

From: MARIA

To: 0413631922

30/04/2010 07:44

#965 P. 001/004

Labco

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 PO Box 10114, Linton Grange, Port Elizabeth, 6015
 E-Mail: info@labco.co.za Web: www.labco.co.za
 Tel: 041 364-1290 Fax: 041 364-1291



CIVIL ENGINEERING MATERIALS TESTING SERVICES (PTY) Ltd

T0227

CUSTOMER : Terratest (Pty) Ltd
 P. O. Box 27308
 Greenacres
 Port Elizabeth, 6057

PROJECT : Redhouse Chelsea Arterial
 Geotechnical Investigation

ATTENTION : Mr. D. Jefferys

SUBMISSION DATE : 19.04.2010

DATE TESTED : 29.04.2010

JOB CARD No. : C8693 / 400359/05/12/DJ/mr/01

REPORT DATE : 29.04.2010

SAMPLING PROCEDURE: Delivered to the laboratory

INDICATOR / CBR RESULT SUMMARY

SAMPLE NUMBER	X114173	X114174	X114175	X114177	X114178	X114179
LAYER						
CO-ORDINATES						
STAKE VALUE	TP 5a	TP 7a	TP 12a	TP 15a	TP 18a	TP 19a
OFF SET						
DEPTH m	0.19-0.56	0.38-1.08	0.55-1.15	0.34-0.81	0.13-0.37	0.34-0.59
DESCRIPTION	Sand	Sand	Pebbles and Cobbles	Sand	Sand	Sandy Gravel
AASHTO CLASSIFICATION	A-3(0)	A-3(0)	A-1-a(0)	A-2-4(0)	A-3(0)	A-2-7(0)
Indicator & CBR results comply to TRH14 Specification of		G9	G7	G7		

SIEVE ANALYSIS - TMH 1 Test Method A1(a)

% PASSING	X114173	X114174	X114175	X114177	X114178	X114179
105.0 mm						
75.0 mm			100			100
63.0 mm			90			93
53.0 mm			90			89
37.5 mm			88			82
26.5 mm			80			80
19.0 mm			72	100	100	75
13.2 mm	100		61	99	99	66
4.75 mm	99		31	97	97	46
2.00 mm	97	100	23	95	95	37
0.425 mm	94	97	21	90	92	34
0.075 mm	25	24	8	26	25	23

SOIL MORTAR ANALYSIS - TMH 1 Test Method A5

	X114173	X114174	X114175	X114177	X114178	X114179
COARSE SAND (%)	3	3	9	5	3	8
COARSE FINE SAND (%)	10	13	8	10	10	7
MEDIUM FINE SAND (%)	33	29	20	28	32	14
FINE FINE SAND (%)	28	30	27	30	28	10
PASSING 0.075mm (%)	25	24	36	27	27	62
GRADING MODULUS	0.84	0.79	2.48	0.89	0.88	2.06

ATTERBERG LIMITS : TMH 1 Test Method A2 - A4

	X114173	X114174	X114175	X114177	X114178	X114179
LIQUID LIMIT						55
PLASTICITY INDEX	NP	NP	NP	NP	NP	25
LINEAR SHRINKAGE	0.0	0.0	0.0	0.0	0.0	11.5

C.B.R. : TMH 1 Test Method A7 - A8

	X114173	X114174	X114175	X114177	X114178	X114179
MOD AASHTO (Kg/m ³)		1924	2333	1930		2032
O.M.C. (%)		10.2	6.8	10.8		7.3
C.B.R. @ 100% COMPACTION		31	37	30		3
C.B.R. @ 98 % COMPACTION		23	26	30		2
C.B.R. @ 95 % COMPACTION		14	22	27		1
C.B.R. @ 93 % COMPACTION		9	21	25		1
C.B.R. @ 90 % COMPACTION		5	20	21		1
SWELL (MASHTO) %		0.0	0.0	0.0		0.6

The above test results are pertinent only to the samples received and tested at the laboratory. This report shall not be reproduced, except in full, without the prior consent of Labco Civil Engineering Materials Testing Services (Pty) Ltd
 Deviation from Test Method : Moisture Contents dried overnight at 105 - 110°C.

Name :

Wouter Steyn

Position :

Laboratory Manager

From: MARTA

To: 0413631922

30/04/2010 07:45

#965 P.002/004

Labco

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**CIVIL ENGINEERING MATERIALS TESTING SERVICES (PTY) Ltd**

T0227

CUSTOMER : Terratest (Pty) Ltd
 P. O. Box 27308
 Greenacres
 Port Elizabeth, 6057

PROJECT : Redhouse Chelsea Arterial
 Geotechnical Investigation

ATTENTION : Mr. D. Jefferys

SUBMISSION DATE : 14.04.2010

DATE TESTED : 29.04.2010

REPORT DATE : 29.04.2010

JOB CARD No. : C8693 / 400359/05/12/DJ/mr/01

SAMPLING PROCEDURE: Delivered to the laboratory

INDICATOR / CBR RESULT SUMMARY

SAMPLE NUMBER	X114180	X114182	X114254	X114255	X114256	X114257
LAYER						
CO-ORDINATES						
STAKE VALUE	TP 21a	TP 39b	TP 6a	TP 11a	TP 11b	TP 13a
OFF SET						
DEPTH m	0.48-0.64	0.51-1.39	0.62-1.13	0.11-0.67	0.67-1.32	0.31-0.57
DESCRIPTION	Sandy Gravel	Sandstone	Weathered Sandstone	Weathered Sandstone	Silty Sand	Sand
AASHTO CLASSIFICATION	A-2-4(0)	A-1-b(0)	A-2-6(0)	A-3(0)	A-3(0)	A-3(0)
Indicator & CBR results comply to TRH14 Specification of		G6				

SIEVE ANALYSIS - TMH 1 Test Method A1(a)

% PASSING	X114180	X114182	X114254	X114255	X114256	X114257
105.0 mm		100				
75.0 mm		87				
63.0 mm		87				100
53.0 mm	100	79	100			93
37.5 mm	98	74	90		100	91
26.5 mm	96	72	85		98	88
19.0 mm	93	67	81	100	95	85
13.2 mm	92	61	73	95	92	81
4.75 mm	90	52	46	86	83	66
2.00 mm	88	49	35	79	77	57
0.425 mm	87	43	32	74	73	52
0.075 mm	35	19	19	53	30	21

SOIL MORTAR ANALYSIS - TMH 1 Test Method A5

	X114180	X114182	X114254	X114255	X114256	X114257
COARSE SAND (%)	1	12	9	6	5	9
COARSE FINE SAND (%)	11	12	7	3	9	8
MEDIUM FINE SAND (%)	25	22	15	6	20	20
FINE FINE SAND (%)	24	16	16	18	28	27
PASSING 0.075mm (%)	40	38	53	67	38	36
GRADING MODULUS	0.90	1.89	2.15	0.94	1.21	1.70

ATTERBERG LIMITS : TMH 1 Test Method A2 - A4

	X114180	X114182	X114254	X114255	X114256	X114257
LIQUID LIMIT	18	19	34	19		
PLASTICITY INDEX	3	3	17	3	NP	NP
LINEAR SHRINKAGE	1.5	1.5	8.5	2.5	0.0	0.0

C.B.R. : TMH 1 Test Method A7 - A8

	X114180	X114182	X114254	X114255	X114256	X114257
MOD AASHTO (Kg/m ³)		2091				
O.M.C. (%)		8.6				
C.B.R. @ 100% COMPACTION		31				
C.B.R. @ 98 % COMPACTION		30				
C.B.R. @ 95 % COMPACTION		28				
C.B.R. @ 93 % COMPACTION		28				
C.B.R. @ 80 % COMPACTION		27				
SWELL (MAASHTO) %		0.1				

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 Deviation from Test Method : Moisture Contents dried overnight at 105 - 110°C.

Name :

Position :

Walter Steyn
 Laboratory Manager

From: MARIA

To: 0413631922

30/04/2010 07:45

#965 P.003/004

Labco

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 Port Elizabeth, 6057

PROJECT : Redhouse Chelsea Arterial
 Geotechnical Investigation

ATTENTION : Mr. D. Jefferys

SUBMISSION DATE : 14.04.2010

DATE TESTED : 29.04.2010

REPORT DATE : 29.04.2010

JOB CARD No. : C8693 / 400359/05/12/DJ/mr/01

SAMPLING PROCEDURE: Delivered to the laboratory

INDICATOR / CBR RESULT SUMMARY

SAMPLE NUMBER	X114258	X114259	X114260	X114262	X114263	X114264
LAYER						
CO-ORDINATES						
STAKE VALUE	TP 14a	TP 14b	TP 22a	TP 23a	TP 25a	TP 37a
OFF SET						
DEPTH m	0.29-0.66	0.87-1.62	0.38-0.86	0.00-0.42	0.11-0.38	0.42-0.81
DESCRIPTION	Sandy Gravel	Weathered Sandstone	Sand	Silty Sand	Sand	Sand
AASHTO CLASSIFICATION	A-1-a(0)	A-4(0)	A-2-4(0)	A-3(0)	A-2-4(0)	A-3(0)
Indicator & CBR results comply to TRH14 Specification of		G7	G10			G7

SIEVE ANALYSIS - TMH 1 Test Method A1(a)

% PASSING	X114258	X114259	X114260	X114262	X114263	X114264
105.0 mm	100					
75.0 mm	89					
63.0 mm	89					
53.0 mm	89					100
37.5 mm	89					98
26.5 mm	85					98
19.0 mm	79	100				98
13.2 mm	66	99	100	100	100	97
4.75 mm	41	96	99	99	99	95
2.00 mm	25	94	99	97	99	93
0.425 mm	14	86	98	94	97	89
0.075 mm	7	45	30	52	40	23

SOIL MORTAR ANALYSIS - TMH 1 Test Method A5

	X114258	X114259	X114260	X114262	X114263	X114264
COARSE SAND (%)	44	9	1	3	2	4
COARSE FINE SAND (%)	4	15	9	7	9	12
MEDIUM FINE SAND (%)	9	13	29	8	21	29
FINE FINE SAND (%)	13	15	31	28	28	30
PASSING 0.075mm (%)	30	48	30	54	40	25
GRADING MODULUS	2.54	0.75	0.73	0.57	0.65	0.95

ATTERBERG LIMITS : TMH 1 Test Method A2 - A4

	X114258	X114259	X114260	X114262	X114263	X114264
LIQUID LIMIT	19	17				
PLASTICITY INDEX	4	3	NP	NP	NP	NP
LINEAR SHRINKAGE	2.5	1.5	0.0	0.0	0.0	0.0

C.B.R. : TMH 1 Test Method A7 - A8

	X114258	X114259	X114260	X114262	X114263	X114264
MOD AASHTO (Kg/m ³)		2046	1876			2056
O.M.C. (%)		10.5	14.5			10.6
C.B.R. @ 100% COMPACTION		153	4			32
C.B.R. @ 98% COMPACTION		79	4			29
C.B.R. @ 95% COMPACTION		47	4			23
C.B.R. @ 93% COMPACTION		44	3			17
C.B.R. @ 90% COMPACTION		39	3			12
SWELL (MAASHTO) %		0.0	0.0			0.0

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 Deviation from Test Method : Moisture Contents dried overnight at 105 - 110°C.

Name :

Position :

Wouter Steyn
 Laboratory Manager

From: MARIA

To: 0413631922

30/04/2010 07:45

#965 P. 004/004

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T0227

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 P. O. Box 27308
 Greenacres
 Port Elizabeth, 6057

PROJECT : Redhouse Chelsea Arterial
 Geotechnical Investigation

ATTENTION : Mr. D. Jefferys

SUBMISSION DATE : 14.04.2010
DATE TESTED : 29.04.2010
REPORT DATE : 29.04.2010

JOB CARD No. : C8693 / 400359/05/12/DJ/mr/01

SAMPLING PROCEDURE: Delivered to the laboratory

INDICATOR / CBR RESULT SUMMARY

SAMPLE NUMBER	X114265				
LAYER					
CO-ORDINATES					
STAKE VALUE	TP 40a				
OFF SET					
DEPTH m	0.50-0.83				
DESCRIPTION	Pebbles and Cobbles				
AASHTO CLASSIFICATION	A-2-6(0)				
Indicator & CBR results comply to TRH14 Specification of					

SIEVE ANALYSIS - TMH 1 Test Method A1(a)

% PASSING 105.0 mm	100				
75.0 mm	88				
63.0 mm	88				
53.0 mm	88				
37.5 mm	85				
26.5 mm	82				
19.0 mm	78				
13.2 mm	74				
4.75 mm	58				
2.00 mm	48				
0.425 mm	45				
0.075 mm	23				

SOIL MORTAR ANALYSIS - TMH 1 Test Method A5

COARSE SAND (%)	6				
COARSE FINE SAND (%)	8				
MEDIUM FINE SAND (%)	22				
FINE FINE SAND (%)	16				
PASSING 0.075mm (%)	48				
GRADING MODULUS	1.84				

ATTERBERG LIMITS : TMH 1 Test Method A2 - A4

LIQUID LIMIT	29				
PLASTICITY INDEX	15				
LINEAR SHRINKAGE	8.0				

C.B.R. : TMH 1 Test Method A7 - A8

MOD AASHTO (Kg/m ³)	2048				
O.M.C. (%)	11.1				
C.B.R. @ 100% COMPACTION	6				
C.B.R. @ 98 % COMPACTION	3				
C.B.R. @ 95 % COMPACTION	2				
C.B.R. @ 93 % COMPACTION	2				
C.B.R. @ 90 % COMPACTION	2				
SWELL (MAASHTO) %	0.8				

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 Deviation from Test Method : Moisture Contents dried overnight at 105 - 110°C.

Name :

Position :

Wouter Steyn

Laboratory Manager

From: MARIA

To: 0413631922

30/04/2010 07:44

#964 P.001/002

Labco

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**CIVIL ENGINEERING MATERIALS TESTING SERVICES (PTY) Ltd**

T0227

CUSTOMER : Terratest (Pty) Ltd
 P. O. Box 27308
 Greenacres
 Port Elizabeth, 6057

PROJECT : Reservoir Geotechnical
 Investigation (Jeffreys Bay)

ATTENTION : Mr. R. Molyneux

SUBMISSION DATE : 16.04.2010
DATE TESTED : 29.04.2010
REPORT DATE : 29.04.2010

JOB CARD No. : C8682 / 400363/05/12/RM/mm/01

SAMPLING PROCEDURE: Delivered to the laboratory

INDICATOR / CBR RESULT SUMMARY

SAMPLE NUMBER	X114139	X114140	X114141	X114143	X114144	X114145
LAYER						
CO-ORDINATES						
STAKE VALUE	TP 1b	TP 1c	TP 2a	TP 2c	TP 3a	TP 3b
OFF SET						
DEPTH m	1.24-1.89	1.89-2.48	0.28-0.80	1.55-2.49	0.28-0.77	0.77-1.08
DESCRIPTION	Siltstone	Siltstone	Mudstone	Siltstone	Mudstone	Siltstone
AASHTO CLASSIFICATION	A-6(4)	A-4(0)	A-7(4)	A-2-4(0)	A-7(6)	A-7(6)
Indicator & CBR results comply to TRH14 Specification of				G10	G10	

SIEVE ANALYSIS - TMH 1 Test Method A1(a)

% PASSING	X114139	X114140	X114141	X114143	X114144	X114145
105.0 mm						
75.0 mm						
63.0 mm		100	100	100		100
53.0 mm	100	90	93	93	100	94
37.5 mm	98	81	93	91	98	92
26.5 mm	92	81	89	82	97	80
19.0 mm	87	77	87	79	96	78
13.2 mm	79	72	82	74	94	77
4.75 mm	67	63	71	66	83	70
2.00 mm	62	57	63	64	71	65
0.425 mm	57	51	56	60	64	60
0.075 mm	48	36	40	33	47	50

SOIL MORTAR ANALYSIS - TMH 1 Test Method A5

	X114139	X114140	X114141	X114143	X114144	X114145
COARSE SAND (%)	8	11	11	6	10	8
COARSE FINE SAND (%)	3	8	7	10	5	3
MEDIUM FINE SAND (%)	4	7	10	12	10	5
FINE FINE SAND (%)	7	11	9	21	10	8
PASSING 0.075mm (%)	77	63	64	51	66	78
GRADING MODULUS	1.33	1.56	1.41	1.43	1.18	1.25

ATTERBERG LIMITS : TMH 1 Test Method A2 - A4

	X114139	X114140	X114141	X114143	X114144	X114145
LIQUID LIMIT	34	26	48	25	41	44
PLASTICITY INDEX	16	9	21	6	22	19
LINEAR SHRINKAGE	9.0	5.5	11.0	4.0	10.5	10.5

C.B.R. : TMH 1 Test Method A7 - A8

MOD AASHTO (Kg/m ³)	2008	2063	1884	2017	1899	1791
O.M.C. (%)	9.8	8.5	9.2	9.3	10.6	13.1
C.B.R. @ 100% COMPACTION	1	4	3	5	7	3
C.B.R. @ 98 % COMPACTION	1	3	2	4	5	3
C.B.R. @ 95 % COMPACTION	1	2	1	4	3	2
C.B.R. @ 93 % COMPACTION	1	2	1	3	3	1
C.B.R. @ 90 % COMPACTION	1	2	1	3	3	1
SWELL (MAASHTO) %	0.9	0.9	0.9	0.6	0.4	0.9

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 Deviation from Test Method : Moisture Contents dried overnight at 105 - 110°C.

Name : 
 Position : **Wouter Steyn**
Laboratory Manager

From: MARTA

To: 0413631922

30/04/2010 07:44

#964 P.002/002

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CIVIL ENGINEERING MATERIALS TESTING SERVICES (PTY) Ltd

T0227

CUSTOMER : Terratest (Pty) Ltd
 P. O. Box 27308
 Greenacres
 Port Elizabeth, 6057

PROJECT : Reservoir Geotechnical
 Investigation (Jeffreys Bay)

ATTENTION : Mr. R. Molyneux

SUBMISSION DATE : 16.04.2010
DATE TESTED : 29.04.2010
REPORT DATE : 29.04.2010

JOB CARD No. : C8682 / 400363/05/12/RM/rm/01

SAMPLING PROCEDURE: Delivered to the laboratory

INDICATOR / CBR RESULT SUMMARY

SAMPLE NUMBER	X114148	X114149			
LAYER					
CO-ORDINATES					
STAKE VALUE	TP 4b	TP 4c			
OFF SET					
DEPTH m	0.41-1.19	1.55-2.18			
DESCRIPTION	Mudstone	Slitstone			
AASHTO CLASSIFICATION	A-6(2)	A-2-4(0)			
Indicator & CBR results comply to TRH14 Specification of		G10			

SIEVE ANALYSIS - TMH 1 Test Method A1(a)

% PASSING					
105.0 mm		100			
75.0 mm	100	80			
63.0 mm	89	76			
53.0 mm	89	76			
37.5 mm	89	71			
26.5 mm	88	68			
19.0 mm	88	64			
13.2 mm	87	60			
4.75 mm	83	51			
2.00 mm	80	48			
0.425 mm	77	45			
0.075 mm	40	19			

SOIL MORTAR ANALYSIS - TMH 1 Test Method A5

COARSE SAND (%)	4	6			
COARSE FINE SAND (%)	5	12			
MEDIUM FINE SAND (%)	13	18			
FINE FINE SAND (%)	28	23			
PASSING 0.075mm (%)	50	40			
GRADING MODULUS	1.03	1.88			

ATTERBERG LIMITS : TMH 1 Test Method A2 - A4

LIQUID LIMIT	33	25			
PLASTICITY INDEX	16	8			
LINEAR SHRINKAGE	8.0	4.5			

C.B.R. : TMH 1 Test Method A7 - A8

MOD AASHTO (Kg/m ³)	1871	2024			
O.M.C. (%)	10.1	9.2			
C.B.R. @ 100% COMPACTION	2	17			
C.B.R. @ 98 % COMPACTION	1	11			
C.B.R. @ 95 % COMPACTION	1	6			
C.B.R. @ 93 % COMPACTION	1	6			
C.B.R. @ 90 % COMPACTION	1	5			
SWELL (MAASHTO) %	1.1	0.4			

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 Deviation from Test Method : Moisture Contents dried overnight at 105 - 110°C.

Page 2 of 2

Revision 7
 17.11.2008
 Labco SF 33

Name :

Position :

Wouter Steyn
 Laboratory Manager



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ENGINEERING MATERIALS TESTING SERVICES (PTY) Ltd

T0227

CLIENT : Terratest (Pty) Ltd P. O. Box 27308 Greenacres Port Elizabeth 6057 ATT: Mr. D. Jefferys	PROJECT : Redhouse Chelsea Arterial JOB CARD NUMBER: C8660 / 400359/05/12/DJ/mr/01 SUBMISSION DATE: 14.04.2010 DATE TESTED: 21.04.2010 REPORT DATE: 21.04.2010 SECTION: TP 34b @ 0.95-1.13m
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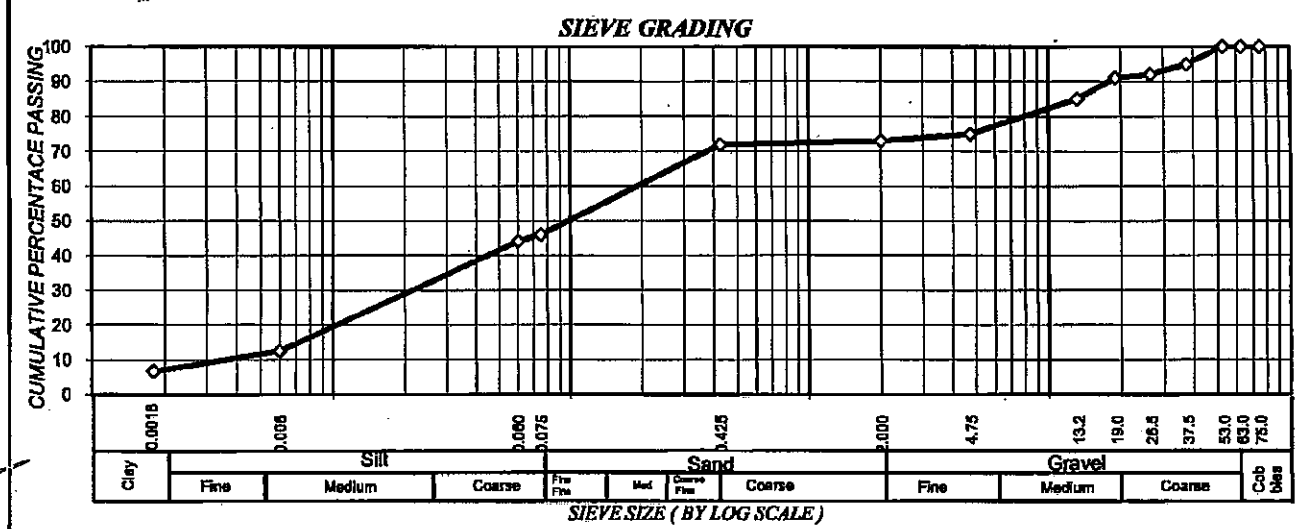
FOUNDATION INDICATOR (TMH 1 :1979 methods A1, A2, A3, A4, A5 & A6*)

S/No. & Description	X114003	Sandstone
Sieve analysis Cumulative percentage passing (mm)	75.0	100
	63.0	100
	53.0	100
	37.5	95
	26.5	92
	19.0	91
	13.2	85
	4.75	75
	2.000	73
	0.425	72
	0.075	46
	0.060	44
	0.006	12
0.0018	7	
Soil Mortar Analysis % < 2.00mm	Coarse Sand	1.0
	Coarse Fine Sand	3.0
	Medium Fine Sand	11.0
	Fine Fine Sand	22.0
	Passing 0.075	63.0
Effective size	0.004	
Uniformity Coefficient	54.3	
Coefficient of curvature	0.7	
Oversize Index	5.0	
Shrinkage Product	504.0	
Grading Coefficient	14.3	
Grading modulus	1.09	
Alter- berg Limits	Liquid Limit	31
	Plasticity Index	12
	Linear Shrinkage	7.0
Unified Soil Classification	SC	
H.R.B Classification	A-6(2)	
Moisture Content (%)	NT	
pH - Value	NT	
Conductivity ms/cm	NT	

POTENTIAL EXPANSION

PLASTICITY CHART

PERFORMANCE AS WEARING COURSE



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 Position: General Manager



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CIVIL ENGINEERING MATERIALS TESTING SERVICES (PTY) Ltd.

T0227

CLIENT : Terratest (Pty) Ltd P. O. Box 27308 Greenacres Port Elizabeth 6057 ATT: Mr. D. Jefferys	PROJECT : Redhouse Chelsea Arterial JOB CARD NUMBER: C8693 / 400359/05/12/DJ/mr/01 SUBMISSION DATE: 19.04.2010 DATE TESTED: 28.04.2010 REPORT DATE: 28.04.2010 SECTION: TP 12b @ 1.15-2.48m
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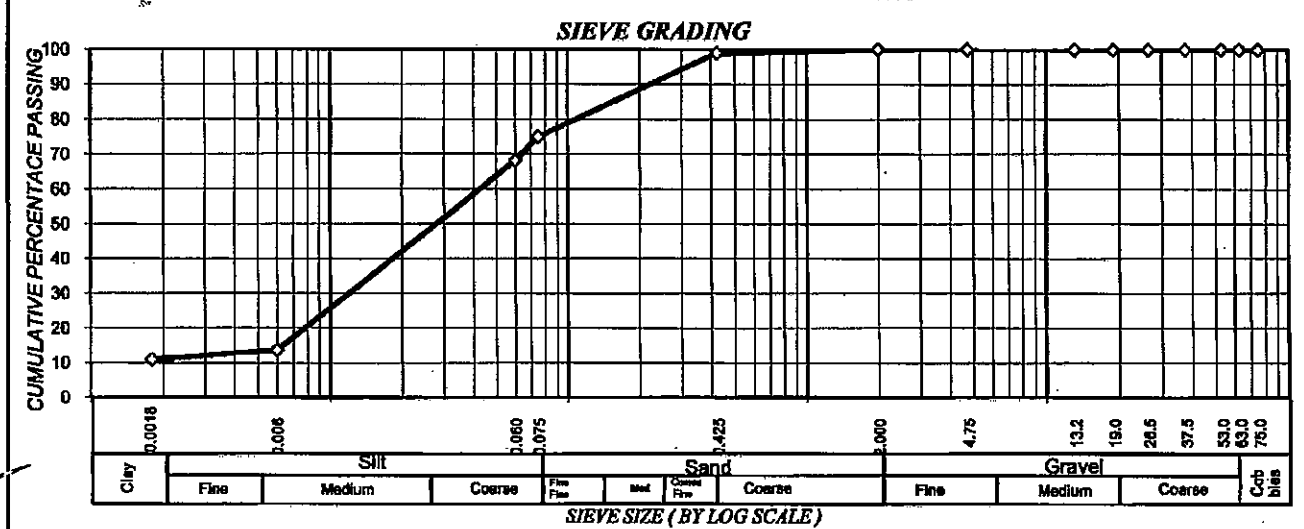
FOUNDATION INDICATOR (TMH 1 :1979 methods A1, A2, A3, A4, A5 & A6*)

S/No. & Description	X114176	Weathered Sandstone
Sieve analysis Cumulative percentage passing (mm)	75.0	100
	63.0	100
	53.0	100
	37.5	100
	28.5	100
	19.0	100
	13.2	100
	4.75	100
	2.000	100
	0.425	99
	0.075	75
	0.060	68
	0.006	14
	0.0018	11
Soil Mortar Analysis % < 2.00mm	Coarse Sand	1.0
	Coarse Fine Sand	3.0
	Medium Fine Sand	7.0
	Fine Fine Sand	14.0
	Passing 0.075	74.0
Effective size	<0.002	
Uniformity Coefficient	-	
Coefficient of curvature	-	
Oversize Index	0.0	
Shrinkage Product	445.5	
Grading Coefficient	0.0	
Grading modulus	0.26	
Atter- berg Limits	Liquid Limit	24
	Plasticity Index	7
	Linear Shrinkage	4.5
Unified Soil Classification	CL	
H.R.B Classification	A-4(3)	
Moisture Content (%)	N/T	
pH - Value	N/T	
Conductivity ms/cm	N/T	

POTENTIAL EXPANSION

PLASTICITY CHART

PERFORMANCE AS WEARING COURSE



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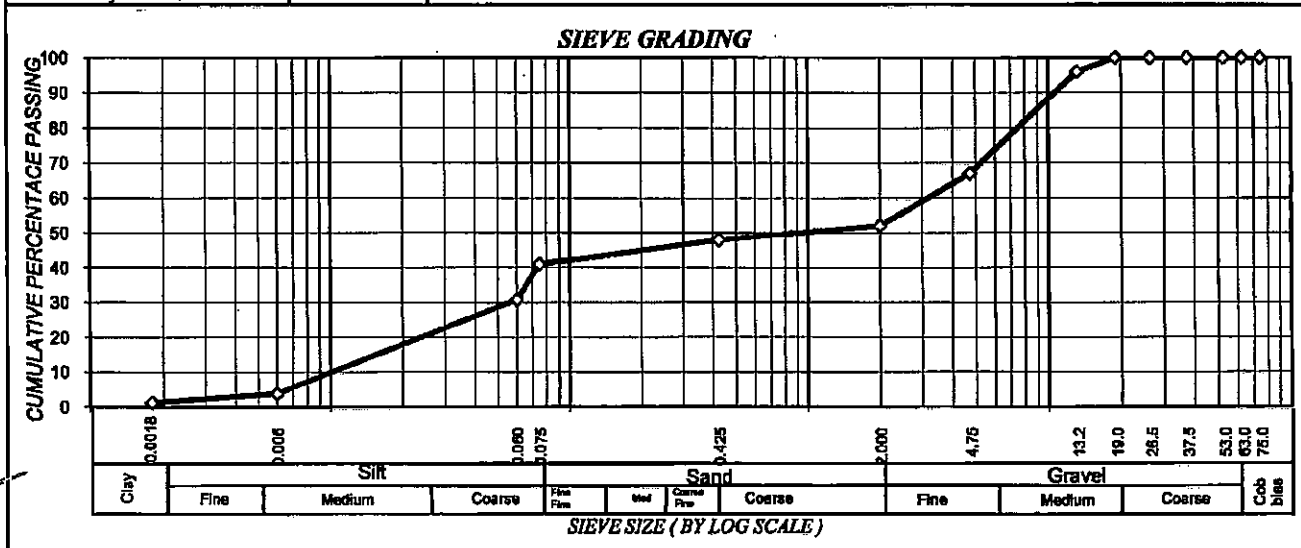
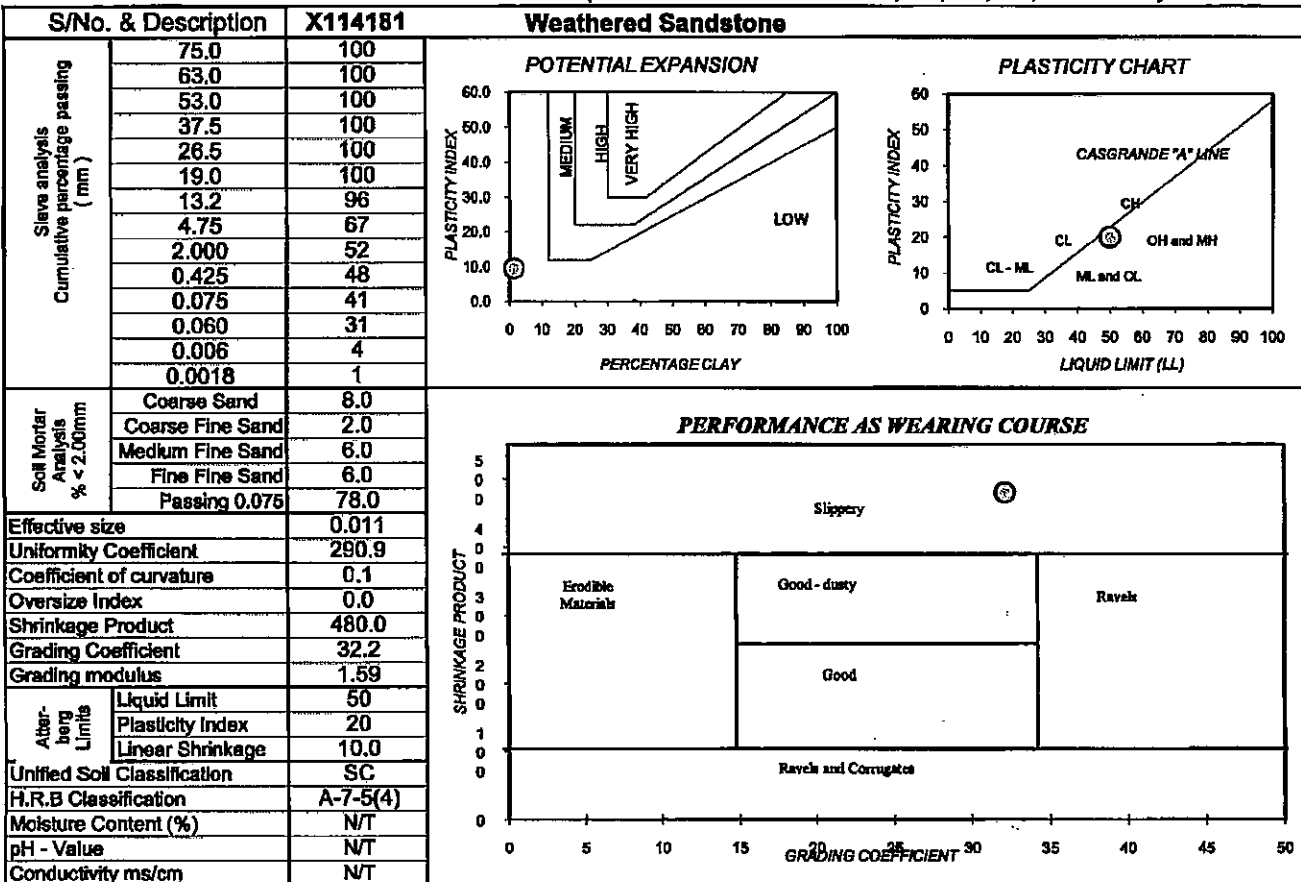
CIVIL ENGINEERING MATERIALS TESTING SERVICES (PTY) Ltd

T0227

CLIENT : Terratest (Pty) Ltd
 P. O. Box 27308
 Greenacres
 Port Elizabeth
 6057
ATT: Mr. D. Jefferys

PROJECT : Redhouse Chelsea Arterial
JOB CARD NUMBER: C8693 / 400359/05/12/DJ/mr/01
SUBMISSION DATE: 19.04.2010
DATE TESTED: 23.04.2010
REPORT DATE: 23.04.2010
SECTION: TP 39a @ 0.34-0.51m

FOUNDATION INDICATOR (TMH 1 :1979 methods A1, A2, A3, A4, A5 & A6*)



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Tests marked with * are "Not SANAS Accredited" and are not included in the SANAS schedule of Accreditation for this laboratory.

Name: _____

Position: _____

Frederik Eljerts
 General Manager



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CIVIL ENGINEERING MATERIALS TESTING SERVICES (PTY) Ltd

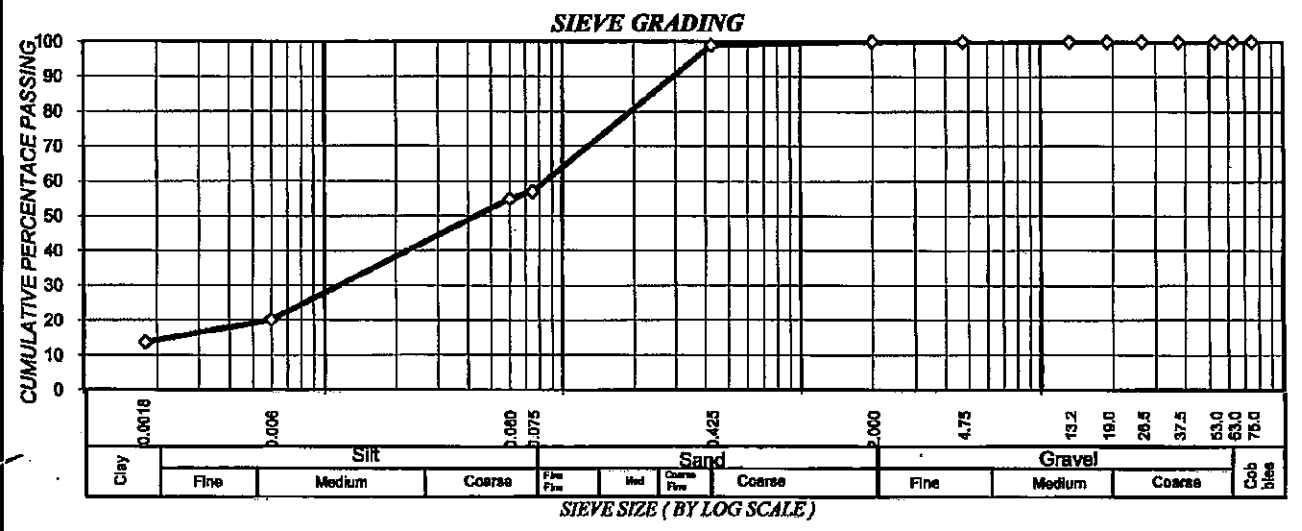
T0227

CLIENT : Terratest (Pty) Ltd
 P. O. Box 27308
 Greenacres
 Port Elizabeth
 6057
ATT: Mr. D. Jefferys

PROJECT : Redhouse Chelsea Arterial
JOB CARD NUMBER: C8693 / 400359/05/12/DJ/mr/D1
SUBMISSION DATE: 19.04.2010
DATE TESTED: 23.04.2010
REPORT DATE: 23.04.2010
SECTION: TP 22b @ 0.86-1.83m

FOUNDATION INDICATOR (TMH 1 :1979 methods A1, A2, A3, A4, A5 & A6*)

S/No. & Description		X114261	Sandstone	
Sieve analysis Cumulative percentage passing (mm)	75.0	100		
	63.0	100		
	53.0	100		
	37.5	100		
	26.5	100		
	19.0	100		
	13.2	100		
	4.75	100		
	2.000	100		
	0.425	99		
	0.075	57		
	0.060	55		
0.006	20			
0.0018	14			
Soil Monitor Analysis % < 2.00mm	Coarse Sand	1.0		
	Coarse Fine Sand	6.0		
	Medium Fine Sand	19.0		
	Fine Fine Sand	17.0		
	Passing 0.075	57.0		
Effective size		<0.002		
Uniformity Coefficient		-		
Coefficient of curvature		-		
Oversize Index		0.0		
Shrinkage Product		1039.5		
Grading Coefficient		0.0		
Grading modulus		0.44		
Atter- berg Limits	Liquid Limit	42		
	Plasticity Index	20		
	Linear Shrinkage	10.5		
Unified Soil Classification		CL		
H.R.B Classification		A-7-6(9)		
Moisture Content (%)		N/T		
pH - Value		N/T		
Conductivity ms/cm		N/T		



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Name:

Frederik Eijbers
 Frederik Eijbers
 General Manager

Position: