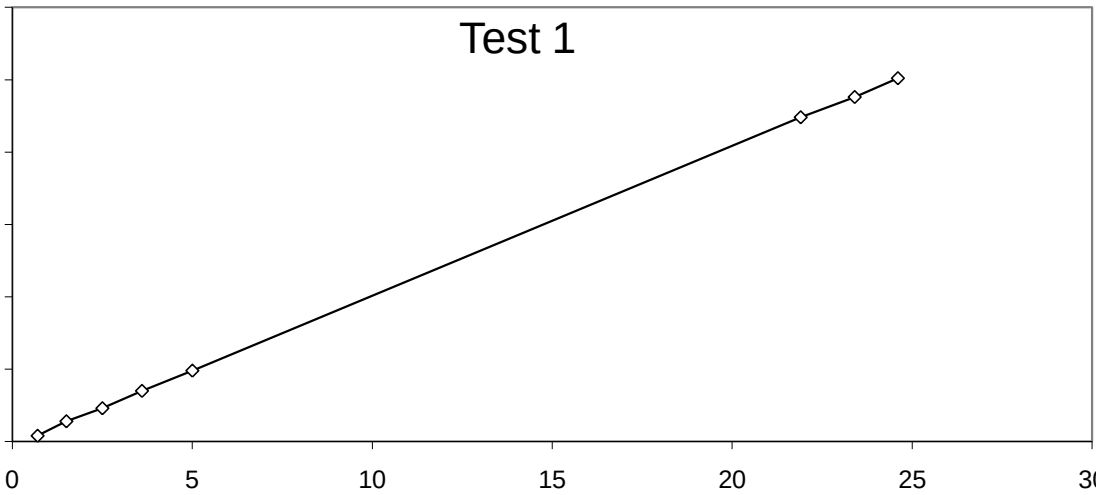
Project No: 09-1428-5007 Phs 4000 Client: Agnico Project: 09 Dike Construction Location: Nunavut	Borehole: Stn 31+424 Sample No.: 316 Depth (m): Lab ID No: 195
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Preparation Notes scooped and rodded into mold at natural water content	Sample Compaction: scoop and rod Target Compaction Degree: N/A ρ_{dry} Max (kg/m³): N/A Permeameter Type: Single Ring Base Plate	Initial Dimensions D_o (cm): 15.25 w_o %: 15.89 ρ_{dry} (kg/m³): N/A Permeant Liquid: De-aired Tap Water
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Test Comments: Amount of Swelling Measured: 0.0% Duration of Test (min): 555	Final Dimensions w_f %: 17.36 ρ_{dry} (kg/m³): 1838 Gs (assumed): 2.70	D_f (cm): 15.25 H_f (cm): 10.31 V_f (cm³): 1884.2 Saturation %: 100.0	Total Number of Pore Volumes: 0.185 Range of Hydraulic Gradient: 10.77-11.42 Average Conductivity k (cm/s): 1.27E-07 Average Conductivity k20 (cm/s): 1.27E-07
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TM	08-Oct-10	LP	November 22, 2010
TESTED BY	DATE	CHECKED BY	DATE

Measurement of Hydraulic Conductivity of Porous Material Using a Rigid-Wall, Compaction-Mold Permeameter				Reference ASTM D 5856-95 (2002)	
Project No: 09-1428-5007 Phs 4000			Borehole: Stn 31+320		
Client: Agnico			Sample No.: 317		
Project: 09 Dike Construction			Depth (m):		
Location Nunavut			Lab ID No: 195		
Preparation Notes		Sample Compaction: scoop and rod		Initial Dimensions	
scooped and rodded into mold at natural water content		Target Compaction Degree: N/A		D _o (cm): 15.24	
		ρ _{dry} Max (kg/m ³): N/A		w _o %: 17.33	
		Permeameter Type: Single Ring Base Plate		ρ _{dry} (kg/m ³): N/A	
Test Method: C:Rising Tailwater (Falling Head)				Permeant Liquid: De-aired Tap Water	
Hydraulic Conductivity (cm/sec)  Time (min) Inflow (cc)  Outflow (cc)					
Test Comments:		Final Dimensions		D _f (cm): 15.24	
		w _f %: 16.81		Total Number of Pore Volumes: 0.135	
Amount of Swelling Measured: 0.0%		ρ _{dry} (kg/m ³): 1815		H _f (cm): 10.31	
Duration of Test (min): 1606		Gs (assumed): 2.70		V _f (cm ³): 1880.3	
				Range of Hydraulic Gradient: 9.65-10.87	
				Average Conductivity k (cm/s): 1.24E-07	
				Average Conductivity k ₂₀ (cm/s): 1.24E-07	
TM		05-Oct-10		LP	
TESTED BY		DATE		November 22,2010	
				DATE	

SPECIFIC GRAVITY OF SOIL SOLIDS

Reference

ASTM C 127-07
ASTM D 854-06 Method B

Project No.:	09-1428-5007/4000	Borehole	N/A
Client:	Agnico Eagle Mines	Sample No.:	105
Project:	Meadowbank-SB Testing	Depth (m):	N/A
Location:	Bay-Goose	Lab Sch No:	030

Specific Gravity of Fine Fraction (ASTM D 854-06)

Percentage Passing #4 sieve		100	
Test Number		1	2
Flask Number		4	7
Air Removal Method		Vacuum	Vacuum
Mass of Flask (g)		172.71	171.29
Mass of Flask + Dry Soil (g)	M_p	300.75	302.68
Mass of Dry Soil (g)		128.07	131.38
Mass of Flask + Soil + Water (g)	$M_{pws,t}$	752.88	752.98
Test Temperature (g)	T_t	23.10	23.10
Mass of Flask + Water (g)	$M_{pw,t}$	670.87	668.90
Mass of Dish + Dry Soil (g)		382.21	430.06
Mass of Dish (g)		254.14	298.68
Mass of Oven Dry Soil (g)	M_s	128.07	131.38
Temperature Coefficient	K	1.00	1.00
Density of Solids (g/cm ³)	ρ_s	2.78	2.78
Specific Gravity at Test Temperature	G_t	2.79	2.78
Specific Gravity at 20°C	$G_{20^\circ C}$	2.79	2.78
AVERAGE SPECIFIC GRAVITY		2.78	

Specific Gravity of Coarse Fraction (ASTM C 127-07)

Percentage Retained on #4 sieve		
Mass of Sample in Water (g)	A	
Mass of Sample @ SSD (g)	B	
Mass of Oven Dried Sample (g)	C	
Bulk G (Oven Dry)	$C/(B-A)$	
Bulk G (SSD)	$B/(B-A)$	
Apparent	$C/(C-A)$	
Absorbion (%)	$(B-C)/C$	

Combined Specific Gravity

COMBINED SPECIFIC GRAVITY	Gavg @20°C
----------------------------------	------------

* 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.

E.Barnes	March 18, 2011	LP	March 21, 2011
TESTED BY	DATE	CHECKED BY	DATE

SPECIFIC GRAVITY OF SOIL SOLIDS

Reference

ASTM C 127-07
ASTM D 854-06 Method B

Project No.:	09-1428-5007/4000	Borehole	N/A
Client:	Agnico Eagle Mines	Sample No.:	302
Project:	Meadowbank-SB Testing	Depth (m):	N/A
Location:	Bay-Goose	Lab Sch No:	031

Specific Gravity of Fine Fraction (ASTM D 854-06)

Percentage Passing #4 sieve		100	
Test Number		1	2
Flask Number		3	5
Air Removal Method		Vacuum	Vacuum
Mass of Flask (g)		173.99	174.80
Mass of Flask + Dry Soil (g)	M_p	298.33	301.25
Mass of Dry Soil (g)		124.33	126.43
Mass of Flask + Soil + Water (g)	$M_{pws,t}$	752.14	754.59
Test Temperature (g)	T_t	22.50	22.70
Mass of Flask + Water (g)	$M_{pw,t}$	672.14	672.81
Mass of Dish + Dry Soil (g)		450.01	463.58
Mass of Dish (g)		325.68	337.15
Mass of Oven Dry Soil (g)	M_s	124.33	126.43
Temperature Coefficient	K	1.00	1.00
Density of Solids (g/cm ³)	ρ_s	2.80	2.83
Specific Gravity at Test Temperature	G_t	2.81	2.84
Specific Gravity at 20°C	$G_{20^\circ C}$	2.81	2.84
AVERAGE SPECIFIC GRAVITY		2.82	

Specific Gravity of Coarse Fraction (ASTM C 127-07)

Percentage Retained on #4 sieve		
Mass of Sample in Water (g)	A	
Mass of Sample @ SSD (g)	B	
Mass of Oven Dried Sample (g)	C	
Bulk G (Oven Dry)	$C/(B-A)$	
Bulk G (SSD)	$B/(B-A)$	
Apparent	$C/(C-A)$	
Absorbion (%)	$(B-C)/C$	

Combined Specific Gravity

COMBINED SPECIFIC GRAVITY	Gavg @20°C
----------------------------------	------------

* 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.

E.Barnes	March 3, 2011	LP	March 21, 2011
TESTED BY	DATE	CHECKED BY	DATE

SPECIFIC GRAVITY OF SOIL SOLIDS

Reference

ASTM C 127-07
ASTM D 854-06 Method B

Project No.:	09-1428-5007/4000	Borehole	N/A
Client:	Agnico Eagle Mines	Sample No.:	314
Project:	Meadowbank-SB Testing	Depth (m):	N/A
Location:	Bay-Goose	Lab Sch No:	031

Specific Gravity of Fine Fraction (ASTM D 854-06)

Percentage Passing #4 sieve		100	
Test Number		1	2
Flask Number		4	7
Air Removal Method		Vacuum	Vacuum
Mass of Flask (g)		172.74	171.37
Mass of Flask + Dry Soil (g)	M_p	294.46	290.68
Mass of Dry Soil (g)		121.72	119.30
Mass of Flask + Soil + Water (g)	$M_{pws,t}$	748.17	745.09
Test Temperature (g)	T_t	23.40	24.40
Mass of Flask + Water (g)	$M_{pw,t}$	670.83	668.75
Mass of Dish + Dry Soil (g)		395.88	364.59
Mass of Dish (g)		274.16	245.29
Mass of Oven Dry Soil (g)	M_s	121.72	119.30
Temperature Coefficient	K	1.00	1.00
Density of Solids (g/cm ³)	ρ_s	2.74	2.78
Specific Gravity at Test Temperature	G_t	2.75	2.78
Specific Gravity at 20°C	$G_{20^\circ C}$	2.75	2.78
AVERAGE SPECIFIC GRAVITY		2.76	

Specific Gravity of Coarse Fraction (ASTM C 127-07)

Percentage Retained on #4 sieve		
Mass of Sample in Water (g)	A	
Mass of Sample @ SSD (g)	B	
Mass of Oven Dried Sample (g)	C	
Bulk G (Oven Dry)	$C/(B-A)$	
Bulk G (SSD)	$B/(B-A)$	
Apparent	$C/(C-A)$	
Absorbion (%)	$(B-C)/C$	

Combined Specific Gravity

COMBINED SPECIFIC GRAVITY	Gavg @20°C
----------------------------------	------------

* 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.

E.Barnes	March 12, 2011	LP	March 21, 2011
TESTED BY	DATE	CHECKED BY	DATE

SPECIFIC GRAVITY OF SOIL SOLIDS

Reference

ASTM C 127-07
ASTM D 854-06 Method B

Project No.:	09-1428-5007/4000	Borehole	N/A
Client:	Agnico Eagle Mines	Sample No.:	315
Project:	Meadowbank-SB Testing	Depth (m):	N/A
Location:	Bay-Goose	Lab Sch No:	031

Specific Gravity of Fine Fraction (ASTM D 854-06)

Percentage Passing #4 sieve		100	
Test Number		1	2
Flask Number		8	3
Air Removal Method		Vacuum	Vacuum
Mass of Flask (g)		174.67	174.03
Mass of Flask + Dry Soil (g)	M_p	260.50	259.93
Mass of Dry Soil (g)		85.83	85.90
Mass of Flask + Soil + Water (g)	$M_{pws,t}$	726.66	726.55
Test Temperature (g)	T_t	23.60	25.40
Mass of Flask + Water (g)	$M_{pw,t}$	672.40	671.79
Mass of Dish + Dry Soil (g)		341.15	373.26
Mass of Dish (g)		255.32	287.36
Mass of Oven Dry Soil (g)	M_s	85.83	85.90
Temperature Coefficient	K	1.00	1.00
Density of Solids (g/cm ³)	ρ_s	2.72	2.76
Specific Gravity at Test Temperature	G_t	2.73	2.77
Specific Gravity at 20°C	$G_{20^\circ C}$	2.72	2.76
AVERAGE SPECIFIC GRAVITY		2.74	

Specific Gravity of Coarse Fraction (ASTM C 127-07)

Percentage Retained on #4 sieve		
Mass of Sample in Water (g)	A	
Mass of Sample @ SSD (g)	B	
Mass of Oven Dried Sample (g)	C	
Bulk G (Oven Dry)	$C/(B-A)$	
Bulk G (SSD)	$B/(B-A)$	
Apparent	$C/(C-A)$	
Absorbion (%)	$(B-C)/C$	

Combined Specific Gravity

COMBINED SPECIFIC GRAVITY	Gavg @20°C
----------------------------------	------------

* 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.

E.Barnes	March 14, 2011	LP	March 21, 2011
TESTED BY	DATE	CHECKED BY	DATE



BAY GOOSE DIKE CONSTRUCTION AS-BUILT REPORT MEADOWBANK GOLD MINE, NUNAVUT

Till for SB and CSB Sample list

Samples List

Sample No.:

- 63
- 65
- 60
- 289
- 319
- 359
- 360

Golder Associates Ltd. - Burnaby Laboratory

PARTICLE SIZE ANALYSIS OF SOILS

Reference
 ASTM D 422-63 (2007)

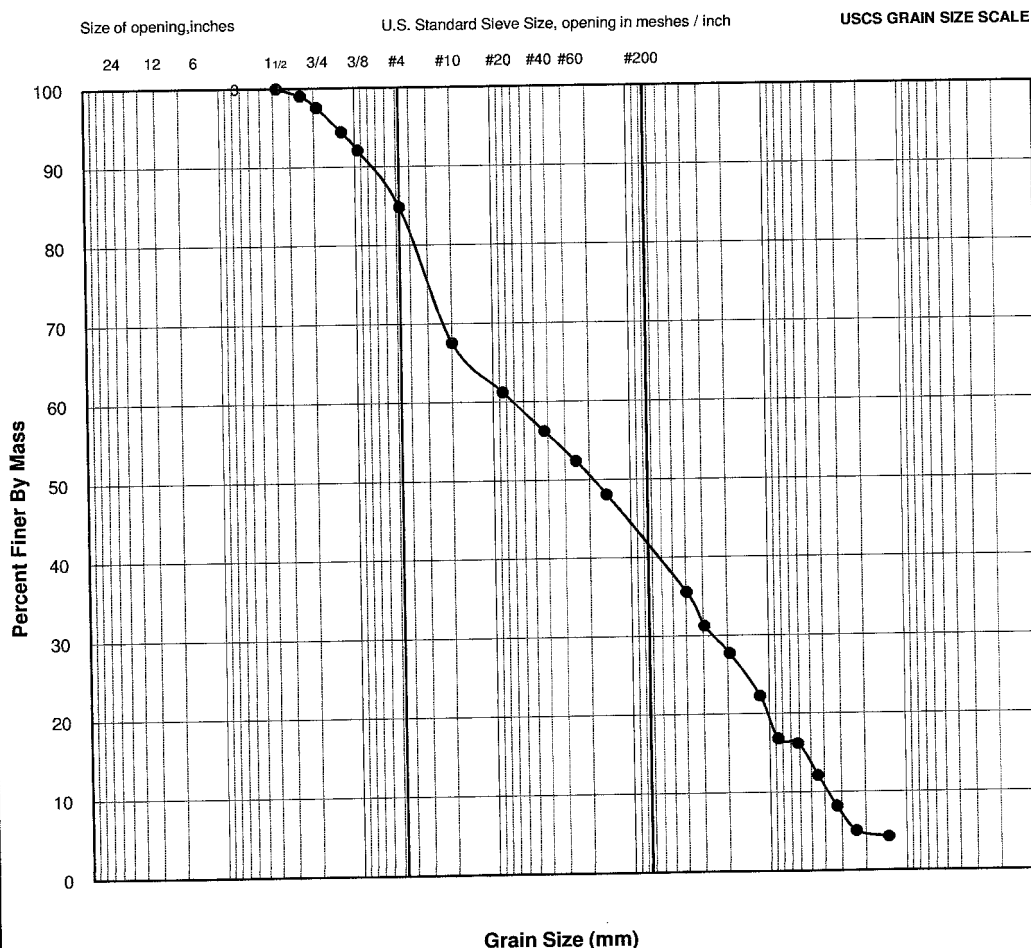
Project No.: 08-1428-0028
Client: AEM
Project: Meadowbank Gold
Location: Nunavut

Sample: 60
Field No.: BG091209-19
Depth (m): N/A
Lab ID No: SA60

Specific Gravity (assumed): 2.73
Date Sampled: Sept 18, 2009

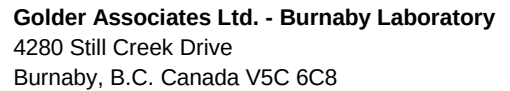
Other Till without bentonite
Remarks:
Dispersion Method: Stirring
Dispersion Period (min): 960.00

Sieve Size (USS)	(mm)	% Passing
3.5"	87.50	100.0
3"	75.00	100.0
2"	50.00	100.0
1.5"	37.50	100.0
1"	25.00	99.0
3/4"	19.00	97.6
1/2"	12.50	94.5
3/8"	9.50	92.1
#4	4.75	84.9
#10	2.00	67.6
#20	0.850	61.2
#40	0.425	56.2
#60	0.250	52.4
#100	0.150	48.1
-	0.0395	35.6
-	0.0295	31.3
-	0.0194	27.8
-	0.0117	22.3
-	0.0087	16.8
-	0.0062	16.2
-	0.0045	12.1
-	0.0032	8.2
-	0.0024	5.1
-	0.0014	4.3



* 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.

OM	Sep 18-09		Sept 30/09
TESTED BY	DATE	CHECKED BY	DATE



Reference
ASTM C136-06 & C117-04

Sample No.:	289
Field Label:	BG082410-1
Depth (m):	NA
Lab ID No:	SA 289

Date Sampled:	August 24, 2010
Material Specification:	Till for CSB (Stockpile along cut-off)
Method:	COMBINED, WASHED
Date Tested:	August 26, 2010

Grain Size Distribution Plot

Y-axis: Percent Finer By Mass (0 to 100)

X-axis: Grain Size (mm) (1000 to 0.0001)

USCS GRAIN SIZE SCALE:

Grain Size (mm)	USCS Scale
25	24
12.5	12
6.3	6
3.15	3
1.6	1 1/2
0.85	3/4
0.425	3/8
0.25	#4
0.15	#10
0.075	#20
0.0425	#40
0.025	#60
0.015	#100

Grain Size Classification:

Grain Size (mm)	Classification
2.0	Gravel
0.075	Sand
0.075	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.*

Sept. 25, 2010
DATE

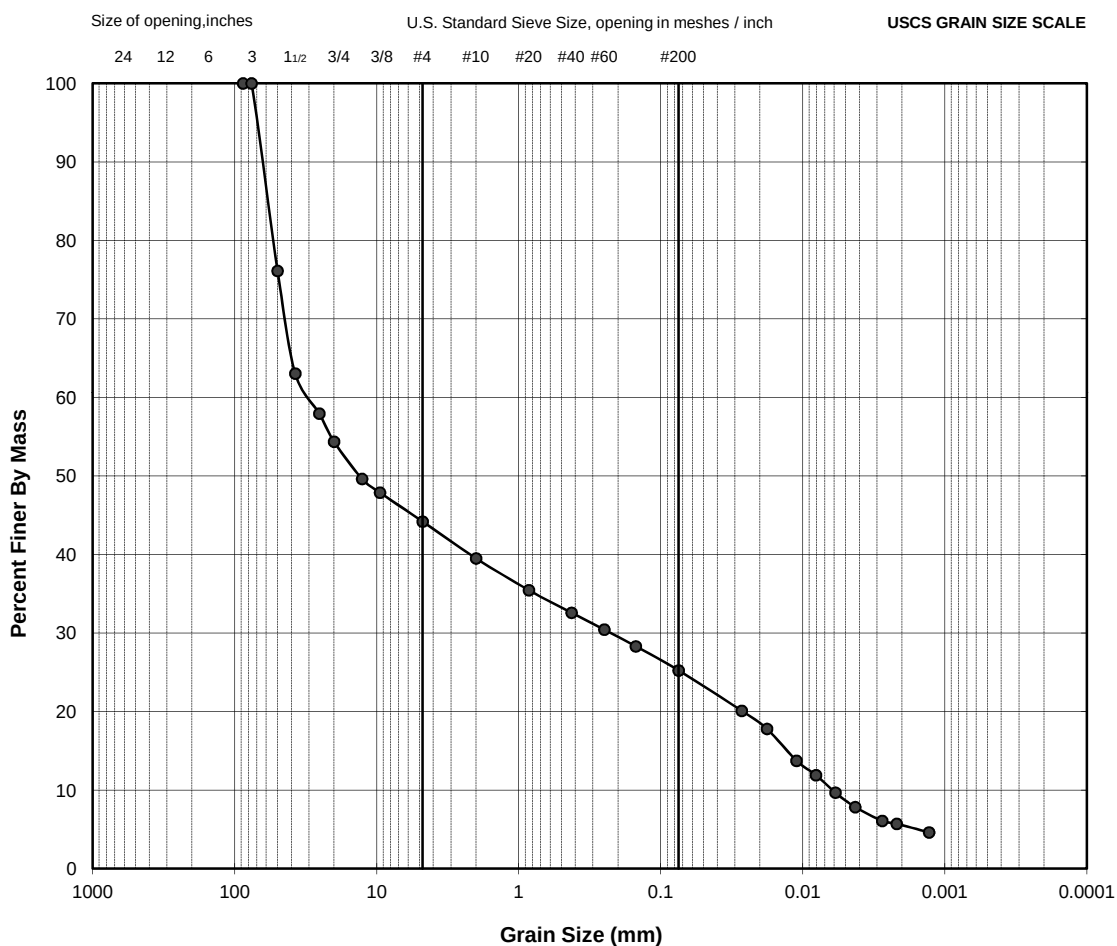
PARTICLE SIZE ANALYSIS OF SOILS

Reference

ASTM D 422-63 (2007)

Project No.:	09-1428-5007 (2000)	Field ID	Till stockpile portage pit
Client:	AEM	Sample No.:	319
Project:	Meadowbank Gold Project	Depth (m):	NA
Location:	Nunavut	Lab ID No:	SA 319
Specific Gravity (assumed):	2.70	Other	Till from stockpile, water content = 8.5%
Date sampled:	September 11, 2010	Remarks:	
Dispersion Method:	Stirring		
Dispersion Period (min):	5.00		

Sieve Size (US)	(mm)	% Passing
3.5"	87.50	100.0
3"	76.20	100.0
2"	50.00	76.1
1.5"	37.50	63.1
1"	25.40	58.0
3/4"	20.00	54.4
1/2"	12.70	49.6
3/8"	9.50	47.9
#4	4.76	44.2
#10	2.00	39.5
#20	0.850	35.5
#40	0.425	32.6
#60	0.250	30.4
#100	0.150	28.3
#200	0.075	25.2
-	0.0269	20.1
-	0.0179	17.8
-	0.0111	13.7
-	0.0081	11.9
-	0.0059	9.7
-	0.0043	7.8
-	0.0028	6.1
-	0.0022	5.7
-	0.0013	4.6



B. Dieudonne	September 16, 2010	YB	Sept. 27, 2010
TESTED BY	DATE	CHECKED BY	DATE



Reference
ASTM C136-06 & C117-04

Sample No.:	359
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Field Label:	BG092610
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Depth (m):	NA
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Lab ID No: SA 359

Date Sampled:	September 26, 2010
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Material Specification: TILL

Method:	SPLIT, WASHED
---------	---------------

Date Tested: September 30, 2010

Size of opening, inches
24 12 6 3 1 1/2 3/4 3/8 #4 #10 #20 #40 #60 #200

U.S. Standard Sieve Size, opening in inches / inch

USCS GRAIN SIZE SCALE

Percent Finer By Mass

Grain Size (mm)

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.

** 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.*

October 1, 2010

DATE _____



Reference
ASTM C136-06 & C117-04

Sample No.:	360
-------------	-----

Field Label:	BG092710
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Depth (m):	NA
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Lab ID No: SA 360

Date Sampled:	September 27, 2010
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Material Specification: TILL

Method:	SPLIT, WASHED
---------	---------------

Date Tested: October 1, 2010

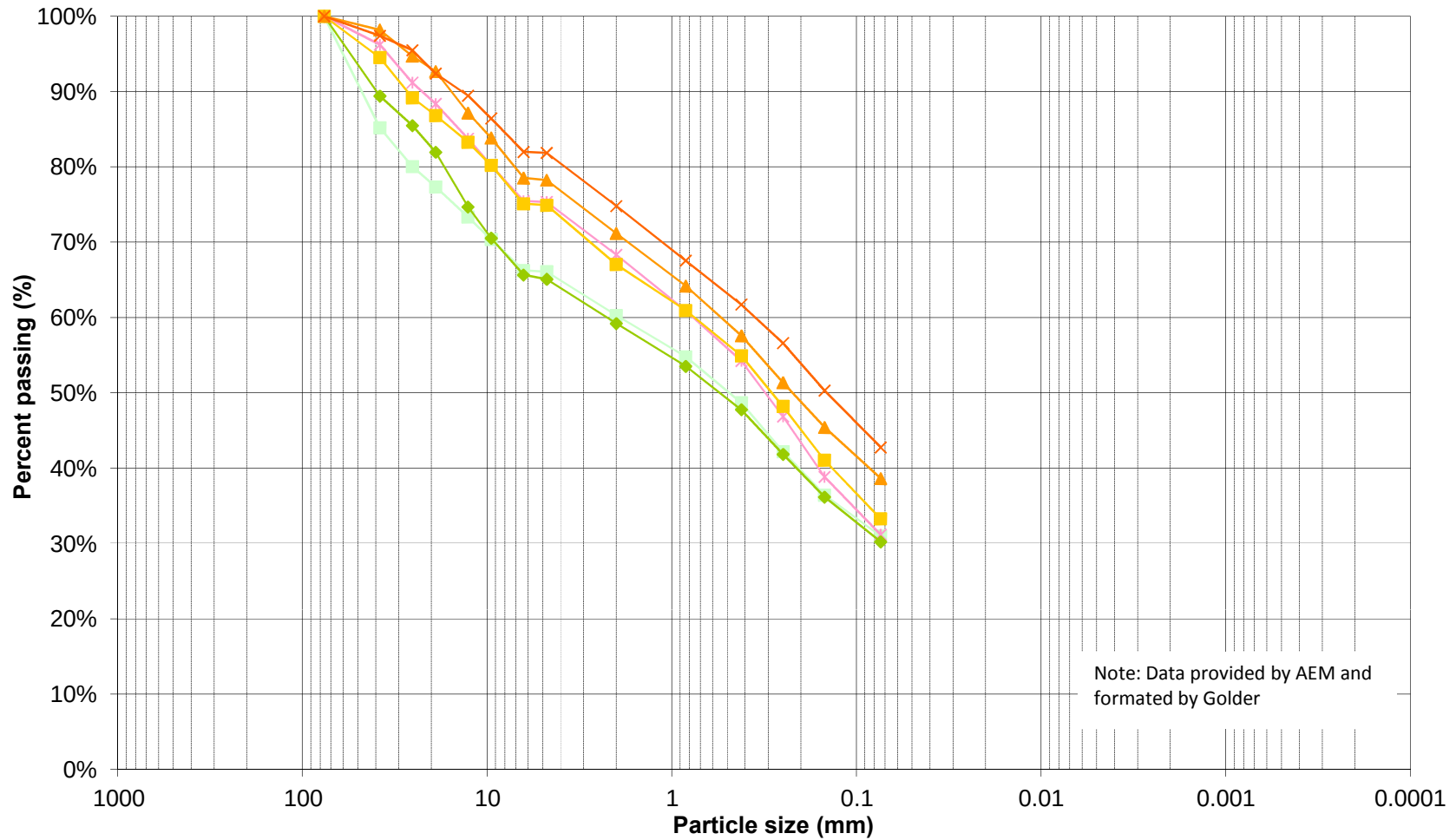
BOULDER	COBBLE	GRAVEL		SAND			FINES (Silt, Clay)
		Coarse	Fine	Coarse	Medium	Fine	

** 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.*

October 3, 2010

DATE _____

Till Grain size analysis



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

■ 100720-Till-Airstrip-01
 ✱ 100726-Till-Airstrip-01
 ◆ 100726-Till-Airstrip-02
 ■ 100729-Till-Airstrip-02
 ▲ 100731-Till-Airstrip-01
 ✕ 10081-Till-Airstrip-01



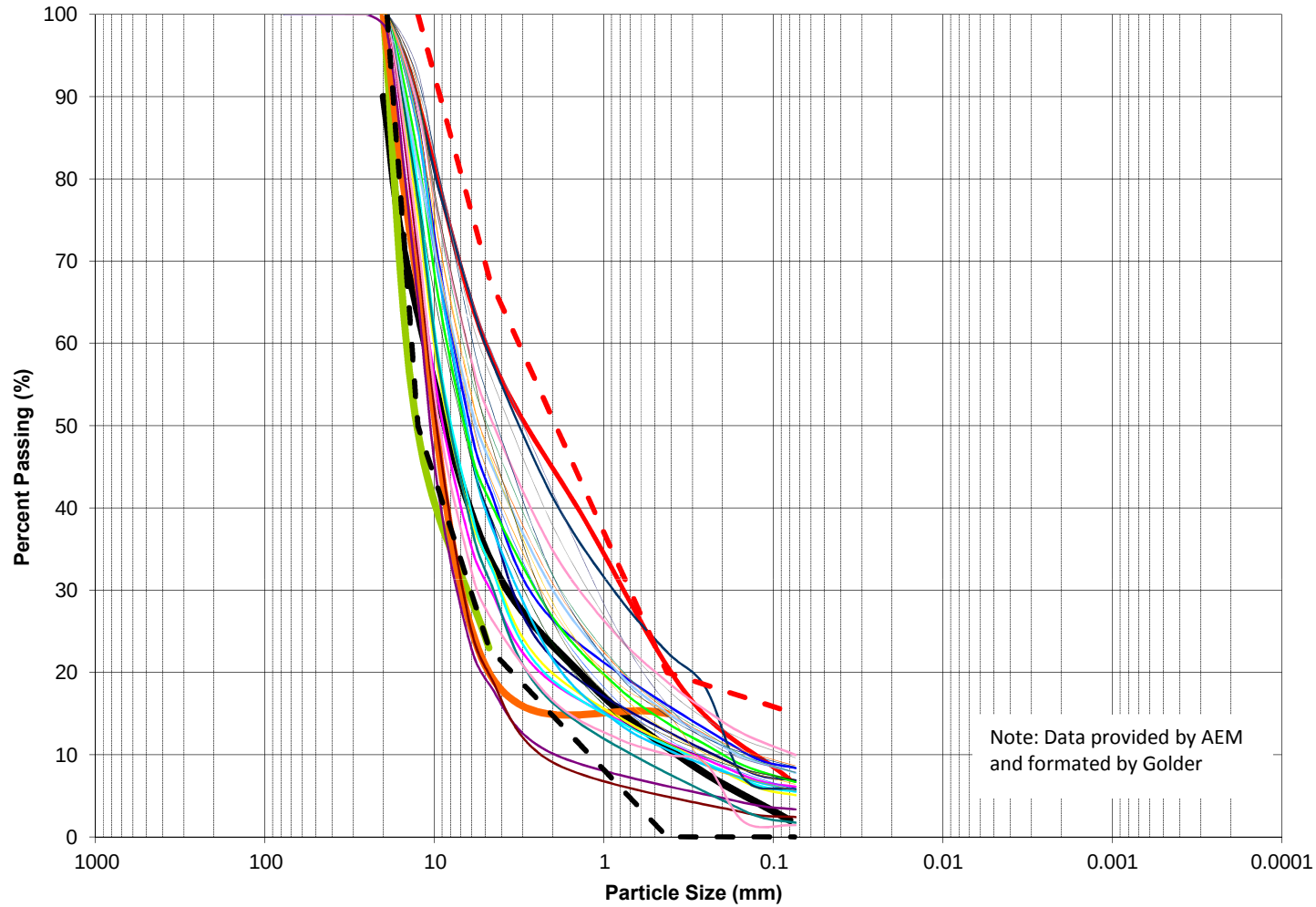
B2 – Quality Control Results



BAY GOOSE DIKE CONSTRUCTION AS-BUILT REPORT MEADOWBANK GOLD MINE, NUNAVUT

AEM

AEM 3/4 Crush Particle Size Distribution



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

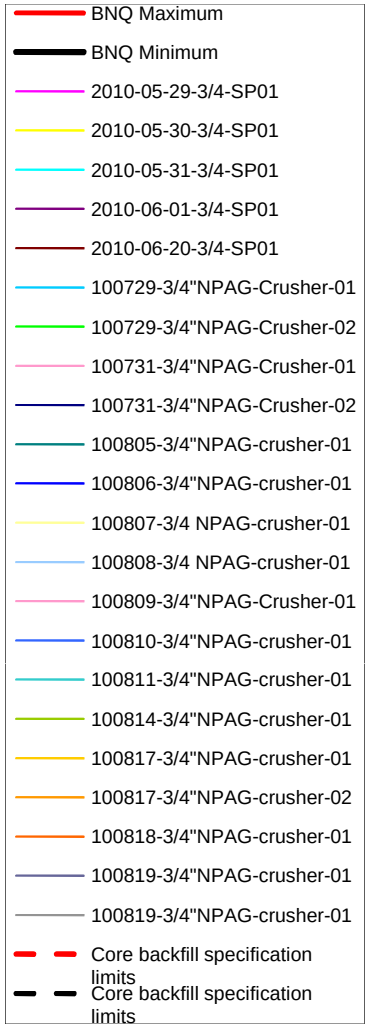
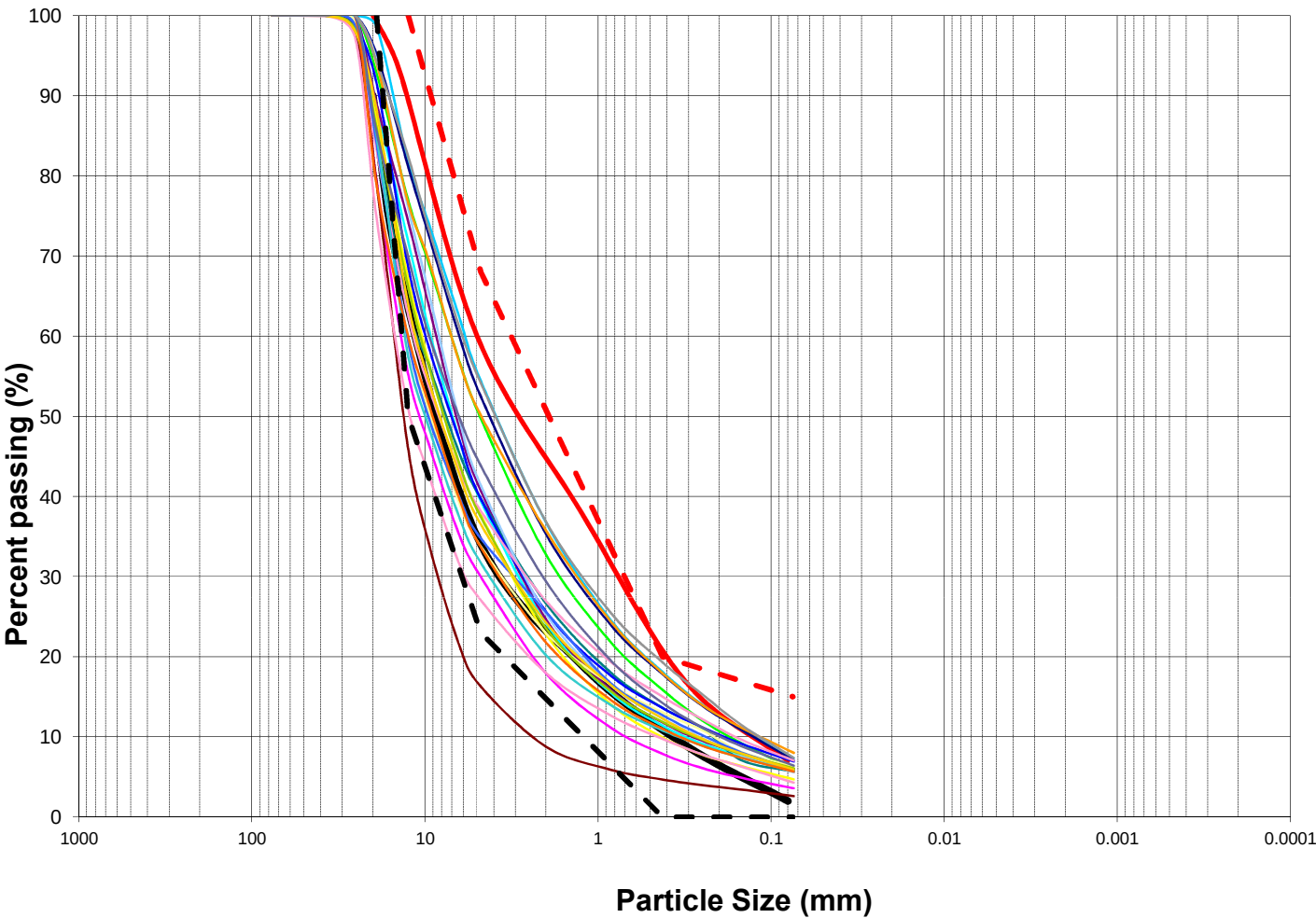
- BNQ maximum
- BNQ minimum
- Golder Coarse 3/4
- Golder Fine 3/4
- 2009-07-28-3/4-SP01
- 2009-07-29-3/4-SP01
- 2009-07-30-3/4-SP01
- 2009-07-31-3/4-SP01
- 2009-08-01-3/4-SP01
- 2009-08-02-3/4-SP01
- 2009-08-03-3/4-SP01
- 2009-08-04-3/4-SP01
- 2009-08-05-3/4-SP01
- 2009-08-06-3/4-SP01
- 2009-08-08-3/4-SP01
- 2009-08-09-3/4-SP01
- 2009-08-11-3/4-SP01
- 2009-08-18-3/4-04h40
- 2009-08-26-3/4-17h00
- 2009-08-28-3/4-10h30
- 2009-08-29-3/4-10h00
- 2009-08-31-3/4-15h40
- 2009-09-01-3/4-16h30
- 2009-09-02-3/4-10h20
- 2009-09-03-3/4-14h30
- 2009-09-04-3/4-17h30
- 2009-09-05-3/4-16h25
- 2009-09-06-3/4-16h25
- Core backfill specification limits
- Core backfill specification limits



BAY GOOSE DIKE CONSTRUCTION AS-BUILT REPORT MEADOWBANK GOLD MINE, NUNAVUT

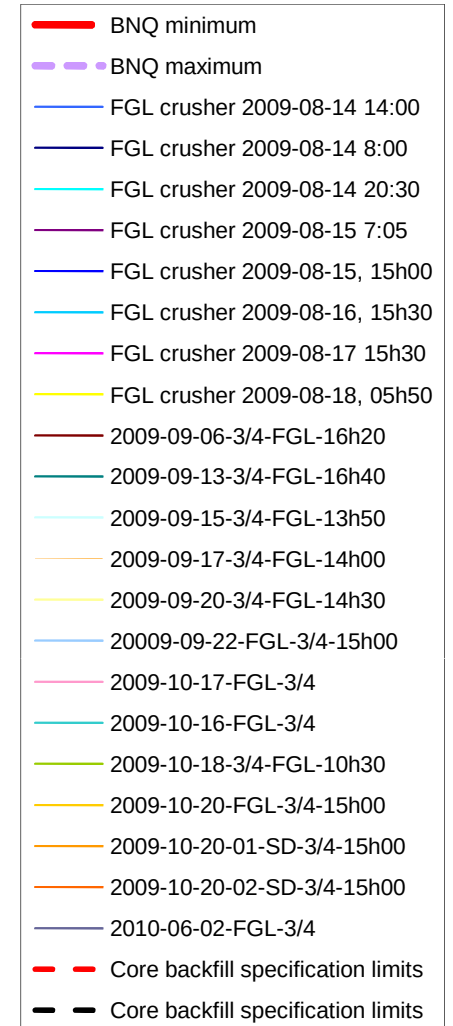
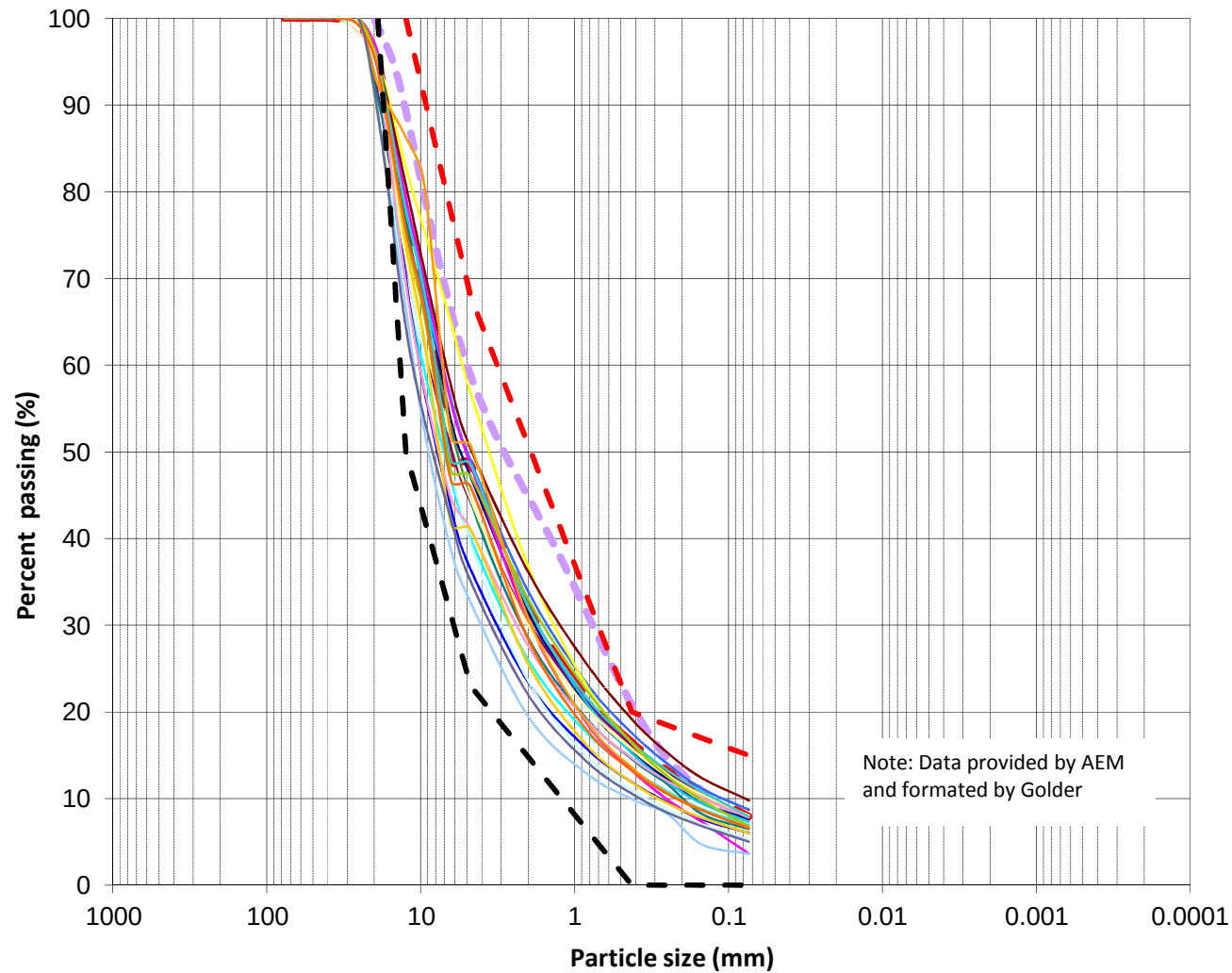
FGL

FGL 3/4 Crush Particle Size Distribution



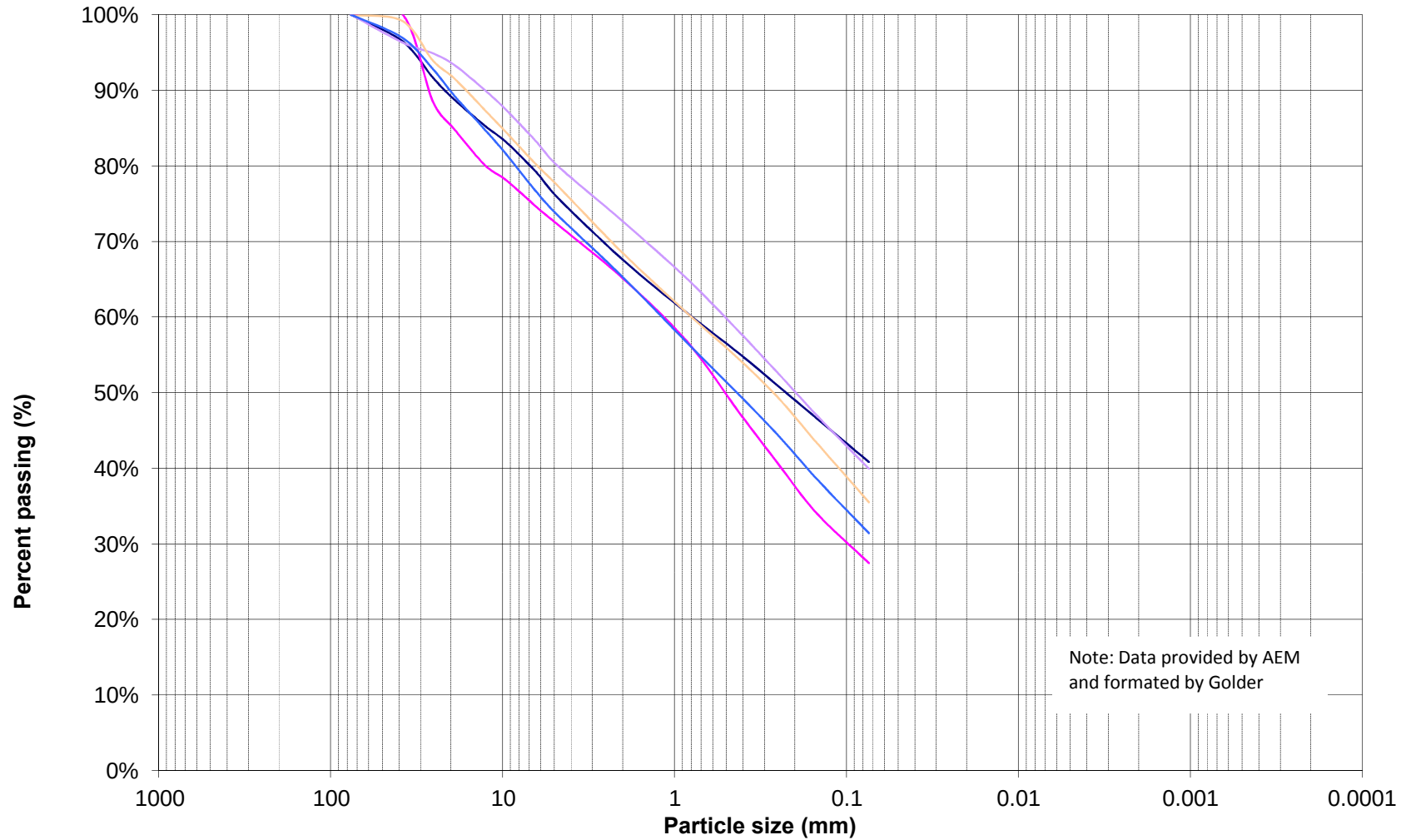
BOULDER	COBBLE	GRAVEL		SAND			FINES (Silt, Clay)
		Coarse	Fine	Coarse	Medium	Fine	

Note: Data provided by AEM and
formatted by Golder



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

Till Grain size analysis



— SWD-2009-08-10#1 MS NS FLOOR
 — SWD-2009-08-16#1 MS NS FLOOR
 — SWD-2009-08-11 #1 MS NS Floor
 — Test Pit 8-A
 — Test Pit 10-A



BAY GOOSE DIKE CONSTRUCTION AS-BUILT REPORT MEADOWBANK GOLD MINE, NUNAVUT

Inquip

Data from Inquip 2009 Daily Reports

Created: G Pizarro

Checked: G Janssens

[illegible]

Meadowbank Bay-Gose Dike As-built (2009 and 2010)

Data from Inquip 2009 Daily Reports

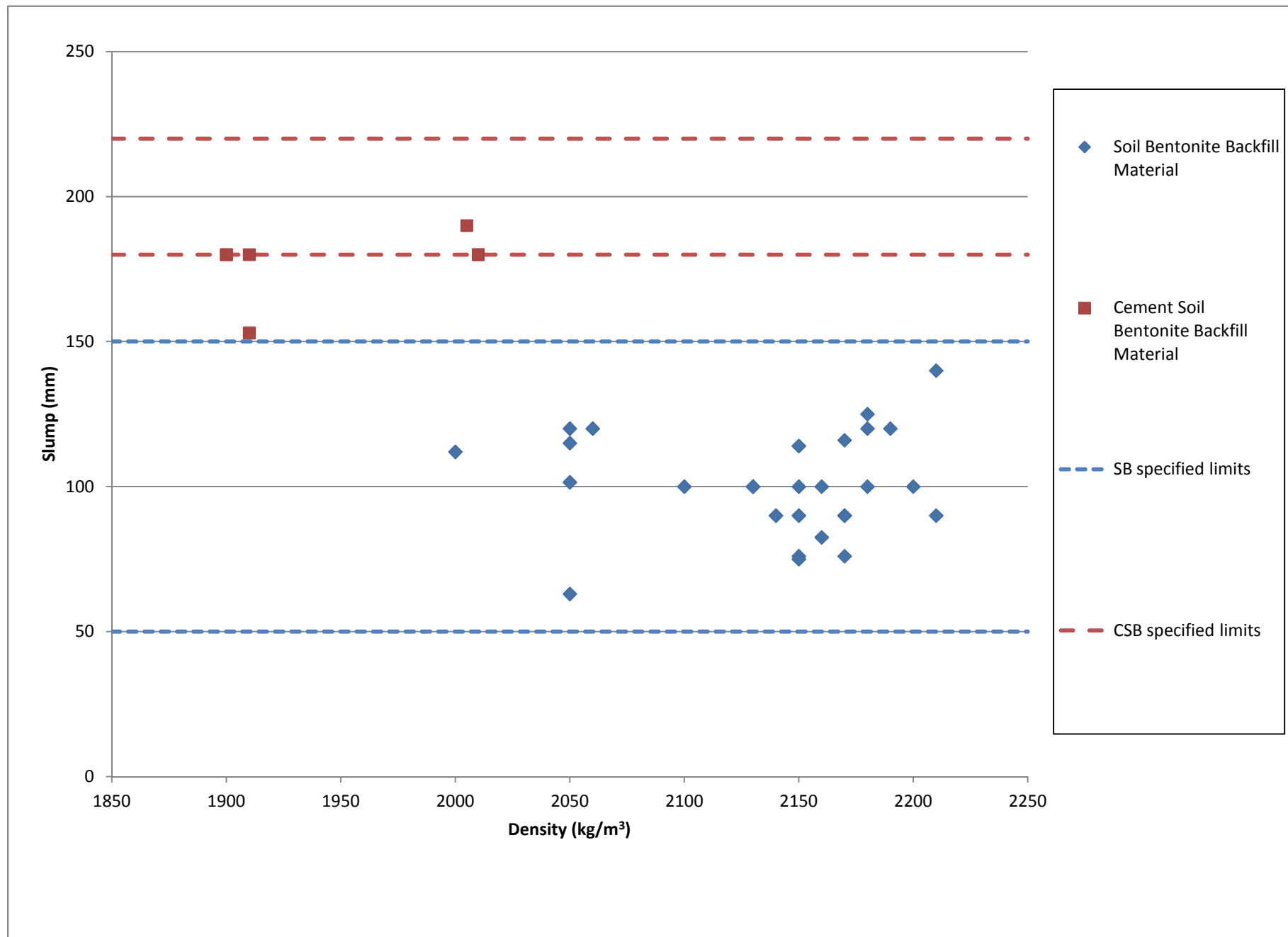
09-1428-5007

Created: G Pizarro

Checked: G Janssens

	Pond Bentonite Slurry		In-trench Bentonite Slurry		Soil Bentonite Backfill Material					Cement Soil Bentonite Backfill Material					Comment
	Density (kg/m3)	Viscosity	Density (kg/m3)	Viscosity	Station	Slump Cone (mm)	Density (kg/m3)	Gradation per design mix	Permeability	Slump (mm)	Density (kg/m3)	Density of slurry prior to till addition (kg/m3)	Permeability	Strength	
22-Sep	1060	41	1240	49	30+455	101.5	2050								Golder reported Density of 2105 kg/m3 in daily report
	1060	41	1200	47	30+462	63	2050								Golder reported Density of 2500 kg/m3 at 30+465
	1060	41	1200	47	30+500	120	2050								
			1200	54	30+050	115	2050								
23-Sep	1060	41	1210	54		140	2210								
	1060	41	1250	55		90	2170								
	1060	41	1160	69		116	2170								
	1060	40	1100	46											
24-Sep	1060	42	1110	49		90	2170								
	1050	41	1160	50		90	2140								
			1180	51		90	2150								
			1180	53											
25-Sep	1060	41	1160	50		76	2170								
			1230	57		114	2150								
26-Sep			1250	50						180	2010	1250			
										159					
										184					
										184					

Note: Numbers in red are assumed as the Inquip reports report them as 100's not 1000's



UNCONFINED COMPRESSION TESTS

D-1633



Client : Inquip
Project ID : Bay Goose Project

Job No. : 09LS1978.04
Report Date : 11/11/2009
Perf'd By : RL
Chk'd By : JBJr

Sample Type : SCB Mixes
Field Samples

Samples Capped : N/A
Test Unit : Geotest 2500
Calibration Date : July 20, 2009

Sample Size : Diameter : 3 inches
Height : 6 inches

Cross-Sectional Area : 7.06858

Sample ID	Fabrication Date	Test Date	Act. Test Age Days	Peak Load lbs	Peak Stress psi	Peak Stress kPa
30 + 836	09/26/2009	11/11/2009	46	112	15.8	109.2
30 + 850	09/26/2009	11/11/2009	46	91	12.9	88.8

Note: The samples were soft. When you pick up the sample, you leave your fingerprints on the surface.

The sample ends were easily trimmed with a knife to create parallel surfaces for the unconfined strength tests.



Laboratories, Inc.

938 S. Central Ave, Canonsburg, Pa. 15317 Tel: 724-746-4441 Fax : 724-745-4261

INQUIP

Associates, Inc.

Daily Construction Report

PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE			CONTRACTOR/OWNER F.GILBERT Itée		Date: Saturday, September 12, 2009		
					Report # DR.2009.09.12		
Weather:			Temperature High: Low:		Ground Conditions		
MANPOWER							
NAME/CRAFT	On Site	HRS.			TYPE	IN-USE	ST-BY
FRANK DAVIS	X	14			Slurry Mixer	X	
LAMAR POWELL	X	14			Grout Mixer		X
MIKE PARSON	X	14			Pump (4)	X	
REX TALBERT	X	14			4" HDPE pipe	X	
JOSUE TORO-DIAZ	X	14			Loader w/forks	X	
					Dozer (D6)	X	
					Excavator (2)	X	
					Genererator	X	
					Tremie pipe		X

SUMMARY OF DAY'S WORK

Started digging around 8:30am. Waited about 30 to 45 minutes for a tape measure to measure the depth of the trench. Had problems with one pump around 11:30am. Started digging at station 30+044 so the cutoff wall is tie in with the till. The till was found at station 30+050 at 2.1 m deep.

The following procedure is the followed at the end of every cut:

After the operator clean the top of the rock with an excavator with a flat-lip bucket, measurements are taken with a tape measure. Working platform elevation is being taken as 136.1. After the approval of Golder Associates' representative, a steel pole is taken to probe and feel the top of bedrock. The specs don't call for these type of procedure; Inquip was instructed verbally by Golder's representative to do so.

The specs call for a measurement of the bottom of the wall (top of rock) one every five meters. A verbal instruction was received to increase the frequency of the readings to one every two meters. These change will slow down the production by 15 to 20 minutes per cut.

REMARKS / DELAYS / ITEMS REQUIRING CONTRACTOR ACTION

SAFETY

Daily tool-box safety meeting every morning. Probing and feeling the top of the rock with a steel pole is a big safety issue since the steel pipe being used gets heavy and hard to move around the trench the deeper we go. Some one may fall in the trench.

ATTACHMENTS

Trench profile.

INQUIP

Associates, Inc.

Daily Construction Report

PROJECT

AGNICO EAGLE MINE
BAY GOOSE DIKE

CONTRACTOR/OWNER

F.GILBERT Itée

Date:

Saturday, September 12, 2009

Report #

DR.2009.09.12

Bentonite Slurry

Time	Location	Marsh Funnel (>45-55 sec)	Density (>1,025 kg/cu.m)	Filter Loss* (cc)	Notes:
8:30 AM	Pond	46	1030.0		
3:30 PM		47	1030.0		
Depth (mid depth)	Station	Marsh Funnel (>40 sec)	Density (1,025-1,250 kg/cu.m)	Filter Loss* (cc)	
1.0	30+055	46	1050		
1.0	30+058	52	1050		

*For Inquip's internal reference.

Soil-Bentonite Backfill

SLUMP	STATION	30+055				Notes:
	50-150 mm	90				
DENSITY	240 kg/cu.m > in-trench slurry	2210				

Cement-Soil-Bentonite Backfill

STATION					Notes:
SLUMP	180-220 mm				
DENSITY	1,900 to 2,100 kg/cu.m				
GROUT DENSITY	1,120 to 1,200 kg/cu.m				
STRENGTH	130 kPa @ 7 days				

INQUIP

Associates, Inc.

Daily Construction Report

PROJECT

AGNICO EAGLE MINE
BAY GOOSE DIKE

CONTRACTOR/OWNER

F.GILBERT Itée

Date:

Saturday, September 12, 2009

Report #

DR.2009.09.12

Excavation Data

Station	Elevation of Workpad (MSL)	Depth to Bedrock (m)	Depth of CSB Backfill (m)	Elevation of Bedrock (MSL)	Elevation of CSB Backfill (MSL)	Total Square meters	Prev Days Total Sq. m
30+044	136.1		No CSB	136.1			
30+046	136.1	1.4	No CSB	134.7		1.4	
30+048	136.1	2.0	No CSB	134.1		3.4	
30+050	136.1	2.1	No CSB	134.0		4.1	
30+052	136.1	2.2	No CSB	133.9		4.3	
30+054	136.1	2.6	No CSB	133.5		4.8	
30+056	136.1	2.6	No CSB	133.5		5.2	
30+058	136.1	2.3	No CSB	133.8		4.9	
30+060	136.1	2.9	No CSB	133.2		5.2	
30+062	136.1	3.2	No CSB	132.9		6.1	
30+064	136.1	3.2	No CSB	132.9		6.4	
30+066	136.1	3.0	No CSB	133.1		6.2	
30+068	136.1	3.1	No CSB	133.1		6.1	
30+070	136.1	3.0	No CSB	133.2		6.0	
30+072	136.1	3.4	No CSB	132.7		6.4	
30+074	136.1	3.3	No CSB	132.9		6.7	
30+076	136.1	4.1	No CSB	132.1		7.3	
30+078	136.1	4.1	No CSB	132.1		8.1	
30+080	136.1	4.0	No CSB	132.2		8.0	
30+082	136.1	4.4	No CSB	131.8		8.3	
30+084	136.1	4.0	No CSB	132.2		8.3	
30+086	136.1	3.5	No CSB	132.6		7.5	
30+088	136.1	4.0	No CSB	132.2		7.5	
30+090	136.1	3.6	No CSB	132.5		7.6	
30+092	136.1	3.6	No CSB	132.5		7.2	
30+094	136.1	4.4	No CSB	131.7		8.0	
30+096	136.1	4.7	No CSB	131.4		9.1	
30+098	136.1	4.7	No CSB	131.4		9.4	
30+100	136.1	5.0	No CSB	131.1		9.7	
30+102	136.1	4.7	No CSB	131.5		9.7	
30+104	136.1	5.0	No CSB	131.2		9.6	
30+106	136.1	5.5	No CSB	130.6		10.5	Preliminary
30+108	136.1	4.9	No CSB	131.2		10.4	Total
							To Date
							223.0

Contractors Verification:

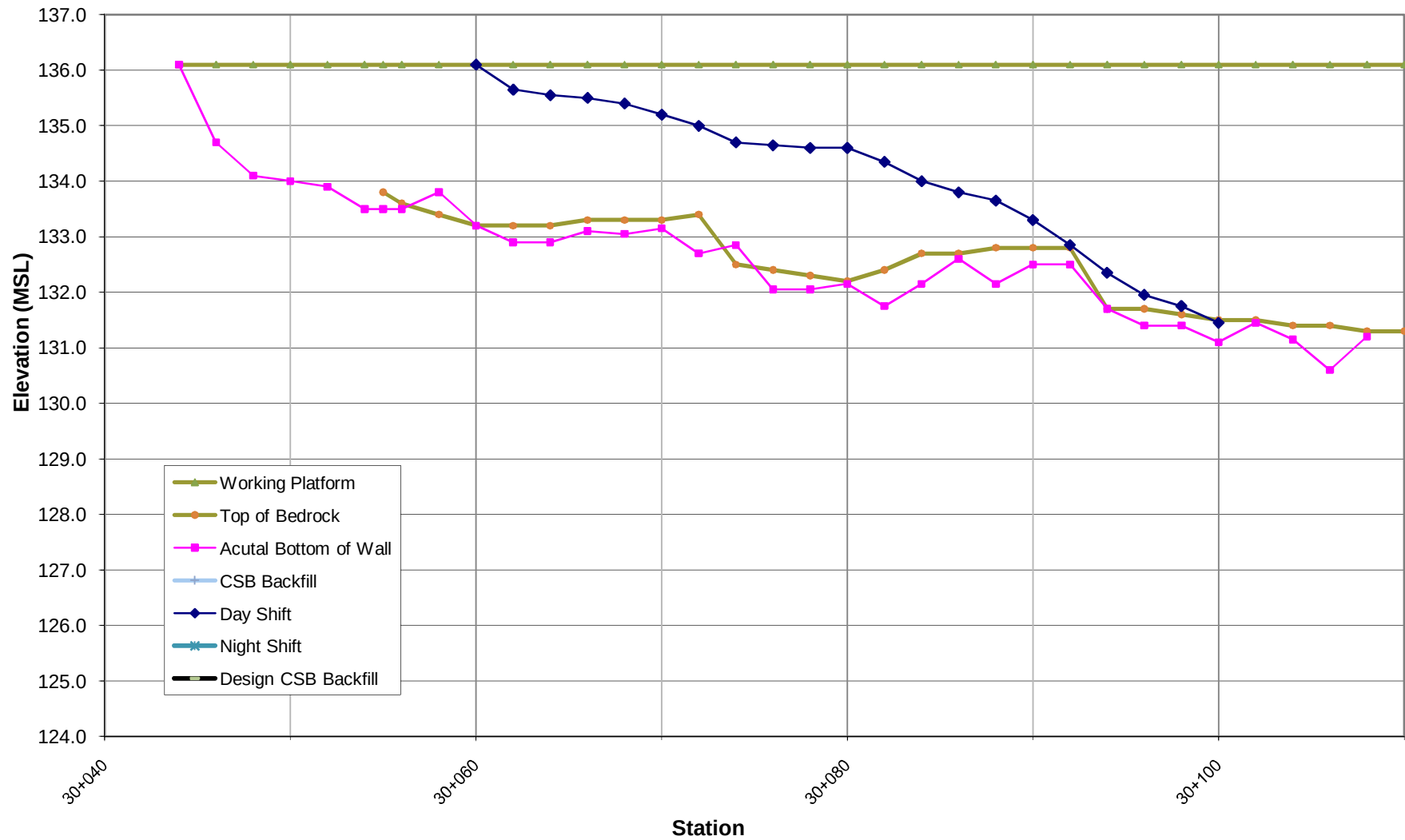
223.0

The above report is complete and correct and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

Submitted By:

Josue Toro-Diaz

Soil Bentonite Cutoff Wall Trench Profile
Agnico Eagle Mine - Bay-Goose Dike
(NOT TO SCALE)



INQUIP

Associates, Inc.

Daily Construction Report

PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE			CONTRACTOR/OWNER F.GILBERT Itée		Date: Sunday, September 13, 2009		
Weather:			Temperature High: Low:		Report # DR.2009.09.13 Ground Conditions		
MANPOWER							
NAME/CRAFT	On Site	HRS.			TYPE	IN-USE	ST-BY
FRANK DAVIS	X	15			Slurry Mixer	X	
LAMAR POWELL	X	15			Grout Mixer		X
MIKE PARSON	X	15			Pump (4)	X	
REX TALBERT	X	15			4" HDPE pipe	X	
JOSUE TORO-DIAZ	X	15			Loader w/forks	X	
					Dozer (D6)	X	
					Excavator (2)	X	
					Genererator	X	
					Tremie pipe		X

SUMMARY OF DAY'S WORK
After first cut was finished, Inquip proceeded to measure the depth and to probe it. At the first station to be probed, the trench hand fell in the trench because of the weight of the pipe. It was clear that probing the bottom of the trench is not safe. Inquip will not probe the bottom of the trench.

REMARKS / DELAYS / ITEMS REQUIRING CONTRACTOR ACTION

SAFETY
Daily tool-box safety meeting every morning. Trench hand fell in the in due to probing the top of rock. Nobody was harmed.

ATTACHMENTS
Trench profile.

INQUIP

Associates, Inc.

Daily Construction Report

PROJECT	AGNICO EAGLE MINE BAY GOOSE DIKE	CONTRACTOR/OWNER	Date:	Sunday, September 13, 2009
		F.GILBERT Itée	Report #	DR.2009.09.13

Bentonite Slurry

Time	Location	Marsh Funnel (>45-55 sec)	Density (>1,025 kg/cu.m)	Filter Loss* (cc)	Notes:
8:00 AM	Pond	45	1030.0		
12:00 PM		45	1030.0		
Depth (mid depth)	Station	Marsh Funnel (>40 sec)	Density (1,025-1,250 kg/cu.m)	Filter Loss* (cc)	
2.0	30+078	53	1150		
2.5	30+116	46	1030		

*For Inquip's internal reference.

Soil-Bentonite Backfill

SLUMP	STATION	30+062	300+78			Notes:
	50-150 mm	100	100			
DENSITY	240 kg/cu.m > in-trench slurry	218	220			

Cement-Soil-Bentonite Backfill

STATION					Notes:
SLUMP	180-220 mm				
DENSITY	1,900 to 2,100 kg/cu.m				
GROUT DENSITY	1,120 to 1,200 kg/cu.m				
STRENGTH	130 kPa @ 7 days				

Associates, Inc.

Daily Construction Report

PROJECT	CONTRACTOR/OWNER	Date:	Sunday, September 13, 2009
AGNICO EAGLE MINE BAY GOOSE DIKE	F.GILBERT Itée	Report #	DR.2009.09.13

Excavation Data

[illegible]

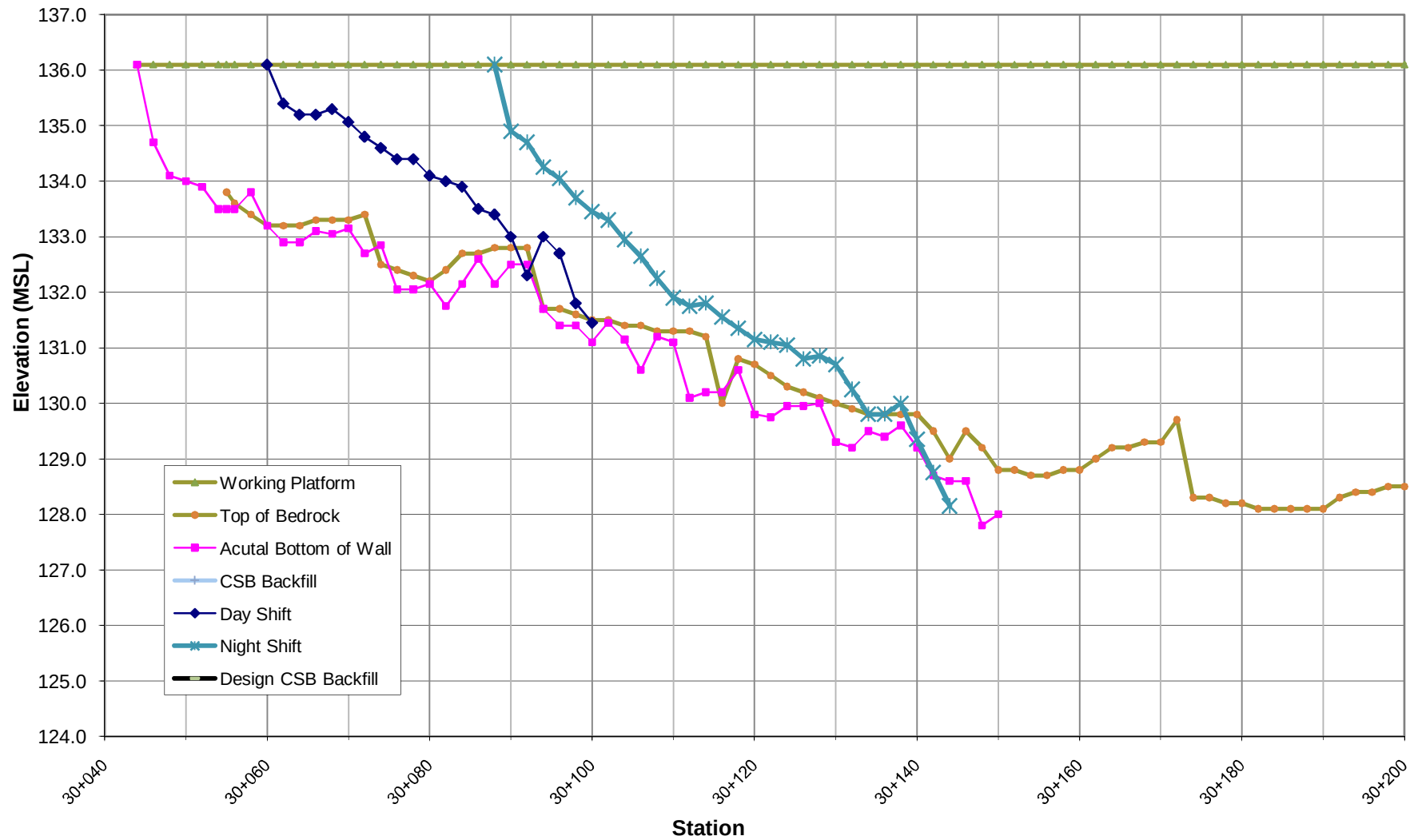
Contractors Verification:

273.9

The above report is complete and correct and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

Submitted By: Josue Toro-Diaz

Soil Bentonite Cutoff Wall Trench Profile
Agnico Eagle Mine - Bay-Goose Dike
(NOT TO SCALE)



INQUIP

Associates, Inc.

Daily Construction Report

PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE			CONTRACTOR/OWNER F.GILBERT Itée		Date: Monday, September 14, 2009		
Weather:			Temperature High: Low:		Report # DR.2009.09.14 Ground Conditions		
MANPOWER							
NAME/CRAFT	On Site	HRS.			TYPE	IN-USE	ST-BY
FRANK DAVIS	X	12			Slurry Mixer	X	
LAMAR POWELL	X	12			Grout Mixer		X
MIKE PARSON	X	12			Pump (4)	X	
REX TALBERT	X	12			4" HDPE pipe	X	
JOSUE TORO-DIAZ	X	12			Loader w/forks	X	
					Dozer (D6)	X	
JOSEPH ARNASUNGAUQ	X	12			Excavator (2)	X	
HUGH NANAUQ	X	12			Genererator	X	
MOSES IKINILIK	X	12			Tremie pipe		X
PETER ETESAYAIC	X	12					

SUMMARY OF DAY'S WORK

Night shift: replace valve at the trench pump.

REMARKS / DELAYS / ITEMS REQUIRING CONTRACTOR ACTION

Some of the measured depth are shallower than expeted. Approval of the depth are being made by Golder's representative at the moment the depth ar taken.

SAFETY

Daily tool-box safety meeting every morning. After the incident of a trench hand falling in the trench the following procedure needs to be follow: The person that will make the measurements will need to wear the proper PPE, a floater (life vest), harness and a rope needs to be tie to the harnes and one person need to hold the rope at all times.

ATTACHMENTS

Trench profile.

Soil-Bentonite Backfill

SLUMP	STATION	30+088	301+06	301+30	301+42	Notes:
	50-150 mm	120	100	120	100	
DENSITY	240 kg/cu.m > in-trench slurry	219	213	218	210	

INQUIP

Associates, Inc.

Daily Construction Report

PROJECT		CONTRACTOR/OWNER	Date:	Monday, September 14, 2009
AGNICO EAGLE MINE BAY GOOSE DIKE		F.GILBERT Itée	Report #	DR.2009.09.14

Bentonite Slurry

Time	Location	Marsh Funnel (>45-55 sec)	Density (>1,025 kg/cu.m)	Filter Loss* (cc)	Notes:
7:45 AM	Pond	45	1050.0		3% of sand in the morning and in the night.
3:00 PM		49	1050.0		
10:15 PM		44	1050.0		
3:00 AM		47	1050.0		
Depth (mid depth)	Station	Marsh Funnel (>40 sec)	Density (1,025-1,250 kg/cu.m)	Filter Loss* (cc)	
3.0	30+130	52	1180		
3.0	30+164	49	1090		
3.0	30+180	50	1100		
3.0	30+200	48	1330		

*For Inquip's internal reference.

Soil-Bentonite Backfill

SLUMP	STATION	30+088	301+06	301+30	301+42	Notes:
	50-150 mm	120	100	120	100	
DENSITY	240 kg/cu.m > in-trench slurry	219	213	218	210	

Cement-Soil-Bentonite Backfill

STATION					Notes:
SLUMP	180-220 mm				
DENSITY	1,900 to 2,100 kg/cu.m				
GROUT DENSITY	1,120 to 1,200 kg/cu.m				
STRENGTH	130 kPa @ 7 days				

Excavation Data

Station	Elevation of Workpad (MSL)	Depth to Bedrock (m)	Depth of CSB Backfill (m)	Elevation of Bedrock (MSL)	Elevation of CSB Backfill (MSL)	Total Square meters	Prev Days Total Sq. m
30+150	136.1	8.1	No CSB	128.0			496.9
30+152	136.1	8.0		128.1		16.1	
30+154	136.1	8.0		128.1		16.0	
30+156	136.1	8.4		127.7		16.4	
30+158	136.1	8.0		128.1		16.4	
30+160	136.1	7.6		128.5		15.6	
30+162	136.1	7.6		128.5		15.2	
30+164	136.1	7.5		128.6		15.1	
30+166	136.1	7.6		128.5		15.1	
30+168	136.1	8.6		127.5		16.2	
30+170	136.1	8.7		127.4		17.3	

INQUIP

Associates, Inc.

Daily Construction Report

PROJECT				CONTRACTOR/OWNER		Date:	Monday, September 14, 2009	
AGNICO EAGLE MINE BAY GOOSE DIKE				F.GILBERT Itée		Report #	DR.2009.09.14	
30+172	136.1	8.7		127.5			17.4	
30+174	136.1	8.3		127.9			16.9	
30+176	136.1	8.3		127.9			16.5	
30+178	136.1	9.0		127.2			17.2	
30+180	136.1	8.3		127.8			17.3	
30+182	136.1	8.3		127.8			16.6	
30+184	136.1	8.0		128.1			16.3	
30+186	136.1	8.4		127.7			16.4	
30+188	136.1	8.5		127.6			16.9	
30+190	136.1	7.9		128.3			16.4	
30+192	135.9	7.5		128.4			15.4	
30+194	135.9	7.6		128.3			15.1	
30+196	135.9	7.8		128.1			15.4	
30+198	135.9	7.8		128.1			15.6	
30+200	136.0	7.9		128.1			15.7	
30+202	136.1	7.9		128.2			15.8	
30+204	136.1	8.1		128.0			16.0	
30+206	136.1	7.9		128.2			16.0	
30+208	136.1	7.8		128.3			15.7	
30+210	136.1	7.8		128.3			15.6	
30+212	136.1	7.7		128.4			15.5	
30+214	136.1	8.4		127.7			16.1	
30+216	136.1	8.1		128.0			16.5	
30+218	136.1	7.8		128.3			15.9	
30+220	136.1	8.1		128.0			15.9	
30+222	136.1	7.9		128.2			16.0	
30+224	136.1	7.8		128.3			15.7	
30+226	136.1	7.8		128.3			15.6	
30+228	136.1	7.7		128.4			15.5	
30+230	136.1	7.6		128.5			15.3	
30+232	136.1	7.4		128.7			15.0	
30+234	136.1	7.6		128.5			15.0	
30+236	136.1	7.4		128.7			15.0	
30+238	136.1	7.5		128.6			14.9	
30+240	136.1	7.6		128.5			15.1	
30+242	136.1	7.5		128.6			15.1	
30+244	136.1	7.2		128.9			14.7	
30+246	136.1	7.7		128.4			14.9	
30+248	136.1	7.9		128.2			15.6	
30+250	136.1	7.9		128.2			15.8	
30+252	136.1	7.4		128.7			15.3	
								Preliminary
								Total
								To Date
								1,304.6

Contractors Verification:

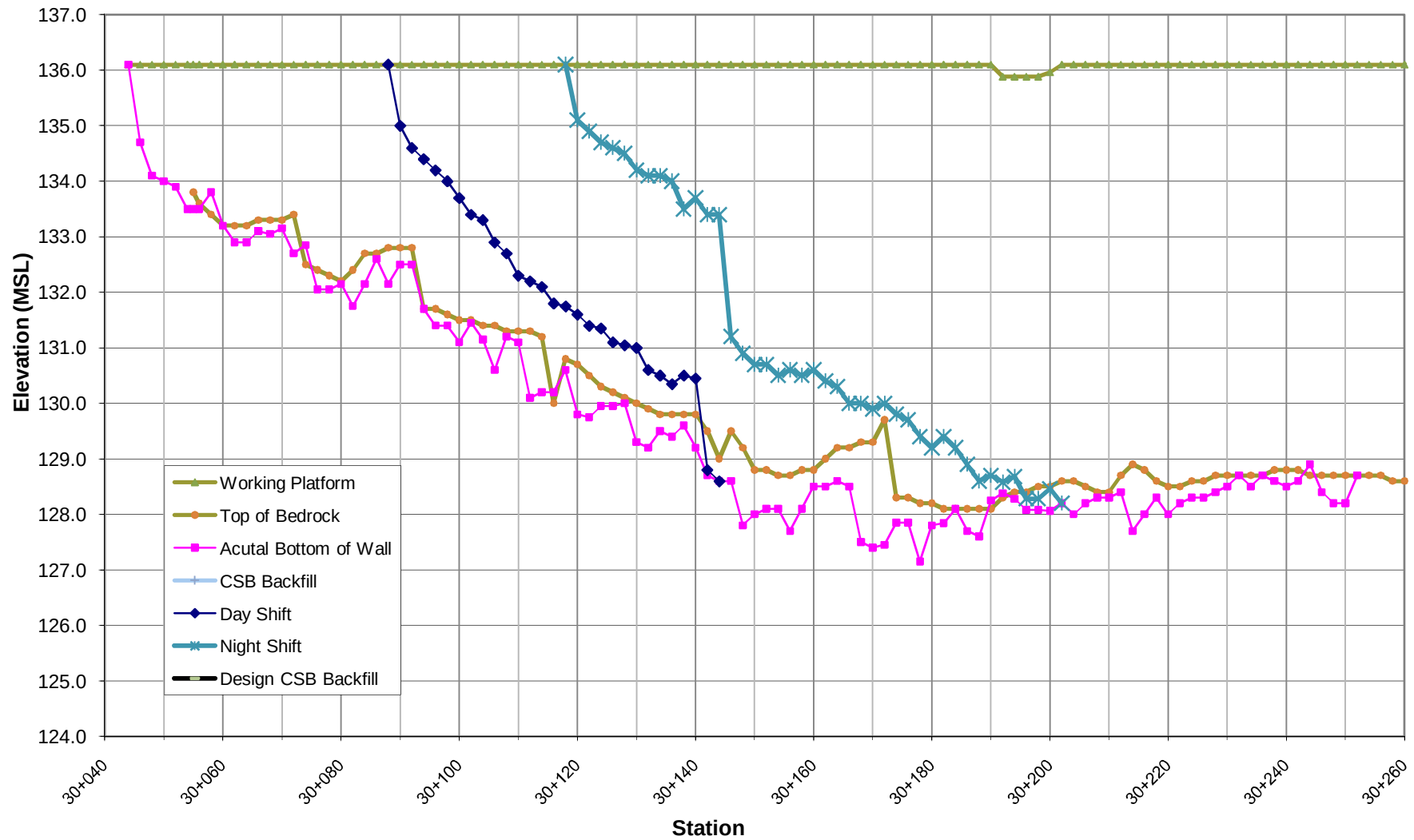
807.7

The above report is complete and correct and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

Submitted By:

Josue Toro-Diaz

Soil Bentonite Cutoff Wall Trench Profile
Agnico Eagle Mine - Bay-Goose Dike
(NOT TO SCALE)



INQUIP

Associates, Inc.

Daily Construction Report

PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE			CONTRACTOR/OWNER F.GILBERT Itée		Date: Tuesday, September 15, 2009		
Weather:			Temperature High: Low:		Report # DR.2009.09.15 Ground Conditions		
MANPOWER							
NAME/CRAFT	On Site	HRS.			TYPE	IN-USE	ST-BY
FRANK DAVIS	X	12			Slurry Mixer	X	
LAMAR POWELL	X	12			Grout Mixer		X
MIKE PARSON	X	12			Pump (4)	X	
REX TALBERT	X	12			4" HDPE pipe	X	
JOSUE TORO-DIAZ	X	12			Loader w/forks	X	
					Dozer (D6)	X	
JOSEPH ARNASUNGAUQ	X	12			Excavator (2)	X	
HUGH NANAUQ	X	12			Genererator	X	
MOSES IKINILIK	X	12			Tremie pipe		X
PETER ETESAYAIC	X	12					

SUMMARY OF DAY'S WORK

Day shift: Had problems with the trench pump; it was replaced. Labor at the mixing area was sick and sent to his room. Only had the mixing guy (Joseph) and the loader operator. Started digging around 9:30am.

Night shift: trench hand can not read the tape measure. Change valve at the mixing area. Stopped backfilling when the toe of the backfill was about 0.5m thick at station 30+300.

REMARKS / DELAYS / ITEMS REQUIRING CONTRACTOR ACTION

Some of the measured depth are shallower than expected. Approval of final depth are being made by Golder's representative at the moment the depth is taken.

SAFETY

Daily tool-box safety meeting every morning.

ATTACHMENTS

Trench profile.

Soil-Bentonite Backfill

SLUMP	STATION	30+150	30+162	30+180	Notes:
	50-150 mm	100	125	100	
DENSITY	240 kg/cu.m > in-trench slurry	215	218	216	

INQUIP

Associates, Inc.

Daily Construction Report

PROJECT

AGNICO EAGLE MINE
BAY GOOSE DIKE

CONTRACTOR/OWNER

F.GILBERT Itée

Date:

Tuesday, September 15, 2009

Report #

DR.2009.09.15

Bentonite Slurry

Time	Location	Marsh Funnel (>45-55 sec)	Density (>1,025 kg/cu.m)	Filter Loss* (cc)	Notes:
8:00 AM	Pond	46	1050.0		3% of sand in the morning and in the night.
1:30 PM		43	1050.0		
9:45 PM		46	1050.0		
4:30 AM		44	1050.0		
Depth (mid depth)	Station	Marsh Funnel (>40 sec)	Density (1,025-1,250 kg/cu.m)	Filter Loss* (cc)	
3.0	30+170	49	1150		
3.0	30+240	48	1150		
3.0	30+270	44	1100		
3.0	30+300	44	1100		

*For Inquip's internal reference.

Cement-Soil-Bentonite Backfill

STATION					Notes:
SLUMP	180-220 mm				
DENSITY	1,900 to 2,100 kg/cu.m				
GROUT DENSITY	1,120 to 1,200 kg/cu.m				
STRENGTH	130 kPa @ 7 days				

Excavation Data

Station	Elevation of Workpad (MSL)	Depth to Bedrock (m)	Depth of CSB Backfill (m)	Elevation of Bedrock (MSL)	Elevation of CSB Backfill (MSL)	Total Square meters	Prev Days Total Sq. m
30+252	136.1	7.4	No CSB	128.7			1,304.6
30+254	136.1	7.6		128.5		15.0	
30+256	136.1	7.6		128.5		15.2	
30+258	136.1	8.0		128.1		15.6	
30+260	136.1	7.9		128.2		15.9	
30+262	136.1	8.0		128.1		15.9	
30+264	136.1	7.5		128.6		15.5	
30+266	136.1	7.5		128.6		15.0	
30+268	136.1	7.6		128.5		15.1	
30+270	136.1	7.8		128.3		15.4	
30+272	136.1	7.9		128.2		15.7	

Associates, Inc.

PROJECT				CONTRACTOR/OWNER		Date:	Tuesday, September 15, 2009
AGNICO EAGLE MINE BAY GOOSE DIKE				F.GILBERT Itée		Report #	DR.2009.09.15
30+274	136.1	7.9		128.2			15.8
30+276	136.1	7.6		128.5			15.5
30+278	136.1	7.5		128.6			15.1
30+280	136.1	7.5		128.6			15.0
30+282	136.1	7.5		128.6			15.0
30+284	136.1	7.4		128.7			14.9
30+286	136.1	7.3		128.8			14.7
30+288	136.1	7.5		128.6			14.8
30+290	136.1	7.3		128.8			14.8
30+292	136.1	7.2		128.9			14.5
30+294	136.1	7.3		128.8			14.5
30+296	136.1	7.4		128.7			14.7
30+298	136.1	7.4		128.7			14.8
30+300	136.1	7.3		128.9			14.7
30+302	136.1	7.6		128.5			14.9
30+304	136.1	7.7		128.4			15.3
30+306	136.1	7.7		128.4			15.4
30+308	136.1	7.7		128.4			15.4
30+310	136.1	7.6		128.5			15.3
30+312	136.1	7.0		129.1			14.6
30+314	136.1	7.3		128.8			14.3
30+316	136.1	7.4		128.7			14.7
30+318	136.1	7.5		128.6			14.9
30+320	136.1	7.5		128.6			15.0
30+322	136.1	7.6		128.5			15.1
30+324	136.1	7.7		128.4			15.3
30+326	136.1	8.1		128.0			15.8
30+328	136.1	7.9		128.2			16.0
30+330	136.1	8.6		127.5			16.5
30+332	136.1	8.5		127.6			17.1
30+334	136.1	8.8		127.3			17.3
30+336	136.1	8.7		127.4			17.5
30+338	136.1	8.9		127.2			17.6
30+340	136.1	8.5		127.6			17.4
							Preliminary
							Total
							To Date
							1,983.0

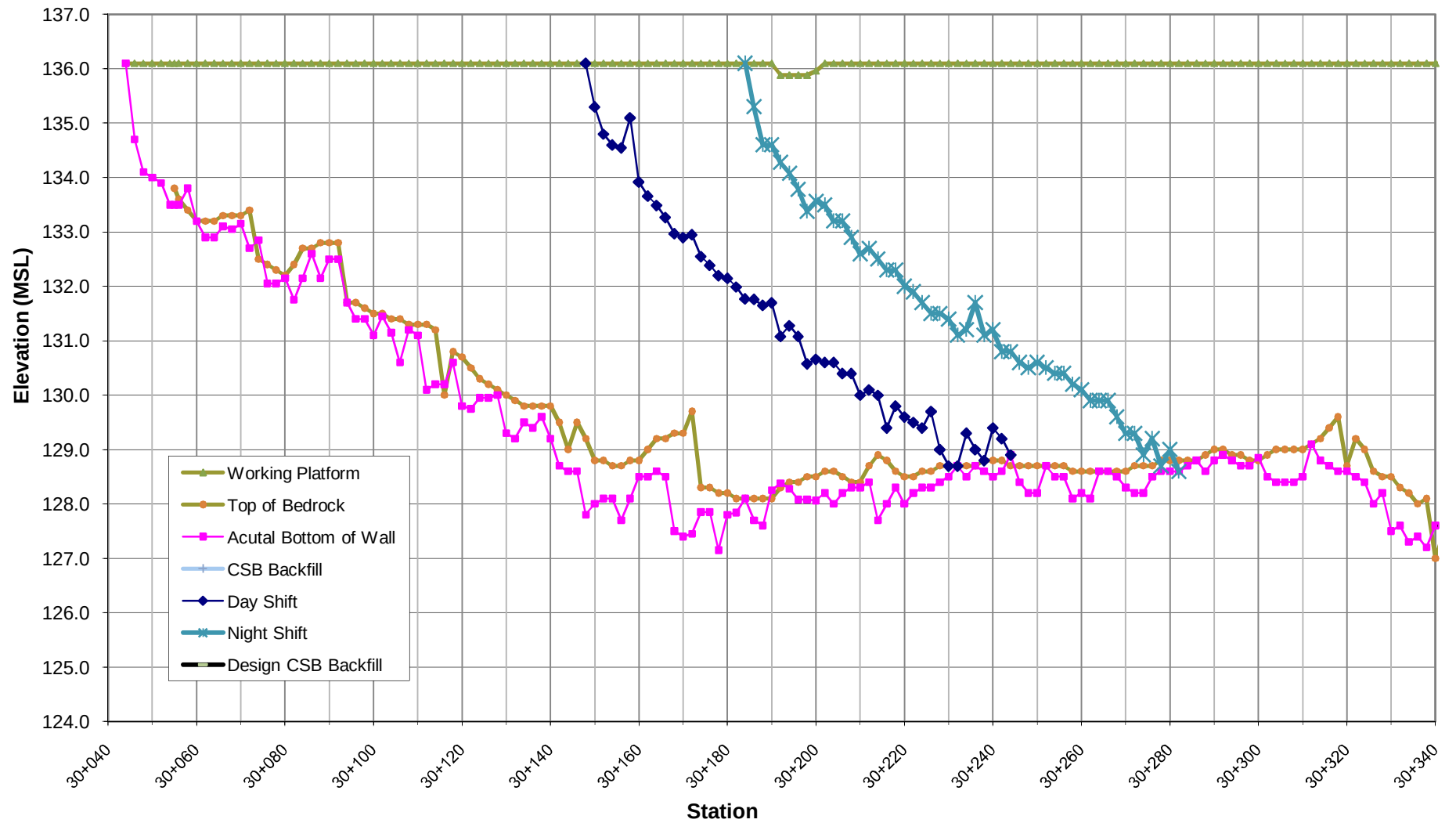
Contractors Verification:

678.4

The above report is complete and correct and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

Submitted By: Josue Toro-Diaz

Soil Bentonite Cutoff Wall Trench Profile
Agnico Eagle Mine - Bay-Goose Dike
(NOT TO SCALE)



INQUIP

Associates, Inc.

Daily Construction Report

PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE			CONTRACTOR/OWNER F.GILBERT Itée		Date: Wednesday, September 16, 2009		
Weather:			Temperature High: Low:		Report # DR.2009.09.16 Ground Conditions		
MANPOWER							
NAME/CRAFT	On Site	HRS.			TYPE	IN-USE	ST-BY
FRANK DAVIS	X	12			Slurry Mixer	X	
LAMAR POWELL	X	12			Grout Mixer		X
MIKE PARSON	X	12			Pump (4)	X	
REX TALBERT	X	12			4" HDPE pipe	X	
JOSUE TORO-DIAZ	X	12			Loader w/forks	X	
					Dozer (D6)	X	
JOSEPH ARNASUNGAUQ	X				Excavator (2)	X	
HUGH NANAUQ	X				Genererator	X	
MOSES IKINILIK	X				Tremie pipe		X
PETER ETESAYAIC	X						

SUMMARY OF DAY'S WORK

Set a steel beam in the trench at station 30+306 to hold the displacement of the SB backfill towards the excavator since after station 30+328 CSB backfill has to be placed.

Dig most of the day with the bucket with the lid (cleaning bucket). Digging with these bucket is very slow. Excavation will proceed until station 30+380, or close, is reached; then, excavation will be shut down until a decision is made about the CSB backfill placement area is decided.

REMARKS / DELAYS / ITEMS REQUIRING CONTRACTOR ACTION

It was brought to our attention the alternative to put CSB backfill all the way to the top in the required section.

SAFETY

Daily tool-box safety meeting every morning.

ATTACHMENTS

Trench profile.

Soil-Bentonite Backfill						
SLUMP	STATION	30+206	30+218	30+224		Notes:
	50-150 mm	82.5	76	75		
DENSITY	240 kg/cu.m > in-trench slurry	216	215	215		

INQUIP

Associates, Inc.

Daily Construction Report

PROJECT

AGNICO EAGLE MINE
BAY GOOSE DIKE

CONTRACTOR/OWNER

F.GILBERT Itée

Date:

Wednesday, September 16, 2009

Report #

DR.2009.09.16

Bentonite Slurry

Time	Location	Marsh Funnel (>45-55 sec)	Density (>1,025 kg/cu.m)	Filter Loss* (cc)	Notes:
8:30 AM	Pond	44	1050.0		3% of sand in the morning and in the night.
4:00 PM		41	1040.0		
9:30 PM		41	1040.0		
4:00 AM		44	1050.0		
Depth (mid depth)	Station	Marsh Funnel (>40 sec)	Density (1,025-1,250 kg/cu.m)	Filter Loss* (cc)	
3.0	30+334	43	1130		
3.0	30+338	41	1130		
3.0	30+350	43	110		
3.0	30+364	44	1130		

*For Inquip's internal reference.

Cement-Soil-Bentonite Backfill

STATION					Notes:
SLUMP	180-220 mm				
DENSITY	1,900 to 2,100 kg/cu.m				
GROUT DENSITY	1,120 to 1,200 kg/cu.m				
STRENGTH	130 kPa @ 7 days				

Excavation Data

Station	Elevation of Workpad (MSL)	Depth to Bedrock (m)	Depth of CSB Backfill (m)	Elevation of Bedrock (MSL)	Elevation of CSB Backfill (MSL)	Total Square meters	Prev Days Total Sq. m
30+340	136.1	8.5		127.6			1,983.0
30+342	136.1	8.8		127.3		17.3	
30+344	136.1	9.1		127.0		17.9	
30+346	136.1	9.2		126.9		18.3	
30+348	136.1	10.0		126.1		19.2	
30+350	136.1	9.0		127.1		19.0	
30+352	136.1	9.7		126.4		18.7	
30+354	136.1	9.7		126.4		19.4	
30+356	136.1	9.9		126.2		19.6	
30+358	136.1	10.5		125.6		20.4	
30+360	136.1	11.0		125.1		21.5	

Associates, Inc.[illegible]

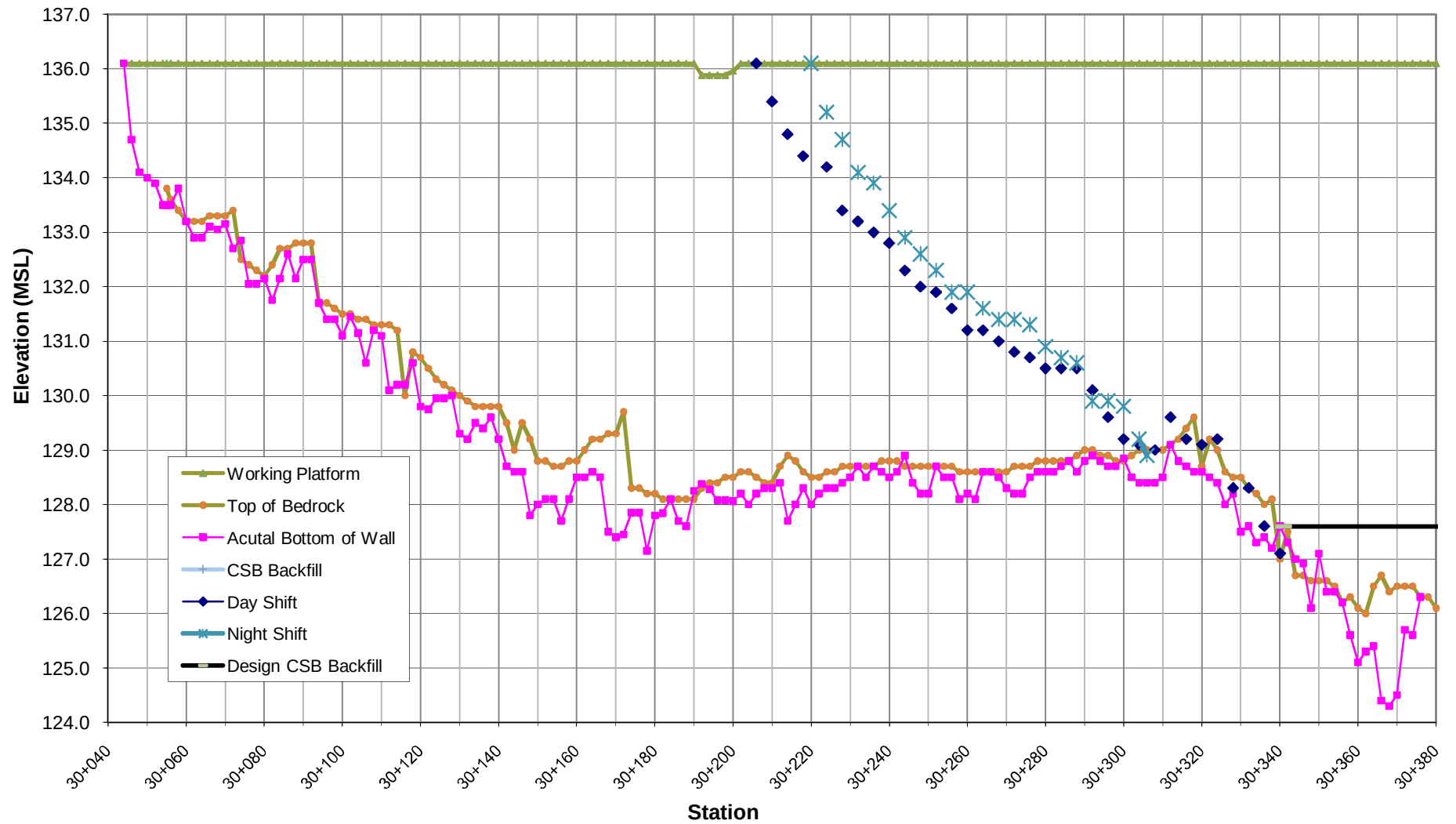
Contractors Verification:

367.1

The above report is complete and correct and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

Submitted By: Josue Toro-Diaz

Soil Bentonite Cutoff Wall Trench Profile
Agnico Eagle Mine - Bay-Goose Dike
(NOT TO SCALE)



INQUIP

Associates, Inc.

Daily Construction Report

PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE			CONTRACTOR/OWNER F.GILBERT Itée		Date: Thursday, September 17, 2009		
Weather:			Temperature High: Low:		Report # DR.2009.09.17 Ground Conditions		
MANPOWER							
NAME/CRAFT	On Site	HRS.			TYPE	IN-USE	ST-BY
FRANK DAVIS	X	12			Slurry Mixer	X	
LAMAR POWELL	X	12			Grout Mixer		X
MIKE PARSON	X	12			Pump (4)		X
REX TALBERT	X	12			4" HDPE pipe		X
JOSUE TORO-DIAZ	X	12			Loader w/forks	X	
					Dozer (D6)	X	
					Excavator (2)		X
					Genererator	X	
					Tremie pipe		X

SUMMARY OF DAY'S WORK
Excavation was shutdown due to the length of the open trench. Some backfill was placed to close the slope.
Met in the morning with Golder and Agnico Eagle Mine (AEM) representatives and discuss 3 options for the placement of the CSB. Option A: fill the already excavated trench with SB and continue excavation to the end of the alignment, after completion, return to the section were CSB Backfill needs to be placed and redig that section and fill it with CSB backfill to the top. Option B: use the existing beam cross as a lead-in slope to place the CSB backfill. at the same time, place SB backfill on the backside of the beam. Option C: place CSB backfill with tremie pipe up to elevation 128.1. AEM told us that they will have an answer for us by the end of the day.

Met again in the afternoon with same personnel to discuss in more details the options. Dominique Namy was called to answer technical questions that AEM and Golder had.

Slurry in trench was stir.

Did not receive any answer from AEM.

REMARKS / DELAYS / ITEMS REQUIRING CONTRACTOR ACTION
Excavation is shutdown until further notice is received on how to approach the placement of the CSB.

SAFETY
Daily tool-box safety meeting every morning.

ATTACHMENTS
Trench profile.

Soil-Bentonite Backfill						
SLUMP	STATION	30+226				Notes:
	50-150 mm	100				
DENSITY	240 kg/cu.m > in-trench slurry	213				

Associates, Inc.

Daily Construction Report

PROJECT

**AGNICO EAGLE MINE
BAY GOOSE DIKE**

CONTRACTOR/OWNER

F.GILBERT Itée

Date:

Thursday, September 17, 2009

Report #

DR.2009.09.17

Bentonite Slurry

Time	Location	Marsh Funnel (>45-55 sec)	Density (>1,025 kg/cu.m)	Filter Loss* (cc)	Notes:
9:00 AM	Pond	47	1050.0		3% of sand in the morning and in the night.
Depth (mid depth)	Station	Marsh Funnel (>40 sec)	Density (1,025-1,250 kg/cu.m)	Filter Loss* (cc)	
4.0	30+364	48	1120		
			1130		

*For Inquip's internal reference.

Cement-Soil-Bentonite Backfill

STATION						Notes:
SLUMP	180-220 mm					
DENSITY	1,900 to 2,100 kg/cu.m					
GROUT DENSITY	1,120 to 1,200 kg/cu.m					
STRENGTH	130 kPa @ 7 days					

Excavation Data

[illegible]

Associates, Inc.

CONTRACTOR/OWNER

Date:

Thursday, September 17, 2009

PROJECT

**AGNICO EAGLE MINE
BAY GOOSE DIKE**

F.GILBERT Itée

Report #

DR.2009.09.17

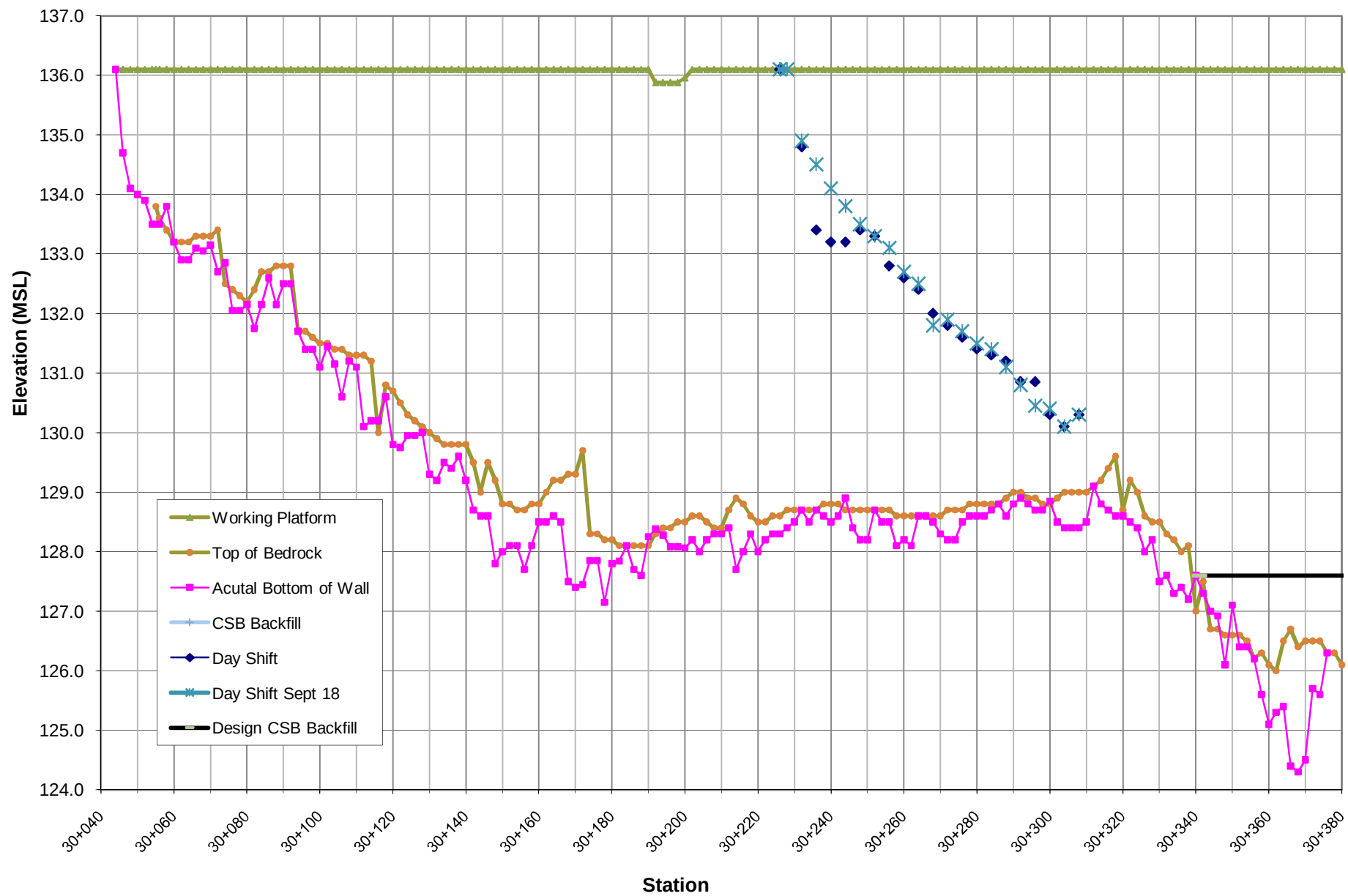
								Preliminary
								Total
								To Date
								2,350.1

Contractors Verification:

The above report is complete and correct and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

Submitted By: Josue Toro-Diaz

Soil Bentonite Cutoff Wall Trench Profile
Agnico Eagle Mine - Bay-Goose Dike
(NOT TO SCALE)



INQUIP

Associates, Inc.

Daily Construction Report

PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE			CONTRACTOR/OWNER F.GILBERT Itée		Date: Friday, September 18, 2009		
Weather:			Temperature High: Low:		Report # DR.2009.09.18 Ground Conditions		
MANPOWER							
NAME/CRAFT	On Site	HRS.			TYPE	IN-USE	ST-BY
FRANK DAVIS	X	12			Slurry Mixer	X	
LAMAR POWELL	X	12			Grout Mixer		X
MIKE PARSON	X	12			Pump (4)		X
REX TALBERT	X	12			4" HDPE pipe		X
JOSUE TORO-DIAZ	X	12			Loader w/forks		X
					Dozer (D6)		X
					Excavator (2)		X
					Genererator		X
					Tremie pipe		X

SUMMARY OF DAY'S WORK
It was decided to go with option B, but instead of using the beam as a lead in slope, inquip was directed to use the existing SB backfill slope to place the CSB backfill. Finished setting up the mixer and started mixing cement slurry between 3:00 and 4:00pm. By 7:00pm, 4 batches of CSB backfill had been mix and placed.

Soundings of the existing slope were done before placing the SCB backfill.

Night shift backfilled all night. Mixed and place 19 batches. 2 batches were wasted due to a cement block plug in the mixer. While cleaning the toe of the trench, the excavator pulled up large pieces of rock about 16" in size.

CSB backfill ingredients: 1,500kg cement, 1cu.m. of water, 15cu.m. of till, 4.5-7.5cu.m. of slurry to reach the desired slump.

REMARKS / DELAYS / ITEMS REQUIRING CONTRACTOR ACTION
Excavation of the cutoff wall will proceed when the toe of the backfill gets clean by the excavator.

SAFETY
Daily tool-box safety meeting every morning.

ATTACHMENTS
Trench profile.

Soil-Bentonite Backfill						
SLUMP	STATION					Notes:
	50-150 mm					
DENSITY	240 kg/cu.m > in-trench slurry					

Associates, Inc.

CONTRACTOR/OWNER

Date:

Friday, September 18, 2009

F.GILBERT Itée

Report #

DR.2009.09.18

Time	Location	Marsh Funnel (>45-55 sec)	Density (>1,025 kg/cu.m)	Filter Loss* (cc)	Notes:
	Pond				3% of sand in the morning and in the night.
Depth (mid depth)	Station	Marsh Funnel (>40 sec)	Density (1,025-1,250 kg/cu.m)	Filter Loss* (cc)	
3.0	30+364	54	1110		

*For Inquip's internal reference.

STATION		302+28	302+32	302+66		Notes:
SLUMP	180-220 mm	100	50	153		
DENSITY	1,900 to 2,100 kg/cu.m			1910		
GROUT DENSITY	1,120 to 1,200 kg/cu.m					

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Associates, Inc.

Daily Construction Report

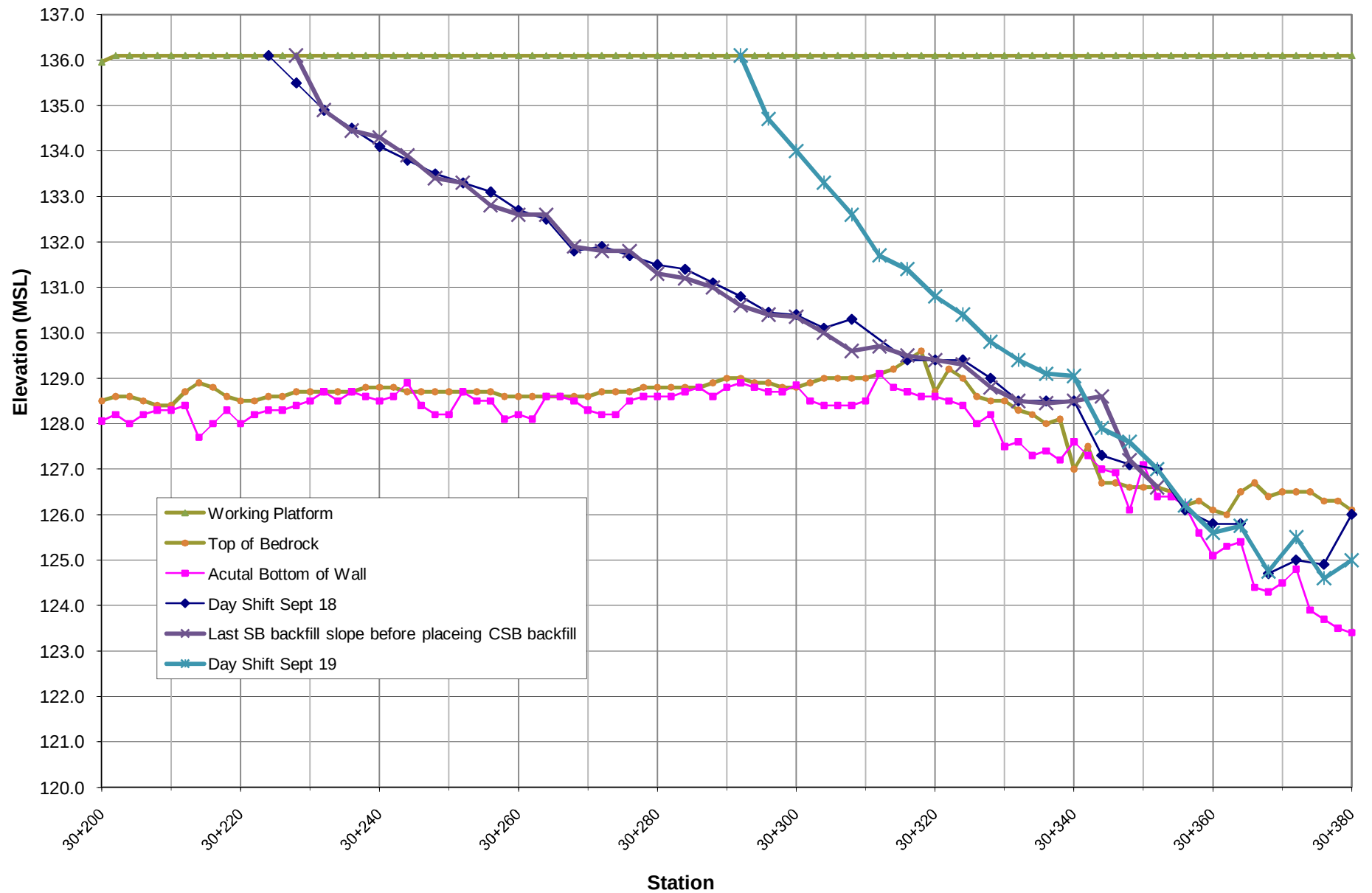
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Contractors Verification:

The above report is complete and correct and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

Submitted By: Josue Toro-Diaz

Soil Bentonite Cutoff Wall Trench Profile
Agnico Eagle Mine - Bay-Goose Dike
(NOT TO SCALE)



INQUIP

Associates, Inc.

Daily Construction Report

PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE			CONTRACTOR/OWNER F.GILBERT Itée		Date: Saturday, September 19, 2009		
Weather:			Temperature High: Low:		Report # DR.2009.09.19 Ground Conditions		
MANPOWER							
NAME/CRAFT	On Site	HRS.			TYPE	IN-USE	ST-BY
FRANK DAVIS	X	12			Slurry Mixer	X	
LAMAR POWELL	X	12			Grout Mixer	X	
MIKE PARSON	X	12			Pump (4)	X	
REX TALBERT	X	12			4" HDPE pipe	X	
JOSUE TORO-DIAZ	X	12			Loader w/forks	X	
					Dozer (D6)	X	
					Excavator (2)	X	
					Genererator	X	
					Tremie pipe		X
					Forklift	X	
					Mixing Box	X	

SUMMARY OF DAY'S WORK

Kept backfilling until 11:00am when excavation was resumed; CSB backfill was at station 30+380. Big boulder were dug out from the bottom of the trench; were digging in the deepest part of the alignment (got up to 13.4m deep).
Inquip was instructed that when the toe of the CSB backfill reaches 8.0m deep, the CSB backfill will stop and SB backfill will continue.

Bentonite usage: As of Sept 20 in the morning
Bags used: 88
Bags on hand: 60

Cement Usage: As of Sept 20 in the morning
Bags used: 62
Broken bags: 3
Bags wasted (after mixed, the cement slurry was dumped): 2
Bags on hand: 62

REMARKS / DELAYS / ITEMS REQUIRING CONTRACTOR ACTION

Excavation of the cutoff wall was resumed at 11:00am.

SAFETY

Daily tool-box safety meeting every morning.

ATTACHMENTS

Trench profile.

INQUIP

Associates, Inc.

Daily Construction Report

PROJECT	AGNICO EAGLE MINE BAY GOOSE DIKE	CONTRACTOR/OWNER	Date:	Saturday, September 19, 2009
		F.GILBERT Itée	Report #	DR.2009.09.19

Soil-Bentonite Backfill

SLUMP	STATION					Notes:
	50-150 mm					
DENSITY	240 kg/cu.m > in-trench slurry					

Bentonite Slurry

Time	Location	Marsh Funnel (>45-55 sec)	Density (>1,025 kg/cu.m)	Filter Loss* (cc)	Notes:
11:35 AM	Pond	39	1050.0		3% of sand
10:30 PM		41	1050.0		
5:00 AM		40	1050.0		
Depth (mid depth)	Station	Marsh Funnel (>40 sec)	Density (1,025-1,250 kg/cu.m)	Filter Loss* (cc)	
4.0	30+364	52	1110		
4.0	30+360	50	1060		
4.0	30+380	46	1110		
4.0	30+400	46	1110		

*For Inquip's internal reference.

Cement-Soil-Bentonite Backfill

STATION	30+296	30+312	30+320		Notes:
SLUMP 180-220 mm	180	180	180		
DENSITY 1,900 to 2,100 kg/cu.m	1900		1910		
GROUT DENSITY 1,120 to 1,200 kg/cu.m	1200		1200		

Associates, Inc.

Daily Construction Report

PROJECT

**AGNICO EAGLE MINE
BAY GOOSE DIKE**

CONTRACTOR/OWNER

F.GILBERT Itée

Date:

Saturday, September 19, 2009

Report #

DR.2009.09.19

Excavation Data

Station	Elevation of Workpad (MSL)	Depth to Bedrock (m)	Depth of CSB Backfill (m)	Elevation of Bedock (MSL)	Elevation of CSB Backfill (MSL)	Total Square meters	Prev Days Total Sq. m
30+376	136.1	12.4		123.7			2,358.0
30+378	136.1	12.6		123.5		25.0	
30+380	136.1	12.7		123.4		25.3	
30+382	136.1	13.0		123.1		25.7	
30+384	136.1	13.2		122.9		26.2	
30+386	136.1	13.2		123.0		26.4	
30+388	136.1	13.0		123.1		26.2	
30+390	136.1	13.4		122.7		26.4	
30+392	136.1	12.1		124.0		25.5	
30+394	136.1	11.7		124.4		23.8	
30+396	136.1	11.4		124.7		23.1	
30+398	136.1	11.5		124.6		22.9	
30+400	136.1	11.5		124.6		23.0	
30+402	136.1	10.8		125.3		22.3	
30+404	136.1	11.8		124.3		22.6	
30+406	136.1	12.2		123.9		24.0	
30+408	136.1	11.7		124.4		23.9	
30+410	136.1	10.8		125.3		22.5	
30+412	136.1	11.0		125.1		21.8	
30+414	136.1	11.0		125.1		22.0	
						2,816.5	

Contractors Verification:

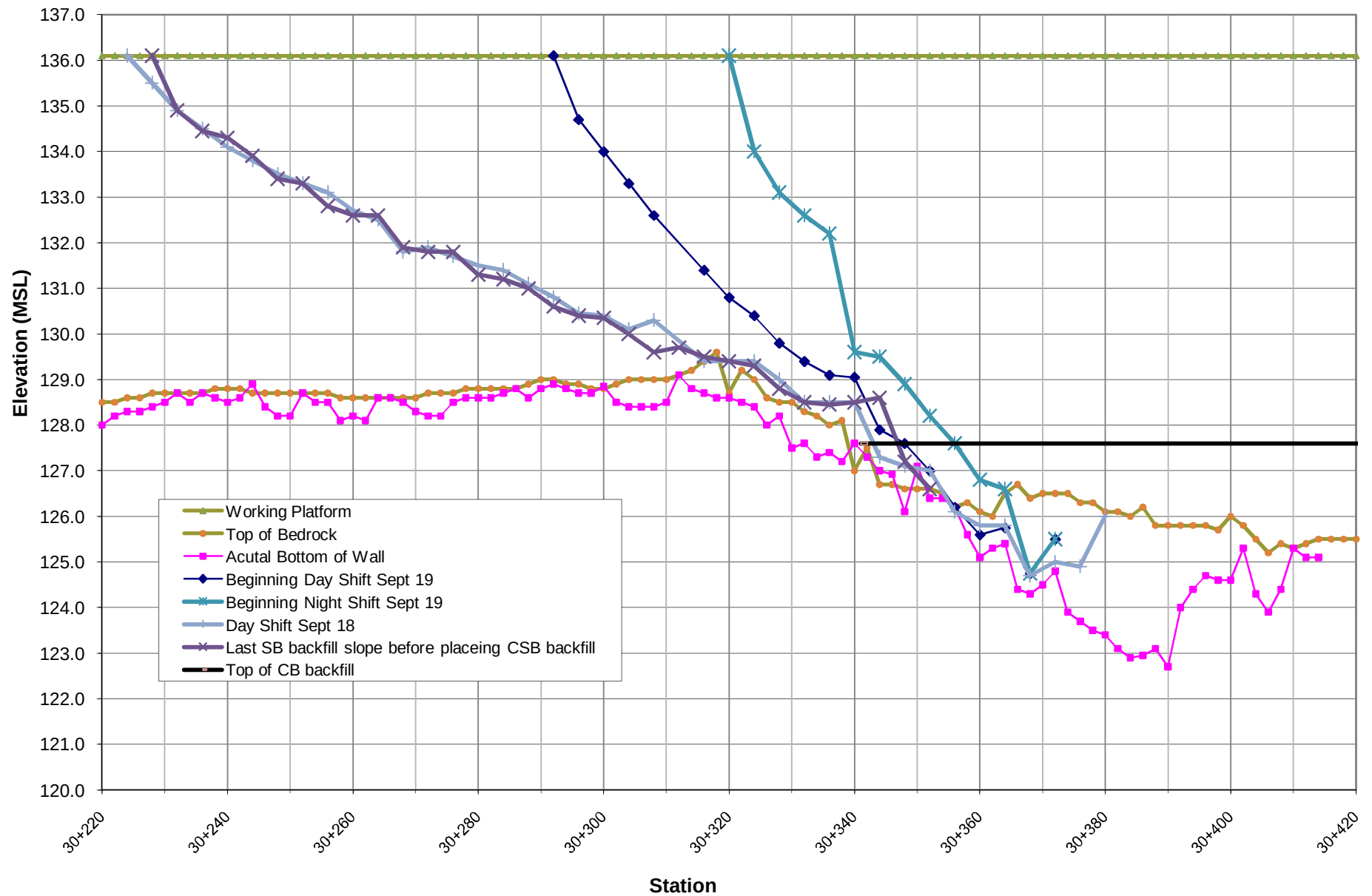
458.5

The above report is complete and correct and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

Submitted By:

Josue Toro-Diaz

Soil Bentonite Cutoff Wall Trench Profile
Agnico Eagle Mine - Bay-Goose Dike
(NOT TO SCALE)



INQUIP

Associates, Inc.

Daily Construction Report

PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE			CONTRACTOR/OWNER F.GILBERT Itée		Date: Sunday, September 20, 2009 Report # DR.2009.09.20		
Weather:			Temperature High: Low:		Ground Conditions		
MANPOWER							
NAME/CRAFT	On Site	HRS.			TYPE	IN-USE	ST-BY
FRANK DAVIS	X	12			Slurry Mixer	X	
LAMAR POWELL	X	12			Grout Mixer	X	
MIKE PARSON	X	12			Pump (4)	X	
REX TALBERT	X	12			4" HDPE pipe	X	
JOSUE TORO-DIAZ	X	12			Loader w/forks	X	
					Dozer (D6)	X	
					Excavator (2)	X	
					Genererator	X	
					Tremie pipe		X
					Forklift	X	
					Mixing Box	X	

SUMMARY OF DAY'S WORK

Received another generator to run the bentonite slurry plant and be able to mix and pump bentonite slurry and cement slurry at the same time.

Bentonite usage: As of Sept 21 in the morning

Bags used: 91

Bags on hand: 57

Cement Usage: As of Sept 21 in the morning

Bags used: 100

Broken bags: 3

Bags wasted (after mixed, the cement slurry was dumped): 3

Bags on hand: 23

REMARKS / DELAYS / ITEMS REQUIRING CONTRACTOR ACTION

SAFETY

Daily tool-box safety meeting every morning.

ATTACHMENTS

Trench profile.

INQUIP

Associates, Inc.

Daily Construction Report

PROJECT	AGNICO EAGLE MINE BAY GOOSE DIKE	CONTRACTOR/OWNER	Date:	Sunday, September 20, 2009
		F.GILBERT Itée	Report #	DR.2009.09.20

Soil-Bentonite Backfill

SLUMP	STATION					Notes:
	50-150 mm					
DENSITY	240 kg/cu.m > in-trench slurry					

Bentonite Slurry

Time	Location	Marsh Funnel (>45-55 sec)	Density (>1,025 kg/cu.m)	Filter Loss* (cc)	Notes:
7:30 AM	Pond	41	1060.0		3% of sand
3:30 PM		42	1060.0		
7:45 PM		41	1060.0		
4:30 AM		43	1050.0		
Depth (mid depth)	Station	Marsh Funnel (>40 sec)	Density (1,025-1,250 kg/cu.m)	Filter Loss* (cc)	
4.0	30+410	46	1100		
4.0	30+410	46	1130		
4.0	30+410	48	1150		
4.0	30+430	47	1117		

*For Inquip's internal reference.

Cement-Soil-Bentonite Backfill

STATION	30+342	30+350	30+360	30+370	Notes:
SLUMP 180-220 mm	180	180	180	180	
DENSITY 1,900 to 2,100 kg/cu.m	1900		2010		
GROUT DENSITY 1,120 to 1,200 kg/cu.m	1120		1120		

Associates, Inc.

Daily Construction Report

PROJECT	CONTRACTOR/OWNER	Date:	Sunday, September 20, 2009
AGNICO EAGLE MINE BAY GOOSE DIKE	F.GILBERT Itée	Report #	DR.2009.09.20

Excavation Data

[illegible]

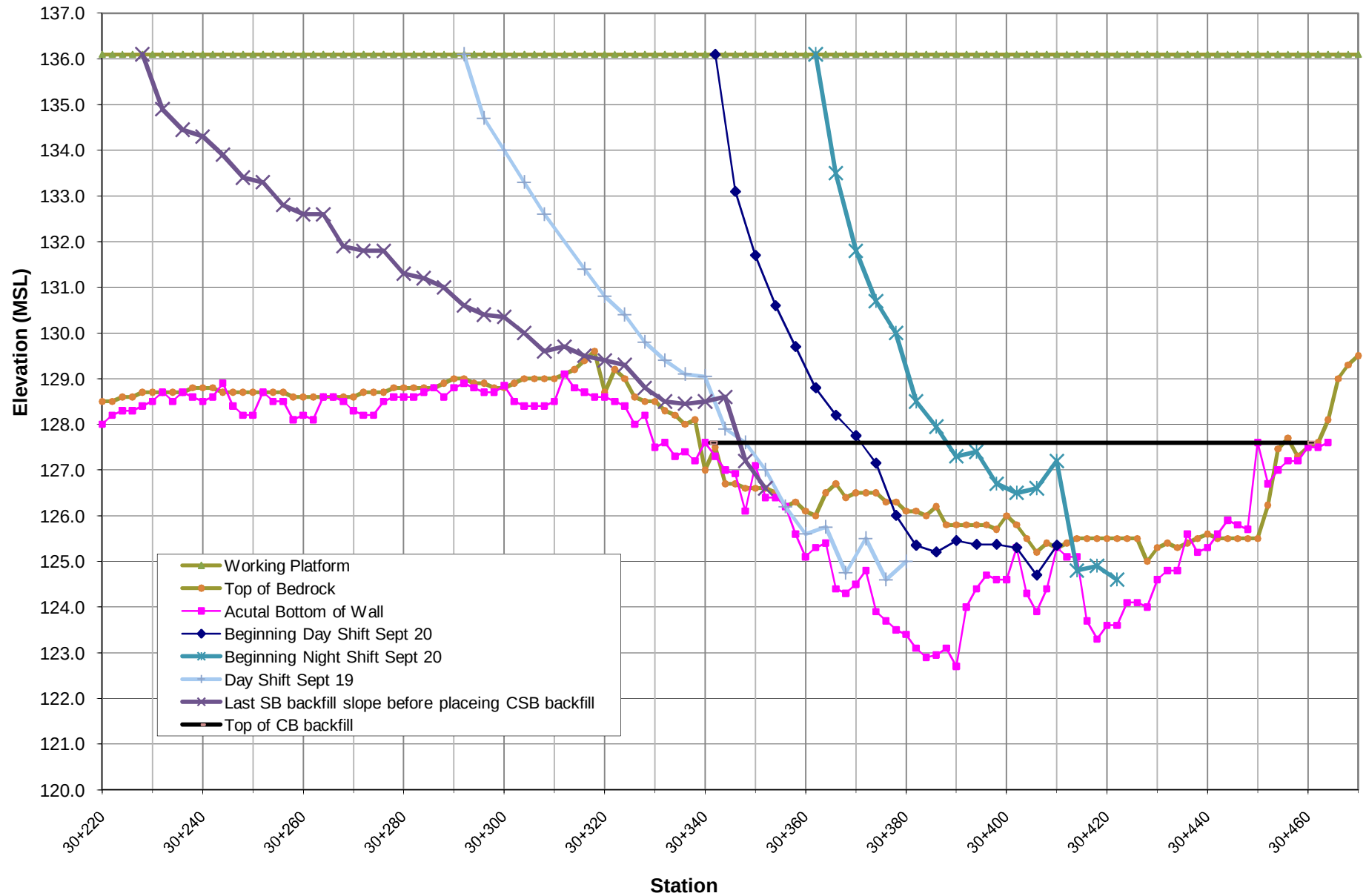
Contractors Verification:

531.5

The above report is complete and correct and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

Submitted By: Josue Toro-Diaz

Soil Bentonite Cutoff Wall Trench Profile
Agnico Eagle Mine - Bay-Goose Dike
(NOT TO SCALE)



INQUIP

Associates, Inc.

Daily Construction Report

PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE			CONTRACTOR/OWNER F.GILBERT Itée		Date: Monday, September 21, 2009		
Weather:			Temperature High: Low:		Report # DR.2009.09.21 Ground Conditions		
MANPOWER							
NAME/CRAFT	On Site	HRS.			TYPE	IN-USE	ST-BY
FRANK DAVIS	X	12			Slurry Mixer	X	
LAMAR POWELL	X	12			Grout Mixer	X	
MIKE PARSON	X	12			Pump (4)	X	
REX TALBERT	X	12			4" HDPE pipe	X	
JOSUE TORO-DIAZ	X	12			Loader w/forks	X	
					Dozer (D6)	X	
					Excavator (2)	X	
					Genererator	X	
					Tremie pipe		X
					Forklift	X	
					Mixing Box	X	

SUMMARY OF DAY'S WORK

Finished placing the CSB section. Measurements were made to confirm that at station 30+466 we had the CSB backfill at 8m deep. Soundings after the last batch of CSB backfill were made by the day shift at the end of the shift. Night shift continue with the placing of the SB backfill. The night shift did not had any labors at the trench.

Bentonite usage: As of Sept 22 in the morning

Bags used: 94

Bags on hand: 54

Cement Usage: As of Sept 22 in the morning

Bags used: 125

Broken bags: 1

Bags wasted (after mixed, the cement slurry was dumped): 3

Bags on hand: 0

REMARKS / DELAYS / ITEMS REQUIRING CONTRACTOR ACTION

Golder requested to measure the slope of the CSB backfill at the beginning of the night shift. It could not be done due to lack of personnel (labors) at the trench. The soundings were done at the end of the day shift.

SAFETY

Daily tool-box safety meeting every morning.

ATTACHMENTS

Trench profile.

INQUIP

Associates, Inc.

Daily Construction Report

PROJECT	AGNICO EAGLE MINE BAY GOOSE DIKE	CONTRACTOR/OWNER	Date:	Monday, September 21, 2009
		F.GILBERT Itée	Report #	DR.2009.09.21

Soil-Bentonite Backfill

SLUMP	STATION	30+406	30+410			Notes:
	50-150 mm	112	120			
DENSITY	240 kg/cu.m > in-trench slurry	200	206			

Bentonite Slurry

Time	Location	Marsh Funnel (>45-55 sec)	Density (>1,025 kg/cu.m)	Filter Loss* (cc)	Notes:
2:00 PM	Pond	41	1050.0		
Depth (mid depth)	Station	Marsh Funnel (>40 sec)	Density (1,025-1,250 kg/cu.m)	Filter Loss* (cc)	
4.0	30+450	47	1160		
4.0	30+460	51	1160		
4.0	30+470	47	1160		
4.0	30+480	55	1200		

*For Inquip's internal reference.

Cement-Soil-Bentonite Backfill

STATION	30+384	30+394			Notes:
SLUMP	180-220 mm	190	190		
DENSITY	1,900 to 2,100 kg/cu.m	2005			
GROUT DENSITY	1,120 to 1,200 kg/cu.m	1180			

Associates, Inc.

Daily Construction Report

PROJECT	CONTRACTOR/OWNER	Date:	Monday, September 21, 2009
AGNICO EAGLE MINE BAY GOOSE DIKE	F.GILBERT Itée	Report #	DR.2009.09.21

Excavation Data

Station	Elevation of Workpad (MSL)	Depth to Bedrock (m)	Depth of CSB Backfill (m)	Elevation of Bedock (MSL)	Elevation of CSB Backfill (MSL)	Total Square meters	Prev Days Total Sq. m	
30+464	136.1	8.5		127.6			3,348.0	
30+466	136.1	8.3		127.8		16.8		
30+468	136.1	8.0		128.1		16.3		
30+470	136.1	7.6		128.5		15.6		
30+472	136.1	7.4		128.7		15.0		
30+474	136.1	7.3		128.8		14.7		
30+476	136.1	7.6		128.5		14.9		
30+478	136.1	7.4		128.7		15.0		
30+480	136.1	7.2		128.9		14.6		
30+482	136.1	7.4		128.7		14.6		
30+484	136.1	7.3		128.9		14.7		
30+486	136.1	7.0		129.1		14.3		
30+488	136.1	7.1		129.0		14.1		
30+490	136.1	7.9		128.2		15.0		
30+492	136.1	7.7		128.4		15.6		
30+494	136.1	7.4		128.8		15.1		
30+496	136.1	7.2		128.9		14.6		
30+498	136.1	6.9		129.2		14.1		
30+500	136.1	6.9		129.2		13.8		
30+502	136.1	7.0		129.1		13.9		
30+504	136.1	6.7		129.4		13.7		
30+506	136.1	6.9		129.2		13.6		
30+508	136.1	6.7		129.4		13.6		
30+510	136.1	6.5		129.6		13.2		
30+512	136.1	6.7		129.4		13.2		
30+514	136.1	6.7		129.4		13.4		
30+516	136.1	6.7		129.4		13.4		
30+518	136.1	7.0		129.1		13.7		
30+520	136.1	7.0		129.1		14.0		
30+522	136.1	7.0		129.1		14.0		
								Preliminary Total To Date
							3,766.3	

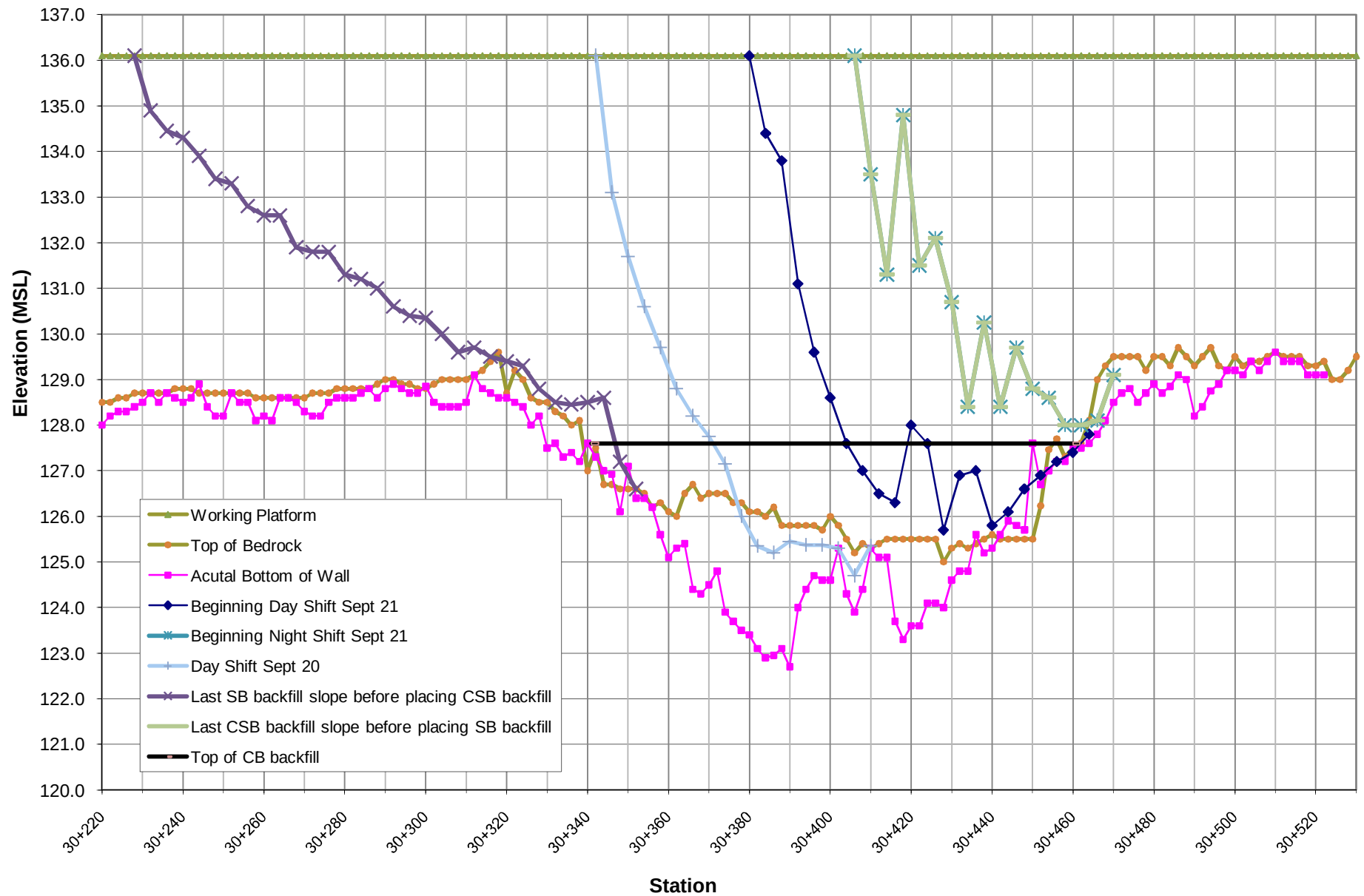
Contractors Verification:

418.3

The above report is complete and correct and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

Submitted By: Josue Toro-Diaz

Soil Bentonite Cutoff Wall Trench Profile
Agnico Eagle Mine - Bay-Goose Dike
(NOT TO SCALE)



INQUIP

Associates, Inc.

Daily Construction Report

PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE			CONTRACTOR/OWNER F.GILBERT Itée		Date: Tuesday, September 22, 2009 Report # DR.2009.09.22		
Weather:			Temperature High: Low:		Ground Conditions		
MANPOWER							
NAME/CRAFT	On Site	HRS.			TYPE	IN-USE	ST-BY
FRANK DAVIS	X	12			Slurry Mixer	X	
LAMAR POWELL	X	12			Grout Mixer		X
MIKE PARSON	X	12			Pump (4)	X	
REX TALBERT	X	12			4" HDPE pipe	X	
JOSUE TORO-DIAZ	X	12			Loader w/forks	X	
					Dozer (D6)	X	
					Excavator (1)	X	
					Generator	X	
					Tremie pipe		X
					Forklift		X
					Mixing Box		X

SUMMARY OF DAY'S WORK

Continue with the placing of the SB backfill. Dug up to station 30+624.

Bentonite usage: As of Sept 23 in the morning

Bags used: 99

Bags on hand: 49

Cement Usage: As of Sept 22 in the morning

Bags used: 125

Broken bags: 1

Bags wasted (after mixed, the cement slurry was dumped): 3

Bags on hand: 0

REMARKS / DELAYS / ITEMS REQUIRING CONTRACTOR ACTION

A plug at the end of the alignment was proposed by Golder.

SAFETY

Daily tool-box safety meeting every morning.

ATTACHMENTS

Trench profile.

INQUIP

Associates, Inc.

Daily Construction Report

PROJECT	AGNICO EAGLE MINE BAY GOOSE DIKE	CONTRACTOR/OWNER	Date:	Tuesday, September 22, 2009
		F.GILBERT Itée	Report #	DR.2009.09.22

Soil-Bentonite Backfill

SLUMP	STATION	30+455	30+462	30+500	3+050	Notes:
	50-150 mm	101.5	63	120	115	Previous densities were reported as hundreds of grams per cubic centimeters (100 * g/cu.cm). The right units are kilograms per cubic meter (kg/cu.m.)
DENSITY	240 kg/cu.m > in-trench slurry	2050	2050	2050	2050	

Bentonite Slurry

Time	Location	Marsh Funnel (>45-55 sec)	Density (>1,025 kg/cu.m)	Filter Loss* (cc)	Notes:
7:50 AM	Pond	41	1060.0		
2:30 PM		41	1060.0		
8:30 PM		41	1060.0		
Depth (mid depth)	Station	Marsh Funnel (>40 sec)	Density (1,025-1,250 kg/cu.m)	Filter Loss* (cc)	
4.0	30+510	49	1240		
3.0	30+550	47	1200		
3.0	30+570	47	1200		
2.0	30+586	54	1200		

*For Inquip's internal reference.

Cement-Soil-Bentonite Backfill

STATION					Notes:
SLUMP	180-220 mm				
DENSITY	1,900 to 2,100 kg/cu.m				
GROUT DENSITY	1,120 to 1,200 kg/cu.m				

INQUIP

Associates, Inc.

Daily Construction Report

PROJECT

AGNICO EAGLE MINE
BAY GOOSE DIKE

CONTRACTOR/OWNER

F.GILBERT Itée

Date:

Tuesday, September 22, 2009

Report #

DR.2009.09.22

Excavation Data

Station	Elevation of Workpad (MSL)	Depth to Bedrock (m)	Depth of CSB Backfill (m)	Elevation of Bedrock (MSL)	Elevation of CSB Backfill (MSL)	Total Square meters	Prev Days Total Sq. m
30+522	136.1	7.0		129.1			3,766.3
30+524	136.1	7.0		129.1		14.0	
30+526	136.1	6.3		129.8		13.3	
30+528	136.1	6.5		129.6		12.8	
30+530	136.1	6.9		129.2		13.4	
30+532	136.1	6.8		129.3		13.7	
30+534	136.1	6.4		129.7		13.2	
30+536	136.1	6.4		129.7		12.8	
30+538	136.1	6.1		130.0		12.5	
30+540	136.1	5.8		130.3		11.9	
30+542	136.1	5.7		130.4		11.5	
30+544	136.1	5.5		130.6		11.2	
30+546	136.1	5.6		130.5		11.1	
30+548	136.1	5.6		130.5		11.2	
30+550	136.1	5.7		130.4		11.3	
30+552	136.1	5.9		130.2		11.6	
30+554	136.1	6.8		129.3		12.7	
30+556	136.1	5.0		131.1		11.8	
30+558	136.1	5.6		130.5		10.6	
30+560	136.1	6.9		129.2		12.5	
30+562	136.1	6.3		129.8		13.2	
30+564	136.1	6.9		129.2		13.2	
30+566	136.1	6.7		129.4		13.6	
30+568	136.1	6.9		129.2		13.6	
30+570	136.1	6.7		129.4		13.6	
30+572	136.1	6.8		129.3		13.5	
30+574	136.1	6.8		129.3		13.6	
30+576	136.1	6.5		129.6		13.3	
30+578	136.1	7.3		128.8		13.8	
30+580	136.1	6.4		129.7		13.7	
30+582	136.1	6.3		129.8		12.7	
30+584	136.1	6.6		129.5		12.9	
30+586	136.1	6.7		129.4		13.3	
30+588	136.1	6.7		129.4		13.4	
30+590	136.1	6.6		129.5		13.3	
30+592	136.1	6.8		129.3		13.4	
30+594	136.1	6.3		129.8		13.1	
30+596	136.1	6.0		130.1		12.3	
30+598	136.1	6.6		129.5		12.6	
30+600	136.1	7.2		128.9		13.8	
30+602	136.1	7.6		128.5		14.8	
30+604	136.1	7.4		128.7		15.0	
30+606	136.1	7.2		128.9		14.6	
30+608	136.1	7.0		129.1		14.2	
30+610	136.1	6.2		129.9		13.2	
30+612	136.1	6.2		129.9		12.4	
30+614	136.1	6.0		130.1		12.2	

INQUIP

Associates, Inc.

Daily Construction Report

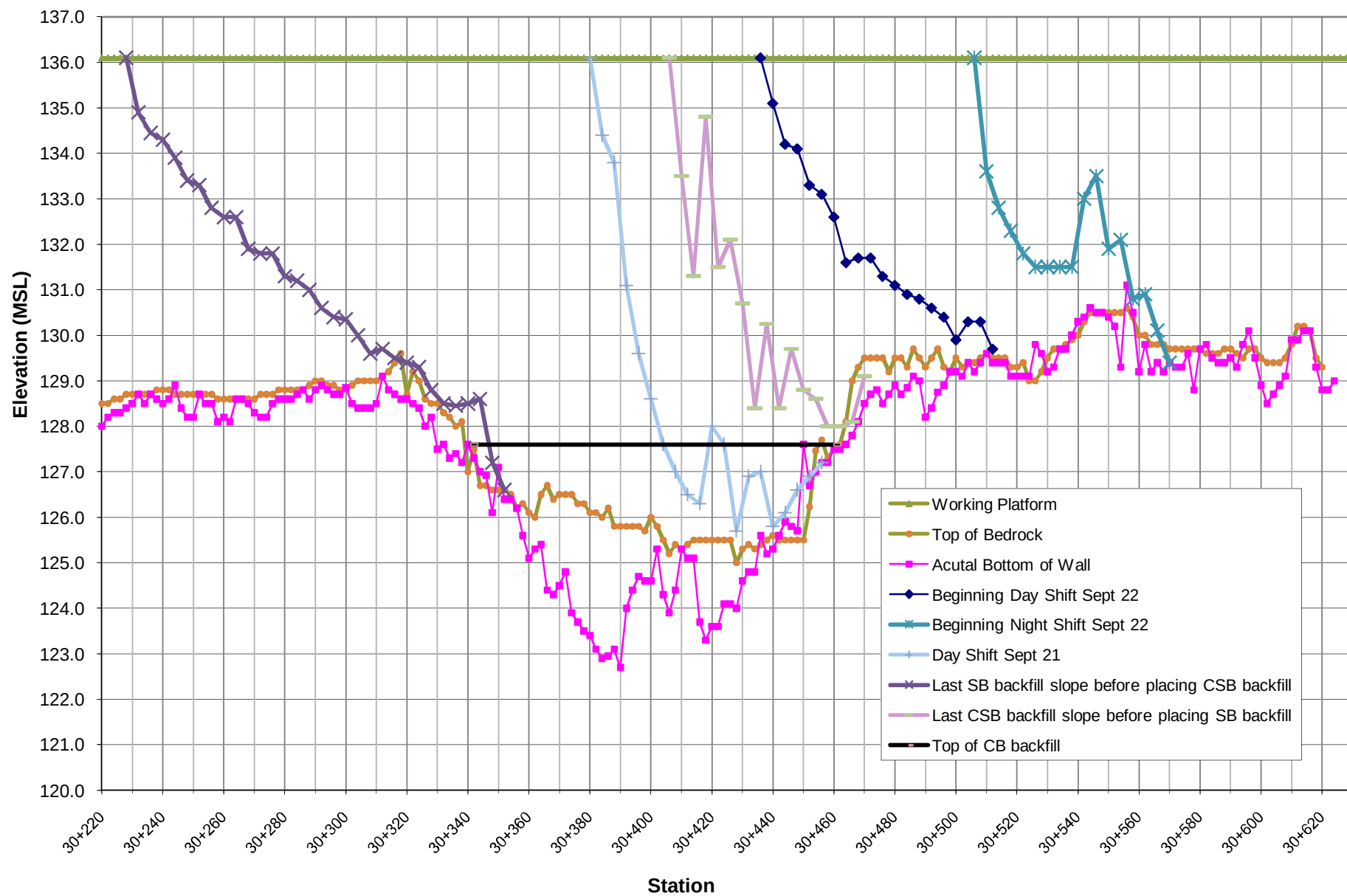
PROJECT				CONTRACTOR/OWNER		Date:		Tuesday, September 22, 2009	
AGNICO EAGLE MINE BAY GOOSE DIKE				F.GILBERT Itée		Report #		DR.2009.09.22	
30+616	136.1	6.0		130.1			12.0	Preliminary Total To Date	
30+618	136.1	6.8		129.3			12.8		
30+620	136.1	7.3		128.8			14.1		
30+622	136.1	7.3		128.8			14.6		
30+624	136.1	7.1		129.0			14.4		
							663.3		
									4,429.6

Contractors Verification:

The above report is complete and correct and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

Submitted By: Josue Toro-Diaz

Soil Bentonite Cutoff Wall Trench Profile
Agnico Eagle Mine - Bay-Goose Dike
(NOT TO SCALE)



INQUIP

Associates, Inc.

Daily Construction Report

PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE			CONTRACTOR/OWNER F.GILBERT Itée		Date: Wednesday, September 23, 2009 Report # DR.2009.09.22		
Weather:			Temperature High: Low:		Ground Conditions		
MANPOWER							
NAME/CRAFT	On Site	HRS.			TYPE	IN-USE	ST-BY
FRANK DAVIS	X	12			Slurry Mixer	X	
LAMAR POWELL	X	12			Grout Mixer		X
MIKE PARSON	X	12			Pump (4)	X	
REX TALBERT	X	12			4" HDPE pipe	X	
JOSUE TORO-DIAZ	X	12			Loader w/forks	X	
					Dozer (D6)	X	
					Excavator (1)	X	
					Generator	X	
					Tremie pipe		X
					Forklift		X
					Mixing Box		X

SUMMARY OF DAY'S WORK

Continue with the placing of the SB backfill. Dug up to station 30+722

Bentonite slurry usage: As of Sept 24 in the morning

Bags used: 106

Bags on hand: 42

Cement Usage: As of Sept 22 in the morning

Bags used: 125

Broken bags: 1

Bags wasted (after mixed, the cement slurry was dumped): 3

Bags on hand: 0

REMARKS / DELAYS / ITEMS REQUIRING CONTRACTOR ACTION

A plug at the end of the alignment was proposed by Golder.No decision has been made. Options will be proposed tomorrow.

SAFETY

Daily tool-box safety meeting every morning.

ATTACHMENTS

Trench profile.

INQUIP

Associates, Inc.

Daily Construction Report

PROJECT	AGNICO EAGLE MINE BAY GOOSE DIKE	CONTRACTOR/OWNER	Date:	Wednesday, September 23, 2009
		F.GILBERT ltée	Report #	DR.2009.09.22

Soil-Bentonite Backfill

SLUMP	STATION	30+560	30+590	30+600	Notes:
	50-150 mm	140	90	116	
DENSITY	240 kg/cu.m > in-trench slurry	2210	2170	2170	

Bentonite Slurry

Time	Location	Marsh Funnel (>45-55 sec)	Density (>1,025 kg/cu.m)	Filter Loss* (cc)	Notes:
8:00 AM	Pond	41	1060.0		Fresh bentonite slurry was pumped into the trench to lower the viscosity at the begginig of the night shift.
2:00 PM		41	1060.0		
9:00 PM		41	1060.0		
5:00 AM		40	1060.0		
Depth (mid depth)	Station	Marsh Funnel (>40 sec)	Density (1,025-1,250 kg/cu.m)	Filter Loss* (cc)	
3.0	30+620	54	1210		
3.0	30+640	55	1250		
3.0	30+690	69	1160		
3.0	30+700	46	1100		

*For Inquip's internal reference.

Cement-Soil-Bentonite Backfill

STATION					Notes:
SLUMP	180-220 mm				
DENSITY	1,900 to 2,100 kg/cu.m				
GROUT DENSITY	1,120 to 1,200 kg/cu.m				

INQUIP

Associates, Inc.

Daily Construction Report

PROJECT	CONTRACTOR/OWNER	Date:	Wednesday, September 23, 2009
AGNICO EAGLE MINE BAY GOOSE DIKE	F.GILBERT Itée	Report #	DR.2009.09.22

Excavation Data

Station	Elevation of Workpad (MSL)	Depth to Bedrock (m)	Depth of CSB Backfill (m)	Elevation of Bedrock (MSL)	Elevation of CSB Backfill (MSL)	Total Square meters	Prev Days Total Sq. m
30+624	136.1	7.1		129.0			4,429.9
30+626	136.1	7.1		129.0		14.2	
30+628	136.1	7.4		128.7		14.5	
30+630	136.1	7.1		129.0		14.5	
30+632	136.1	6.9		129.2		14.0	
30+634	136.1	7.1		129.0		14.0	
30+636	136.1	6.9		129.2		14.0	
30+638	136.1	6.8		129.3		13.7	
30+640	136.1	7.0		129.1		13.8	
30+642	136.1	6.7		129.4		13.7	
30+644	136.1	6.7		129.4		13.4	
30+646	136.1	7.1		129.0		13.8	
30+648	136.1	6.9		129.2		14.0	
30+650	136.1	7.0		129.1		13.9	
30+652	136.1	7.0		129.1		14.0	
30+654	136.1	6.7		129.4		13.7	
30+656	136.1	6.4		129.7		13.1	
30+658	136.1	6.2		129.9		12.6	
30+660	136.1	6.7		129.4		12.9	
30+662	136.1	6.3		129.8		13.0	
30+664	136.1	6.5		129.6		12.8	
30+666	136.1	6.2		129.9		12.7	
30+668	136.1	6.9		129.2		13.1	
30+670	136.1	6.9		129.2		13.8	
30+672	136.1	6.6		129.5		13.5	
30+674	136.1	6.1		130.0		12.7	
30+676	136.1	6.7		129.4		12.8	
30+678	136.1	7.4		128.7		14.1	
30+680	136.1	7.2		128.9		14.6	
30+682	136.1	7.3		128.9		14.5	
30+684	136.1	6.8		129.3		14.1	
30+686	136.1	7.1		129.0		13.9	
30+688	136.1	6.8		129.3		13.9	
30+690	136.1	6.6		129.5		13.4	
30+692	136.1	6.6		129.5		13.2	
30+694	136.1	6.7		129.4		13.3	
30+696	136.1	6.5		129.6		13.2	
30+698	136.1	6.6		129.5		13.1	
30+700	136.1	6.5		129.6		13.1	
30+702	136.1	6.3		129.8		12.8	
30+704	136.1	6.4		129.7		12.7	
30+706	136.1	6.8		129.3		13.2	
30+708	136.1	7.2		128.9		14.0	
30+710	136.1	7.6		128.5		14.8	
30+712	136.1	8.2		127.9		15.8	
30+714	136.1	8.2		127.9		16.4	
30+716	136.1	8.7		127.4		16.9	

Associates, Inc.[illegible]

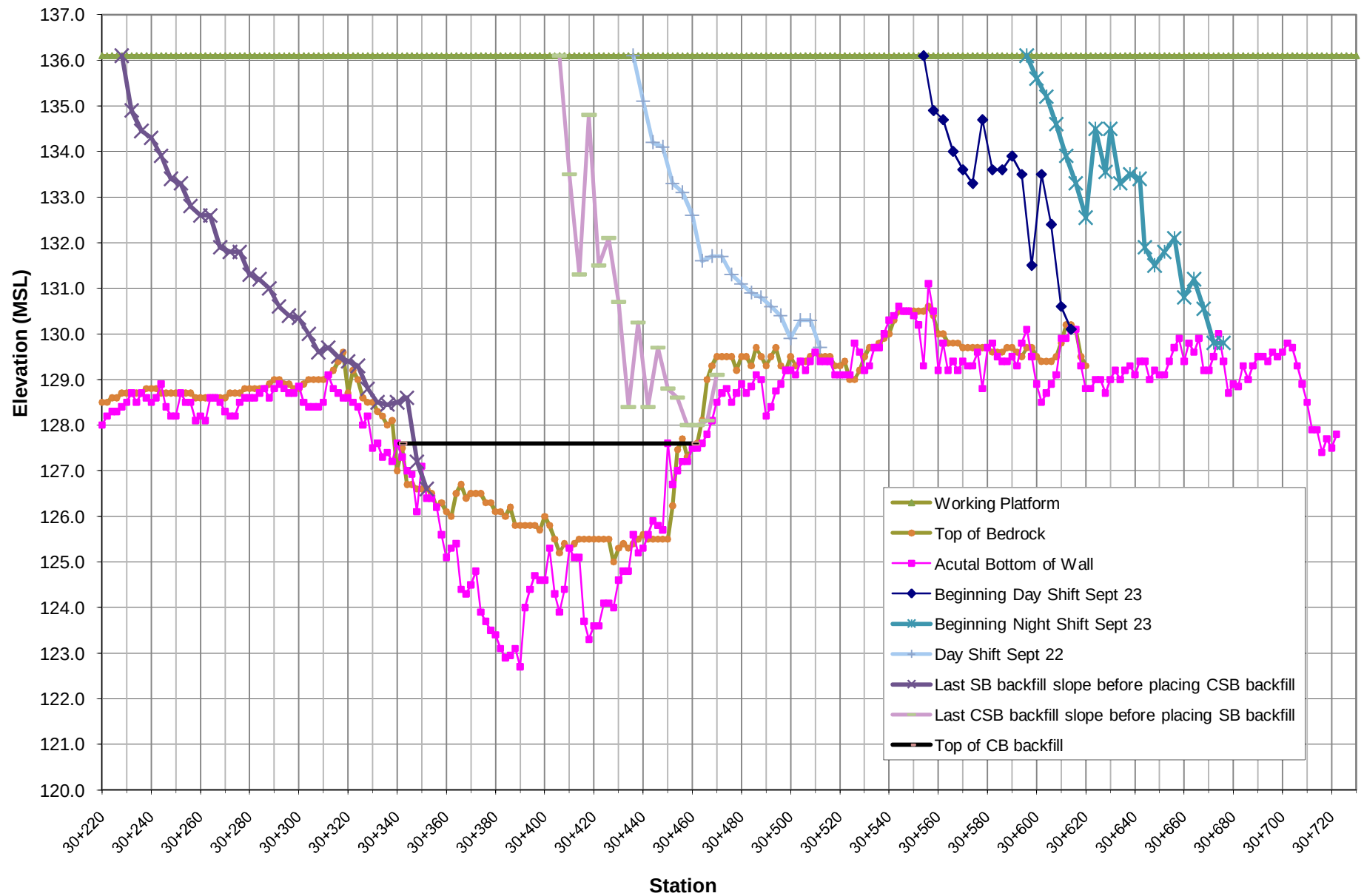
Contractors Verification:

684.1

The above report is complete and correct and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

Submitted By: Josue Toro-Diaz

Soil Bentonite Cutoff Wall Trench Profile
Agnico Eagle Mine - Bay-Goose Dike
(NOT TO SCALE)



INQUIP

Associates, Inc.

Daily Construction Report

PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE			CONTRACTOR/OWNER F.GILBERT Itée		Date: Thursday, September 24, 2009 Report # DR.2009.09.24		
Weather:			Temperature High: Low:		Ground Conditions		
MANPOWER							
NAME/CRAFT	On Site	HRS.			TYPE	IN-USE	ST-BY
FRANK DAVIS	X	12			Slurry Mixer	X	
LAMAR POWELL	X	12			Grout Mixer		X
MIKE PARSON	X	12			Pump (4)	X	
REX TALBERT	X	12			4" HDPE pipe	X	
JOSUE TORO-DIAZ	X	12			Loader w/forks	X	
					Dozer (D6)	X	
					Excavator (1)	X	
					Generator	X	
					Tremie pipe		X
					Forklift		X
					Mixing Box		X

SUMMARY OF DAY'S WORK

Continue with the placing of the SB backfill. Dug up to station 30+818. The Sb backfill slope was cleaned by pushing backfill until the excavator dug some buckets. These procedure was done a couple of times during the day and night shift.

Bentonite slurry usage: As of Sept 24 in the morning
Bags used: 106
Bags on hand: 42

Cement Usage: As of Sept 22 in the morning
Bags used: 125
Broken bags: 1
Bags wasted (after mixed, the cement slurry was dumped): 3
Bags on hand: 0

REMARKS / DELAYS / ITEMS REQUIRING CONTRACTOR ACTION

No response was given about the connection plug at the end of the alignment.

SAFETY

Daily tool-box safety meeting every morning.

ATTACHMENTS

Trench profile.

INQUIP

Associates, Inc.

Daily Construction Report

PROJECT	AGNICO EAGLE MINE BAY GOOSE DIKE	CONTRACTOR/OWNER	Date:	Thursday, September 24, 2009
		F.GILBERT Itée	Report #	DR.2009.09.24

Soil-Bentonite Backfill

SLUMP	STATION	30+650	30+658	30+688	Notes:
	50-150 mm	90	90	90	
DENSITY	240 kg/cu.m > in-trench slurry	2170	2140	2150	

Bentonite Slurry

Time	Location	Marsh Funnel (>45-55 sec)	Density (>1,025 kg/cu.m)	Filter Loss* (cc)	Notes:
8:00 AM	Pond	42	1060.0		
3:00 PM		41	1050.0		
Depth (mid depth)	Station	Marsh Funnel (>40 sec)	Density (1,025-1,250 kg/cu.m)	Filter Loss* (cc)	
2.0	30+700	49	1110		
2.0	30+730	50	1160		
2.0	30+760	51	1180		
2.0	30+760	53	1180		

*For Inquip's internal reference.

Cement-Soil-Bentonite Backfill

STATION					Notes:
SLUMP	180-220 mm				
DENSITY	1,900 to 2,100 kg/cu.m				
GROUT DENSITY	1,120 to 1,200 kg/cu.m				

INQUIP

Associates, Inc.

Daily Construction Report

PROJECT	CONTRACTOR/OWNER	Date:	Thursday, September 24, 2009
AGNICO EAGLE MINE BAY GOOSE DIKE	F.GILBERT Itée	Report #	DR.2009.09.24

Excavation Data

Station	Elevation of Workpad (MSL)	Depth to Bedrock (m)	Depth of CSB Backfill (m)	Elevation of Bedrock (MSL)	Elevation of CSB Backfill (MSL)	Total Square meters	Prev Days Total Sq. m
30+722	136.1	8.3		127.8			5,114.0
30+724	136.1	7.8		128.3		16.1	
30+726	136.1	6.3		129.8		14.1	
30+728	136.1	7.8		128.3		14.1	
30+730	136.1	7.6		128.5		15.4	
30+732	136.1	7.0		129.1		14.6	
30+734	136.1	7.0		129.1		14.0	
30+736	136.1	6.9		129.2		13.9	
30+738	136.1	6.6		129.5		13.5	
30+740	136.1	7.0		129.1		13.6	
30+742	136.1	7.2		128.9		14.2	
30+744	136.1	6.8		129.3		14.0	
30+746	136.1	7.5		128.6		14.3	
30+748	136.1	8.1		128.0		15.6	
30+750	136.1	8.0		128.1		16.1	
30+752	136.1	7.8		128.3		15.8	
30+754	136.1	7.3		128.8		15.1	
30+756	136.1	7.5		128.6		14.8	
30+758	136.1	7.6		128.5		15.1	
30+760	136.1	7.0		129.1		14.6	
30+762	136.1	7.0		129.1		14.0	
30+764	136.1	7.7		128.4		14.7	
30+766	136.1	7.2		128.9		14.9	
30+768	136.1	7.0		129.1		14.2	
30+770	136.1	7.8		128.3		14.8	
30+772	136.1	6.5		129.6		14.3	
30+774	136.1	7.7		128.4		14.2	
30+776	136.1	6.6		129.5		14.3	
30+778	136.1	6.8		129.3		13.4	
30+780	136.1	6.8		129.3		13.6	
30+782	136.1	6.6		129.5		13.4	
30+784	136.1	6.4		129.7		13.0	
30+786	136.1	6.0		130.1		12.4	
30+788	136.1	5.9		130.2		11.9	
30+790	136.1	5.8		130.3		11.7	
30+792	136.1	5.7		130.4		11.5	
30+794	136.1	5.7		130.4		11.4	
30+796	136.1	5.7		130.4		11.4	
30+798	136.1	5.9		130.2		11.6	
30+800	136.1	5.9		130.2		11.8	
30+802	136.1	5.3		130.8		11.2	
30+804	136.1	5.3		130.8		10.6	
30+806	136.1	5.3		130.8		10.6	
30+808	136.1	5.5		130.6		10.8	
30+810	136.1	6.0		130.1		11.5	
30+812	136.1	6.0		130.1		12.0	
30+814	136.1	5.5		130.6		11.5	

INQUIP

Associates, Inc.

Daily Construction Report

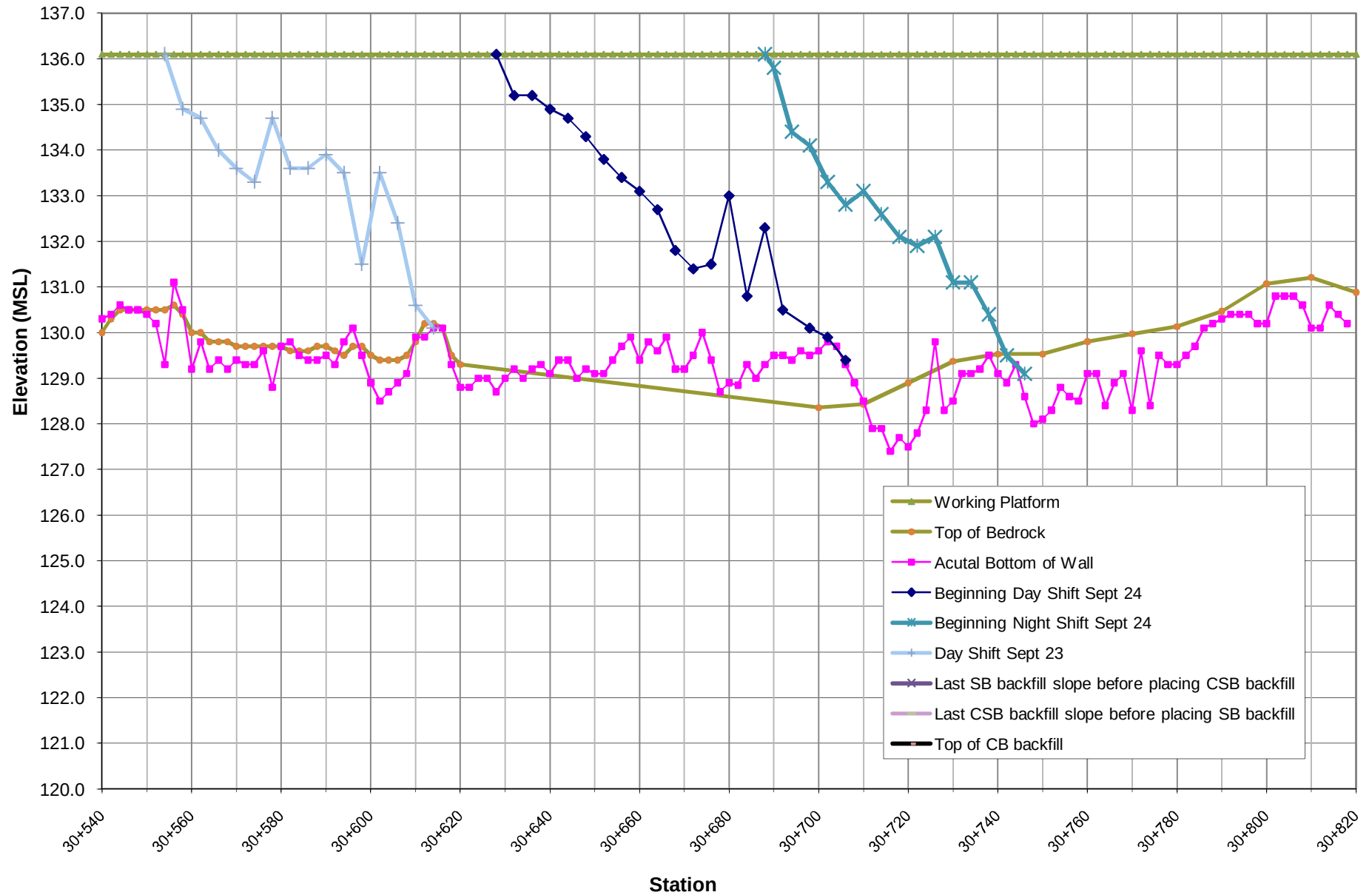
PROJECT				CONTRACTOR/OWNER		Date:		Thursday, September 24, 2009	
AGNICO EAGLE MINE BAY GOOSE DIKE				F.GILBERT Itée		Report #		DR.2009.09.24	
30+816	136.1	5.7		130.4			11.2		Preliminary Total To Date
30+818	136.1	5.9		130.2			11.6		
							642.4		5,756.4

Contractors Verification:

The above report is complete and correct and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

Submitted By: Josue Toro-Diaz

Soil Bentonite Cutoff Wall Trench Profile
Agnico Eagle Mine - Bay-Goose Dike
(NOT TO SCALE)



INQUIP

Associates, Inc.

Daily Construction Report

PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE			CONTRACTOR/OWNER F.GILBERT Itée		Date: Friday, September 25, 2009 Report # DR.2009.09.25		
Weather:			Temperature High: Low:		Ground Conditions		
MANPOWER							
NAME/CRAFT	On Site	HRS.			TYPE	IN-USE	ST-BY
FRANK DAVIS	X	12			Slurry Mixer	X	
LAMAR POWELL	X	12			Grout Mixer		X
MIKE PARSON	X	12			Pump (4)	X	
REX TALBERT	X	12			4" HDPE pipe	X	
JOSUE TORO-DIAZ	X	12			Loader w/forks	X	
					Dozer (D6)	X	
					Excavator (1)	X	
					Generator	X	
					Tremie pipe		X
					Forklift		X
					Mixing Box		X

SUMMARY OF DAY'S WORK

Excavate to station 30+856. As mentioned before, Inquip proposed 3 different alternatives for the connection plug. Inquip was instructed by AEM to make the connection plug as proposed by Golder (Doc. no. 1107 Rev.0) with a change in the cement content from 2-3%.

CSB backfill will be placed tomorrow.

Bentonite slurry usage: As of Sept 26 in the morning

Bags used: 106

Bags on hand: 42

Cement Usage: As of Sept 22 in the morning

Bags used: 125

Broken bags: 1

Bags wasted (after mixed, the cement slurry was dumped): 3

Bags on hand: 0

REMARKS / DELAYS / ITEMS REQUIRING CONTRACTOR ACTION

Inquip was instructed to proceed with the connection plug as proposed by Golder.

SAFETY

Daily tool-box safety meeting every morning.

ATTACHMENTS

Trench profile.

INQUIP

Associates, Inc.

Daily Construction Report

PROJECT	AGNICO EAGLE MINE BAY GOOSE DIKE	CONTRACTOR/OWNER	Date:	Friday, September 25, 2009
		F.GILBERT Itée	Report #	DR.2009.09.25

Soil-Bentonite Backfill

SLUMP	STATION	30+750	30+786			Notes:
	50-150 mm	76	114			
DENSITY	240 kg/cu.m > in-trench slurry	2170	2150			

Bentonite Slurry

Time	Location	Marsh Funnel (>45-55 sec)	Density (>1,025 kg/cu.m)	Filter Loss* (cc)	Notes:
8:00 AM	Pond	41	1060.0		
Depth (mid depth)	Station	Marsh Funnel (>40 sec)	Density (1,025-1,250 kg/cu.m)	Filter Loss* (cc)	
2.0	30+816	50	1160		
2.0	30+842	57	1230		

*For Inquip's internal reference.

Cement-Soil-Bentonite Backfill

STATION					Notes:
SLUMP	180-220 mm				
DENSITY	1,900 to 2,100 kg/cu.m				
GROUT DENSITY	1,120 to 1,200 kg/cu.m				

Associates, Inc.

Daily Construction Report

PROJECT	CONTRACTOR/OWNER	Date:	Friday, September 25, 2009
AGNICO EAGLE MINE BAY GOOSE DIKE	F.GILBERT Itée	Report #	DR.2009.09.25

Excavation Data

[illegible]

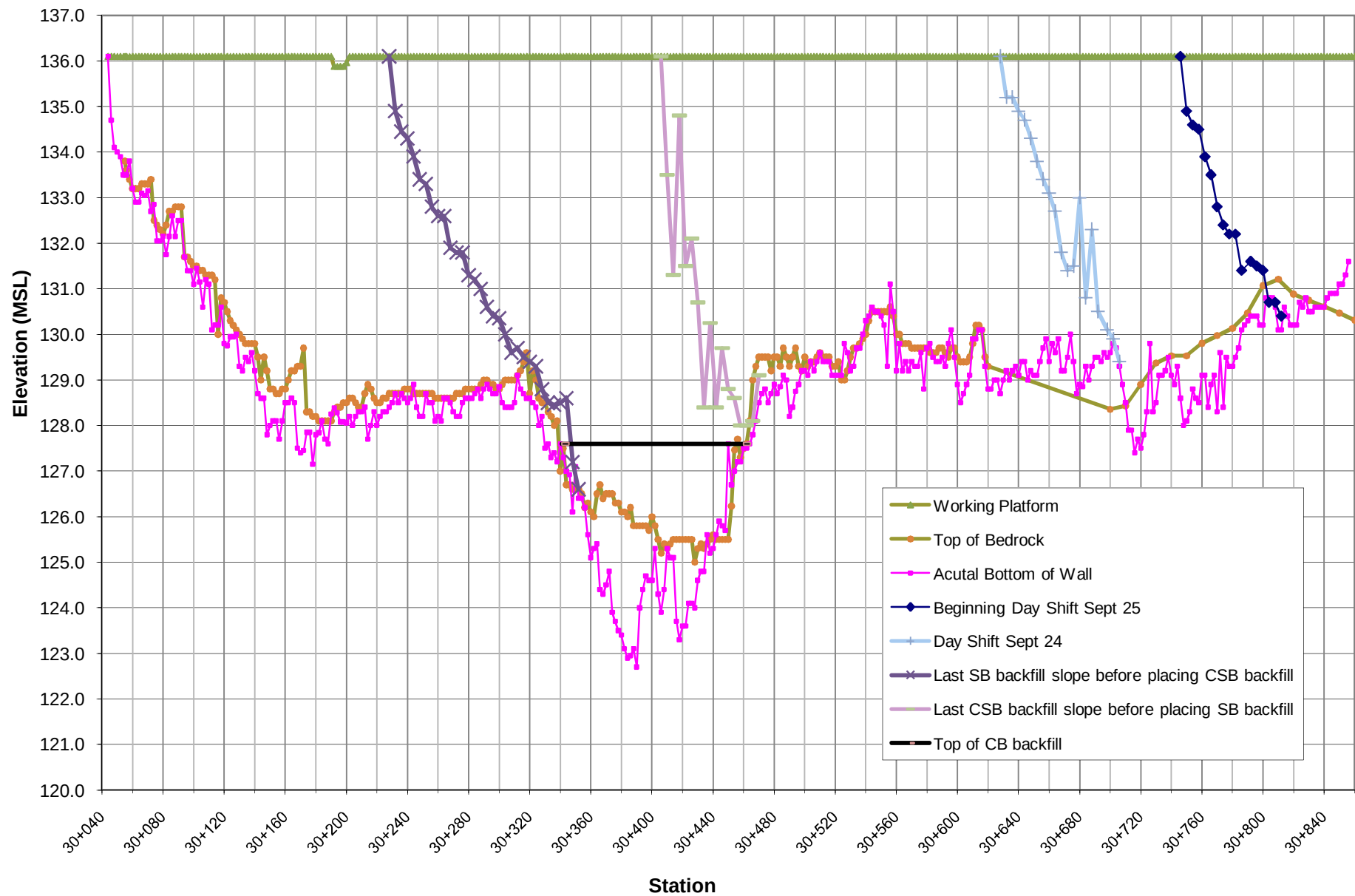
Contractors Verification:

204.2

The above report is complete and correct and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

Submitted By: Josue Toro-Diaz

Soil Bentonite Cutoff Wall Trench Profile
Agnico Eagle Mine - Bay-Goose Dike
(NOT TO SCALE)



INQUIP

Associates, Inc.

Daily Construction Report

PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE			CONTRACTOR/OWNER F.GILBERT Itée		Date: Saturday, September 26, 2009		
					Report # DR.2009.09.26		
Weather:			Temperature High: Low:		Ground Conditions		
MANPOWER							
NAME/CRAFT	On Site	HRS.			TYPE	IN-USE	ST-BY
FRANK DAVIS	X	12			Slurry Mixer		
LAMAR POWELL	X	12			Grout Mixer	X	
MIKE PARSON	X	12			Pump (4)	X	
REX TALBERT	X	12			4" HDPE pipe	X	
JOSUE TORO-DIAZ	X	12			Loader w/forks	X	
					Dozer (D6)	X	
					Excavator (1)	X	
					Generator	X	
					Tremie pipe		X
					Forklift		X
					Mixing Box	X	

SUMMARY OF DAY'S WORK

Finish excavating to station 30+860 and CSB backfill was placed to the end.

To achieve the required 3% of cement the CSB backfill was mixed as follows: One 1,500kg cement bag was mixed with 2cu.m. of water. These cement slurry was used to mix 2 batches. Each batch will consist of 15cu.m. of till, 1cu.m. of cement slurry and bentonite slurry as needed to achieve the required slump.

Bentonite slurry usage: As of Sept 26.

Bags used: 106

Bags on hand: 42

Cement Usage: As of Sept 26.

Bags used: 140

Broken bags: 1

Bags wasted (after mixed, the cement slurry was dumped): 3

Bags on hand: one container full and one bag.

REMARKS / DELAYS / ITEMS REQUIRING CONTRACTOR ACTION

Inquip was instructed to proceed with the connection plug as proposed by Golder.

SAFETY

Daily tool-box safety meeting every morning.

ATTACHMENTS

Trench profile.

INQUIP

Associates, Inc.

Daily Construction Report

PROJECT

AGNICO EAGLE MINE
BAY GOOSE DIKE

CONTRACTOR/OWNER

F.GILBERT Itée

Date:

Saturday, September 26, 2009

Report #

DR.2009.09.26

Soil-Bentonite Backfill

SLUMP	STATION					Notes:
	50-150 mm					
DENSITY	240 kg/cu.m > in-trench slurry					

Bentonite Slurry

Time	Location	Marsh Funnel (>45-55 sec)	Density (>1,025 kg/cu.m)	Filter Loss* (cc)	Notes:
	Pond				
Depth (mid depth)	Station	Marsh Funnel (>40 sec)	Density (1,025-1,250 kg/cu.m)	Filter Loss* (cc)	
2.0	30+840	50	1250		

*For Inquip's internal reference.

Cement-Soil-Bentonite Backfill

STATION	30+792	30+820	30+836	30+850	Notes:
SLUMP 180-220 mm	180	159	184	184	
DENSITY 1,900 to 2,100 kg/cu.m	2010				
GROUT DENSITY 1,120 to 1,200 kg/cu.m	1250				

Associates, Inc.

Daily Construction Report

PROJECT

**AGNICO EAGLE MINE
BAY GOOSE DIKE**

CONTRACTOR/OWNER

F. GILBERT Itée

Date:

Saturday, September 26, 2009

Report #

DR.2009.09.26

Excavation Data

Station	Elevation of Workpad (MSL)	Depth to Bedrock (m)	Depth of CSB Backfill (m)	Elevation of Bedrock (MSL)	Elevation of CSB Backfill (MSL)	Total Square meters	Prev Days Total Sq. m
30+856	136.1	4.5		131.6			5,960.6
30+858	136.1	4.4		131.7		8.9	
30+860	136.1	3.5		132.6		7.9	
							Preliminary Total To Date
							5,977.4

Contractors Verification:

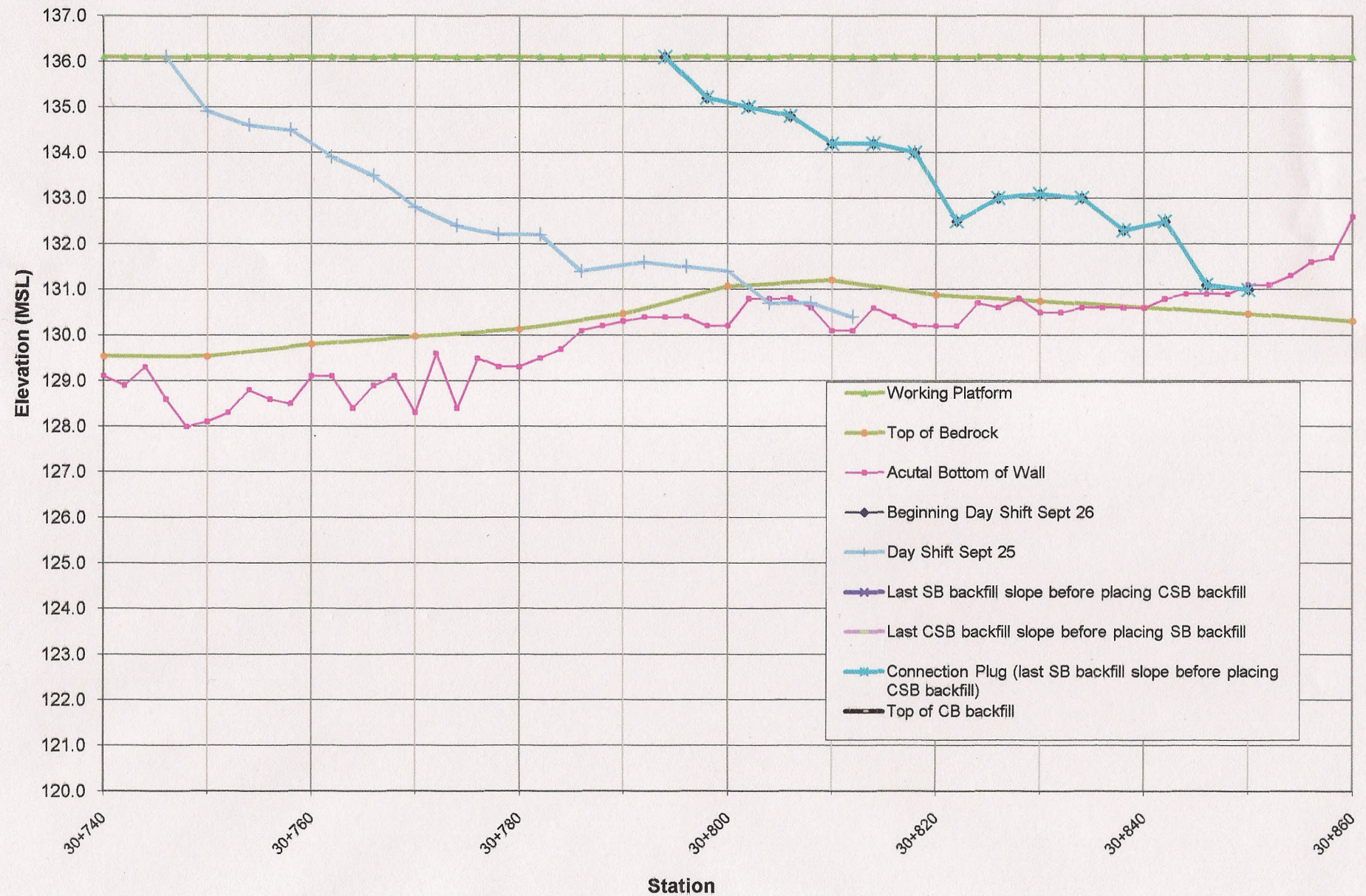
16.8

The above report is complete and correct and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

Submitted By:

Josue Toro-Diaz

**Soil Bentonite Cutoff Wall Trench Profile
Agnico Eagle Mine - Bay-Goose Dike
(NOT TO SCALE)**



**SUMMARY OF FLEX WALL PERMEABILITY
ST RESULTS
5084 (Method A)**



Client	:	Inquip	Date	:	11/16/09
Project Location	:	Bay Goose	Job No.	:	09LS2043.01
Sample Number	:	Station 30 plus 55	Tested By	:	RL
Fabrication Date	:	09/12/2009	Checked By	:	JB
As-Received M/C	:	28.5%			
			Spec. Gravity	:	2.70 Assumed

Physical Property Data

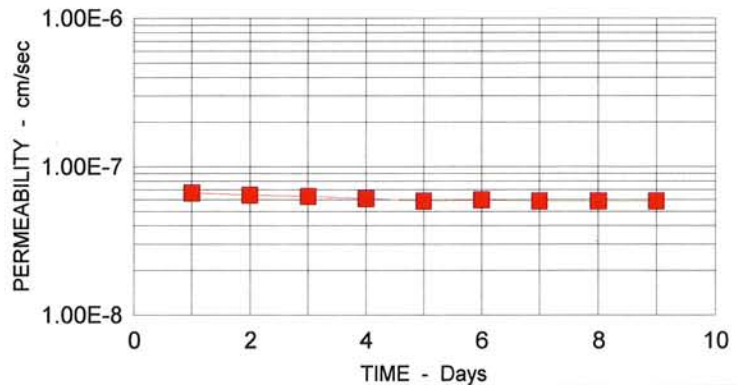
Initial Height (in)	:	3.93	Final Height (in)	:	3.75
Initial Diameter (in)	:	2.80	Final Diameter (in)	:	2.74
Initial Wet Weight (g)	:	818.60	Final Wet Weight (g)	:	790.40
Wet Density (pcf)	:	128.75	Wet Density (pcf)	:	136.20
Moisture Content %	:	20.40	Moisture Content %	:	16.20
Dry Density (pcf)	:	106.94	Dry Density (pcf)	:	117.21
Initial Void Ratio	:	0.5755	Final Void Ratio	:	0.4374
Saturation , %	:	95.7	Saturation , %	:	100.0

Test Parameters

Fluid	:	De-Aired Water	Effective		
Cell Pressure (psi)	:	65.00	Confining Pressure (psi)	:	10
Head Water (psi)	:	56.80	Gradient	:	26.52
Tail Water (psi)	:	53.20			

Permeability Input Data
for Last Data Point

Flow, Q (cc)	:	5.20
Length, L (in)	:	3.75
Area, A (sqin)	:	5.90
Head, h (psi)	:	3.60
Time, t (min)	:	1441.00
Temp, T (Deg C)	:	20.4



Computed Permeability

PERMEABILITY, K = 5.89E-008 (cm/sec) at 20 Degrees C

**SUMMARY OF FLEX WALL PERMEABILITY
ST RESULTS**
-5084 (Method A)



Client	:	Inquip	Date	:	11/16/09
Project Location	:	Bay Goose	Job No.	:	09LS2043.01
Sample Number	:	Station 30 plus 218	Tested By	:	RL
Fabrication Date	:	09/19/2009	Checked By	:	JB
As-Received M/C	:	24.7%			
			Spec. Gravity	:	2.70 Assumed

Physical Property Data

Initial Height (in)	:	4.36	Final Height (in)	:	4.23
Initial Diameter (in)	:	2.80	Final Diameter (in)	:	2.75
Initial Wet Weight (g)	:	916.10	Final Wet Weight (g)	:	891.20
Wet Density (pcf)	:	129.88	Wet Density (pcf)	:	135.27
Moisture Content %	:	20.20	Moisture Content %	:	16.89
Dry Density (pcf)	:	108.05	Dry Density (pcf)	:	115.72
Initial Void Ratio	:	0.5592	Final Void Ratio	:	0.4559
Saturation , %	:	97.5	Saturation , %	:	100.0

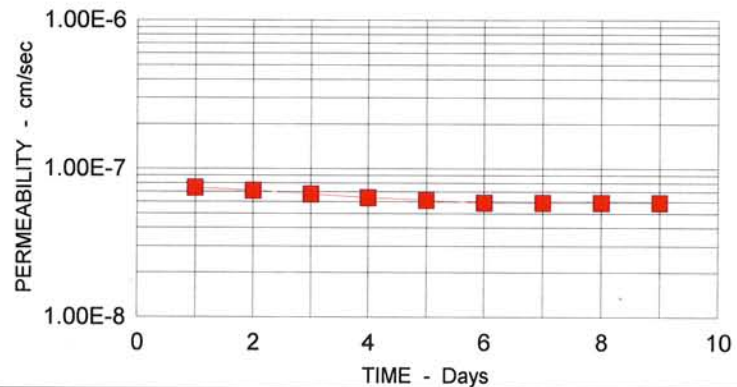
Test Parameters

Fluid	:	De-Aired Water	Effective		
Cell Pressure (psi)	:	65.00	Confining Pressure (psi)	:	10
Head Water (psi)	:	56.90	Gradient	:	24.79
Tail Water (psi)	:	53.10			

Permeability Input Data

for Last Data Point

Flow, Q (cc)	:	4.90
Length, L (in)	:	4.23
Area, A (sqin)	:	5.93
Head, h (psi)	:	3.80
Time, t (min)	:	1440.00
Temp, T (Deg C)	:	20.4



Computed Permeability

PERMEABILITY, K = 5.91E-008 (cm/sec) at 20 Degrees C

**SUMMARY OF FLEX WALL PERMEABILITY
ST RESULTS
5084 (Method A)**



Client : Inquip	Date : 11/16/09
Project Location : Bay Goose	Job No. : 09LS2043.01
Sample Number : Station 30 plus 560	Tested By : RL
Fabrication Date : 09/23/2009	Checked By : JB
As-Received M/C : 14.4%	
	Spec. Gravity : 2.70 Assumed

Physical Property Data

Initial Height (in) : 4.27	Final Height (in) : 4.11
Initial Diameter (in) : 2.80	Final Diameter (in) : 2.77
Initial Wet Weight (g) : 959.20	Final Wet Weight (g) : 936.00
Wet Density (pcf) : 138.86	Wet Density (pcf) : 143.53
Moisture Content % : 14.17	Moisture Content % : 11.40
Dry Density (pcf) : 121.62	Dry Density (pcf) : 128.84
Initial Void Ratio : 0.3853	Final Void Ratio : 0.3077
Saturation , % : 99.3	Saturation , % : 100.0

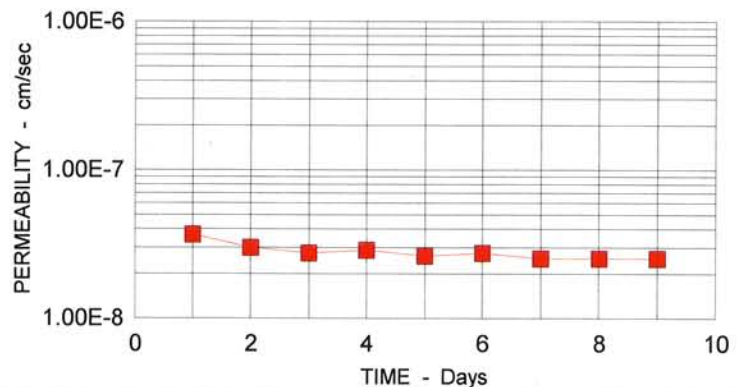
Test Parameters

Fluid : De-Aired Water	Effective
Cell Pressure (psi) : 65.00	Confining Pressure (psi) : 10
Head Water (psi) : 56.90	Gradient : 25.50
Tail Water (psi) : 53.10	

Permeability Input Data

for Last Data Point

Flow, Q (cc) :	2.20
Length, L (in) :	4.11
Area, A (sqin) :	6.03
Head, h (psi) :	3.80
Time, t (min) :	1439.00
Temp, T (Deg C) :	20.4



Computed Permeability

PERMEABILITY, K = 2.54E-008 (cm/sec) at 20 Degrees C

**SUMMARY OF FLEX WALL PERMEABILITY
ST RESULTS
.5084 (Method A)**



Client	:	Inquip	Date	:	11/16/09
Project Location	:	Bay Goose	Job No.	:	09LS2043.01
Sample Number	:	Station 30 plus 750	Tested By	:	RL
Fabrication Date	:	09/25/2009	Checked By	:	JB
As-Received M/C	:	17.8%			
			Spec. Gravity	:	2.70 Assumed

Physical Property Data

Initial Height (in)	:	4.16	Final Height (in)	:	4.01
Initial Diameter (in)	:	2.80	Final Diameter (in)	:	2.76
Initial Wet Weight (g)	:	920.60	Final Wet Weight (g)	:	899.20
Wet Density (pcf)	:	136.79	Wet Density (pcf)	:	142.44
Moisture Content %	:	14.75	Moisture Content %	:	12.06
Dry Density (pcf)	:	119.21	Dry Density (pcf)	:	127.11
Initial Void Ratio	:	0.4133	Final Void Ratio	:	0.3255
Saturation , %	:	96.4	Saturation , %	:	100.0

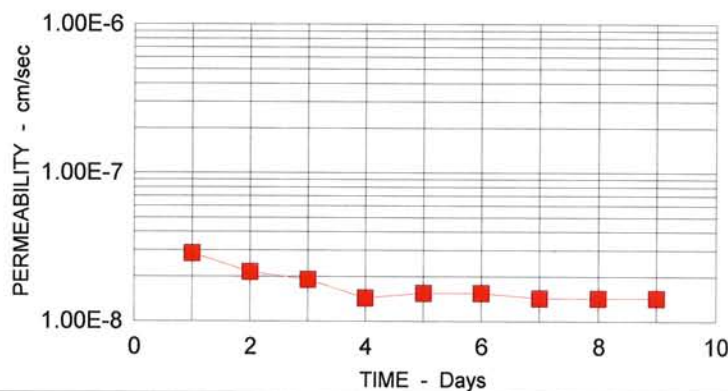
Test Parameters

Fluid	:	De-Aired Water	Effective		
Cell Pressure (psi)	:	65.00	Confining Pressure (psi)	:	10
Head Water (psi)	:	56.80	Gradient	:	24.76
Tail Water (psi)	:	53.20			

Permeability Input Data

for Last Data Point

Flow, Q (cc)	:	1.20
Length, L (in)	:	4.01
Area, A (sqin)	:	5.99
Head, h (psi)	:	3.60
Time, t (min)	:	1440.00
Temp, T (Deg C)	:	20.4



Computed Permeability

PERMEABILITY, K = 1.44E-008 (cm/sec) at 20 Degrees C

**SUMMARY OF FLEX WALL PERMEABILITY
ST RESULTS
5084 (Method A)**



Client	:	Inquip	Date	:	11/16/09
Project Location	:	Bay Goose	Job No.	:	09LS2043.01
Sample Number	:	No Labels	Tested By	:	RL
Fabrication Date	:	INA	Checked By	:	JB
As-Received M/C	:	18.6%			
			Spec. Gravity	:	2.70 Assumed

Physical Property Data

Initial Height (in)	:	3.85	Final Height (in)	:	3.64
Initial Diameter (in)	:	2.80	Final Diameter (in)	:	2.78
Initial Wet Weight (g)	:	847.70	Final Wet Weight (g)	:	827.20
Wet Density (pcf)	:	136.10	Wet Density (pcf)	:	142.62
Moisture Content %	:	14.90	Moisture Content %	:	11.94
Dry Density (pcf)	:	118.45	Dry Density (pcf)	:	127.41
Initial Void Ratio	:	0.4223	Final Void Ratio	:	0.3224
Saturation , %	:	95.3	Saturation , %	:	100.0

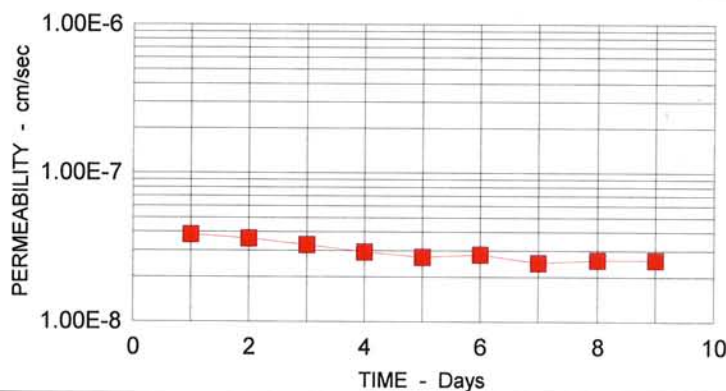
Test Parameters

Fluid	:	De-Aired Water	Effective		
Cell Pressure (psi)	:	65.00	Confining Pressure (psi)	:	10
Head Water (psi)	:	56.70	Gradient	:	25.80
Tail Water (psi)	:	53.30			

Permeability Input Data

for Last Data Point

Flow, Q (cc)	:	2.30
Length, L (in)	:	3.64
Area, A (sqin)	:	6.07
Head, h (psi)	:	3.40
Time, t (min)	:	1440.00
Temp, T (Deg C)	:	20.4



Computed Permeability

PERMEABILITY, K = 2.60E-008 (cm/sec) at 20 Degrees C

Data from Inquip 2010 Daily Reports

Created: G Pizarro

Material	
----------	--

	Pond Bentonite		In-trench Bentonite		Soil Bentonite Backfill Material					Cement Soil Bentonite Backfill Material						
	Density (tons / m3)	Viscosity	Density (tons / m3)	Viscosity	Slump Cone (mm)	Density (tons / m3)	Gradation per design mix	Permeability	SB Density (kg/m3)	Slump (mm)	Density (tons / m3)	Density of slurry prior to till addition (tons / m3)	cylinders	Permeability	Strength	CSB Density (kg/m3)
Max	1.09	52	1.240	140	200	2.300				200	2.800	1.500				
Min	1.01	41	1.020	40	7	2.060				154	1.850	1.120				
Average	1.04	44	1.131	49	131	2.123				182	2.093	1.254	3			
spec	>1025	40-55	1025-1250	>40	50-150	240 > slurry				180-220	1900-2100	1120-1200				
out of spec	3%	ok	1%	ok	23%	ok				30%	25%	40%				
23-Aug-10	1.03	49	1.07	52												
	1.03	47	1.07	49												
			1.08	47												
24-Aug-10	1.03	45	1.03	45						165	1.92	1.49	3			1920
			1.05	47						180	1.9	1.45				1900
27-Aug-10	1.04	45	1.08	47	152	2.08			2080							
	1.03	47	1.1	47	140	2.1			2100							
	1.05	45	1.1	47	127	2.13			2130							
28-Aug-10	1.04	45	1.08	44	102	2.08			2080							
	1.03	42	1.12	49	152.4	2.1			2100							
	1.04	44	1.12	47	152.4	2.11			2110							
	1.04	45	1.11	47												
29-Aug-10	1.03	45	1.15	45	165	2.12			2120							
	1.04	43	1.19	45	140	2.11			2110							
	1.04	46	1.2	48	178	2.2			2200							
	1.05	47	1.13	46	191	2.3			2300							
30-Aug-10	1.03	41	1.06	45	150	2.1			2100							
	1.03	41	1.17	47	125	2.1			2100							
	1.04	45	1.15	47	140	2.12			2120							
	1.03	44	1.15	49	127	2.14			2140							
31-Aug-10	1.03	41	1.17	51	125	2.12			2120							
	1.04	42	1.15	50	125	2.11			2110							
	1.04	43	1.15	50	140	2.14			2140							
	1.04	42	1.15	49	140	2.12			2120							
01-Sep-10	1.03	41	1.21	47	135	2.12			2120							
	1.03	41	1.23	47	125	2.1			2100							
	1.04	42	1.18	48	152	2.14			2140							
	1.04	47	1.18	51	140	2.15			2150							
02-Sep-10	1.03	42	1.23	48	100	2.12			2120							
	1.03	43	1.23	51	150	2.12			2120							
			1.23	53	127	2.13			2130							
			1.24	55	102	2.16			2160							
04-Sep-10	1.01	45	1.07	60	7	2.07			2070							
	1.02	45	1.02	55												

Meadowbank Bay-Gose Dike As-built (2009 and 2010)

Data from Inquip 2010 Daily Reports

09-1428-5007

Created: G Pizarro

Checked: G Janssens

	Pond Bentonite		In-trench Bentonite		Soil Bentonite Backfill Material					Cement Soil Bentonite Backfill Material						
	Density (tons / m3)	Viscosity	Density (tons / m3)	Viscosity	Slump Cone (mm)	Density (tons / m3)	Gradation per design mix	Permeability	SB Density (kg/m3)	Slump (mm)	Density (tons / m3)	Density of slurry prior to till addition (tons / m3)	cylinders	Permeability	Strength	CSB Density (kg/m3)
05-Sep-10	1.05	43	1.08	45	125	2.19			2190	200	2	1.5				2000
	1.06	42	1.06	43	110	2.12			2120							
	1.04	43	1.1	46												
	1.04	45	1.11	46												
07-Sep-10	1.05	42	1.15	44	100	2.11			2110							
	1.05	43	1.12	44	125	2.13			2130							
	1.04	42	1.14	47	127	2.16			2160							
	1.06	44	1.12	51	102	2.12			2120							
14-Sep-10	1.05	43	1.1	140												
	1.09	45														
15-Sep-10	1.05	43	1.12	46						176	2	1.12				2000
	1.04	43	1.11	47												
	1.05	45	1.1	50												
	1.08	47	1.1	48												
16-Sep-10	1.04	44	1.1	47						200	2.05	1.26				2050
	1.04	45	1.1	45						190						
	1.04	45	1.11	48												
17-Sep-10	1.04	51	1.1	47						180	2.8	1.15				
	1.04	45	1.08	46						185	2.5	1.2				
	1.04	47	1.09	47												
	1.03	47														
18-Sep-10	1.04	50	1.17	50						200	2.05	1.12				2050
	1.04	43	1.17	48						175						
	1.05	47	1.12	52						175	2.1	1.15				2100
	1.04	45								185						
19-Sep-10	1.04	47	1.17	50						175	2.08	1.28				2080
	1.04	43	1.1	49						177	2.1	1.5				2100
	1.03	45	1.15	51						180						
	1.04	47														
20-Sep-10	1.04	42	1.12	50						180	2.12	1.23				2120
	1.04	41	1.18	50						185						
			1.21	52						154	2.13	1.41				2130
			1.18	50						180						
21-Sep-10	1.04	41	1.24	51						185	2.05	1.19				2050
	1.04	41	1.15	47						180	2.06	1.2				2060
	1.04	41	1.1	45												
22-Sep-10	1.03	41	1.13	44						190	2.03	1.16				2030
			1.17	48						185						
			1.19	52						180	1.95	1.18				1950
			1.2	48						179						
			1.2	49	200	2.12			2120							

Meadowbank Bay-Gose Dike As-built (2009 and 2010)

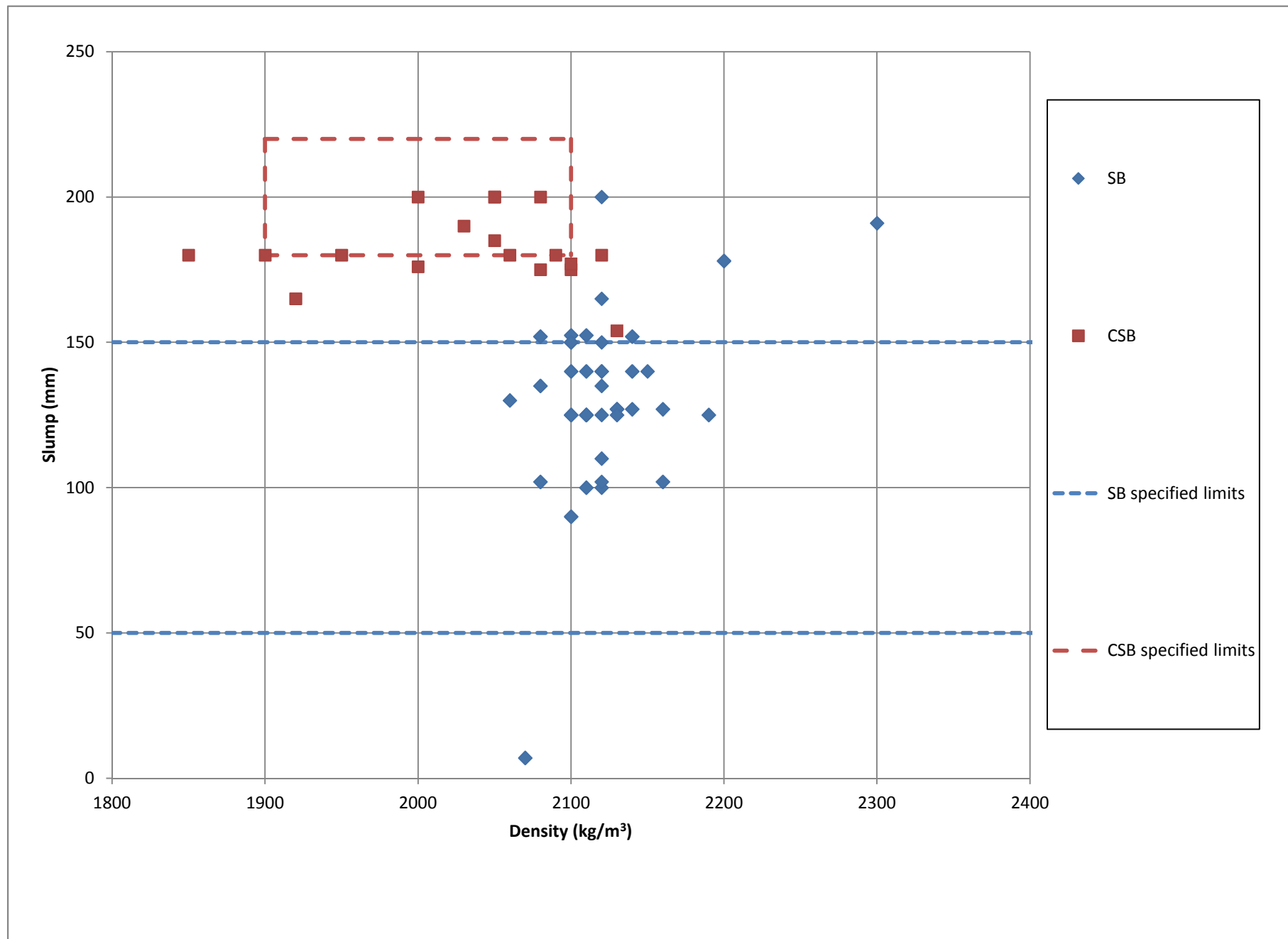
Data from Inquip 2010 Daily Reports

09-1428-5007

Created: G Pizarro

Checked: G Janssens

	Pond Bentonite		In-trench Bentonite		Soil Bentonite Backfill Material					Cement Soil Bentonite Backfill Material						
	Density (tons / m3)	Viscosity	Density (tons / m3)	Viscosity	Slump Cone (mm)	Density (tons / m3)	Gradation per design mix	Permeability	SB Density (kg/m3)	Slump (mm)	Density (tons / m3)	Density of slurry prior to till addition (tons / m3)	cylinders	Permeability	Strength	CSB Density (kg/m3)
23-Sep-10			1.16	47	90	2.1			2100							
			1.21	50	150	2.1			2100							
24-Sep-10	1.03	52	1.06	40	125	2.11			2110							
	1.04	45	1.08	41	135	2.08			2080							
	1.04	45	1.1	45	125	2.11			2110							
			1.12	50	130	2.06			2060							
25-Sep-10	1.03	44	1.08	48						180	1.85	1.14				1850
	1.03	45	1.11	45												
	1.03	45	1.06	49												
			1.12	50												
26-Sep-10			1.1	48						200	2.08	1.15				2080
			1.1	52						190						
			1.12	54						180	2.09	1.2				2090
										175						



INQUIP Associates, Inc.	Daily Construction Report
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PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE	CONTRACTOR/OWNER F.GILBERT Itée	Date: Tuesday, August 24, 2010 Report # DR.2010.08.24
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Weather:	Temperature High: 19 °C Low: 5 °C	Ground Conditions
-----------------	--	--------------------------

MANPOWER							
NAME/CRAFT	On Site	HRS.			TYPE	IN-USE	ST-BY
FRANK DAVIS	X	12			Slurry Mixer		X
LAMAR POWELL	X	12			Grout Mixer	X	
BENNY SMITH	X	12			Pump (4)	X	
JOHN LOGAN	X	12			4" HDPE pipe	X	
WILLIAM COLLINS	X	12			Loader w/forks	X	
JOSUE TORO-DIAZ	X	12			Dozer (D6)		
					CAT385	X	
					Generator	X	
					Tremie pipe		
					Forklift		
					Mixing Box	X	
					Kamatsu	X	

SUMMARY OF DAY'S WORK

Waited until 10am for instructions on if to keep digging or not. Inquip was instructed to dig from station 31+570 to 31+552 and backfill it with CSB (cement-soil-bentonite).

Digging was finished around 6pm. Started backfilling at 8pm. Mixed 8 batched of CSB.

CSB: 15 cu.m. of till, 1 cu.m. of cement grout, bentonite slurry as needed to reach desired slump.

Bentonite slurry usage Bags used: 4 Bags on hand:	Cement Usage: Bags used: 8 Broken bags: Bags wasted (after mixed, the cement slurry was dumped): Bags on hand: 29
---	---

REMARKS / DELAYS / ITEMS REQUIRING CONTRACTOR ACTION

Inquip/F.Gilbert were instructed not to keep digging due to the compaction of the material below 8m deep at station 31+600.

SAFETY

Daily tool-box safety meeting every morning.

ATTACHMENTS

Trench profile.

INQUIP Associates, Inc.	Daily Construction Report
PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE	CONTRACTOR/OWNER F.GILBERT Itée Date: Tuesday, August 24, 2010 Report # DR.2010.08.24

Soil-Bentonite Backfill						
SLUMP	STATION					Notes:
	50-150 mm					
DENSITY	240 kg/cu.m > in-trench slurry					

Cement-Soil-Bentonite Backfill						
	STATION	3Rrd BATCH		8th BATCH		Notes:
SLUMP	180-220 mm	165		180		Samples of these batches were taken and 3 cylinders of each were made.
DENSITY	1.90 to 2.10 kg/cu.m	1.92	X	1.9	X	
GROUT DENSITY	1.12 to 1.20 kg/cu.m	1.49	X	1.45	X	

Bentonite Slurry					
Time	Location	Marsh Funnel (>45-55 sec)	Density (>1.025 kg/cu.m)	Filter Loss* (cc)	Notes:
10:00 AM	Pond	45	1.03	17.0	*For Inquip's internal reference.
Depth (mid depth)	Station	Marsh Funnel (>40 sec)	Density (1.025-1.25 kg/cu.m)	Filter Loss* (cc)	
2.0	31+572	45	1.03	17.0	
2.0	31+564	47	1.05	X	
				X	

Associates, Inc.

Daily Construction Report

PROJECT

**AGNICO EAGLE MINE
BAY GOOSE DIKE**

CONTRACTOR/OWNER

F.GILBERT Itée

Date:

Tuesday, August 24, 2010

Report #

DR.2010.08.24

Excavation Data

[illegible]

Contractors Verification:

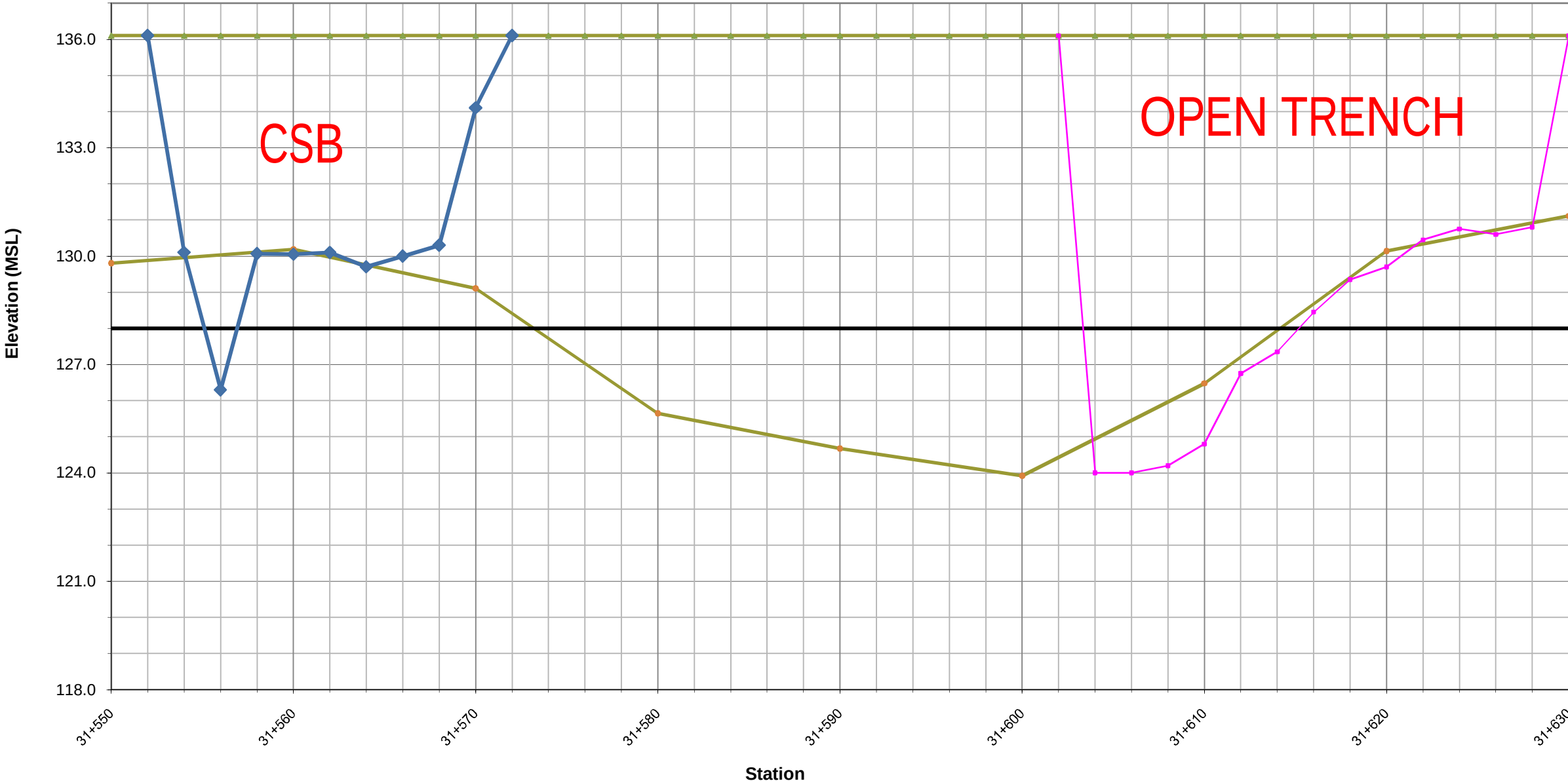
108.36

The above report is complete and correct and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

Submitted By: William Collins/Josue Toro-Diaz

Soil Bentonite Cutoff Wall Trench Profile
Agnico Eagle Mine - Bay-Goose Dike
(NOT TO SCALE)

- Working Platform
- Top of Bedrock (as per Bathymetry)
- Top of CB backfill
- 23-Aug-10
- 24-Aug-10



INQUIP Associates, Inc.			Daily Construction Report				
PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE			CONTRACTOR/OWNER F.GILBERT Itée		Date: Saturday, September 04, 2010 Report # DR.2010.09.04		
Weather:			Temperature High: Low:		Ground Conditions		
MANPOWER							
NAME/CRAFT	On Site	HRS.			TYPE	IN-USE	ST-BY
FRANK DAVIS	X	12			Slurry Mixer	X	
LAMAR POWELL	X	12			Grout Mixer		X
BENNY SMITH	X	12			Pumps	X	
JOHN LOGAN	X	12			4" HDPE pipe	X	
WILLIAM COLLINS	X	12			Loader w/forks		X
JOSUE TORO-DIAZ					Dozer (D6)	X	
					CAT385	X	
					Generator	X	
					Tremie pipe		
					Forklift		
					Mixing Box		X
					Kamatsu		

SUMMARY OF DAY'S WORK

Bentonite slurry usage Bags used: 12 Bags on hand: 192	Cement Usage: Bags used: Broken bags: Bags wasted (after mixed, the cement slurry was dumped): Bags on hand: 21
--	---

REMARKS / DELAYS / ITEMS REQUIRING CONTRACTOR ACTION

SAFETY
 Daily tool-box safety meeting every morning.

ATTACHMENTS
 Trench profile.

<b style="font-size: 2em;">INQUIP Associates, Inc.	Daily Construction Report						
PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE	<table style="width: 100%; border: none;"> <tr> <td style="width: 40%; border: none; vertical-align: top;"> CONTRACTOR/OWNER F.GILBERT Itée </td> <td style="width: 60%; border: none; vertical-align: top;"> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;">Date:</td> <td style="border: none;">Saturday, September 04, 2010</td> </tr> <tr> <td style="border: none;">Report #</td> <td style="border: none;">DR.2010.09.04</td> </tr> </table> </td> </tr> </table>	CONTRACTOR/OWNER F.GILBERT Itée	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;">Date:</td> <td style="border: none;">Saturday, September 04, 2010</td> </tr> <tr> <td style="border: none;">Report #</td> <td style="border: none;">DR.2010.09.04</td> </tr> </table>	Date:	Saturday, September 04, 2010	Report #	DR.2010.09.04
CONTRACTOR/OWNER F.GILBERT Itée	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;">Date:</td> <td style="border: none;">Saturday, September 04, 2010</td> </tr> <tr> <td style="border: none;">Report #</td> <td style="border: none;">DR.2010.09.04</td> </tr> </table>	Date:	Saturday, September 04, 2010	Report #	DR.2010.09.04		
Date:	Saturday, September 04, 2010						
Report #	DR.2010.09.04						

Soil-Bentonite Backfill					
SLUMP	STATION			31+560	Notes:
	50-150 mm			7	
DENSITY	240 kg/cu.m > in-trench slurry			207	

Cement-Soil-Bentonite Backfill					
STATION					Notes:
SLUMP	180-220 mm				
DENSITY	1.90 to 2.10 kg/cu.m				
GROUT DENSITY	1.12 to 1.20 kg/cu.m				

Bentonite Slurry					Notes:
Time	Location	Marsh Funnel (>45-55 sec)	Density (>1.025 kg/cu.m)	Filter Loss* (cc)	
	Pond				
8:30 PM		45	1.01	12.0	
4:00 AM		45	1.02	12.2	
Depth (mid depth)	Station	Marsh Funnel (>40 sec)	Density (1.025-1.25 kg/cu.m)	Filter Loss* (cc)	
2.0	31+526	60	1.07	11.2	
2.0	31+502	55	1.02		

*For Inquip's internal reference.

Daily Construction Report

PROJECT

**AGNICO EAGLE MINE
BAY GOOSE DIKE**

CONTRACTOR/OWNER

F.GILBERT Itée

Date:

Saturday, September 04, 2010

Report #

DR.2010.09.04

Excavation Data

[illegible]

Contractors Verification:

The above report is complete and correct and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

Submitted By:

William Collins/Josue Toro-Diaz

INQUIP

Associates, Inc.

Daily Construction Report

PROJECT			CONTRACTOR/OWNER		Date:		
AGNICO EAGLE MINE BAY GOOSE DIKE			F.GILBERT Itée		Wednesday, September 08, 2010		
Weather:			Temperature		Report #		
			High:		DR.2010.09.08		
			Low:		Ground Conditions		
MANPOWER							
NAME/CRAFT	On Site	HRS.			TYPE	IN-USE	ST-BY
FRANK DAVIS	X	12			Slurry Mixer		
LAMAR POWELL	X	12			Grout Mixer		X
BENNY SMITH	X	12			Pumps		
JOHN LOGAN	X	12			4" HDPE pipe		
WILLIAM COLLINS	X	12			Loader w/forks		X
JOSUE TORO-DIAZ					Dozer (D6)		
					CAT385		
					Generator		
					Tremie pipe		
					Forklift		
					Mixing Box		X
					Kamatsu		

SUMMARY OF DAY'S WORK
NO WORK - PAD NOT AVAILABLE - 9/08 TO 9/13

Bentonite slurry usage Bags used: Bags on hand:	Cement Usage: Bags used: Broken bags: Bags wasted (after mixed, the cement slurry was dumped): Bags on hand:
---	--

REMARKS / DELAYS / ITEMS REQUIRING CONTRACTOR ACTION

SAFETY
Daily tool-box safety meeting every morning.

ATTACHMENTS
Trench profile.

INQUIP Associates, Inc.	Daily Construction Report
PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE	CONTRACTOR/OWNER F.GILBERT Itée Date: Wednesday, September 08, 2010 Report # DR.2010.09.08

Soil-Bentonite Backfill						
SLUMP	STATION					Notes:
	50-150 mm					
DENSITY	240 kg/cu.m > in-trench slurry					

Cement-Soil-Bentonite Backfill						
STATION						Notes:
SLUMP	180-220 mm					
DENSITY	1.90 to 2.10 kg/cu.m		X		X	
GROUT DENSITY	1.12 to 1.20 kg/cu.m		X		X	

Bentonite Slurry					
Time	Location	Marsh Funnel (>45-55 sec)	Density (>1.025 kg/cu.m)	Filter Loss* (cc)	Notes:
	Pond				
Depth (mid depth)	Station	Marsh Funnel (>40 sec)	Density (1.025-1.25 kg/cu.m)	Filter Loss* (cc)	
				X	
				X	

*For Inquip's internal reference.

Daily Construction Report

PROJECT

**AGNICO EAGLE MINE
BAY GOOSE DIKE**

CONTRACTOR/OWNER

F.GILBERT Itée

Date:

Wednesday, September 08, 2010

Report #

DR.2010.09.08

Excavation Data

[illegible]

Contractors Verification:

The above report is complete and correct and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

Submitted By: William Collins/Josue Toro-Diaz

INQUIP Associates, Inc.			Daily Construction Report				
PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE			CONTRACTOR/OWNER F.GILBERT Itée		Date: Tuesday, September 14, 2010 Report # DR.2010.09.14		
Weather:			Temperature High: Low:		Ground Conditions		
MANPOWER							
NAME/CRAFT	On Site	HRS.			TYPE	IN-USE	ST-BY
FRANK DAVIS	X	12			Slurry Mixer	X	
LAMAR POWELL	X	12			Grout Mixer		X
BENNY SMITH	X	12			Pumps	X	
JOHN LOGAN	X	12			4" HDPE pipe	X	
WILLIAM COLLINS	X	12			Loader w/forks		X
JOSUE TORO-DIAZ					Dozer (D6)	X	
					CAT385	X	
					Generator	X	
					Tremie pipe		
					Forklift		
					Mixing Box		X
					Kamatsu		

SUMMARY OF DAY'S WORK

Got to the mine at noon and start seting up for night shift to start digging.

Bentonite slurry usage Bags used: 6 Bags on hand: 192	Cement Usage: Bags used: 16 Broken bags: Bags wasted (after mixed, the cement slurry was dumped): Bags on hand: 21
---	--

REMARKS / DELAYS / ITEMS REQUIRING CONTRACTOR ACTION

SAFETY

Daily tool-box safety meeting every morning.

ATTACHMENTS

Trench profile.

INQUIP Associates, Inc.	Daily Construction Report								
PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE	<table style="width: 100%; border: none;"> <tr> <td style="width: 40%; border: none;">CONTRACTOR/OWNER</td> <td style="width: 60%; border: none;">Date:</td> </tr> <tr> <td style="border: none; text-align: center;">F.GILBERT Itée</td> <td style="border: none; text-align: right;">Tuesday, September 14, 2010</td> </tr> <tr> <td style="border: none;"></td> <td style="border: none; text-align: right;">Report #</td> </tr> <tr> <td style="border: none;"></td> <td style="border: none; text-align: right;">DR.2010.09.14</td> </tr> </table>	CONTRACTOR/OWNER	Date:	F.GILBERT Itée	Tuesday, September 14, 2010		Report #		DR.2010.09.14
CONTRACTOR/OWNER	Date:								
F.GILBERT Itée	Tuesday, September 14, 2010								
	Report #								
	DR.2010.09.14								

Soil-Bentonite Backfill						
SLUMP	STATION 50-150 mm					Notes:
DENSITY	240 kg/cu.m > in-trench slurry					

Cement-Soil-Bentonite Backfill						
STATION						Notes:
SLUMP	180-220 mm					
DENSITY	1.90 to 2.10 kg/cu.m		X		X	
GROUT DENSITY	1.12 to 1.20 kg/cu.m		X		X	

Bentonite Slurry					
Time	Location	Marsh Funnel (>45-55 sec)	Density (>1.025 kg/cu.m)	Filter Loss* (cc)	Notes:
4:30 AM	Pond	43	1.05	19.0	
3:00 AM		45	1.09	18.0	
Depth (mid depth)	Station	Marsh Funnel (>40 sec)	Density (1.025-1.25 kg/cu.m)	Filter Loss* (cc)	
2.0	31+806	140	1.1	11.0	
				X	
				X	

*For Inquip's internal reference.

Associates, Inc.

Daily Construction Report

PROJECT

**AGNICO EAGLE MINE
BAY GOOSE DIKE**

CONTRACTOR/OWNER

F.GILBERT Itée

Date:

Tuesday, September 14, 2010

Report #

DR.2010.09.14

Excavation Data

[illegible]

Contractors Verification:

64.40

The above report is complete and correct and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

Submitted By:

William Collins/Josue Toro-Diaz

INQUIP Associates, Inc.			Daily Construction Report				
PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE			CONTRACTOR/OWNER F.GILBERT Itée		Date: Wednesday, September 15, 2010 Report # DR.2010.09.15		
Weather:			Temperature High: 11 °C Low: 5 °C		Ground Conditions Fairly Dry		
MANPOWER							
NAME/CRAFT	On Site	HRS.			TYPE	IN-USE	ST-BY
FRANK DAVIS	X	12			Slurry Mixer	x	
LAMAR POWELL	X	12			Grout Mixer		X
BENNY SMITH	X	12			Pumps	X	
JOHN LOGAN	X	12			4" HDPE pipe	X	
WILLIAM COLLINS	X	12			Loader w/forks		X
JOSUE TORO-DIAZ					Dozer (D6)	X	
					CAT385	X	
					Generator	X	
					Tremie pipe		
					Forklift		
					Mixing Box		X
					Kamatsu		

SUMMARY OF DAY'S WORK

Old slurry. Used 3 bags of bentonite, day shift; started mixing @ 4pm. Digging @ 2:00 to 315, o-ring +bent tube on 1250. One batch of csb.

Bentonite slurry usage

Bags used: 27

Bags on hand: 165

Cement Usage:

Bags used: 3

Broken bags:

Bags wasted (after mixed, the cement slurry was dumped):

Bags on hand: 18

REMARKS / DELAYS / ITEMS REQUIRING CONTRACTOR ACTION

SAFETY

Daily tool-box safety meeting every morning.

ATTACHMENTS

Trench profile.

Associates, Inc.

PROJECT	CONTRACTOR/OWNER	Date:	Wednesday, September 15, 2010
AGNICO EAGLE MINE BAY GOOSE DIKE	F.GILBERT Itée	Report #	DR.2010.09.15

SLUMP	STATION					Notes:
	50-150 mm					
DENSITY	240 kg/cu.m > in-trench slurry					

STATION			start	31+800	Notes:
SLUMP	180-220 mm			176 mm	
DENSITY	1.90 to 2.10 kg/cu.m		2.0 m		
GROUT DENSITY	1.12 to 1.20 kg/cu.m		1.121		

Time	Location	Marsh Funnel (>45-55 sec)	Density (>1.025 kg/cu.m)	Filter Loss* (cc)	Notes:
7:00 AM	Pond	43	1.05	20.0	Sand Content 2%
1:15 PM		43	1.04		
7:30 PM		45	1.05	21.0	
2:00 AM		47	1.08	19.0	
Depth (mid depth)	Station	Marsh Funnel (>40 sec)	Density (1.025-1.25 kg/cu.m)	Filter Loss* (cc)	
2.0	31+816	46	1.12	22.0	
3.0	31+820	47	1.11		
2.0	31+818	50	1.1	20.0	
3.0	31+834	48	1.1		*For Inquip's internal reference.

Associates, Inc.

Daily Construction Report

PROJECT

**AGNICO EAGLE MINE
BAY GOOSE DIKE**

CONTRACTOR/OWNER

F.GILBERT Itée

Date:

Wednesday, September 15, 2010

Report #

DR.2010.09.15

Excavation Data

[illegible]

Contractors Verification:

561.10

The above report is complete and correct and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

Submitted By:

William Collins/Josue Toro-Diaz

INQUIP Associates, Inc.			Daily Construction Report				
PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE			CONTRACTOR/OWNER F.GILBERT Itée		Date: Thursday, September 16, 2010 Report # DR.2010.09.16		
Weather: Light Rain			Temperature High: 4 °C Low: 2 °C		Ground Conditions Wet		
MANPOWER							
NAME/CRAFT	On Site	HRS.			TYPE	IN-USE	ST-BY
FRANK DAVIS	X	12			Slurry Mixer	x	
LAMAR POWELL	X	12			Grout Mixer		X
BENNY SMITH	X	12			Pumps	X	
JOHN LOGAN	X	12			4" HDPE pipe	X	
WILLIAM COLLINS	X	12			Loader w/forks		X
JOSUE TORO-DIAZ					Dozer (D6)	X	
					CAT385	X	
					Generator	X	
					Tremie pipe		
					Forklift		
					Mixing Box		X
					Kamatsu		

SUMMARY OF DAY'S WORK
 31+856 Large Boulder at 16 m. 1250 shovel slow at bottom silt to till. 1 set samples, csb, @ 31+800. 8 batch CSB

Bentonite slurry usage Bags used: 27 Bags on hand: 165	Cement Usage: Bags used: 3 Broken bags: Bags wasted (after mixed, the cement slurry was dumped): Bags on hand: 18
--	---

REMARKS / DELAYS / ITEMS REQUIRING CONTRACTOR ACTION

SAFETY
 Daily tool-box safety meeting every morning.

ATTACHMENTS
 Trench profile.

Associates, Inc.

PROJECT	CONTRACTOR/OWNER	Date:	Thursday, September 16, 2010
AGNICO EAGLE MINE	F.GILBERT Itée	Report #	DR.2010.09.16
BAY GOOSE DIKE			

SLUMP	STATION					Notes:
	50-150 mm					
DENSITY	240 kg/cu.m > in-trench slurry					

STATION		31+800	31+800			Notes:
SLUMP	180-220 mm	200 mm	190 mm			
DENSITY	1.90 to 2.10 kg/cu.m	2.05				
GROUT DENSITY	1.12 to 1.20 kg/cu.m	1.26				

					Notes:
Time	Location	Marsh Funnel (>45-55 sec)	Density (>1.025 kg/cu.m)	Filter Loss* (cc)	Sand Content 2%
6:45 AM	Pond	44	1.04	19.0	
1:15 PM		45	1.04	18.0	
7:40 PM		45	1.04	18.0	
Depth (mid depth)	Station	Marsh Funnel (>40 sec)	Density (1.025-1.25 kg/cu.m)	Filter Loss* (cc)	
3.0	31+850	47	1.1	19.0	
2.0	31+848	45	1.1		
3.0	31+870	48	1.11	19.0	
					*For Inquip's internal reference.

Associates, Inc.

Daily Construction Report

PROJECT

**AGNICO EAGLE MINE
BAY GOOSE DIKE**

CONTRACTOR/OWNER

F.GILBERT Itée

Date:

Thursday, September 16, 2010

Report #

DR.2010.09.16

Excavation Data

[illegible]

Contractors Verification:

371.10

The above report is complete and correct and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

Submitted By:

William Collins/Josue Toro-Diaz

INQUIP Associates, Inc.			Daily Construction Report				
PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE			CONTRACTOR/OWNER F.GILBERT Itée		Date: Friday, September 17, 2010 Report # DR.2010.09.17		
Weather: Light Rain			Temperature High: 8 °C Low: 3 °C		Ground Conditions Wet		
MANPOWER							
NAME/CRAFT	On Site	HRS.			TYPE	IN-USE	ST-BY
FRANK DAVIS	X	12			Slurry Mixer	x	
LAMAR POWELL	X	12			Grout Mixer		X
BENNY SMITH	X	12			Pumps	X	
JOHN LOGAN	X	12			4" HDPE pipe	X	
WILLIAM COLLINS	X	12			Loader w/forks		X
JOSUE TORO-DIAZ					Dozer (D6)	X	
					CAT385	X	
					Generator	X	
					Tremie pipe		
					Forklift		
					Mixing Box		X
					Kamatsu		

SUMMARY OF DAY'S WORK

Waiting on compaction (Geopac - loaned them a mission pump for vibration) Restarted excavation @ 3pm. Backfill CSB.

Bentonite slurry usage
 Bags used: 10
 Bags on hand: 155

Cement Usage:
 Bags used: 9
 Broken bags:
 Bags wasted (after mixed, the cement slurry was dumped):
 Bags on hand: 18

REMARKS / DELAYS / ITEMS REQUIRING CONTRACTOR ACTION

SAFETY
 Daily tool-box safety meeting every morning.

ATTACHMENTS
 Trench profile.

Associates, Inc.

PROJECT	CONTRACTOR/OWNER	Date:	Friday, September 17, 2010
AGNICO EAGLE MINE BAY GOOSE DIKE	F.GILBERT Itée	Report #	DR.2010.09.17

SLUMP	STATION					Notes:
	50-150 mm					
DENSITY	240 kg/cu.m > in-trench slurry					

STATION		31+800		31+800		Notes:
SLUMP	180-220 mm	180 mm		185 mm		
DENSITY	1.90 to 2.10 kg/cu.m	2.8		2.5		
GROUT DENSITY	1.12 to 1.20 kg/cu.m	1.15		1.2		

Time	Location	Marsh Funnel (>45-55 sec)	Density (>1.025 kg/cu.m)	Filter Loss* (cc)	Notes:
7:30 AM	Pond	51	1.04	18.0	Sand Content 2%
3:30 PM		45	1.04	19.0	
7:30 PM		47	1.04	18.0	
2:25 AM		47	1.03	19.0	
Depth (mid depth)	Station	Marsh Funnel (>40 sec)	Density (1.025-1.25 kg/cu.m)	Filter Loss* (cc)	
2.0	31+848	47	1.1	19.0	
2.0	31+860	46	1.08	19.0	
2.0	31+890	47	1.09		*For Inquip's internal reference.

Associates, Inc.

Daily Construction Report

PROJECT

AGNICO EAGLE MINE
BAY GOOSE DIKE

CONTRACTOR/OWNER

F.GILBERT Itée

Date:

Friday, September 17, 2010

Report #

DR.2010.09.17

Excavation Data

[illegible]

Contractors Verification:

492.15

The above report is complete and correct and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

Submitted By:

William Collins/Josue Toro-Diaz

INQUIP Associates, Inc.	Daily Construction Report
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PROJECT			CONTRACTOR/OWNER		Date:		
AGNICO EAGLE MINE BAY GOOSE DIKE			F.GILBERT Itée		Saturday, September 18, 2010		
					Report # DR.2010.09.18		
Weather:			Temperature		Ground Conditions		
Light Rain			High: 8 °C		Wet		
Low: 6 °C							
MANPOWER							
NAME/CRAFT	On Site	HRS.			TYPE	IN-USE	ST-BY
FRANK DAVIS	X	12			Slurry Mixer	x	
LAMAR POWELL	X	12			Grout Mixer		X
BENNY SMITH	X	12			Pumps	X	
JOHN LOGAN	X	12			4" HDPE pipe	X	
WILLIAM COLLINS	X	12			Loader w/forks		X
JOSUE TORO-DIAZ					Dozer (D6)	X	
					CAT385	X	
					Generator	X	
					Tremie pipe		
					Forklift		
					Mixing Box		X
					Kamatsu		

SUMMARY OF DAY'S WORK

Hit top of bedrock @ 31+914, 16 M. Working /w backfill only in AM. Using compaction pounder only 20 M away from excavation! Top out backfill 9am; moving forward. 31+818 csb samples taken.

Bentonite slurry usage Bags used: 0 Bags on hand: 155	Cement Usage: Bags used: 21 Broken bags: Bags wasted (after mixed, the cement slurry was dumped): Bags on hand: 18
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REMARKS / DELAYS / ITEMS REQUIRING CONTRACTOR ACTION

SAFETY

Daily tool-box safety meeting every morning.

ATTACHMENTS

Trench profile.

Associates, Inc.

PROJECT	CONTRACTOR/OWNER	Date:	Saturday, September 18, 2010
AGNICO EAGLE MINE BAY GOOSE DIKE	F.GILBERT Itée	Report #	DR.2010.09.18

SLUMP	STATION					Notes:
	50-150 mm					
DENSITY	240 kg/cu.m > in-trench slurry					

STATION		31+806	31+818	31+832	31+836	Notes:
SLUMP	180-220 mm	200	175	175	185	
DENSITY	1.90 to 2.10 kg/cu.m	2.05		2.1		
GROUT DENSITY	1.12 to 1.20 kg/cu.m	1.12		1.15		

					Notes:
Time	Location	Marsh Funnel (>45-55 sec)	Density (>1.025 kg/cu.m)	Filter Loss* (cc)	Sand Content 6%
7:45 AM	Pond	50	1.04		
11:00 AM		43	1.04	20.0	
9:45 PM		47	1.05	19.0	
2:40 AM		45	1.04	20.0	
Depth (mid depth)	Station	Marsh Funnel (>40 sec)	Density (1.025-1.25 kg/cu.m)	Filter Loss* (cc)	
3.0	31+886	50	1.17		
2.0	31+902	48	1.17		
2.0	31+916	52	1.12	19.0	
					*For Inquip's internal reference.

Associates, Inc.

Daily Construction Report

PROJECT

**AGNICO EAGLE MINE
BAY GOOSE DIKE**

CONTRACTOR/OWNER

F.GILBERT Itée

Date:

Saturday, September 18, 2010

Report #

DR.2010.09.18

Excavation Data

[illegible]

Contractors Verification:

470.56

The above report is complete and correct and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

Submitted By:

William Collins/Josue Toro-Diaz

INQUIP Associates, Inc.			Daily Construction Report				
PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE			CONTRACTOR/OWNER F.GILBERT Itée		Date: Sunday, September 19, 2010 Report # DR.2010.09.19		
Weather: Light Rain			Temperature High: 8 °C Low: 2 °C		Ground Conditions Wet		
MANPOWER							
NAME/CRAFT	On Site	HRS.			TYPE	IN-USE	ST-BY
FRANK DAVIS	X	12			Slurry Mixer	x	
LAMAR POWELL	X	12			Grout Mixer		X
BENNY SMITH	X	12			Pumps	X	
JOHN LOGAN	X	12			4" HDPE pipe	X	
WILLIAM COLLINS	X	12			Loader w/forks		X
JOSUE TORO-DIAZ					Dozer (D6)	X	
					CAT385	X	
					Generator	X	
					Tremie pipe		
					Forklift		
					Mixing Box		X
					Kamatsu		

SUMMARY OF DAY'S WORK
 On standby from 12:30 AM last night, waiting for compaction. Mixing bentonite ponds. Restart 2 PM = 13 HR downtime. 31+844 Samples CSB

Bentonite slurry usage Bags used: 16 Bags on hand: 139	Cement Usage: Bags used: 29 Broken bags: Bags wasted (after mixed, the cement slurry was dumped): Bags on hand: 18
--	--

REMARKS / DELAYS / ITEMS REQUIRING CONTRACTOR ACTION

SAFETY
 Daily tool-box safety meeting every morning.

ATTACHMENTS
 Trench profile.

INQUIP Associates, Inc.	Daily Construction Report
PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE	CONTRACTOR/OWNER F.GILBERT Itée Date: Sunday, September 19, 2010 Report # DR.2010.09.19

Soil-Bentonite Backfill						
SLUMP	STATION 50-150 mm					Notes:
DENSITY	240 kg/cu.m > in-trench slurry					

Cement-Soil-Bentonite Backfill					
STATION	31+844		31+853	31+862	Notes:
SLUMP	180-220 mm	175		177 180	
DENSITY	1.90 to 2.10 kg/cu.m	2.08	2.1		
GROUT DENSITY	1.12 to 1.20 kg/cu.m	1.28	1.5		

Bentonite Slurry					Notes:
Time	Location	Marsh Funnel (>45-55 sec)	Density (>1.025 kg/cu.m)	Filter Loss* (cc)	
9:00 AM	Pond	47	1.04	17.0	
1:15 PM		43	1.04	20.0	
9:00 PM		45	1.03	16.0	
2:30 AM		47	1.04	17.0	
Depth (mid depth)	Station	Marsh Funnel (>40 sec)	Density (1.025-1.25 kg/cu.m)	Filter Loss* (cc)	
3.0	31+924	50	1.17		
				X	
3.0	31+930	49	1.1	19.0	
3.0	31+950	51	1.15	X	

*For Inquip's internal reference.

Associates, Inc.

Daily Construction Report

PROJECT

**AGNICO EAGLE MINE
BAY GOOSE DIKE**

CONTRACTOR/OWNER

F.GILBERT Itée

Date:

Sunday, September 19, 2010

Report #

DR.2010.09.19

Excavation Data

[illegible]

Contractors Verification:

391.60

The above report is complete and correct and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

Submitted By:

William Collins/Josue Toro-Diaz

INQUIP Associates, Inc.	Daily Construction Report
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PROJECT			CONTRACTOR/OWNER		Date:		
AGNICO EAGLE MINE BAY GOOSE DIKE			F.GILBERT Itée		Monday, September 20, 2010		
					Report # DR.2010.09.20		
Weather:			Temperature		Ground Conditions		
Light Rain, Snow			High: 4 °C Low: 0 °C		Fairly Dry, Frost		
MANPOWER							
NAME/CRAFT	On Site	HRS.			TYPE	IN-USE	ST-BY
FRANK DAVIS	X	12			Slurry Mixer	x	
LAMAR POWELL	X	12			Grout Mixer	x	
BENNY SMITH	X	12			Pumps	X	
JOHN LOGAN	X	12			4" HDPE pipe	X	
WILLIAM COLLINS	X	12			Loader w/forks	x	
JOSUE TORO-DIAZ					Dozer (D6)	X	
					CAT385	X	
					Generator	X	
					Tremie pipe		
					Forklift	x	
					Mixing Box	x	
					Kamatsu	x	

SUMMARY OF DAY'S WORK

3 Hour delay waiting on compaction/workpad. Light freeze in AM. Slow excavation /w rigged bucket on 385c. Welding on old bucket @ shop.

Bentonite slurry usage Bags used: 0 Bags on hand: 139	Cement Usage: Bags used: 42 Broken bags: Bags wasted (after mixed, the cement slurry was dumped): Bags on hand: 18
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REMARKS / DELAYS / ITEMS REQUIRING CONTRACTOR ACTION

In some of the previous reports the column for "depth of bedrock", should also be interpreted as 'bottom elevation of trench' when excavation was stop in till. Grout mixer, dozer, forklift, and mixing box were used every time we placed CSB. Kamatsu was used in addition to CAT385 when excavation was deep.

SAFETY

Daily tool-box safety meeting every morning.

ATTACHMENTS

Trench profile.

Daily Construction Report

PROJECT

**AGNICO EAGLE MINE
BAY GOOSE DIKE**

CONTRACTOR/OWNER

F.GILBERT Itée

Date:

Monday, September 20, 2010

Report #

DR.2010.09.20

Soil-Bentonite Backfill

SLUMP	STATION					Notes:
	50-150 mm					
DENSITY	240 kg/cu.m > in-trench slurry					

Cement-Soil-Bentonite Backfill

STATION		31+844	31+896	31+924	31+932	Notes:
SLUMP	180-220 mm	180	185	154	180	
DENSITY	1.90 to 2.10 kg/cu.m	2.12		2.13		
GROUT DENSITY	1.12 to 1.20 kg/cu.m	1.23		1.41		

Bentonite Slurry

Time	Location	Marsh Funnel (>45-55 sec)	Density (>1.025 kg/cu.m)	Filter Loss* (cc)	Notes:
8:00 AM	Pond	42	1.04	16.0	4% Sand; frozen
12:55 PM		41	1.04		
Depth (mid depth)	Station	Marsh Funnel (>40 sec)	Density (1.025-1.25 kg/cu.m)	Filter Loss* (cc)	
3.0	31+966	50	1.12	20.0	
3.0	31+972	50	1.18		
3.0	31+978	52	1.21	19.0	
3.0	31+982	50	1.18		*For Inquip's internal reference.

Associates, Inc.

Daily Construction Report

PROJECT

**AGNICO EAGLE MINE
BAY GOOSE DIKE**

CONTRACTOR/OWNER

F.GILBERT Itée

Date:

Monday, September 20, 2010

Report #

DR.2010.09.20

Excavation Data

[illegible]

Contractors Verification:

387.60

The above report is complete and correct and all materials report and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

Submitted By:

William Collins/Josue Toro-Diaz

INQUIP Associates, Inc.	Daily Construction Report
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PROJECT			CONTRACTOR/OWNER		Date:		
AGNICO EAGLE MINE BAY GOOSE DIKE			F.GILBERT Itée		Tuesday, September 21, 2010		
					Report # DR.2010.09.21		
Weather:			Temperature		Ground Conditions		
Light Rain			High: 4 °C Low: 1 °C		Wet		
MANPOWER							
NAME/CRAFT	On Site	HRS.			TYPE	IN-USE	ST-BY
FRANK DAVIS	X	12			Slurry Mixer	x	
LAMAR POWELL	X	12			Grout Mixer	x	
BENNY SMITH	X	12			Pumps	X	
JOHN LOGAN	X	12			4" HDPE pipe	X	
WILLIAM COLLINS	X	12			Loader w/forks	x	
JOSUE TORO-DIAZ					Dozer (D6)	X	
					CAT385	X	
					Generator	X	
					Tremie pipe		
					Forklift	x	
					Mixing Box	x	
					Kamatsu	x	

SUMMARY OF DAY'S WORK
Moving CSB plant. Backfill @ 32+ 010. Pumping fresh slurry to trench. Am compaction almost complete. Boulders @ 32+018. Dominique Namy on site.

Bentonite slurry usage Bags used: 0 Bags on hand: 139	Cement Usage: Bags used: 13 Broken bags: Bags wasted (after mixed, the cement slurry was dumped): Bags on hand: 18
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REMARKS / DELAYS / ITEMS REQUIRING CONTRACTOR ACTION
In some of the previous reports the column for "depth of bedrock", should also be interpreted as 'bottom elevation of trench' when excavation was stop in till. Grout mixer, dozer, forklift, and mixing box were used every time we placed CSB. Kamatsu was used in addition to CAT385 when excavation was deep.

SAFETY
Daily tool-box safety meeting every morning.

ATTACHMENTS
Trench profile.

INQUIP

Associates, Inc.

Daily Construction Report

PROJECT

AGNICO EAGLE MINE
BAY GOOSE DIKE

CONTRACTOR/OWNER

F.GILBERT Itée

Date:

Tuesday, September 21, 2010

Report #

DR.2010.09.21

Soil-Bentonite Backfill

SLUMP	STATION					Notes:
	50-150 mm					
DENSITY	240 kg/cu.m > in-trench slurry					

Cement-Soil-Bentonite Backfill

STATION		31+940		31+950		Notes:
SLUMP	180-220 mm	185		180		
DENSITY	1.90 to 2.10 kg/cu.m	2.05		2.06		
GROUT DENSITY	1.12 to 1.20 kg/cu.m	1.19		1.2		

Bentonite Slurry

Time	Location	Marsh Funnel (>45-55 sec)	Density (>1.025 kg/cu.m)	Filter Loss* (cc)	Notes:
8:00 AM	Pond	41	1.04	18.0	10% Sand
12:55 PM		41	1.04		
8:00 PM		41	1.04	18.0	
Depth (mid depth)	Station	Marsh Funnel (>40 sec)	Density (1.025-1.25 kg/cu.m)	Filter Loss* (cc)	
3.0	31+988	51	1.24		
2.0	31+994	47	1.15		
2.0	32+000	45	1.1	17.0	

*For Inquip's internal reference.

Associates, Inc.

Daily Construction Report

PROJECT	CONTRACTOR/OWNER	Date:	Tuesday, September 21, 2010
AGNICO EAGLE MINE BAY GOOSE DIKE	F.GILBERT Itée	Report #	DR.2010.09.21

Excavation Data

Station	Elevation of Workpad (MASL)	Depth to Bedrock (m) or bottom trench in till	Depth of CSB Backfill (m)	Elevation of Bedock (MASL) or trench bottom in till	Elevation of CSB Backfill (MASL)	Total	Prev Days	
						Square meters	Total Sq. m	
32+014	136.1	12.10		124.0			7,707.5	
32+016	136.1	12.40		123.7		24.50		
32+018	136.1	12.50		123.6		24.90		
32+020	136.1	11.90		124.2		24.40		
32+022	136.1	12.10		124.0		24.00		
32+024	136.1	11.20		124.9		23.30		
32+026	136.1	11.50		124.6		22.70		
32+028	136.1	11.60		124.5		23.10		
32+030	136.1	11.60		124.5		23.20		
32+032	136.1	11.70		124.4		23.30		
32+034	136.1	11.60		124.5		23.30		
32+036	136.1	11.09		125.0		22.69		
32+038	136.1	11.09		125.0		22.18		
32+040	136.1	11.70		124.4		22.79		
32+042	136.1	11.80		124.3		23.50		
32+044	136.1	12.00		124.1		23.80		
32+046	136.1	12.20		123.9		24.20		
32+048	136.1	11.90		124.2		24.10		
32+050	136.1	11.60		124.5		23.50		
32+052	136.1	11.07		125.0		22.67		
32+054	136.1	11.05		125.1		22.12		
32+056	136.1	11.05		125.1		22.10		
32+058	136.1	11.01		125.1		22.06		
								Preliminary Total To Date
						8,219.9		

Contractors Verification:

512.41

The above report is complete and correct and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

Submitted By:

William Collins/Josue Toro-Diaz

INQUIP Associates, Inc.	Daily Construction Report
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PROJECT			CONTRACTOR/OWNER		Date: Wednesday, September 22, 2010		
AGNICO EAGLE MINE BAY GOOSE DIKE			F.GILBERT Itée		Report # DR.2010.09.22		
Weather:			Temperature		Ground Conditions		
Light Rain			High: 4 °C Low: 1 °C		Wet		
MANPOWER							
NAME/CRAFT	On Site	HRS.			TYPE	IN-USE	ST-BY
FRANK DAVIS	X	12			Slurry Mixer	x	
LAMAR POWELL	X	12			Grout Mixer	x	
BENNY SMITH	X	12			Pumps	X	
JOHN LOGAN	X	12			4" HDPE pipe	X	
WILLIAM COLLINS	X	12			Loader w/forks	x	
JOSUE TORO-DIAZ					Dozer (D6)	X	
					CAT385	X	
					Generator	X	
					Tremie pipe		
					Forklift	x	
					Mixing Box	x	
					Kamatsu	x	

SUMMARY OF DAY'S WORK

Pumped slurry AM for trench level only. Backfilling only. Change pump grout plant. Dominique on site. Samples taken, 31+966

Bentonite slurry usage Bags used: 0 Bags on hand: 139	Cement Usage: Bags used: 57 Broken bags: Bags wasted (after mixed, the cement slurry was dumped): Bags on hand: 18
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REMARKS / DELAYS / ITEMS REQUIRING CONTRACTOR ACTION

In some of the previous reports the column for "depth of bedrock", should also be interpreted as 'bottom elevation of trench' when excavation was stop in till. Grout mixer, dozer, forklift, and mixing box were used every time we placed CSB. Kamatsu was used in addition to CAT385 when excavation was deep.

SAFETY

Daily tool-box safety meeting every morning.

ATTACHMENTS

Trench profile.

Associates, Inc.

PROJECT	CONTRACTOR/OWNER	Date:	Wednesday, September 22, 2010
AGNICO EAGLE MINE BAY GOOSE DIKE	F.GILBERT Itée	Report #	DR.2010.09.22

SLUMP	STATION					Notes:
	50-150 mm					
DENSITY	240 kg/cu.m > in-trench slurry					

STATION		31+966	31+980	31+006	31+020	Notes:
SLUMP	180-220 mm	190	185	180	179	
DENSITY	1.90 to 2.10 kg/cu.m	2.03		1.95		
GROUT DENSITY	1.12 to 1.20 kg/cu.m	1.16		1.18		

Time	Location	Marsh Funnel (>45-55 sec)	Density (>1.025 kg/cu.m)	Filter Loss* (cc)	Notes:
8:00 AM	Pond	41	1.03	18.0	5% Sand
Depth (mid depth)	Station	Marsh Funnel (>40 sec)	Density (1.025-1.25 kg/cu.m)	Filter Loss* (cc)	
1.0	32+040	44	1.13		
3.0	32+054	48	1.17		
3.0	32+064	52	1.19		
3.0	32+080	48	1.2		

*For Inquip's internal reference.

Associates, Inc.

Daily Construction Report

PROJECT	CONTRACTOR/OWNER	Date:	Wednesday, September 22, 2010
AGNICO EAGLE MINE	F.GILBERT Itée	Report #	DR.2010.09.22
BAY GOOSE DIKE			

Excavation Data

[illegible]

Contractors Verification:

575.10

The above report is complete and correct and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

Submitted By:

William Collins/Josue Toro-Diaz

INQUIP Associates, Inc.	Daily Construction Report
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PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE	CONTRACTOR/OWNER F.GILBERT Itée	Date: Thursday, September 23, 2010 Report # DR.2010.09.23
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Weather: Light Rain	Temperature High: 5 °C Low: 0 °C	Ground Conditions Wet
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MANPOWER							
NAME/CRAFT	On Site	HRS.			TYPE	IN-USE	ST-BY
FRANK DAVIS	X	12			Slurry Mixer	x	
LAMAR POWELL	X	12			Grout Mixer	x	
BENNY SMITH	X	12			Pumps	X	
JOHN LOGAN	X	12			4" HDPE pipe	X	
WILLIAM COLLINS	X	12			Loader w/forks	x	
JOSUE TORO-DIAZ					Dozer (D6)	X	
					CAT385	X	
					Generator	X	
					Tremie pipe		
					Forklift	x	
					Mixing Box	x	
					Kamatsu	x	

SUMMARY OF DAY'S WORK

5 batch of SB @ 7 inch / 200 mm slump over csb slope. 32+039 @ corner SB starts. Resumed normal slump SB @ 32+044. Desanding and pumping to pond @ corner channel. Waiting on compaction 12 noon, on standby. Finished CSB TOE @ 32+102 (Elevation: 128)

Bentonite slurry usage Bags used: 0 Bags on hand: 139	Cement Usage: Bags used: 5 Broken bags: Bags wasted (after mixed, the cement slurry was dumped): Bags on hand: 18
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REMARKS / DELAYS / ITEMS REQUIRING CONTRACTOR ACTION

SAFETY

Daily tool-box safety meeting every morning.

ATTACHMENTS

Trench profile.

<b style="font-size: 2em;">INQUIP Associates, Inc.	Daily Construction Report						
PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE	<table style="width: 100%; border: none;"> <tr> <td style="width: 40%; border: none;">CONTRACTOR/OWNER</td> <td style="border: none;">Date:</td> <td style="border: none;">Thursday, September 23, 2010</td> </tr> <tr> <td style="border: none; text-align: center;">F.GILBERT Itée</td> <td style="border: none;">Report #</td> <td style="border: none;">DR.2010.09.23</td> </tr> </table>	CONTRACTOR/OWNER	Date:	Thursday, September 23, 2010	F.GILBERT Itée	Report #	DR.2010.09.23
CONTRACTOR/OWNER	Date:	Thursday, September 23, 2010					
F.GILBERT Itée	Report #	DR.2010.09.23					

Soil-Bentonite Backfill					
SLUMP	STATION	32+040	32+050	32+070	Notes:
	50-150 mm	200 mm	90 mm	150 mm	
DENSITY	240 kg/cu.m > in-trench slurry	2.12	2.1	2.1	

Cement-Soil-Bentonite Backfill					
STATION					Notes:
SLUMP	180-220 mm				
DENSITY	1.90 to 2.10 kg/cu.m				
GROUT DENSITY	1.12 to 1.20 kg/cu.m				

Bentonite Slurry				
Time	Location	Marsh Funnel (>45-55 sec)	Density (>1.025 kg/cu.m)	Filter Loss* (cc)
	Pond			
Depth (mid depth)	Station	Marsh Funnel (>40 sec)	Density (1.025-1.25 kg/cu.m)	Filter Loss* (cc)
3.0	32+094	49	1.2	
2.0	32+124	47	1.16	
2.0	32+130	50	1.21	

5% Sand

*For Inquip's internal reference.

Associates, Inc.

Daily Construction Report

PROJECT

**AGNICO EAGLE MINE
BAY GOOSE DIKE**

CONTRACTOR/OWNER

F.GILBERT Itée

Date:

Thursday, September 23, 2010

Report #

DR.2010.09.23

Excavation Data

[illegible]

Contractors Verification:

126.30

The above report is complete and correct and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

Submitted By:

William Collins/Josue Toro-Diaz

INQUIP Associates, Inc.	Daily Construction Report
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PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE			CONTRACTOR/OWNER F.GILBERT Itée		Date: Friday, September 24, 2010 Report # DR.2010.09.24		
Weather: Light Rain / Snow			Temperature High: 3 °C Low: 0 °C		Ground Conditions Wet		
MANPOWER							
NAME/CRAFT	On Site	HRS.			TYPE	IN-USE	ST-BY
FRANK DAVIS	X	12			Slurry Mixer	x	
LAMAR POWELL	X	12			Grout Mixer	x	
BENNY SMITH	X	12			Pumps	X	
JOHN LOGAN	X	12			4" HDPE pipe	X	
WILLIAM COLLINS	X	12			Loader w/forks	x	
JOSUE TORO-DIAZ					Dozer (D6)	X	
					CAT385	X	
					Generator	X	
					Tremie pipe		
					Forklift	x	
					Mixing Box	x	
					Kamatsu	x	

SUMMARY OF DAY'S WORK
 Waiting on compaction 31+628 standby (mix one bag, pond to raise visc to 52 seconds. 4:30 pm start @ 31+560 CSB plug) Sample taken prep+grad 32+080.

Bentonite slurry usage Bags used: 1 Bags on hand: 138	Cement Usage: Bags used: 0 Broken bags: Bags wasted (after mixed, the cement slurry was dumped): Bags on hand: 18
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REMARKS / DELAYS / ITEMS REQUIRING CONTRACTOR ACTION

SAFETY
 Daily tool-box safety meeting every morning.

ATTACHMENTS
 Trench profile.

<b style="font-size: 2em;">INQUIP Associates, Inc.	Daily Construction Report								
PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE	<table style="width: 100%; border: none;"> <tr> <td style="width: 40%; border: none;">CONTRACTOR/OWNER</td> <td style="border: none;">Date:</td> </tr> <tr> <td style="border: none; text-align: center;">F.GILBERT Itée</td> <td style="border: none; text-align: right;">Friday, September 24, 2010</td> </tr> <tr> <td style="border: none;"></td> <td style="border: none; text-align: right;">Report #</td> </tr> <tr> <td style="border: none;"></td> <td style="border: none; text-align: right;">DR.2010.09.24</td> </tr> </table>	CONTRACTOR/OWNER	Date:	F.GILBERT Itée	Friday, September 24, 2010		Report #		DR.2010.09.24
CONTRACTOR/OWNER	Date:								
F.GILBERT Itée	Friday, September 24, 2010								
	Report #								
	DR.2010.09.24								

Soil-Bentonite Backfill						
SLUMP	STATION	32+080	32+090	32+110	32+135	Notes:
	50-150 mm	125 mm	135 mm	125 mm	130 mm	
DENSITY	240 kg/cu.m > in-trench slurry	2.11	2.08	2.11	2.06	

Cement-Soil-Bentonite Backfill					
STATION					Notes:
SLUMP	180-220 mm				
DENSITY	1.90 to 2.10 kg/cu.m				
GROUT DENSITY	1.12 to 1.20 kg/cu.m				

Bentonite Slurry					Notes:
Time	Location	Marsh Funnel (>45-55 sec)	Density (>1.025 kg/cu.m)	Filter Loss* (cc)	5% Sand *For Inquip's internal reference.
12:30 PM	Pond	52	1.03	16.0	
10:30 PM		45	1.04	16.0	
3:00 AM		45	1.04	16.0	
Depth (mid depth)	Station	Marsh Funnel (>40 sec)	Density (1.025-1.25 kg/cu.m)	Filter Loss* (cc)	
2.0	32+100	40	1.06		
1.0	32+124	41	1.08		
pipe	31+560	45	1.1		
2.0	31+572	50	1.12		

Associates, Inc.

Daily Construction Report

PROJECT	CONTRACTOR/OWNER	Date:	Friday, September 24, 2010
AGNICO EAGLE MINE BAY GOOSE DIKE	F.GILBERT Itée	Report #	DR.2010.09.24

Excavation Data

[illegible]

Contractors Verification:

160.45

The above report is complete and correct and all materials report and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

Submitted By: William Collins/Josue Toro-Diaz

INQUIP Associates, Inc.	Daily Construction Report
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PROJECT			CONTRACTOR/OWNER		Date:		
AGNICO EAGLE MINE BAY GOOSE DIKE			F.GILBERT Itée		Saturday, September 25, 2010		
					Report # DR.2010.09.25		
Weather:			Temperature		Ground Conditions		
Light Rain / Snow			High: 3 °C Low: 0 °C		Wet		
MANPOWER							
NAME/CRAFT	On Site	HRS.			TYPE	IN-USE	ST-BY
FRANK DAVIS	X	12			Slurry Mixer		
LAMAR POWELL	X	12			Grout Mixer	x	
BENNY SMITH	X	12			Pumps	X	
JOHN LOGAN	X	12			4" HDPE pipe	X	
WILLIAM COLLINS	X	12			Loader w/forks	x	
JOSUE TORO-DIAZ					Dozer (D6)	X	
					CAT385	X	
					Generator	X	
					Tremie pipe		
					Forklift	x	
					Mixing Box	x	
					Kamatsu	x	

SUMMARY OF DAY'S WORK
 Mixing bentonite AM to keep up, ran out on nightshift! 10AM 12 noon downtime! Mixing bentonite bag by bag to minimize slurry for end of escavation. 9 bags total for channel 31+628.

Bentonite slurry usage Bags used: 3 Bags on hand: 126	Cement Usage: Bags used: 14 Broken bags: Bags wasted (after mixed, the cement slurry was dumped): Bags on hand: 0
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SAFETY
 Daily tool-box safety meeting every morning.

ATTACHMENTS
 Trench profile.

INQUIP Associates, Inc.	Daily Construction Report
PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE	CONTRACTOR/OWNER F.GILBERT Itée Date: Saturday, September 25, 2010 Report # DR.2010.09.25

Soil-Bentonite Backfill						
SLUMP	STATION					Notes:
	50-150 mm					
DENSITY	240 kg/cu.m > in-trench slurry					

Cement-Soil-Bentonite Backfill						
	STATION			31+568	31+570	Notes:
SLUMP	180-220 mm			180	1.85	
DENSITY	1.90 to 2.10 kg/cu.m		X	1.85	X	
GROUT DENSITY	1.12 to 1.20 kg/cu.m		X	1.14	X	

Bentonite Slurry					Notes:
Time	Location	Marsh Funnel (>45-55 sec)	Density (>1.025 kg/cu.m)	Filter Loss* (cc)	
7:15 AM	Pond	44	1.03	17.0	
2:00 PM		45	1.03		
9:00 PM		45	1.03	17.0	
Depth (mid depth)	Station	Marsh Funnel (>40 sec)	Density (1.025-1.25 kg/cu.m)	Filter Loss* (cc)	
3.0	31+586	48	1.08		
3.0	31+590	45	1.11	X	
3.0	31+598	49	1.06		
3.0	31+602	50	1.12	X	

*For Inquip's internal reference.

Associates, Inc.

Daily Construction Report

PROJECT

**AGNICO EAGLE MINE
BAY GOOSE DIKE**

CONTRACTOR/OWNER

F.GILBERT Itée

Date:

Saturday, September 25, 2010

Report #

DR.2010.09.25

Excavation Data

[illegible]

Contractors Verification:

202.69

The above report is complete and correct and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

Submitted By:

William Collins/Josue Toro-Diaz

INQUIP Associates, Inc.	Daily Construction Report
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PROJECT			CONTRACTOR/OWNER		Date:		
AGNICO EAGLE MINE BAY GOOSE DIKE			F.GILBERT Itée		Sunday, September 26, 2010		
					Report # DR.2010.09.26		
Weather:			Temperature		Ground Conditions		
Light Rain / Snow			High: 3 °C Low: 0 °C		Wet		
MANPOWER							
NAME/CRAFT	On Site	HRS.			TYPE	IN-USE	ST-BY
FRANK DAVIS	X	12			Slurry Mixer		
LAMAR POWELL	X	12			Grout Mixer	x	
BENNY SMITH	X	12			Pumps	X	
JOHN LOGAN	X	12			4" HDPE pipe	X	
WILLIAM COLLINS	X	12			Loader w/forks	x	
JOSUE TORO-DIAZ					Dozer (D6)	X	
					CAT385	X	
					Generator	X	
					Tremie pipe		
					Forklift	x	
					Mixing Box	x	
					Kamatsu	x	

SUMMARY OF DAY'S WORK
 Finished excavation 8AM - tie in corner 2m past intersection. 4.2 depth because of existing backfill. Two pumps down @ 9:30 AM; waiting to fix. Stop csb top out at 31+610 and switch to SB.

Bentonite slurry usage Bags used: 0 Bags on hand: 126	Cement Usage: Bags used: 22 Broken bags: Bags wasted (after mixed, the cement slurry was dumped): Bags on hand: 0
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SAFETY
 Daily tool-box safety meeting every morning.

ATTACHMENTS
 Trench profile.

INQUIP Associates, Inc.	Daily Construction Report
PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE	CONTRACTOR/OWNER F.GILBERT Itée Date: Sunday, September 26, 2010 Report # DR.2010.09.26

Soil-Bentonite Backfill						
SLUMP	STATION 50-150 mm					Notes:
DENSITY	240 kg/cu.m > in-trench slurry					

Cement-Soil-Bentonite Backfill						
	STATION	31+576	31+586	31+595	31+600	Notes:
SLUMP	180-220 mm	200 mm	190 mm	180 mm	175 mm	
DENSITY	1.90 to 2.10 kg/cu.m	2.08		2.09		
GROUT DENSITY	1.12 to 1.20 kg/cu.m	1.15		1.2		

Bentonite Slurry					
Time	Location	Marsh Funnel (>45-55 sec)	Density (>1.025 kg/cu.m)	Filter Loss* (cc)	Notes:
finished	Pond				
Depth (mid depth)	Station	Marsh Funnel (>40 sec)	Density (1.025-1.25 kg/cu.m)	Filter Loss* (cc)	
2.0	31+620	48	1.1		
2.0	31+586	52	1.1		
2.0	31+596	54	1.12		

*For Inquip's internal reference.

Associates, Inc.

Daily Construction Report

PROJECT

**AGNICO EAGLE MINE
BAY GOOSE DIKE**

CONTRACTOR/OWNER

F.GILBERT Itée

Date:

Sunday, September 26, 2010

Report #

DR.2010.09.26

Excavation Data

[illegible]

Contractors Verification:

54.70

The above report is complete and correct and all materials report and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

Submitted By:

William Collins/Josue Toro-Diaz

INQUIP

Associates, Inc.

Daily Construction Report

PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE			CONTRACTOR/OWNER F.GILBERT Itée		Date: Monday, August 23, 2010 Report # DR.2010.08.23		
Weather:			Temperature High: Low:		Ground Conditions		
MANPOWER							
NAME/CRAFT	On Site	HRS.			TYPE	IN-USE	ST-BY
FRANK DAVIS	X	12			Slurry Mixer	X	
LAMAR POWELL	X	12			Grout Mixer		X
BENNY SMITH	X	12			Pump (4)	X	
JOHN LOGAN	X	12			4" HDPE pipe	X	
WILLIAM COLLINS	X	12			Loader w/forks	X	
JOSUE TORO-DIAZ	X	12			Dozer (D6)		
					CAT385	X	
					Generator	X	
					Tremie pipe		
					Forklift		
					Mixing Box		X
					Kamatsu		X

SUMMARY OF DAY'S WORK

Started digging around 8am.

Big bolder, about 1m long x 0.5m wide, was dug out of the trench at station 31+610.

On the last cut done, below 8m deep, the excavated material was not compacted as the above. Inquip/F.Gilbert were instructed by AEM to stop digging around 10pm.

Bentonite slurry usage

Bags used: 4

Bags on hand:

Cement Usage:

Bags used:

Broken bags:

Bags wasted (after mixed, the cement slurry was dumped):

Bags on hand:

REMARKS / DELAYS / ITEMS REQUIRING CONTRACTOR ACTION

SAFETY

Daily tool-box safety meeting every morning.

ATTACHMENTS

Trench profile.

INQUIP

Associates, Inc.

Daily Construction Report

PROJECT	AGNICO EAGLE MINE BAY GOOSE DIKE	CONTRACTOR/OWNER	Date:	Monday, August 23, 2010
		F.GILBERT Itée	Report #	DR.2010.08.23

Soil-Bentonite Backfill

SLUMP	STATION					Notes:
	50-150 mm					
DENSITY	240 kg/cu.m > in-trench slurry					

Cement-Soil-Bentonite Backfill

STATION					Notes:
SLUMP	180-220 mm				
DENSITY	1,900 to 2,100 kg/cu.m				
GROUT DENSITY	1,120 to 1,200 kg/cu.m				

Bentonite Slurry

Time	Location	Marsh Funnel (>45-55 sec)	Density (>1,025 kg/cu.m)	Filter Loss* (cc)	Notes:
10:00 AM	Pond	49	1.03	14.0	Sand Content: 1% and 1.5%
2:30 PM		47	1.03	14.0	
Depth (mid depth)	Station	Marsh Funnel (>40 sec)	Density (1,025-1,250 kg/cu.m)	Filter Loss* (cc)	
2.0	31+622	52	1.07	18.0	
2.0	31+622	49	1.07		
2.0	31+612	47	1.08	11.8	

*For Inquip's internal reference.

Associates, Inc.

Daily Construction Report

PROJECT	CONTRACTOR/OWNER	Date:	Monday, August 23, 2010
AGNICO EAGLE MINE BAY GOOSE DIKE	F.GILBERT Itée	Report #	DR.2010.08.23

Excavation Data

[illegible]

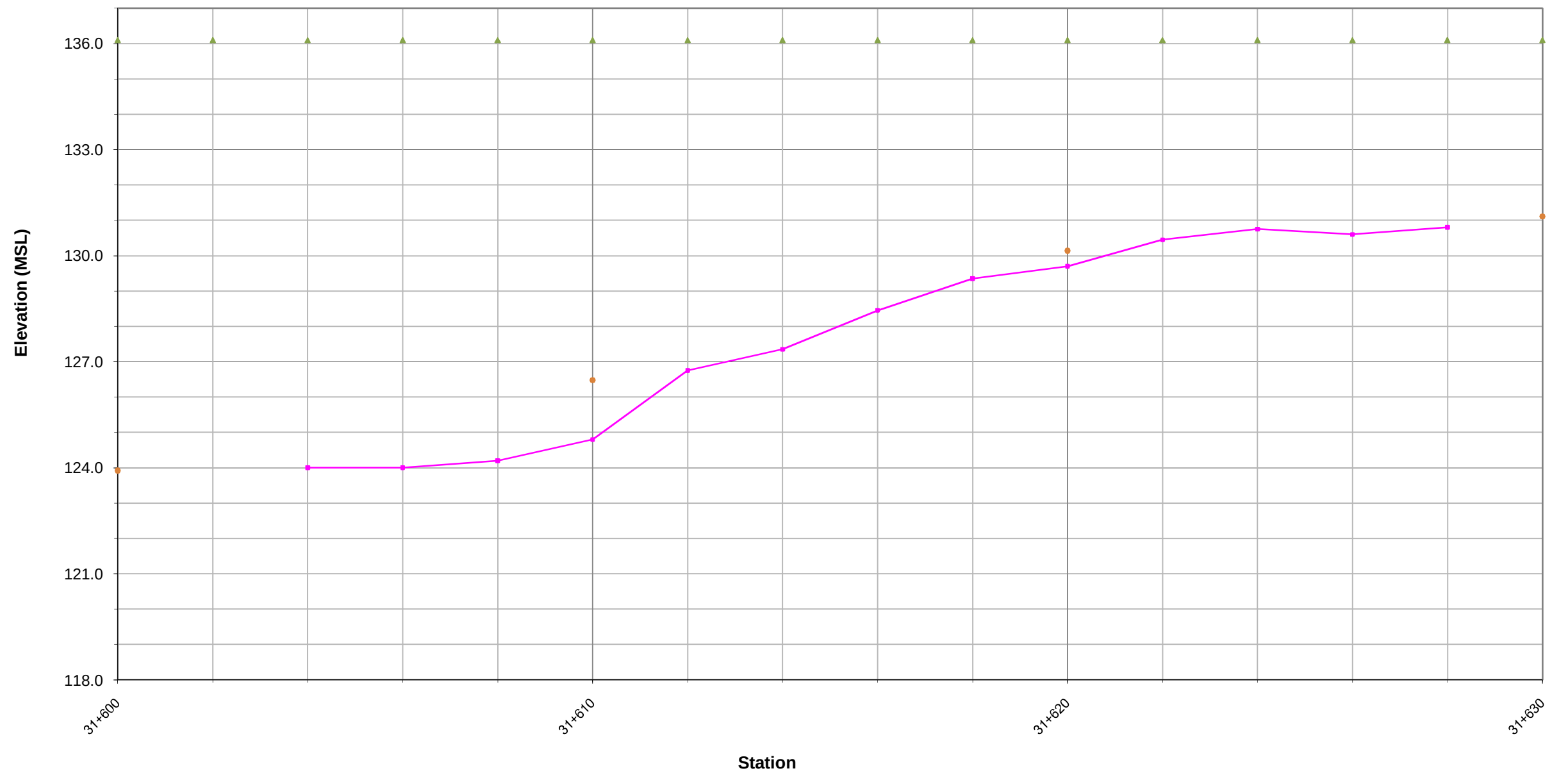
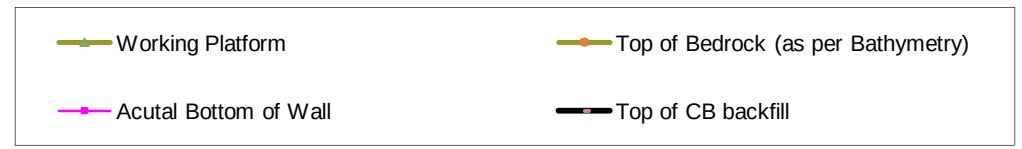
Contractors Verification:

209.40

The above report is complete and correct and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

Submitted By: William Collins/Josue Toro-Diaz

**Soil Bentonite Cutoff Wall Trench Profile
Agnico Eagle Mine - Bay-Goose Dike
(NOT TO SCALE)**



INQUIP

Associates, Inc.

Daily Construction Report

PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE			CONTRACTOR/OWNER F.GILBERT Itée		Date: Wednesday, August 25, 2010		
Weather:			Temperature High: Low:		Report # DR.2010.08.25 Ground Conditions		
MANPOWER							
NAME/CRAFT	On Site	HRS.			TYPE	IN-USE	ST-BY
FRANK DAVIS	X	12			Slurry Mixer		X
LAMAR POWELL	X	12			Grout Mixer		X
BENNY SMITH	X	12			Pump (4)		X
JOHN LOGAN	X	12			4" HDPE pipe		X
WILLIAM COLLINS	X	12			Loader w/forks		X
JOSUE TORO-DIAZ	X	12			Dozer (D6)		X
					CAT385		X
					Generator		X
					Tremie pipe		X
					Forklift		
					Mixing Box		X
					Kamatsu		X

SUMMARY OF DAY'S WORK

Waited all day to be instructed to keep diggin or move to another section due to the poor compaction on the excavated material.

Bentonite slurry usage

Bags used:

Bags on hand:

Cement Usage:

Bags used:

Broken bags:

Bags wasted (after mixed, the cement slurry was dumped):

Bags on hand: 29

REMARKS / DELAYS / ITEMS REQUIRING CONTRACTOR ACTION

Inquip/F.Gilbert were instructed not to keep digging due to the compaction of the material below 8m deep at station 31+600.

SAFETY

Daily tool-box safety meeting every morning.

ATTACHMENTS

Trench profile.

INQUIP

Associates, Inc.

Daily Construction Report

PROJECT	AGNICO EAGLE MINE BAY GOOSE DIKE	CONTRACTOR/OWNER	Date:	Wednesday, August 25, 2010
		F.GILBERT Itée	Report #	DR.2010.08.25

Soil-Bentonite Backfill

SLUMP	STATION					Notes:
	50-150 mm					
DENSITY	240 kg/cu.m > in-trench slurry					

Cement-Soil-Bentonite Backfill

STATION					Notes:
SLUMP	180-220 mm				
DENSITY	1.90 to 2.10 kg/cu.m				
GROUT DENSITY	1.12 to 1.20 kg/cu.m				

Bentonite Slurry

Time	Location	Marsh Funnel (>45-55 sec)	Density (>1.025 kg/cu.m)	Filter Loss* (cc)	Notes:
	Pond				
Depth (mid depth)	Station	Marsh Funnel (>40 sec)	Density (1.025-1.25 kg/cu.m)	Filter Loss* (cc)	

*For Inquip's internal reference.

Associates, Inc.

CONTRACTOR/OWNER

Date: Wednesday, August 25, 2010

**AGNICO EAGLE MINE
BAY GOOSE DIKE**

F.GILBERT Itée

Report #

DR.2010.08.25

Excavation Data

[illegible]

Contractors Verification:

The above report is complete and correct and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

Submitted By: William Collins/Josue Toro-Diaz

INQUIP

Associates, Inc.

Daily Construction Report

PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE			CONTRACTOR/OWNER F.GILBERT Itée		Date: Friday, August 27, 2010 Report # DR.2010.08.27		
Weather:			Temperature High: Low:		Ground Conditions		
MANPOWER							
NAME/CRAFT	On Site	HRS.			TYPE	IN-USE	ST-BY
FRANK DAVIS	X	12			Slurry Mixer	X	
LAMAR POWELL	X	12			Grout Mixer		X
BENNY SMITH					Pumps	X	
JOHN LOGAN	X	12			4" HDPE pipe	X	
WILLIAM COLLINS	X	12			Loader w/forks	X	
JOSUE TORO-DIAZ	X	12			Dozer (D6)	X	
					CAT385	X	
					Generator	X	
					Tremie pipe		
					Forklift		
					Mixing Box		X
					Kamatsu		

SUMMARY OF DAY'S WORK

Hauled till to station 31+560. Resumed excavation @ 10:00 am. CSB and loose gravel is making slurry thick.

Bentonite slurry usage
Bags used: 9 (day shift; no info on night shift)
Bags on hand: 203

Cement Usage:
Bags used: 8
Broken bags:
Bags wasted (after mixed, the cement slurry was dumped):
Bags on hand: 29

REMARKS / DELAYS / ITEMS REQUIRING CONTRACTOR ACTION

Crew took off at 11am. Waited until 2:45pm for the next crew to come in.

SAFETY

Daily tool-box safety meeting every morning.

At shift change, one of the employees, Benny Smith, sprain his ankle getting off the Dozer D6. Stepped on a rock. Was taken to the medical center and was given rest until Sunday morning when they will re-check his foot and see if the swell has come down.

ATTACHMENTS

Trench profile.

INQUIP

Associates, Inc.

Daily Construction Report

PROJECT	AGNICO EAGLE MINE BAY GOOSE DIKE	CONTRACTOR/OWNER	Date:	Friday, August 27, 2010
		F.GILBERT Itée	Report #	DR.2010.08.27

Soil-Bentonite Backfill

SLUMP	STATION	31+556	31+528	31+506	Notes:
	50-150 mm	152	140	127	
DENSITY	240 kg/cu.m > in-trench slurry	2.08	2.1	2.13	

Cement-Soil-Bentonite Backfill

STATION					Notes:
SLUMP	180-220 mm				
DENSITY	1.90 to 2.10 kg/cu.m				
GROUT DENSITY	1.12 to 1.20 kg/cu.m				

Bentonite Slurry

Time	Location	Marsh Funnel (>45-55 sec)	Density (>1.025 kg/cu.m)	Filter Loss* (cc)	Notes:
7:00 AM	Pond	45	1.04	12.0	
1:00 PM		47	1.03	16.0	
8:00 PM		45	1.05	12.0	
Depth (mid depth)	Station	Marsh Funnel (>40 sec)	Density (1.025-1.25 kg/cu.m)	Filter Loss* (cc)	
3.0	31+502	47	1.08	15.0	
3.0	31+426	47	1.1		
3.0	31+404	47	1.1	21.0	

*For Inquip's internal reference.

INQUIP

Associates, Inc.

Daily Construction Report

PROJECT	CONTRACTOR/OWNER	Date:	Friday, August 27, 2010
AGNICO EAGLE MINE BAY GOOSE DIKE	F.GILBERT Itée	Report #	DR.2010.08.27

Excavation Data

Station	Elevation of Workpad (MASL)	Depth to Bedrock (m)	Depth of CSB Backfill (m)	Elevation of Bedrock (MASL)	Elevation of CSB Backfill (MASL)	Total Square meters	Prev Days Total Sq. m
31+444	136.1	4.98		131.1			969.8
31+442	136.1	5.49		130.6		10.47	
31+440	136.1	6.45		129.7		11.94	
31+438	136.1	5.46		130.6		11.91	
31+436	136.1	5.50		130.6		10.96	
31+434	136.1	4.67		131.4		10.17	
31+432	136.1	5.10		131.0		9.77	
31+430	136.1	5.50		130.6		10.60	
31+428	136.1	6.20		129.9		11.70	
31+426	136.1	5.50		130.6		11.70	
31+424	136.1	5.30		130.8		10.80	
31+422	136.1	5.46		130.6		10.76	
31+420	136.1	5.08		131.0		10.54	
31+418	136.1	5.15		131.0		10.23	
31+416	136.1	5.50		130.6		10.65	
31+414	136.1	5.70		130.4		11.20	
31+412	136.1	6.55		129.6		12.25	
31+410	136.1	6.45		129.7		13.00	
31+408	136.1	6.65		129.5		13.10	
31+406	136.1	6.70		129.4		13.35	
31+404	136.1	6.65		129.5		13.35	
31+402	136.1	6.40		129.7		13.05	
31+400	136.1	6.40		129.7		12.80	
31+398	136.1	6.40		129.7		12.80	
31+396	136.1	6.00		130.1		12.40	
31+394	136.1	6.30		129.8		12.30	
31+392	136.1	6.60		129.5		12.90	
31+390	136.1	5.90		130.2		12.50	
31+388	136.1	5.00		131.1		10.90	
31+386	136.1	4.80		131.3		9.80	
31+384	136.1	5.00		131.1		9.80	
31+382	136.1	5.20		130.9		10.20	
31+380	136.1	5.10		131.0		10.30	
31+378	136.1	5.00		131.1		10.10	
31+376	136.1	5.00		131.1		10.00	
31+374	136.1	4.90		131.2		9.90	
31+372	136.1	4.90		131.2		9.80	
31+370	136.1	5.20		130.9		10.10	
31+368	136.1	5.30		130.8		10.50	
31+366	136.1	5.40		130.7		10.70	
31+364	136.1	5.50		130.6		10.90	
31+362	136.1	5.80		130.3		11.30	
31+360	136.1	6.00		130.1		11.80	
31+358	136.1	5.90		130.2		11.90	
31+356	136.1	5.90		130.2		11.80	
31+354	136.1	6.20		129.9		12.10	
31+352	136.1	6.20		129.9		12.40	

INQUIP

Associates, Inc.

Daily Construction Report

PROJECT				CONTRACTOR/OWNER		Date:		Friday, August 27, 2010	
AGNICO EAGLE MINE BAY GOOSE DIKE				F.GILBERT Itée		Report #		DR.2010.08.27	
31+350	136.1	5.90		130.2			12.10		
31+348	136.1	5.30		130.8			11.20		
31+346	136.1	5.00		131.1			10.30		
31+344	136.1	5.20		130.9			10.20		
31+342	136.1	5.20		130.9			10.40		
31+340	136.1	4.90		131.2			10.10		
31+338	136.1	4.40		131.7			9.30		
31+336	136.1	3.90		132.2			8.30		
31+334	136.1	4.00		132.1			7.90		
31+332	136.1	4.00		132.1			8.00		
31+330	136.1	3.70		132.4			7.70		
31+328	136.1	3.90		132.2			7.60		
31+326	136.1	3.80		132.3			7.70		
31+324	136.1	4.80		131.3			8.60		
31+322	136.1	5.00		131.1			9.80		
31+320	136.1	5.30		130.8			10.30		
31+318	136.1	5.40		130.7			10.70		
31+316	136.1	5.10		131.0			10.50		Preliminary
31+314	136.1	4.70		131.4			9.80		Total
									To Date
									1,671.8

Contractors Verification:

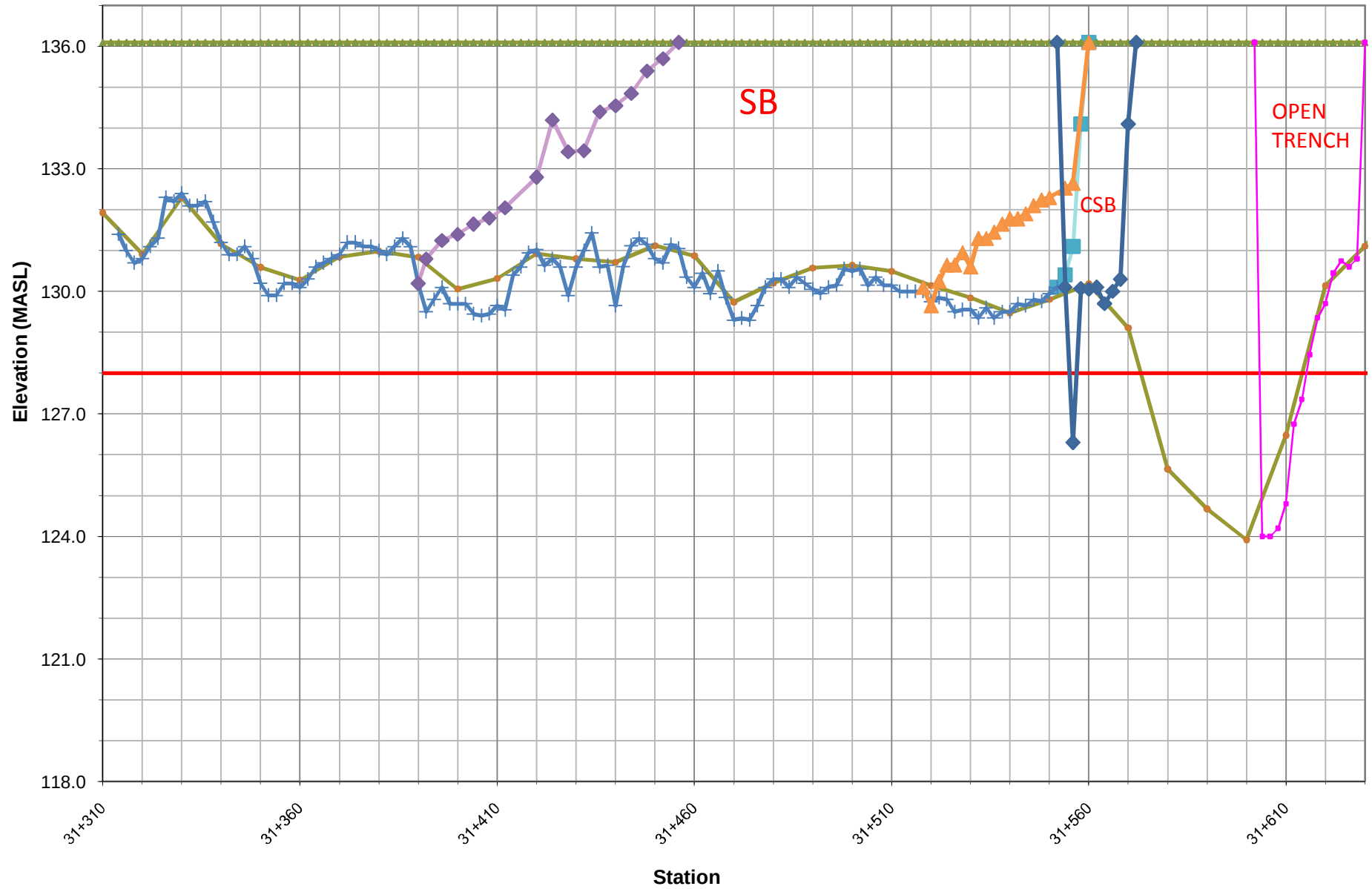
702.00

The above report is complete and correct and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

Submitted By: William Collins/Josue Toro-Diaz

Soil Bentonite Cutoff Wall Trench Profile
Agnico Eagle Mine - Bay-Goose Dike
(NOT TO SCALE)

- Working Platform
- Top of CB backfill
- SB Backfill
- Night Shift
- Top of Bedrock (as per Bathymetry)
- 23-Aug-10
- Day Shift



INQUIP

Associates, Inc.

Daily Construction Report

PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE			CONTRACTOR/OWNER F.GILBERT Itée		Date: Saturday, August 28, 2010 Report # DR.2010.08.28		
Weather:			Temperature High: Low:		Ground Conditions		
MANPOWER							
NAME/CRAFT	On Site	HRS.			TYPE	IN-USE	ST-BY
FRANK DAVIS	X	12			Slurry Mixer	X	
LAMAR POWELL	X	12			Grout Mixer		X
BENNY SMITH					Pumps	X	
JOHN LOGAN	X	12			4" HDPE pipe	X	
WILLIAM COLLINS	X	12			Loader w/forks	X	
JOSUE TORO-DIAZ	X	12			Dozer (D6)	X	
					CAT385	X	
					Generator	X	
					Tremie pipe		
					Forklift		
					Mixing Box		X
					Kamatsu		

SUMMARY OF DAY'S WORK

Dug all day without pumping fresh slurry to the trench due to the toe being so far back from the excavation.

Bentonite slurry usage

Bags used: 5

Bags on hand: 198

Cement Usage:

Bags used: 8

Broken bags:

Bags wasted (after mixed, the cement slurry was dumped):

Bags on hand: 29

REMARKS / DELAYS / ITEMS REQUIRING CONTRACTOR ACTION

SAFETY

Daily tool-box safety meeting every morning.

ATTACHMENTS

Trench profile.

INQUIP

Associates, Inc.

Daily Construction Report

PROJECT	AGNICO EAGLE MINE BAY GOOSE DIKE	CONTRACTOR/OWNER	Date:	Saturday, August 28, 2010
		F.GILBERT ltée	Report #	DR.2010.08.28

Soil-Bentonite Backfill

SLUMP	STATION	31+456	31+438	31+390	Notes:
	50-150 mm	102	152.4	152.4	
DENSITY	240 kg/cu.m > in-trench slurry	2.08	2.1	2.11	

Cement-Soil-Bentonite Backfill

STATION					Notes:
SLUMP	180-220 mm				
DENSITY	1.90 to 2.10 kg/cu.m				
GROUT DENSITY	1.12 to 1.20 kg/cu.m				

Bentonite Slurry

Time	Location	Marsh Funnel (>45-55 sec)	Density (>1.025 kg/cu.m)	Filter Loss* (cc)	Notes:
7:00 AM	Pond	45	1.04	13.0	
1:00 PM		42	1.03	14.0	
10:00 PM		44	1.04	14.0	
3:20 AM		45	1.04	15.0	
Depth (mid depth)	Station	Marsh Funnel (>40 sec)	Density (1.025-1.25 kg/cu.m)	Filter Loss* (cc)	
3.0	31+450	44	1.08	23.0	
3.0	31+340	49	1.12		
3.0	31+250	47	1.12	21.0	
3.0	31+240	47	1.11		

*For Inquip's internal reference.

INQUIP

Associates, Inc.

Daily Construction Report

PROJECT	CONTRACTOR/OWNER	Date:	Saturday, August 28, 2010
AGNICO EAGLE MINE BAY GOOSE DIKE	F.GILBERT Itée	Report #	DR.2010.08.28

Excavation Data

Station	Elevation of Workpad (MASL)	Depth to Bedrock (m)	Depth of CSB Backfill (m)	Elevation of Bedrock (MASL)	Elevation of CSB Backfill (MASL)	Total Square meters	Prev Days Total Sq. m
31+314	136.1	4.70		131.4			1,671.8
31+312	136.1	4.10		132.0		8.80	
31+310	136.1	4.05		132.1		8.15	
31+308	136.1	4.35		131.8		8.40	
31+306	136.1	4.90		131.2		9.25	
31+304	136.1	5.20		130.9		10.10	
31+302	136.1	4.90		131.2		10.10	
31+300	136.1	4.80		131.3		9.70	
31+298	136.1	5.35		130.8		10.15	
31+296	136.1	5.20		130.9		10.55	
31+294	136.1	4.50		131.6		9.70	
31+292	136.1	4.40		131.7		8.90	
31+290	136.1	4.00		132.1		8.40	
31+288	136.1	3.90		132.2		7.90	
31+286	136.1	4.00		132.1		7.90	
31+284	136.1	4.20		131.9		8.20	
31+282	136.1	4.00		132.1		8.20	
31+280	136.1	4.20		131.9		8.20	
31+278	136.1	3.90		132.2		8.10	
31+276	136.1	3.95		132.2		7.85	
31+274	136.1	3.65		132.5		7.60	
31+272	136.1	3.50		132.6		7.15	
31+270	136.1	3.50		132.6		7.00	
31+268	136.1	3.30		132.8		6.80	
31+266	136.1	3.50		132.6		6.80	
31+264	136.1	3.60		132.5		7.10	
31+262	136.1	3.90		132.2		7.50	
31+260	136.1	4.50		131.6		8.40	
31+258	136.1	5.10		131.0		9.60	
31+256	136.1	5.60		130.5		10.70	
31+254	136.1	5.30		130.8		10.90	
31+252	136.1	5.20		130.9		10.50	
31+250	136.1	5.20		130.9		10.40	
31+248	136.1	5.10		131.0		10.30	
31+246	136.1	5.10		131.0		10.20	
31+244	136.1	4.90		131.2		10.00	
31+242	136.1	4.90		131.2		9.80	
31+240	136.1	4.70		131.4		9.60	
31+238	136.1	4.90		131.2		9.60	
31+236	136.1	4.90		131.2		9.80	
31+234	136.1	5.20		130.9		10.10	
31+232	136.1	6.30		129.8		11.50	
31+230	136.1	6.30		129.8		12.60	
31+228	136.1	6.80		129.3		13.10	

Associates, Inc.

PROJECT				CONTRACTOR/OWNER		Date:	Saturday, August 28, 2010
AGNICO EAGLE MINE BAY GOOSE DIKE				F.GILBERT Itée		Report #	DR.2010.08.28
							Preliminary
							Total
							To Date
							2,067.4

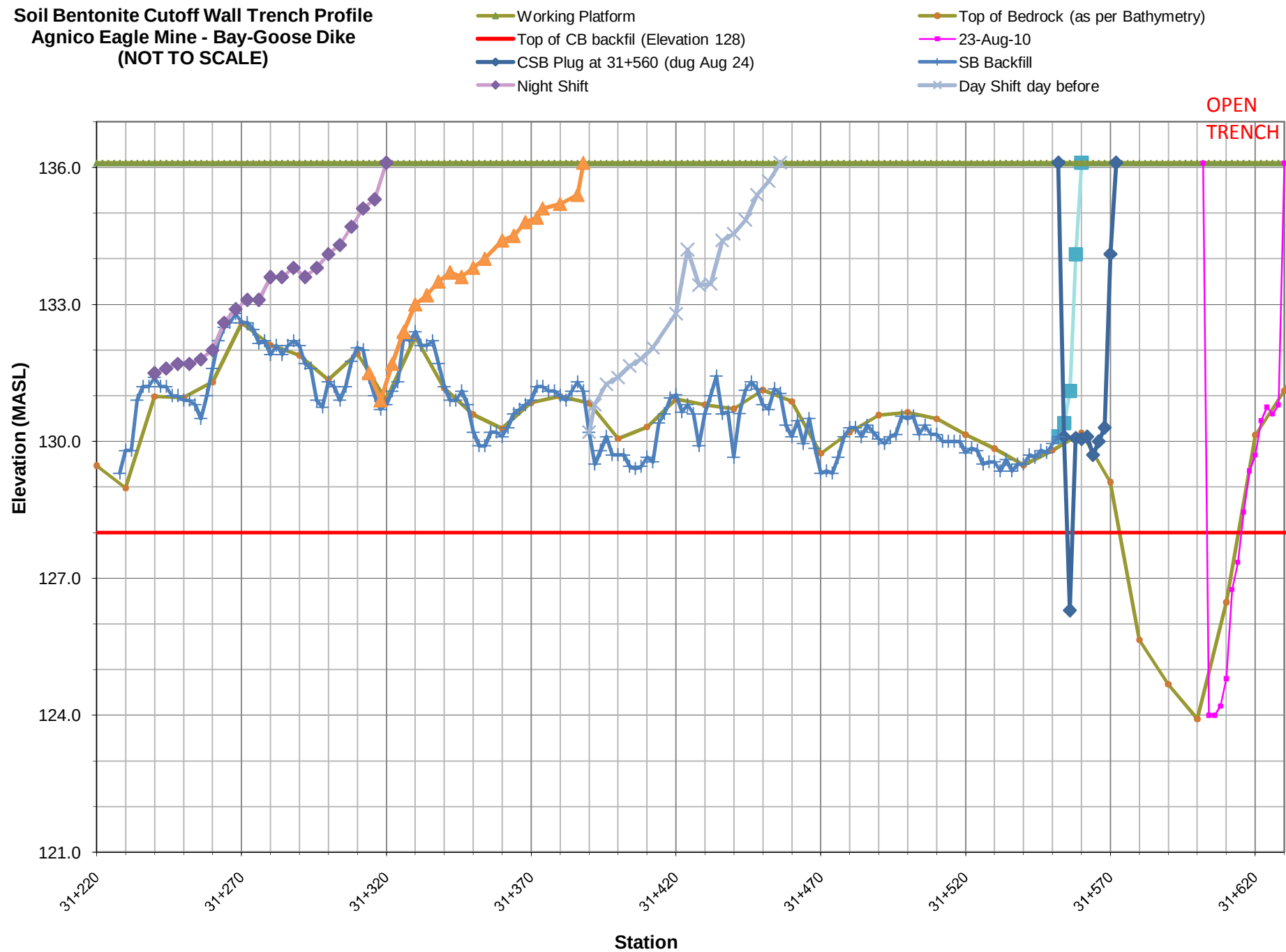
Contractors Verification:

395.60

The above report is complete and correct and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

Submitted By: William Collins/Josue Toro-Diaz

Soil Bentonite Cutoff Wall Trench Profile
Agnico Eagle Mine - Bay-Goose Dike
(NOT TO SCALE)



INQUIP

Associates, Inc.

Daily Construction Report

PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE			CONTRACTOR/OWNER F.GILBERT Itée		Date: Sunday, August 29, 2010 Report # DR.2010.08.29		
Weather:			Temperature High: Low:		Ground Conditions		
MANPOWER							
NAME/CRAFT	On Site	HRS.			TYPE	IN-USE	ST-BY
FRANK DAVIS	X	12			Slurry Mixer		X
LAMAR POWELL	X	12			Grout Mixer		X
BENNY SMITH					Pumps	X	
JOHN LOGAN	X	12			4" HDPE pipe	X	
WILLIAM COLLINS	X	12			Loader w/forks		X
JOSUE TORO-DIAZ	X	12			Dozer (D6)	X	
					CAT385	X	
					Generator	X	
					Tremie pipe		
					Forklift		
					Mixing Box		X
					Kamatsu		

SUMMARY OF DAY'S WORK

Backfill caught up with excavation.

Bentonite slurry usage

Bags used:

Bags on hand: 233

Cement Usage:

Bags used: 8

Broken bags:

Bags wasted (after mixed, the cement slurry was dumped):

Bags on hand: 29

REMARKS / DELAYS / ITEMS REQUIRING CONTRACTOR ACTION

SAFETY

Daily tool-box safety meeting every morning.

ATTACHMENTS

Trench profile.

INQUIP

Associates, Inc.

Daily Construction Report

PROJECT	AGNICO EAGLE MINE BAY GOOSE DIKE	CONTRACTOR/OWNER	Date:	Sunday, August 29, 2010
		F.GILBERT Itée	Report #	DR.2010.08.29

Soil-Bentonite Backfill

SLUMP	STATION	31+320	21+290	31+252	31+220	Notes:
	50-150 mm	165	140	178	191	
DENSITY	240 kg/cu.m > in-trench slurry	2.12	2.11	2.2	2.3	

Cement-Soil-Bentonite Backfill

STATION					Notes:
SLUMP	180-220 mm				
DENSITY	1.90 to 2.10 kg/cu.m				
GROUT DENSITY	1.12 to 1.20 kg/cu.m				

Bentonite Slurry

Time	Location	Marsh Funnel (>45-55 sec)	Density (>1.025 kg/cu.m)	Filter Loss* (cc)	Notes:
9:15 AM	Pond	45	1.03	12.0	Sand Content 5% AM and 2% PM
1:50 PM		43	1.04		
10:00 PM		46	1.04		
4:00 AM		47	1.05	21.0	
Depth (mid depth)	Station	Marsh Funnel (>40 sec)	Density (1.025-1.25 kg/cu.m)	Filter Loss* (cc)	
3.0	31+240	45	1.15	20.0	
3.0	31+260	45	1.19		
3.0	31+204	48	1.2	15.0	
3.0	31+170	46	1.13		

*For Inquip's internal reference.

Associates, Inc.

Daily Construction Report

PROJECT	CONTRACTOR/OWNER	Date:	Sunday, August 29, 2010
AGNICO EAGLE MINE BAY GOOSE DIKE	F.GILBERT Itée	Report #	DR.2010.08.29

Excavation Data

[illegible]

Associates, Inc.

PROJECT				CONTRACTOR/OWNER		Date:	Sunday, August 29, 2010
AGNICO EAGLE MINE BAY GOOSE DIKE				F.GILBERT Itée		Report #	DR.2010.08.29
							Preliminary
							Total
							To Date
							2,622.7

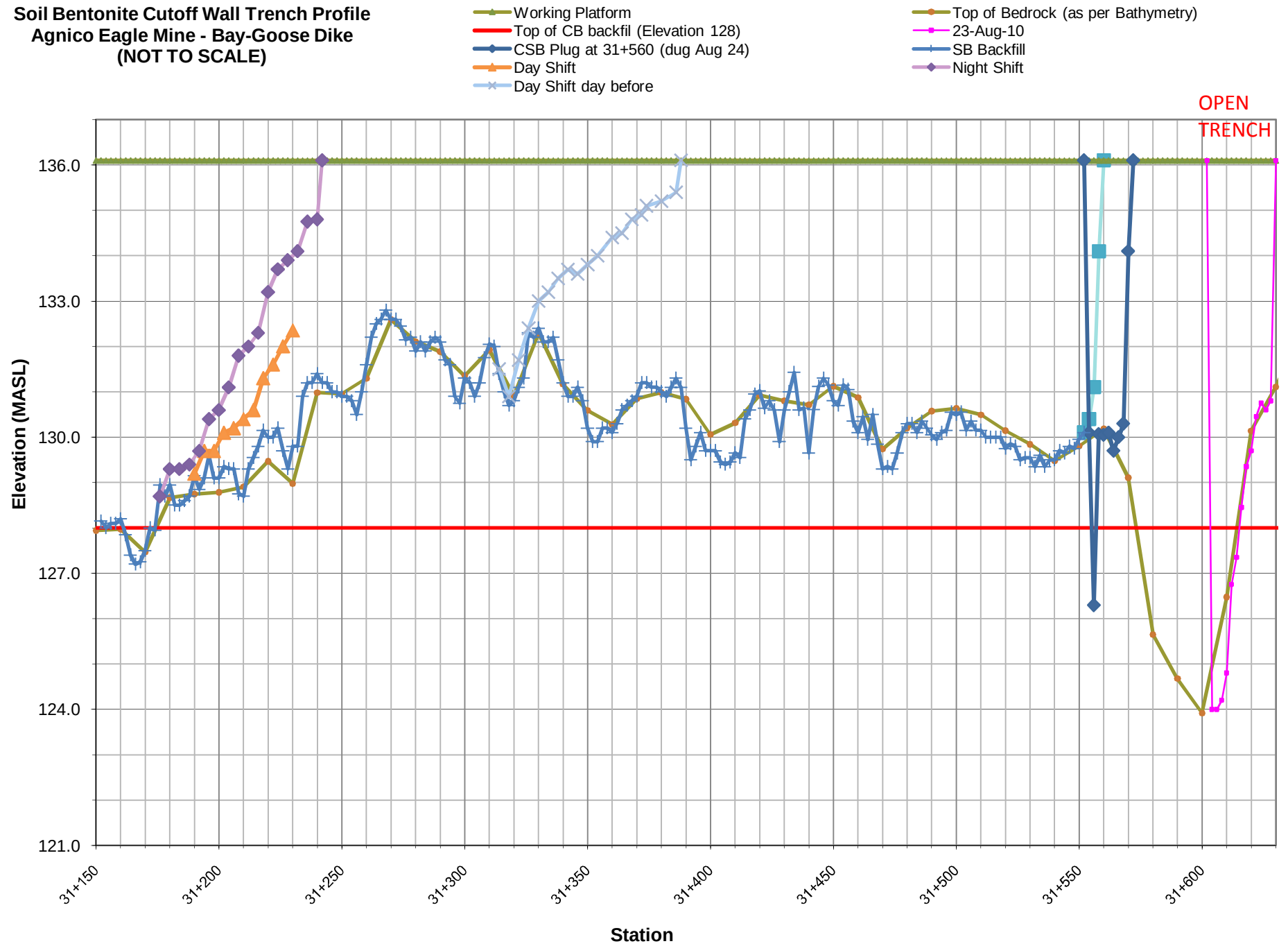
Contractors Verification:

555.25

The above report is complete and correct and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

Submitted By: William Collins/Josue Toro-Diaz

**Soil Bentonite Cutoff Wall Trench Profile
Agnico Eagle Mine - Bay-Goose Dike
(NOT TO SCALE)**



INQUIP

Associates, Inc.

Daily Construction Report

PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE			CONTRACTOR/OWNER F.GILBERT Itée		Date: Monday, August 30, 2010 Report # DR.2010.08.30		
Weather:			Temperature High: Low:		Ground Conditions		
MANPOWER							
NAME/CRAFT	On Site	HRS.			TYPE	IN-USE	ST-BY
FRANK DAVIS	X	12			Slurry Mixer		X
LAMAR POWELL	X	12			Grout Mixer		X
BENNY SMITH					Pumps	X	
JOHN LOGAN	X	12			4" HDPE pipe	X	
WILLIAM COLLINS	X	12			Loader w/forks		X
JOSUE TORO-DIAZ	X	12			Dozer (D6)	X	
					CAT385	X	
					Generator	X	
					Tremie pipe		
					Forklift		
					Mixing Box		X
					Kamatsu		

SUMMARY OF DAY'S WORK

Backfill caught up with excavation.

Bentonite slurry usage

Bags used:

Bags on hand: 233

Cement Usage:

Bags used: 8

Broken bags:

Bags wasted (after mixed, the cement slurry was dumped):

Bags on hand: 29

REMARKS / DELAYS / ITEMS REQUIRING CONTRACTOR ACTION

SAFETY

Daily tool-box safety meeting every morning.

ATTACHMENTS

Trench profile.

INQUIP

Associates, Inc.

Daily Construction Report

PROJECT	CONTRACTOR/OWNER	Date:	Monday, August 30, 2010
AGNICO EAGLE MINE BAY GOOSE DIKE	F.GILBERT Itée	Report #	DR.2010.08.30

Soil-Bentonite Backfill

SLUMP	STATION	31+242	31+220	31+200	31+190	Notes:
	50-150 mm	150	125	140	127	
DENSITY	240 kg/cu.m > in-trench slurry	2.1	2.1	2.12	2.14	

Cement-Soil-Bentonite Backfill

STATION					Notes:
SLUMP	180-220 mm				
DENSITY	1.90 to 2.10 kg/cu.m				
GROUT DENSITY	1.12 to 1.20 kg/cu.m				

Bentonite Slurry

Time	Location	Marsh Funnel (>45-55 sec)	Density (>1.025 kg/cu.m)	Filter Loss* (cc)	Notes:
9:15 AM	Pond	41	1.03	14.0	Sand Content 1.5%
1:45 PM		41	1.03	15.0	
10:00 PM		45	1.04	15.0	
1:00 AM		44	1.03	14.0	
Depth (mid depth)	Station	Marsh Funnel (>40 sec)	Density (1.025-1.25 kg/cu.m)	Filter Loss* (cc)	
3.0	31+180	45	1.06	20.0	
3.0	31+180	47	1.17		
3.0	31+164	47	1.15	17.0	
3.0	31+122	49	1.15		

*For Inquip's internal reference.

Associates, Inc.

Daily Construction Report

PROJECT	CONTRACTOR/OWNER	Date:	Monday, August 30, 2010
AGNICO EAGLE MINE BAY GOOSE DIKE	F.GILBERT Itée	Report #	DR.2010.08.30

Excavation Data

[illegible]

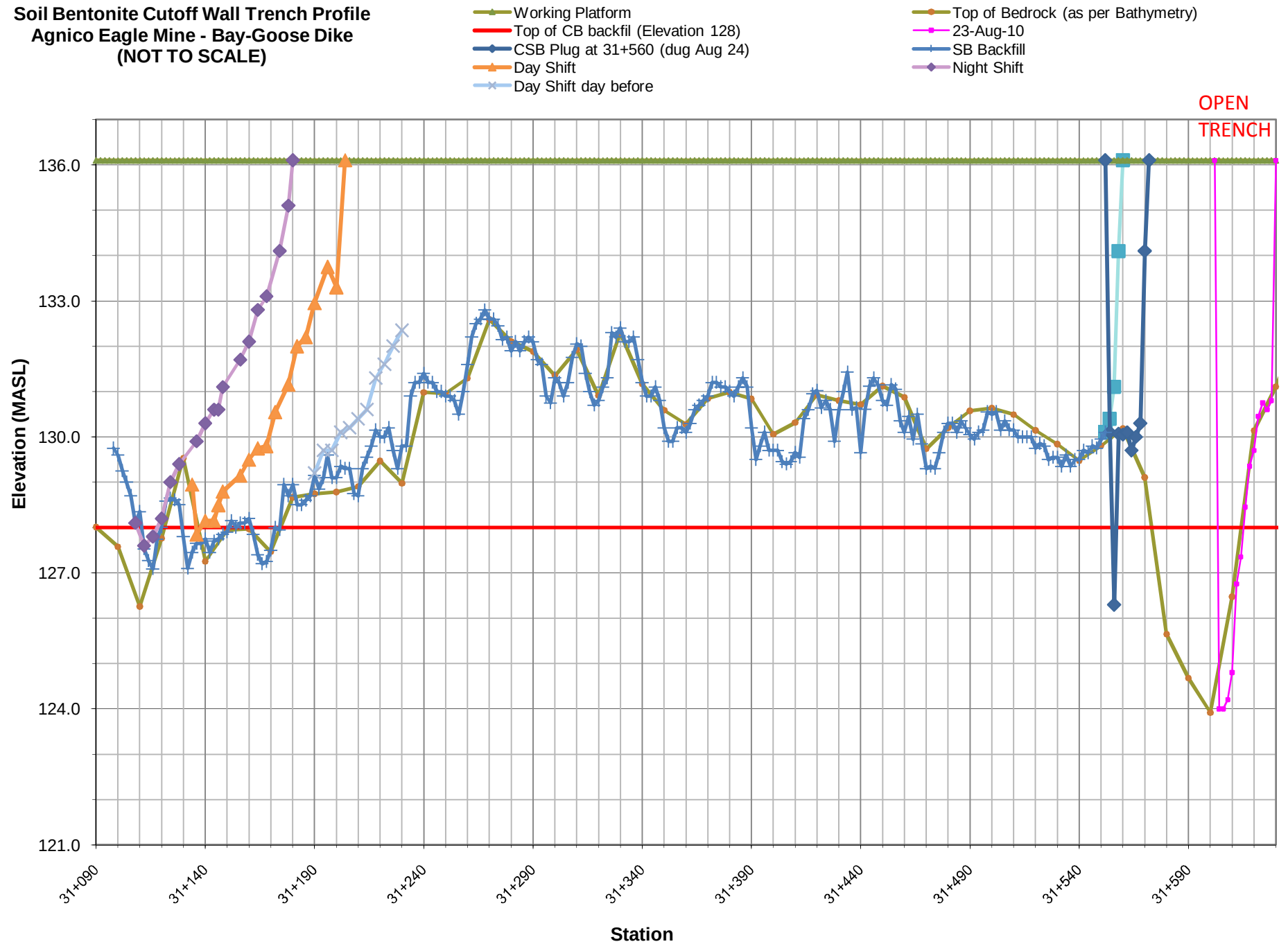
Contractors Verification:

433.44

The above report is complete and correct and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

Submitted By: William Collins/Josue Toro-Diaz

**Soil Bentonite Cutoff Wall Trench Profile
Agnico Eagle Mine - Bay-Goose Dike
(NOT TO SCALE)**



INQUIP

Associates, Inc.

Daily Construction Report

PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE			CONTRACTOR/OWNER F.GILBERT Itée		Date: Tuesday, August 31, 2010 Report # DR.2010.08.31		
Weather:			Temperature High: Low:		Ground Conditions		
MANPOWER							
NAME/CRAFT	On Site	HRS.			TYPE	IN-USE	ST-BY
FRANK DAVIS	X	12			Slurry Mixer		X
LAMAR POWELL	X	12			Grout Mixer		X
BENNY SMITH					Pumps	X	
JOHN LOGAN	X	12			4" HDPE pipe	X	
WILLIAM COLLINS	X	12			Loader w/forks		X
JOSUE TORO-DIAZ	X	12			Dozer (D6)	X	
					CAT385	X	
					Generator	X	
					Tremie pipe		
					Forklift		
					Mixing Box		X
					Kamatsu		

SUMMARY OF DAY'S WORK

Backfilled without pumping slurry during the day.

Bentonite slurry usage

Bags used:

Bags on hand: 225

Cement Usage:

Bags used: 8

Broken bags:

Bags wasted (after mixed, the cement slurry was dumped):

Bags on hand: 29

REMARKS / DELAYS / ITEMS REQUIRING CONTRACTOR ACTION

Waited for till for 1hr, fuel for 2hrs, GPS and hydraulic problems on Kamatsu.

SAFETY

Daily tool-box safety meeting every morning.

ATTACHMENTS

Trench profile.

INQUIP

Associates, Inc.

Daily Construction Report

PROJECT	AGNICO EAGLE MINE BAY GOOSE DIKE	CONTRACTOR/OWNER	Date:	Tuesday, August 31, 2010
		F.GILBERT ltée	Report #	DR.2010.08.31

Soil-Bentonite Backfill

SLUMP	STATION	31+180	31+162	31+150	31+140	Notes:
	50-150 mm	125	125	140	140	
DENSITY	240 kg/cu.m > in-trench slurry	2.12	2.11	2.14	2.12	

Cement-Soil-Bentonite Backfill

STATION					Notes:
SLUMP	180-220 mm				
DENSITY	1.90 to 2.10 kg/cu.m				
GROUT DENSITY	1.12 to 1.20 kg/cu.m				

Bentonite Slurry

Time	Location	Marsh Funnel (>45-55 sec)	Density (>1.025 kg/cu.m)	Filter Loss* (cc)	Notes:
8:15 AM	Pond	41	1.03	14.0	Sand Content 5.0%
1:45 PM		42	1.04	13.0	
9:00 PM		43	1.04	13.0	
4:00 AM		42	1.04	13.0	
Depth (mid depth)	Station	Marsh Funnel (>40 sec)	Density (1.025-1.25 kg/cu.m)	Filter Loss* (cc)	
3.0	31+120	51	1.17	20.0	
2.0	31+102	50	1.15		
3.0	31+090	50	1.15	21.0	
3.0	31+080	49	1.15		

*For Inquip's internal reference.

Associates, Inc.

Daily Construction Report

PROJECT	CONTRACTOR/OWNER	Date:	Tuesday, August 31, 2010
AGNICO EAGLE MINE BAY GOOSE DIKE	F.GILBERT Itée	Report #	DR.2010.08.31

Excavation Data

[illegible]

Contractors Verification:

268.95

The above report is complete and correct and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

Submitted By: William Collins/Josue Toro-Diaz

Soil Bentonite Cutoff Wall Trench Profile
Agnico Eagle Mine - Bay-Goose Dike
(NOT TO SCALE)

- Working Platform
- Top of CB backfill (Elevation 128)
- ◆— CSB Plug at 31+560 (dug Aug 24)
- ▲— Day Shift
- ×— Day Shift day before
- Top of Bedrock (as per Bathymetry)
- ◆— 23-Aug-10
- +— SB Backfill
- ◆— Night Shift



**OPEN
TRENCH**

INQUIP

Associates, Inc.

Daily Construction Report

PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE			CONTRACTOR/OWNER F.GILBERT Itée		Date: Wednesday, September 01, 2010 Report # DR.2010.09.01		
Weather:			Temperature High: Low:		Ground Conditions		
MANPOWER							
NAME/CRAFT	On Site	HRS.			TYPE	IN-USE	ST-BY
FRANK DAVIS	X	12			Slurry Mixer		X
LAMAR POWELL	X	12			Grout Mixer		X
BENNY SMITH					Pumps	X	
JOHN LOGAN	X	12			4" HDPE pipe	X	
WILLIAM COLLINS	X	12			Loader w/forks		X
JOSUE TORO-DIAZ					Dozer (D6)	X	
					CAT385	X	
					Generator	X	
					Tremie pipe		
					Forklift		
					Mixing Box		X
					Kamatsu		

SUMMARY OF DAY'S WORK

CAT385 down with pump problems. Kamatsu1250 with lip bucket too slow and the gravel fill is very dense. Changed to CAT345 at 11am.

Bentonite slurry usage

Bags used:

Bags on hand: 224

Cement Usage:

Bags used: 8

Broken bags:

Bags wasted (after mixed, the cement slurry was dumped):

Bags on hand: 29

REMARKS / DELAYS / ITEMS REQUIRING CONTRACTOR ACTION

SAFETY

Daily tool-box safety meeting every morning.

ATTACHMENTS

Trench profile.

INQUIP

Associates, Inc.

Daily Construction Report

PROJECT	AGNICO EAGLE MINE BAY GOOSE DIKE	CONTRACTOR/OWNER	Date:	Wednesday, September 01, 2010
		F.GILBERT ltée	Report #	DR.2010.09.01

Soil-Bentonite Backfill

SLUMP	STATION	31+120	31+116	31+100	31+088	Notes:
	50-150 mm	135	125	152	140	
DENSITY	240 kg/cu.m > in-trench slurry	2.12	2.1	2.14	2.15	

Cement-Soil-Bentonite Backfill

STATION					Notes:
SLUMP	180-220 mm				
DENSITY	1.90 to 2.10 kg/cu.m				
GROUT DENSITY	1.12 to 1.20 kg/cu.m				

Bentonite Slurry

Time	Location	Marsh Funnel (>45-55 sec)	Density (>1.025 kg/cu.m)	Filter Loss* (cc)	Notes:
8:30 AM	Pond	41	1.03	13.0	Sand Content 10, 8 and 3.5%
2:30 AM		41	1.03	15.0	
8:00 PM		42	1.04	15.0	
1:00 AM		47	1.04	15.0	
Depth (mid depth)	Station	Marsh Funnel (>40 sec)	Density (1.025-1.25 kg/cu.m)	Filter Loss* (cc)	
2.0	31+076	47	1.21	22.0	
3.0	31+060	47	1.23		
3.0	31+036	48	1.18	21.0	
3.0	31+000	51	1.18		

*For Inquip's internal reference.

INQUIP

Associates, Inc.

Daily Construction Report

PROJECT	AGNICO EAGLE MINE BAY GOOSE DIKE	CONTRACTOR/OWNER	Date:	Wednesday, September 01, 2010
		F.GILBERT Itée	Report #	DR.2010.09.01

Excavation Data

Station	Elevation of Workpad (MASL)	Depth to Bedrock (m)	Depth of CSB Backfill (m)	Elevation of Bedrock (MASL)	Elevation of CSB Backfill (MASL)	Total Square meters	Prev Days Total Sq. m
31+052	136.1	6.50		129.6			3,325.1
31+050	136.1	6.60		129.5		13.10	
31+048	136.1	6.05		130.1		12.65	
31+046	136.1	6.10		130.0		12.15	
31+044	136.1	6.00		130.1		12.10	
31+042	136.1	6.15		130.0		12.15	
31+040	136.1	6.70		129.4		12.85	
31+038	136.1	7.15		129.0		13.85	
31+036	136.1	6.85		129.3		14.00	
31+034	136.1	6.85		129.3		13.70	
31+032	136.1	5.70		130.4		12.55	
31+030	136.1	5.30		130.8		11.00	
31+028	136.1	5.05		131.1		10.35	
31+026	136.1	5.40		130.7		10.45	
31+024	136.1	5.25		130.9		10.65	
31+022	136.1	5.25		130.9		10.50	
31+020	136.1	5.05		131.1		10.30	
31+018	136.1	4.90		131.2		9.95	
31+016	136.1	4.40		131.7		9.30	
31+014	136.1	4.10		132.0		8.50	
31+012	136.1	4.10		132.0		8.20	
31+010	136.1	3.80		132.3		7.90	
31+008	136.1	3.85		132.3		7.65	
31+006	136.1	3.30		132.8		7.15	
31+004	136.1	3.20		132.9		6.50	
31+002	136.1	3.00		133.1		6.20	
31+000	136.1	2.50		133.6		5.50	
30+998	136.1	2.75		133.4		5.25	
30+996	136.1	2.60		133.5		5.35	
30+994	136.1	2.30		133.8		4.90	
30+992	136.1	2.05		134.1		4.35	
30+990	136.1	2.00		134.1		4.05	
30+988	136.1	2.05		134.1		4.05	
30+986	136.1	1.90		134.2		3.95	
30+984	136.1	1.70		134.4		3.60	
30+982	136.1	1.55		134.6		3.25	
30+980	136.1	1.40		134.7		2.95	
30+978	136.1	1.30		134.8		2.70	
30+976	136.1	1.50		134.6		2.80	
30+974	136.1	1.40		134.7		2.90	
30+972	136.1	1.50		134.6		2.90	
30+970	136.1	1.85		134.3		3.35	
30+968	136.1	1.50		134.6		3.35	
30+966	136.1	1.50		134.6		3.00	
30+964	136.1	1.55		134.6		3.05	
30+962	136.1	1.60		134.5		3.15	
30+960	136.1	1.65		134.5		3.25	

Associates, Inc.

PROJECT				CONTRACTOR/OWNER		Date:	Wednesday, September 01, 2010		
AGNICO EAGLE MINE BAY GOOSE DIKE				F.GILBERT ltée		Report #	DR.2010.09.01		
30+958	136.1	1.80		134.3			3.45		
30+956	136.1	1.70		134.4			3.50		
30+954	136.1	2.40		133.7			4.10		
30+952	136.1	2.70		133.4			5.10		
30+950	136.1	2.10		134.0			4.80		
30+948	136.1	2.05		134.1			4.15		
30+946	136.1	2.00		134.1			4.05		
30+944	136.1	1.95		134.2			3.95		
30+942	136.1	2.10		134.0			4.05		
30+940	136.1	2.45		133.7			4.55		
30+938	136.1	2.15		134.0			4.60		
30+936	136.1	2.20		133.9			4.35		
30+934	136.1	2.15		134.0			4.35		
30+932	136.1	1.90		134.2			4.05		
30+930	136.1	1.85		134.3			3.75		
30+928	136.1	2.00		134.1			3.85		
									Preliminary
									Total
									To Date
									3,733.1

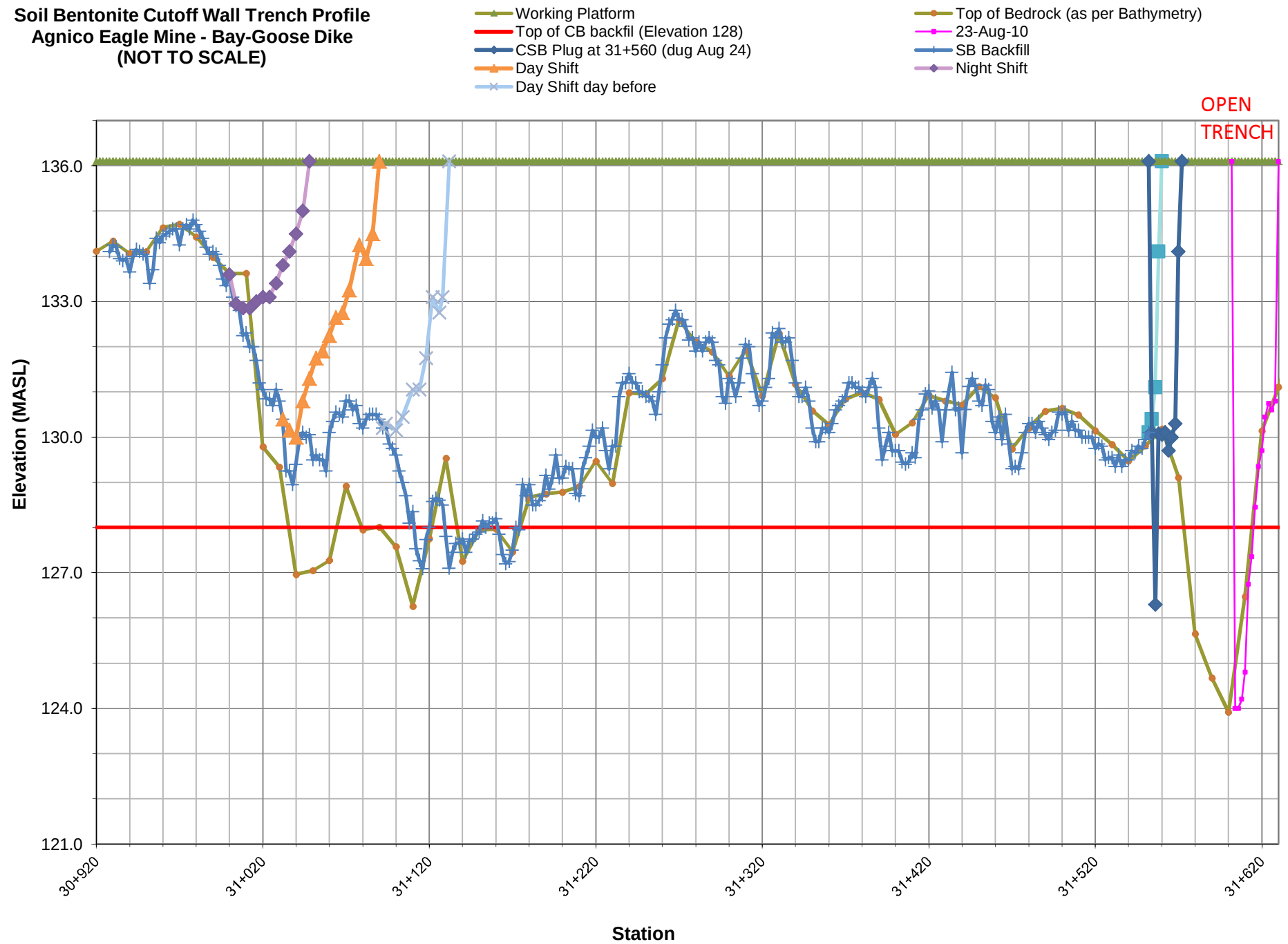
Contractors Verification:

408.00

The above report is complete and correct and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

Submitted By: William Collins/Josue Toro-Diaz

**Soil Bentonite Cutoff Wall Trench Profile
Agnico Eagle Mine - Bay-Goose Dike
(NOT TO SCALE)**



INQUIP

Associates, Inc.

Daily Construction Report

PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE			CONTRACTOR/OWNER F.GILBERT Itée		Date: Thursday, September 02, 2010 Report # DR.2010.09.02		
Weather:			Temperature High: Low:		Ground Conditions		
MANPOWER							
NAME/CRAFT	On Site	HRS.			TYPE	IN-USE	ST-BY
FRANK DAVIS	X	12			Slurry Mixer		X
LAMAR POWELL	X	12			Grout Mixer		X
BENNY SMITH	X	12			Pumps	X	
JOHN LOGAN	X	12			4" HDPE pipe	X	
WILLIAM COLLINS	X	12			Loader w/forks		X
JOSUE TORO-DIAZ					Dozer (D6)	X	
					CAT385	X	
					Generator	X	
					Tremie pipe		
					Forklift		
					Mixing Box		X
					Kamatsu		

SUMMARY OF DAY'S WORK

Backfill all day. Dug all the way to station 30+860.

Bentonite slurry usage

Bags used:

Bags on hand: 224

Cement Usage:

Bags used: 8

Broken bags:

Bags wasted (after mixed, the cement slurry was dumped):

Bags on hand: 29

REMARKS / DELAYS / ITEMS REQUIRING CONTRACTOR ACTION

SAFETY

Daily tool-box safety meeting every morning.

ATTACHMENTS

Trench profile.

INQUIP

Associates, Inc.

Daily Construction Report

PROJECT	AGNICO EAGLE MINE BAY GOOSE DIKE	CONTRACTOR/OWNER	Date:	Thursday, September 02, 2010
		F.GILBERT Itée	Report #	DR.2010.09.02

Soil-Bentonite Backfill

SLUMP	STATION	31+040	30+000	30+930	30+908	Notes:
	50-150 mm	100	150	127	102	
DENSITY	240 kg/cu.m > in-trench slurry	2.12	2.12	2.13	2.16	

Cement-Soil-Bentonite Backfill

STATION					Notes:
SLUMP	180-220 mm				
DENSITY	1.90 to 2.10 kg/cu.m				
GROUT DENSITY	1.12 to 1.20 kg/cu.m				

Bentonite Slurry

Time	Location	Marsh Funnel (>45-55 sec)	Density (>1.025 kg/cu.m)	Filter Loss* (cc)	Notes:
8:00 AM	Pond	42	1.03	16.0	Sand Content 8, 9%
9:00 PM		43	1.03	15.0	
Depth (mid depth)	Station	Marsh Funnel (>40 sec)	Density (1.025-1.25 kg/cu.m)	Filter Loss* (cc)	
2.0	30+974	48	1.23	29.0	
1.0	30+936	51	1.23		
1.0	30+892	53	1.23	28.0	
1.0	30+870	55	1.24		

*For Inquip's internal reference.

Associates, Inc.

CONTRACTOR/OWNER

Date:

Thursday, September 02, 2010

AGNICO EAGLE MINE

BAY GOOSE DIKE

F.GILBERT Itée

Report #

DR.2010.09.02

[illegible][illegible]

Associates, Inc.[illegible]

Contractors Verification:

210.80

The above report is complete and correct and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

Submitted By: William Collins/Josue Toro-Diaz

Soil Bentonite Cutoff Wall Trench Profile
Agnico Eagle Mine - Bay-Goose Dike
(NOT TO SCALE)

- Working Platform
- Top of CB backfil (Elevation 128)
- ◆— CSB Plug at 31+560 (dug Aug 24)
- ▲— Day Shift
- ×— Day Shift day before
- Top of Bedrock (as per Bathymetry)
- ◆— 23-Aug-10
- +— SB Backfill
- ◆— Night Shift



Daily Construction Report

PROJECT			CONTRACTOR/OWNER		Date: Fri 9/3/2010		
AGNICO EAGLE MINE BAY GOOSE DIKE			F.GILBERT Itée		Report # 18		
Weather: CLEAR			Temperature High: 13° Low: 3°		Ground Conditions Dry + Rocky		
MANPOWER							
NAME/CRAFT	On Site	HRS.			TYPE	IN-USE	ST-BY
FRANK DAVIS	X	12			Slurry Mixer		X
LAMAR POWELL	X	12			Grout Mixer		X
BENNY SMITH					Pumps		X
JOHN LOGAN	X	12			4" HDPE pipe	X	
WILLIAM COLLINS	X	12			Loader w/forks		X
JOSUE TORO-DIAZ	X	12			Dozer (D6)	X	
					CAT385	X	
					Generator		X
					Tremie pipe		X
					Forklift		X
					Mixing Box		X
					Kamatsu	X	

SUMMARY OF DAY'S WORK

SUMMARY OF DAY'S WORK Welding pipe BACK to 31+628, ON STANDY FOR
Excavation & work pad. Moving Till BACK to 31+628.
Backfill 31+628 with Gravel for Vibro compaction, setting
up to pump slurry back to pond. 3:30 pm. Day shift
Night shift

BACKFILL GRAVEL 31+628 Finished

Bentonite slurry usage

Bags used:

Bags on hand: 193

Cement Usage:

Bags used:

Broken bags:

Bags wasted (after mixed, the cement slurry was dumped):

Bags on hand:

REMARKS / DELAYS / ITEMS REQUIRING CONTRACTOR ACTION

work pad, place to dig!

SAFETY

Daily tool-box safety meeting every morning.

Watch For Rocks & 3 points Contact
When getting off Equip.

SLIPS, TRIP, FALL

ATTACHMENTS

Frank Davis
Lena Carroll
Willie Collins
John Logan
Benney Smith

INQUIP

Associates, Inc.

Daily Construction Report

PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE			CONTRACTOR/OWNER F.GILBERT Itée		Date: Sunday, September 05, 2010 Report # DR.2010.09.05		
Weather:			Temperature High: Low:		Ground Conditions		
MANPOWER							
NAME/CRAFT	On Site	HRS.			TYPE	IN-USE	ST-BY
FRANK DAVIS	X	12			Slurry Mixer		X
LAMAR POWELL	X	12			Grout Mixer		X
BENNY SMITH	X	12			Pumps	X	
JOHN LOGAN	X	12			4" HDPE pipe	X	
WILLIAM COLLINS	X	12			Loader w/forks		X
JOSUE TORO-DIAZ					Dozer (D6)	X	
					CAT385	X	
					Generator	X	
					Tremie pipe		
					Forklift		
					Mixing Box		X
					Kamatsu		

SUMMARY OF DAY'S WORK

Day shift didn't backfill. Setup for the CSB plug. Night shift was the one that started excavation and backfilling.

Bentonite slurry usage

Bags used: 8

Bags on hand: 216

Cement Usage:

Bags used: 16

Broken bags:

Bags wasted (after mixed, the cement slurry was dumped):

Bags on hand: 21

REMARKS / DELAYS / ITEMS REQUIRING CONTRACTOR ACTION

SAFETY

Daily tool-box safety meeting every morning.

ATTACHMENTS

Trench profile.

INQUIP

Associates, Inc.

Daily Construction Report

PROJECT	AGNICO EAGLE MINE BAY GOOSE DIKE	CONTRACTOR/OWNER	Date:	Sunday, September 05, 2010
		F.GILBERT Itée	Report #	DR.2010.09.05

Soil-Bentonite Backfill

SLUMP	STATION			31+648	31+640	Notes:
	50-150 mm			125	400	
DENSITY	240 kg/cu.m > in-trench slurry			2.19	2.12	

Cement-Soil-Bentonite Backfill

STATION			31+788		Notes:
SLUMP	180-220 mm		200		
DENSITY	1.90 to 2.10 kg/cu.m		2		
GROUT DENSITY	1.12 to 1.20 kg/cu.m		1.5		

Bentonite Slurry

Time	Location	Marsh Funnel (>45-55 sec)	Density (>1.025 kg/cu.m)	Filter Loss* (cc)	Notes:
3:00 PM	Pond	43	1.05	16.0	Sand Content 2%
8:15 PM		42	1.06	15.0	
2:00 AM		43	1.04	13.0	
5:00 AM		45	1.04	16.0	
Depth (mid depth)	Station	Marsh Funnel (>40 sec)	Density (1.025-1.25 kg/cu.m)	Filter Loss* (cc)	
2.0	31+806	45	1.08	15.0	
2.0	31+644	43	1.06		
2.0	31+664	46	1.1	17.0	
3.0	31+690	46	1.11		

*For Inquip's internal reference.

INQUIP

Associates, Inc.

Daily Construction Report

PROJECT	AGNICO EAGLE MINE BAY GOOSE DIKE	CONTRACTOR/OWNER	Date:	Sunday, September 05, 2010
		F.GILBERT Itée	Report #	DR.2010.09.05

Excavation Data

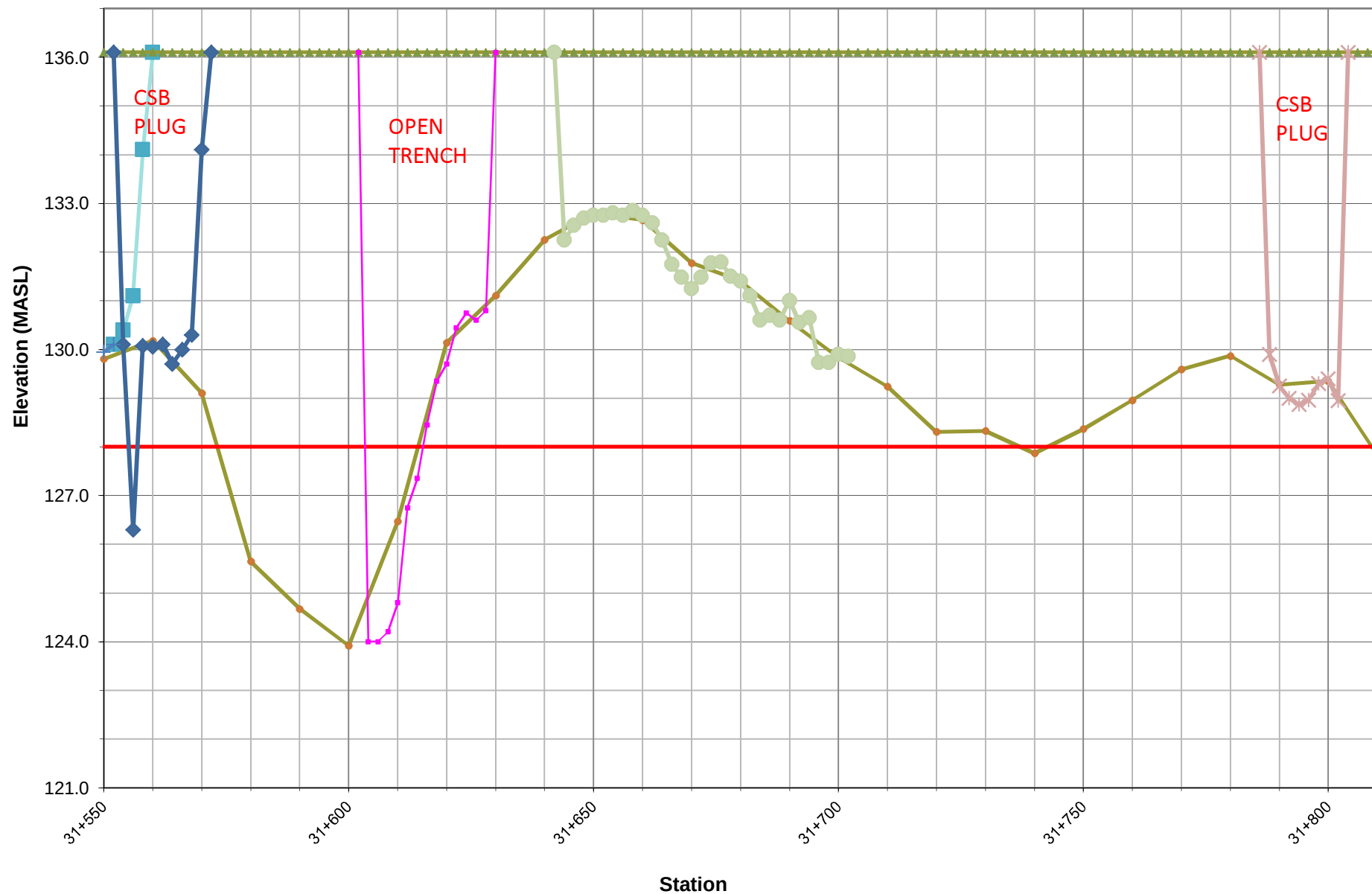
Station	Elevation of Workpad (MASL)	Depth to Bedrock (m)	Depth of CSB Backfill (m)	Elevation of Bedrock (MASL)	Elevation of CSB Backfill (MASL)	Total Square meters	Prev Days Total Sq. m
31+788	136.1	6.20		129.9			3,943.9
31+790	136.1	6.85		129.3		13.05	
31+792	136.1	7.10		129.0		13.95	
31+794	136.1	7.23		128.9		14.33	
31+796	136.1	7.14		129.0		14.37	
31+798	136.1	6.80		129.3		13.94	
31+800	136.1	6.70		129.4		13.50	
31+802	136.1	7.15		129.0		13.85	
31+644	136.1	3.85		132.3			
31+646	136.1	3.55		132.6		7.40	
31+648	136.1	3.40		132.7		6.95	
31+650	136.1	3.35		132.8		6.75	
31+652	136.1	3.35		132.8		6.70	
31+654	136.1	3.30		132.8		6.65	
31+656	136.1	3.35		132.8		6.65	
31+658	136.1	3.25		132.9		6.60	
31+660	136.1	3.35		132.8		6.60	
31+662	136.1	3.50		132.6		6.85	
31+664	136.1	3.85		132.3		7.35	
31+666	136.1	4.35		131.8		8.20	
31+668	136.1	4.62		131.5		8.97	
31+670	136.1	4.85		131.3		9.47	
31+672	136.1	4.62		131.5		9.47	
31+674	136.1	4.32		131.8		8.94	
31+676	136.1	4.30		131.8		8.62	
31+678	136.1	4.60		131.5		8.90	
31+680	136.1	4.70		131.4		9.30	
31+682	136.1	5.00		131.1		9.70	
31+684	136.1	5.50		130.6		10.50	
31+686	136.1	5.40		130.7		10.90	
31+688	136.1	5.50		130.6		10.90	
31+690	136.1	5.10		131.0		10.60	
31+692	136.1	5.55		130.6		10.65	
31+694	136.1	5.45		130.7		11.00	
31+696	136.1	6.37		129.7		11.82	
31+698	136.1	6.37		129.7		12.74	Preliminary
31+700	136.1	6.20		129.9		12.57	Total
31+702	136.1	6.24		129.9		12.44	To Date
							4,305.1
Contractors Verification:						361.18	

The above report is complete and correct and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

Submitted By: William Collins/Josue Toro-Diaz

Soil Bentonite Cutoff Wall Trench Profile
Agnico Eagle Mine - Bay-Goose Dike
(NOT TO SCALE)

- Working Platform
- Top of CB backfil (Elevation 128)
- ◆— CSB Plug at 31+560 (dug Aug 24)
- ▲— Day Shift
- ×— Day Shift day before
- SB Backfill II
- Top of Bedrock (as per Bathymetry)
- ◆— 23-Aug-10
- ◆— SB Backfill
- ◆— Night Shift
- ×— CSB plug Sept 5, 2010



INQUIP

Associates, Inc.

Daily Construction Report

PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE			CONTRACTOR/OWNER F.GILBERT Itée		Date: Monday, September 06, 2010 Report # DR.2010.09.06		
Weather:			Temperature High: Low:		Ground Conditions		
MANPOWER							
NAME/CRAFT	On Site	HRS.			TYPE	IN-USE	ST-BY
FRANK DAVIS	X	12			Slurry Mixer		X
LAMAR POWELL	X	12			Grout Mixer		X
BENNY SMITH	X	12			Pumps	X	
JOHN LOGAN	X	12			4" HDPE pipe	X	
WILLIAM COLLINS	X	12			Loader w/forks		X
JOSUE TORO-DIAZ					Dozer (D6)	X	
					CAT385	X	
					Generator	X	
					Tremie pipe		
					Forklift		
					Mixing Box		X
					Kamatsu		

SUMMARY OF DAY'S WORK

Bentonite slurry usage
Bags used: 8
Bags on hand: 216

Cement Usage:
Bags used: 16
Broken bags:
Bags wasted (after mixed, the cement slurry was dumped):
Bags on hand: 21

REMARKS / DELAYS / ITEMS REQUIRING CONTRACTOR ACTION

SAFETY

Daily tool-box safety meeting every morning.

ATTACHMENTS

Trench profile.

INQUIP

Associates, Inc.

Daily Construction Report

PROJECT	AGNICO EAGLE MINE BAY GOOSE DIKE	CONTRACTOR/OWNER	Date:	Monday, September 06, 2010
		F.GILBERT Itée	Report #	DR.2010.09.06

Soil-Bentonite Backfill

SLUMP	STATION					Notes:
	50-150 mm					
DENSITY	240 kg/cu.m > in-trench slurry					

Cement-Soil-Bentonite Backfill

STATION					Notes:
SLUMP	180-220 mm				
DENSITY	1.90 to 2.10 kg/cu.m				
GROUT DENSITY	1.12 to 1.20 kg/cu.m				

Bentonite Slurry

Time	Location	Marsh Funnel (>45-55 sec)	Density (>1.025 kg/cu.m)	Filter Loss* (cc)	Notes:
	Pond				
Depth (mid depth)	Station	Marsh Funnel (>40 sec)	Density (1.025-1.25 kg/cu.m)	Filter Loss* (cc)	

*For Inquip's internal reference.

Daily Construction Report

PROJECT

**AGNICO EAGLE MINE
BAY GOOSE DIKE**

CONTRACTOR/OWNER

F.GILBERT Itée

Date:

Monday, September 06, 2010

Report #

DR.2010.09.06

Excavation Data

[illegible]

Contractors Verification:

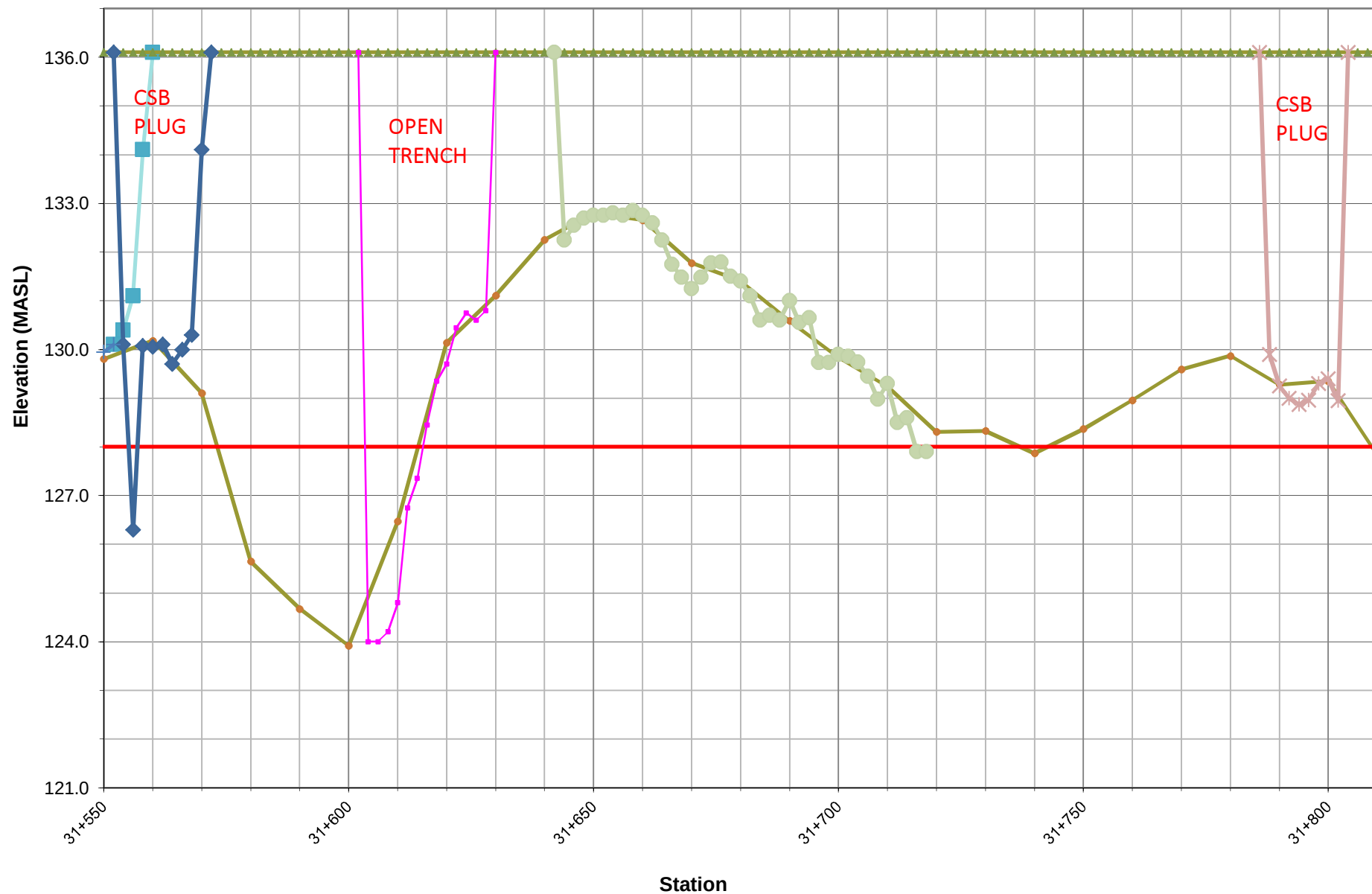
114.90

The above report is complete and correct and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

Submitted By: William Collins/Josue Toro-Diaz

Soil Bentonite Cutoff Wall Trench Profile
Agnico Eagle Mine - Bay-Goose Dike
(NOT TO SCALE)

- Working Platform
- Top of CB backfil (Elevation 128)
- ◆— CSB Plug at 31+560 (dug Aug 24)
- ▲— Day Shift
- ×— Day Shift day before
- SB Backfill II
- Top of Bedrock (as per Bathymetry)
- ◆— 23-Aug-10
- ◆— SB Backfill
- ◆— Night Shift
- ×— CSB plug Sept 5, 2010



INQUIP

Associates, Inc.

Daily Construction Report

PROJECT AGNICO EAGLE MINE BAY GOOSE DIKE			CONTRACTOR/OWNER F.GILBERT Itée		Date: Tuesday, September 07, 2010 Report # DR.2010.09.07		
Weather:			Temperature High: Low:		Ground Conditions		
MANPOWER							
NAME/CRAFT	On Site	HRS.			TYPE	IN-USE	ST-BY
FRANK DAVIS	X	12			Slurry Mixer		X
LAMAR POWELL	X	12			Grout Mixer		X
BENNY SMITH	X	12			Pumps	X	
JOHN LOGAN	X	12			4" HDPE pipe	X	
WILLIAM COLLINS	X	12			Loader w/forks		X
JOSUE TORO-DIAZ					Dozer (D6)	X	
					CAT385	X	
					Generator	X	
					Tremie pipe		
					Forklift		
					Mixing Box		X
					Kamatsu		

SUMMARY OF DAY'S WORK

Finished esxcavation at noon. Backfilled all afternoon and night until 12:30am. Drain all lines for winter weather.

Bentonite slurry usage
Bags used: 18
Bags on hand: 198

Cement Usage:
Bags used: 16
Broken bags:
Bags wasted (after mixed, the cement slurry was dumped):
Bags on hand: 21

REMARKS / DELAYS / ITEMS REQUIRING CONTRACTOR ACTION

Restart on Sept 14, 2010. 3hrs delay waiting for the CAT385.

SAFETY

Daily tool-box safety meeting every morning.

ATTACHMENTS

Trench profile.

INQUIP

Associates, Inc.

Daily Construction Report

PROJECT	AGNICO EAGLE MINE BAY GOOSE DIKE	CONTRACTOR/OWNER	Date:	Tuesday, September 07, 2010
		F.GILBERT Itée	Report #	DR.2010.09.07

Soil-Bentonite Backfill

SLUMP	STATION	31+658	31+666	31+674	31+678	Notes:
	50-150 mm	100	125	127	102	
DENSITY	240 kg/cu.m > in-trench slurry	2.11	2.13	2.16	2.12	

Cement-Soil-Bentonite Backfill

STATION					Notes:
SLUMP	180-220 mm				
DENSITY	1.90 to 2.10 kg/cu.m				
GROUT DENSITY	1.12 to 1.20 kg/cu.m				

Bentonite Slurry

Time	Location	Marsh Funnel (>45-55 sec)	Density (>1.025 kg/cu.m)	Filter Loss* (cc)	Notes:
7:15 AM	Pond	42	1.05	19.0	
1:40 PM		43	1.05	16.0	
8:45 PM		42	1.04	19.0	
4:30 AM		44	1.06	15.0	
Depth (mid depth)	Station	Marsh Funnel (>40 sec)	Density (1.025-1.25 kg/cu.m)	Filter Loss* (cc)	
2.0	31+684	44	1.15	20.0	
1.0	31+710	44	1.12	28.0	
2.0	31+728	47	1.14	17.0	
3.0	31+738	51	1.12	15.0	

*For Inquip's internal reference.

INQUIP

Associates, Inc.

Daily Construction Report

PROJECT

AGNICO EAGLE MINE
BAY GOOSE DIKE

CONTRACTOR/OWNER

F.GILBERT Itée

Date:

Tuesday, September 07, 2010

Report #

DR.2010.09.07

Excavation Data

Station	Elevation of Workpad (MASL)	Depth to Bedrock (m)	Depth of CSB Backfill (m)	Elevation of Bedrock (MASL)	Elevation of CSB Backfill (MASL)	Total Square meters	Prev Days Total Sq. m
31+718	136.1	8.20		127.9			4,433.9
31+720	136.1	8.30		127.8		16.50	
31+722	136.1	7.90		128.2		16.20	
31+724	136.1	7.50		128.6		15.40	
31+726	136.1	6.95		129.2		14.45	
31+728	136.1	8.00		128.1		14.95	
31+730	136.1	8.20		127.9		16.20	
31+732	136.1	7.80		128.3		16.00	
31+734	136.1	8.10		128.0		15.90	
31+736	136.1	8.40		127.7		16.50	
31+738	136.1	8.65		127.5		17.05	
31+740	136.1	7.90		128.2		16.55	
31+742	136.1	7.90		128.2		15.80	
31+744	136.1	7.50		128.6		15.40	
31+746	136.1	7.40		128.7		14.90	
31+748	136.1	7.30		128.8		14.70	
31+750	136.1	7.80		128.3		15.10	
31+752	136.1	7.85		128.3		15.65	
31+754	136.1	7.30		128.8		15.15	
31+756	136.1	7.25		128.9		14.55	
31+758	136.1	8.50		127.6		15.75	
31+760	136.1	7.15		129.0		15.65	
31+762	136.1	6.75		129.4		13.90	
31+764	136.1	6.30		129.8		13.05	
31+766	136.1	6.40		129.7		12.70	
31+768	136.1	6.20		129.9		12.60	
31+770	136.1	6.10		130.0		12.30	
31+772	136.1	6.10		130.0		12.20	
31+774	136.1	5.70		130.4		11.80	
31+776	136.1	5.60		130.5		11.30	
31+778	136.1	6.50		129.6		12.10	
31+780	136.1	6.70		129.4		13.20	
31+782	136.1	6.80		129.3		13.50	
31+784	136.1	6.80		129.3		13.60	
31+786	136.1	6.70		129.4	136.1	13.50	
31+788	136.1	6.70	6.2	129.4	129.9	13.40	
31+790	136.1	6.85	6.9	129.3	129.3	13.55	Preliminary
31+792	136.1	7.10	7.1	129.0	129.0	13.95	Total
							To Date
							4,968.9

Contractors Verification:

535.00

The above report is complete and correct and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

Submitted By: William Collins/Josue Toro-Diaz

dn.ts/11012
Bay Goose Construction

McLean Office
April 11, 2011

Fernand Gilbert, Ltée
1700 Bld. Talbot
Chicoutimi, Québec

ATTN: Mr. Guy Morissette, Contract Manager
Agnico Eagle Mine

RE: Meadowbank Gold Project
Bay Goose Dike Construction

SUBJ: Laboratory Test Report
CSB and SB Test Results
Construction Season 2010

Dear Mr. Morissette:

Please find attached the following QC test results for the work done on the above project in 2010:

- Appendix A: QC compressive strength and density test results for the CSB samples.
- Appendix B: Permeability Tests on CSB Samples
- Appendix C: Gradation and permeability tests on SB samples.
- Appendix D: Inquip's analysis of test data for CSB in 2009 and 2010.

The testing program was performed by Qualitas Laboratory in Longueuil, Québec.

As a conclusion, we would like to stress that all the 2010 QC results demonstrate that the CSB mixture meet both the density and strength requirements of the specifications. As a matter of fact, the compressive strength results exceed by far the contract requirements,

Bay Goose Construction
Laboratory Report - CSB

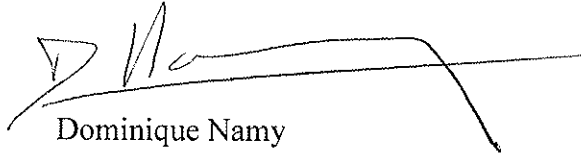
see "Specification SG.2.6 CSB Backfill"

- The density of the CSB mixture shall be 1120 to 1200 Kg/M³, and
- The CSB mixture shall have a compressive strength of at least 130 KPa when fully cured (7 days).

We hope that these results will alleviate the concerns raised about the CSB backfill.

Please do not hesitate to call me if you have any questions. We really appreciate the opportunity to work for you, Fernand Gilbert, Agnico Eagle Mine and its Engineers on this interesting project.

Best Regards,

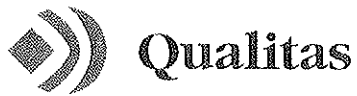
A handwritten signature in black ink, appearing to read 'D. Namy', with a long horizontal stroke extending to the right.

Dominique Namy
President

Enclosures

Bay Goose Construction
Laboratory Report - CSB

APPENDIX A: QC Compressive Strength and Density Test Results 2010



GROUPE QUALITAS INC.
591, rue Le Breton
Longueuil (Québec)
Canada J4G 1R9
www.qualitas.qc.ca

Tél.: 450-674-4901
Téléc.: 450-674-3370

March 25th, 2011

Mr Dominique Namy
Inquip Associates Inc.
P.O. Box 6277
McLean (VA) 22106
United States

File no : 16525-G

Subject : Results of compressive strength
Bay Goose, Nunavut

Mr Namy,

Please find attached the results of the compressive strength analysis carried out on the soil-cement-bentonite samples. These samples were brought to our Longueuil laboratory in October 2010 and we have stored immediately in a room with controlled humidity and temperature. We received the test program for these samples in early February 2011.

We carried out seven compressive strength analysis on the soil-cement-bentonite samples. With the results, we have attached a photographs of samples before and after shear strength.

We hope that this report is to your satisfaction. Do not hesitate to contact us if further information is required.

GROUPE QUALITAS INC.

Hélène Bilodeau, Engineer
Chef du laboratoire géotechnique

HB/st



Qualitas

UNCONFINED COMPRESSIVE STRENGTH - ASTM D2166-06

FILE : 16525-G
CLIENT : Inquip Associates Inc.
PROJECT : Bay Goose Nunavut

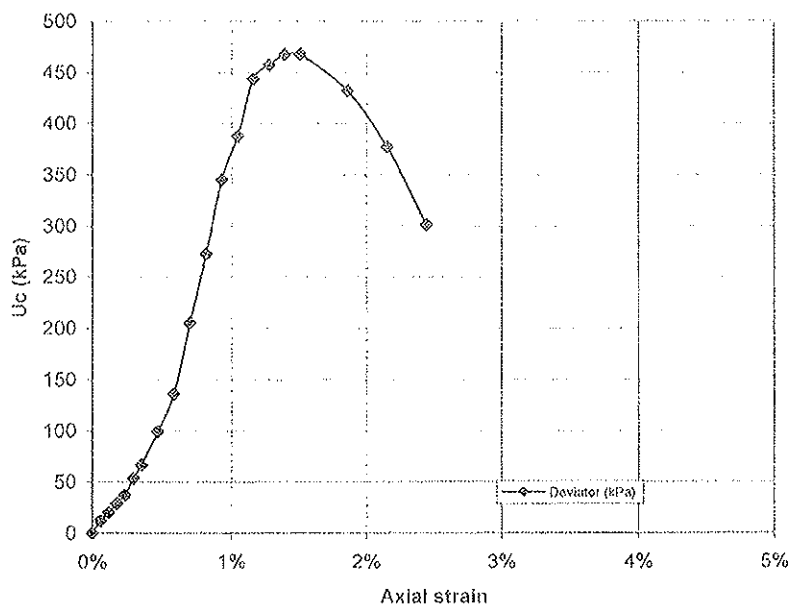
SAMPLE 31+600
(2010-09-24)

FILE : 16525-G-31+600-01-Comp-A.xls

Unconfined compressive strength

Initial length, H_i (mm) : 171.97 Initial volume, V_i (cm³) : 1371 Initial area, A_i (cm²) : 79.72 Rate of strain (mm/min) : 1.14
Final length, H_f (mm) : 167.77 Final volume, V_f (cm³) : 1371 Final area, A_f (cm²) : 81.72

No.	Data		Deformation	Area	Strength, U_c	Test results
	A_L (0.01mm)	F_a (N)	$\Delta H/H_i$ (%)	(cm ²)	(kPa)	
1	80	0.0	0.00%	79.72	0	Shear strength :
2	90	97.0	0.06%	79.77	12	
3	100	161.0	0.12%	79.82	20	
4	110	232.0	0.17%	79.86	29	
5	120	297.0	0.23%	79.91	37	
6	130	429.0	0.29%	79.96	54	U_c (kPa) : 468 kPa $\Delta H/H_i$ (%) : 1.51 %
7	140	532.0	0.35%	80.00	66	
8	160	792.0	0.47%	80.10	99	
9	180	1089.0	0.58%	80.19	136	
10	200	1649.0	0.70%	80.28	205	
11	220	2191.0	0.81%	80.38	273	Physicals characteristics :
12	240	2778.0	0.93%	80.47	345	
13	260	3124.0	1.05%	80.57	388	
14	280	3579.0	1.16%	80.66	444	
15	300	3695.0	1.28%	80.76	458	
16	320	3778.0	1.40%	80.85	467	Initial water content : 39.3 % Wet unit weight : 1810 kg/m ³ Dry unit weight : 1299 kg/m ³
17	340	3786.0	1.51%	80.95	468	
18	400	3510.0	1.86%	81.23	432	
19	450	3071.0	2.15%	81.48	377	
20	500	2460.0	2.44%	81.72	301	



Remarks :

Initial ratio (height / diameter) = 1.7

Tested by : A. Bustamante, ing. jr.
date : 2011-02-10

Approved by : Hélène Bilodeau, ing.
date : 2011-02-11



Photograph No. 1 : Sample 31+600 – Before compressive test.



Photograph No. 2



Photograph No. 3

Photographs Nos. 2 and 3 : Sample 31+600 – After compressive test.



Qualitas

UNCONFINED COMPRESSIVE STRENGTH - ASTM D2166-06

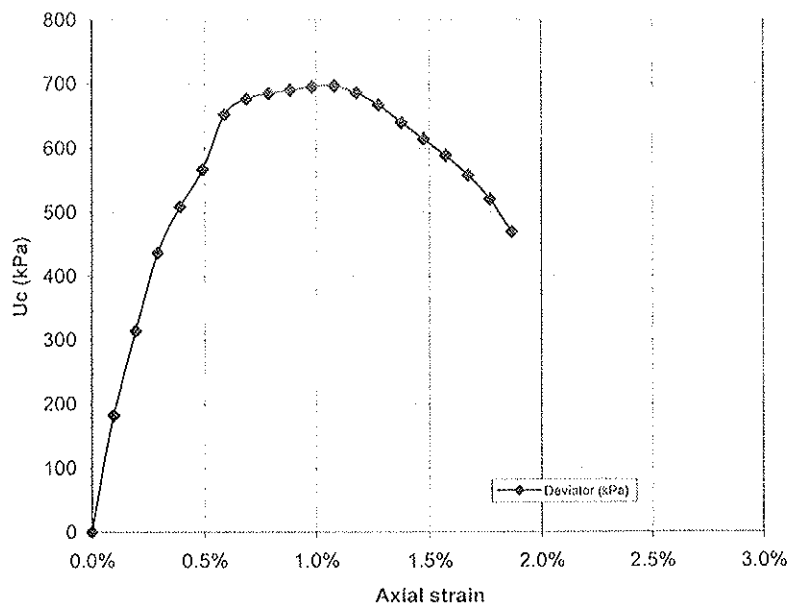
FILE : 16525-G
CLIENT : Inquip Associates inc.
PROJECT : Bay Goose Nunavut

SAMPLE : 31+800
(2010-09-16)
CURE : 155 days
FILE : 16525-G-31+800-Comp-A.xls

Unconfined compressive strength

Initial length, H_i (mm) :	101.68	Initial volume, V_i (cm ³) :	216	Initial area, A_i (cm ²) :	21.24	Rate of strain (mm/min) :	1.14
Final length, H_f (mm) :	99.78	Final volume, V_f (cm ³) :	216	Final area, A_f (cm ²) :	21.65		

No.	Data		Deformation	Area	Strength, U_c	Test results
	ΔL (0.01mm)	F_a (N)	$\Delta H/H_i$ (%)	(cm ²)	(kPa)	
1	70	0.0	0.00%	21.24	0	Shear strength : U_c (kPa) : 697 $\Delta H/H_i$ (%) : 1.08 %
2	80	387.0	0.10%	21.26	182	
3	90	668.0	0.20%	21.28	314	
4	100	929.0	0.30%	21.31	436	
5	110	1084.0	0.39%	21.33	508	
6	120	1209.0	0.49%	21.35	566	
7	130	1393.0	0.59%	21.37	652	
8	140	1446.0	0.69%	21.39	676	
9	150	1466.0	0.79%	21.41	686	
10	160	1479.0	0.89%	21.43	690	
11	170	1491.0	0.98%	21.45	695	Physicals characteristics : Initial water content : 40.4 % Wet unit weight : 1770 kg/m ³ Dry unit weight : 1260 kg/m ³ Final water content : 38.9 %
12	180	1496.0	1.08%	21.48	697	
13	190	1474.0	1.18%	21.50	686	
14	200	1435.0	1.28%	21.52	667	
15	210	1377.0	1.38%	21.54	639	
16	220	1323.0	1.48%	21.56	614	
17	230	1269.0	1.57%	21.58	588	
18	240	1204.0	1.67%	21.60	557	
19	250	1125.0	1.77%	21.63	520	
20	260	1014.0	1.87%	21.65	468	

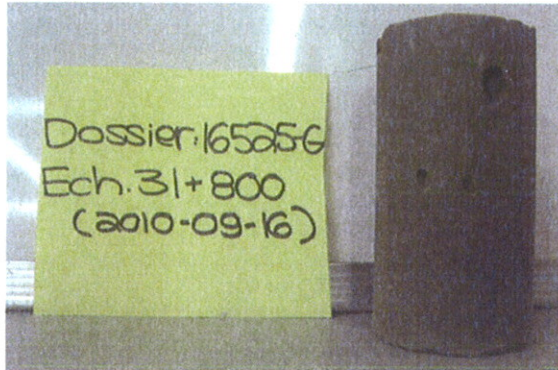


Remarks :

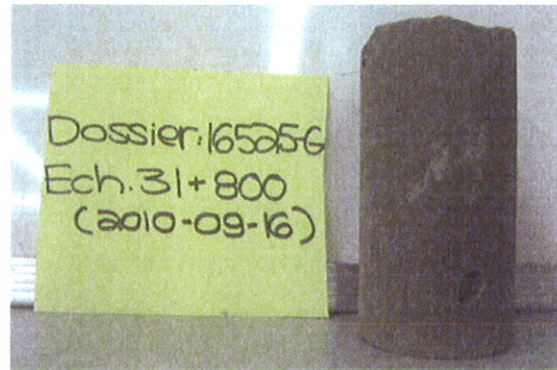
Initial ratio (height / diameter) = 2.0

Tested by : A. Bustamante, ing. jr.
date : 2011-02-18

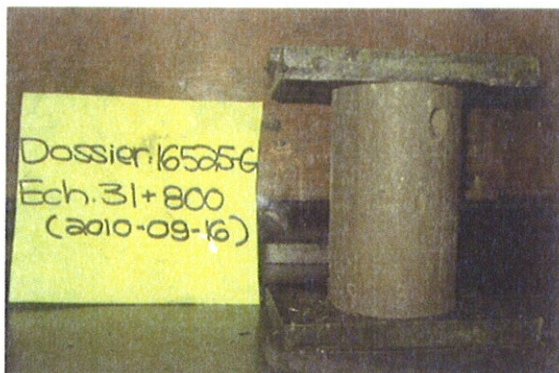
Approved by : Hélène Bilodeau, ing.
date : 2011-02-21



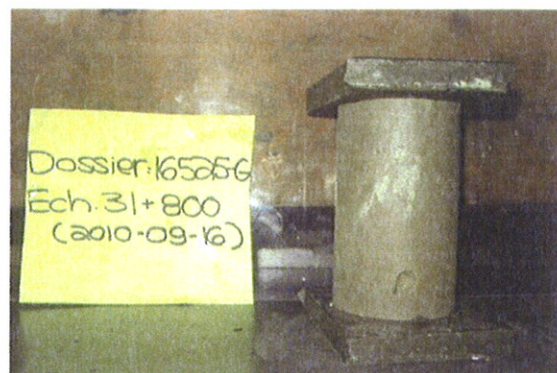
Photograph No. 4



Photograph No. 5

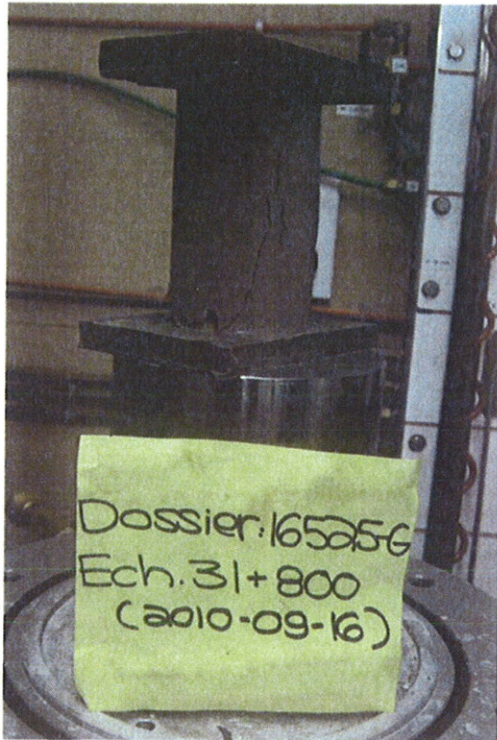


Photograph No. 6

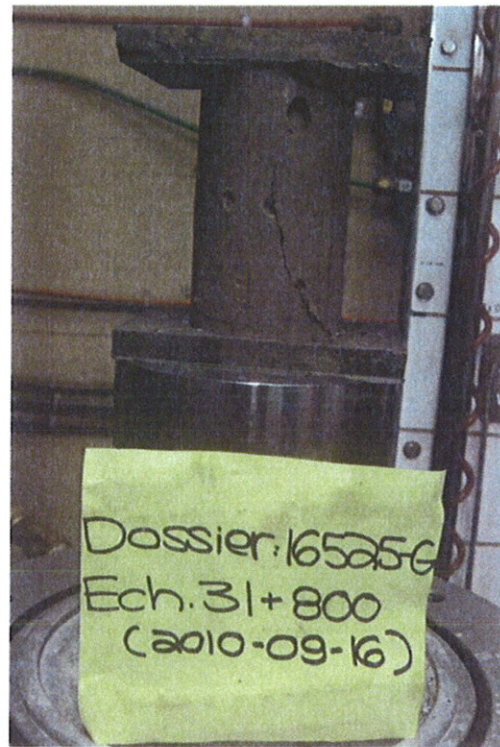


Photograph No. 7

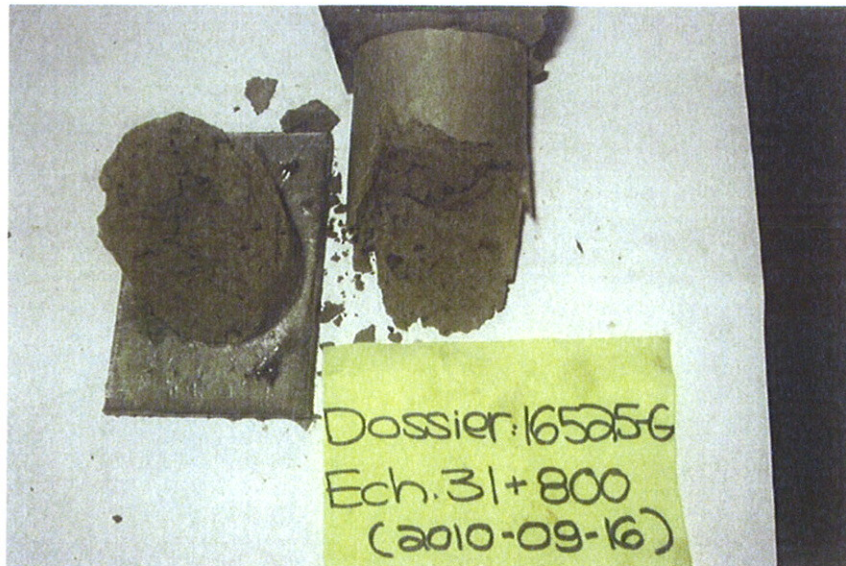
Photographs Nos. 4 at 7 : Sample 31+800 – Before compressive test.



Photograph No. 8



Photograph No. 9



Photograph No. 10

Photographs Nos. 8 at 10 : Sample 31+800 – After compressive test.



Qualitas

UNCONFINED COMPRESSIVE STRENGTH - ASTM D2166-06

FILE : 16525-G
CLIENT : Inqulp Associates inc.
PROJECT : Bay Goose Nunavut

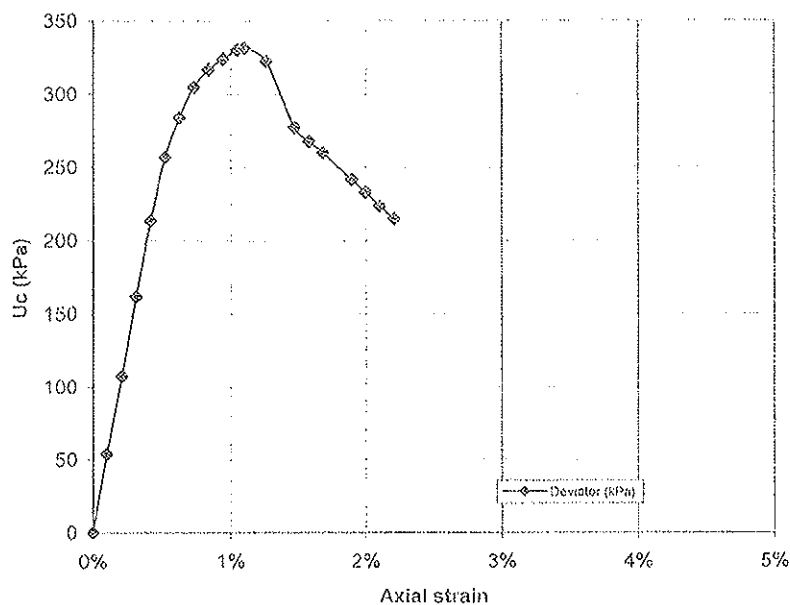
SAMPLE 31+944
(2010-09-21)

FILE : 16525-G-31+944-Comp-A.xls

Unconfined compressive strength

Initial length, H_i (mm) : 95.12 Initial volume, V_i (cm³) : 200.46 Initial area, A_i (cm²) : 21.07 Rate of strain (mm/min) : 0.508
Final length, H_f (mm) : 93.02 Final volume, V_f (cm³) : 200.46 Final area, A_f (cm²) : 21.55

No.	Data		Deformation	Area	Strength, U_c	Test results
	ΔL (0.01mm)	F_a (N)	$\Delta H/H_i$ (%)	(cm ²)	(kPa)	
1	90	0.0	0.00%	21.07	0	Shear strength : U_c (kPa) : 331 kPa $\Delta H/H_i$ (%) : 1.10 %
2	100	114.0	0.11%	21.10	54	
3	110	227.0	0.21%	21.12	107	
4	120	342.0	0.32%	21.14	162	
5	130	452.0	0.42%	21.16	214	
6	140	544.0	0.53%	21.19	257	
7	150	602.0	0.63%	21.21	284	
8	160	647.0	0.74%	21.23	305	
9	170	673.0	0.84%	21.25	317	
10	180	689.0	0.95%	21.28	324	
11	190	703.0	1.05%	21.30	330	Physicals characteristics : Initial water content : 38.19 % Wet unit weight : 1831 kg/m ³ Dry unit weight : 1325 kg/m ³ Final water content : 36.01 %
12	195	706.0	1.10%	21.31	331	
13	210	688.0	1.26%	21.34	322	
14	230	593.0	1.47%	21.39	277	
15	240	573.0	1.58%	21.41	268	
16	250	557.0	1.68%	21.43	260	
17	270	519.0	1.89%	21.48	242	
18	280	501.0	2.00%	21.50	233	
19	290	481.0	2.10%	21.53	223	
20	300	463.0	2.21%	21.55	215	



Remarks :

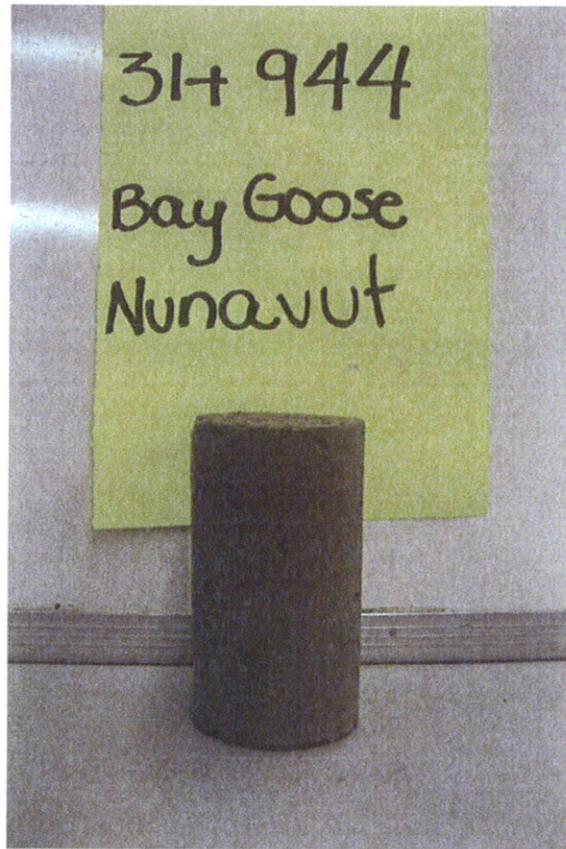
Initial ratio (height / diameter) = 1.8

Tested by : A. Bustamante, ing. jr.

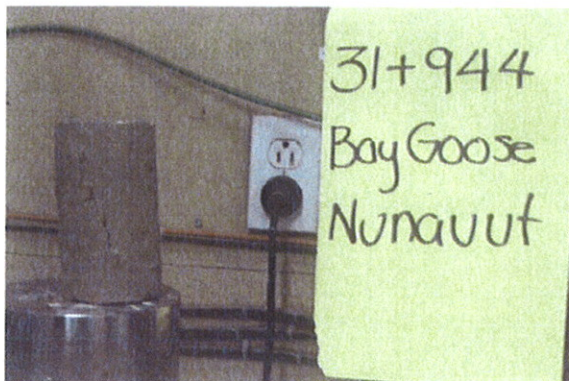
date : 2011-02-09

Approved by : Hélène Bilodeau, ing.

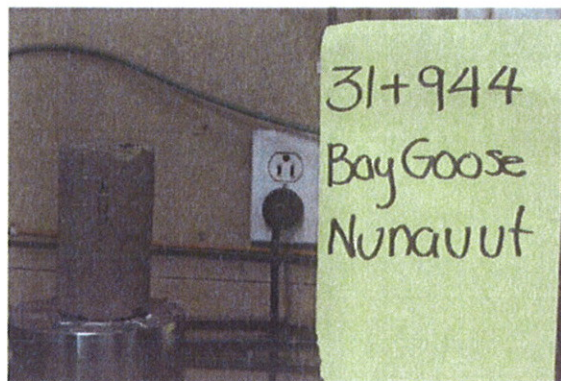
date : 2011-02-10



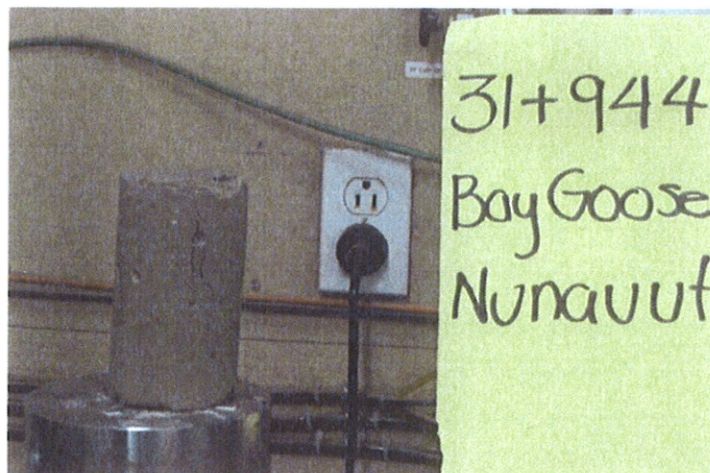
Photograph No. 11 : Sample 31+944 – Before compressive test.



Photograph No. 12



Photograph No. 13



Photograph No. 14

Photographs Nos. 12 at 14 : Sample 31+944 – After compressive test.



Qualitas

UNCONFINED COMPRESSIVE STRENGTH - ASTM D2166-06

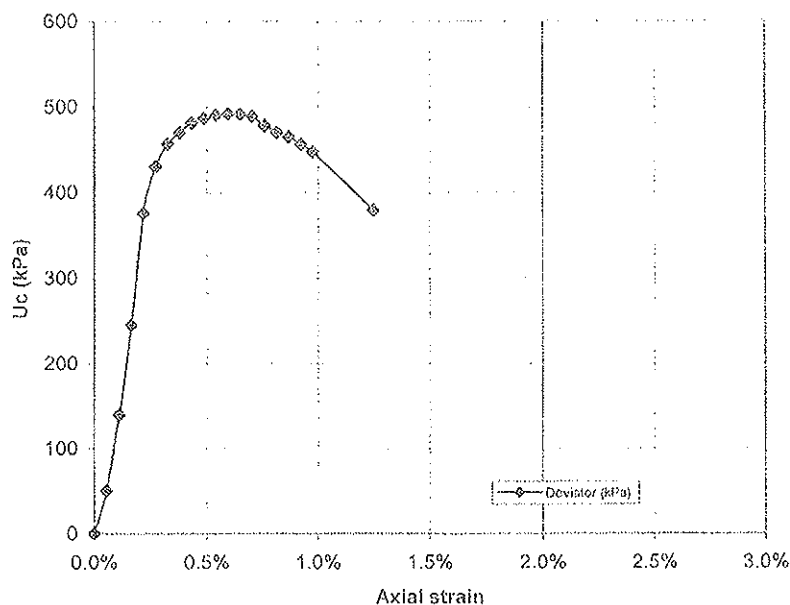
FILE : 16525-G
CLIENT : Inqulp Associates inc.
PROJECT : Bay Goose Nunavut

SAMPLE : 32+080
(2010-09-24)
CURE : 147 days
FILE : 16525-G-32+080-Comp-A.xls

Unconfined compressive strength

Initial length, H_i (mm) : 184.11 Initial volume, V_i (cm³) : 1457 Initial area, A_i (cm²) : 79.14 Rate of strain (mm/min) : 1.14
Final length, H_f (mm) : 181.81 Final volume, V_f (cm³) : 1457 Final area, A_f (cm²) : 80.14

No.	Data		Deformation	Area	Strength, U_c	Test results
	ΔL (0.01mm)	F_a (N)	$\Delta H/H_i$ (%)	(cm ²)	(kPa)	
1	20	0.0	0.00%	79.14	0	Shear strength :
2	30	397.0	0.05%	79.18	50	
3	40	1105.0	0.11%	79.22	139	
4	50	1943.0	0.16%	79.27	245	
5	60	2979.0	0.22%	79.31	376	
6	70	3412.0	0.27%	79.35	430	U_c (kPa) : 492 kPa $\Delta H/H_i$ (%) : 0.66 %
7	80	3625.0	0.33%	79.40	457	
8	90	3731.0	0.38%	79.44	470	
9	100	3829.0	0.43%	79.48	482	
10	110	3873.0	0.49%	79.53	487	
11	120	3902.0	0.54%	79.57	490	Physicals characteristics :
12	130	3917.0	0.60%	79.61	492	
13	140	3918.0	0.65%	79.66	492	
14	150	3900.0	0.71%	79.70	489	
15	160	3814.0	0.76%	79.74	478	
16	170	3755.0	0.81%	79.79	471	Initial water content : 31.9 % Wet unit weight : 1903 kg/m ³ Dry unit weight : 1443 kg/m ³ Final water content : 30.6 %
17	180	3713.0	0.87%	79.83	465	
18	190	3646.0	0.92%	79.88	456	
19	200	3575.0	0.98%	79.92	447	
20	250	3040.0	1.25%	80.14	379	



Remarks :

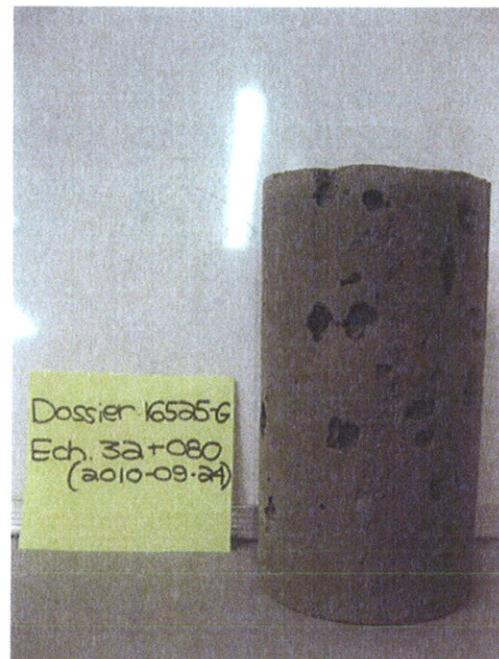
Initial ratio (height / diameter) = 1.8

Tested by : A. Bustamante, ing. jr.
date : 2011-02-18

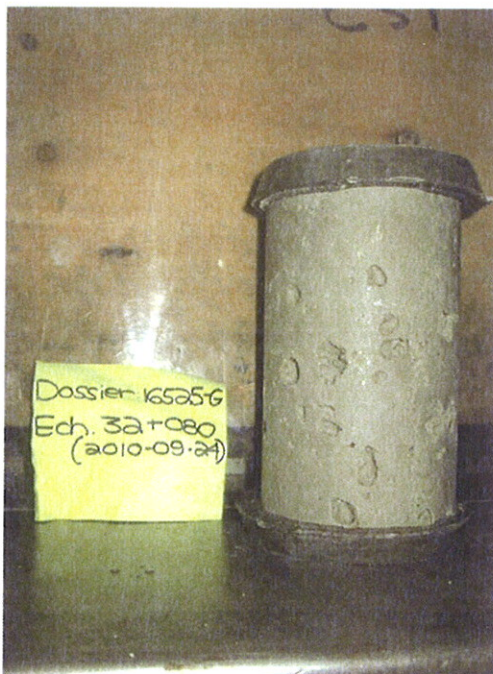
Approv. by : H  t  no Bilodeau, ing.
date : 2011-02-21



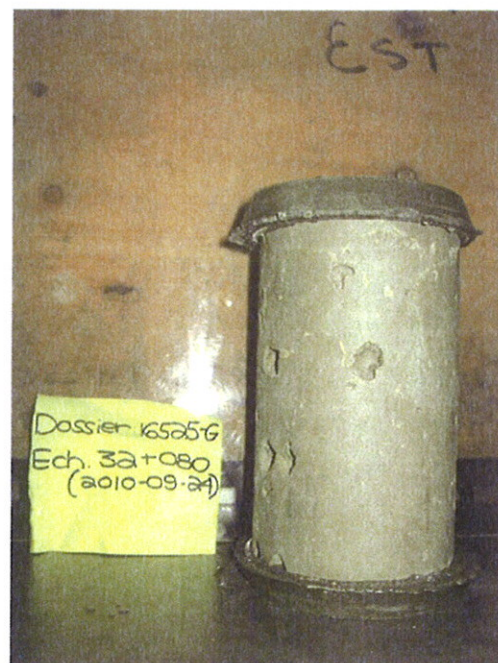
Photograph No. 15



Photograph No. 16



Photograph No. 17



Photograph No. 18

Photographs Nos. 15 at 18 : Sample 32+080 – Before compressive test.



Photograph No. 19



Photograph No. 20



Photograph No. 21

Photographs Nos. 19 at 21 : Sample 32+080 – After compressive test.

**Qualitas****UNCONFINED COMPRESSIVE STRENGTH - ASTM D2166-06**

FILE : 16525-G

SAMPLE :

CSB PLUG

CLIENT : Inquip Associates inc.

(2010-09-05)

PROJECT : Bay Goose Nunavut

CURE :

166 days

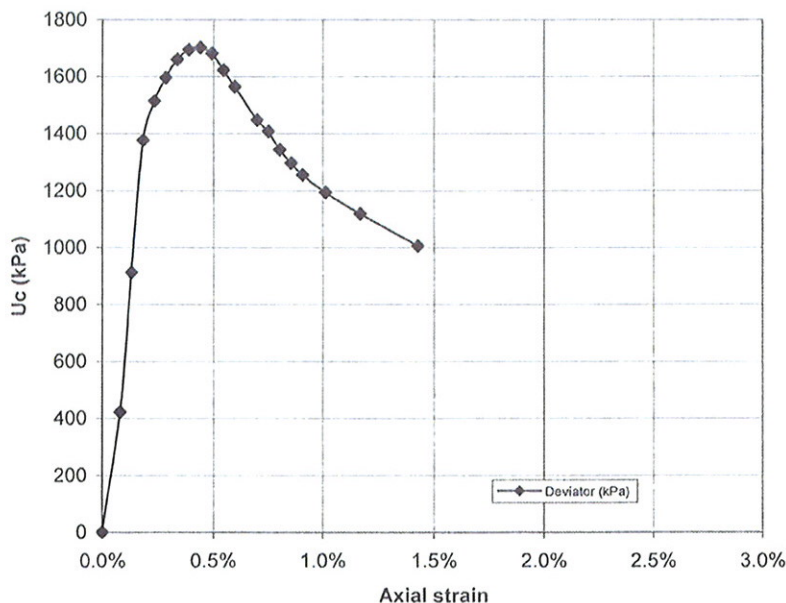
FILE :

16525-G-CSB-Comp-A.xls

Unconfined compressive strength

Initial length, H_i (mm) :	192.63	Initial volume, V_i (cm ³) :	1508	Initial area, A_i (cm ²) :	78.28	Rate of strain (mm/min) :	1.14
Final length, H_f (mm) :	189.88	Final volume, V_f (cm ³) :	1508	Final area, A_f (cm ²) :	79.42		

No.	Data		Deformation	Area	Strength, U_c	Test results
	ΔL (0.01mm)	F_a (N)	$\Delta H/H_i$ (%)	(cm ²)	(kPa)	
1	25	0.0	0.00%	78.28	0	Shear strength :
2	40	3302.0	0.08%	78.35	421	
3	50	7147.0	0.13%	78.39	912	
4	60	10797.0	0.18%	78.43	1377	
5	70	11882.0	0.23%	78.47	1514	
6	80	12524.0	0.29%	78.51	1595	Uc (kPa) : 1701 kPa $\Delta H/H_i$ (%) : 0.44 %
7	90	13029.0	0.34%	78.55	1659	
8	100	13306.0	0.39%	78.59	1693	
9	110	13377.0	0.44%	78.63	1701	
10	120	13220.0	0.49%	78.67	1680	
11	130	12765.0	0.55%	78.71	1622	Physicals characteristics :
12	140	12317.0	0.60%	78.75	1564	
13	160	11404.0	0.70%	78.84	1447	
14	170	11100.0	0.75%	78.88	1407	
15	180	10604.0	0.80%	78.92	1344	
16	190	10236.0	0.86%	78.96	1296	Initial water content : 19.9 % Wet unit weight : 1647 kg/m ³ Dry unit weight : 1373 kg/m ³
17	200	9909.0	0.91%	79.00	1254	
18	220	9443.0	1.01%	79.09	1194	
19	250	8868.0	1.17%	79.21	1120	
20	300	7979.0	1.43%	79.42	1005	



Remarks :

Initial ratio (height / diameter) = 1.9

Tested by : A. Bustamante, ing. jr.

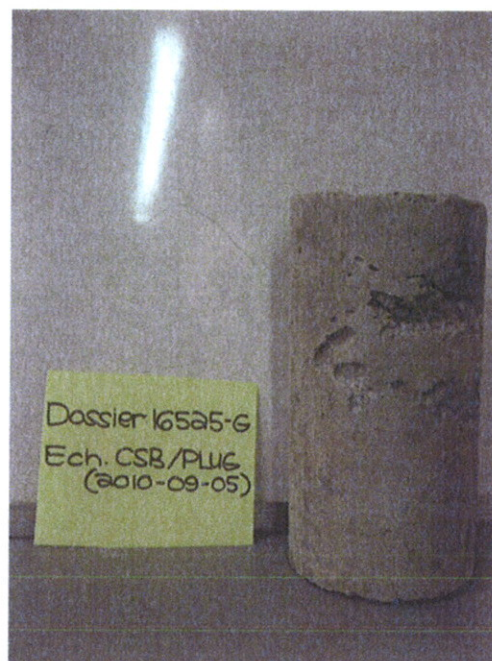
date : 2011-02-18

Approv. by : H  l  ne Bilodeau, ing.

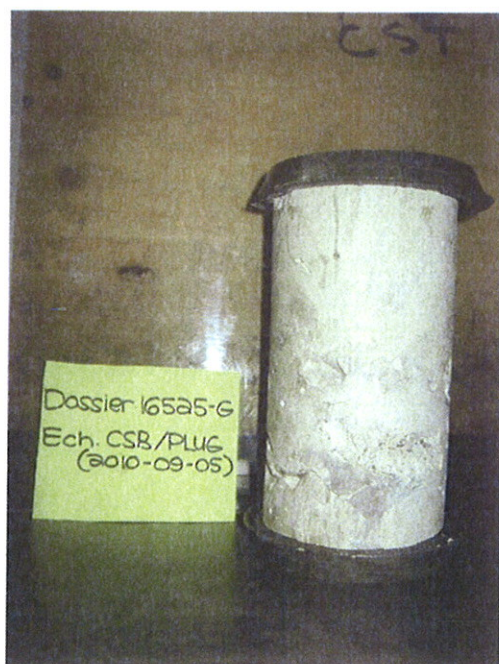
date : 2011-02-21



Photograph No. 22



Photograph No. 23

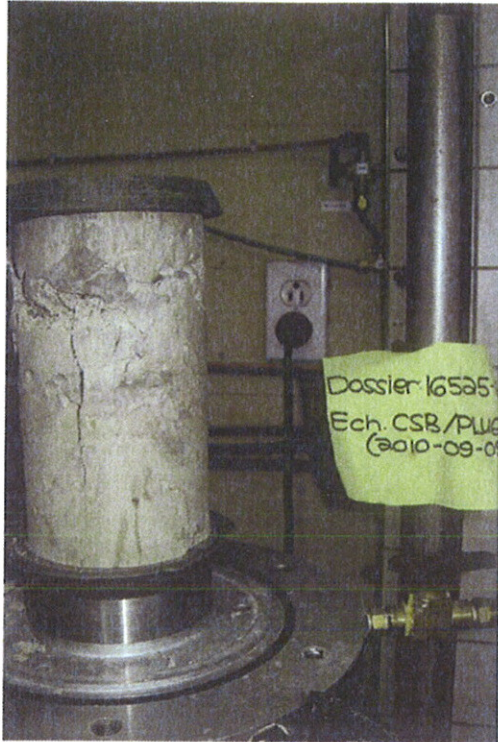


Photograph No. 24



Photograph No. 25

Photographs Nos. 22 at 25 : Sample CSB / PLUG – Before compressive test.



Photograph No. 26



Photograph No. 27



Photograph No. 28

Photographs Nos. 26 at 28 : Sample CSB / PLUG – After compressive test.



Qualitas

UNCONFINED COMPRESSIVE STRENGTH - ASTM D2166-06

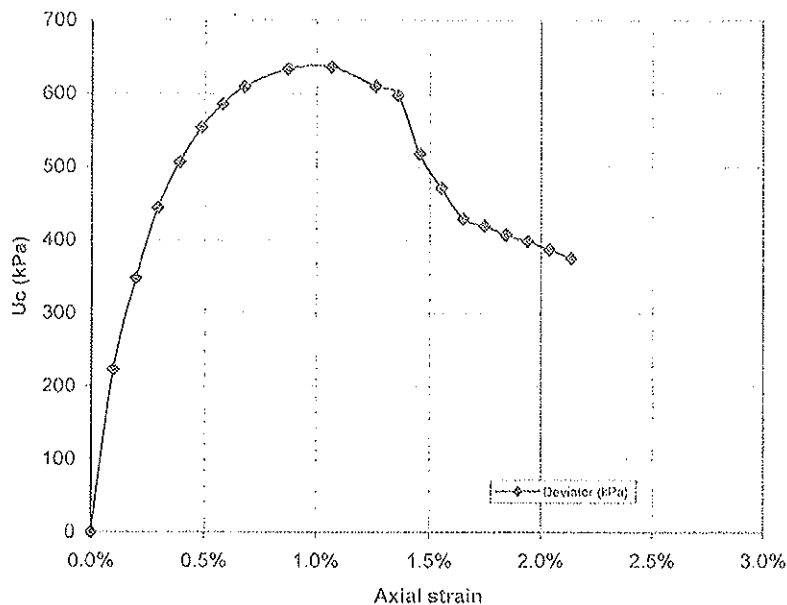
FILE : 16525-G
CLIENT : Inquip Associates inc.
PROJECT : Bay Goose Nunavut

SAMPLE : 31+844
(2010-09-10)
CURE : 152 days
FILE : 16525-G-31+844-Comp-A.xls

Unconfined compressive strength

Initial length, H_i (mm) : 103.04 Initial volume, V_i (cm³) : 218 Initial area, A_i (cm²) : 21.16 Rate of strain (mm/min) : 1.14
Final length, H_f (mm) : 100.84 Final volume, V_f (cm³) : 218 Final area, A_f (cm²) : 21.62

No.	Data		Deformation	Area	Strength, U_c	Test results
	ΔL (0.01mm)	F_a (N)	$\Delta H/H_i$ (%)	(cm ²)	(kPa)	
1	90	0.0	0.00%	21.16	0	Shear strength : U_c (kPa) : 636 $\Delta H/H_i$ (%) : 1.07 %
2	100	472.0	0.10%	21.18	223	
3	110	737.0	0.19%	21.20	348	
4	120	942.0	0.29%	21.22	444	
5	130	1076.0	0.39%	21.24	507	
6	140	1177.0	0.49%	21.26	554	
7	150	1247.0	0.58%	21.28	586	
8	160	1298.0	0.68%	21.30	609	
9	180	1352.0	0.87%	21.34	633	
10	200	1361.0	1.07%	21.39	636	
11	220	1308.0	1.26%	21.43	610	Physicals characteristics : Initial water content : 45.7 % Wet unit weight : 1690 kg/m ³ Dry unit weight : 1160 kg/m ³ Final water content : 42.81 %
12	230	1282.0	1.36%	21.45	598	
13	240	1112.0	1.46%	21.47	518	
14	250	1013.0	1.55%	21.49	471	
15	260	924.0	1.65%	21.51	430	
16	270	904.0	1.75%	21.53	420	
17	280	878.0	1.84%	21.55	407	
18	290	860.0	1.94%	21.58	399	
19	300	836.0	2.04%	21.60	387	
20	310	811.0	2.14%	21.62	375	



Remarks :

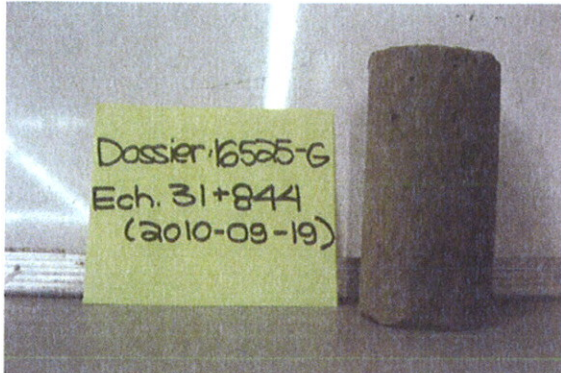
Initial ratio (height / diameter) = 2.0

Tested by : A. Bustamante, ing. jr.

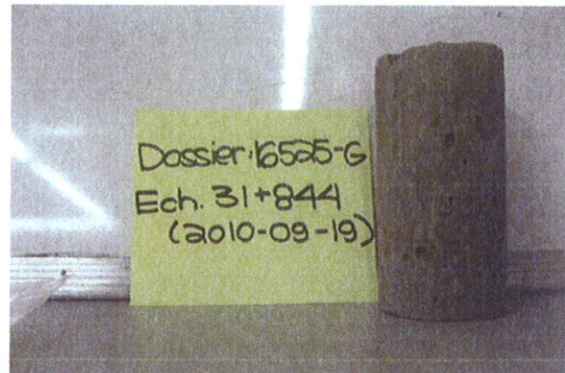
date : 2011-02-18

Approved by : Hélène Bilodeau, ing.

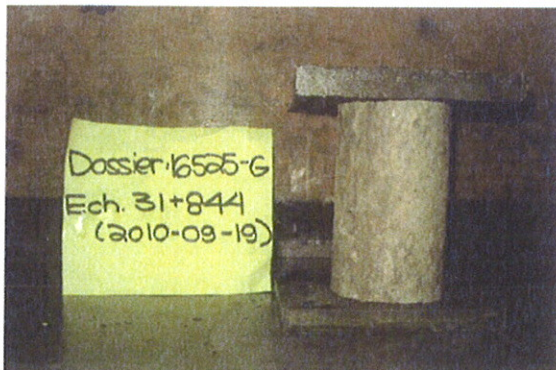
date : 2011-02-21



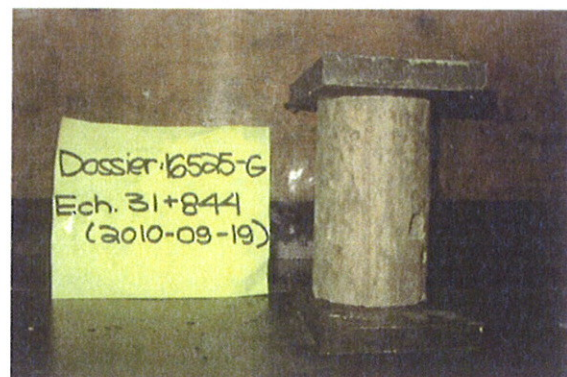
Photograph No. 29



Photograph No. 30



Photograph No. 31

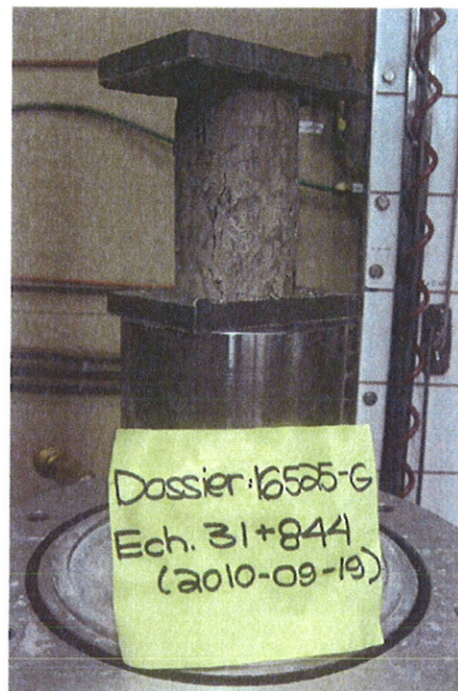


Photograph No. 32

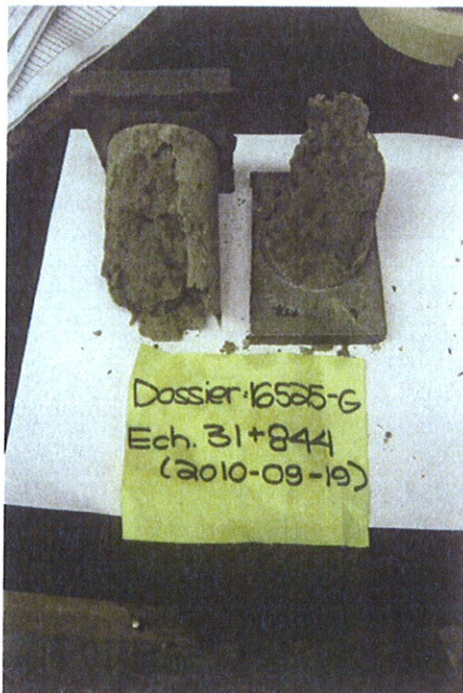
Photographs Nos. 29 at 32 : Sample 31+844 – Before compressive test.



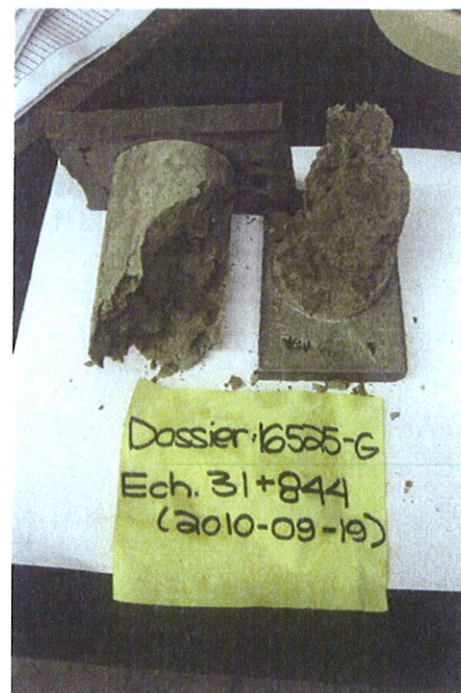
Photograph No. 33



Photograph No. 34



Photograph No. 35



Photograph No. 36

Photographs Nos. 33 at 36 : Sample 31+844 – After compressive test.



Qualitas

UNCONFINED COMPRESSIVE STRENGTH - ASTM D2166-06

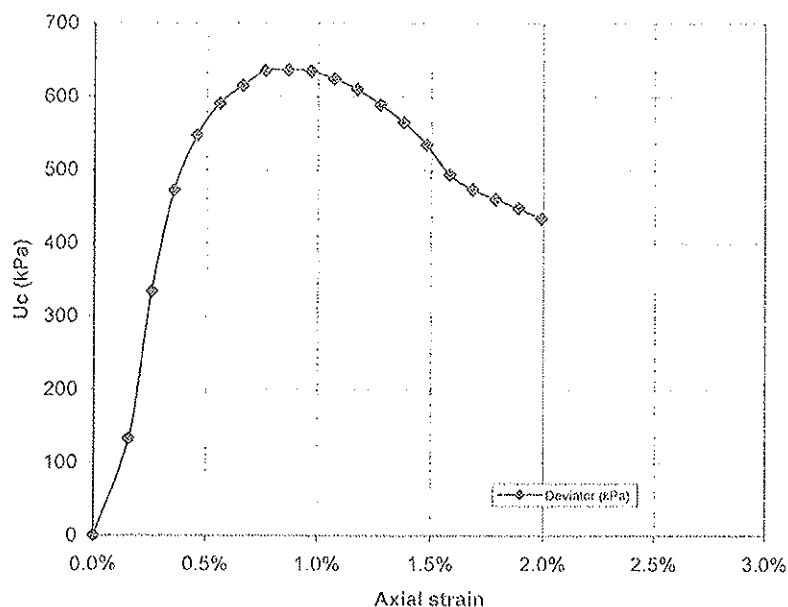
FILE : 16525-G
CLIENT : Inquip Associates inc.
PROJECT : Bay Goose Nunavut

SAMPLE : 31+966
(2010-09-22)
CURE : 149 days
FILE : 16525-G-31+926-Comp-A.xls

Unconfined compressive strength

Initial length, H_i (mm) : 97.91 Initial volume, V_i (cm³) : 204 Initial area, A_i (cm²) : 20.84 Rate of strain (mm/min) : 1.14
Final length, H_f (mm) : 95.96 Final volume, V_f (cm³) : 204 Final area, A_f (cm²) : 21.26

No.	Data		Deformation	Area	Strength, U_c	Test results
	ΔL (0.01mm)	F_a (N)	$\Delta H/H_i$ (%)	(cm ²)	(kPa)	
1	5	0.0	0.00%	20.64	0	Shear strength : U_c (kPa) : 636 $\Delta H/H_i$ (%) : 0.87 %
2	20	276.0	0.15%	20.87	132	
3	30	697.0	0.26%	20.89	334	
4	40	987.0	0.36%	20.91	472	
5	50	1146.0	0.46%	20.93	547	
6	60	1237.0	0.56%	20.95	590	
7	70	1290.0	0.66%	20.97	615	
8	80	1334.0	0.77%	21.00	635	
9	90	1337.0	0.87%	21.02	636	
10	100	1336.0	0.97%	21.04	635	
11	110	1314.0	1.07%	21.06	624	Physicals characteristics : Initial water content : 38.56 % Wet unit weight : 1810 kg/m ³ Dry unit weight : 1306 kg/m ³ Final water content : 36.62 %
12	120	1287.0	1.17%	21.08	610	
13	130	1243.0	1.28%	21.10	589	
14	140	1194.0	1.38%	21.13	565	
15	150	1131.0	1.48%	21.15	535	
16	160	1045.0	1.58%	21.17	494	
17	170	1003.0	1.69%	21.19	473	
18	180	977.0	1.79%	21.21	461	
19	190	952.0	1.89%	21.24	448	
20	200	923.0	1.99%	21.26	434	

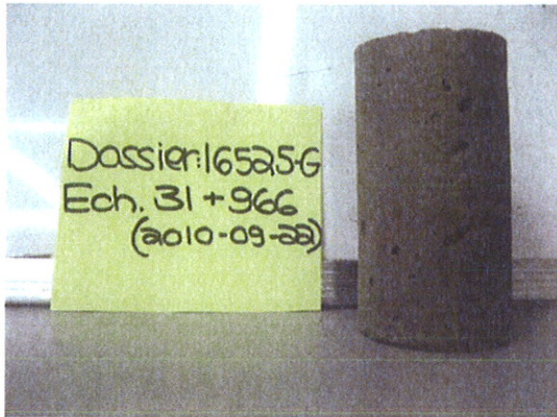


Remarks :

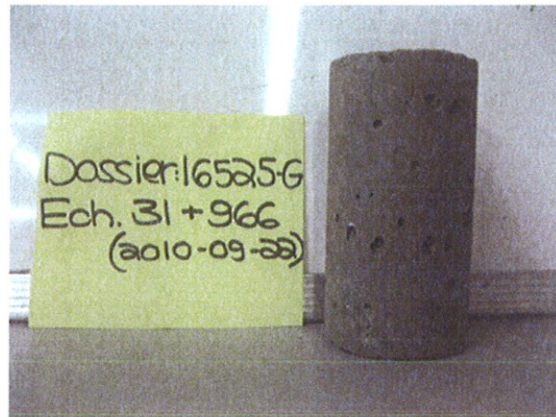
Initial ratio (height / diameter) = 1.9

Tested by : A. Bustamante, ing jr.
date : 2011-02-18

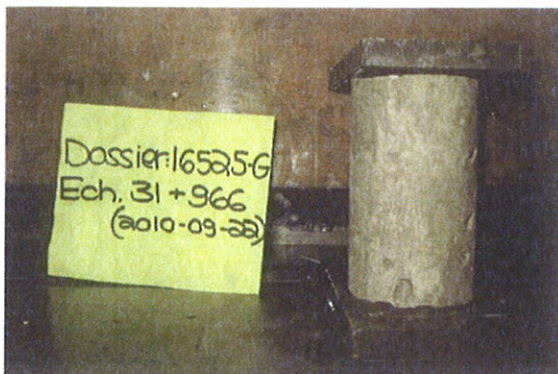
Approved by : Hélène Bilodeau, ing
date : 2011-02-21



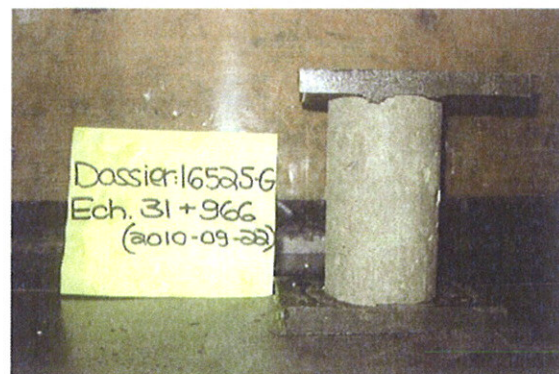
Photograph No. 37



Photograph No. 38



Photograph No. 39

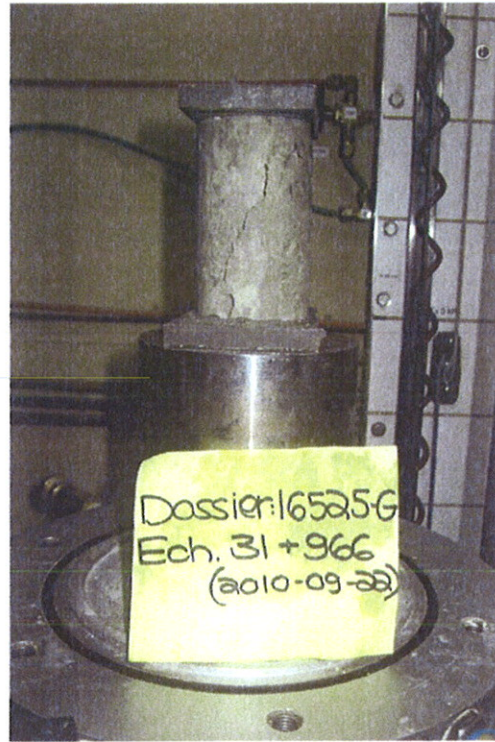


Photograph No. 40

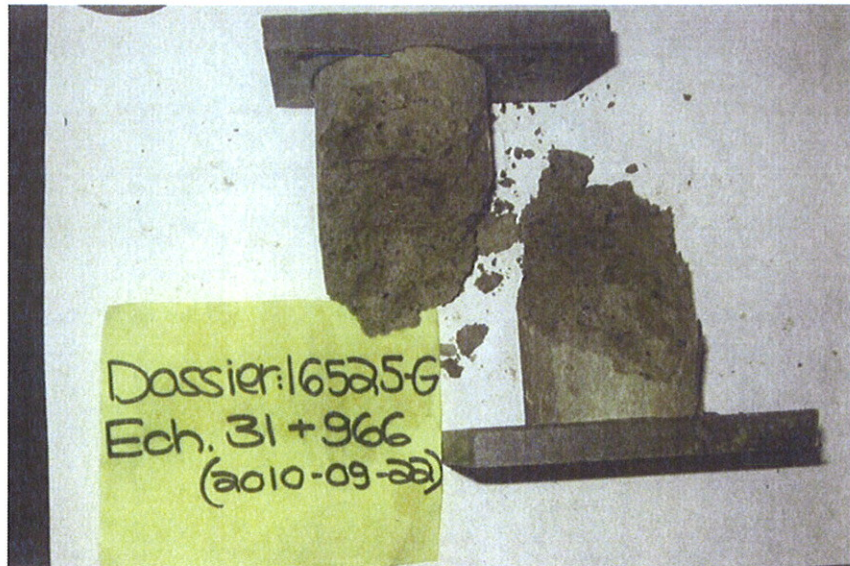
Photographs Nos. 37 at 40 : Sample 31+966 – Before compressive test.



Photograph No. 41



Photograph No. 42



Photograph No. 43

Photographs Nos. 41 at 43 : Sample 31+966 – After compressive test.

Bay Goose Construction
Laboratory Report - CSB

APPENDIX B: QC Permeability Tests on CSB Samples 2010



FILE No : 16525-G

CLIENT : Inquip Associates inc.

PROJECT Bay Goose Nunavut

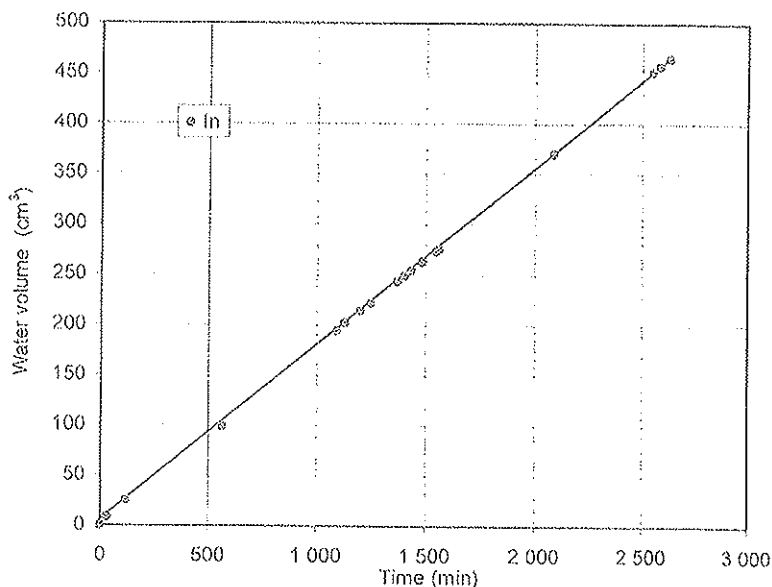
SAMPLE No : CSB/PLUG
(2010-09-05)

FILE : 16525-G-CSBP.KTX

VOLUMETRIC CHARACTERISTICS				PHYSICAL PARAMETERS				PHYSICAL PROPERTIES	
	State	Initial	Final		State	Initial	Saturat.	Perm.	
Diameter of specimen	mm	98.8	98.8	Water content, w	%	21.34	28.77	28.77	D_{RS}
Height of specimen	mm	119.6	119.6	Dry unit weight, ρ_d	kg/m ³	1505	1502	1502	$\rho_{d\ max}$
Cross section of specimen	cm ²	76.7	76.7	Deg. of saturation, S_r	%	72	97	97	W_{opt}
Volume of specimen	cm ³	917	917	Porosity, n	1/1	0.445	0.446	0.446	
Wet weight	g	1671.69	1774.0	Void ratio, e	1/1	0.802	0.806	0.805	
Dry weight	g		1377.7						
Water content, w	%	21.34	28.77						

TEST CONDITIONS				WATER CONTENT				APPARATUS AND METHOD	
	State	Consol.	Saturat.	Perm.		State	Initial	Final	
Cell pressure	kPa	10	510	525		Type	Auxil.	Total	
Top back-pressure	kPa	5	505	505		Tare no		C-44	
Base differential	cm water	0	0	100		Wet weight		2204.0	1671.7
Effective pressure	kPa	5	5	15		Dry weight		1807.6	1377.7
Hydraulic gradient	1/1	0	0	8.4		Tare weight		430.0	
						w %		28.77	21.34
									Water temp.: 20° C

EXPERIMENTAL DATAS				
Date	Hour	dt	Water volume (cm ³)	
mm-jj	hh:mm	min	In	Out
03-21	14:12	0	0.0	
	14:43	31	8.4	
	16:12	120	25.2	
	23:40	568	99.2	
03-22	08:26	1 094	194.5	
	09:03	1 131	202.2	
	10:16	1 204	214.2	
	11:05	1 253	222.0	
	13:08	1 376	243.7	
	13:40	1 408	249.0	
	14:10	1 438	254.3	
	15:00	1 488	262.6	
	16:02	1 550	273.0	
	16:17	1 565	275.5	
03-23	01:00	2 088	370.2	
	08:46	2 554	451.7	
	09:18	2 586	457.6	
	10:06	2 634	465.7	



Material type: Soil - cement - bentonite
 Specimen type: Intact
 Consistency: P₆₀: mm
 P_p: kg/cm²

Remarks :

This test was carried out with a commercial drinking water.
 The coefficient of permeability was measured only with the water going in the sample.

ND : No determined

* : Estimated value

TEST RESULTS		
Initial dry unit weight	1505	kg/m ³
Initial water content	21.34	%
Initial degree of saturation	72	%
Coefficient of permeability	4.5E-06	cm/s
Hydraulic gradient applied	8.38	1/1
Tested by : A. Bustamante, ing. jr.		
Approved by : Hélène Bilodeau, ing.		
Date : 2011-03-25		



Qualitas

HYDRAULIC CONDUCTIVITY IN A FLEXIBLE WALL PERMEAMETER

ASTM D5084-03

FILE No. : 16525-G

CLIENT : Inquip Associates inc.

PROJECT Bay Goose Nunavut

SAMPLE No. : 31+800

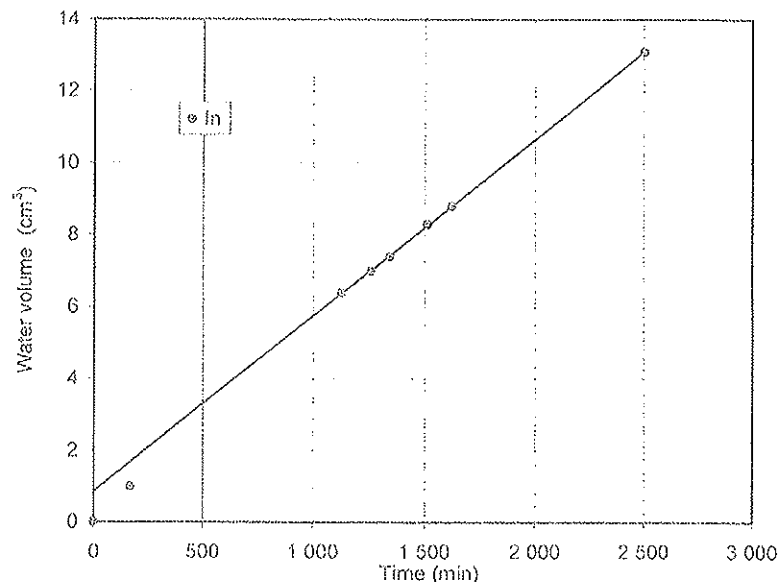
(2010-09-16)

FILE : 16525-G-31+800.KTX

VOLUMETRIC CHARACTERISTICS				PHYSICAL PARAMETERS				PHYSICAL PROPERTIES	
	State	Initial	Final		State	Initial	Saturat.	Perm.	
Diameter of specimen	mm	52.0	52.0	Water content, w	%	42.74	43.20	43.20	D_{RS}
Height of specimen	mm	88.0	88.0	Dry unit weight, ρ_d	kg/m ³	1251	1247	1247	$\rho_d \max$
Cross section of specimen	cm ²	21.2	21.2	Deg. of saturation, S_r	%	100	100	100	W_{opt}
Volume of specimen	cm ³	187	187	Porosity, n	1/1	0.539	0.540	0.540	
Wet weight	g	332.08	333.2	Void ratio, e	1/1	1.168	1.175	1.175	
Dry weight	g		232.6						
Water content, w	%	42.74	43.20						

TEST CONDITIONS					WATER CONTENT				APPARATUS AND METHOD	
	State	Consol.	Saturat.	Perm.		State	Initial	Final	Initial	
Cell pressure	kPa	10	510	530		Type	Auxil.	Total	Total	Cell : Tx-50B
Top back-pressure	kPa	5	505	505		Tare no		Q-6		Unity : 3
Base differential	cm eau	0	0	150		Wet weight		350.1	332.1	Membr. : 0.4 mm
Effective pressure	kPa	5	5	18		Dry weight		249.6	232.6	Number : 2
Hydraulic gradient	1/1	0	0	17.1		Tare weight		17.0		Sequence : CSK
						w %		43.20	42.74	Water temp. : 20° C

EXPERIMENTAL DATAS				
Date	Hour	dl	Water volume (cm ³)	
mm-jj	hh:mm	min	In	Out
03-29	13:23	0	0.0	
	16:12	169	1.0	
03-30	08:12	1 129	6.4	
	10:27	1 264	7.0	
	11:49	1 346	7.4	
	14:37	1 514	8.3	
	16:27	1 624	8.8	
03-31	07:08	2 505	13.1	



Material type : Soil - cement - bentonite

Specimen type : Intact

Consistency :

P_{100} : mm
 P_p : kg/cm²

Remarks :

This test was carried out with a commercial drinking water.

The coefficient of permeability was measured only with the water going in the sample.

ND : No determined

* : Estimated value

TEST RESULTS

Initial dry unit weight	1251	kg/m ³
Initial water content	42.74	%
Initial degree of saturation	100	%
Coefficient of permeability	2.2E-07	cm/s
Hydraulic gradient applied	17.11	1/1

Tested by : A. Bustamante, ing. jr.
 Approved by : H          , ing.

[Signature]

Date : 2011-04-01

FILE No. : 16525-G

CLIENT : Inquip Associates inc.

PROJECT : Bay Goose Nunavut

SAMPLE No. : 31+844

(2010-09-19)

FILE : 16525-31+844.KTX

VOLUMETRIC CHARACTERISTICS				PHYSICAL PARAMETERS					PHYSICAL PROPERTIES	
	State	Initial	Final		State	Initial	Saturat.	Perm.		
Diameter of specimen	mm	52.0	51.9	Water content , w	%	51.29	52.76	52.76	D_{RS}	2.72*
Height of specimen	mm	100.8	100.6	Dry unit weight, ρ_d	kg/m ³	1112	1114	1114	$\rho_{d\ max}$	
Cross section of specimen	cm ²	21.2	21.1	Deg. of saturation, S_r	%	97	100	100	W_{opt}	
Volume of specimen	cm ³	214	213	Porosity, n	1/1	0.590	0.589	0.589		
Wet weight	g	358.16	361.6	Void ratio, e	1/1	1.439	1.435	1.435		
Dry weight	g	236.7								
Water content, w	%	51.29	52.76							

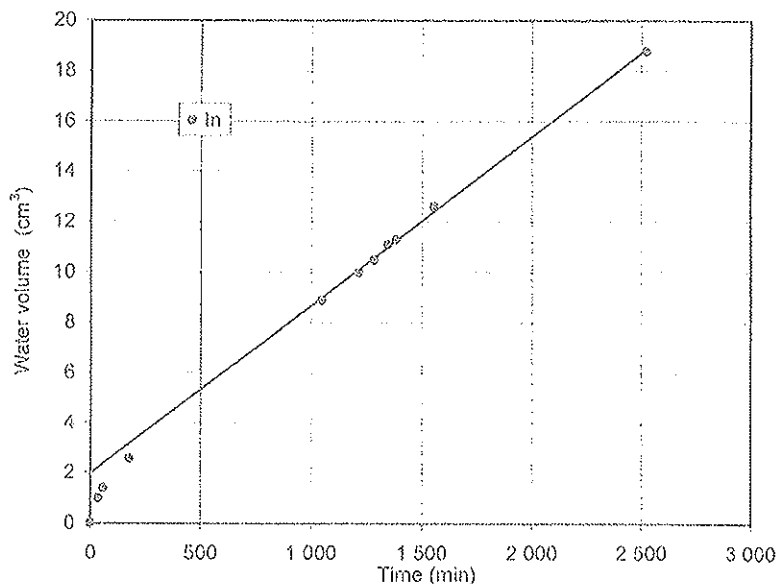
TEST CONDITIONS					WATER CONTENT				APPARATUS AND METHOD	
	State	Consol.	Saturat.	Perm.	State	Initial	Final	Initial		
Cell pressure	kPa	10	510	530	Type	Auxil.	Total	Total	Cell :	Tx-50B
Top back-pressure	kPa	5	505	505	Tare no		Q-31		Unity :	2
Base differential	cm eau	0	0	200	Wet weight		378.5	358.2	Membr. :	0.4 mm
Effective pressure	kPa	5	5	15	Dry weight		253.6	236.7	Number :	2
Hydraulic gradient	1/1	0	0	19.9	Tare weight		16.9		Sequence :	CSK
					w %		52.76	51.29	Water temp. :	20° C

EXPERIMENTAL DATAS				
Date	Hour	dt	Water volume (cm ³)	
mm-jj	hh:mm	min	In	Out
03-22	14:42	0	0.0	
	15:18	36	1.0	
	15:41	59	1.4	
	17:43	181	2.6	
03-23	08:10	1 048	8.9	
	10:57	1 215	10.0	
	12:08	1 286	10.5	
	13:10	1 348	11.1	
	13:48	1 386	11.3	
	16:40	1 558	12.6	
03-24	08:48	2 526	18.8	

The graph displays the relationship between Time (min) and Water volume (cm³). The data points are as follows:

Time (min)	Water volume (cm ³)
0	0.0
100	1.0
150	1.4
180	2.6
1048	8.9
1215	10.0
1286	10.5
1348	11.1
1386	11.3
1558	12.6
2526	18.8

The point at (480, 16) is highlighted with a box and labeled 'In'.



Materiél type : Soil - cement - bentonite

Specimen type : Intact

Consistency :

 P_{100} :

mm

 P_p :

 kg/cm²

Remarks :

This test was carried out with a commercial drinking water.

The coefficient of permeability was measured only with the water going in the sample.

ND : No determined

* : Estimated value

TEST RESULTS

Initial dry unit weight	1112	kg/m ³
Initial water content	51.29	%
Initial degree of saturation	97	%

Coefficient of permeability	2.6E-07	cm/s
Hydraulic gradient applied	19.95	1/1

 Tested by : A. Bustamante, ing. jr.
 Approved by : Héliène Bilodeau, ing.

Date : 2011-04-01

FILE No : 16525-G
 CLIENT : Inquip Associates inc.
 PROJECT : Bay Goose Nunavut

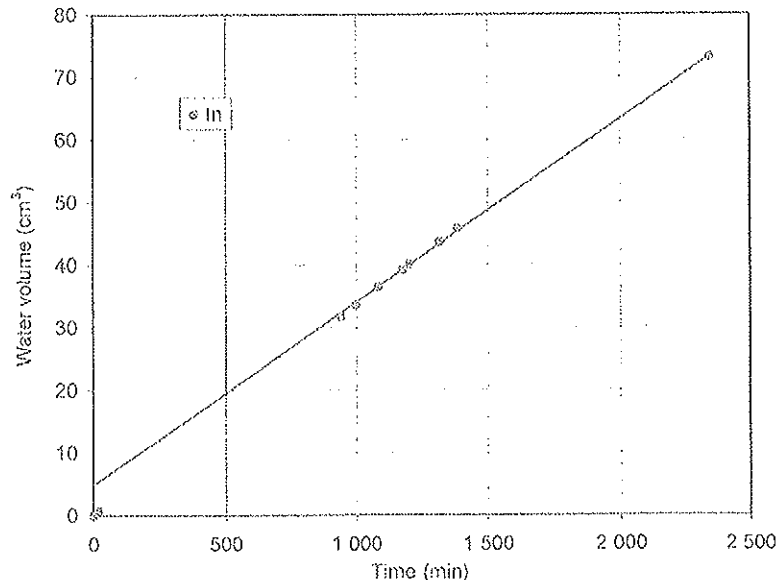
SAMPLE No : 31+944
 (2010-09-21)

FILE : 16525-G-31-944.KTX

VOLUMETRIC CHARACTERISTICS				PHYSICAL PARAMETERS				PHYSICAL PROPERTIES	
	State	Initial	Final		State	Initial	Saturat.	Perm.	
Diameter of specimen	mm	51.8	51.7	Water content, w	%	36.27	38.19	38.19	D_{RS}
Height of specimen	mm	95.2	95.0	Dry unit weight, ρ_d	kg/m ³	1343	1330	1330	ρ_d^{max}
Gross section of specimen	cm ²	21.1	21.0	Deg. of saturation, S_r	%	97	100	100	W_{out}
Volume of specimen	cm ³	201	200	Porosity, n	1/1	0.505	0.509	0.509	
Wet weight	g	361.93	367.0	Void ratio, e	1/1	1.020	1.039	1.039	
Dry weight	g	265.6							
Water content, w	%	36.27	38.19						

TEST CONDITIONS				WATER CONTENT				APPARATUS AND METHOD	
	State	Consol.	Saturat.	Perm.		State	Initial	Final	
Cell pressure	kPa	10	510	525		Type	Auxil.	Total	Cell : Tx-50A
Top Back-pressure	kPa	5	505	505		Tare no		Q-48	Unity : 2
Base differential	cm water	0	0	150		Wet weight		384.0	Membr. : 0.4 mm
Effective pressure	kPa	5	5	13		Dry weight		282.6	Number : 2
Hydraulic gradient	1/1	0	0	15.8		Tare weight		17.0	Sequence : CSK
						w %		38.19	Water temp.: 20° C

EXPERIMENTAL DATAS				Water volume (cm ³)
Date	Hour	dt	Water volume (cm ³)	
min-ij	hh:mm	min	In	
02-07	16:55	0	0.0	
	17:15	20	0.7	
02-08	8:37	942	31.7	
	9:34	999	33.6	
	11:01	1 086	36.5	
	12:33	1 178	39.2	
	13:00	1 205	40.1	
	14:53	1 318	43.6	
02-09	16:03	1 388	45.8	
	8:00	2 345	73.1	



Materiel type: Soil - cement - bentonite
 Specimen type: Intact
 Consistency: P60: mm
 PP: kg/cm²

Remarks :
 This test was carried out with a commercial drinking water.
 The coefficient of permeability was measured only with the water going in the sample.

ND : No determinated * : Estimated value

TEST RESULTS		
Initial dry unit weight	1343	kg/m ³
Initial water content	36.27	%
Initial degree of saturation	97	%
Coefficient of permeability	1.5E-06	cm/s
Hydraulic gradient applied	15.83	1/1
Tested by : A. Bustamante, ing. jr. Approved by : H����������, ing.		
Date : 2011-02-10		

FILE No. : 16525-G

CLIENT : Inquip Associates inc.

PROJECT Bay Goose Nunavut

SAMPLE No. : 31+966

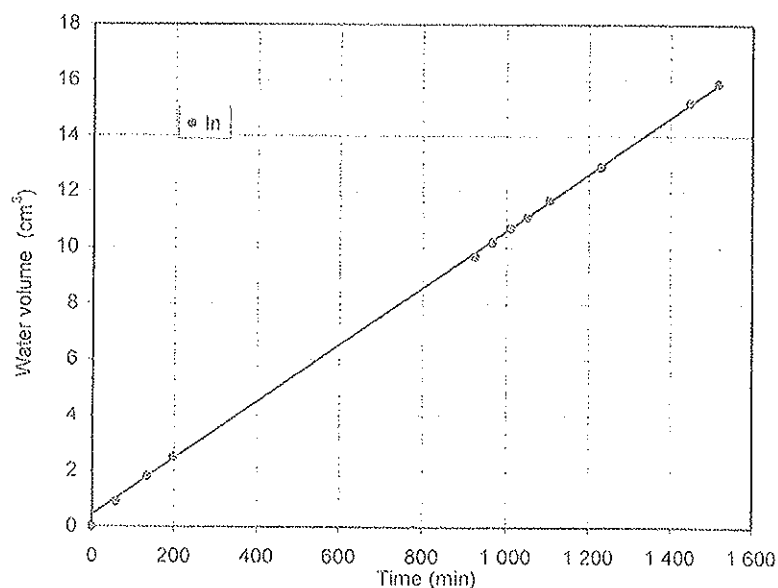
(2010-09-22)

FILE : 16525-G-31+966.KTX

VOLUMETRIC CHARACTERISTICS				PHYSICAL PARAMETERS				PHYSICAL PROPERTIES	
	State	Initial	Final		State	Initial	Saturat.	Perm.	
Diameter of specimen	mm	51.5	51.5	Water content, w	%	39.39	40.61	40.61	D_{rs} 2.72 *
Height of specimen	mm	77.0	77.0	Dry unit weight, ρ_d	kg/m ³	1289	1289	1289	$\rho_{d\max}$
Cross section of specimen	cm ²	20.8	20.8	Deg. of saturation, S_r	%	97	100	100	W_{opt}
Volume of specimen	cm ³	160	160	Porosity, n	1/1	0.525	0.525	0.525	
Wet weight	g	287.93	290.4	Void ratio, e	1/1	1.104	1.105	1.105	
Dry weight	g	206.6							
Water content, w	%	39.39	40.61						

TEST CONDITIONS					WATER CONTENT				APPARATUS AND METHOD
	State	Consol.	Saturat.	Perm.	State	Initial	Final	Initial	
Cell pressure	kPa	10	510	530	Type	Auxil.	Total	Total	Cell : Tx-50B
Top back-pressure	kPa	5	505	505	Tare no		Q-25		Unity : 2
Base differential	cm eau	0	0	150	Wet weight		307.2	287.9	Membr. : 0.4 mm
Effective pressure	kPa	5	5	18	Dry weight		223.3	206.6	Number : 2
Hydraulic gradient	1/1	0	0	19.5	Tare weight		16.8		Sequence : CSK
					w %		40.61	39.39	Water temp. : 20° C

EXPERIMENTAL DATAS				
Date	Hour	dt	Water volume (cm ³)	
mm-jj	hh:mm	min	In	Out
03-27	16:42	0	0.0	
	17:41	59	0.9	
	18:57	135	1.8	
	20:00	198	2.5	
03-28	08:08	926	9.7	
	08:50	968	10.2	
	09:33	1 011	10.7	
	10:14	1 052	11.1	
	11:08	1 106	11.7	
	13:14	1 232	12.9	
	16:51	1 449	15.2	
	18:00	1 518	15.9	



Matériel type : Soil - cement - bentonite

Specimen type : Intact

Consistency :

 P_{100} :

mm

 P_p :

 kg/cm²

Remarks :

This test was carried out with a commercial drinking water.

The coefficient of permeability was measured only with the water going in the sample.

TEST RESULTS	
Initial dry unit weight	1289 kg/m ³
Initial water content	39.39 %
Initial degree of saturation	97 %
Coefficient of permeability	4.2E-07 cm/s
Hydraulic gradient applied	19.54 1/1
Tested by : A. Bustamante, ing. jr.	
Approved by : Hélène Bilodeau, ing.	
Date : 2011-04-01	

ND : No determined

* : Estimated value

FILE No : 16525-G

CLIENT : Inquip Associates inc.

PROJECT : Bay Goose Nunavut

SAMPLE No : 32+080

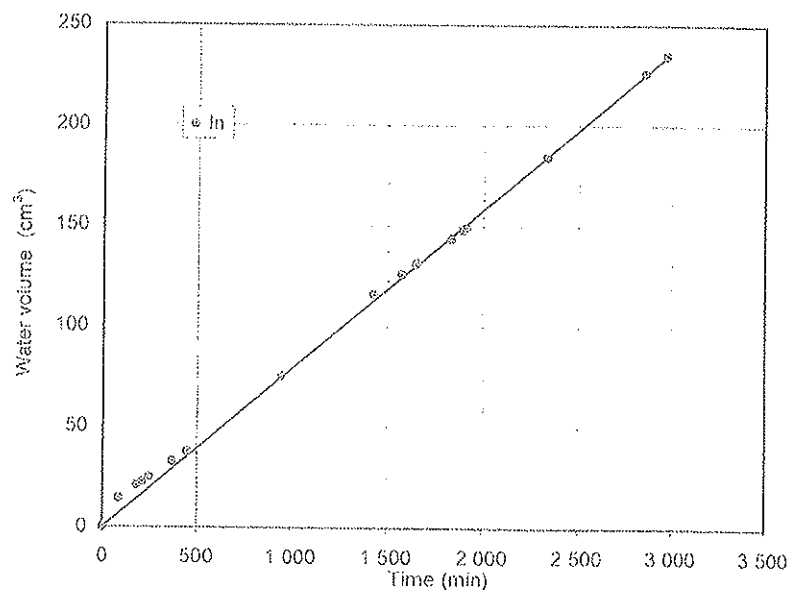
(2010-09-24)

FILE : 16525-G-32+080.KTX

VOLUMETRIC CHARACTERISTICS				PHYSICAL PARAMETERS				PHYSICAL PROPERTIES	
	State	Initial	Final		State	Initial	Saturat.	Perm.	
Diameter of specimen	mm	101.5	101.5	Water content, w	%	34.84	37.42	37.42	D_{RS}
Height of specimen	mm	117.2	117.2	Dry unit weight, ρ_d	kg/m ³	1346	1344	1344	ρ_d^{max}
Cross section of specimen	cm ²	80.9	80.9	Deg. of saturation, S_r	%	93	100	100	W_{opt}
Volume of specimen	cm ³	948	948	Porosity, n	1/1	0.503	0.504	0.504	
Wet weight	g	1718.53	1751.3	Void ratio, e	1/1	1.014	1.018	1.018	
Dry weight	g		1274.5						
Water content, w	%	34.84	37.42						

TEST CONDITIONS				WATER CONTENT				APPARATUS AND METHOD	
	State	Consol.	Saturat.	Perm.		State	Initial	Final	
Cell pressure	kPa	10	510	525		Type	Auxil.	Total	Cell : K-3
Top back-pressure	kPa	0	500	505					Unity : 2
Base differential	cm water	0	0	150		Tare no		C-15	Membr. : 0.4 mm
Effective pressure	kPa	10	10	13		Wet weight		2316.1	Number : 1
Hydraulic gradient	1/1	0	0	12.8		Dry weight		1839.3	Sequence : CSK
						Tare weight		564.8	Water temp. : 20° C
						w %		37.42	
								34.84	

EXPERIMENTAL DATAS				
Date	Hour	dt	Water volume (cm ³)	
mm-jj	hh:mm	min	In	Out
03-16	08:34	0	0.0	
	10:02	88	14.2	
	11:37	183	20.9	
	12:05	211	22.6	
	12:43	249	25.0	
	14:45	371	32.7	
03-17	16:04	450	37.8	
	00:20	946	75.5	
	08:24	1 430	116.0	
	10:49	1 575	126.1	
	12:05	1 651	131.3	
	15:06	1 832	143.7	
03-18	16:07	1 893	147.9	
	16:26	1 912	149.3	
	23:30	2 336	184.5	
	08:10	2 856	226.2	
	10:04	2 970	234.8	



Materiel type : Soil - cement - bentonite

Specimen type : Intact

Consistency :

 P_{100} : mm
 P_p : kg/cm²

Remarks :

This test was carried out with a commercial drinking water.

The coefficient of permeability was measured only with the water going in the sample.

ND : No determined

* : Estimated value

TEST RESULTS

Initial dry unit weight	1346	kg/m ³
Initial water content	34.84	%
Initial degree of saturation	93	%
Coefficient of permeability	1.3E-06	cm/s
Hydraulic gradient applied	12.83	1/1

Tested by : A. Bustamante, ing. jr.

Approved by : Hélène Bilodeau, ing.

Date : 2011-03-25

Bay Goose Construction
Laboratory Report - CSB

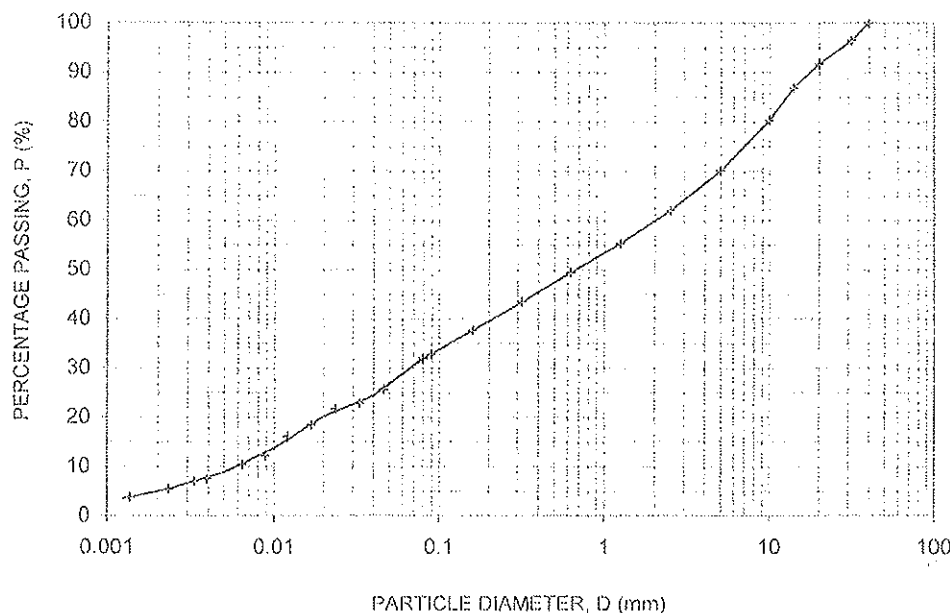
APPENDIX C: QC Gradation and Permeabililty Tests on SB Samples 2010

FILE : 16525-G
 CLIENT : Inquip Associates inc.
 PROJECT : Bay Goose Nunavut

 SAMPLE : 31+028
 (2010-09-02)

 Sample no. : 31+028
 File no. : 31+028.GRN

Silty gravelly sand, traces of clay.		SIEVE (mm)	RETAINED MASSES		PERCENTAGES		PERCENT. TOTAL PASSING
			INDIVID.	CUMUL.	RETAINED	PASSING	
SIEVING OF GRAVEL							
METHOD : DRY		112					
Total dry mass (g)	: 4 096	80					
Total mass > 5mm	: 1 227	56					
Percentage retained on 5mm	: 30.0	40		0	0.0		100.0
Maximum diameter (mm)	:	31.5		144	3.5		96.5
		20		339	8.3		91.7
		14		539	13.2		86.8
		10		806	19.7		80.3
		5		1 227	30.0		70.0
		Pan		4 096			
WATER CONTENT, w (%) Reception		SIEVING OF SAND					
Fraction passing sieve	: None	2.50		23.2	11.4	88.6	62.1
Total wet weight	: 2 932.5	1.25		42.8	21.0	79.0	55.3
Total dry weight	: 2 532.7	0.63		59.9	29.5	70.5	49.4
Tare no EA-03	: 227.1	0.32		77.3	38.0	62.0	43.4
		0.16		94.0	46.2	53.8	37.7
WATER CONTENT, w (%)	: 17.34	0.08		110.7	54.4	45.6	31.9
		Pan		203.4			
METHOD : DRY		HYDROMETER TEST					
Fraction passing sieve	: 5	D (mm)	Time (min)	Temper. (C)	Reading R	L (cm)	
Mass of wet soil tested (g)	:	0.0896	0.25	22.1	17.8	11.9	32.7
Mass of dry soil tested (g)	: 48.10	0.0464	1		14.7	12.7	25.6
Specific gravity	: 2.72*	0.0332	2		13.5	13.0	22.8
Percentage total passing	: 70.0	0.0236	4	22.1	13.0	13.1	21.7
Hydrometer 151H no	3742	0.0169	8	22.1	11.6	13.5	18.5
Mass of hydrometer (g)	: 53.79	0.0121	16	21.8	10.6	13.8	16.0
L = A.R + B	A (1/cm) : -0.27	0.0089	31	21.4	9.0	14.2	12.2
	B (cm) : 17.57	0.0065	60	21.1	8.3	14.4	10.4
C = D + 0.2 (20-T)	D (1/1) : 4.0	0.0040	164	21.0	7.0	14.7	7.4
Scale factor	F (1/1) : 1.00	0.0033	234	21.1	6.8	14.8	7.0
		0.0023	475	21.3	6.1	15.0	5.4
		0.0014	1 433	20.6	5.5	15.1	3.7
Defloculant :	5 g hexametaphosphate / liter						



DIAMETER (mm)	PERCENT. PASSING
20	91.7
5	70.0
0.4	45.4
0.08	31.9
0.002	4.9
0.0060	10
0.0695	30
2.0238	60
CU :	335.1
CC :	0.4
USC :	SM
MF :	
Csl :	
Symbol :	SG31.3A1
Remarks :	*Estimated value
Tested by :	M. Naili 2011-03-02
Approved by :	Hélène Bilodeau, ing.
Date :	2011-03-07



FILE No : 16525-G

CLIENT : Inquip Associates inc.

PROJECT : Bay Goose Nunavut

SAMPLE No : 31+028

(2010-09-02)

FILE : 16525-31+028.KTX

VOLUMETRIC CHARACTERISTICS				PHYSICAL PARAMETERS				PHYSICAL PROPERTIES	
	State	Initial	Final	State	Initial	Saturat.	Perm.		
Diameter of specimen	mm	102.8	101.2	Water content, w	%	16.91	14.55	14.44	D_{rs} $P_{et\ max}$ W_{out}
Height of specimen	mm	115.9	114.1	Dry unit weight, ρ_d	kg/m ³	1858	1943	1947	
Cross section of specimen	cm ²	83.0	80.4	Deg. of saturation, S_r	%	100	100	100	
Volume of specimen	cm ³	962	917	Porosity, n	1/1	0.315	0.284	0.282	
Wet weight	g	2093.34	2047.0	Void ratio, e	1/1	0.460	0.396	0.393	
Dry weight	g	1790.6							
Water content, w	%	16.91	14.32						

TEST CONDITIONS					WATER CONTENT				APPARATUS AND METHOD	
	State	Consol.	Saturat.	Perm.	State	Initial	Final	Initial		
Cell pressure	kPa	10	510	525	Type	Auxil.	Total	Total	Cell :	K-1
Top Back-pressure	kPa	5	505	505	Tare no		E-15		Unity :	3
Base differential	cm water	0	0	150	Wet weight		2469.8	2093.3	Membr. :	0.4 mm
Effective pressure	kPa	5	5	13	Dry weight		2213.3	1790.6	Number :	2
Hydraulic gradient	1/1	0	0	13.2	Tare weight		422.7		Sequence :	CSK
					w %		14.32	16.91	Water temp. :	20° C

EXPERIMENTAL DATAS				
Date	Hour	dt	Water volume (cm ³)	
mm-jj	hh:mm	min	In	Out
02-25	8:01	0	0.0	0.0
	13:58	357	0.1	0.6
	16:13	492	0.2	0.8
02-28	7:28	4 287	1.9	6.1

The graph plots Water volume (cm³) on the y-axis (0.0 to 7.0) against Temps (min) on the x-axis (0 to 5000). Two data series are shown: 'In' (circles) and 'Out' (triangles). Both series show a linear increase in water volume over time. The 'Out' series has a steeper slope than the 'In' series.

Temps (min)	In (cm ³)	Out (cm ³)
0	0.0	0.0
~357	0.1	0.6
~492	0.2	0.8
4287	1.9	6.1

Materiel type: Soil-bentonite (Silty gravelly sand, traces of clay)

Specimen type: Compacted

Consistency:

P₆₀:

mm

P_p:kg/cm²

Remarks:

This test was carried out with a commercial drinking water.

Sample was manually compacted in the mold at its reception water content.

TEST RESULTS

Initial dry unit weight	1858	kg/m ³
Initial water content	16.91	%
Initial degree of saturation	100	%
Coefficient of permeability	1.4E-08	cm/s
Hydraulic gradient applied	13.19	1/1

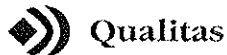
Tested by : A. Bustamante, ing. jr.

Approved by : Hélène Bilodeau, ing.

ND : No determined

* : Estimated value

Date : 2011-03-02



GRAIN SIZE ANALYSIS OF INORGANIC SOILS

NQ 2501-025 / LC 21-040

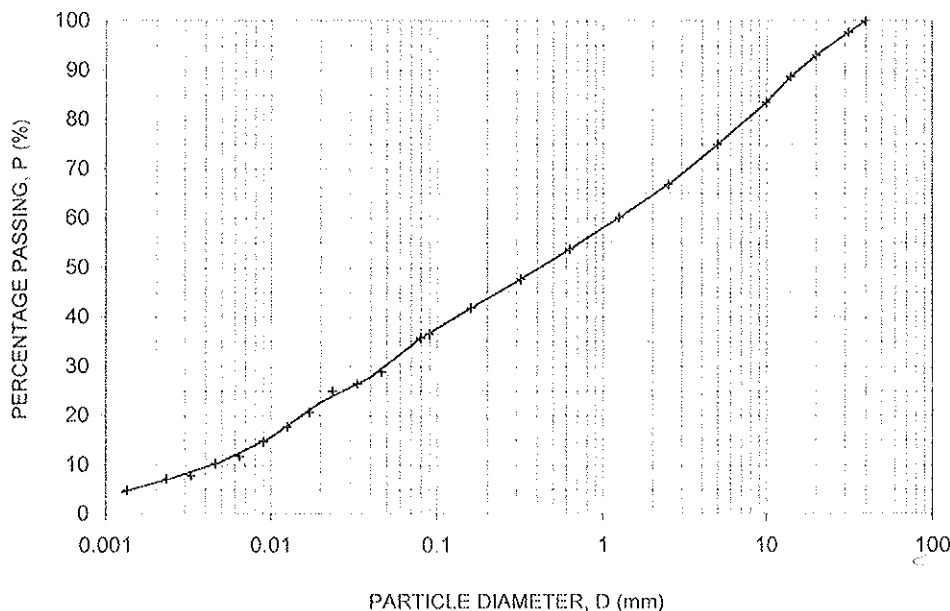
FILE : 16525-G
CLIENT : Inquip Associates inc.
PROJECT : Bay Goose Nunavut

SAMPLE : 31+228
(2010-08-30)

Sample no. : 31+228

File no. : 31+228.GRN

Gravelly silty sand, traces of clay.			SIEVE (mm)	RETAINED MASSES		PERCENTAGES		PERCENT. TOTAL PASSING
				INDIVID.	CUMUL.	RETAINED	PASSING	
			SIEVING OF GRAVEL					
METHOD : DRY			112					
Total dry mass (g)	:	2 188	80					
Total mass > 5mm	:	550	56					
Percentage retained on 5mm	:	25.1	40		0	0.0		100.0
Maximum diameter (mm)	:		31.5		51	2.3		97.7
			20		152	6.9		93.1
			14		248	11.3		88.7
			10		362	16.5		83.5
			5		550	25.1		74.9
			Pan		2 188			
WATER CONTENT, w (%) Reception			SIEVING OF SAND					
Fraction passing sieve	:	None	2.50		22.6	10.8	89.2	66.8
Total wet weight	:	3 100.0	1.25		41.2	19.7	80.3	60.1
Total dry weight	:	2 618.1	0.63		59.1	28.3	71.7	53.6
Tare no C-42	:	429.8	0.32		75.9	36.4	63.6	47.6
			0.16		92.1	44.2	55.8	41.8
WATER CONTENT, w (%)	:	22.02	0.08		109.2	52.4	47.6	35.7
			Pan		208.5			
METHOD : DRY			HYDROMETER TEST					
Fraction passing sieve	:	5	D (mm)	Time (min)	Temper. (C)	Reading R	L (cm)	
Mass of wet soil tested (g)	:		0.0901	0.25	20.9	18.6	11.6	36.5
Mass of dry soil tested (g)	:	47.93	0.0466	1		15.5	12.5	28.9
Specific gravity	:	2.72*	0.0333	2		14.5	12.7	26.4
Percentage total passing	:	74.9	0.0237	4	20.9	13.9	12.9	24.9
Hydrometer 151H no	:	3742	0.0171	8	20.7	12.2	13.4	20.6
Mass of hydrometer (g)	:	53.79	0.0126	15	20.7	11.0	13.7	17.6
L = A.R + B	A (1/cm)	-0.27	0.0090	30	20.7	9.8	14.0	14.7
	B (cm)	17.57	0.0065	60	20.7	8.6	14.3	11.7
C = D + 0.2 (20-T)	D (1/1)	4.0	0.0046	120	20.7	8.0	14.5	10.2
Scale factor	F (1/1)	1.00	0.0033	240	20.7	7.0	14.7	7.8
			0.0023	480	20.5	6.8	14.8	7.2
			0.0014	1 469	19.8	6.0	15.0	4.8
Defloculant : 5 g hexametaphosphate / liter								



DIAMETER (mm)	PERCENT. PASSING
20	93.1
5	74.9
0.4	49.6
0.08	35.7
0.002	6.5
0.0045	10
0.0515	30
1.2378	60
CU :	277.8
CC :	0.5
USC :	SM
MF :	
Csi :	
Symbol :	SL3G3A1
Remarks :	*Estimated value
Tested by :	
M. Naili	2011-02-21
Approved by :	
Hélène Bilodeau, ing.	
Date :	2011-02-22

FILE No. : 16525-G

CLIENT : Inquip Associates inc.

PROJECT : Bay Goose Nunavut

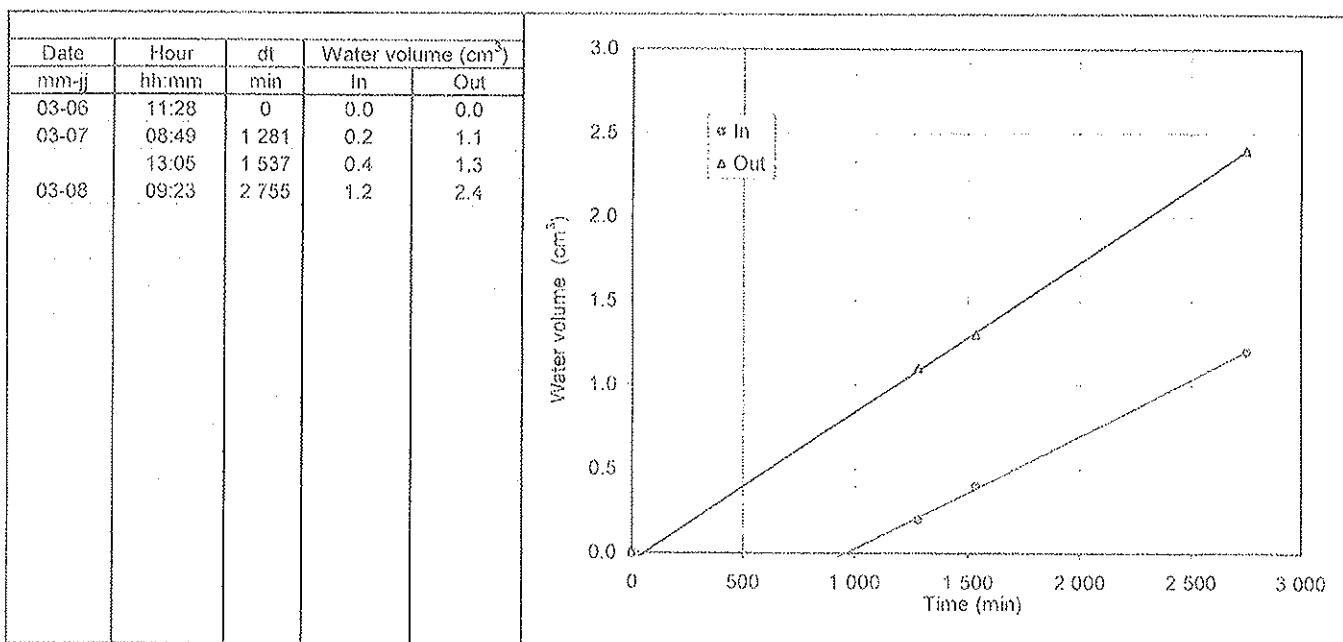
SAMPLE No. : 31+228

(2010-08-30)

FILE : 16525-31+228.KTX

VOLUMETRIC CHARACTERISTICS				PHYSICAL PARAMETERS				PHYSICAL PROPERTIES		
	State	Initial	Final		State	Initial	Saturat.	Perm.		
Diameter of specimen	mm	102.0	100.7	Water content , w	%	18.37	16.45	16.41	D_{RS}	2.72 [*]
Height of specimen	mm	116.0	114.6	Dry unit weight, ρ_d	kg/m ³	1808	1874	1875	$\rho_{d\ max}$	
Cross section of specimen	cm ²	81.7	79.7	Deg. of saturation, S_r	%	100	100	100	W_{opt}	
Volume of specimen	cm ³	948	913	Porosity, n	1/1	0.333	0.309	0.309		
Wet weight	g	2027.75	1993.6	Void ratio, e	1/1	0.500	0.447	0.446		
Dry weight	g		1713.1							
Water content, w	%	18.37	16.38							

TEST CONDITIONS				WATER CONTENT				APPARATUS AND METHOD	
	State	Consol.	Saturat.	Perm.	State	Initial	Final	Initial	
Cell pressure	kPa	10	510	525	Type	Auxil.	Total	Total	Cell : K-3
Top back-pressure	kPa	5	505	505	Tare no		C-40		Unity : 2
Base differential	cm eau	0	0	150	Wet weight		2424.0	2027.8	Membr. : 0.4 mm
Effective pressure	kPa	5	5	13	Dry weight		2143.5	1713.1	Number : 2
Hydraulic gradient	1/1	0	0	13.1	Tare weight		430.4		Sequence : CSK
					w %		16.38	18.37	Water temp. : 20° C



Materiel type : Soil-bentonite (Gravelly silty sand, traces of clay)

Specimen type : Compacted

Consistency : P_{100} : mm
 P_p : kg/cm²

This test was carried out with a commercial drinking water.

Sample was manually compacted in the mold at its reception water content.

ND : no determinated

* : Estimated value

TEST RESULTS		
Initial dry unit weight	1808	kg/m ³
Initial water content	18.37	%
Initial degree of saturation	100	%
Coefficient of permeability	1.2E-08	cm/s
Hydraulic gradient applied	13.13	1/1
Tested by : A. Bustamante, ing. jr.		
Approved by : Hélène Bilodeau, ing.		
Date : 2011-03-09		



Qualitas

GRAIN SIZE ANALYSIS OF INORGANIC SOILS

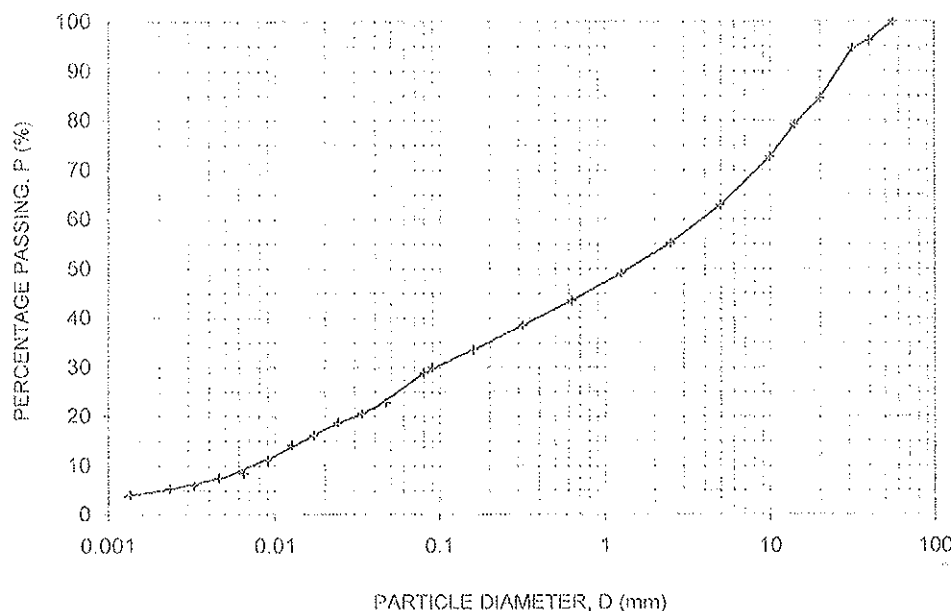
NQ 2501-025 / LC 21-040

FILE : 16525-G
 CLIENT : Inquip Associates inc.
 PROJECT : Bay Goose Nunavut

SAMPLE : 31+328
 (2010-08-29)

Sample no. : 31+328
 File no. : 31+328.GRN

Silty sandy gravel, traces of clay.				SIEVE (mm)	RETAINED MASSES		PERCENTAGES		PERCENT. TOTAL PASSING
					INDIVID.	CUMUL.	RETAINED	PASSING	
SIEVING OF GRAVEL									
METHOD : DRY				112					
Total dry mass (g) : 3 166				80					
Total mass > 5mm : 1 175				56		0	0.0		100.0
Percentage retained on 5mm : 37.1				40		121	3.8		96.2
Maximum diameter (mm) :				31.5		172	5.4		94.6
				20		492	15.5		84.5
				14		660	20.8		79.2
				10		867	27.4		72.6
				5		1 175	37.1		62.9
				Pan		3 166			
WATER CONTENT, w (%) Reception				SIEVING OF SAND					
Fraction passing sieve : None				2.50		27.9	12.3	87.7	55.2
Total wet weight : 4 081.5				1.25		49.9	22.0	78.0	49.0
Total dry weight : 3 598.4				0.63		69.8	30.8	69.2	43.5
Tare no C-36 : 432.2				0.32		87.7	38.7	61.3	38.6
				0.16		106.0	46.8	53.2	33.5
WATER CONTENT, w (%) : 15.26				0.08		122.9	54.2	45.8	28.8
				Pan		226.5			
METHOD : DRY				HYDROMETER TEST					
Fraction passing sieve : 5				D (mm)	Time (min)	Temper. (C)	Reading R	L (cm)	
Mass of wet soil tested (g) :				0.0902	0.25	20.9	18.5	11.7	29.9
Mass of dry soil tested (g) : 48.80				0.0469	1		15.0	12.6	22.8
Specific gravity : 2.72				0.0335	2		13.9	12.9	20.5
Percentage total passing : 62.9				0.0239	4	20.9	13.0	13.1	18.7
Hydrometer 151H no : 3742				0.0172	6	20.7	11.8	13.5	16.2
Mass of hydrometer (g) : 53.79				0.0127	15	20.7	10.8	13.7	14.1
L = A.R + B A (1/cm) : -0.27				0.0091	30	20.7	9.3	14.1	11.1
B (cm) : 17.57				0.0065	60	20.7	8.0	14.5	8.4
C = D + 0.2 (20-T) D (1/1) : 4.0				0.0046	120	20.7	7.5	14.6	7.4
Scale factor F (1/1) : 1.00				0.0033	240	20.7	6.8	14.8	6.0
				0.0023	480	20.5	6.5	14.9	5.3
				0.0014	1 469	19.8	6.0	15.0	4.0
Deflocculant : 5 g hexametaphosphate / liter									



DIAMETER (mm)	PERCENT. PASSING
20	84.5
5	62.9
0.4	40.2
0.08	28.8
0.002	4.9
0.0079	10
0.0957	30
3.8571	60
CU :	487.3
CC :	0.3
USC :	SM
MF :	
Csi :	
Symbol :	GS3L3A1
Remarks :	*Estimated value
Tested by :	M. Naili 2011-02-21
Approved by :	<i>[Signature]</i>
	Hélène Bilodeau, ing.
Date :	2011-02-22

HYDRAULIC CONDUCTIVITY IN A FLEXIBLE WALL PERMEAMETER

ASTM D5084-03

FILE No. : 16525-G

CLIENT : Inquip Associates inc.

PROJECT Bay Goose Nunavut

SAMPLE No. : 31+328

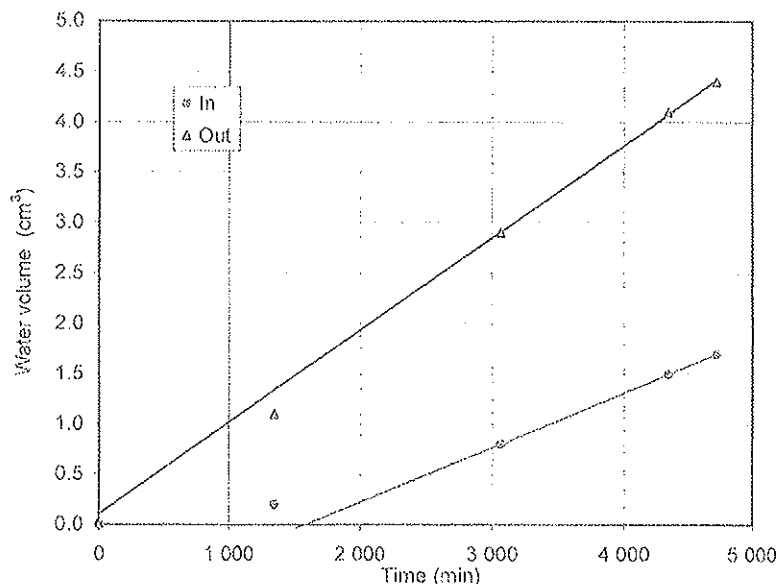
(2010-08-29)

FILE : 16525-31+328.KTX

VOLUMETRIC CHARACTERISTICS				PHYSICAL PARAMETERS				PHYSICAL PROPERTIES	
	State	Initial	Final		State	Initial	Saturat.	Perm.	
Diameter of specimen	mm	102.0	100.7	Water content, w	%	16.23	14.40	14.33	D_{RS}
Height of specimen	mm	116.0	114.5	Dry unit weight, ρ_d	kg/m ³	1878	1948	1951	$\rho_{d\max}$
Cross section of specimen	cm ²	81.7	79.6	Deg. of saturation, S_r	%	99	100	100	W_{opt}
Volume of specimen	cm ³	948	911	Porosity, n	1/1	0.308	0.282	0.280	
Wet weight	g	2068.75	2033.6	Void ratio, e	1/1	0.444	0.392	0.390	
Dry weight	g	1779.9							
Water content, w	%	16.23	14.25						

TEST CONDITIONS					WATER CONTENT				APPARATUS AND METHOD
	State	Consol.	Saturat.	Perm.	State Type	Initial Auxil.	Final Total	Initial Total	
Cell pressure	kPa	10	510	525					Cell : K-1
Top back-pressure	kPa	5	505	505	Tare no		KD		Unity : 2
Base differential	cm eau	0	0	150	Wet weight		2456.5	2068.8	Membr. : 0.4 mm
Effective pressure	kPa	5	5	13	Dry weight		2202.9	1779.9	Number : 2
Hydraulic gradient	1/1	0	0	13.1	Tare weight		423.0		Sequence : CSK
					w %		14.25	16.23	Water temp. : 20° C

Date	Hour	dt	Water volume (cm ³)	
mm-jj	hh:mm	min	In	Out
03-04	08:20	0	0.0	0.0
03-05	06:55	1 355	0.2	1.1
03-06	11:28	3 068	0.8	2.9
03-07	08:49	4 349	1.5	4.1
	15:05	4 725	1.7	4.4



Material type : Soil-bentonite (Silty sandy gravel, traces of clay)

Specimen type : Compacted

Consistency :

P_{100} : mm

P_p : kg/cm²

Remarks :

This test was carried out with a commercial drinking water.

Sample was manually compacted in the mold at its reception water content.

TEST RESULTS

Initial dry unit weight	1878	kg/m ³
Initial water content	16.23	%
Initial degree of saturation	99	%
Coefficient of permeability	1.2E-08	cm/s
Hydraulic gradient applied	13.14	1/1

Tested by : A. Bustamante, ing. jr.
Approved by : Hélène Bilodeau, ing.

Date : 2011-03-09

ND : no determined

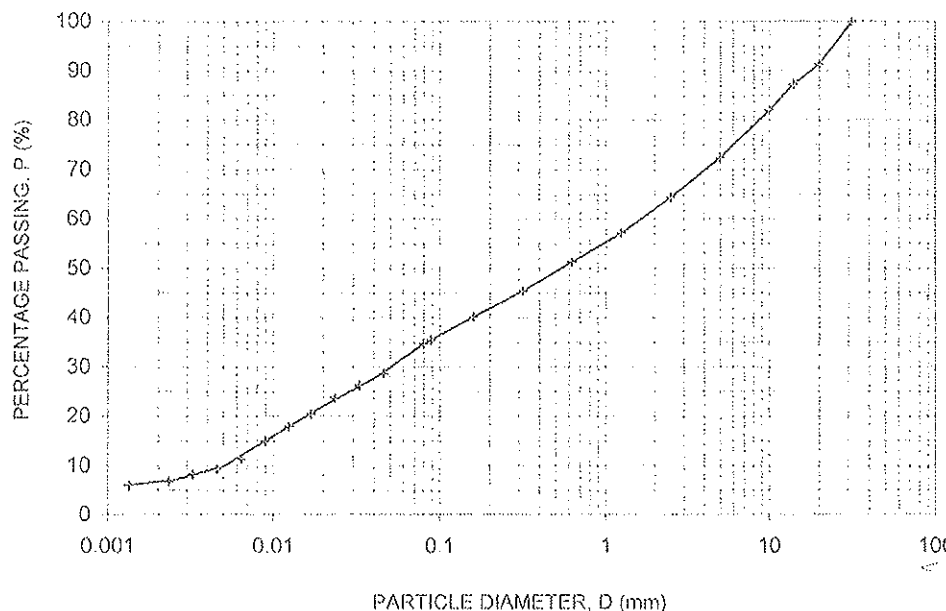
* : Estimated value

FILE : 16525-G
 CLIENT : Inquip Associates inc.
 PROJECT : Bay Goose Nunavut

 SAMPLE : 31+428
 (2010-08-29)

 Sample no. : 31+428
 File no. : 31+428.GRN

Gravelly silty sand, traces of clay.				SIEVE (mm)	RETAINED MASSES		PERCENTAGES		PERCENT. TOTAL PASSING
					INDIVID.	CUMUL.	RETAINED	PASSING	
				SIEVING OF GRAVEL					
METHOD : DRY				112					
Total dry mass (g) : 3 223				80					
Total mass > 5mm : 891				56					
Percentage retained on 5mm : 27.6				40					
Maximum diameter (mm) :				31.5		0	0.0		100.0
				20		279	8.7		91.3
				14		412	12.8		87.2
				10		584	18.1		81.9
				5		891	27.6		72.4
				Pan		3 223			
WATER CONTENT, w (%) Reception				SIEVING OF SAND					
Fraction passing sieve : None				2.50		23.2	11.1	88.9	64.3
Total wet weight : 4 203.7				1.25		44.0	21.1	78.9	57.1
Total dry weight : 3 656.9				0.63		60.9	29.2	70.8	51.2
Tare no C-35 : 434.0				0.32		77.6	37.3	62.7	45.4
				0.16		92.9	44.6	55.4	40.1
WATER CONTENT, w (%) : 16.96				0.08		108.4	52.0	48.0	34.7
				Pan		208.4			
METHOD : DRY				HYDROMETER TEST					
Fraction passing sieve : 5				D (mm)	Time (min)	Temper. (C)	Reading R	L (cm)	
Mass of wet soil tested (g) :				0.0886	0.25	20.9	20.0	11.3	35.4
Mass of dry soil tested (g) : 52.25				0.0459	1		16.9	12.1	28.6
Specific gravity : 2.72				0.0329	2		15.8	12.4	26.2
Percentage total passing : 72.4				0.0235	4	20.9	14.6	12.7	23.6
Hydrometer 151H no 3742				0.0169	8	20.7	13.2	13.1	20.5
Mass of hydrometer (g) : 53.79				0.0125	15	20.7	12.0	13.4	17.8
L = A.R + B A (1/cm) : -0.27				0.0090	30	20.7	10.7	13.8	15.0
B (cm) : 17.57				0.0064	60	20.7	9.0	14.2	11.3
C = D + 0.2 (20-T) D (1/1) : 4.0				0.0046	120	20.7	8.1	14.4	9.3
Scale factor F (1/1) : 1.00				0.0033	240	20.7	7.6	14.6	8.2
				0.0023	480	20.5	7.0	14.7	6.8
				0.0013	1 469	19.8	6.8	14.8	6.0
Defloculant : 5 g hexametaphosphate / liter									



DIAMETER (mm)	PERCENT. PASSING
20	91.3
5	72.4
0.4	47.3
0.08	34.7
0.002	6.6
0.0052	10
0.0523	30
1.6530	60
CU :	318.5
CC :	0.3
USC :	SM
MF :	
Csi :	
Symbol :	SL3G3A1
Remarks :	
*Estimated value	
Tested by :	
M. Naili	2011-02-21
Approved by :	
Hélène Bilodeau, Ing.	
Date :	
2011-02-22	

FILE No : 16525-G

CLIENT : Inquip Associates inc.

PROJECT Bay Goose Nunavut

SAMPLE No : 31+428

(2010-08-29)

FILE : 16525-G-31+428.KTX

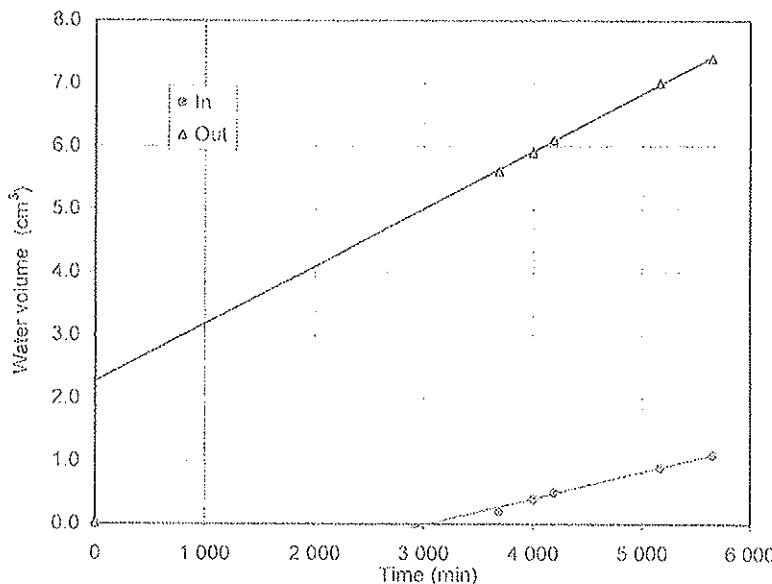
VOLUMETRIC CHARACTERISTICS				PHYSICAL PARAMETERS				PHYSICAL PROPERTIES	
	State	Initial	Final		State	Initial	Saturat.	Perm.	
Diameter of specimen	mm	102.0	99.7	Water content, w	%	17.51	15.71	15.53	D_{RS}
Height of specimen	mm	116.0	113.4	Dry unit weight, ρ_d	kg/m ³	1786	1900	1907	$\rho_{d\max}$
Cross section of specimen	cm ²	81.7	78.1	Deg. of saturation, S_r	%	92	100	100	w_{opt}
Volume of specimen	cm ³	948	885	Porosity, n	1/1	0.341	0.299	0.297	
Wet weight	g	1989.6	1952.9	Void ratio, e	1/1	0.518	0.427	0.422	
Dry weight	g		1693.2						
Water content, w	%	17.51	15.34						

TEST CONDITIONS					WATER CONTENT				APPARATUS AND METHOD
	State	Consol.	Saturat.	Perm.		State	Initial	Final	
Cell pressure	kPa	10	510	525		Type	Auxil.	Total	Cell : K-3
Top back-pressure	kPa	0	500	505		Tare no		C-42	Unity : 3
Base differential	cm water	0	0	150		Wet weight		2382.5	Membr. : 0.4 mm
Effective pressure	kPa	10	10	13		Dry weight		2122.8	Number : 1
Hydraulic gradient	1/1	0	0	13.3		Tare weight		429.7	Sequence : CSK
					w %			15.34	Water temp. : 20° C

EXPERIMENTAL DATAS				
Date	Hour	dt	Water volume (cm ³)	
mm-jj	hh:mm	min	In	Out
03-11	17:18	0	0.0	0.0
03-14	06:50	3 692	0.2	5.6
	12:05	4 007	0.4	5.9
	15:14	4 196	0.5	6.1
03-15	07:29	5 171	0.9	7.0
	15:30	5 652	1.1	7.4

The graph plots Water volume (cm³) on the y-axis (0.0 to 8.0) against Time (min) on the x-axis (0 to 6000). Two data series are shown: 'In' (circles) and 'Out' (triangles). The 'Out' series starts at (0, 0) and increases linearly to (5652, 7.4). The 'In' series starts at (0, 0) and increases very slowly to (5652, 1.1). A legend indicates that circles represent 'In' and triangles represent 'Out'.

Time (min)	Water volume (cm ³) - In	Water volume (cm ³) - Out
0	0.0	0.0
3692	0.2	5.6
4007	0.4	5.9
4196	0.5	6.1
5171	0.9	7.0
5652	1.1	7.4



Material type: Soil - bentonite (Gravelly silty sand, traces of clay)

Specimen type: Compacted

Consistency:

 P_{60} : mm

 P_p : kg/cm²

Remarks:

This test was carried out with a commercial drinking water.

Sample was manually compacted in the mold at its reception water content.

ND : No determined

* : Estimated value

TEST RESULTS

Initial dry unit weight	1786	kg/m ³
Initial water content	17.51	%
Initial degree of saturation	92	%
Coefficient of permeability	1.1E-08	cm/s
Hydraulic gradient applied	13.27	1/1

 Tested by : A. Bustamante, ing. jr.
 Approved by : Hélène Bilodeau, ing.

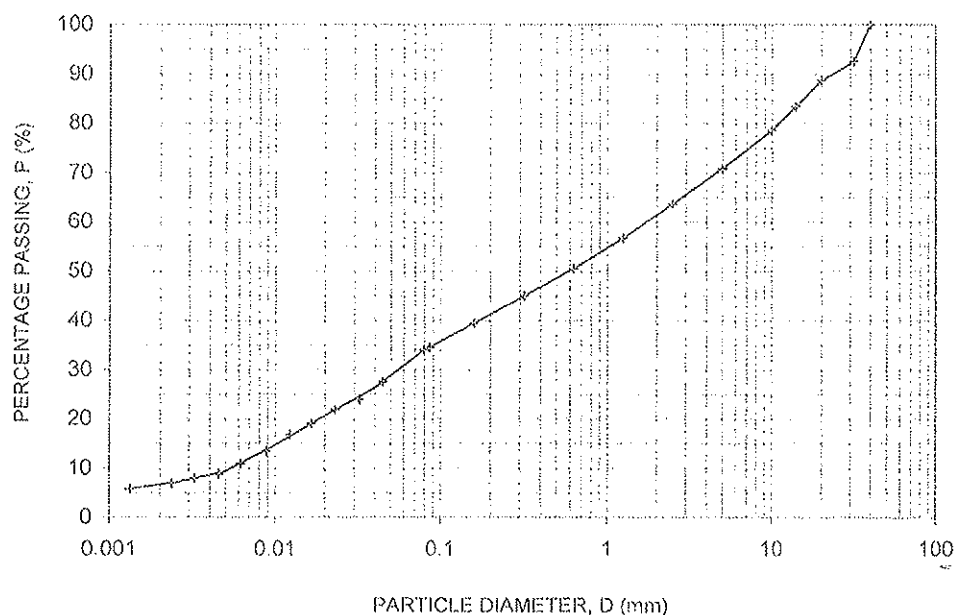
Date : 2011-03-25

FILE : 16525-G
 CLIENT : Inquip Associates inc.
 PROJECT : Bay Goose Nunavut

 SAMPLE : 31+644
 (2010-09-05)

 Sample no. : 31+644
 File no. : 31+644.GRN

Silty gravelly sand, traces of clay.		SIEVE (mm)	RETAINED MASSES		PERCENTAGES		PERCENT. TOTAL
			INDIVID.	CUMUL.	RETAINED	PASSING	PASSING
		SIEVING OF GRAVEL					
METHOD :	DRY	112					
Total dry mass (g)	: 3 693	80					
Total mass > 5mm	: 1 078	56					
Percentage retained on 5mm	: 29.2	40		0	0.0		100.0
Maximum diameter (mm)	:	31.5		278	7.5		92.6
		20		418	11.3		88.7
		14		612	16.6		83.4
		10		790	21.4		78.6
		5		1 078	29.2		70.8
		Pan		3 693			
WATER CONTENT, w (%)		SIEVING OF SAND					
Fraction passing sieve	: None	2.50		23.8	10.1	89.9	63.6
Total wet weight	: 4 898.0	1.25		46.8	20.0	80.0	56.7
Total dry weight	: 4 346.5	0.63		67.3	28.7	71.3	50.5
Tare no	MP-6	0.32		85.7	36.6	63.4	44.9
		0.16		103.8	44.3	55.7	39.4
WATER CONTENT, w (%)	: 14.94	0.08		121.7	51.9	48.1	34.0
		Pan		234.3			
METHOD : DRY		HYDROMETER TEST					
Fraction passing sieve	: 5	D	Time	Temper.	Reading	L	
Mass of wet soil tested (g)	:	(mm)	(min)	(C)	R	(cm)	
Mass of dry soil tested (g)	: 53.37	0.0865	0.25	23.2	19.8	11.3	34.5
Specific gravity	: 2.72 ^a	0.0449	1		16.5	12.2	27.6
Percentage total passing	: 70.8	0.0323	2		14.8	12.7	24.0
Hydrometer 151H no	3742	0.0231	4	23.2	13.8	12.9	21.9
Mass of hydrometer (g)	: 53.79	0.0166	8	22.8	12.5	13.3	19.0
		0.0123	15	22.4	11.5	13.5	16.7
L = A.R + B	A (1/cm) : -0.27	0.0089	30	22.0	10.0	13.9	13.4
	B (cm) : 17.57	0.0062	63	21.5	8.9	14.2	10.9
C = D + 0.2 (20-T)	D (1/1) : 4.0	0.0046	120	21.4	7.9	14.5	8.8
Scale factor	F (1/1) : 1.00	0.0032	242	21.5	7.5	14.6	8.0
		0.0024	450	21.5	7.0	14.7	6.9
		0.0013	1 440	21.5	6.5	14.9	5.9
Deflocculant : 5 g hexametaphosphate / liter							



DIAMETER (mm)	PERCENT. PASSING
20	88.7
5	70.8
0.4	46.7
0.08	34.0
0.002	6.6
0.0055	10
0.0565	30
1.7410	60
CU :	319.1
CC :	0.3
USC :	SM
MF :	
Csi :	
Symbol :	SG3L3A1
Remarks :	
*Estimated value	
Tested by :	
M. Naili	2011-03-17
Approv. by :	
Hélène Bilodeau, ing.	
Date :	
2011-03-28	

FILE No : 16525-G
 CLIENT : Inquip Associates inc.
 PROJECT : Bay Goose Nunavut

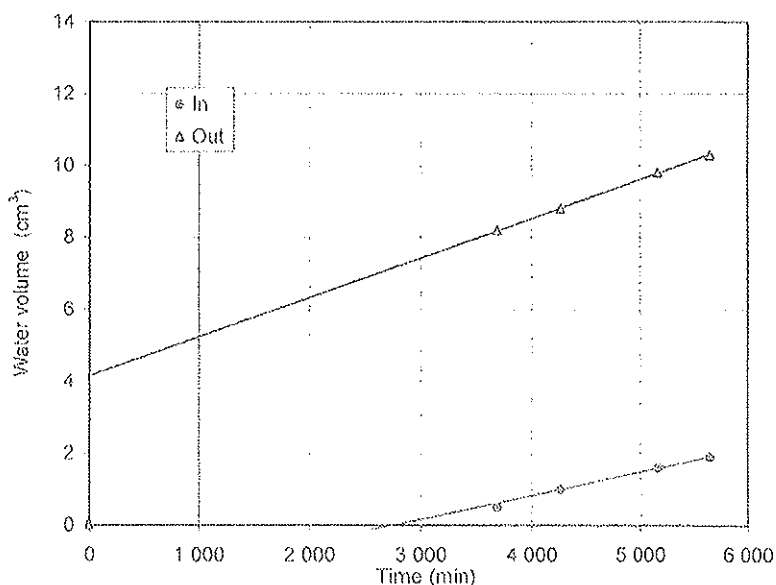
SAMPLE No : 31+644
 (2010-09-05)

FILE : 16525-G-31+644.KTX

VOLUMETRIC CHARACTERISTICS				PHYSICAL PARAMETERS				PHYSICAL PROPERTIES	
	State	Initial	Final		State	Initial	Saturat.	Perm.	
Diameter of specimen	mm	102.0	101.1	Water content, w	%	15.73	14.76	14.53	D_{RS}
Height of specimen	mm	117.5	116.5	Dry unit weight, ρ_d	kg/m ³	1899	1935	1944	$\rho_{d\ max}$
Cross section of specimen	cm ²	81.7	80.3	Deg. of saturation, S_r	%	100	100	100	W_{opt}
Volume of specimen	cm ³	960	936	Porosity, n	1/1	0.300	0.286	0.283	
Wet weight	g	2115.41	2089.2	Void ratio, e	1/1	0.428	0.401	0.395	
Dry weight	g		1827.8						
Water content, w	%	15.73	14.30						

TEST CONDITIONS				WATER CONTENT				APPARATUS AND METHOD	
	State	Consol.	Saturat.	Perm.		State	Initial	Final	
Cell pressure	kPa	10	510	525		Type	Auxil.	Total	Cell : K-2
Top back-pressure	kPa	0	500	505					Unity : 2
Base differential	cm water	0	0	150		Tare no		C-44	Membr. : 0.4 mm
Effective pressure	kPa	10	10	13		Wet weight		2519.2	Number : 1
Hydraulic gradient	1/1	0	0	12.9		Dry weight		2257.8	Sequence : CSK
						Tare weight		430.0	Water temp. : 20° C
						w %		14.30	
								15.73	

EXPERIMENTAL DATAS				
Date	Hour	dt	Water volume (cm ³)	
mm-jj	hh:mm	min	In	Out
03-11	17:18	0	0.0	0.0
03-14	06:50	3 692	0.5	8.2
	16:31	4 273	1.0	8.8
03-15	07:29	5 171	1.6	9.8
	15:30	5 652	1.9	10.3



Material type: Soil - bentonite (Gravelly silty sand, traces of clay)
 Specimen type: Compacted
 Consistency: P₆₀: mm
 PP: kg/cm²

Remarks:

This test was carried out with a commercial drinking water.
 Sample was manually compacted in the mold at its reception water content.

ND : No determined

* : Estimated value

TEST RESULTS

Initial dry unit weight	1899	kg/m ³
Initial water content	15.73	%
Initial degree of saturation	100	%
Coefficient of permeability	1.4E-08	cm/s
Hydraulic gradient applied	12.91	1/1

Tested by : A. Bustamante, ing. jr.
 Approved by : Hélène Bilodeau, ing.

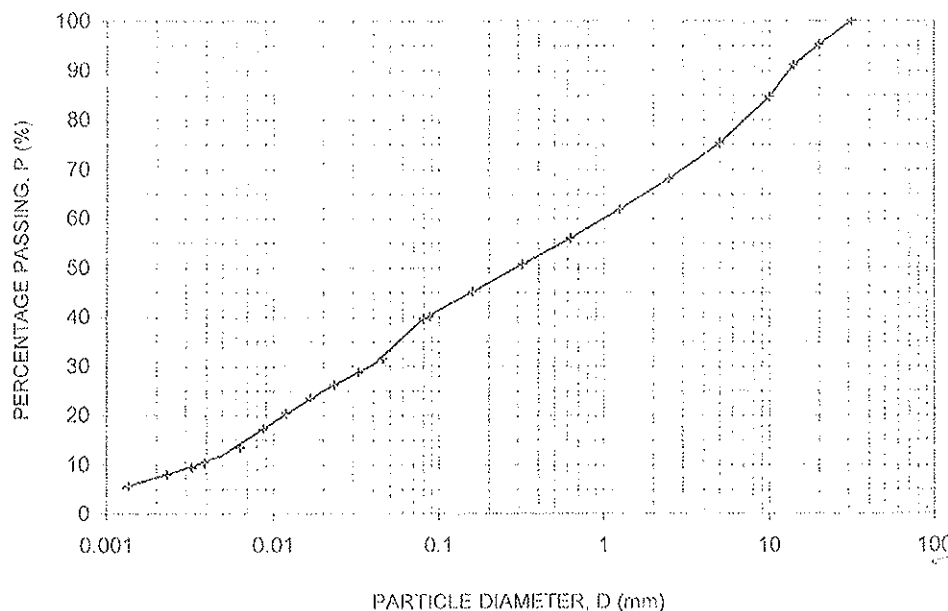
Date : 2011-03-25

FILE : 16525-G
 CLIENT : Inqup Associates inc.
 PROJECT : Bay Goose Nunavut

 SAMPLE : 32+050
 (2011-09-22)

 Sample no. : 32+050
 File no. : 32+050.GRN

Gravelly silty sand, traces of clay.			SIEVE (mm)	RETAINED MASSES		PERCENTAGES		PERCENT. TOTAL PASSING
				INDIVID.	CUMUL.	RETAINED	PASSING	
			SIEVING OF GRAVEL					
METHOD : DRY			112					
Total dry mass (g)	:	2 974	80					
Total mass > 5mm	:	736	56					
Percentage retained on 5mm	:	24.8	40					
Maximum diameter (mm)	:		31.5		0	0.0		100.0
			20		140	4.7		95.3
			14		265	8.9		91.1
			10		455	15.3		84.7
			5		736	24.8		75.2
			Pan		2 974			
WATER CONTENT, w (%) Reception			SIEVING OF SAND					
Fraction passing sieve	:	None	2.50		19.7	9.5	90.5	68.1
Total wet weight	:	1 630.7	1.25		36.8	17.8	82.2	61.8
Total dry weight	:	1 418.3	0.63		52.8	25.6	74.4	56.0
Tare no K	:	228.1	0.32		67.3	32.6	67.4	50.7
			0.16		82.6	40.0	60.0	45.1
WATER CONTENT, w (%)	:	17.85	0.08		97.7	47.4	52.6	39.6
			Pan		206.3			
METHOD : DRY			HYDROMETER TEST					
Fraction passing sieve	:	5	D	Time	Temper.	Reading	L	
Mass of wet soil tested (g)	:		(mm)	(min)	(C)	R	(cm)	
Mass of dry soil tested (g)	:	48.17	0.0876	0.25	22.1	19.8	11.3	40.1
Specific gravity	:	2.72	0.0456	1		16.3	12.3	31.4
Percentage total passing	:	75.2	0.0326	2		15.2	12.5	28.7
Hydrometer 151H no	:	3742	0.0233	4	22.1	14.2	12.8	26.2
Mass of hydrometer (g)	:	53.79	0.0167	8	22.1	13.1	13.1	23.5
			0.0120	16	21.8	11.9	13.4	20.4
L = A.R + B	A (1/cm)	-0.27	0.0087	31	21.4	10.7	13.8	17.2
	B (cm)	17.57	0.0064	60	21.1	9.2	14.2	13.4
C = D + 0.2 (20-T)	D (1/1)	4.0	0.0039	164	21.0	8.0	14.5	10.4
Scale factor	F (1/1)	1.00	0.0033	234	21.1	7.6	14.6	9.4
			0.0023	475	21.3	7.0	14.7	8.1
			0.0014	1 433	20.6	6.2	15.0	5.7
Deflocculant :	5 g hexametaphosphate / liter							



DIAMETER (mm)	PERCENT. PASSING
20	95.3
5	75.2
0.4	52.4
0.08	39.6
0.002	7.4
0.0037	10
0.0382	30
1.0086	60
CU :	276.2
CC :	0.4
USC :	SM
MF :	
Csl :	
Symbol :	SL3G3A1
Remarks :	*Estimated value
Tested by :	
M. Naili	2011-03-02
Approved by :	
Hélène Bilodeau, ing.	
Date :	2011-03-07

FILE No : 16525-G
 CLIENT : Inquip Associates inc.
 PROJECT : Bay Goose Nunavut

SAMPLE No : 32+050
 (2010-09-22)

FILE : 16525-32+050.KTX

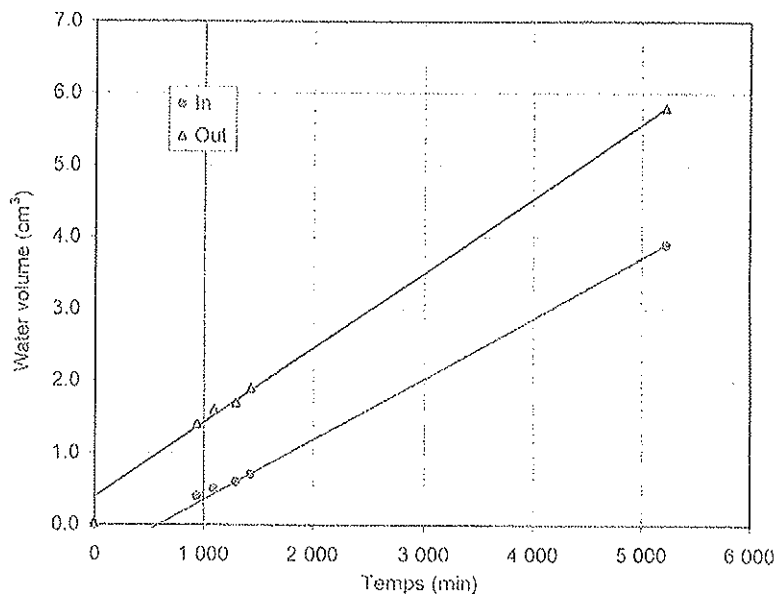
VOLUMETRIC CHARACTERISTICS				PHYSICAL PARAMETERS				PHYSICAL PROPERTIES	
	State	Initial	Final		State	Initial	Saturat.	Perm.	
Diameter of specimen	mm	103.0	101.5	Water content, w	%	18.48	16.10	16.04	D_{rs}
Height of specimen	mm	118.4	116.7	Dry unit weight, ρ_d	kg/m ³	1805	1886	1888	$\rho_{d\ max}$
Cross section of specimen	cm ²	83.3	80.9	Deg. of saturation, S_r	%	100	100	100	W_{opt}
Volume of specimen	cm ³	987	944	Porosity, n	1/1	0.335	0.305	0.304	
Wet weight	g	2113.71	2069.3	Void ratio, e	1/1	0.503	0.438	0.436	
Dry weight	g	1784.0							
Water content, w	%	18.48	15.99						

TEST CONDITIONS				WATER CONTENT				APPARATUS AND METHOD	
	State	Consol.	Saturat.	Perm.		State	Initial	Final	
Cell pressure	kPa	10	510	525		Type	Auxil.	Total	Cell : K-3
Top Back-pressure	kPa	5	505	505		Tare no		RE	Unity : 2
Base differential	cm water	0	0	150		Wet weight		2491.6	Membr. : 0.4 mm
Effective pressure	kPa	5	5	13		Dry weight		2206.3	Number : 2
Hydraulic gradient	1/1	0	0	12.9		Tare weight		422.3	Sequence : CSK
						w %		15.99	Water temp. : 20° C

EXPERIMENTAL DATAS				
Date	Hour	dt	Water volume (cm ³)	
mm-jj	hh:mm	min	In	Out
02-24	16:17	0	0.0	0.0
02-25	8:00	943	0.4	1.4
	10:33	1 096	0.5	1.6
	13:58	1 301	0.6	1.7
	16:13	1 436	0.7	1.9
02-28	7:28	5 231	3.9	5.8

The graph displays the relationship between time and water volume for two different conditions, 'In' and 'Out'. The 'Out' condition shows a higher water volume for the same time interval compared to the 'In' condition. Both conditions exhibit a constant rate of increase, as indicated by the straight lines.

Temps (min)	Water volume (cm ³) - In	Water volume (cm ³) - Out
0	0.0	0.4
943	0.4	1.4
1096	0.5	1.6
1301	0.6	1.7
1436	0.7	1.9
5231	3.9	5.8



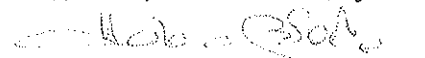
Material type: Soil - bentonite (Gravelly silty sand, traces of clay)
 Specimen type: Compacted
 Consistency: P_{so}: mm
 P_p: kg/cm²

Remarks:
 This test was carried out with a commercial drinking water.
 Sample was manually compacted in the mold at its reception water content.

ND : No determined * : Estimated value

TEST RESULTS		
Initial dry unit weight	1805	kg/m ³
Initial water content	18.48	%
Initial degree of saturation	100	%
Coefficient of permeability	1.5E-08	cm/s
Hydraulic gradient applied	12.90	1/1

Tested by : A. Bustamante, ing. jr.
 Approved by : Hélène Bilodeau, ing.



Date : 2011-03-07

Bay Goose Construction
Laboratory Report - CSB

APPENDIX D: Inquip's Analysis of Test Data for CSB 2009/2010

Bay Goose Construction
Laboratory Report - CSB

We understand that there have been some concerns about the CSB backfill placed in the trench in 2010. These concerns were raised because the QA unconfined compressive tests, UCS, done in samples of 2010 backfill yielded lower values than in 2009, even if these values met the requirements of the specifications. It appeared also that the consumption of cement per theoretical square meter of CSB wall in 2010 was lower than in 2009.

Please find below a quick analysis concerning the CSB mixes used in 2009 and 2010:

1. Formulations 2009 and 2010

- The Formulations used in 2009 and 2010 were basically the same. The cement was added as a grout with the following formulation: 1M³ water and 1 superbag of cement (1.5 ton/bag). The formulations were submitted on the daily reports respectively dated 9/18/2009 and 8/24/2010.

Table 1: Batch Formulation

Item	2009	2010
Water	1 M ³	1 M ³
Cement	1.5T	1.5T
Till	15 M ³	15 M ³
Slurry	as needed for slump	as needed for slump

The main difference between 2009 and 2010 were:

- The size of the buckets on the mixing backhoe. The bucket used in 2010 was bigger. The buckets were calibrated each year in the presence of the Owner's representative.
- Age of the cement: We believe that the cement was stored on site during the winter period between the 2009 and 2010 construction season; In our opinion, this should not impact its cementations characteristics as long as it was properly stored.
- The source of the till was different. We are not sure how significant were the differences, if any, as we have not seen any test data on this material. But it is important to note that no CSB mix design was performed with the till used in 2010. Difference in gradation and water content could impact the yield of the mix as well as its permanent mechanical characteristics. This is the main reason why there is a need to do the mix design with all the materials to be used on site.

Bay Goose Construction
 Laboratory Report - CSB

2. Unconfined Compressive Strength

In 2009, Golder performed a few QA unconfined compressive strength on the CSB 6% formulation.

In 2010, both Golder and Inquip ran these tests on the 6% formulation.

The results are summarized in Tables 2 and 3 below:

Table 2: Golder QA UCS Tests 2009-2010

Year	Station	Curing Time	UCS	Wet Unit Wgt.	Cap on Samples
2009	30+340	7	917	?	?
2009	30+340	28	1,200	?	?
2009	30+365	7	552	?	?
2009	30+365	28	558	?	?
2009	30+990	7	586	?	?
2009	30+390	28	814	?	?
2010	31+800 (1)	7	231	?	?
2010	31+800 (1)	28	416	?	No
2010	31+800 (1)	56	274	?	No
2010	31+800 (2)	7	233	?	No
2010	30+800 (2)	28	392	?	No
2010	30+800 (2)	56	283	?	No
2010	31+940	7	89	?	No
2010	31+940	28	173	?	No
2010	31+940	56	257	?	No
2010	31+980	9	265	?	No
2010	31+980	28	424	?	No
2010	31+994	9	294	?	No
2010	31+994	28	470	?	No
2010	31+566	56	623	?	No
Average Golder 2009 UCS			771KPa		
Average Golder 2010 UCS			317 Kpa		

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Table 3: INQUIP QC UCS Tests 2010

Station	Curing Time	UCS KPa	Wet Unit Wgt. Kg/M3	CAP on Samples
31+600		468	1810	No
31+800	155	697	1770	Yes
31+944		331	1831	No
32+080	147	492	1903	Yes
PLUG	166		1647	Yes
31+844	152	636	1690	Yes
31+966	149	636	1810	Yes
Average Inquip 2010 without Cap			399 KPa	
Average Inquip 2010 with Cap			832 KPa	

We have the following comments on the above results:

- The two Inquip first samples tested by Qualitas were taken at station 31+600 and 31+944. As seen on the table these samples did not have any cap. Upon review of the photos, we noticed that the failure plans were vertical, which is a clear indication of excentric loading conditions as the two extremities of the samples were not parallel. We called the laboratory and asked that the remaining samples be capped before testing. All the failure plans on the cap samples are close to a 45 degree angle as should be expected, and the latter results are representative of the strength of the material.
- We understand that the “Golder” samples tested in 2010 were not capped. This is most likely a reason for the low values which were recorded.
- Other parameters which may induce some differences between the QA and QC test results are:
 - Storage conditions on site: Were some samples exposed to freezing temperature? Inquip samples were stored immediately after fabrication in the trailer.
 - Protection during transport
 - Curing Time: Our past experience does not show any significant increase of strength on laboratory samples after fourteen days.

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In our opinion, the QC testing demonstrates clearly that the UCS obtained in 2010 are within the same range of magnitude than the QA results of 2009. This is an additional confirmation than the mixing formulations were similar in 2009 and 2010.

3. Site QC Measurements

The site QC on the CSB included the following tests:

- Slump
- Unit weight of CSB backfill measured with the mud balance
- Unit weight of water cement grout
- Taking cylinders of CSB for further testing by an independent laboratory.

Tables 4 and 5 below, show that the slump and backfill density were within the same ranges for 2009 and 2010.

Table 4: INQUIP on Site QC 2009 for CSB

Date	STATION	SLUMP	Unit Weight CSB	Unit Weight Grout
9/19/2009	30+796	184.15	1900	1200
	30+312	180.594		
	30+320	178	1910	
9/19/2009	30+228	100		
	30+232	50		
	30+266	153	1910	
9/20/2009	30+342	180	1900	1120
	30+350	180	2160	1260
	30+360	180	2010	1120
	30+370	180		
9/21/2009	30+384	190.5	2005	1180
	30+394	190.5		
9/26/2009	30+792	177.8	2010	1250
	30+420	158.78		
	30+836	184.15		
	30+850	184.15		
				7130
Average		168 Cm	1,976 Kg/M3	1,188 Kg/M3

Note: One unusually low measure, 50, is included in average.

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Table 5: INQUIP on Site QC 2010 for CSB

DATE	STATION	SLUMP	DENSITY BACKFILL	CEMENT DENSITY
8/24/2010		230	1.79	1.45
8/24/2010		165	1.92	1.49
		180	1.9	1.45
09/05/2010	31+788	200	2	1.5
09/15/2010	31+800	176	2	1.121
09/16/2010	31+800	200	2.05	1.26
	31+800	190		
09/17/2010	31+800	180	2.8	1.15
	31+800	185	2.5	1.2
09/18/2010	31+806	200	2.05	1.12
	31+818	175		
	31+832	175	2.01	1.15
	31+836	185		
09/19/2010	31+844	175	2.08	1.28
	31+353	177	2.1	1.5
	31+862	180		
09/20/2010	31+844	180	2.12	1.23
	31+896	185		
	31+924	154	2.13	1.41
	31+932	180		
9/21/2010	31+940	185	2.05	1.19
	31+950	180	2.06	1.2
9/22/2010	31+966	190	2.03	1.16
9/25/2010	31+568	180	1.85	1.14
	31+570	185		
9/26/2010	31+576	200	2.08	1.15
	31+586	190		
	31+595	180	2.09	1.2
	31+595	175		
Average		184 Cm	2,008 Kg/M3	1.26 Kg/M3

Note: The unit weight of the cement water grout appears somewhat higher in 2010, but this difference is not surprising as the grout is not “stable” in the absence of bentonite. So the readings might vary a lot depending upon the procedure used as well as the timing

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when taking the samples. The important consideration is that the complete volume of grout was placed in the mixing box, so every CSB batch incorporated 1.5 ton of cement.

4. Cement Consumption

As per Agnico Eagle email dated "11 Fevrier 2011", the following quantities of CSB walls installed and cement used in 2009 and 2010 were as per the following table.

**Table 7: AEM Cement Consumption
based on FG Field Report**

Item	2009	2010
Area CSB, M ²	1620	4364
Cement , T0	198	391
Number Batches	132	260
Cement Kg/M ²	122	87

Inquip's quantities, see Table 8, varied slightly from the above, mostly because we did not account for the seriously damaged bags. The content of these bags were added to the regular grout.

Table 8: "Inquip" Cement Consumption

Item	2009	2010
Area CSB, M ²	1620	4120
Cement, T0	187	355
Number batches	125	237
Cement/M ²	115.7	86.2

Hence it would appear that less cement was used in 2010 than in 2009 despite the fact that the formulations were the same! This discrepancy can be explained as follows:

- The areas of CSB used in the above tables are theoretical areas. The calculation should be made by M³ of CSB backfill placed and not by theoretical M² of cutoff wall. This is because it is typical for a slurry trench to have a volume in place larger than its theoretical volume. The ratio of in place volume to theoretical volume is called the overbreak.

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- It is likely that the overbreak in 2009 was significantly higher than in 2010 mostly for the following reasons:
 - In 2009 the excavation of the CSB area was done with 2 backhoes, instead of one excavator in 2010. The positioning of the second machine is surely not at the exact same location as for the first machine resulting in a larger trench volume.
 - The compaction in 2009 was performed with dynamic compaction. In 2010 it was a combination of dynamic and vibroflotation resulting in a denser fill in place hence more stable fill and less small raveling of the side walls.
- In addition, different till materials in 2009 and 2010 resulted probably in different yields of the batches.

As an example in order to get an order of magnitude, on the cement consumption, if the of overbreak in 2010 was 20 % lower than in 2009, assuming a batch volume of 17 M³, this corresponds to approximately 77 tons less cement used in 2010. Or If the average batch volume in 2010 was 1 M³ higher than in 2009, (which is in the order of 6 % assuming again 17 M³ per batch in 2009), this would correspond to approximately 20 tons less of cement used in 2010.

Additional possible contributing factors are:

- Small difference in the size and teeth configuration of the excavation buckets in 2009 and 2010.
- Different operator on the night shift in 2009 and 2010 for the CSB mixing. Filling the bucket is somewhat operator dependant.
- Variance on the areas of SCB, as the accuracy of the sounding of the interfaces SB/SCB, is (in our opinion) in the range of 1 to 2 feet.

As a general conclusion, it is our strong belief that:

- We used the same formulation for the CSB batches in 2009 and 2010.
- The unconfined compressive strength of the CSB backfill exceeds by far the minimum requirements of the specifications and have the same order of magnitude in 2009 and 2010.
- Differences in the construction procedures and source of till material explain the apparent discrepancy in cement quantities respectively used in 2009 and 2010.