APPENDIX C

APPENDIX C GEOTECHNICAL QUALITY CONTROL TESTING



C1 Diversi Jericho Di 1100060.00 - Tahera Dia Corporatio	amond Mine 07 By: - amond on	Average file October an Material us trench AVG. MOIS BULK REL	. DENSITY (SSD): T REL. DENSITY:	5	% a a a
Tahera Dia Corporatio	By: - amond on	October an Material us trench AVG. MOIS BULK REL BULK REL	and November of 2005 Sed to backfill Reach STURE CONT.: DENSITY: DENSITY (SSD): T REL. DENSITY:	5 A inlet cut-off 4.5 n/a	% a a a
Tahera Dia Corporatio	By: - amond on	Material us trench AVG. MOIS BULK REL BULK REL APPARENT	sed to backfill Reach STURE CONT.: DENSITY: DENSITY (SSD): T REL. DENSITY:	A inlet cut-off 4.5 n/a n/a	% a a a
CENT 100	on O O	trench AVG. MOIS BULK REL BULK REL APPARENT	STURE CONT.: DENSITY: DENSITY (SSD): T REL. DENSITY:	4.5 n/a n/a n/a	% a a a
CENT 100	0 0	AVG. MOIS BULK REL BULK REL APPARENT	DENSITY: DENSITY (SSD): T REL. DENSITY:	n/a n/a n/a	a a a
CENT 100	0 0	BULK REL BULK REL APPARENT	DENSITY: DENSITY (SSD): T REL. DENSITY:	n/a n/a n/a	a a a
SING 9	0	BULK REL. APPARENT	. DENSITY (SSD): T REL. DENSITY:	n/a n/a	a
SING 9	0	APPARENT	T REL. DENSITY:	n/a	a
SING 9	0		•		
SING 9	0	ABSORPII	ion:	n/a	a
SING 9	0				
80	0				
70					
00					
99 20	0				
88 N					
	0				
39					
31	0				
20					
15			-		
	0.08 0.00	0.425	2.5	752	75
		P	PARTICLE SIZE (mm)		
	39 31 20 25	99	39 30 55 10 0 80 10 0 80 10 10 10 10 10 10 10 10 10 10 10 10 10	39 31 20 20 10	39 30 30 20

ebo

			P	ARTICI	LE SIZ	E ANA	LYSI	S RE	POR	T			
PROJECT:	_	C1 D	iversio	n		ANALY	SIS DE	SCRIP	TION:				
ADDRESS:	•	Jeric	ho Diaı	nond Min	ne	Average 20 mm crush gradation produced							
PROJECT NO):	1100	060.007	50.007		in March 2006							
DATE TESTE	D:		-	By:	-	Material used as liner bedding and cover material							
CLIENT:	•	Tahe	ra Dian	nond									
	•	Corp	oration	oration		AVG. MOISTURE CONT.:					0.7%		
	•					BULKI	REL DE	NSITY:	:			n/a	
ATTENTION:	·-					BULK REL. DENSITY (SSD):				n/a			
	· -					•						n/a	
						APPARENT REL. DENSITY: ABSORPTION:				n/a			
PARTICLE	PERCE	NT	100										
SIZE	PASSI	NG	100										
			90							$\perp I_{-}$			
			80							-			
									,	//			
			70							/			
			o										
20	100		NS 60										
14	97		PERCENT PASSING										
10	77		ËÄ										
5	49		940 40						/				
2.5	34		<u> </u>										
1.25 0.63	23 15		30										
0.63	7												
0.08	4		20										
										1	verage Gra /- 1 Standa		on
			10							-\	7- i Starida	iu Deviati	
			0										
				0.08	, ,	C Y	.25	2.5	2	10	25	75	150
				0 0	Č	5.	_		ZE (mm)				•
									(/				
Remarks:													
Reviewed by	,.						P.Eı	na					

The testing services reported herein have been performed by an EBA technician to recognized industry standards, unless otherwise noted. No other warranty is made. These data do not include or represent any interpretation or opinion of specification compliance or material suitability. Should engineering interpretation be required, EBA will provide it upon written request.

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

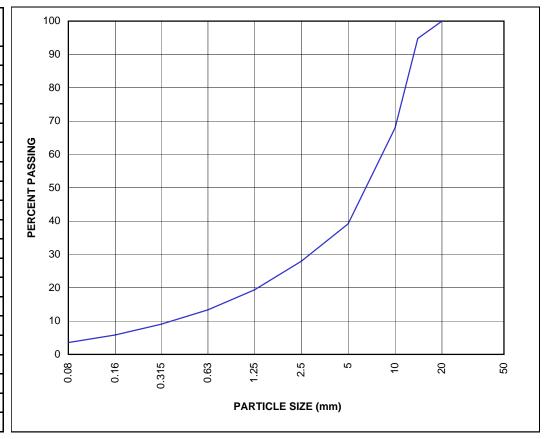
CLIENT: Tahera Diamond Corp. 2.6% NAT. MOISTURE CONT.:

> n/a **COLOUR PLATE #: BULK REL DENSITY:** n/a

ATTENTION: Roland Jones/Harold Gates **BULK REL. DENSITY (SSD):** n/a

> n/a APPARENT REL. DENSITY: n/a **ABSORPTION:**

PARTICLE	PERCENT
SIZE	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

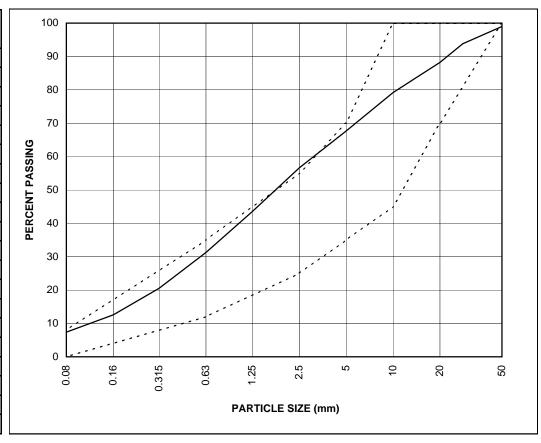
Reviewed by:



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. 3.0% NAT. MOISTURE CONT.: n/a **COLOUR PLATE #: BULK REL DENSITY:** n/a **ATTENTION: Roland Jones/Harold Gates BULK REL. DENSITY (SSD):** n/a n/a APPARENT REL. DENSITY:

ABSORPTION:

PARTICLE	PERCENT
SIZE	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:



n/a

2.7

2167

100+%

2.7

2044

96.4%

Moisture - kg/m³ Moisture - %

Dry Density - kg/m³
Compaction - %

EBA Engineering Consultants Ltd.								
			Density	Test Results				
Project: C1 Diversion Address: Jericho, N		1	Test Apparatus: Soil Description:		Mach. No: 50 mm crush			
Project Number: 0101-1100060.007 Date Tested: 7-May-06 By: GDK Client: Tahera Diamond Corp.				Temperature: Specified Comp	action:	Air:+2 95%		
	tention: Roland Jones/Harold Gates Compaction Standard: Minimum Dry Density:			ensity:	Standard			
D.S2492 M.S726			Maximum Dry D Optimum Moistu	•	2120 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/m³ Moisture Count	2225	2099	2117	2136	2097	2136		
Moisture - CR								

Elevations referenced to OG

2.3

2088

98.5%

2

2094

98.8%

1.9

2058

97.1%

2.2

2071

97.7%

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

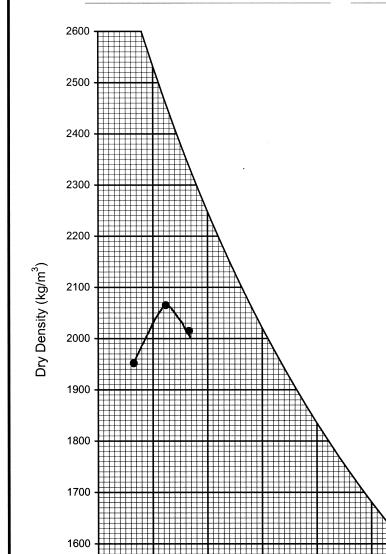
Date Sampled:

5-May-06

Sample Location:

Sample Description:

50 mm Crush



Maximum Dry Density:

2065 kg/m³

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 cm³

Compactive Effort:

600 kJ/m³

Reviewed By:

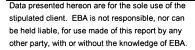
P. Eng.

Rock Corrected Densities (12 Percent Oversize)

Maximum Dry Density = 2120 kg/m³ Optimum Water Content = 5.5%

15.00 20.00 25.00

Water Content (%)



0.00

5.00

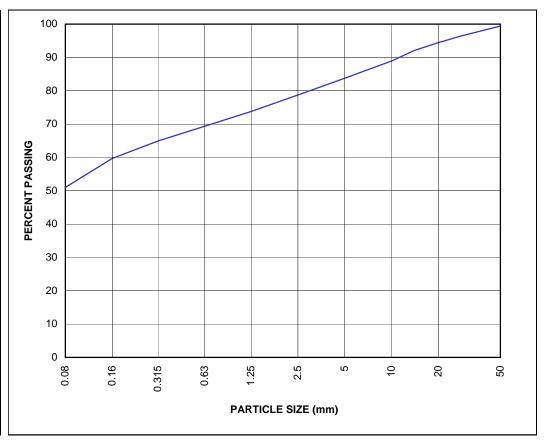
1500

Density Test Results						
Project: C1 Diversion Address: Jericho, N	IU			Test Apparatus: Nuclear Soil Description:	50 mm crush	Mach. No:
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			Temperature: Specified Compaction: Compaction Standard:	Air:+4 95% Standard		
			Minimum Dry Density: Maximum Dry Density: Optimum Moisture:	2120 5.5		
Test # / Probe Depth Location	07 / 300 near channel					
Elevation Density Count	mouth -0.3 m					
Density - CR Wet Density - kg/m ³ Moisture Count	2126					
Moisture - CR Moisture - kg/m ³						
Moisture - % Dry Density - kg/m³ Compaction - %	3.1 2062 97.3%					
Elevations referenced to	OG					

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. 13.2% NAT. MOISTURE CONT.: n/a **COLOUR PLATE #: BULK REL DENSITY:** n/a **ATTENTION:** Roland Jones/Harold Gates **BULK REL. DENSITY (SSD):** n/a n/a APPARENT REL. DENSITY:

ABSORPTION:

PARTICLE	PERCENT				
SIZE	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:



n/a

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

N. C
TECHNICAL SERVICES

		Pressure (psi)		Time o	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

Client: Tahera Corp.

Liner Type: HDPE single textured Sheet Thickness: 60 MIL

Job Number:				
Q/C Technician:	Al Harman			
Peel Test	Results (Test 1,Test 2)	ASTM Minimum		
	lbs/inch	lbs/inch		
1)	134/131	78		
2)	144/140	78		

April 28/06

C-1 Diversion ditch

Tahera Jericho project

Date:

Location:

Project Name:

2) 3)

1)	171	120	
	lbs/inch	lbs/inch	
Shear Test	Results	ASTM Minimum	
· · · · · · · · · · · · · · · · · · ·	•		
3)	138/138	78	
2)	144/140	78	

166	120
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.(° F)	280	
EXTRUDITE TEMP.(° F)	252	
SHEET TEMPERATURE (°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	П п	



Q/C TE	JHľ	VIC	IAN
--------	-----	-----	-----

signature

NOTE: ASTM Minimum weld strength for 60 mil HDPE

Peel 78 lbs/in Shear 120 lbs/in 40mil HDPE 52 lbs./inch 80 lbs/inch