APPENDIX C

APPENDIX C GEOTECHNICAL QUALITY CONTROL TESTING

EBA Engineering Consultants Ltd.

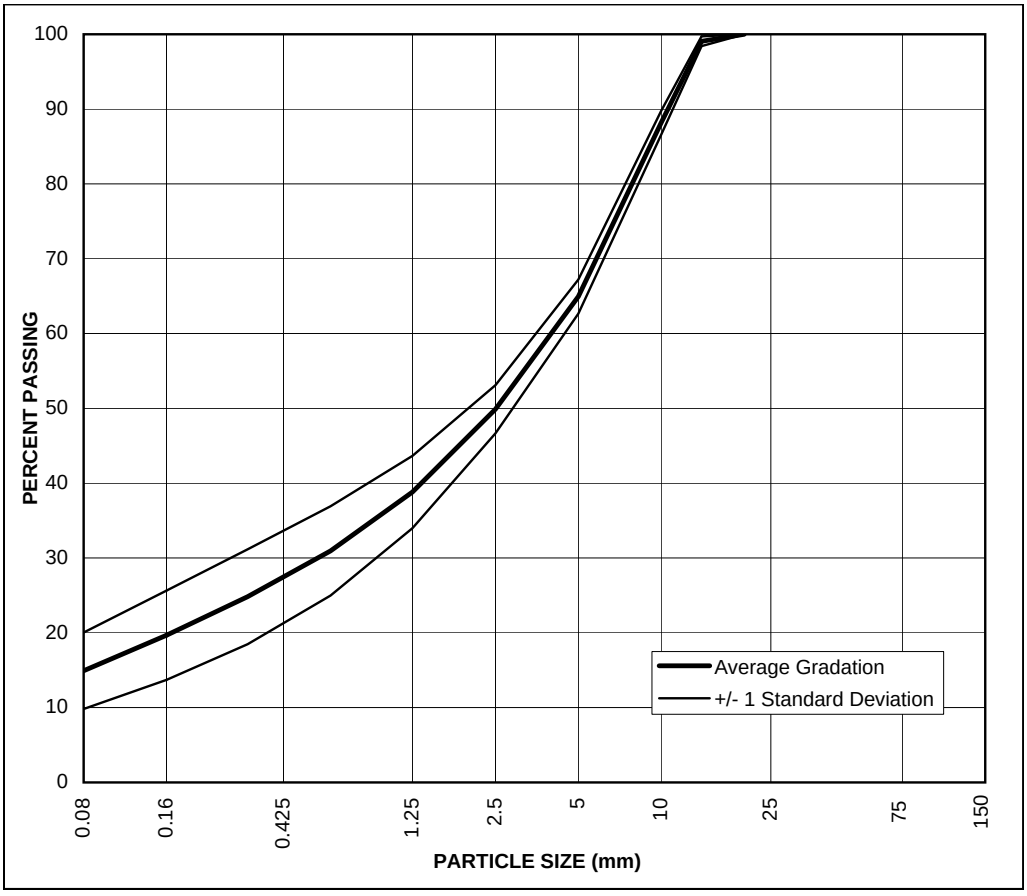
PARTICLE SIZE ANALYSIS REPORT

PROJECT: C1 Diversion
ADDRESS: Jericho Diamond Mine
PROJECT NO: 1100060.007
DATE TESTED: - **By:** -
CLIENT: Tahera Diamond Corporation
ATTENTION:

ANALYSIS DESCRIPTION:
Average filter material gradation produced in October and November of 2005 Material used to backfill Reach A inlet cut-off trench

AVG. MOISTURE CONT.:	4.5%
BULK REL DENSITY:	n/a
BULK REL. DENSITY (SSD):	n/a
APPARENT REL. DENSITY:	n/a
ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
20	100
14	99
10	88
5	65
2.5	50
1.25	39
0.63	31
0.16	20
0.08	15



Remarks:

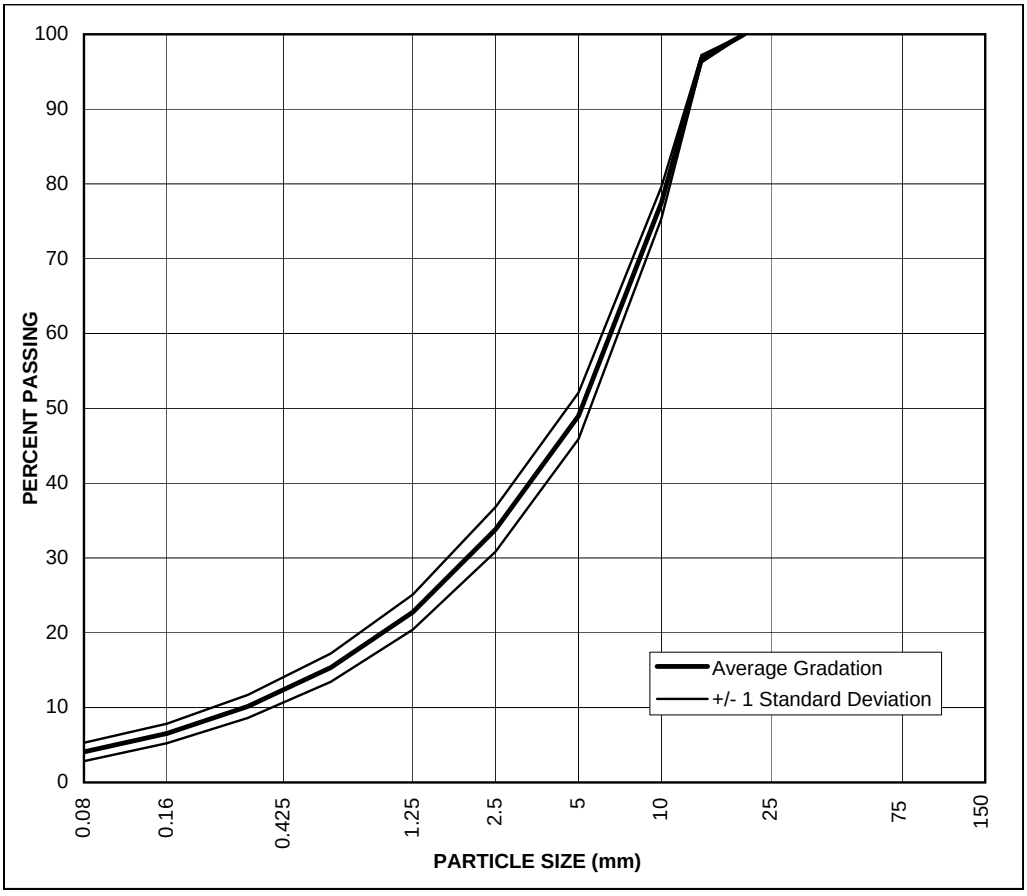
Reviewed by: _____ P.Eng.

EBA Engineering Consultants Ltd.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	**C1 Diversion**	**ANALYSIS DESCRIPTION:**	
ADDRESS:	**Jericho Diamond Mine**	**Average 20 mm crush gradation produced**	
PROJECT NO:	**1100060.007**	**in March 2006**	
DATE TESTED:	**-** **By: -**	**Material used as liner bedding and cover material**	
CLIENT:	**Tahera Diamond**		
	Corporation	**AVG. MOISTURE CONT.:**	**0.7%**
		BULK REL DENSITY:	**n/a**
ATTENTION:		**BULK REL. DENSITY (SSD):**	**n/a**
		APPARENT REL. DENSITY:	**n/a**
		ABSORPTION:	**n/a**

PARTICLE SIZE	PERCENT PASSING
20	**100**
14	**97**
10	**77**
5	**49**
2.5	**34**
1.25	**23**
0.63	**15**
0.16	**7**
0.08	**4**



Remarks:

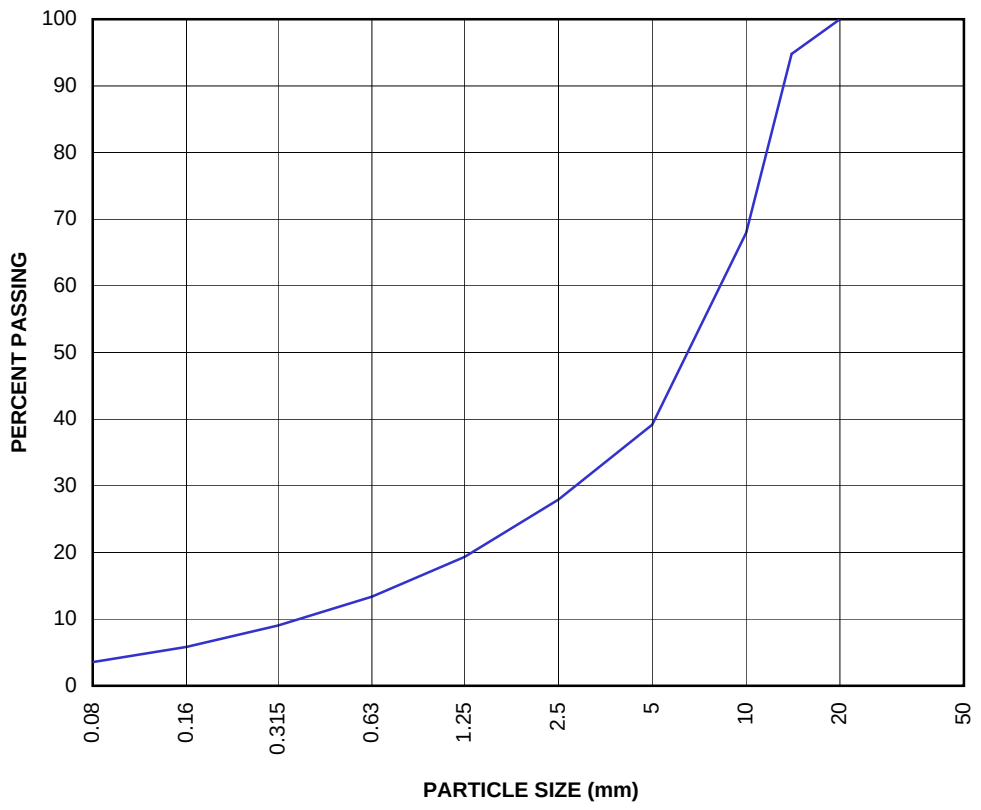
Reviewed by: _____ P.Eng.

EBA Engineering Consultants Ltd.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	PKCA Dams	**SAMPLE NO:**	Batchplant Stockpile
ADDRESS:	Jericho Diamond Project	**SAMPLE DESCRIPTION:**	
PROJECT NO:	0101-04-1100060.007		20 mm Stockpile
DATE TESTED:	May 04/06 By: GDK		
CLIENT:	Tahera Diamond Corp.	**NAT. MOISTURE CONT.:**	2.6%
		COLOUR PLATE #:	n/a
		BULK REL DENSITY:	n/a
ATTENTION:	Roland Jones/Harold Gates	**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
20	100
14	95
10	68
5	39
2.5	28
1.25	19
0.630	13
0.315	9
0.160	6
0.080	4



Remarks: Sampled from salvaged material near former batch plant

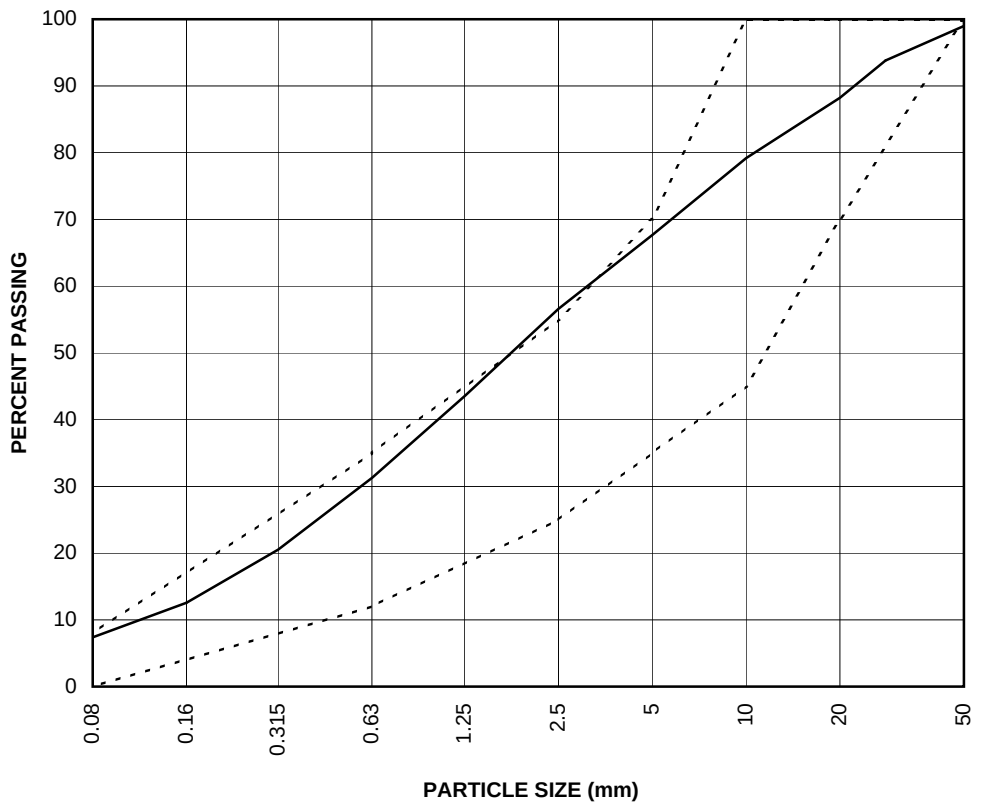
Reviewed by: _____

EBA Engineering Consultants Ltd.

PARTICLE SIZE ANALYSIS REPORT

PROJECT:	C1 Diversion	**SAMPLE NO:**	05-03
ADDRESS:	Jericho Diamond Project	**SAMPLE DESCRIPTION:**	
PROJECT NO:	0101-04-1100060.007		50 mm Crush
DATE TESTED:	May 05/06 By: GDK		
CLIENT:	Tahera Diamond Corp.	**NAT. MOISTURE CONT.:**	3.0%
		COLOUR PLATE #:	n/a
		BULK REL DENSITY:	n/a
ATTENTION:	Roland Jones/Harold Gates	**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
56	100
28	94
20	88
14	84
10	79
5	68
2.5	57
1.25	44
0.630	31
0.315	21
0.160	13
0.080	7



Remarks: Sampled from stockpile at crusher on May 5, 2006

Type 3 gradation limits shown

Reviewed by: _____

EBA Engineering Consultants Ltd.

Density Test Results

Project: **C1 Diversion Construction**
Address: **Jericho, NU**
Project Number: **0101-1100060.007**
Date Tested: 7-May-06 By: GDK
Client: **Tahera Diamond Corp.**

Attention: **Roland Jones/Harold Gates**
D.S…2492
M.S…726

Test Apparatus: Nuclear Mach. No:
Soil Description: 50 mm crush

Temperature: Air:+2
Specified Compaction: 95%
Compaction Standard: Standard
Minimum Dry Density:
Maximum Dry Density: 2120
Optimum Moisture: 5.5

Test # / Probe Depth	01/250	02/250	03 / 250	04 / 300	05/250	06 / 250		
Location	6 m from S end	6 m from S end	12 m from S end	inlet	10 m from S end	10 m from S end		
Elevation	-1.8 m	-1.5 m	-1.5 m	-1.4 m	-1.0 m	-0.8 m		
Density Count								
Density - CR								
Wet Density - kg/m^3	2225	2099	2117	2136	2097	2136		
Moisture Count								
Moisture - CR								
Moisture - kg/m^3								
Moisture - %	2.7	2.7	2.2	2.3	1.9	2		
Dry Density - kg/m^3	2167	2044	2071	2088	2058	2094		
Compaction - %	100+%	96.4%	97.7%	98.5%	97.1%	98.8%		

Elevations referenced to OG

EBA Engineering Consultants Ltd.

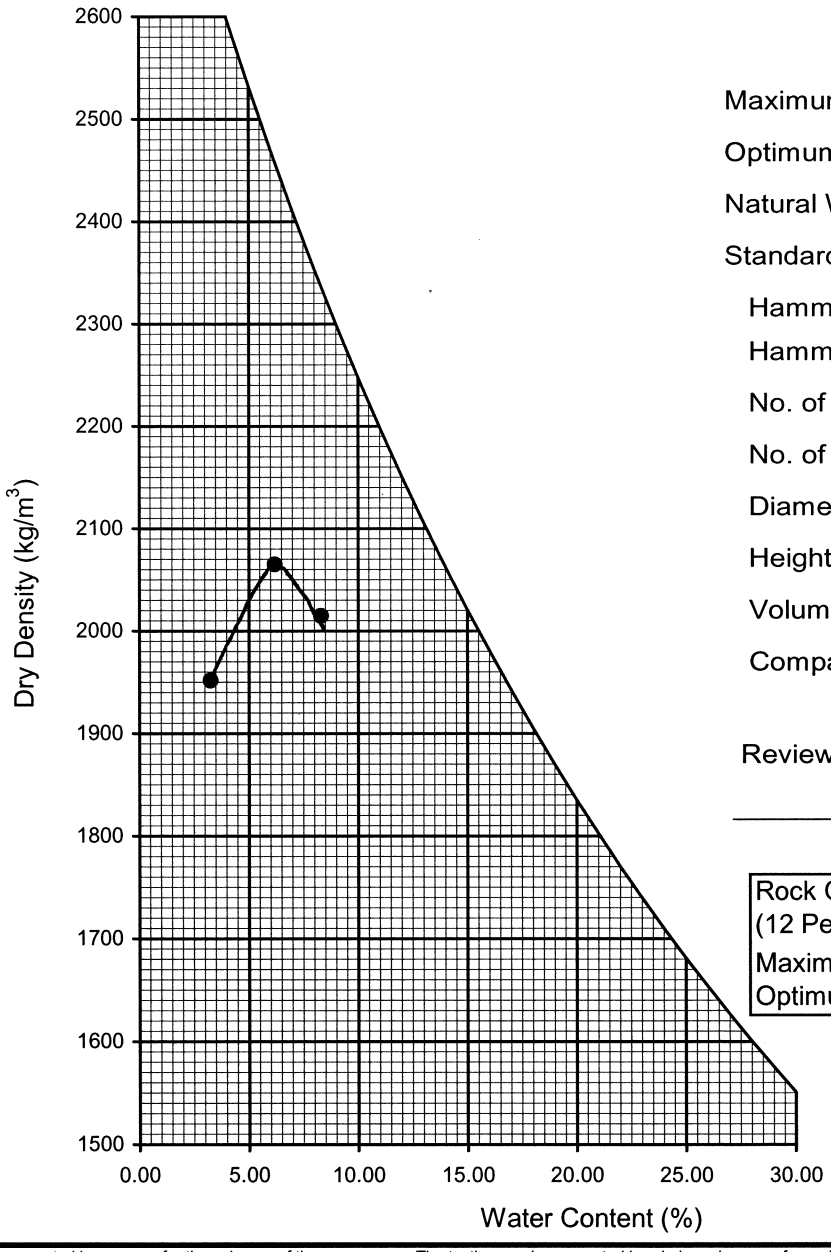
MOISTURE-DENSITY RELATIONSHIP

Project: Jericho Diamond Project
Address: Jericho Diamond Mine, NU

Project No.: 1100060.007
Date Tested: 5-May-06 By: GDK
Client: Tahera Diamond Corp.
Attention: Mr. Roland Jones/Harold Gates

Sample No.: 05-03
Date Sampled: 5-May-06
Sample Location:

Sample Description: 50 mm Crush



Maximum Dry Density: 2065 kg/m^3
Optimum Water Content: 6.2%
Natural Water Content: 4.9%

Standard Proctor (ASTM D 698) Part D

Hammer Weight:	2.5 kg
Hammer Drop:	305 mm
No. of Layers:	3
No. of Blows / Layer:	56
Diameter of Mould:	152 mm
Height of Mould:	116 mm
Volume Mould:	2124 cm^3
Compactive Effort:	600 kJ/m^3

Reviewed By:

_____ P. Eng.

Rock Corrected Densities
(12 Percent Oversize)
Maximum Dry Density = 2120 kg/m^3
Optimum Water Content = 5.5%

EBA Engineering Consultants Ltd.

Density Test Results

Project: **C1 Diversion Construction**
Address: **Jericho, NU**
Project Number: **0101-1100060.007**
Date Tested: 8-May-06 By: GDK
Client: **Tahera Diamond Corp.**

Attention: **Roland Jones/Harold Gates**
D.S…-
M.S…-

Test Apparatus: Nuclear Mach. No:
Soil Description: 50 mm crush

Temperature: Air:+4
Specified Compaction: 95%
Compaction Standard: Standard
Minimum Dry Density:
Maximum Dry Density: 2120
Optimum Moisture: 5.5

Test # / Probe Depth	07 / 300							
Location	near channel							
	mouth							
Elevation	-0.3 m							
Density Count								
Density - CR								
Wet Density - kg/m^3	2126							
Moisture Count								
Moisture - CR								
Moisture - kg/m^3								
Moisture - %	3.1							
Dry Density - kg/m^3	2062							
Compaction - %	97.3%							

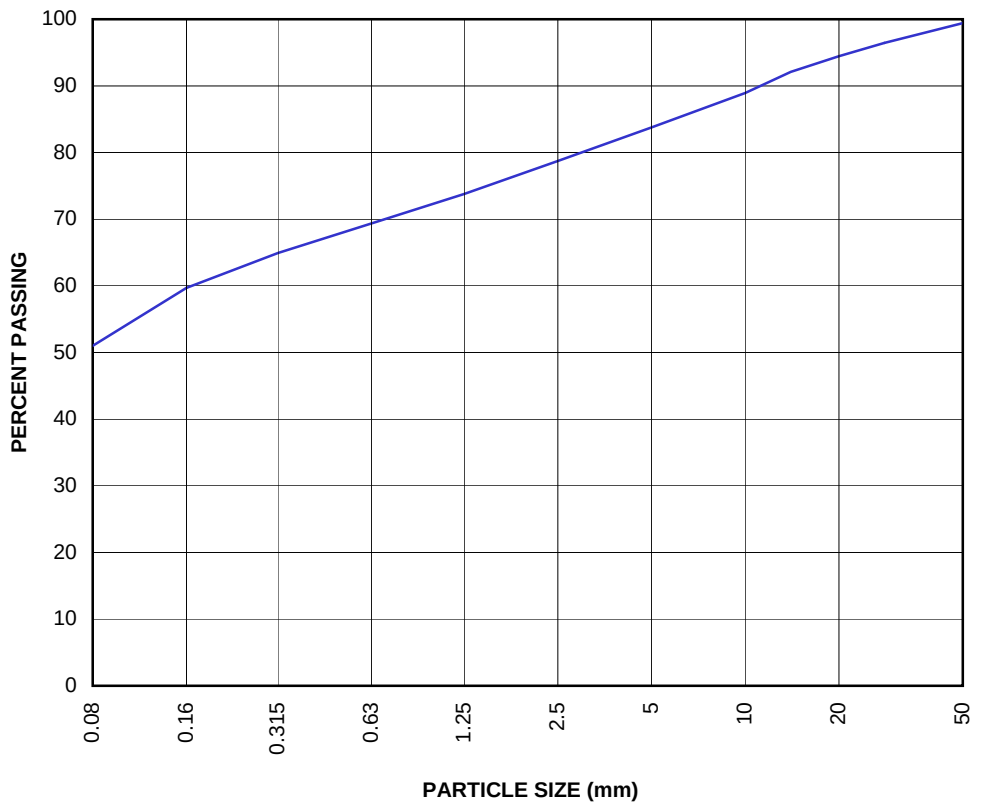
Elevations referenced to OG

EBA Engineering Consultants Ltd.

AGGREGATE ANALYSIS REPORT

PROJECT:	PKCA Dams	**SAMPLE NO:**	05-02
ADDRESS:	Jericho Diamond Project	**SAMPLE DESCRIPTION:**	
PROJECT NO:	0101-04-1100060.007		Till grab sample
DATE TESTED:	May 05/06 By: GDK		
CLIENT:	Tahera Diamond Corp.	**NAT. MOISTURE CONT.:**	13.2%
		COLOUR PLATE #:	n/a
		BULK REL DENSITY:	n/a
ATTENTION:	Roland Jones/Harold Gates	**BULK REL. DENSITY (SSD):**	n/a
		APPARENT REL. DENSITY:	n/a
		ABSORPTION:	n/a

PARTICLE SIZE	PERCENT PASSING
56	100
28	96
20	94
14	92
10	89
5	84
2.5	79
1.25	74
0.630	69
0.315	65
0.160	60
0.080	51



Remarks: Sampled from till placed at Reach C north berm on May 4, 2006

Cobbles and boulders not sampled

Reviewed by: _____

APPENDIX D

APPENDIX D LINER INSTALLATION SUMMARY

Air Pressure/Vac Box Testing

Date Installed: April29/06
Project Name: C-1diversion
Location: Tahera Jericho Project
Job Number:
Q/C Technician: Al Harman

Client: Tahera Corp
Liner Type: HDPE single textured
Sheet Thickness: 60 MIL

		Pressure (psi)			Time of Test			
Date Tested	**Seam Number**	**Start**	**End**	**Change**	**Start**	**End**	**Pass/Fail**	**Comments**
April 29/06	1	35	35	0	13:31	13:36	Pass	
April 29/06	2	35	35	0	14:32	14:37	Pass	
April 29/06	3	35	35	0	15:58	16:03	Pass	
April 29/06	4	35	35	0	17:01	17:06	Pass	
April 29/06	5	35	35	0	18:15	18:20	Pass	
April 29/06	6	35	35	0	18:32	18:37	Pass	
Vacum Test		**Patch**	**VAC Test**					

Wedge Welder Qualification

Date: April 28/06
Project Name: C-1 Diversion ditch
Location: Tahera Jericho project
Job Number:
Q/C Technician: Al Harman

Client: Tahera Corp.
Liner Type: HDPE single textured
Sheet Thickness: 60 MIL

Peel Test	Results (Test 1,Test 2) lbs/inch	ASTM Minimum lbs/inch
1)	134/131	78
2)	144/140	78
3)	138/138	78

Shear Test	Results lbs/inch	ASTM Minimum lbs/inch
1)	171	120
2)	166	120
3)	167	120

Welder Settings

Temperature: 356 Degrees F **Speed:** 4.5 ft/min

A & A
TECHNICAL SERVICES
327 OLD AIRPORT ROAD
YELLOWKNIFE, NT

EXTRUSION WELDER QUALIFICATION
FIELD TEST DATA

PROJECT NAME:	C-1 Diversion Channel
LOCATION:	Tahera Jericho Mine
DATE:	April 29, 2006
Q/C TECHNICIAN	Al Harman

EXTRUSION WELDER No.	#1
PRE-HEAT TEMP.(^{o} F)	280
EXTRUDITE TEMP.(^{o} F)	252
SHEET TEMPERATURE (^{O}C)	0
MATERIAL	60 Mil HDPE

DESTRUCTIVE TEST RESULTS

PEEL TESTS

TEST No.	lbs/in.	% Separation	Comments:
1	148	0	
2	135	0	
3	142	0	
4	127	0	
5	134	0	

SHEAR TESTS

TEST No.	lbs/in.	Comments:
1	190	Necked outside of weld
2	181	" "
3	187	" "
4	191	" "
5	199	" "

Q/C TECHNICIAN _____
signature

NOTE:	ASTM Minimum weld strength for 60 mil HDPE	40mil HDPE
	Peel 78 lbs/in	52 lbs./inch
	Shear 120 lbs/in	80 lbs/inch