



MEADOWBANK GOLD PROJECT

SOUTH CAMP DIKE

CONSTRUCTION SUMMARY REPORT

MEADOWBANK GOLD PROJECT, NUNAVUT

MARCH 2012





MEADOWBANK GOLD PROJECT
SOUTH CAMP DIKE
CONSTRUCTION SUMMARY REPORT

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MEADOWBANK GOLD PROJECT
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SECTION 1 • GENERAL

1.1 OBJECTIVE

This construction summary report summarizes the construction information for the South Camp Dike during the year 2009 at Meadowbank Gold Project (Meadowbank), located approximately 80 km north of Baker Lake, Nunavut, to comply with Meadowbank Water License 2AM-MEA0815 Part D, Item 26.

1.2 SCOPE

The major construction activities related to the South Camp Dike works were carried out between April and June, 2009. This report includes:

- A summary of the major construction activities;
- As-built drawing and documentation.

As-built geometry information is based on surveys performed by the Owner, Agnico-Eagle Mines Ltd. (AEM) and bathymetry surveys by Golder Associates Ltd. (Golder).

AEM representatives prepared the final as-built report, combining a draft report provided by Golder Associates Ltd. (Golder). In general during construction, quality control was the responsibility of the contractor for the South Camp Dike which was AEM Operations division who reported to the Owner, AEM Dike construction superintendent.

This factual report has been prepared in collaboration between Golder Associates Ltd. and Agnico-Eagle Mines Limited, Meadowbank Division.

1.3 DESCRIPTION OF SOUTH CAMP DIKE

The South Camp Dike is located south of the plant site area and is used to connect the mainland to South Camp Island. The South Camp Dike, in conjunction with the Bay-Goose Dike, isolates a portion of Third Portage Lake which will be dewatered in order to develop the Goose Island Pit and the southern portion of the Portage Pit. It covers a narrow channel, approximately 60 m in width, where water depths were between 0.5 and 1 m.

The South Camp Dike was primarily constructed between April and June of 2009, prior to ice breakup. During the winter of 2009-2010 additional thermal capping material and rockfill for the haul road was added to the dike. The South Camp Dike has a broad rockfill shell with a bituminous geomembrane liner installed on the upstream side of the shell. Compacted granular material mixed with bentonite was placed above the toe of the liner. The liner was founded on native frozen (permafrost) till material or bedrock, in a trench approximately 3 to 5 m below the lakebed surface. The haul road is located on the downstream side of the dike. The dike is approximately 85 m long, with a crest width of approximately 25 m at elevation 136.6 m (minimum).



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1.4 DESIGN AND CONSTRUCTION DRAWINGS

The detailed design for the South Camp Dike was prepared by Golder (2009), developed in collaboration with AEM. Design Drawings 4300-01 and 4300-02 (Rev. 0 dated May 12 and May 13, 2009) are available in Appendix I. Design drawings prepared by AEM are also available in Appendix I.

The construction drawings were updated by AEM as required to support subsequent field changes based on conditions during construction. As-Built drawings prepared by AEM are available in Figure 1 to 4 presented in Appendix II of that report.

1.5 CONSTRUCTION DOCUMENTATION

AEM was responsible for collection, distribution and storage of South Camp Dike related construction documentation which included the following:

- Golder South Camp Dike IFC Drawings;
- South Camp Dike construction QC Documentation;
- As-built documentation.

Related construction documentation for South camp Dike is available in appendix to this report.



SECTION 2 • SOUTH CAMP DIKE CONSTRUCTION ACTIVITIES

The general construction work sequence between April and June 2009 for the South Camp Dike consisted of:

- Foundation preparation;
 - Excavation of ice rich materials conducted by blasting and by excavator.
- Rockfill shell placement;
 - Rockfill material was geochemically classified as non-potentially acid generating (NPAG), placed with dozer and compacted by trafficking loaded haul 773/777 haul trucks.
- Liner upstream toe trench excavation to native frozen (permafrost) till material or bedrock;
- Liner bedding placement;
 - Placement of granular bedding material (150 mm minus and 20 mm minus) on the upstream face of the rockfill shell;
- Bituminous liner installation on the upstream face and in the toe trench;
- Toe trench backfill;
 - Backfill with granular material (20 mm minus) with bentonite (8%).
- Liner cover;
 - Placement of granular material (20 mm minus) over the liner.
- Completion of the rockfill shell;
- Instrumentation installation;
 - Two thermistor strings exist on the upstream side of the South Camp Dike. SD-10 is located near the liner toe, and SD-09-A is located approximately 20 m further upstream within Third Portage Lake.
- Turbidity barrier installation.

Rockfill material for the South Camp Dike was geochemically classified as non-potentially acid generating (NPAG), and was supplied from onsite quarries. Processed granular materials from AEM or contractor crusher were NPAG material.

AEM operation division was the general contractor for the construction activities and reported to the AEM Dike superintendent and/or Owner's representative.

Construction activities are shown in the photographic records in Appendix III.



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SECTION 3 • SOUTH CAMP DIKE CONSTRUCTION QC ACTIVITIES

In general, quality control was the responsibility of the contractor for the South Camp Dike which was AEM Operations division who reported to the Owner, AEM Dike construction superintendent.

AEM representatives conducted visual observation of work procedure during the construction. Review of the work procedure was done on a daily basis and corrections were made if needed. Daily survey was conducted by AEM representatives for progress, as-built documentation and to ensure that limits and grades were followed correctly during the construction. Photographs of the work progress were taken throughout the construction program.

Laboratory test results on granular material used for liner bedding (20 mm minus) and bentonite augmented granular material (20 minus) are available in Appendix IV.

QC documentation related to the geotechnical instrumentation (thermistor) installed at South camp Dike is available in Appendix V.



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SECTION 4 • CLOSURE

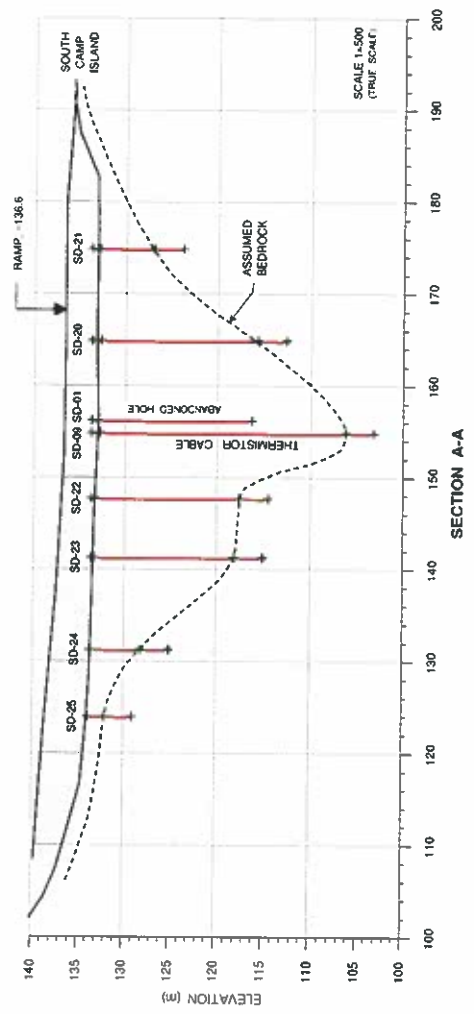
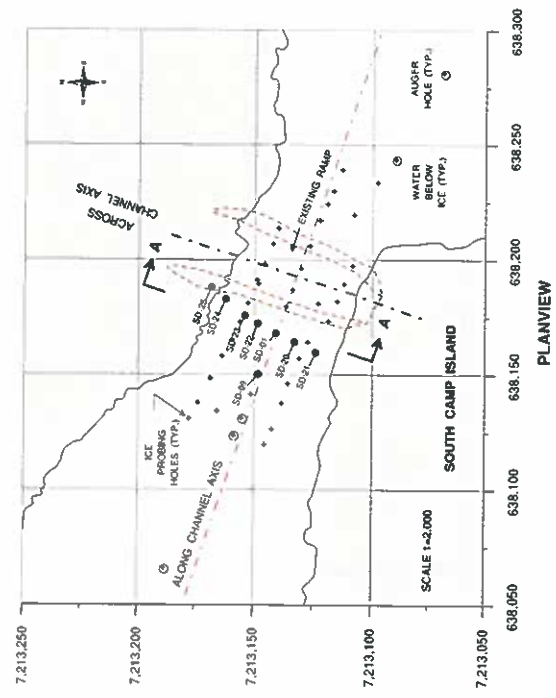
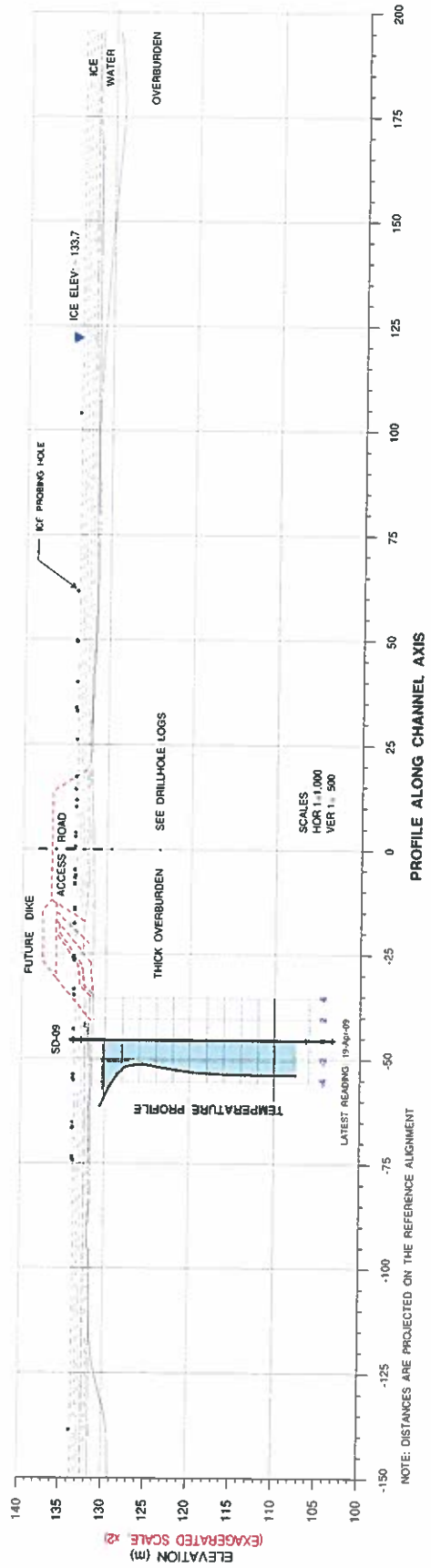
This report has been prepared to present a summary of the South Camp Dike as-built construction information conducted during 2009 including QC records, as-built drawings and a summary of key construction activities.



**MEADOWBANK GOLD PROJECT
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APPENDIX I

South Camp Dike Design Drawings



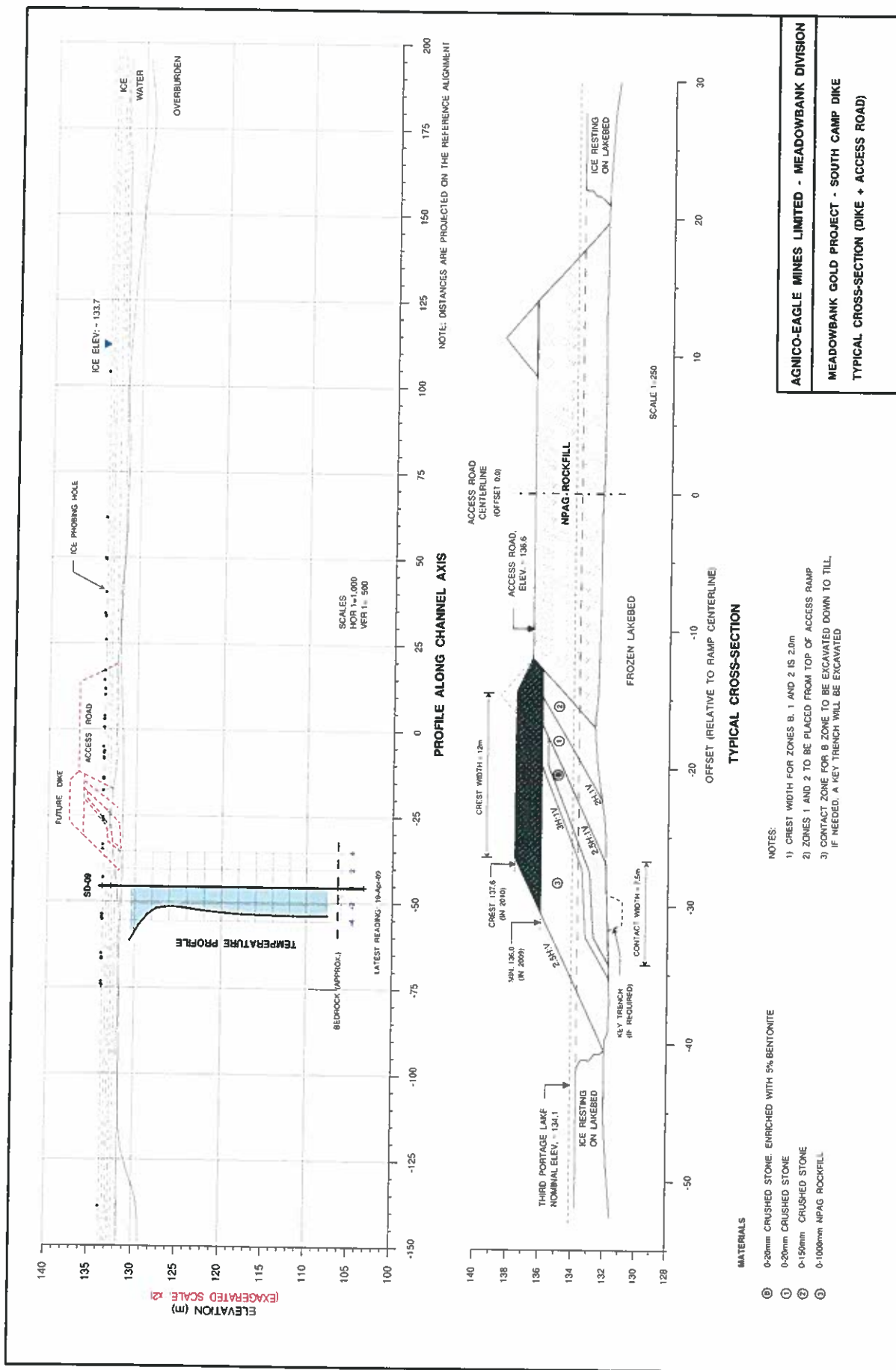
AGNICO-EAGLE MINES LIMITED - MEADOWBANK DIVISION

MEADOWBANK GOLD PROJECT - SOUTH CAMP DIKE

2009 SITE INVESTIGATION CAMPAIGN

GEOTECHNICAL PROFILES

FIGURE 1
GEOTECHNICAL PROFILE (m)



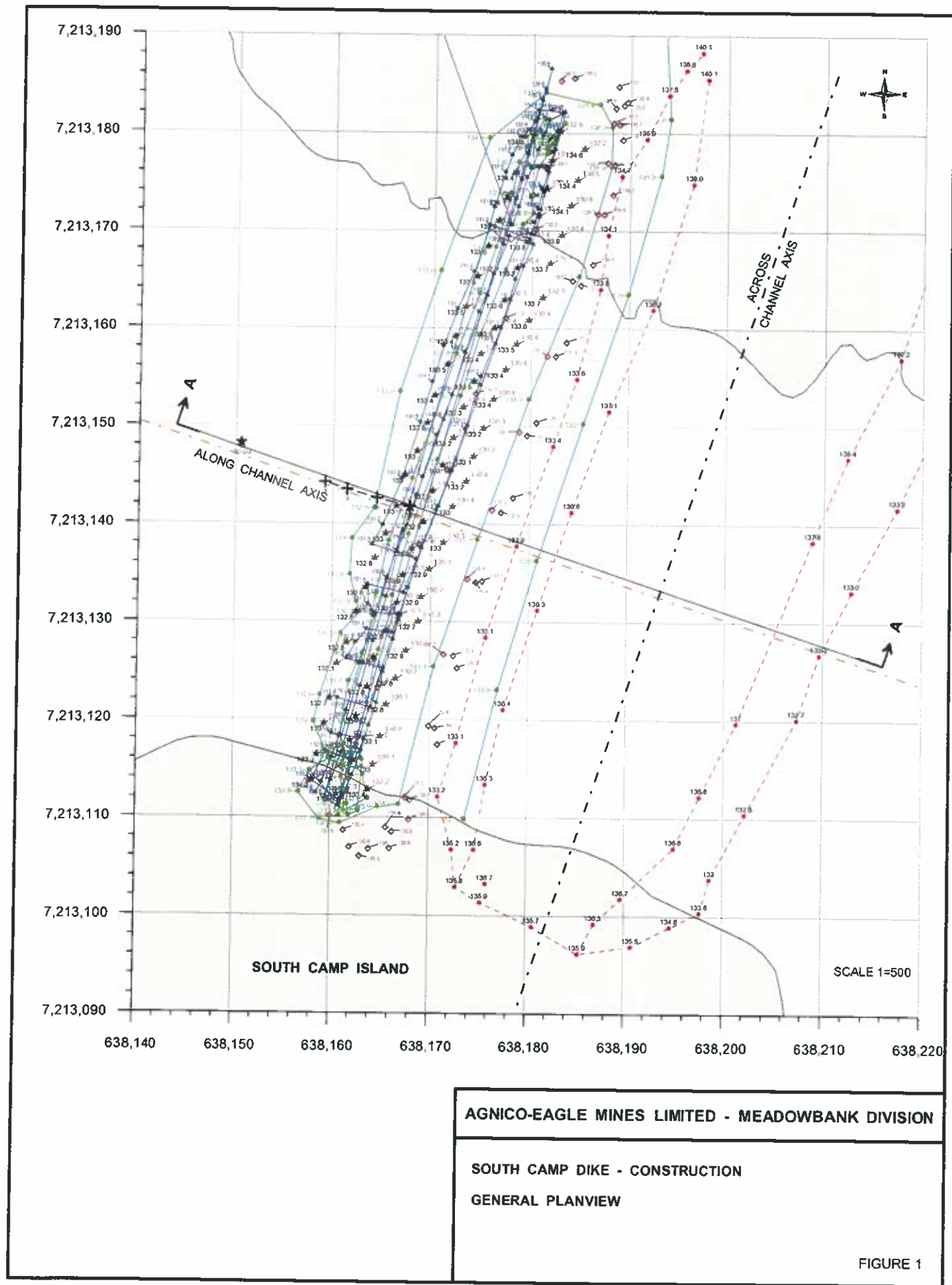
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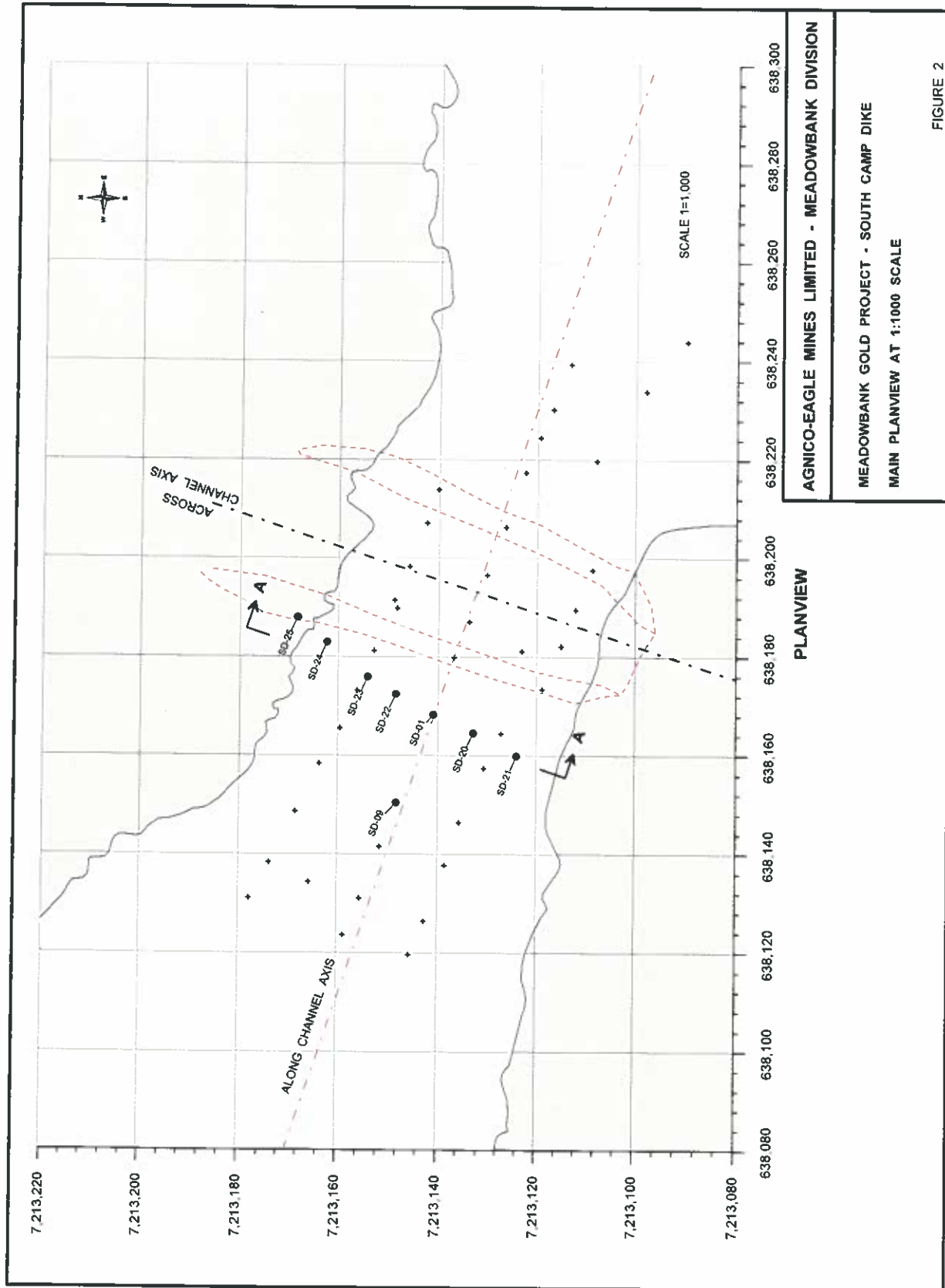


**MEADOWBANK GOLD PROJECT
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APPENDIX II

South Camp Dike As-Built Drawings



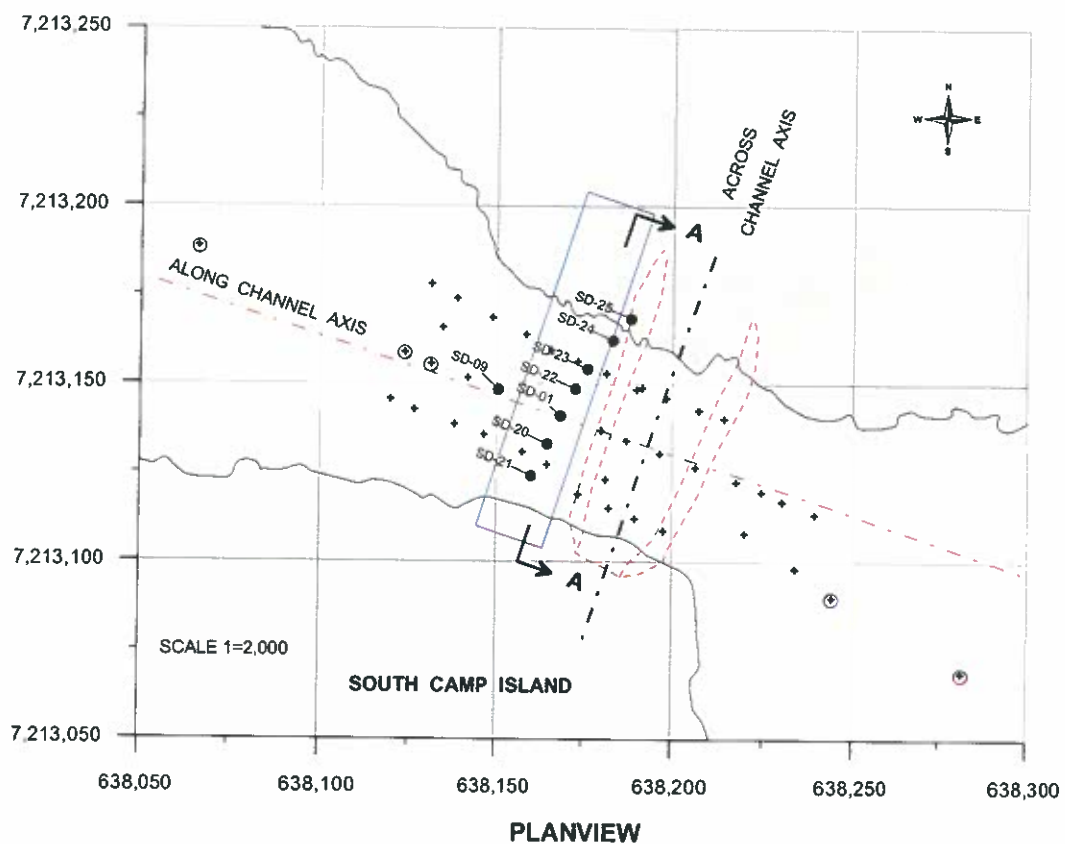


AGNICO-EAGLE MINES LIMITED - MEADOWBANK DIVISION

MEADOWBANK GOLD PROJECT - SOUTH CAMP DIKE

MAIN PLANVIEW AT 1:1000 SCALE

FIGURE 2



AGNICO-EAGLE MINES LIMITED - MEADOWBANK DIVISION

MEADOWBANK GOLD PROJECT - EAST DIKE CONSTRUCTION

3/4 INCH CRUSHED STONE STOCKPILE

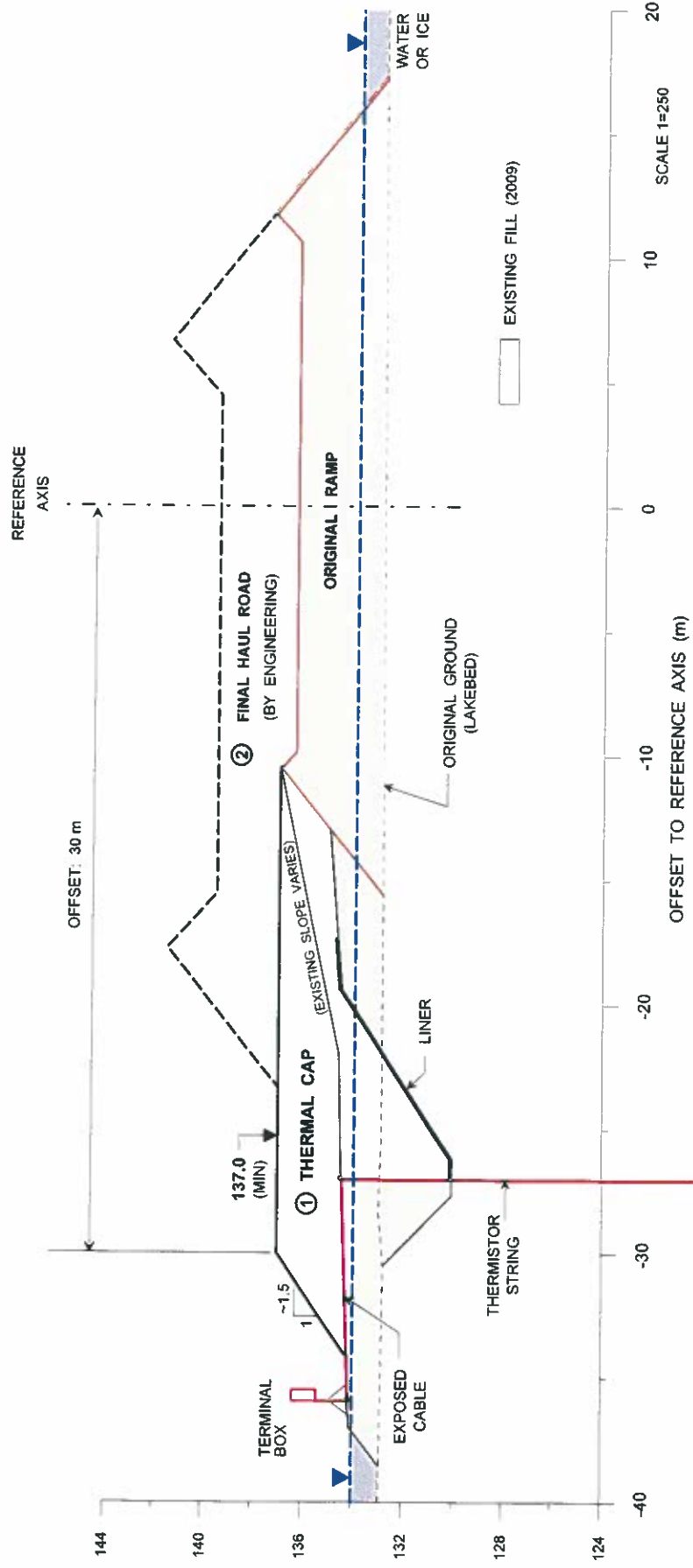
GRAIN SIZE CURVES - JUNE 2008

FIGURE 3

REFERENCE GRF

LAKE SIDE

PIT SIDE



NOTES:

- 1) THERMAL CAP TO BE PLACED IN TWO LIFTS. SNOW TO BE REMOVED PRIOR TO PLACEMENT OF ROCKFILL
- 2) DESIGN GEOMETRY FOR HAUL ROAD TO BE PROVIDED BY ENGINEERING
- 3) COORDINATES FOR REFERENCE AXIS:
638.211 E 7.213,186 N
638.174 E 7.213,075 N

AGNICO-EAGLE MINES LIMITED - MEADOWBANK DIVISION

SOUTH CAMP DIKE CONSTRUCTION
TYPICAL CROSS-SECTION AT COMPLETION

FIGURE 4

TYPICAL CROSS-SECTION GRF



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APPENDIX III

South Camp Dike Construction Photographs



April 13, 2009



April 16, 2009



April 22, 2009



April 22, 2009



May 6, 2009



May 8, 2009



May 8, 2009



May 8, 2009



May 8, 2009



May 9, 2009



May 8, 2009



May 9, 2009



May 9, 2009



May 9, 2009



May 9, 2009



May 11, 2009



May 11, 2009



May 11, 2009



May 11, 2009



May 12, 2009



May 12, 2009



May 13, 2009



May 13, 2009



May 13, 2009



May 13, 2009



May 14, 2009



May 15, 2009



May 16, 2009



May 22, 2009



May 22, 2009



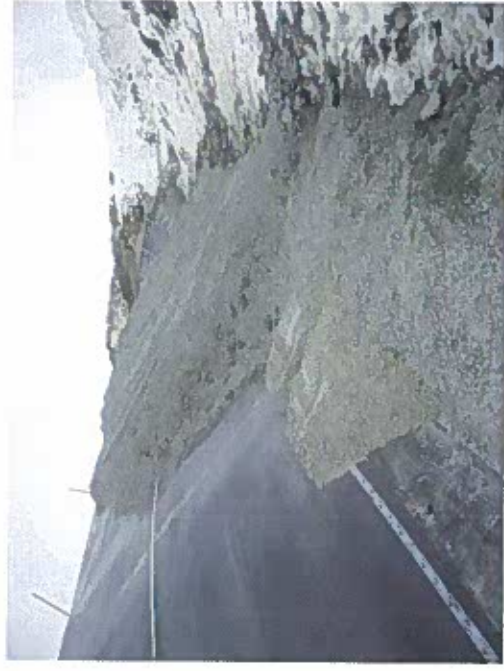
May 22, 2009



May 23, 2009



May 23, 2009



May 23, 2009



May 24, 2009



May 24, 2009



May 25, 2009



May 25, 2009



May 25, 2009



July 2, 2009



July 2, 2009



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APPENDIX IV

Laboratory Test Results

SIEVE ANALYSIS OF FINE AND COARSE AGGREGATE



May 9, 2009

AEM
Meadowbank Project

JOB NUMBER: 08-1428-0029(5000)
SAMPLE NUMBER: Stockpile

ATTENTION: Gaston Blanchette

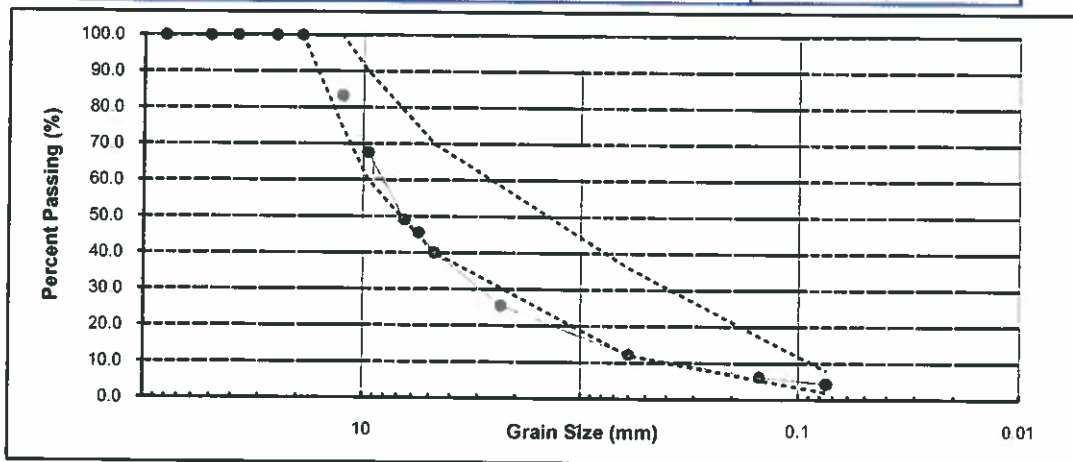
PROJECT: South Camp Dike

Sample:	Crush Stockpile
---------	-----------------

DATE SAMPLED: May 8, 2009

SAMPLED BY: JF

SIEVE ANALYSIS					MATERIAL SPECIFICATION : MMCD, GRANULAR BASE	
Sieve Size (mm)	% Retained	% Passing	Individual % Retained (Split values)			
			+ 19 mm	- 19 mm		
150	0.0	100.0	0.0			
80	0.0	100.0	0.0			
50	0.0	100.0	0.0			
37.5	0.0	100.0	0.0			
25	0.0	100.0	0.0			
19	0.0	100.0	0.0		100	100
12.5	16.8	83.2		0.0	75	100
9.5	15.5	67.6		0.0	60	90
6.5	18.6	49.1		0.0		
5.60	3.5	45.5		0.0		
4.75	5.5	40.0		0.0	40	70
2.360	14.6	25.5		0.0		
0.600	13.3	12.2		0.0	12	36
0.150	6.0	6.2		0.0		
0.075	1.9	4.3		0.0	2	8
PAN	4.4			0.0		
Total	100.0					



Remarks: Percent Gravel (4.75 mm and coarser) : 50.9%
Percent Sand (4.75 to 0.075 mm) : 44.8%
Percent Silt and Clay (Finer than 0.075) : 4.3%

Lab Technician:

GR

Reviewed by:

JC

Notice: 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.

SIEVE ANALYSIS OF FINE AND COARSE AGGREGATE



May 11, 2009

AEM
Meadowbank Project

JOB NUMBER: 08-1428-0029 - 5000
SAMPLE NUMBER: SP2

ATTENTION: Mr Gaston Blanchette

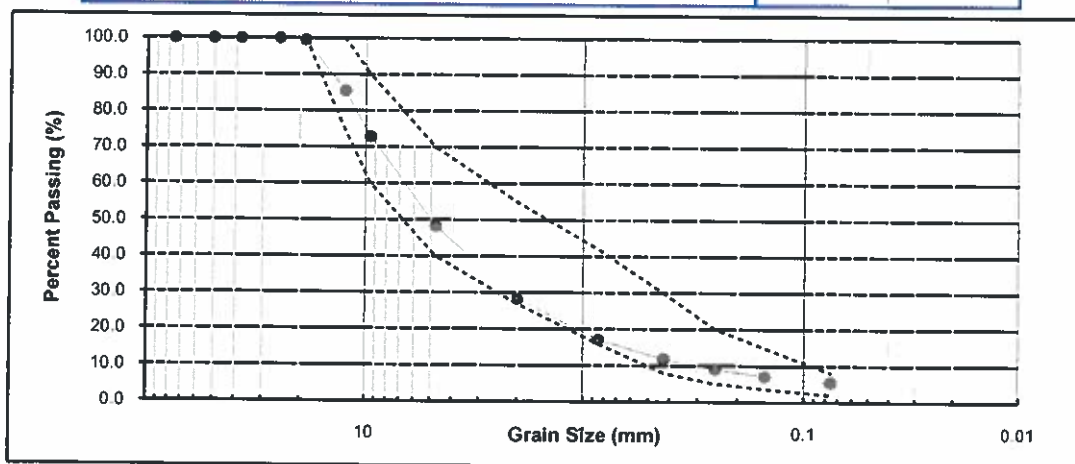
PROJECT: South Camp Dike

Sample:	SCD Stockpile
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DATE SAMPLED: **May 10, 2009**

SAMPLED BY: **GR**

SIEVE ANALYSIS					MATERIAL SPECIFICATION : MMCD, GRANULAR BASE	
Sieve Size (mm)	% Retained	% Passing	Individual % Retained (Split values)			
			+ 19 mm	- 19 mm		
150	0.0	100.0	0.0			
75	0.0	100.0	0.0			
50	0.0	100.0	0.0			
37.5	0.0	100.0	0.0			
25	0.0	100.0	0.0			
19	0.5	99.5	0.0		100	100
12.5	14.1	85.4		0.0	75	100
9.5	12.5	72.9		0.0	60	90
4.75	24.8	48.1		0.0	40	70
2.00	19.9	28.2		0.0	27	55
0.85	11.1	17.1		0.0	16	42
0.425	5.4	11.7		0.0	8	30
0.250	2.8	8.9		0.0	5	20
0.150	1.9	7.0		0.0		
0.075	1.7	5.3		0.0	2	8
PAN	5.2			0.0		
Total	99.8					



Remarks: Percent Gravel (4.75 mm and coarser) : 51.9%

Percent Sand (4.75 to 0.075 mm) : 42.8%

Percent Silt and Clay (Finer than 0.075) : 5.3%

Specification Lines are for reference only

Lab Technician:

GR

Reviewed by:

0

Notice: The test data given herein pertain to the sample provided only. This report constitutes a testing service only.
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SIEVE ANALYSIS OF FINE AND COARSE AGGREGATE



May 11, 2009

AEM
Meadowbank Project

JOB NUMBER: 08-1428-0029 - 5000
SAMPLE NUMBER: SP

ATTENTION: Mr Gaston Blanchette

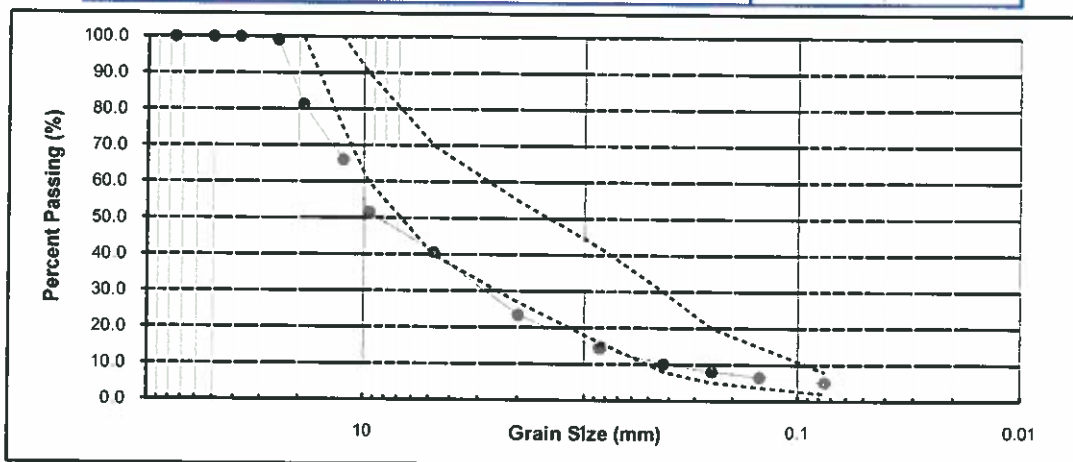
PROJECT: South Camp Dike

Sample:	Airport Stockpile
---------	-------------------

DATE SAMPLED: May 10, 2009

SAMPLED BY: GR

SIEVE ANALYSIS					MATERIAL SPECIFICATION : MMCD, GRANULAR BASE	
Sieve Size (mm)	% Retained	% Passing	Individual % Retained (Split values)			
			+ 19 mm	- 19 mm		
150	0.0	100.0	0.0			
75	0.0	100.0	0.0			
50	0.0	100.0	0.0			
37.5	0.0	100.0	0.0			
25	0.9	99.1	0.0			
19	17.9	81.3	0.0		100	100
12.5	15.3	66.0		0.0	75	100
9.5	14.5	51.5		0.0	60	90
4.75	10.8	40.6		0.0	40	70
2.00	17.3	23.3		0.0	27	55
0.85	9.1	14.3		0.0	16	42
0.425	4.2	10.1		0.0	8	30
0.250	2.1	8.0		0.0	5	20
0.150	1.5	6.5		0.0		
0.075	1.4	5.0		0.0	2	8
PAN	4.9			0.0		
Total	99.9					



Remarks: Percent Gravel (4.75 mm and coarser) : 59.4%

Percent Sand (4.75 to 0.075 mm) : 35.6%

Percent Silt and Clay (Finer than 0.075) : 5%

Specification Lines are for reference only

Lab Technician:

GR

Reviewed by:

0

Notice: The test data given herein pertain to the sample provided only. This report constitutes a testing service only.
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SIEVE ANALYSIS OF FINE AND COARSE AGGREGATE



May 10-09

AEM
Meadowbank Project

JOB NUMBER: 08-1428-0029 (5000)
SAMPLE NUMBER: 0

ATTENTION: Mr Gaston Blanchette

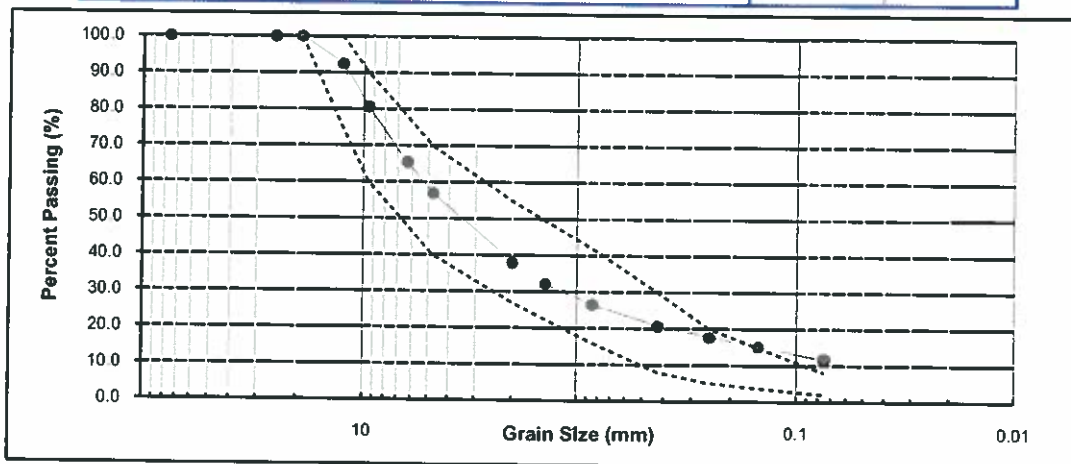
PROJECT: South Camp Dike

Sample:	Mixed 8% Bentonite/Crush
---------	--------------------------

DATE SAMPLED: May 9-09

SAMPLED BY: GR

SIEVE ANALYSIS					MATERIAL SPECIFICATION : MMCD, GRANULAR BASE	
Sieve Size (mm)	% Retained	% Passing	Individual % Retained (Split values)			
			+ 19 mm	- 19 mm		
150	0.0	100.0	0.0			
75	0.0	100.0	0.0			
25	0.0	100.0	0.0			
19	0.0	100.0	0.0		100	100
12.5	7.6	92.4	0.0		75	100
9.5	11.7	80.7	0.0		60	90
6.3	15.4	65.3		0.0		
4.75	8.5	56.8		0.0	40	70
2	18.9	37.9		0.0	27	55
1.40	5.8	32.1		0.0		
0.85	5.8	26.4		0.0	16	42
0.425	5.7	20.7		0.0	8	30
0.250	3.1	17.6		0.0	5	20
0.150	2.5	15.1		0.0		
0.075	3.6	11.6		0.0	2	8
PAN	11.6			0.0		
Total	100.1					



Remarks: Percent Gravel (4.75 mm and coarser) : 62.1%
Percent Sand (4.75 to 0.075 mm) : 26.4%
Percent Silt and Clay (Finer than 0.075) : 11.6%

Lab Technician:

GR

Reviewed by:

0

Notice: 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.



**MEADOWBANK GOLD PROJECT
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APPENDIX V

Thermistor Calibration and Installation Records

**SOUTH CAMP DIKE - THERMISTORS
AS-BUILT LOCATION OF PVC TUBES**

Instrument	Eastings	Northings	Elevation	PVC
TH-09	638150.532	7213148.18	136.032	CASING
TH-10	638167.791	7213141.74	134.384	CASING

Project: **Meadowbank Gold Mine**

Location: **SD-09A**

Northings: 7,213,148.18

Eastings: 638,150.53

String #: **38-3**

Borehole depth:

Elevation of **1st** bead (m): **133.03**

Bead Spacing: (Varies) **1-2 m**

Station

Off set

Resistance (kΩ)

Bead	B #1	B #2	B #3	B #4	B #5	B #6	B #7	B #8	B #9	B #10	B #11	B #12	B #13	B #14	B #15	B #16
Elev. (m)	133.03	132.03	131.03	130.03	129.03	128.03	127.03	126.03	124.03	122.03	120.03	118.03	116.03	114.03	112.03	110.03
Depth (m)	133.03	132.03	131.03	130.03	129.03	128.03	127.03	126.03	124.03	122.03	120.03	118.03	116.03	114.03	112.03	110.03
Correction	0.03	0.00	0.01	-0.02	0.06	-0.03	-0.03	-0.03	0.01	-0.03	0.01	-0.03	0.02	0.02	0.00	-0.04

Location: **SD-10**

Northings: 7,213,141.76

Eastings: 638,167.87

String #: **38-5**

Borehole depth:

Elevation of **1st** bead (m): **132.40**

Bead Spacing: (Varies) **1-2 m**

Station

Off set

Resistance (kΩ)

Bead	B #1	B #2	B #3	B #4	B #5	B #6	B #7	B #8	B #9	B #10	B #11	B #12	B #13	B #14	B #15	B #16
Elev. (m)	132.40	131.40	130.40	129.40	128.40	127.40	126.40	125.40	123.40	121.40	119.40	117.40	115.40	113.40	111.40	109.40
Depth (m)	132.40	131.40	130.40	129.40	128.40	127.40	126.40	125.40	123.40	121.40	119.40	117.40	115.40	113.40	111.40	109.40
Correction	0.02	0.02	0.02	0.00	0.03	0.02	-0.02	-0.04	0.00	0.00	0.02	0.01	0.00	-0.02	-0.04	0.01