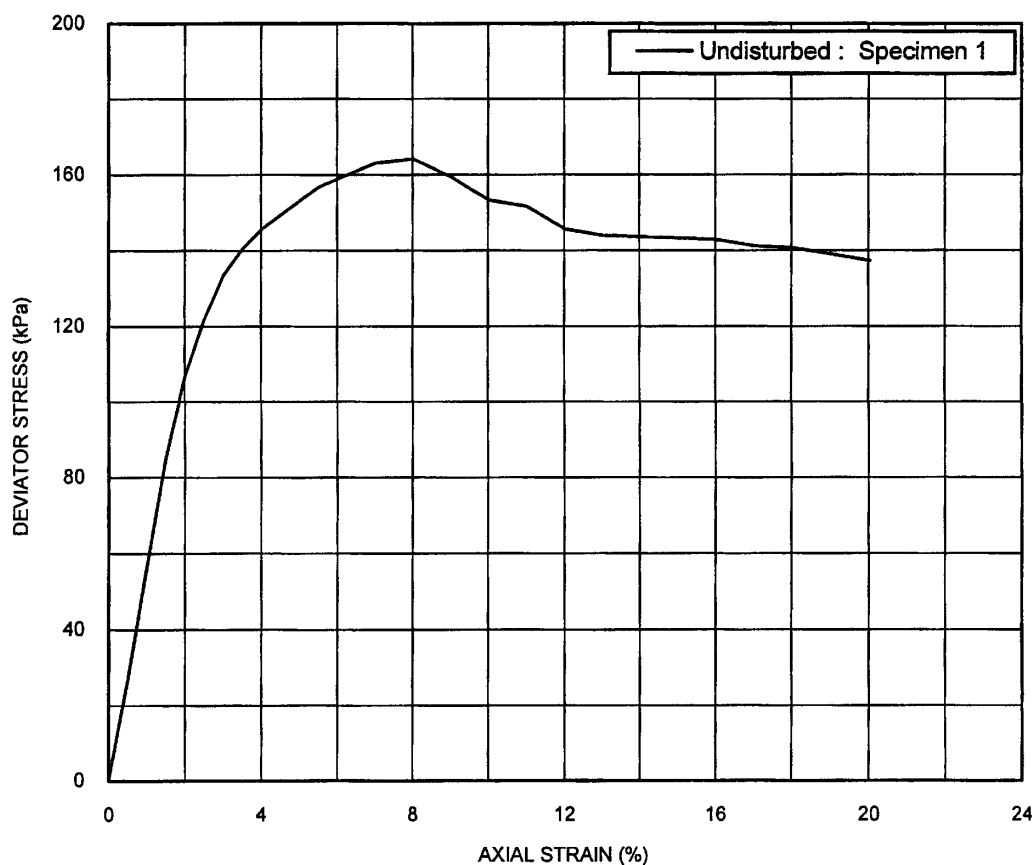



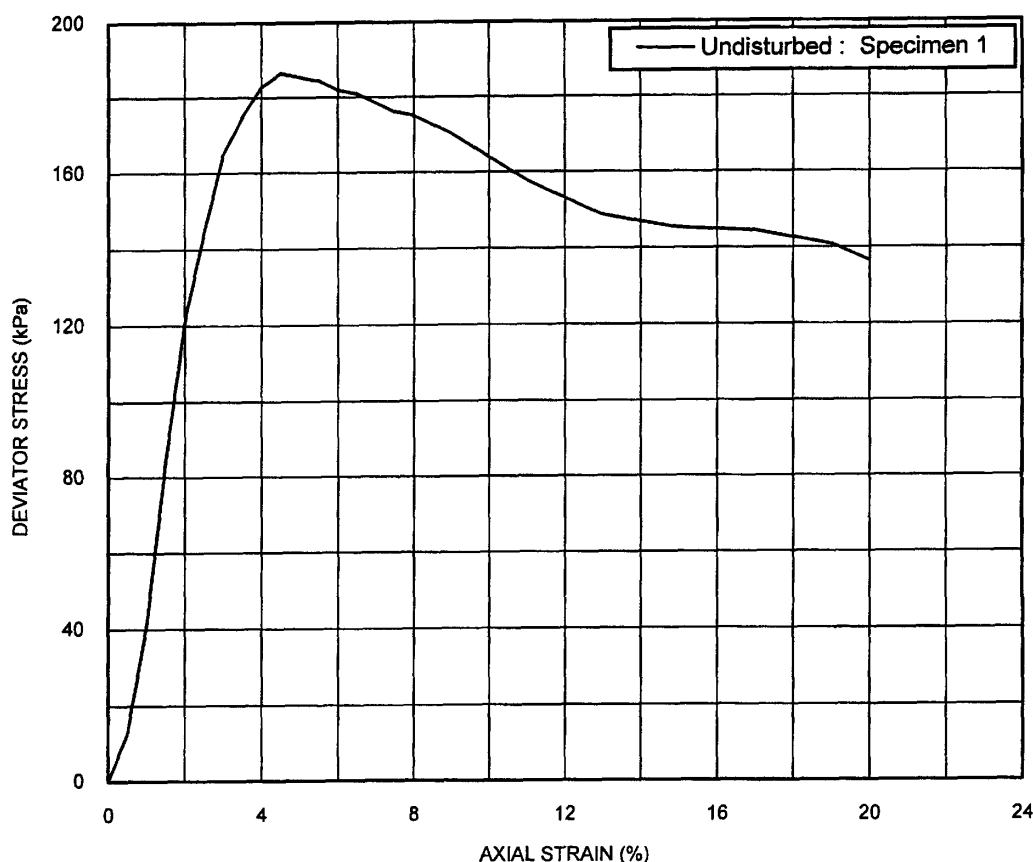
Date: 18/05/2010
Drawn by: SC



<u>Initial Conditions</u>		<u>Units</u>	<u>Specimen 1</u>
Sample length		mm	209.5
Sample diameter		mm	102.7
Membrane thickness		mm	0.24
Rate of strain		%/min	1.0
Bulk density		Mg/m ³	1.90
Dry density		Mg/m ³	1.43
Moisture content		%	33
<u>Failure Conditions</u>			
Cell pressure		kPa	110
Membrane correction		kPa	0.45
Corrected deviator stress		kPa	164
Strain at failure		%	8.0
Undrained shear strength		kPa	82
<u>Sample Details</u>		<u>Failure shape</u>	
Borehole	: BH2		
Sample	: -		
Depth (m)	: 5.50		

Tested in accordance with BS 1377: Part 7: 1990: Clause 8

UNCONSOLIDATED UNDRAINED TRIAxIAL COMPRESSION TEST

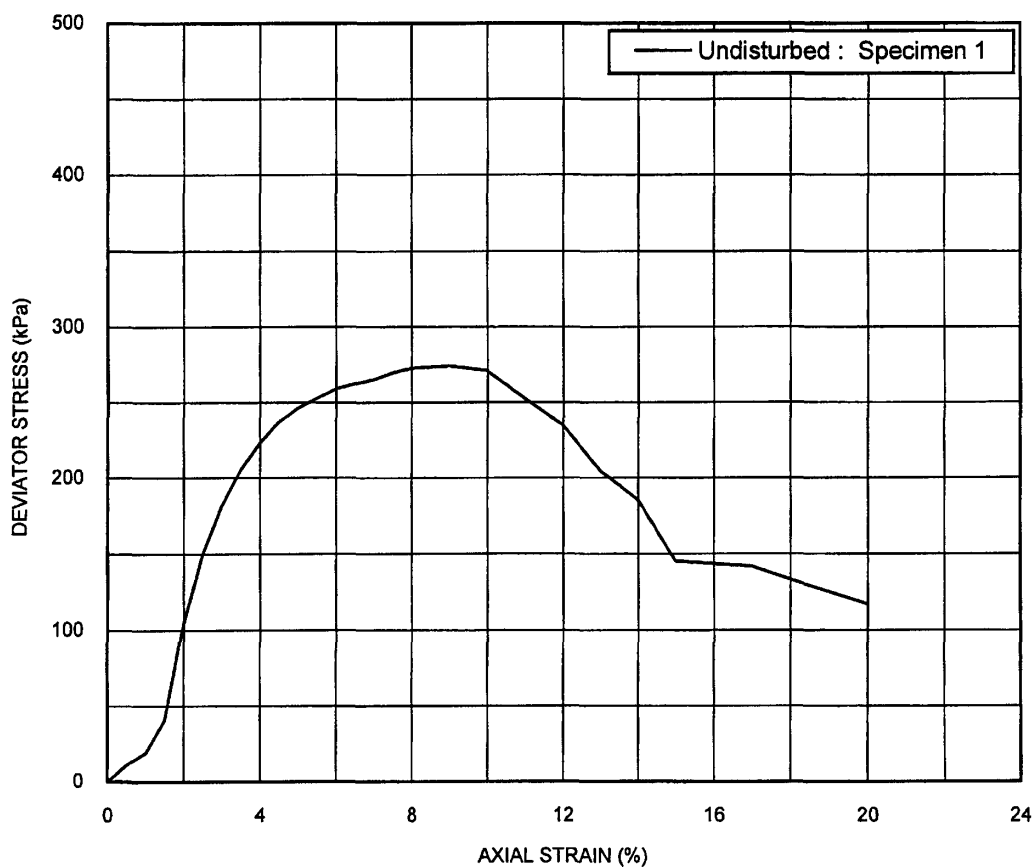



Initial Conditions		Units	Specimen 1
Sample length	mm		210.2
Sample diameter	mm		102.5
Membrane thickness	mm		0.24
Rate of strain	%/min		1.0
Bulk density	Mg/m ³		1.95
Dry density	Mg/m ³		1.53
Moisture content	%		27
Failure Conditions			
Cell pressure	kPa		170
Membrane correction	kPa		0.27
Corrected deviator stress	kPa		186
Strain at failure	%		4.5
Undrained shear strength	kPa		93
Sample Details		Failure shape	
Borehole	: BH2		
Sample	: -		
Depth (m)	: 8.50		

Tested in accordance with BS 1377: Part 7: 1990: Clause 8

**UNCONSOLIDATED UNDRAINED
TRIAxIAL COMPRESSION TEST**

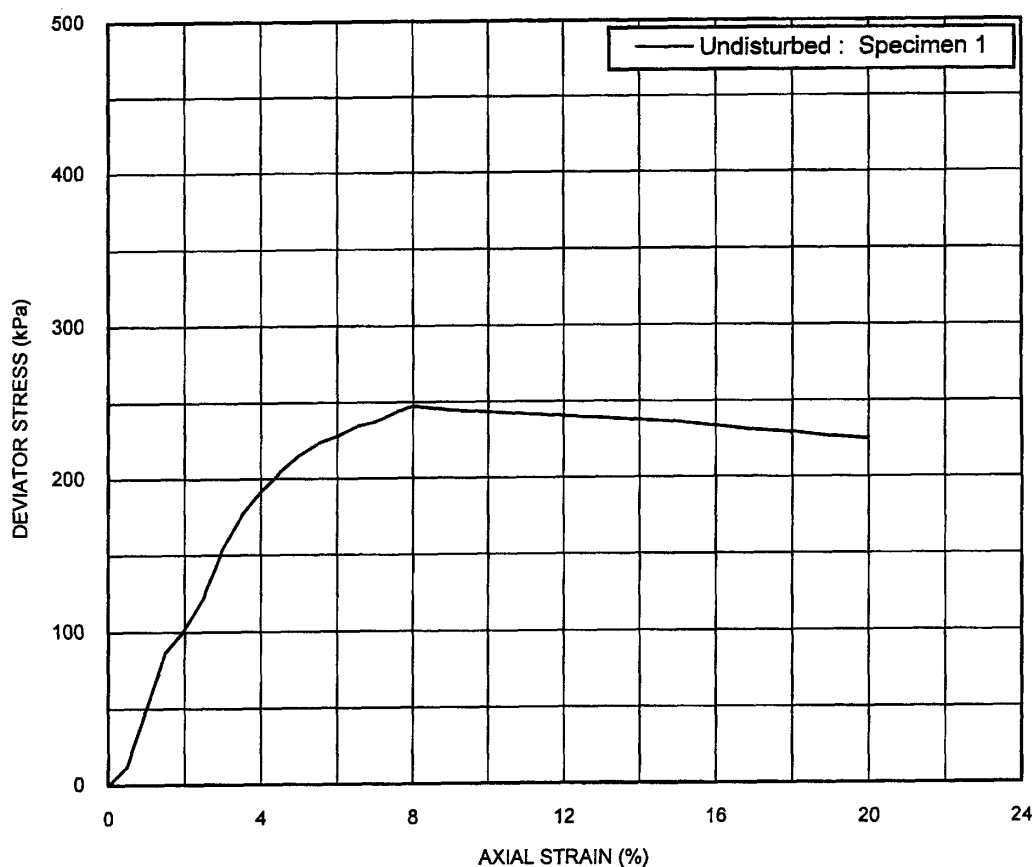
Date: 18/05/2010
Drawn by: SC



<u>Initial Conditions</u>		<u>Specimen 1</u>
Sample length	mm	210.3
Sample diameter	mm	102.0
Membrane thickness	mm	0.24
Rate of strain	%/min	1.0
Bulk density	Mg/m ³	1.93
Dry density	Mg/m ³	1.50
Moisture content	%	29
<u>Failure Conditions</u>		
Cell pressure	kPa	230
Membrane correction	kPa	0.50
Corrected deviator stress	kPa	274
Strain at failure	%	9.0
Undrained shear strength	kPa	137
<u>Sample Details</u>		<u>Failure shape</u>
Borehole	: BH2	
Sample	: -	
Depth (m)	: 11.50	

Tested in accordance with BS 1377: Part 7: 1990: Clause 8

UNCONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST

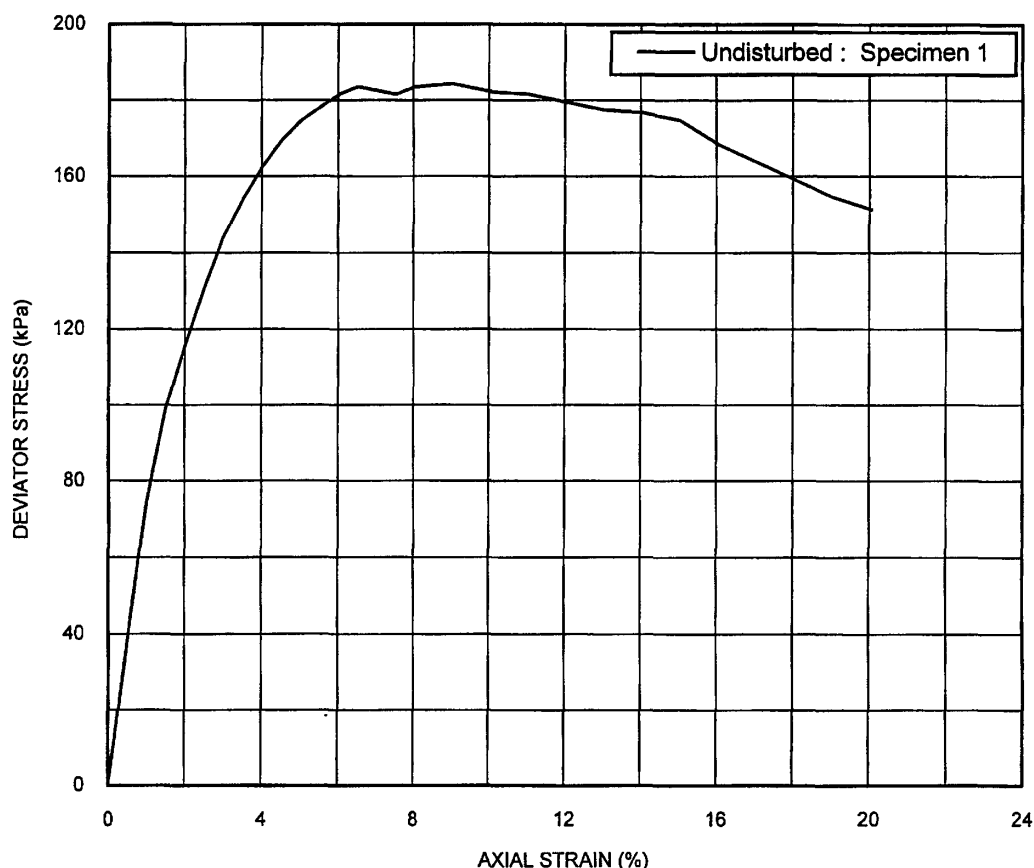



<u>Initial Conditions</u>	<u>Units</u>	<u>Specimen 1</u>
Sample length	mm	210.1
Sample diameter	mm	102.9
Membrane thickness	mm	0.24
Rate of strain	%/min	1.0
Bulk density	Mg/m ³	1.95
Dry density	Mg/m ³	1.52
Moisture content	%	28
<u>Failure Conditions</u>		
Cell pressure	kPa	290
Membrane correction	kPa	0.44
Corrected deviator stress	kPa	247
Strain at failure	%	8.0
Undrained shear strength	kPa	124
<u>Sample Details</u>		<u>Failure shape</u>
Borehole	: BH2	
Sample	: -	
Depth (m)	: 14.50	

Tested in accordance with BS 1377: Part 7: 1990: Clause 8

**UNCONSOLIDATED UNDRAINED
TRIAxIAL COMPRESSION TEST**

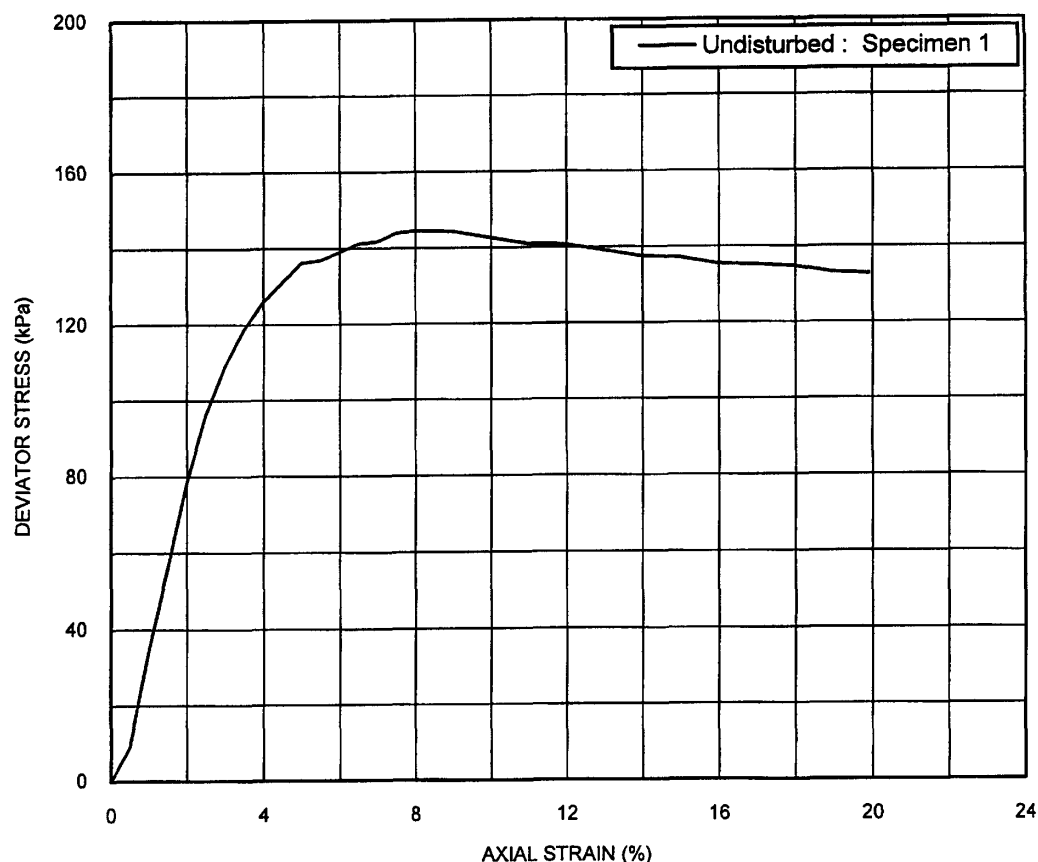
Date: 18/05/2010
Drawn by: SC



Initial Conditions		Units	Specimen 1
Sample length	mm		209.4
Sample diameter	mm		102.2
Membrane thickness	mm		0.24
Rate of strain	%/min		1.0
Bulk density	Mg/m ³		1.93
Dry density	Mg/m ³		1.45
Moisture content	%		33
Failure Conditions			
Cell pressure	kPa		70
Membrane correction	kPa		0.50
Corrected deviator stress	kPa		184
Strain at failure	%		9.0
Undrained shear strength	kPa		92
Sample Details		Failure shape	
Borehole	: BH3		
Sample	: -		
Depth (m)	: 3.50		

Tested in accordance with BS 1377: Part 7: 1990: Clause 8

UNCONSOLIDATED UNDRAINED
TRIAxIAL COMPRESSION TEST



<u>Initial Conditions</u>		<u>Specimen 1</u>
Sample length	mm	184.8
Sample diameter	mm	104.0
Membrane thickness	mm	0.24
Rate of strain	%/min	1.0
Bulk density	Mg/m ³	1.89
Dry density	Mg/m ³	1.50
Moisture content	%	26
<u>Failure Conditions</u>		
Cell pressure	kPa	110
Membrane correction	kPa	0.44
Corrected deviator stress	kPa	144
Strain at failure	%	8.0
Undrained shear strength	kPa	72
<u>Sample Details</u>		<u>Failure shape</u>
Borehole	: BH3	
Sample	: -	
Depth (m)	: 5.50	

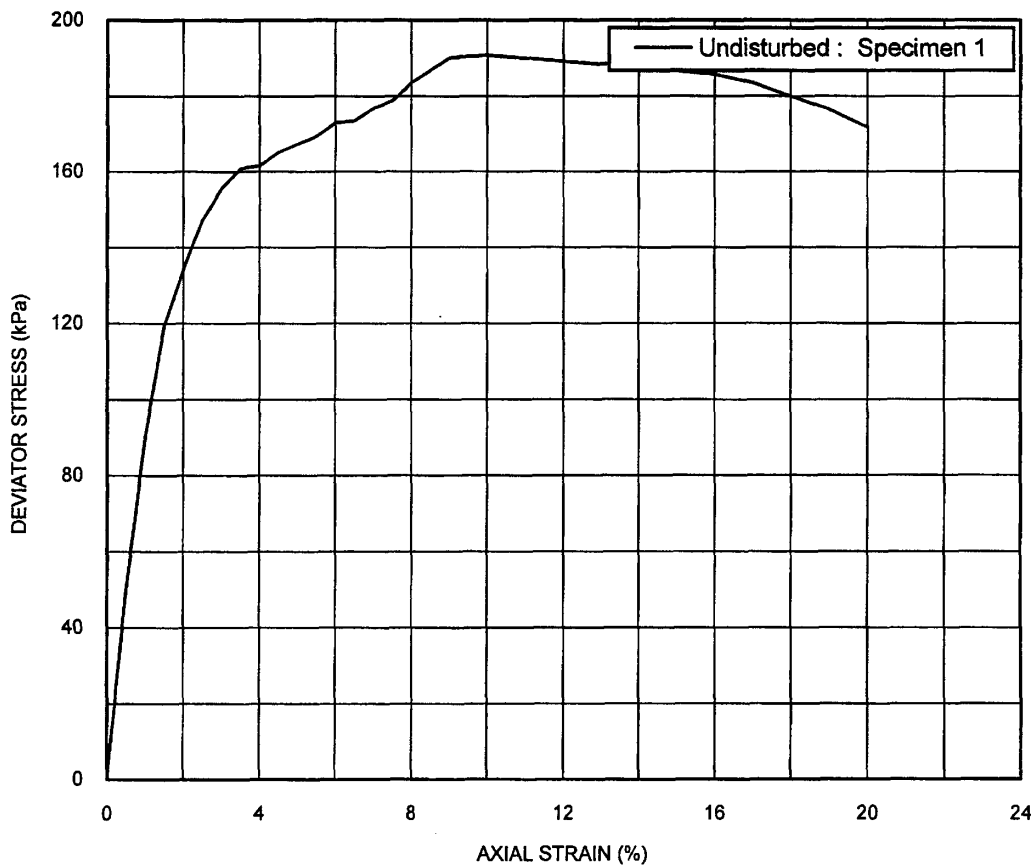
Tested in accordance with BS 1377: Part 7: 1990: Clause 8

**UNCONSOLIDATED UNDRAINED
TRIAxIAL COMPRESSION TEST**



2652

Drawn by: SC
Date: 18/05/2010



Initial Conditions		Units	Specimen 1
Sample length		mm	210.2
Sample diameter		mm	103.0
Membrane thickness		mm	0.24
Rate of strain		%/min	1.0
Bulk density		Mg/m ³	1.95
Dry density		Mg/m ³	1.51
Moisture content		%	30
Failure Conditions			
Cell pressure		kPa	170
Membrane correction		kPa	0.54
Corrected deviator stress		kPa	191
Strain at failure		%	10.0
Undrained shear strength		kPa	95
Sample Details		Failure shape	
Borehole	: BH3		
Sample	: -		
Depth (m)	: 8.50		

Tested in accordance with BS 1377: Part 7: 1990: Clause 8

UNCONSOLIDATED UNDRAINED
TRIAxIAL COMPRESSION TEST



Clive Gerring
RSK STATS Geoconsult Limited
18 Frogmore Road
Hemel Hempstead
Hertfordshire
HP3 9RT

STRUCTURAL SOILS LTD

SITE INVESTIGATION

SOIL ROCK &
MATERIAL TESTING

GEOTECHNICAL
CONSULTANCY

CONTAMINATED
LAND ASSESSMENT

24th May 2010

TESTING REPORT

YOUR REF: 241529

SITE: FITZROY FARM

CERTIFICATE NUMBER: 581115

DATE SAMPLES RECEIVED: 11th May 2010

DATE TESTING COMMENCED: 11th May 2010

DATE OF SAMPLE DISPOSAL: 24th June 2010

INSTRUCTIONS: Please carry out Moisture Content, Atterberg Limit, Particle Size Distribution and Compaction tests on the samples provided.

Dear Mr Gerring,

I have pleasure in enclosing the test report for the above project that you submitted to us for testing.

Yours sincerely

Paul Kent

Paul Kent
Laboratory Manager

Enc.

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HEAD OFFICE:
Bristol

BRANCH OFFICE:
Castleford
West Yorkshire



Date: 24/05/2010

Drawn by: SC

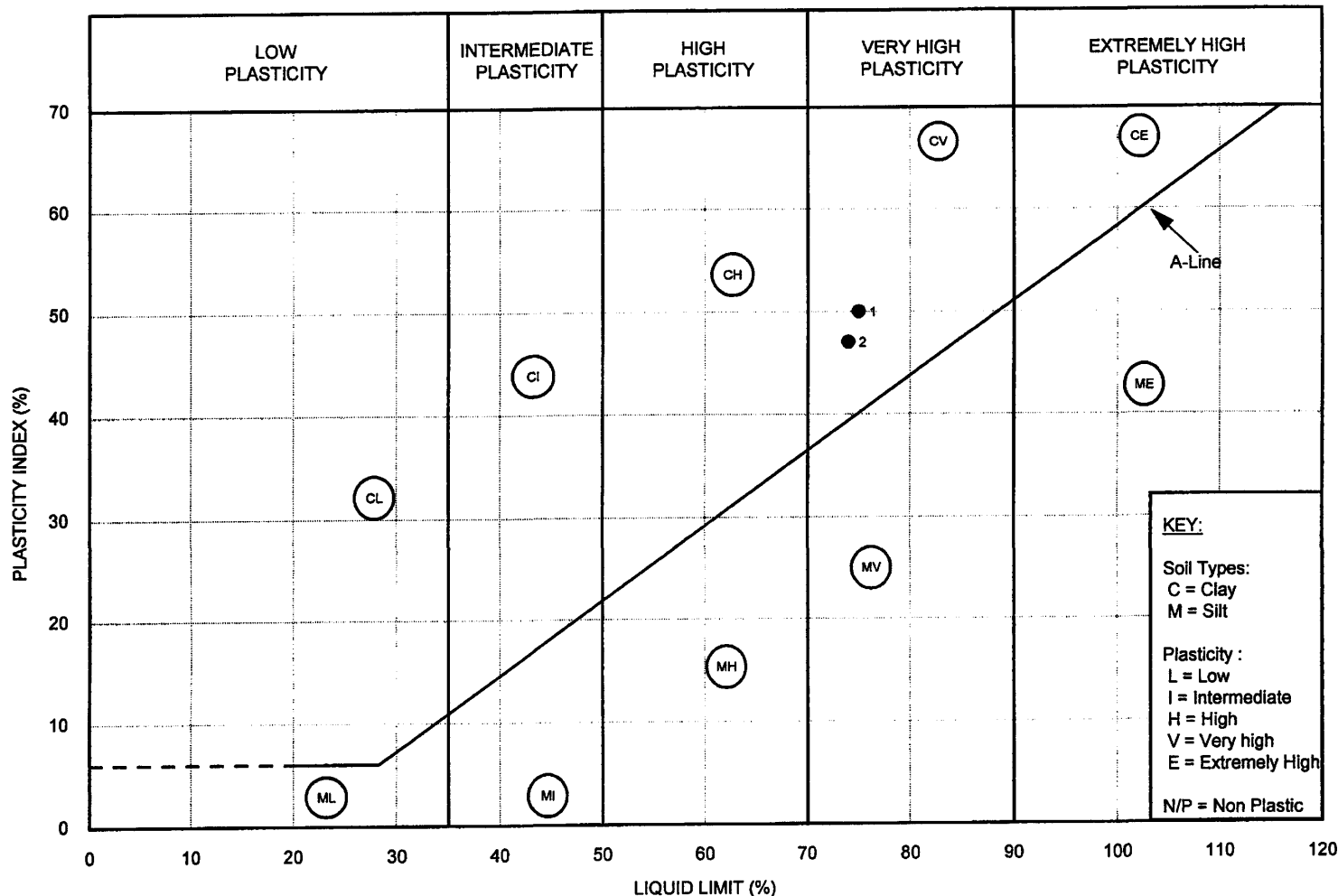
Template Issue: 2

Filename: 581115 / CLASS / 01_MC.XLS

Borehole	Sample	Depth (m)	Moisture Content (%)
BH1	-	1.00-2.00	32
BH2	-	2.00-3.00	31

Tested in accordance with BS1377: Part 2: 1990: Clause 3

SUMMARY OF MOISTURE CONTENT TEST RESULTS



Plot Number	Borehole	Sample	Depth (m)	BS Test Method*	Preparation Method †	% Passing 425 micron Sieve	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)
1	BH1	-	1.00-2.00	4.4/5.3/5.4	4.2.3	100	75	25	50
2	BH2	-	2.00-3.00	4.4/5.3/5.4	4.2.3	100	74	27	47

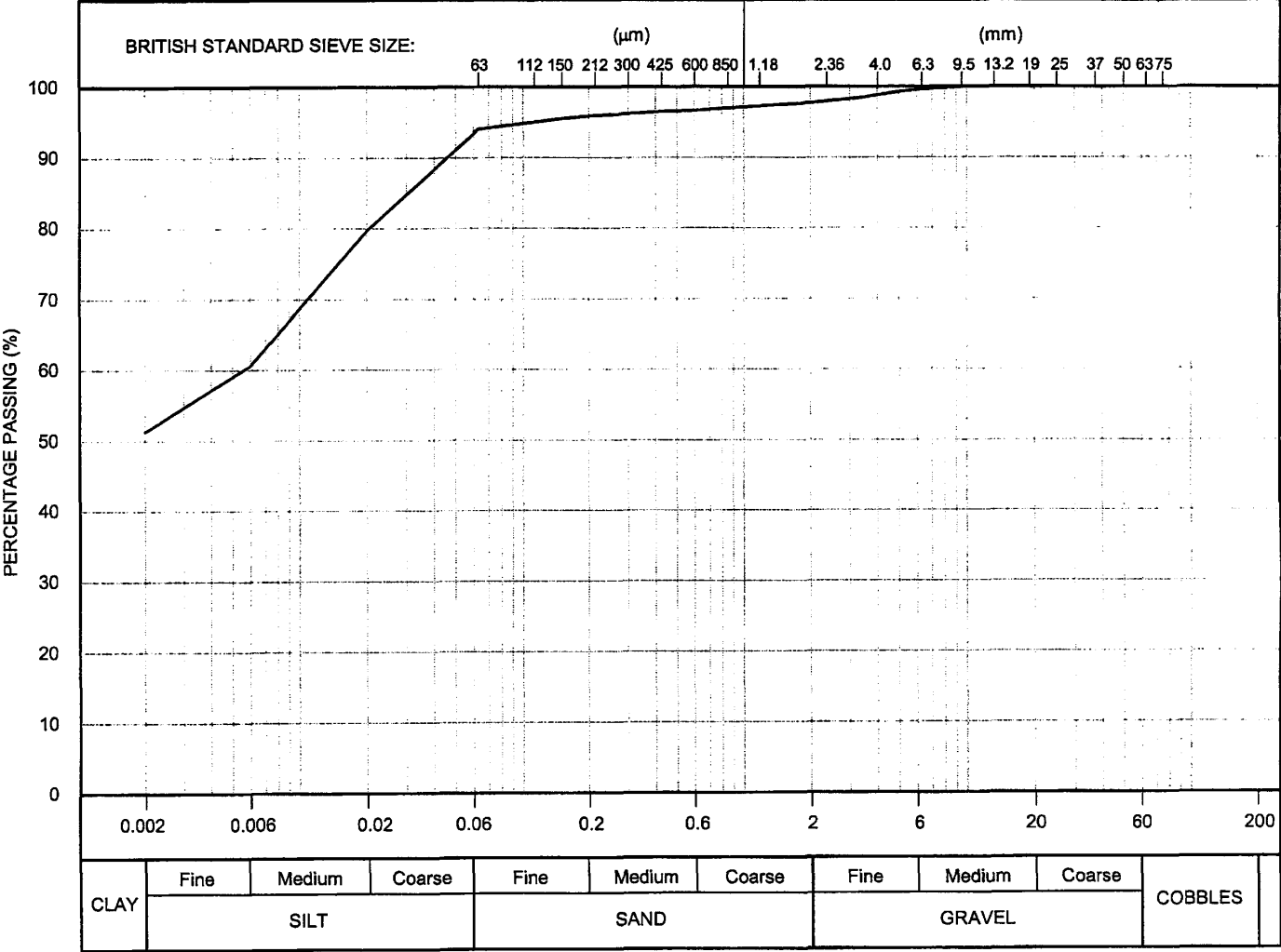
*Tested in accordance with the following clauses of BS 1377:Part 2:1990:
4.3 - Cone Penetrometer Method
4.4 - One point Cone Penetrometer Method
4.5 - Casagrande Method
4.6 - One point Casagrande Method
5.3 - Plastic Limit Method
5.4 - Plasticity Index

†Tested in accordance with the following clauses of BS 1377:Part 2:1990:
4.2.3 - Natural Soil
4.2.4 - Sieved Specimen

ATTERBERG LIMITS TEST RESULTS



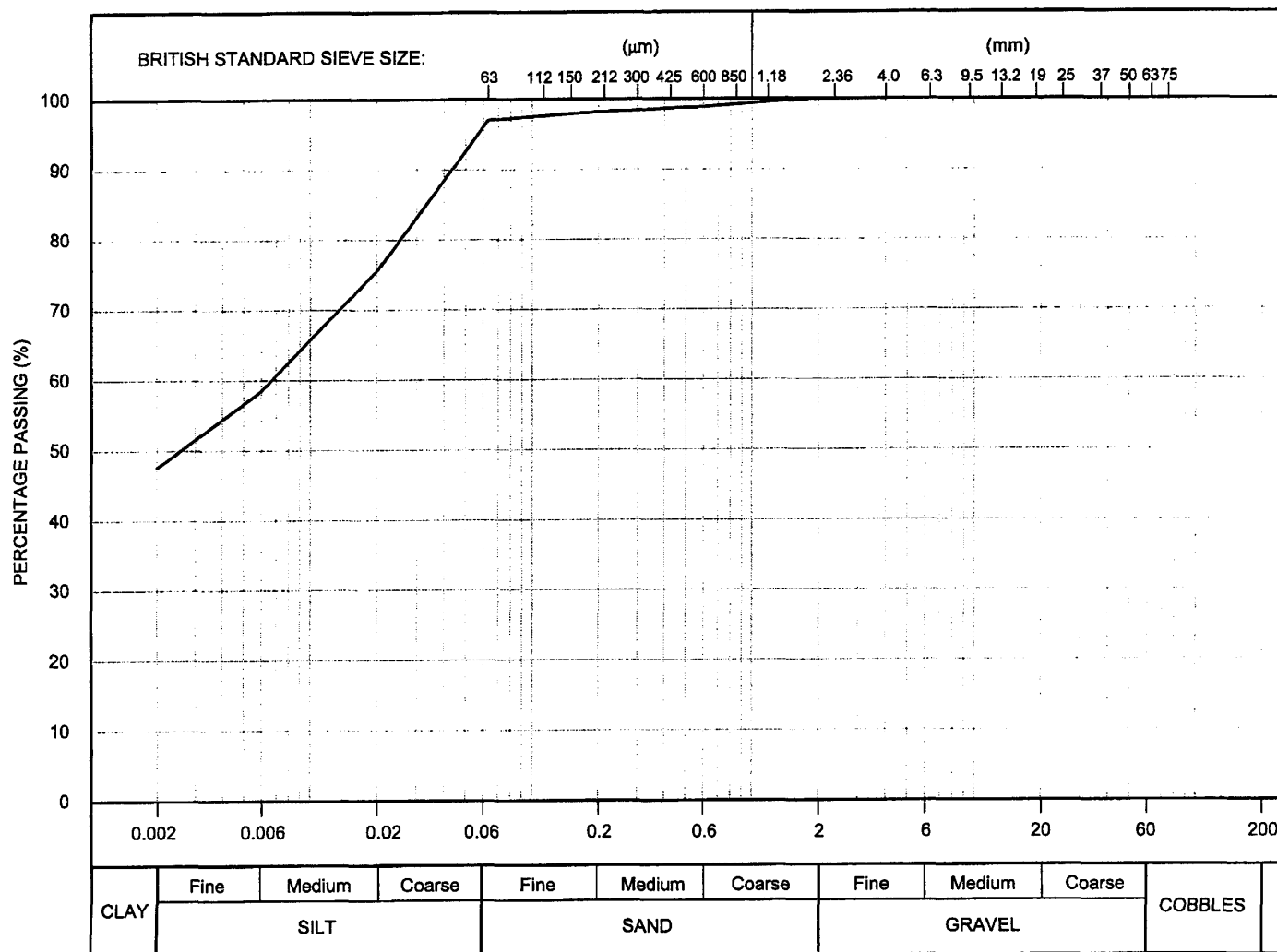
2652



Particle Density: Assumed - 2.70 (Mg/m³)

Curve	Borehole	Sample	Depth (m)	BS Test * Method	Pretreatment Method	Percentage soil types				
						Clay	Silt **	Sand	Gravel	Cobbles
1	BH1	-	1.00-2.00	9.2/9.4	Sodium Hex.	51	42	5	2	-

Notes:										
* Tested in accordance with the following clauses of BS 1377: Part 2: 1990										
9.2 Wet sieve 9.4 Sedimentation by pipette										
9.3 Dry sieve 9.5 Sedimentation by hydrometer										
** Where a sedimentation test was not carried out, this figure represents total fines, i.e., particles of diameter less than 63 microns										



Particle Density: Assumed - 2.70 (Mg/m³)

Curve	Borehole	Sample	Depth (m)	BS Test * Method	Pretreatment Method	Percentage soil types				
						Clay	Silt **	Sand	Gravel	Cobbles
1	BH2	-	2.00-3.00	9.2/9.4	Sodium Hex.	48	48	4	-	-

Notes:

* Tested in accordance with the following clauses of BS 1377: Part 2: 1990

9.2 Wet sieve

9.4 Sedimentation by pipette

9.3 Dry sieve

9.5 Sedimentation by hydrometer

** Where a sedimentation test was not carried out, this figure represents total fines, i.e., particles of diameter less than 63 microns

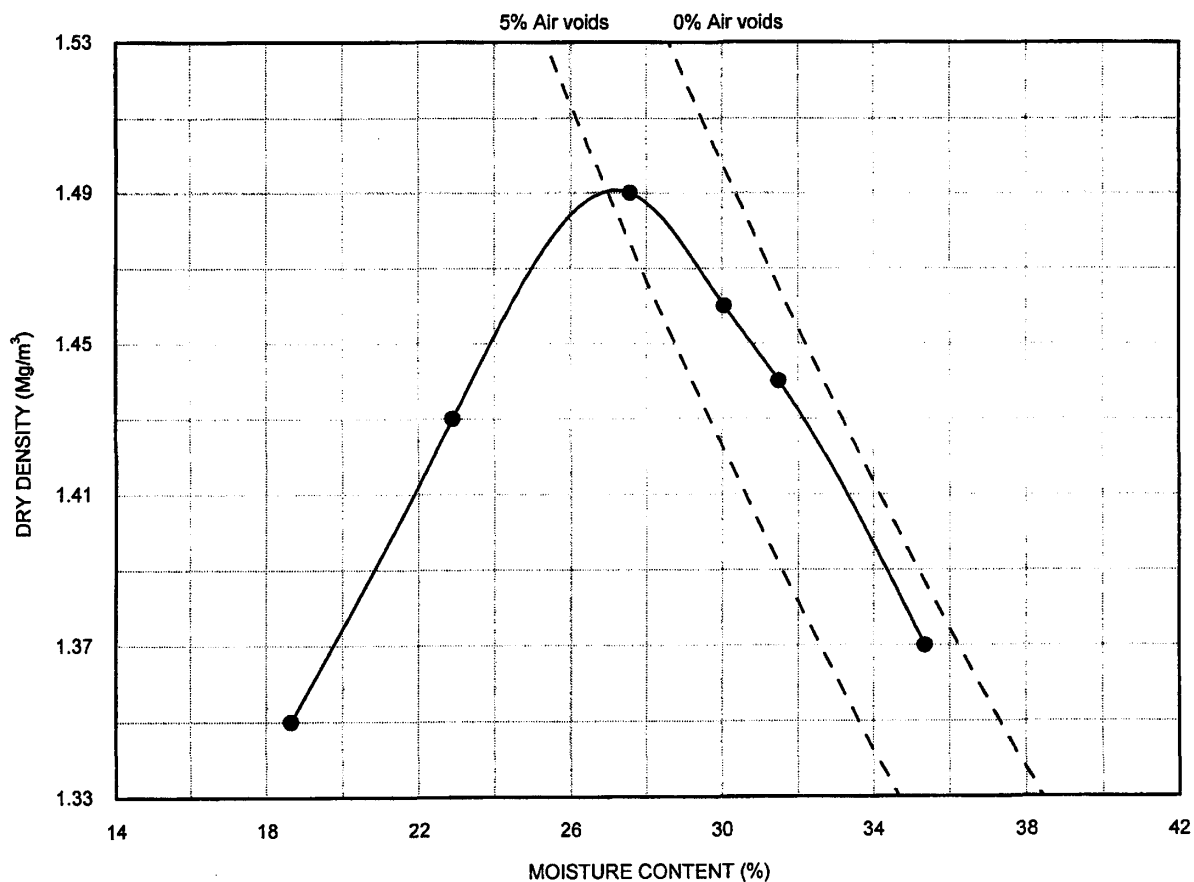
PARTICLE SIZE DISTRIBUTION TEST RESULTS

Date: 24/05/2010

Drawn by: SC

Template Issue: 2

Filename: 581115\OTHER\BH1_CO.OPJ



Tested in accordance with BS 1377: Part 4: 1990: (see table below for method used)

Clause 3.3:	Clause 3.4:	Clause 3.5:	Clause 3.6:	Clause 3.7:
2.5kg rammer	2.5kg rammer	4.5kg rammer	4.5kg rammer	Vibrating hammer
3 layers	3 layers	5 layers	5 layers	3 layers
27 blows/layer	62 blows/layer	27 blows/layer	62 blows/layer	1 minute/layer

Optimum moisture content	: 27	%	Trial Pit	: BH1
Maximum dry density	: 1.49	Mg/m³	Sample	: -
Test method (see above)	: 3.3		Depth (m)	: 1.00-2.00
Particle density	: 2.72	Mg/m³ (Assumed)		
Proportion of sample > 20mm	: 0	%		
Single / Multi sample	: Single			

DETERMINATION OF DRY DENSITY/MOISTURE CONTENT RELATIONSHIP BY COMPACTION