The Sizewell C Project

6.14 Environmental Statement Addendum
Volume 3: Environmental Statement Addendum Appendices
Chapter 2 Main Development Site Appendix 2.13.A
Phase 2 Geo-Environmental Interpretative Report Part 8 of 25

Revision:	2.0
Applicable Regulation:	**Regulation 5(2)(a)**
PINS Reference Number:	**EN010012**

January 2021

Planning Act 2008
Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

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	Project: ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate: 41
	Project No.: A0012-10	
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Photographs

Soil Mechanics

Photograph A

Photograph D

	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	42
	Carried out for	NNB Generation Company Limited	

Photographs

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	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	43
	Carried out for	NNB Generation Company Limited	

Photographs

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	Project: ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate: 44
	Project No.: A0012-10	
	Carried out for: NNB Generation Company Limited	

Photographs

Soil Mechanics

	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	45
	Carried out for	NNB Generation Company Limited	

Photographs

Soil Mechanics

Trial Pit 33 Face A

Trial Pit 33 Face D

	Project: ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE Project No.: A0012-10 Carried out for: NNB Generation Company Limited	Plate 46

Photographs

Soil Mechanics

	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	47
	Carried out for	NNB Generation Company Limited	

Photographs

Soil Mechanics

Trial Pit A

Trial Pit D

	Project: ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE Project No.: A0012-10 Carried out for: NNB Generation Company Limited	Plate 48

Photographs

Soil Mechanics

Photographs

Soil Mechanics

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	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	50
	Carried out for	NNB Generation Company Limited	

Photographs

Soil Mechanics

	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	51
	Carried out for	NNB Generation Company Limited	

Photographs

Soil Mechanics

Trial Pit 38 Face A

Trial Pit 38 Face D

	Project: ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate 52
	Project No.: A0012-10	
	Carried out for: NNB Generation Company Limited	

Photographs

Soil Mechanics

	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	53
	Carried out for	NNB Generation Company Limited	

Photographs

Soil Mechanics

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Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate	54
Project No.	A0012-10		
Carried out for	NNB Generation Company Limited		

Photographs

Soil Mechanics

	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	55
	Carried out for	NNB Generation Company Limited	

Photographs

Soil Mechanics

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	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	56
	Carried out for	NNB Generation Company Limited	

Photographs

Soil Mechanics

Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
Project No.	A0012-10	57
Carried out for	NNB Generation Company Limited	

Photographs

Soil Mechanics

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	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	58
	Carried out for	NNB Generation Company Limited	

Photographs

Soil Mechanics

	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	59
	Carried out for	NNB Generation Company Limited	

Photographs

Soil Mechanics

Trial Pit 42 Face A

Trial Pit 42 Face D

	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	60
	Carried out for	NNB Generation Company Limited	

Photographs

Soil Mechanics

	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	61
	Carried out for	NNB Generation Company Limited	

Photographs

Soil Mechanics

Trial Pit TP47 Depth 1.6m

Trial Pit TP47 Depth 1.6m

	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	62
	Carried out for	NNB Generation Company Limited	

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	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	63
	Carried out for	NNB Generation Company Limited	

Photographs

Soil Mechanics

	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	64
	Carried out for	NNB Generation Company Limited	

Photographs

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	Project: ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate: 65
	Project No.: A0012-10	
	Carried out for: NNB Generation Company Limited	

Photographs

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	Project: ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate: 66
	Project No.: A0012-10	
	Carried out for: NNB Generation Company Limited	

Photographs

Soil Mechanics

Trial Pit 47 Face A

Trial Pit 47 Face D

	Project: ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE Project No.: A0012-10 Carried out for: NNB Generation Company Limited	Plate 67

Photographs

Soil Mechanics

	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	68
	Carried out for	NNB Generation Company Limited	

Photographs

Soil Mechanics

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	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	69
	Carried out for	NNB Generation Company Limited	

Photographs

Soil Mechanics

Photographs

Soil Mechanics

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Photographs

Soil Mechanics

Trial Pit 52 Face A

Trial Pit 52 Face D

	Project: ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE Project No.: A0012-10 Carried out for: NNB Generation Company Limited	Plate 72

Photographs

Soil Mechanics

Photographs

Soil Mechanics

Trial Pit 53 Face A

Trial Pit 53 Face D

	Project: ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE Project No.: A0012-10 Carried out for: NNB Generation Company Limited	Plate 74

Photographs

Soil Mechanics

Photographs

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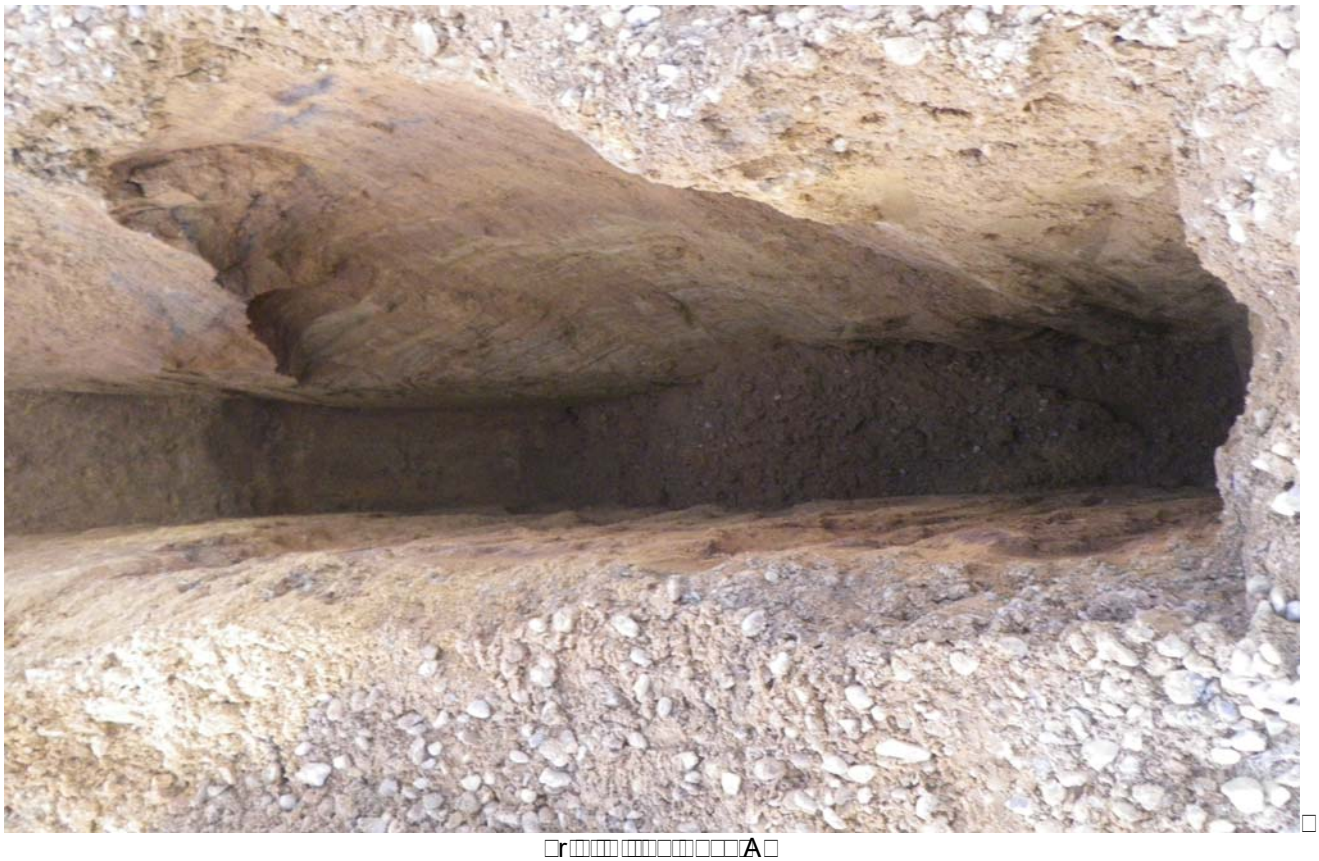
	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	76
	Carried out for	NNB Generation Company Limited	

Photographs

Soil Mechanics

Project: ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE
Project No.: A0012-10
Carried out for: NNB Generation Company Limited

Plate 77



Photographs

Soil Mechanics

Trial Pit 56 Face A

Trial Pit 56 Face D

	Project: ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.: A0012-10	78
	Carried out for: NNB Generation Company Limited	

Photographs

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	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	79
	Carried out for	NNB Generation Company Limited	

Photographs

Soil Mechanics

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	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	80
	Carried out for	NNB Generation Company Limited	

Photographs

Soil Mechanics

Photographs

Soil Mechanics

	Project: ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate: 82
	Project No.: A0012-10	
	Carried out for: NNB Generation Company Limited	

Photographs

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Photographs

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Tria Pit 65 Face D

	Project: ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE Project No.: A0012-10 Carried out for: NNB Generation Company Limited	Plate 84

Photographs

Soil Mechanics

	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	85
	Carried out for	NNB Generation Company Limited	

Photographs

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	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	86
	Carried out for	NNB Generation Company Limited	

Photographs

Soil Mechanics

Photographs

Soil Mechanics

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Tria Pit 67 Face D

	Project: ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Proiect No.: A0012-10	88
	Carried out for: NNB Generation Company Limited	

Photographs

Soil Mechanics

	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	89
	Carried out for	NNB Generation Company Limited	

Photographs

Soil Mechanics

Plate A

Plate D

	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	90
	Carried out for	NNB Generation Company Limited	

Photographs

Soil Mechanics

	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	91
	Carried out for	NNB Generation Company Limited	

Photographs

Soil Mechanics

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□□□□□□ □	**Project** ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE **Proiect No.** A0012-10 **Carried out for** NNB Generation Company Limited	**Plate** 92

Photographs

Soil Mechanics

	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	93
	Carried out for	NNB Generation Company Limited	

Photographs

Soil Mechanics

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	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	94
	Carried out for	NNB Generation Company Limited	

Photographs

Soil Mechanics

	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	95
	Carried out for	NNB Generation Company Limited	

Photographs

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□□□□□□ □	Project: ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE Proiect No.: A0012-10 Carried out for: NNB Generation Company Limited	Plate 96

Photographs

Soil Mechanics

	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	97
	Carried out for	NNB Generation Company Limited	

Photographs

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□□□□□□ □	**Project**	**ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE**
	Proiect No.	**A0012-10**
	Carried out for	**NNB Generation Company Limited**
		Plate **98**

Photographs

Soil Mechanics

	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	99
	Carried out for	NNB Generation Company Limited	

Photographs

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	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	100
	Carried out for	NNB Generation Company Limited	

Photographs

Soil Mechanics

	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	101
	Carried out for	NNB Generation Company Limited	

Photographs

Soil Mechanics

	Project: ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate: 102
	Project No.: A0012-10	
	Carried out for: NNB Generation Company Limited	

Photographs

Soil Mechanics

	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	103
	Carried out for	NNB Generation Company Limited	

Photographs

Soil Mechanics

	Project: ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate: 104
	Project No.: A0012-10	
	Carried out for: NNB Generation Company Limited	

Photographs

Soil Mechanics

	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	105
	Carried out for	NNB Generation Company Limited	

Photographs

Soil Mechanics

Plate A

Plate D

	Project: ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE Project No.: A0012-10 Carried out for: NNB Generation Company Limited	Plate 106

Photographs

Soil Mechanics

	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	107
	Carried out for	NNB Generation Company Limited	

Photographs

Soil Mechanics

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	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	108
	Carried out for	NNB Generation Company Limited	

Photographs

Soil Mechanics

	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	109
	Carried out for	NNB Generation Company Limited	

Photographs

Soil Mechanics

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□□□□□□ □	**Project**	**ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE**
	Proiect No.	**A0012-10**
	Carried out for	**NNB Generation Company Limited**
		Plate **110**

Photographs

Soil Mechanics

	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	111
	Carried out for	NNB Generation Company Limited	

Photographs

Soil Mechanics

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	Project ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE **Project No.** A0012-10 **Carried out for** NNB Generation Company Limited	**Plate** 112

Photographs

Soil Mechanics

Photographs

Soil Mechanics

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	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	114
	Carried out for	NNB Generation Company Limited	

Photographs

Soil Mechanics

	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	115
	Carried out for	NNB Generation Company Limited	

Photographs

Soil Mechanics

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	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	116
	Carried out for	NNB Generation Company Limited	

Photographs

Soil Mechanics

	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	117
	Carried out for	NNB Generation Company Limited	

Photographs

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□□□□□□	**Project** ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	**Plate**
	Project No. A0012-10	**118**
	Carried out for NNB Generation Company Limited	

Photographs

Soil Mechanics

	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	119
	Carried out for	NNB Generation Company Limited	

Photographs

Soil Mechanics

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□□□□□□ □	**Project** ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE **Project No.** A0012-10 **Carried out for** NNB Generation Company Limited	**Plate** 120

Photographs

Soil Mechanics

	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	121
	Carried out for	NNB Generation Company Limited	

Photographs

Soil Mechanics

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	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	122
	Carried out for	NNB Generation Company Limited	

Photographs

Soil Mechanics

	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Plate
	Project No.	A0012-10	123
	Carried out for	NNB Generation Company Limited	

Report No A0012-10/6

ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE

FACTUAL REPORT ON GROUND INVESTIGATION

VOLUME 6 : COMPREHENSIVE AND DATA INTEGRATION REPORT

Carried out for: NNB Generation Company Limited

August 2011

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ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE

FACTUAL REPORT ON GROUND INVESTIGATION

VOLUME 6: COMPREHENSIVE AND DATA INTEGRATION REPORT

Report No: A0012-10/6

Date: August 2011

Employer:

NNB Generation Company Limited
40 Grosvenor Place
Victoria
London
SW1X 7EN

Issue No	Date	Details
1	August 2011	Report as submitted

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ANNEXE
Pumping Test Interpretive Report

1 INTRODUCTION

During February 2010 Soil Mechanics (SM) were commissioned by EDF – DIN CEIDRE TEGG (EDF), on behalf of NNB Generation Company Limited (NNB), to carry out a ground investigation as part of the Onshore Investigations Phase 1 for Sizewell Site, Suffolk. The investigation was required to obtain geotechnical information for the proposed construction of the new Sizewell C Nuclear Power Station.

The scope of the investigation, which was specified by EDF, comprised cable percussion, rotary drilled and rotasonic boreholes, cone penetration testing, trial pits, in situ testing and laboratory testing. The factual fieldwork and laboratory test records are presented in Volumes 1 to 5 of the report, see Report Structure. This volume (Volume 6) presents an assessment of the data obtained from the investigation and the development of a geotechnical ground model. The results of previous ground investigations have not been considered in the current study.

2 THE SITE AND GEOLOGY

2.1 The Site

Sizewell power station is located in Suffolk, East Anglia, on the east coast adjoining the north Sea, and some 30 km south of Lowestoft. It is approximately 3 km north east of Leiston at National Grid reference TM 473 643, see Site Location Plan, Figure 30.

The proposed Sizewell C Power Station site is immediately to the north of the existing Sizewell B site, which has the original Sizewell A Magnox Station to its south. The investigation was carried out in three areas, as shown in Figure 30.

- main site area – on the north side of the existing Sizewell B site
- northern woodland area – the east-west corridor north of 264500 mN
- Greater Gabbard area – to the south west of the existing Sizewell B site

The majority of the investigation was concentrated at the main site area. This comprises three fields of rough grassland, with small areas of woodland and scrub, approximately 600 m by 600 m in area. The topography is generally flat at an elevation of less than 5 mOD. The site is separated from the North Sea coastline by a bund some 6 m high. To the north and west are various water courses and bodies, including nature reserves, beyond which the ground rises to approximately

10 mOD. The landscape of the main site area is essentially man-made resulting from stockpiling and subsequent reprofiling of material excavated during construction of the Sizewell B power station during the 1990s. The sea bund is known to include man-made materials, such as concrete.

The northern woodland area comprises a 2 km long, south-west to north-east, corridor intended as the access route for construction traffic. This passes through predominantly woodland over natural ground at an elevation of about 10 mOD. The Greater Gabbard site comprises an approximately circular area 300 m in diameter to the south.

2.2 Published Geology

The published geological map covering the site, BGS Sheet 191 (1996), shows the underlying sequence of strata to comprise the following:

SUMMARY OF STRATA

<table>
<tr><th>UNIT</th><th>FORMATION</th><th colspan="2">AGE</th><th>REMARKS</th></tr>
<tr><td>Made Ground</td><td></td><td></td><td></td><td>Placed as part of construction of Sizewell B power station</td></tr>
<tr><td>Marine Deposits (Tidal flats – mud)</td><td></td><td rowspan="2">Quaternary</td><td>Holocene</td><td>Referred to as Recent Deposits in this report.</td></tr>
<tr><td>Crag Group</td><td></td><td>Plio-Pleistocene</td><td></td></tr>
<tr><td rowspan="2">Thames Group</td><td>London Clay Formation</td><td rowspan="4">Tertiary</td><td rowspan="4">Paleocene-Eocene</td><td></td></tr>
<tr><td>Harwich Formation</td><td rowspan="3">Referred to collectively as Lower London Tertiaries in this report.</td></tr>
<tr><td>Lambeth Group</td><td>Formerly Woolwich and Reading Beds</td></tr>
<tr><td colspan="2">Ormesby Clay Formation</td></tr>
<tr><td>Chalk Group</td><td>Upper Chalk</td><td>Cretaceous</td><td></td><td></td></tr>
</table>

Previous ground investigations have been carried out at the proposed Sizewell C site and also for the existing A and B sites. Reference to historic information was not required as part of this report.

3 STRATIGRAPHY

3.1 General

Descriptions of the strata encountered are given on the exploratory hole records contained in Volumes 2A and 2B of the report. Note that in the following discussion exploratory hole numbers have been abbreviated by not including the 2009 part of the reference, ie CBH 2009_1 is referred to as CBH 1, etc.

The following discussion relates to the main site area where the major part of the investigation was carried out.

3.2 Assessment of Stratigraphy

The downward succession encountered is in general agreement with the published geological information and is broadly uniform across the site, as summarised below.

SUMMARY OF GROUND CONDITIONS

STRATUM ENCOUNTERED (GEOLOGICAL UNIT)	**STRATUM TOP (mOD)**	**THICKNESS (m) Average Range**	**REMARKS**
Made Ground (including Topsoil)	Ground level	4.5 0 to 23.5	Stratum thickness variable due to previous site activities
Recent Deposits	-1.5 range 6 to -8	6.5 1 to 17	Stratum thickness variable and influenced by surface topography and depth to underlying Crag Deposits
Crag Deposits	-8 range 3 to -16	34 29 to 42	Stratum top variable, see contour plot
London Clay	-43 range -40 to -45	13.5 10 to 19.5	Stratum top dipping to south-east overall
Lower London Tertiaries	-57 range -54 to -61	23.5 16.5 to 27	Stratum thickening slightly to east. Comprises sequence of upper clay layer (absent at some locations), sand layer and lower clay layer.
Chalk	-80 range -78 to -83	Not proved	Stratum top dipping slightly to east

Note: levels quoted to nearest 1 m, thickness to nearest 0.5 m

The vertical and lateral distribution of the geological units across the site are shown in the following drawings (see also Contents Page):

- Figure 2 : Summary Deep Geological Cross Section - for full thickness of strata penetrated
- Figure 3.1 to 3.5 : North - South Geological Cross Sections
- Figure 3.6 to 3.9 : Four West - East Geological Cross Sections
- Figure 4.1 to 4.3 : Contour Plots showing top of Recent Cohesive Deposits, Crag Deposits and London Clay
- Figure 5 : Isopachyte Drawing showing thickness of Recent Cohesive Deposits

The positions of the exploratory holes in the main site area are shown on the plan, Figure 1, which also includes the locations of the geological cross sections.

The accuracy of assessment of stratum boundary depths will differ for the various exploratory hole types used in the investigation, ranging from continuously sampled boreholes to open (destructively drilled) holes. While conventionally greater reliance would be placed on the continuously cored boreholes there were significant zones of core loss in some cases which make these less reliable than usual. Generally the assessment of stratum boundary depths has been made treating all exploratory holes equally, unless there is clear evidence to the contrary. In such cases this has been noted.

A simple statistical analysis was carried out on the stratum boundary depths below ground level, their corresponding Reduced Levels and the stratum thicknesses. Table 1 presents the minimum, maximum and average values for these together with their standard deviations. The reliability of this approach will be influenced by:

- the irregular distribution of exploratory holes across the site (ie not a simple grid arrangement), with average and standard deviations distorted by concentrations of holes in particular areas
- the accuracy of depth assessment in different hole types, as discussed above
- variation in the topography (for depths below ground level)
- actual geological structure (eg the dip of the surface of the Chalk)

The results of geophysical wireline logging (CBH series holes, MPM4 and 7, SD1 and 3) have also been referred to as a check on stratum boundary depths in these holes.

An assessment of the stratigraphy has been carried out by Fondasol for the MPM and DBH series boreholes, using data obtained from drilling parameter monitoring (primarily penetration rate) and Menard pressuremeter tests, see Volume 3A. The drilling parameter data was considered by Fondasol to be a less reliable indicator of stratigraphy than CPT or sampled boreholes, and has not been used. However, the stratum boundary depths presented on the Fondasol borehole logs, which are based on driller's observations, have been included in the overall assessment.

3.3 Comments on Stratigraphy

3.3.1 Introduction

The full sequence of strata was encountered at three locations on the main site where boreholes were drilled to depths of 100 m or more:

- south west group - CBH 1, SD 1, MPM 1
- north west group - CBH 2, MPM 2, SBP 2, DBH 1 and DBH 2
- east group - CBH 8U, SD 3, MPM 13

The boreholes are shown schematically on the Summary Deep Geological Cross Section, Figure 2, which also includes the other three SBP series boreholes which penetrated to the top of the Chalk. The interpretation has assumed that stratigraphic boundaries below the top of the London Clay are planar between the three groups of holes.

Discussion of the stratigraphy commences with the deepest stratum, the Chalk.

3.3.2 Chalk

The level of the chalk boundary appears to be essentially flat, the variation in level between locations being no more that the variation between boreholes at any one location. However, taking the average values for the boreholes for each group, the boundary apparently dips slightly to the east, by about 1.5 m over nearly 400 m, which would be in agreement with the regional geological information.

3.3.2 Lower London Tertiaries

The strata between the Chalk and overlying London Clay, comprise deposits of the Lower London Tertiaries. The published geological information for the area shows these to be a downward sequence of deposits of the Harwich Group, Lambeth Group and Ormesby Clay Formation. However, clear differentiation of these units has not been possible and the strata have been collectively referred to as the Lower London Tertiaries.

The level of the top of the Lower London Tertiaries (ie its boundary with the overlying London Clay) is flat with no convincing evidence of slope between the three groups of holes penetrating to this depth. The average thickness is 25 m, apparently slightly thicker to the east where the top of the Chalk is slightly deeper.

The Lower London Tertiaries comprise both cohesive and granular facies. In general there is a sand layer overlying a clay layer. The boundary occurs at an average elevation of about -68.5 mOD, see Table 1.

The north west group and the isolated holes SBP 3 and SBP 4 encountered an upper clay layer above the sand layer. Subdivisions of the Lower London Tertiaries are also evident in the crosshole seismic profile obtained at the north west group. However, individual units do not readily correlate between boreholes and it is not possible to confirm the exact stratigraphic units within the Lower London Tertiaries; the soils have therefore been considered for convenience as an Upper and Lower Clay separated by a Sand.

3.3.3 London Clay

The top of the London Clay was revealed in approximately 40 boreholes. Overall the stratum surface drops by approximately 3.5 m from north-west to south-east across the site, see Contour Plot Fig 4.3, although this trend is not always apparent over shorter distances.

3.3.4 Crag Deposits

These were encountered in over 100 exploratory holes, including CPTs. The level of the stratum top is shown on the Contour Plots, Figure 4.2 (which includes all exploratory holes) and 4.2A (based on selected holes considered to be of greater reliability). These suggest some structure to the upper surface, taking the form of an asymmetric shallow trough with axis roughly aligned east-

west. At the southern edge of the main site the top of the Crag is most shallow reaching 0 mOD, and dips downwards to the north by up to 10 m. The central part of the site comprises a flatter area at around -10 mOD, to the north of this the surface rises gently to about -5 mOD. It should be noted that at the northern and southern edges of the site where the borehole information is sparser the contouring model is likely to be less reliable.

The thickness of the Crag, proved in over 40 holes, was found to vary by nearly 13 m, primarily due to the variation in the stratum top depth rather than the basal depth, as discussed above.

3.3.5 Recent Deposits

These comprise both cohesive and granular materials, together with organic soils including peat. Differentiation between the granular soils and the overlying Made Ground, where present, is generally difficult due to the origin of the Made Ground from nearby natural deposits. As such a clear distinction is only possible where the topography indicates a raised ground level (eg the sea bund at the eastern edge of the site), the presence of a buried relic topsoil, or inclusion of anthropogenic artefacts such as brick, concrete or metallic fragments, etc.

The cohesive and organic soils, collectively referred to here as Recent Cohesive Deposits, are clearly differentiated from the granular Made Ground. Considering all the exploratory holes, there appears to be much variation in the levels of the top and base of the Recent Cohesive Deposits, and also its thickness. However, many of these may be unreliable, as discussed previously. The CPTs are likely to be provide the most reliable indication of boundary depths for this stratum, and were used, for example, to check the apparently deeper organic deposits suggested in DBH8 and 9. Based on these the top of the layer generally occurs between about -2 and -4 mOD, as shown on the Contour Plot, Figure 4.1.

The thickest part of the layer (where >6 m thick) generally corresponds to the trough forming the deepest part of the top of the Crag Deposits, see Isopachyte Plot Figure5.

3.3.6 Made Ground and Topsoil

The surface deposits are almost entirely granular in nature with occasional cohesive layers. A surfacing layer of concrete or macadam is present in areas of hardstanding forming parts of the operational power station site. A thin topsoil layer was separately identified where supporting significant growing vegetation.

4 MATERIAL PROPERTIES AND GEOTECHNICAL PARAMETERS

4.1 General

The strata encountered are discussed in the following section, commencing with the deepest, ie the Chalk layer. The results of in situ and laboratory testing carried out to determine geotechnical parameters are presented in other sections of the report as indicated in the Report Structure. The material properties obtained for each geological unit are summarised in Tables 2 to 7, see Contents. These include a simple statistical interpretation of the data to obtain the minimum, maximum, mean and standard deviation of each parameter where appropriate. Where results fall well outside the general range these have been excluded and noted accordingly. Plots of the parameters (either as parameter value against reduced level or other appropriate format) are presented as Figures following the Tables. These are listed on the Contents page and also cross-referenced on the relevant Material Properties Tables.

Summary plots of shear modulus, undrained shear strength and angle of friction, which have been obtained from a number of different laboratory and/or in situ test methods, are presented as Figures 24 to 26.

A statistical interpretation of the results of the Menard pressuremeter testing and drilling parameters is included in Volume 3A.

4.2 Chalk (Table 7)

Rotary core drilling was carried out into the Chalk in 8 of the 12 boreholes penetrating the stratum (see Table 1). The material was found to be variable in composition within and between the three groups of hole:

- south west group – the Chalk appears to be of poor strength
    - no core was recovered by Geobor S wireline drilling in CBH 1
    - Sonic coring in SD 1 recovered Chalk described as extremely weak to very weak, grade C3. However, the nature of the coring method is likely to have disturbed the material and the description of recovered core is not reliable.

- north west group – there was considerable variation in the quality of Chalk recovered from the three cored boreholes in this group, ranging from relatively competent A2 and A3 material in

the lower part of SBP 2, to structureless Dm and C1 to C5 material in DBH1. A change in density is indicated at around 107 m in the geo-logging carried out within the plastic liner installed in SBP 2, however, this is not reflected by material variation revealed by the core recovered and may be a function of the installation. The crosshole seismic testing shows no clear S or P-wave velocity variation.

- east group – again there was conflicting variation in the chalk condition indicated by the two cored boreholes, ranging from A2/3 in the upper part of SD 3 and lower part of CBH 8U to complete core loss in the upper part of CBH 8U (indicating a very low grade material) and grade C3 in lower part of SD 3.

4.3 Lower London Tertiaries (Table 6)

4.3.1 Clay

Material description (Upper Clay) : stiff to very stiff, silty to slightly sandy, CLAY. Sometimes thinly laminated, or interlaminated with sand. Colour variably brown, orange brown, and grey, sometimes mottled.

Material description (Lower Clay) : stiff to very stiff CLAY. Sometimes thinly laminated, extremely closely fissured. Colour variably dark grey, brown and grey, occasionally reddish, blueish/greenish.

Clay described on the borehole logs as soft and firm is considered to be disturbed and softened, and unrepresentative of the in situ material.

The upper and lower Lower London Tertiaries clays are clearly distinguishable in terms of their plasticity: the lower clay is of extremely high plasticity compared to a much lower plasticity for the upper clay, see Figure 7.6 and 8. This is at least in part due to the greater proportion of clay size particles in the lower clay, and the greater proportion of silt in the upper clay, see Figure 6.5. The relative proportions of clay are also reflected in the much higher methylene blue values obtained for the lower clay, see Figure 17. The results of the mineralological analyses are inconclusive in suggesting whether there is also a significant difference in clay mineralogy.

The moisture contents of the lower clay are generally higher than those for the upper clay, by a factor of approximately two comparing the average values. In both clays the moisture contents are

a little greater than the corresponding plastic limits. Particle densities are similar for both clays. The bulk density is noticeably greater for the upper clay.

The consolidation tests indicate a wide range of overconsolidation ratios for the Lower London Tertiaries Clay, see Figure 16. It should be noted that interpretation of oedometer test results has been carried out by both Casagrande and Schmertman methods, both of which are somewhat subjective. The coefficient of compressibility values (m_v) have been assessed from the slope of the unloading line.

4.3.2 Sand

Material description : brown to grey, slightly silty to silty, fine to medium SAND.
Occasionally thinly laminated, occasionally with angular to rounded fine to medium gravel of flint. Rarely encountered as gravel. Rare lignite bands, siltstone/sandstone bands. The sand contains a relatively small proportion of fine soil (silt and clay).

4.4 London Clay (Table 5)

Material description : variably grey and brown, stiff to very stiff, silty to slightly sandy, CLAY. Sometimes fissured, thinly laminated, with thin laminae of silt. Rarely slightly gravelly. Occasional claystone/siltstone.

The soil is a clay of very high and extremely high plasticity, falling between the ranges of the lower and upper Lambeth Clays, see Figure 8. The plasticity data tentatively suggest a boundary between about -48 and -50 mOD with slightly more plastic clay above this level, see Figure 7.5. Moisture contents are generally slightly above the corresponding plastic limits, and are typically slightly less in the lower substratum.

The higher plasticity values for the upper layer (Liquid Limits from about 80 to >100) are greater than those typically reported elsewhere for London Clay (60 to 80).

The methylene blue values indicate a clay content somewhat between the upper and lower Lower London Tertiaries Clays, see Figure 17, with lower values towards the base of the stratum, corresponding to the plasticity profile.

There is also a noticeable change in the bulk and dry density profiles at about -50 mOD, see Figure 10. Above this level the density values are particularly low with average bulk and dry densities of about 1.75 and 1.2 Mg/m^3, compared to typical London Clay values in the region of 1.95 and 1.55 Mg/m^3 respectively. The samples were obtained from eight separate holes across the site, by both U100 sampling and rotary coring, and would therefore seem to be representative. It is likely that these low densities are related to the higher than typical Atterberg limits and moisture contents.

A corresponding step at about -50 mOD is visible in the shear wave velocity profile, Figure 22.

Interpretation of the one dimensional (oedometer) consolidation tests is summarised in Figure 16, which includes results for the Lower London Tertiaries. The comments in Section 4.3.1 regarding the interpretation also apply to the London Clay.

4.5 Crag Deposits (Table 4)

Material description : slightly silty, fine to coarse SAND with varying proportions of fine to medium gravel size shell fragments. Locally cemented. Rare thin laminae of clay. Colour variably brown and grey, becoming predominantly grey below about 20 m.

The laboratory index tests indicate the material properties to be fairly consistent throughout the full thickness of the stratum, with no discernible variation in particle size distribution.

Other parameter variations are:

- slight reduction in moisture content over the range -20 and -32 mOD, compared to the rest of the stratum, although this may be coincidental
- consistent increase in particle density with depth, suggesting some change in mineralogy of the particles deposited
- minor variation in bulk and dry density, with apparent reduction below -30 mOD
- some scatter in max/min dry density, again with reduction below -30 mOD
- no apparent variation in laboratory drained shear strength parameters

The laboratory permeabilities are of the order of 1 E-4 m/s, locally lower, with a trend of increasing slightly with depth along the upper bound side. These compare reasonably well with the permeability range derived from the pumping test of 2.6 to 4.3 E-4 m/s.

The Standard Penetration Test (SPT) results are shown in Figure 18 and a statistical analysis of the results given in the table below. Most of the tests reached the maximum 50 blow count without achieving the full 300 mm test drive penetration. The N values are therefore almost entirely calculated on the blowcount for the measured penetration extrapolated to the full test drive length.

As can be seen there is much scatter of results, reflecting lateral variation in the material properties, although the test is considerably influenced by the drilling process as well. While there is a general increase in N value with depth, as would be expected, it is possible to see bands of reasonably consistent relative density over the 5 m depth intervals examined:

Reduced level range, mOD	SPT N value
-5 to -15	50
-15 to -20	100
-20 to -30	130
-30 to base	145

In terms of relative density description on the borehole logs, the sand is essentially very dense below -15 mOD (ie N > 50), with medium dense to very dense conditions at shallower depth.

The Menard test results suggest that the Crag Deposits can be divided into three layers in terms of strength/stiffness properties, with boundaries at about -10 mOD, -19 mOD and -34 mOD. This is discussed in the Fondasol report, Volume 3A.

4.6 Recent Deposits (Table 3)

The Cohesive Recent Deposits are clays of very to extremely high plasticity, with moisture contents falling roughly midway between the corresponding liquid and plastic limits. The more organic soils have moisture contents in excess of 100%.

The consolidation test results suggest some overconsolidation of the upper part of the stratum, to approximately 8 m depth, below which the soils are essentially normally consolidated, see Figure 15.

4.7 Made Ground (Table 2)

Material description : slightly silty to silty, slightly gravelly to gravelly fine and medium SAND with occasional roots/rootlets, shells/shell fragments, wood and man-made material artefacts (eg brick and concrete fragments). In parts varying to GRAVEL with variable sand content.
Rarely encountered as cohesive material. Surface layer of concrete or macadam at some locations.

The Made Ground is almost entirely derived from natural deposits excavated during construction of the Sizewell B power station, and subsequently reworked during landscaping works. The distinction between this placed material and the underlying natural soils of similar origin is therefore extremely difficult except where clear identifiers such as man-made artefacts are encountered, or a relic topsoil layer separating reworked and natural materials is present.

5 GROUNDWATER

Records of groundwater monitoring carried out in borehole installations during the fieldwork are presented in Volume 1. The results of a pumping test in the Crag Deposits are reported in Volume 3B which includes an interpretation of the test data to assess hydrogeological parameters.

Comments relating to the background monitoring of groundwater levels during the fieldwork period between end of July 2010 and beginning of March 2011 are presented below. The data examined exclude observations influenced by the pumping test carried out between 26 January and 13 February 2011. The records have been corrected for barometric variation.

The two vibrating wire piezometers installed in the Chalk (CBH1 and MPM2) showed artesian groundwater conditions, with a piezometric surface at approximately 4.5 m above ground level. The pressure varied by up to 0.80 m during the monitoring period. The trend of variation in pressure with time is similar in the two installations and is probably at least partly due to tidal response.

The other CBH and DBH series borehole monitoring standpipes were installed in the Crag Deposits, with two nominal response zones ranges: typically between 10 and 20 m below ground level, and between 15 and 35 m below ground level. The average water levels for each installation are at between 0.28 and 0.73 mOD (ie, within 0.45 m), indicating a phreatic surface at an average elevation of 0.53 mOD. The groundwater level in the Crag Deposits is tidally influenced, by

between 0.3 and 1.2 m in the monitored installations, as shown in the example data extracts, see Figure 27. The variation appears to be largely influenced by the distance from the sea, see Figure 28.

The GW series standpipes were installed in the Made Ground/Recent Deposits and top of the Crag Deposits to a maximum depth of about 15 m. These indicate a greater range of groundwater elevations, with average water levels for each installation at between 0.44 and 2.14 mOD. The higher groundwater levels were recorded in the installations where ground level is greater. GW1 and 2, for example, show groundwater at above 2 mOD where ground level is in excess of 13 mOD.

The range of water levels recorded in each GW installation varied between 0.12 and 1.58 m, the greater ranges being closer to the sea, although there is not a simple trend due to the greater lateral extent and ground level variation of these holes.

The monitoring installations suggest that the vertical groundwater pressure profile through the superficial materials and Crag Deposits is essentially hydrostatic, see Figure 29. However, the long standpipe response zones (generally greater than 10 m) are likely to mask the effects of under-drainage or surface recharge.

SUMMARY OF GROUNDWATER CONDITIONS

Installation reference	Range of values	Average value	Standard deviation	Remarks
CHALK, GWL mOD				Vibrating wire piezometers
CBH1	6.75 to 7.55	7.02	0.08	
MPM2	5.77 to 6.24	5.96	0.08	
CRAG DEPOSITS, GWL mOD				Standpipes
CBH and DBH installations	-0.06 to 1.19	0.53	NA	All data from 15 No installations
	0.28 to 0.73	NA	NA	Range of water levels averaged for each installation

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REFERENCES

BGS England and Wales Sheet 191 : 1996 : Saxmundham. 1:50000 geological map (solid & drift). British Geological Survey

Summary of Strata

Stratum	Top of stratum, mbgl and mOD					Thickness, m					Remarks
	No of holes	min	max	avg	std dev	No of holes	min	max	avg	std dev	
Topsoil	33	0.00	0.00	0.00	NA	33	0.05	0.30	0.12	0.06	
		NA	NA	NA	NA						
Made Ground	186	0.00	1.20	0.05	0.20	126	0.10	10.70	4.29	2.71	Excludes GW16D and GW17 where penetrated 20 m and 11 m respectively.
		12.04	0.50	3.29	2.38						
Recent Deposits undifferentiated	137	0.00	12.00	4.25	2.96	107	0.80	17.00	6.25	3.40	
		6.15	-8.26	-1.31	3.13						
Recent Deposits Cohesive (inc Peat)	101	0.70	15.65	6.57	2.63	93	0.50	10.00	4.11	2.15	Stratum taken as full depth range where occuring as more than one stratum in a hole. Individual stratum thicknesses vary from 0.22 to 10 m. Nearly 90% of holes encountered less than 6 m thickness of Peat.
		0.79	-9.58	-3.95	2.03						
Crag Deposits	109	3.30	20.30	10.65	2.37	46	29.10	41.93	34.17	2.74	Ignoring DBH8, 9 and 10 - see Report. At 90% of hole locations stratum top elevation between -5.3 and -12.5 mOD, average -8.6 mOD, std dev 1.7 m
		3.10	-12.48	-8.00	2.67						
London Clay	46	42.00	55.50	45.42	2.63	14	10.20	19.70	13.69	2.08	Greatest depth to stratum top corresponding to highest ground level at CBH3. Full thickness proven in CBH1, 2, 8U. DBH1. MPM1, 2, 13. SBP1, 2, 3, 4. SD1, 3.
		-40.41	-45.08	-42.79	1.27						
Lower London Tertiaries undifferentiated	14	56.45	63.00	58.76	2.02	12	16.70	26.75	23.73	2.45	Encountered in CBH1, 2, 8U. DBH1, 2. MPM1, 2, 13. SBP1, 2, 3, 4. SD1, 3. Full thickness not proven in SBP3 and 4
		-54.16	-61.41	-56.55	1.92						
Upper Clay	7	56.45	66.76	59.21	3.65	8	0.96	6.55	3.51	2.46	CBH2. DBH1. SBP1, 2, 3, 4. SD3. 2 separate strata in SBP2
		-54.85	-63.36	-57.20	3.02						
Sand	14	57.50	65.25	60.62	2.75	14	3.75	18.10	9.97	4.34	Ignoring separate strata in SBP2 and SD3. Includes layers of gravel in SBP2 and SD1, and siltstone in CBH8U.
		-54.16	-63.16	-58.41	2.98						
Lower Clay	14	65.40	76.30	70.67	3.25	12	5.20	17.25	11.37	3.29	Full thickness not proven in SBP3 and 4
		-62.82	-74.70	-68.34	3.34						
Chalk	12	79.70	86.11	82.31	2.15	Thickness of stratum not proven at maximum penetration of 45.05 m					Encountered in CBH1, 2, 8U. DBH1, 2. MPM1, 2, 13. SBP1, 2. SD1, 3.
		-78.11	-82.71	-80.07	1.56						

Notes:

Project ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE

Project No. A0012-10

Carried out for NNB Generation Company Limited

Table 1

Soil Mechanics

Summary of Material Properties – Made Ground

Soil Mechanics

Parameter	No of results	Range of values	Average value	Standard deviation	Remarks
Particle size distribution	12				See Figure 6.1
<63 µm (silt and clay)		1 to 15	8.6	4.4	
0.063 to 0.2 (fine sand)		18 to 42	25.4	7.4	
0.2 to 0.63 (med sand)		44 to 61	56.5	5.7	
0.63 to 2 (coarse sand)		0 to 8	4.1	2.4	
2 to 6.3 (fine gravel)		0 to 4	1.6	1.1	
6.3 to 20 (med gravel)		0 to 11	1.6	3.2	
Moisture content, w %	8	14 to 20	17	2.0	See Figure 7.1 and 7.2
Particle density, ρ_s Mg/m^3	6	2.63 to 2.79	2.66	0.06	See Figure 9
Bulk density, γb Mg/m^3	7	1.80 to 2.14	2.04	0.11	Linear measurement See Figure 10
Dry density, γd Mg/m^3	7	1.58 to 1.86	1.76	0.09	
Min dry density, Mg/m^3	2	1.41 and 1.52	1.47	NA	See Figure 11
Max dry density, Mg/m^3	2	1.71 and 1.89	1.80	NA	
Translation shear box	3				Sets of 3 See Figure 12
Friction angle peak, ϕ_p^o		3.5 to 44	40	4	
Friction angle residual, ϕ_r^o		27.5 to 36	31	5	
Cohesion peak, c_p kPa		3 to 21	9	10	
Cohesion residual, c_r kPa		0 to 18	7	10	

Notes:

Project ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE
Project No. A0012-10
Carried out for NNB Generation Company Limited

Table 2

Summary of Material Properties – Recent Deposits

Soil Mechanics

Parameter	No of results	Range of values	Average value	Standard deviation	Remarks
Particle size distribution	4				See Figure 6.2
Liquid limit, W_L	8	79 to 498	172	141	Excluding results 32 See Figure 7.1 and 7.3
Plastic limit, W_P	7	32 to 101	56	30	Excluding 2 results NP
Plastic index, PI	7	42 to 122	69	28	
Moisture content, w %	13	58 to 842	19	219	Excluding result 48
Liquidity index, LI	7	0.48 to 0.62	0.52	0.05	Excluding result -0.268
Atterberg limits classification	Soils of very high to extremely high plasticity, plotting above and below the 'A-line'				See Figure 8
Particle density, ρ_s Mg/m^3	3	2.61 to 2.64	2.62	0.02	See Figure 9
Bulk density, γb Mg/m^3	6	0.84 to 1.54	1.19	0.25	Linear measurement
Dry density, γd Mg/m^3	6	0.12 to 0.89	0.46	0.30	See Figure 10
Undrained shear strength (triaxial test), Su kPa	6	13 to 68	46	20	See Figure 13
One dimensional consolidation	9				Oedometer tests. See Figure 15
Methylene blue value, g/kg	9	19.0 to 45.9	36.4	8.2	Excluding result 2.5 See Figure 17
Mineralogy	2	Granular soil – 86 % quartz, 6 % calcite Fine soil – 66 % smectite/illite/kaolinite/chlorite, 30 % quartz and calcite			See Volume 4

S wave velocity, km/s	14	0.151 to 0.271	0.219	0.042	Includes Made Ground, from 0 to -15 mOD. See Volume 3B
P wave velocity, km/s	6	1.50 to 1.80	1.68	0.10	

Summary of Material Properties - Crag Deposits

Soil Mechanics

Parameter	No of results	Range of values	Average value	Standard deviation	Remarks
Particle size distribution <63 µm (silt and clay) 0.063 to 0.2 (fine sand) 0.2 to 0.63 (med sand) 0.63 to 2 (coarse sand) 2 to 6.3 (fine gravel) 6.3 to 20 (med gravel)	39	 1 to 8 8 to 45 22 to 69 1 to 48 0 to 12 0 to 6	 3 21 50 18 3.5 1.5	 1.7 10 11 12 3 2	Excludes 6 results with >10% passing 63um and 2 results of >40% passing 63um, from probable cohesive inclusions. See Figure 6.3.
Moisture content, w %	38	14 to 29	19	3.1	See Figure 7.1 and 7.4
Liquid limit, W_L	2	38 and 41	40	2	Excluding result 21
Plastic limit, W_P	2	19	19	NA	Excluding result NP
Plastic index, PI	2	19 and 22	21	2	
Liquidity index, LI	2	0.36 and 0.53	0.44	0.12	
Atterberg limits classification	Clay of intermediate plasticity				See Figure 8
Particle density, ρ_s Mg/m^3	30	2.63 to 2.73	2.67	0.02	See Figure 9
Bulk density, γb Mg/m^3	35	1.90 to 2.14	2.04	0.06	Linear measurement See Figure 10
Dry density, γd Mg/m^3	35	1.49 to 1.83	1.72	0.07	
Min dry density, Mg/m^3	33	1.37 to 1.59	1.48	0.05	See Figure 11
Max dry density, Mg/m^3	33	1.65 to 1.93	1.80	0.06	
Translation shear box Friction angle peak, $\phi_p{}^o$ Friction angle residual, $\phi_r{}^o$ Cohesion peak, c_p kPa Cohesion residual, c_r kPa	9	 33.5 to 40.5 28.5 to 34.0 0 to 79 0 to 25	 36.7 30.8 26 9	 2.5 1.8 27 11	See Figure 12
Undrained shear strength (triaxial test determinations), Su kPa	10	82 to 345	177	94	
Permeability, k m/s	9	2.6 E-5 to 1.1 E-4	7.4 E-5	3.1 E-5	Falling head test
pH	9	6.9 to 7.7	7.3	0.3	
Sulphate, SO4 g/l	9	0.04 to 0.31	0.15	0.10	
Carbonate, CO3 %	9	0.82 to 11	3.5	3.64	
Mineralogy	2	71 and 89 % quartz 2 to 15 % calcite and aragonite			See Volume 4

Summary of Material Properties - Crag Deposits

Soil Mechanics

S wave velocity, km/s	27	0.320 to 0.601	0.466	0.086	Between -15 and -42 mOD
P wave velocity, km/s	26	1.715 to 2.111	1.935	0.104	See Volume 3B
Menard Pressuremeter Tests (PMT)					
See Volume 3A (including assessment of drilling parameters in MPM and DBH boreholes)					

Standard Penetration Test (SPT) N values

Depth, mOD	No of results	Range of values		Average value	Standard deviation	Remarks
-5 to -10	31	4	100	46	25	525 tests in 14 BHs (12 No penetrating full Crag Deposits thickness). See Figure 18
-10 to -15	77	10	150	61	27	
-15 to -20	75	16	200	99	35	
-20 to -25	76	68	231	129	36	
-25 to -30	73	65	375	130	43	
-30 to -35	69	75	214	142	32	
-35 to -40	71	63	214	148	35	
-40 to -45	53	46	214	145	39	

Summary of Material Properties – London Clay

Soil Mechanics

Parameter	No of results	Range of values	Average value	Standard deviation	Remarks
Particle size distribution <2 µm (clay) 2 to 63µm (silt)	10	 30 to 60 40 to 62	 43 54	 9 8	See Figure 6.4
Liquid limit, W_L	26	75 to 114	90	11	Excluding result 39 See Figure 7.1 and 7.5
Plastic limit, W_P	26	26 to 51	37	7	Excluding result 17
Plastic index, PI	25	29 to 79	53	10	
Moisture content, w %	28	27 to 58	43	7	
Liquidity index, LI	26	-0.11 to 0.35	0.11	0.12	
Atterberg limits classification	Clay of very high and extremely high plasticity (CV and CE). Five results silt of very high and extremely high plasticity (MV and ME)				See Figure 8
Particle density, ρ_s Mg/m^3	8	2.62 to 2.70	2.65	0.03	See Figure 9
Bulk density, γb Mg/m^3	13	1.66 to 1.95	1.80	0.10	Linear measurement See Figure 10
Dry density, γd Mg/m^3	13	1.08 to 1.49	1.27	0.14	
Undrained shear strength (triaxial test), Su kPa	2	12 and 68			
One dimensional consolidation	4				Oedometer tests. See Figure 16
Permeability, k m/s	1	4 E-11	NA	NA	Triaxial cell permeability
Methylene blue value, g/kg	13	58.0 to 88.0	72.2	8.1	Excluding results 10.7 and 31.5 See Figure 17
Mineralogy	2	58 and 60 % smectite, 8 to 15 % illite/kaolinite/chlorite			See Volume 4

S wave velocity, km/s	11	0.317 to 0.611	0.440	0.117	Between -43 and -56 mOD. See Volume 3B
P wave velocity, km/s	14	1.608 to 1.980	1.753	0.106	

Summary of Material Properties – Lower London Tertiaries

Soil Mechanics

UPPER CLAY

Parameter	No of results	Range of values	Average value	Standard deviation	Remarks
Particle size distribution <2 μm (clay) 2 to 63μm (silt)	8	 20 to 56 36 to 76	 42 51	 14 13	 Including Upper and Lower Clay See Figure 6.5
Liquid limit, W_L	6	27 to 55	38	11	See Figure 7.1 and 7.6
Plastic limit, W_P	5	17 to 21	19	2	Excluding result NP
Plastic index, PI	5	8 to 34	21	11	
Moisture content, w %	8	19 to 33	25	4	
Liquidity index, LI	5	0.03 to 0.73	0.38	0.30	
Atterberg limits classification	Clay of low to high plasticity (CL to CH), one result NP				See Figure 8
Particle density, ρ_s Mg/m^3	6	2.61 to 2.68	2.64	0.04	See Figure 9
Bulk density, γb Mg/m^3	7	1.97 to 2.18	2.06	0.07	See Figure 10
Dry density, γd Mg/m^3	7	1.56 to 1.83	1.67	0.09	
Undrained shear strength (triaxial test), Su kPa					
One dimensional consolidation	5				Oedometer tests. See Figure 16. Including Lower Clay
Permeability, k m/s	1	9 E-12	NA	NA	Triaxial cell permeability
Methylene blue value, g/kg	7	1.7 to 49.7	20.2	17.4	See Figure 17

S wave velocity, km/s	11	0.240 to 0.565	0.446	0.093	Between -58 and -68 mOD. See Volume 3B
P wave velocity, km/s	11	1.709 to 1.981	1.850	0.072	

Summary of Material Properties – Lower London Tertiaries

Soil Mechanics

LOWER CLAY

Parameter	No of results	Range of values	Average value	Standard deviation	Remarks
Particle size distribution					See above
Liquid limit, W_L	8	96 to 138	117	17	See Figure 7.1 and 7.6
Plastic limit, W_P	8	31 to 44	39	5	
Plastic index, PI	8	62 to 95	78	14	
Moisture content, w %	8	31 to 48	41	6	
Liquidity index, LI	8	-0.06 to 0.10	0.02	0.05	
Atterberg limits classification	Clay of extremely high plasticity (CE)				See Figure 8
Particle density, ρ_s Mg/m^3	4	2.61 to 2.67	2.65	0.03	
Bulk density, γb Mg/m^3	5	1.69 to 1.93	1.80	0.12	
Dry density, γd Mg/m^3	5	1.16 to 1.55	1.28	0.17	
Undrained shear strength (triaxial test), Su kPa					
Methylene blue value, g/kg	8	65.4 to 116.1	91.5	18.5	See Figure 17
Mineralogy	2	Granular soil – 83 % quartz Fine soil – 57 % smectite, 14 % illite/kaolinite/chlorite			See Volume 4

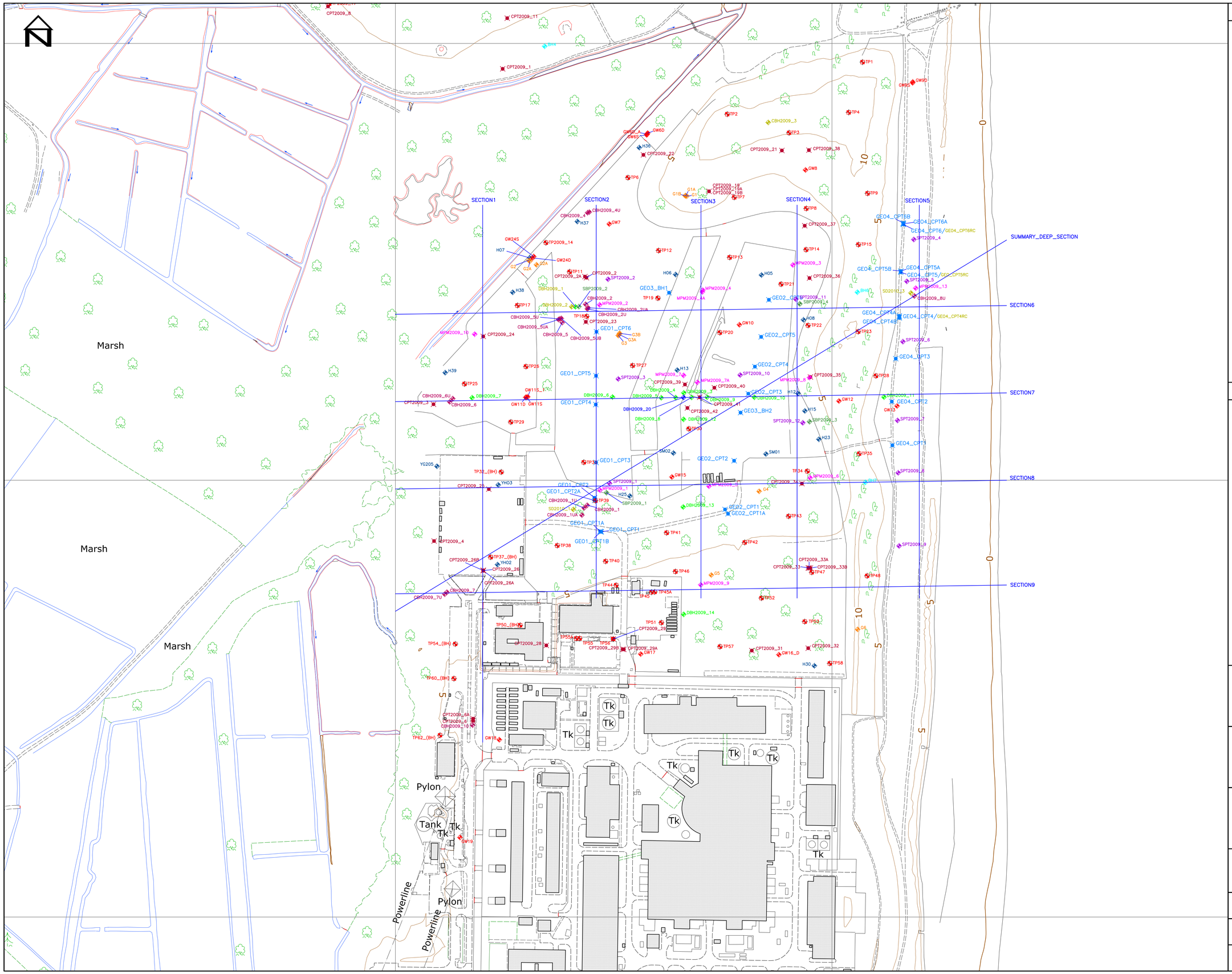
S wave velocity, m/s	6	260 to 505	363	98	Between -68 and -74 mOD. Higher values probably influenced by refraction through underlying stratum
P wave velocity, km/s	6	1.604 to 1.741	1.682	0.047	
S wave velocity, km/s	7	0.946 to 1.272	1.062	0.107	Between -75 and -81 mOD. See Volume 3B
P wave velocity, km/s	7	1.729 to 2.397	2.039	0.308	

Summary of Material Properties – Chalk

Soil Mechanics

Parameter	No of results	Range of values	Average value	Standard deviation	Remarks
Mineralogy	2	99 % calcite			See Volume 4
Unconfined compressive strength, MPa	4	1.07 to 2.34	1.65	0.53	
Young's modulus E, MPa	4	630 to 1145	825	245	
Poisson's ratio ν	4	0.16 to 0.29	0.22	0.06	
Moisture content	5	27 to 36	30	3	
Bulk density, γb Mg/m^3	5	1.94 to 1.98	1.95	0.02	
Dry density, γd Mg/m^3	5	1.43 to 1.56	1.50	0.05	
Saturated moisture content, %	5	27 to 33	30	2	
Porosity, %	5	42 to 47	44	2	

S wave velocity, km/s	32	0.944 to 1.128	1.033	0.046	Between -86 and -118 mOD.
P wave velocity, km/s	32	2.152 to 2.662	2.351	0.106	Erratic values between -81 and -85 mOD ignored. See Volume 3B



GENERAL NOTES

Note: Co-ordinates and levels related to Ordnance Survey National Grid and Datum using Leica's System 1200 dual frequency geodetic GPS receiver and SmartNet RTK correction. WGS84 position transformed using the Ordnance Survey OSTN/OSGM02 definitive transformation for the United Kingdom.

LEGEND TO SYMBOLS

- CBH (Rotary Cored Borehole)
- SD (Sonic Rotary Cored Borehole)
- SPT (Standard Penetration Testing Borehole)
- DBH (Rotary Open Hole Borehole)
- SBP (Self Boring Pressuremeter Testing Borehole)
- MPM (Menard Pressuremeter Testing Borehole)
- CPT (Cone Penetration Test)
- GEO_CPT (Cone Penetration Test)
- GW (Cable Percussion Borehole)
- G (Cable Percussion Borehole)
- BH (Cable Percussion Borehole)
- TP (Machine Excavated Trial Pit)
- Historical Borehole Location
- Section Line

Scale: 1:2000

0 20m 40 80 120 160

Title

EXPLORATORY HOLE PLAN AND CROSS SECTION LOCATIONS

Project

ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE

Client

NNB Generation Company Limited

Soil Mechanics

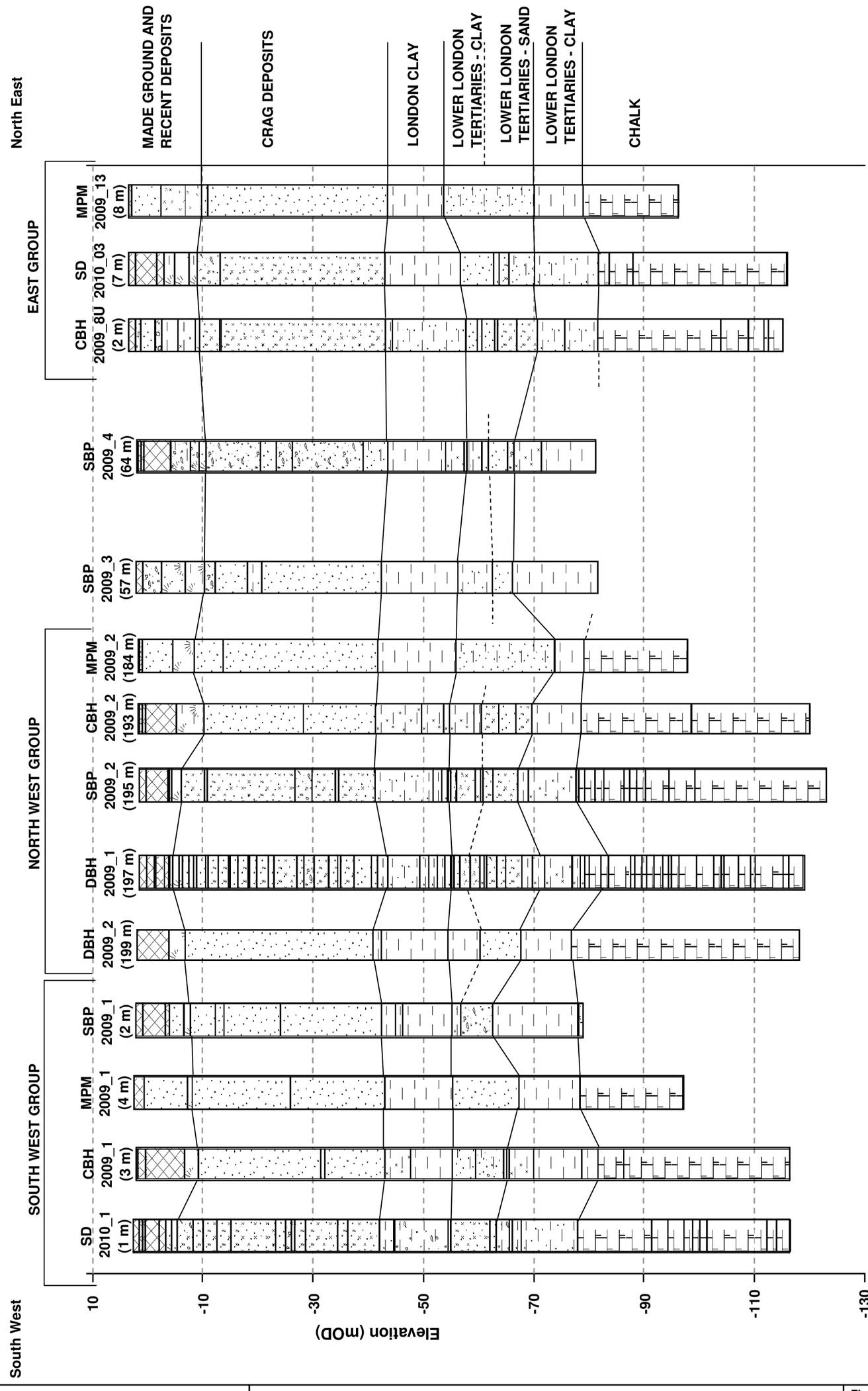
Date	Drawn By	Approv. By
28.01.11	AW	MT

Sheet Size	Scale	Project No
A1	1:2000	A0012-10

Figure No	Rev
1	0

Summary Deep Geological Cross Section

Soil Mechanics



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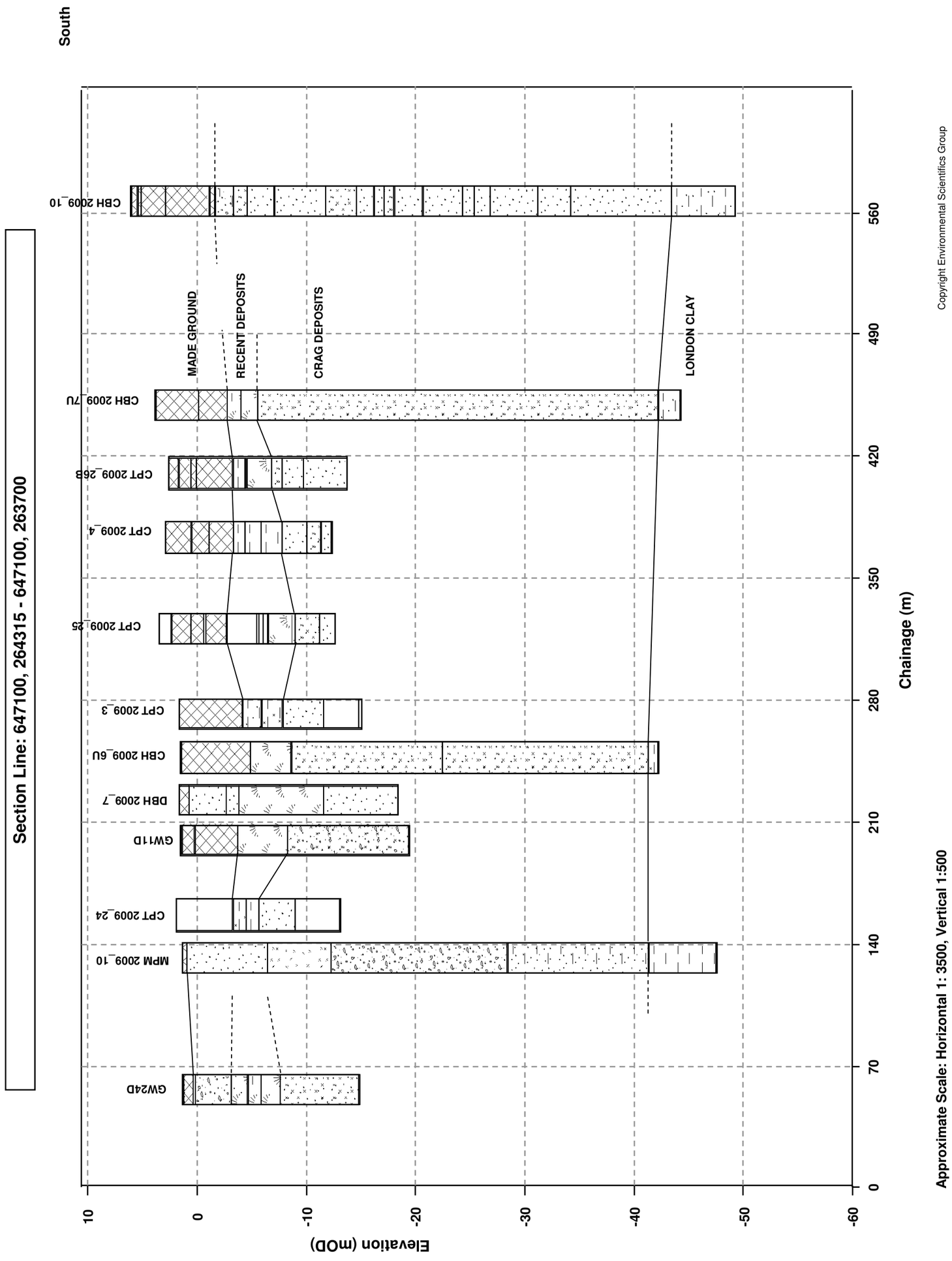
Project No.	A0012-10
Carried out for	NNB Generation Company Limited

Figure

2

Geological Cross Section 1

Soil Mechanics



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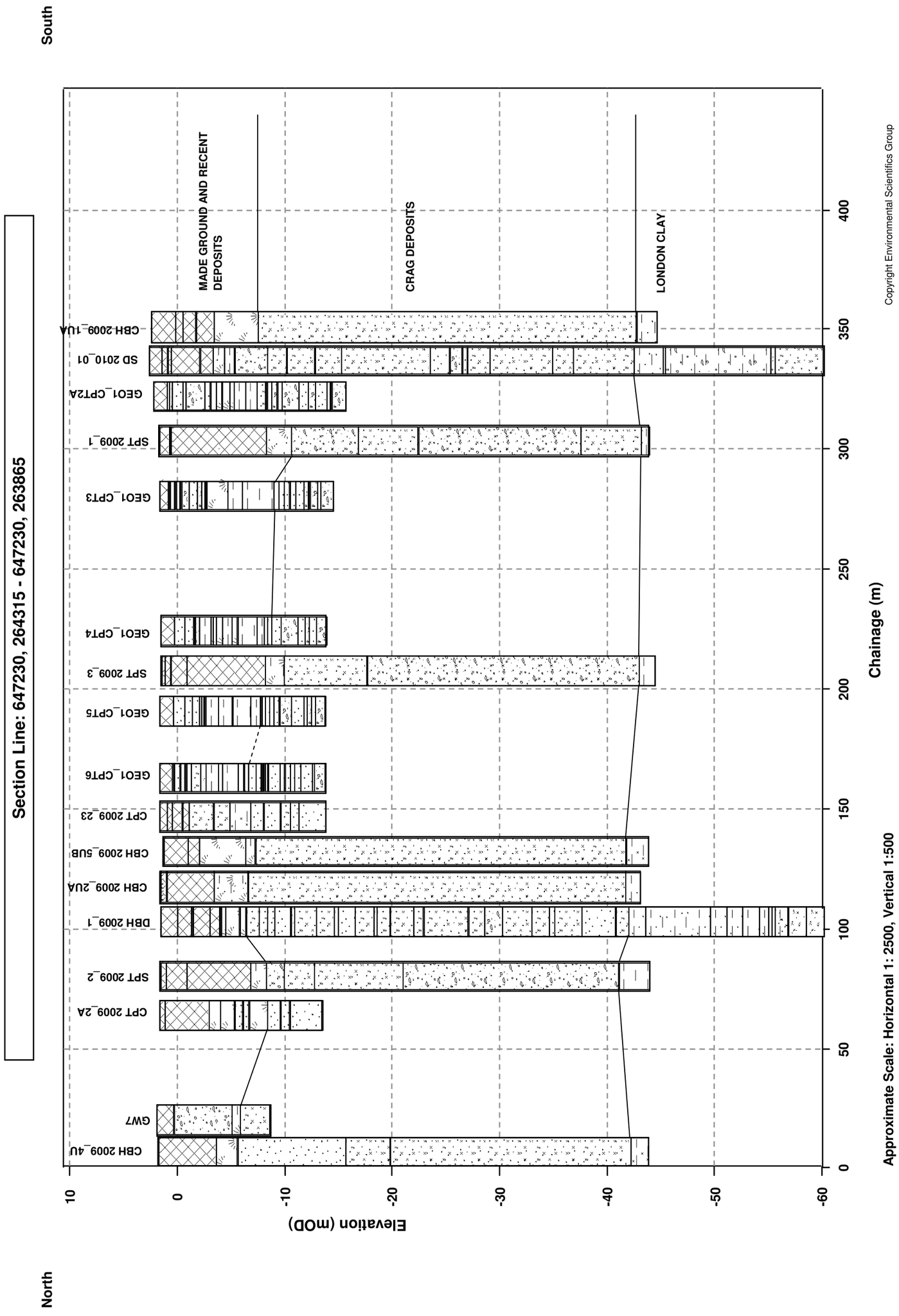
Geological Cross Section 2

Soil Mechanics



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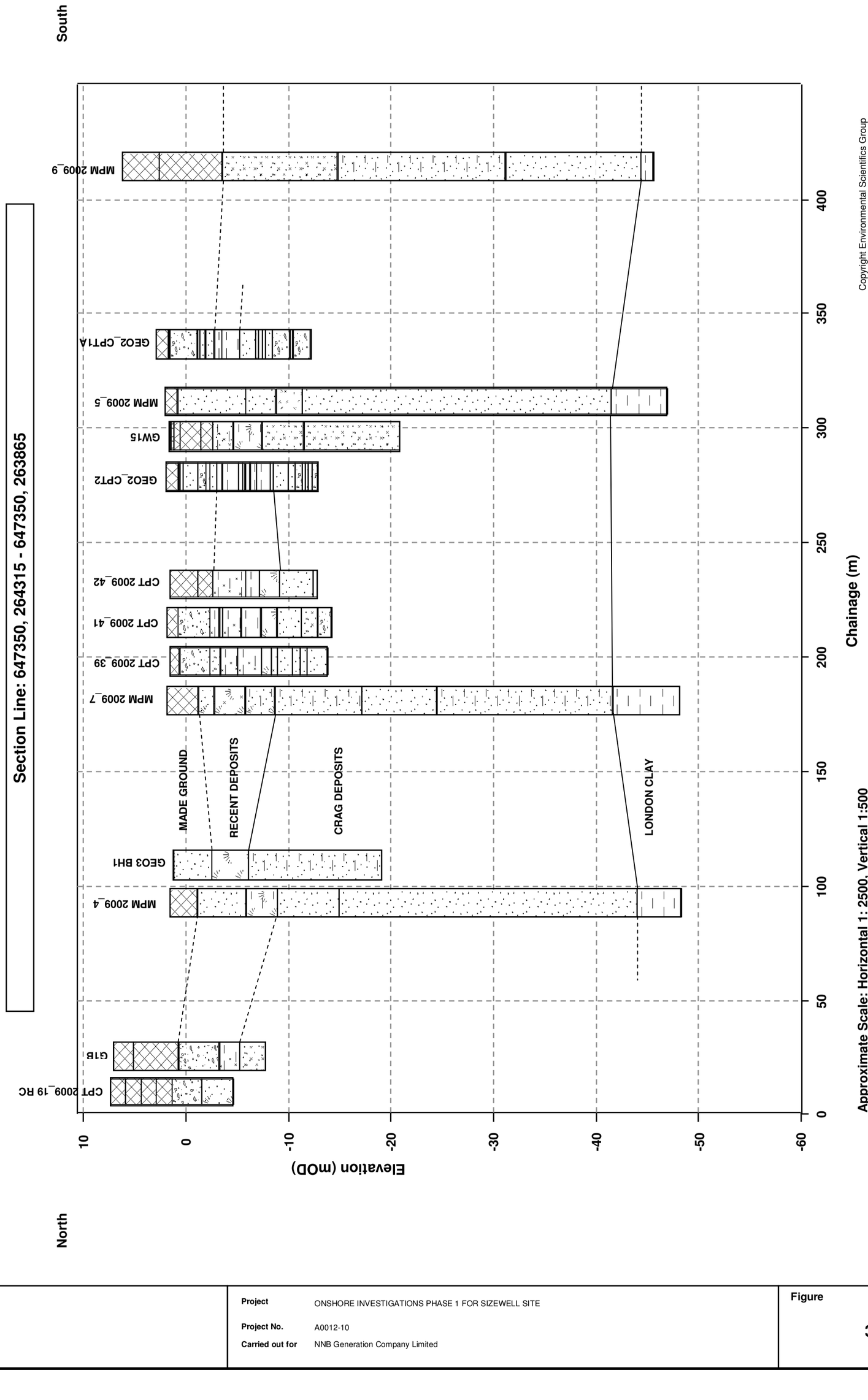
	Project ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE **Project No.** A0012-10 **Carried out for** NNB Generation Company Limited	**Figure** 3.2

Geological Cross Section 3

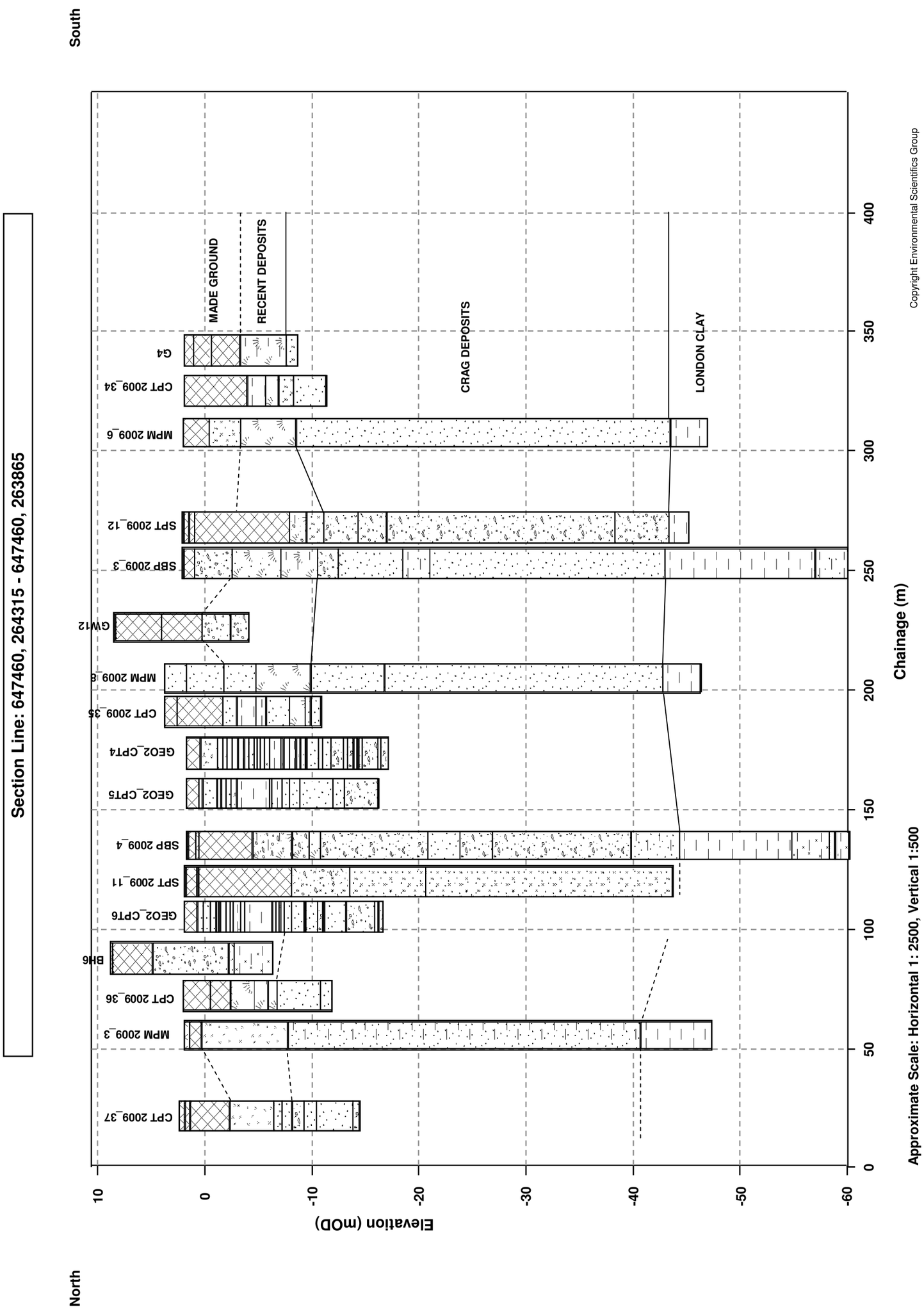
Soil Mechanics



Notes:	**Project** ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE **Project No.** A0012-10 **Carried out for** NNB Generation Company Limited	**Figure** 3.3

Geological Cross Section 4

Soil Mechanics



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Project No.	A0012-10
Carried out for	NNB Generation Company Limited

Figure

3.4

Geological Cross Section 5

Soil Mechanics

South

Section Line: 647600, 264315 - 647600, 263865

MADE GROUND
RECENT DEPOSITS
CRAG DEPOSITS
LONDON CLAY

SPT 2009_9
BH7
SPT 2009_8
GEO4_CPT1
SPT 2009_7
GEO4_CPT2
GEO4_CPT3
SPT 2009_6
GW9D
GEO4_CPT4 RC
CBH 2009_BU
SD 2010_03
MPM 2009_13
SPT 2009_5
GEO4_CPT5 RC
SPT 2009_4
GEO4_CPT6 RC

Elevation (mOD)
10
0
-10
-20
-30
-40
-50
-60

Chainage (m)
0
50
100
150
200
250
300
350
400

Approximate Scale: Horizontal 1: 2500, Vertical 1:500

North

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Notes:

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Project No.	A0012-10
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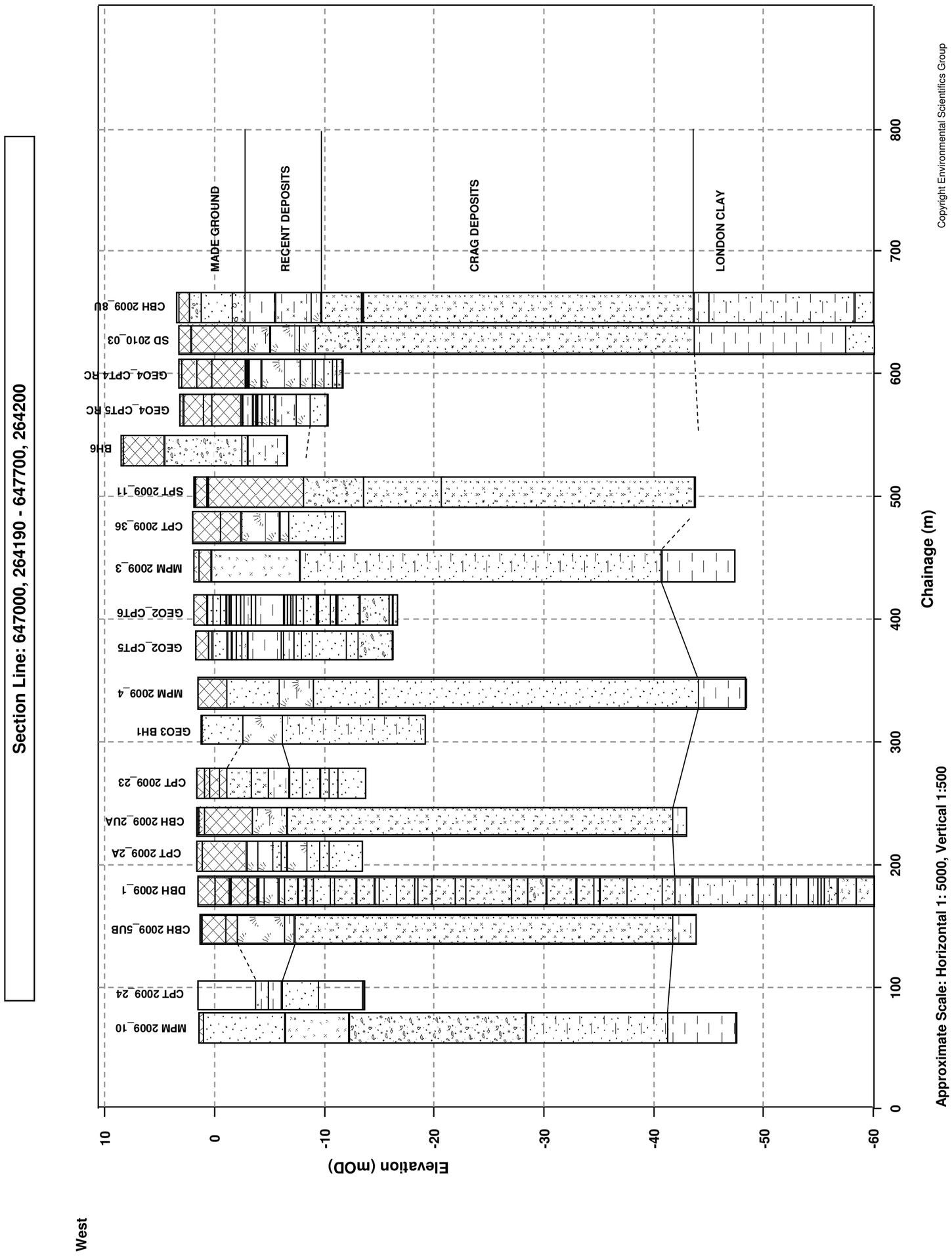
Figure 3.5

Geological Cross Section 6

Soil Mechanics



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Notes:

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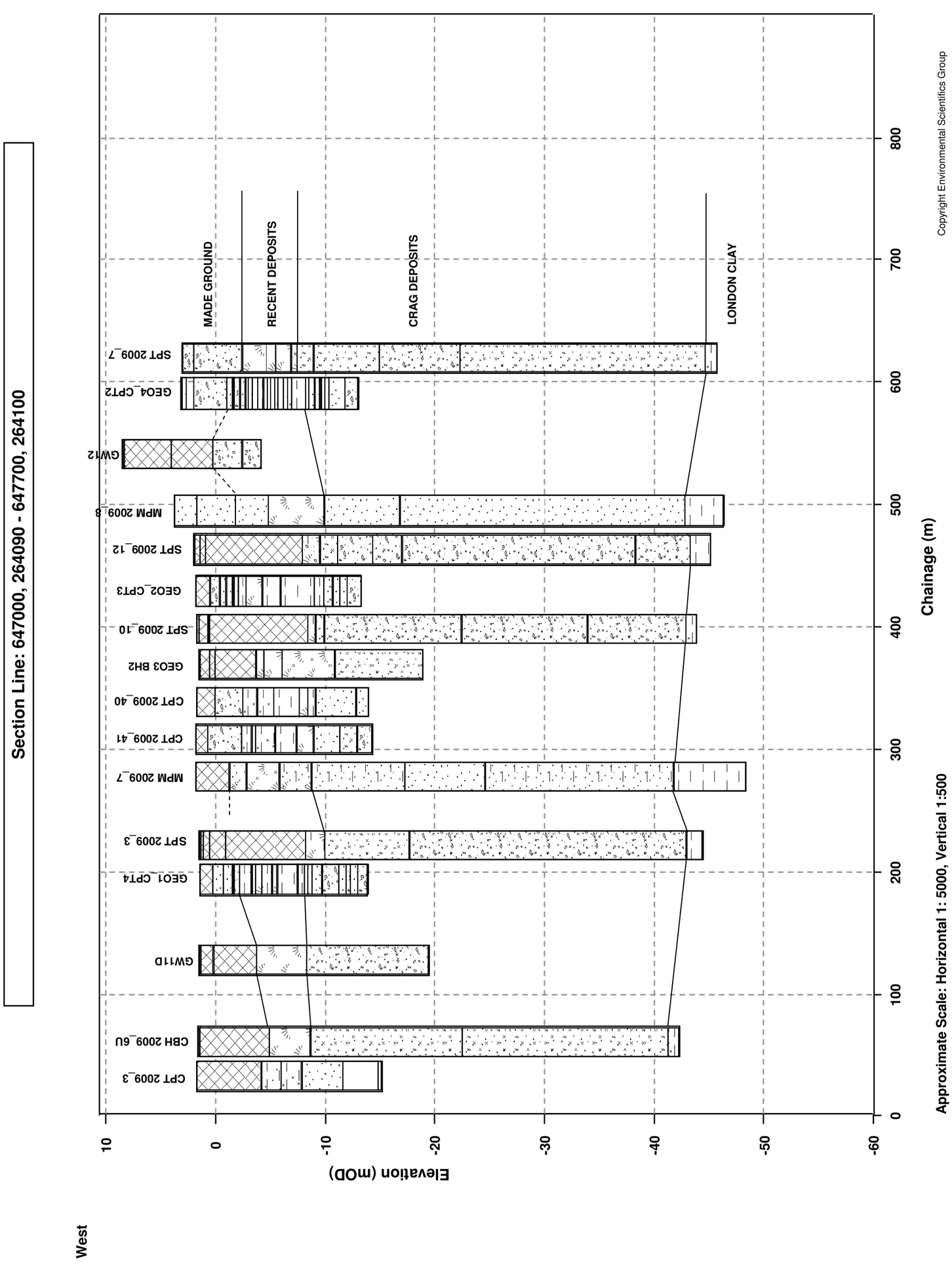
Project No.	A0012-10
Carried out for	NNB Generation Company Limited

Figure

3.6

Geological Cross Section 7

Soil Mechanics



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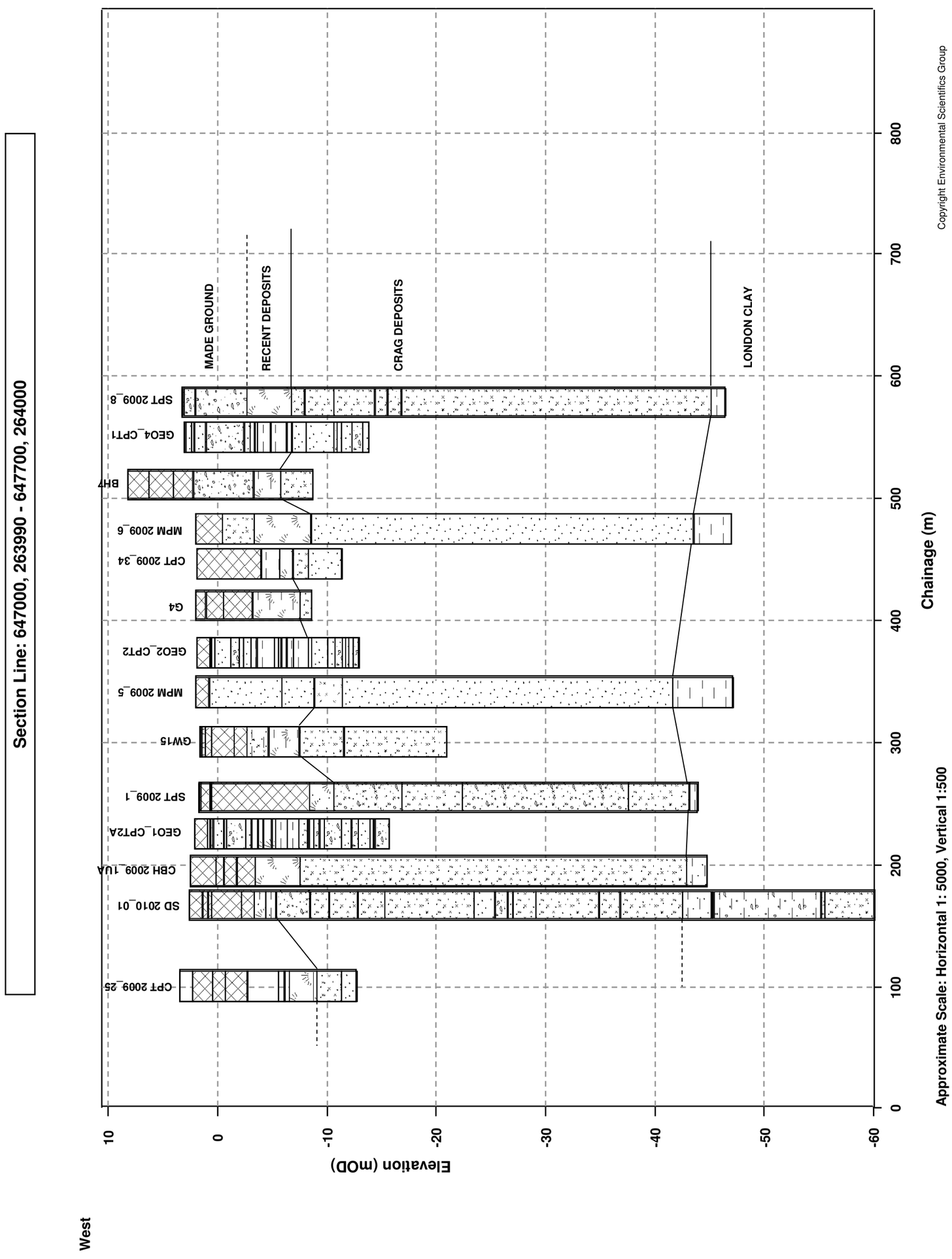
Notes:		
	Project ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE **Project No.** A0012-10 **Carried out for** NNB Generation Company Limited	**Figure** 3.7

Geological Cross Section 8

Soil Mechanics



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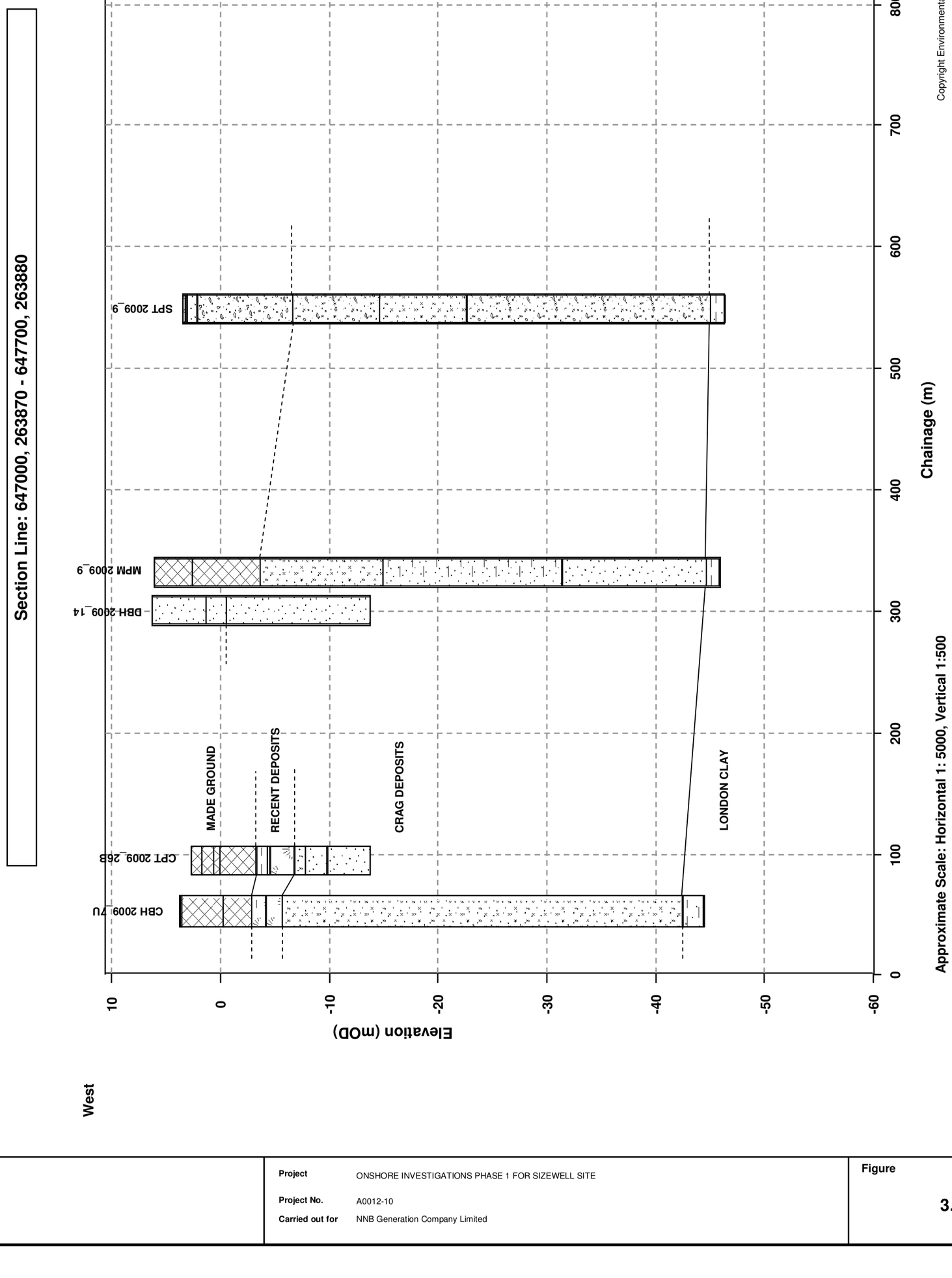
Notes:		Figure
	Project ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE **Project No.** A0012-10 **Carried out for** NNB Generation Company Limited	3.8

Geological Cross Section 9

Soil Mechanics



Notes:

Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE
Project No.	A0012-10
Carried out for	NNB Generation Company Limited

Figure

3.9

GENERAL NOTES

9.0 — Elevation contour to metres Ordnance Datum

85 CBH 2009_3 — Borehole reference and Top of Recent Cohesive elevation

Scale: 1:2500

0 25m 50 75 100 125

Title

CONTOUR PLOT - TOP OF RECENT COHESIVE DEPOSITS

Project

ONSHORE INVESTIGATIONS
PHASE 1 FOR SIZEWELL SITE

Client

NNB Generation Company Limited

Soil Mechanics

Date	Drawn By	Approv. By
01/04/11	AW	MT

Sheet Size	Scale	Project No
A3	1:2500	A0012-10

Figure No	Rev
4.1	0

GENERAL NOTES

-9.0 Elevation contour to metres Ordnance Datum

-8.5 CBH 2009_3 Borehole reference and Top of Crag Deposits elevation

Scale: 1:2500

0 25m 50 75 100 125

Title

CONTOUR PLOT -
TOP OF CRAG DEPOSITS
ALL HOLES

Project

ONSHORE INVESTIGATIONS
PHASE 1 FOR SIZEWELL SITE

Client

NNB Generation Company Limited

Soil Mechanics

Date	Drawn By	Approv. By
24/02/11	AW	MT

Sheet Size	Scale	Project No
A3	1:2500	A0012-10

Figure No	Rev
4.2	0

GENERAL NOTES

9.0 Elevation contour to metres Ordnance Datum

8_5 CBH 2009_3 Borehole reference and Top of Crag Deposits elevation

Scale: 1:2500

0 25m 50 75 100 125

Title

CONTOUR PLOT - TOP OF CRAG DEPOSITS SELECTED HOLES

Project

ONSHORE INVESTIGATIONS
PHASE 1 FOR SIZEWELL SITE

Client

NNB Generation Company Limited

Soil Mechanics

Date	Drawn By	Approv. By
01/04/11	AW	MT

Sheet Size	Scale	Project No
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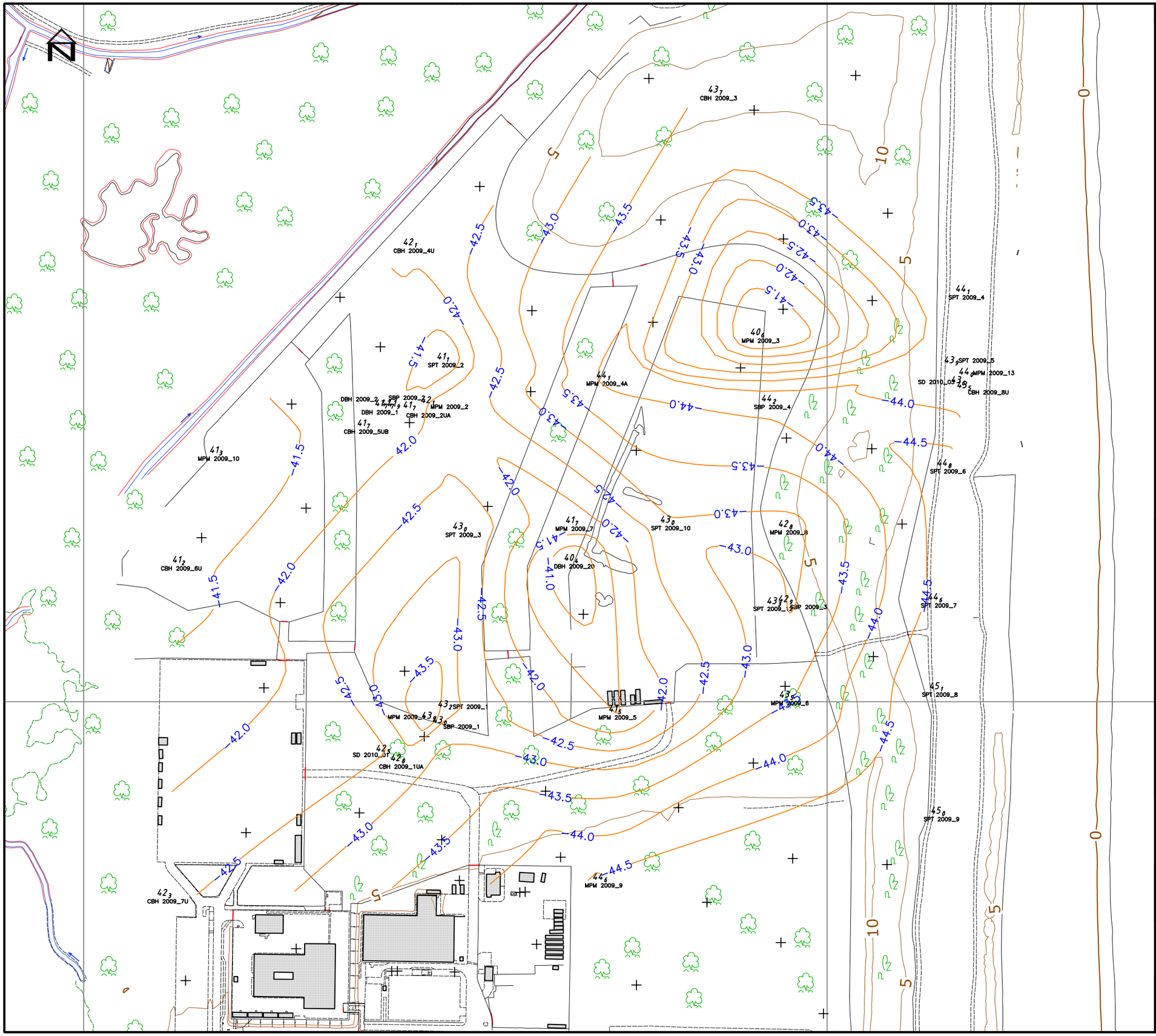
Figure No	Rev
4.2A	0



GENERAL NOTES

9.0 — Elevation contour to metres Ordnance Datum

8_5 CBH 2009_3 — Borehole reference and Top of London Clay Deposits elevation

Scale: 1:2500

0 25m 50 75 100 125

Title

CONTOUR PLOT -
TOP OF LONDON CLAY DEPOSITS

Project

ONSHORE INVESTIGATIONS
PHASE 1 FOR SIZEWELL SITE

Client

NNB Generation Company Limited

Soil Mechanics

Date	Drawn By	Approv. By
01/04/11	AW	MT

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Figure No	Rev
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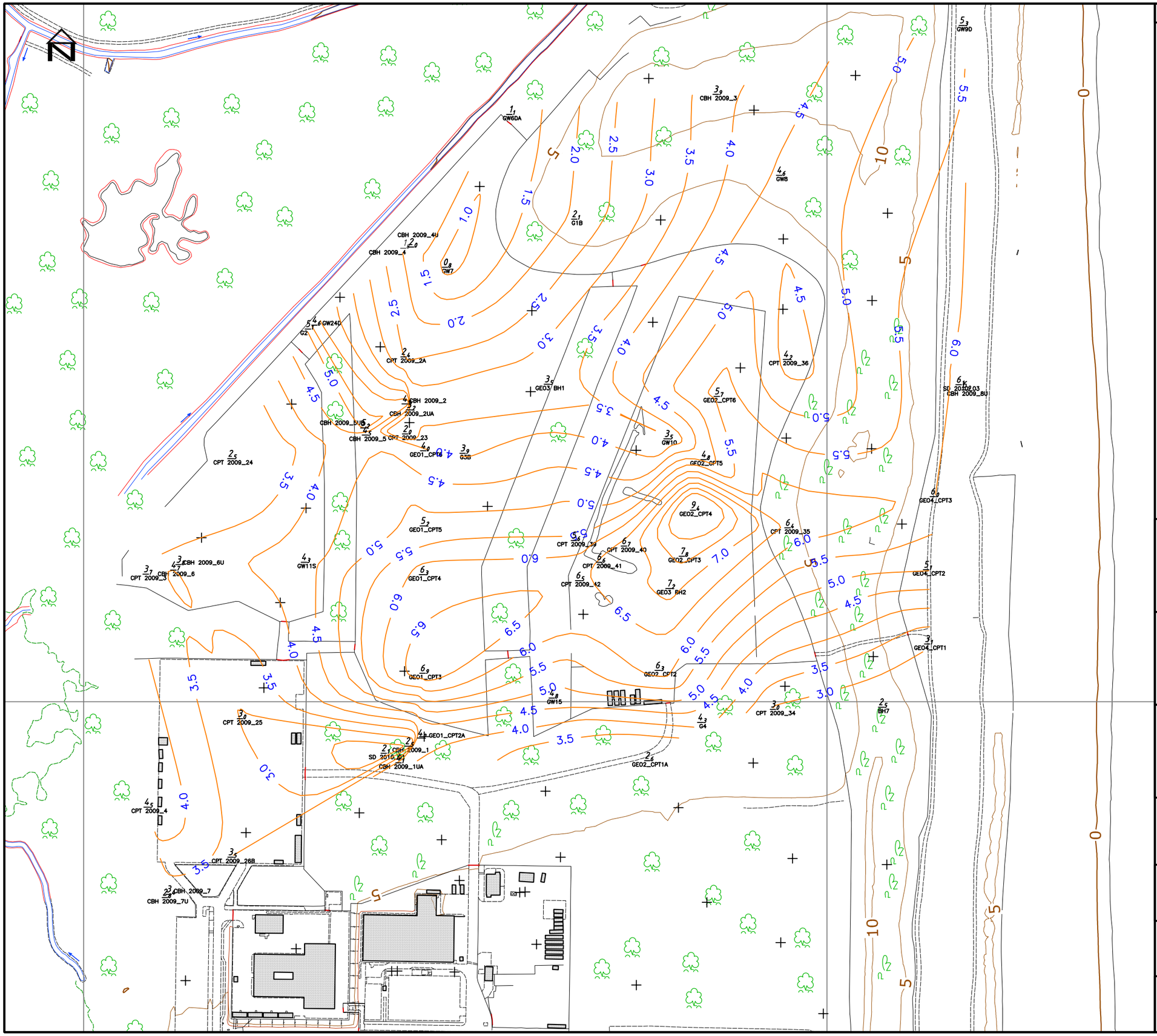


GENERAL NOTES

9.0 — Thickness contour in metres

8 / 5 CBH 2009_3 — Borehole reference and thickness of recent cohesive deposits

Scale: 1:2500

0 25m 50 75 100 125

Title

ISOPACHYTE -
RECENT COHESIVE DEPOSITS

Project

ONSHORE INVESTIGATIONS
PHASE 1 FOR SIZEWELL SITE

Client

NNB Generation Company Limited

Soil Mechanics

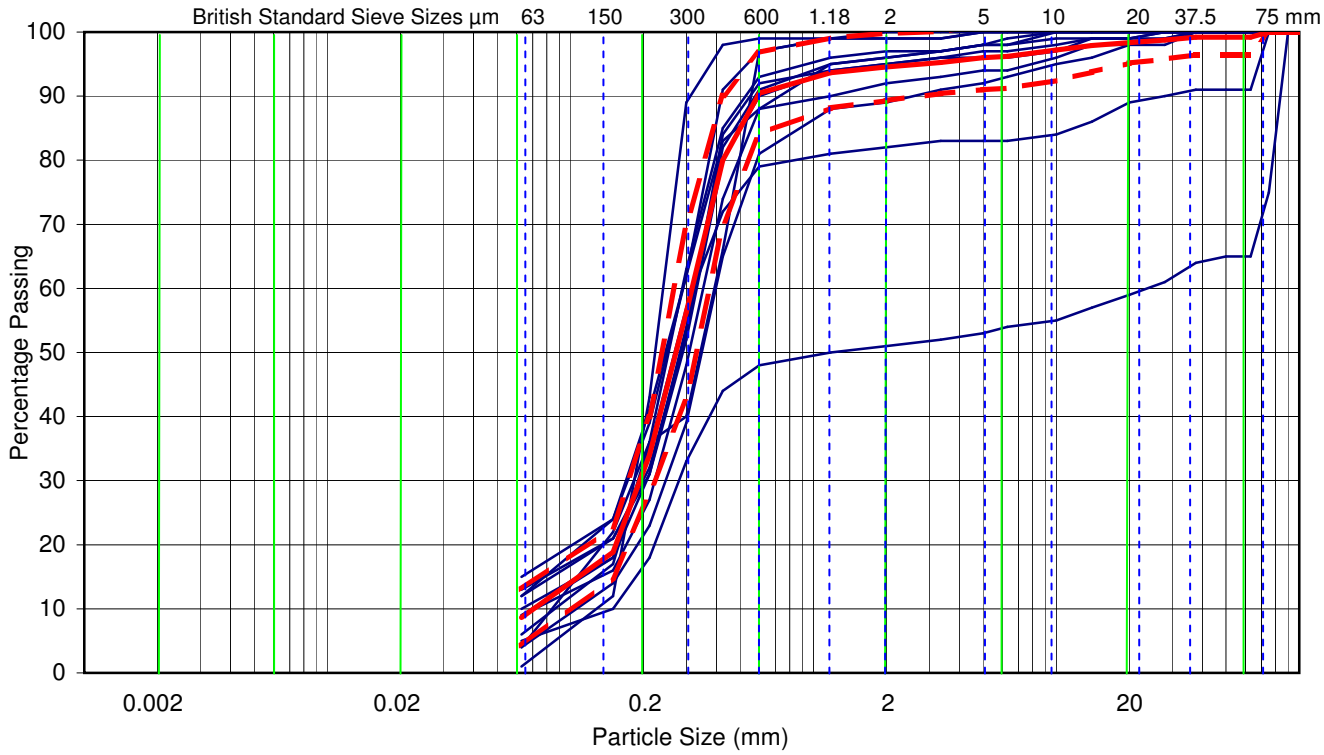
Date	Drawn By	Approv. By
01/04/11	AW	MT

Sheet Size	Scale	Project No
A3	1:2500	A0012-10

Figure No	Rev
5	0

Particle Size Distribution - Made Ground

Soil Mechanics



CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
	SILT			SAND			GRAVEL			

Notes: Mean and +- 1 standard deviation shown for all PSDs where >80% passing 2 mm

Nominal particle size, mm	Percentage passing			
	Minimum	Maximum	Average	Standard deviation
0.063	1	15	8.6	4.4
0.150	12	24	18.8	3.9
0.212	23	43	34.0	6.0
0.300	39	89	56.3	13.6
0.425	65	98	80.0	10.1
0.60	79	99	90.5	6.3
1.18	81	99	93.6	5.5
2.00	82	100	94.5	5.2
3.35	83	100	95.3	4.8
5.0	83	100	96.0	5.0
6.3	83	100	96.2	5.0
10	84	100	97.2	4.7
14	86	100	97.9	4.1
20	89	100	98.4	3.2
28	90	100	98.7	3.0
37.5	91	100	99.2	2.7
50	91	100	99.2	2.7
63	91	100	99.2	2.7
75	100	100	100.0	0.0
90	100	100	100.0	0.0
125	100	100	100.0	0.0

Notes:

Project ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE

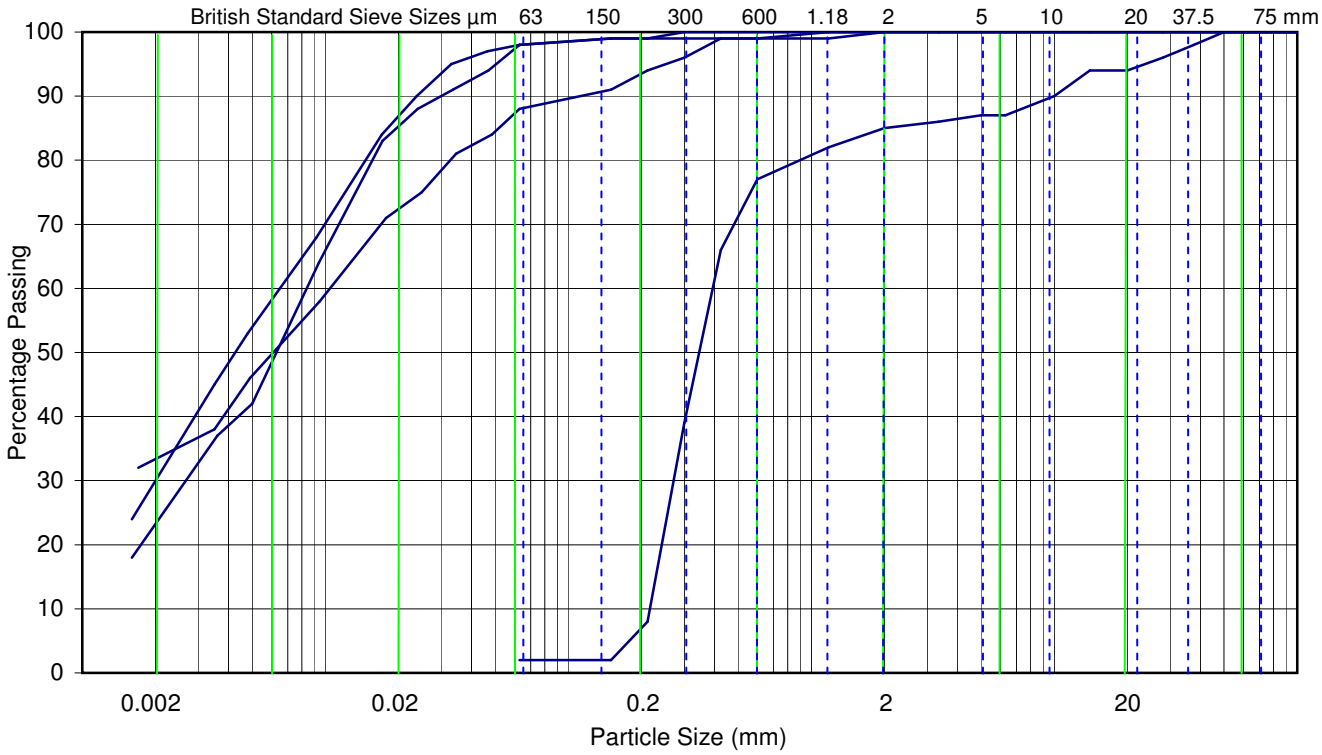
Project No. A0012-10

Carried out for NNB Generation Company Limited

Figure 6.1

Particle Size Distribution - Recent Deposits

Soil Mechanics



CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
	SILT			SAND			GRAVEL			

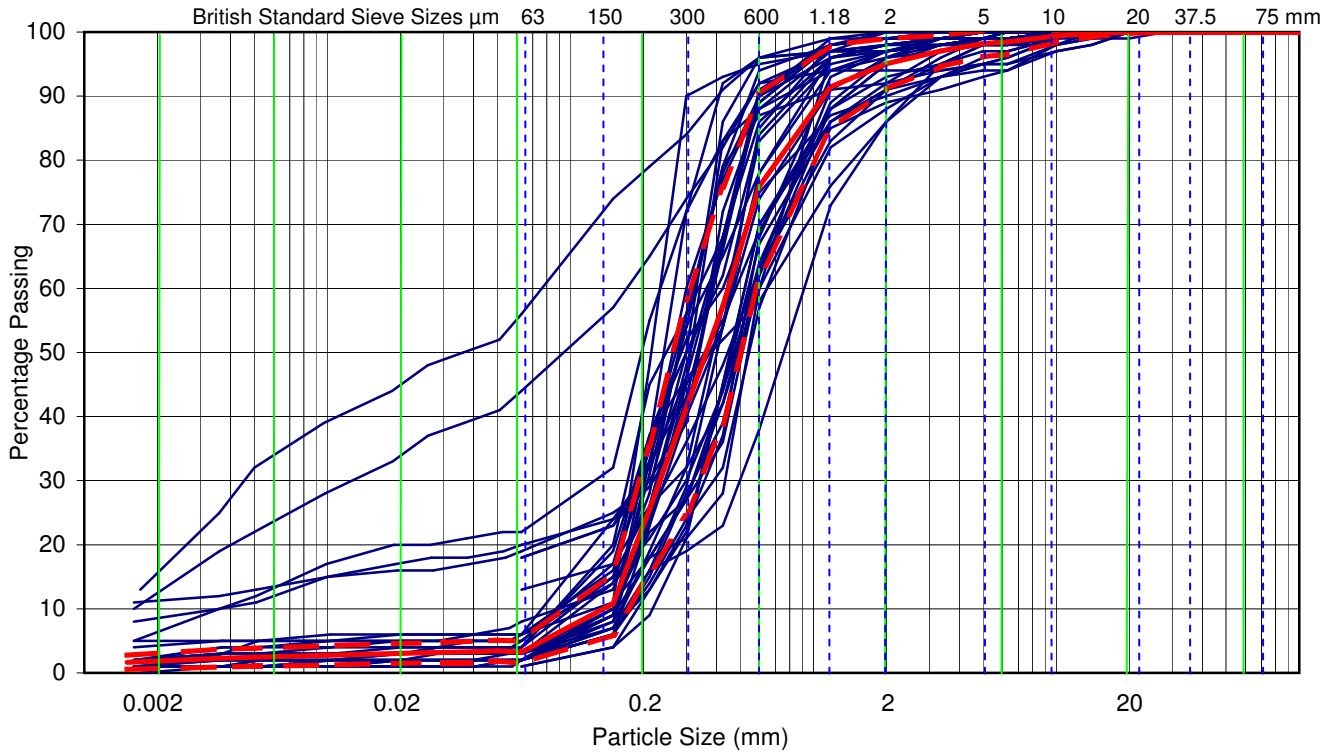
Notes: Statistical analysis not appropriate

Nominal particle	Percentage passing			
	Minimum	Maximum	Average	Standard deviation

Notes:	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Figure
	Project No.	A0012-10	6.2
	Carried out for	NNB Generation Company Limited	

Particle Size Distribution - Crag Deposits

Soil Mechanics



CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
	SILT			SAND			GRAVEL			

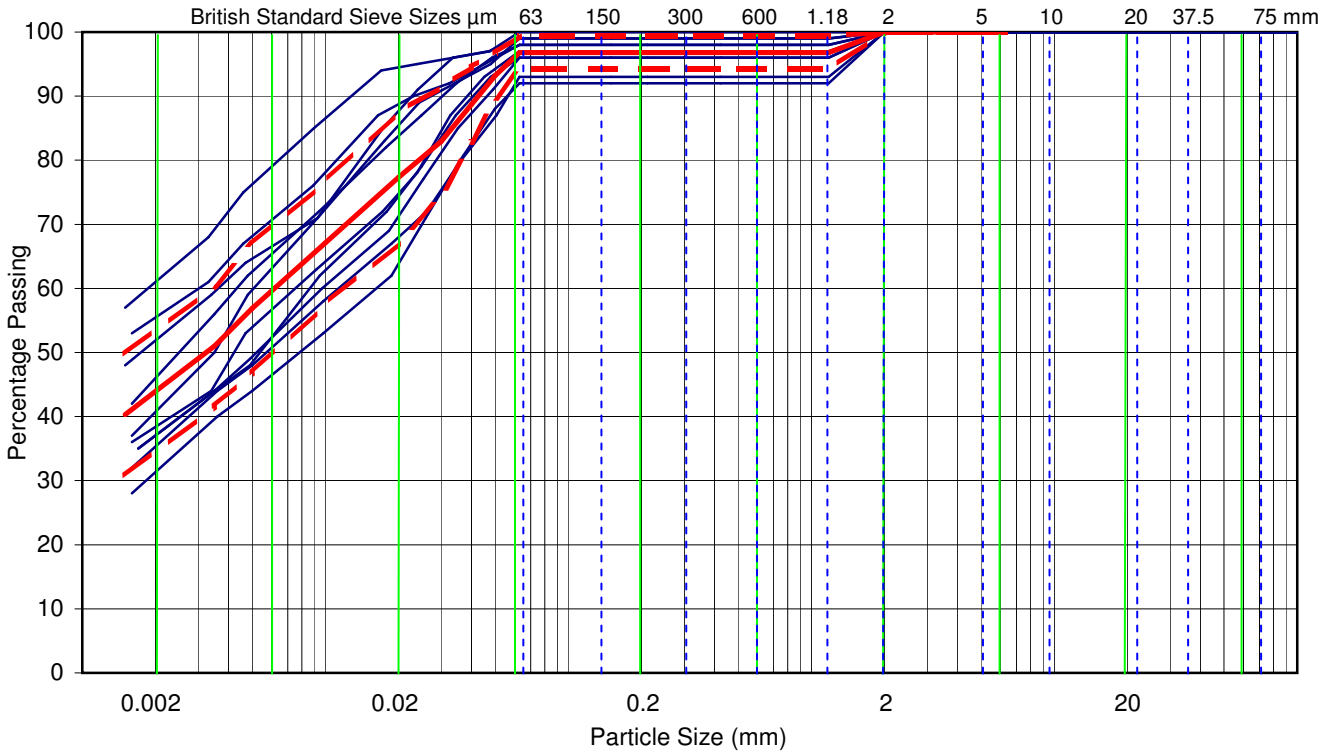
Notes: Mean and +- 1 standard deviation shown for all PSDs where <10% passing 63um

Nominal particle	Percentage passing			
	Minimum	Maximum	Average	Standard deviation
0.0015	0	5	1.6	1.1
0.0035	1	5	2.3	1.4
0.005	1	5	2.5	1.4
0.01	1	6	2.7	1.5
0.02	1	6	3.0	1.6
0.03	1	6	3.2	1.6
0.04	1	6	3.3	1.7
0.05	1	7	3.5	1.6
0.063	1	8	3.2	1.7
0.15	4	24	10.8	4.9
0.212	9	48	25.5	9.9
0.3	19	90	41.3	16.8
0.425	23	93	57.2	18.6
0.6	38	96	75.9	14.4
1.18	73	98	91.5	6.6
2	86	100	95.1	3.9
3.35	91	100	97.1	2.4
5	93	100	98.2	2.0
6.3	94	100	98.5	1.9
10	97	100	99.4	0.9
14	98	100	99.8	0.5
20	99	100	100.0	0.2
Prepared: 25/03/2011 15	100	100	100.0	0.0

Notes:	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Figure
	Project No.	A0012-10	6.3
	Carried out for	NNB Generation Company Limited	

Particle Size Distribution - London Clay

Soil Mechanics



CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
	SILT			SAND			GRAVEL			

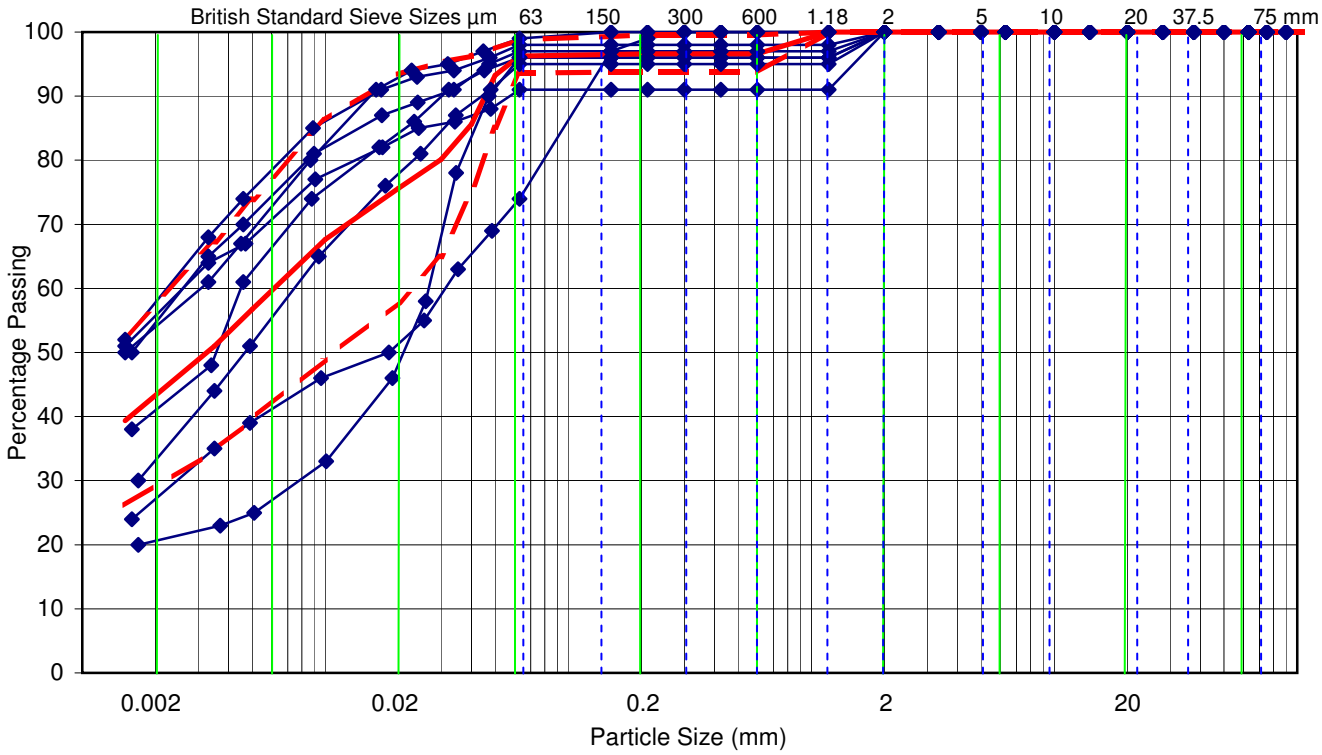
Notes: Mean and +- 1 standard deviation shown for all PSDs

Nominal particle	Percentage passing			
	Minimum	Maximum	Average	Standard deviation
0.0015	28	57	40.3	9.5
0.0035	40	68	51.0	9.4
0.005	44	75	56.9	10.1
0.01	53	85	67.1	9.6
0.02	62	94	77.3	10.3
0.03	71	95	82.9	8.5
0.04	80	96	88.7	5.9
0.05	87	97	93.2	3.6
0.063	92	100	96.8	2.6

Notes:	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Figure
	Project No.	A0012-10	6.4
	Carried out for	NNB Generation Company Limited	

Particle Size Distribution - Lower London Tertiaries Clay

Soil Mechanics



CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
	SILT			SAND			GRAVEL			

Notes: Mean and +- 1 standard deviation shown for all PSDs where <10% passing 63um

Nominal particle	Percentage passing			
	Minimum	Maximum	Average	Standard deviation
0.0015	20	52	39.4	13.2
0.0035	23	68	51.0	16.3
0.005	25	74	56.8	17.1
0.01	33	85	67.6	18.7
0.02	46	91	75.6	17.8
0.03	55	94	80.1	15.2
0.04	63	95	85.6	10.6
0.05	74	99	93.3	8.1
0.063	91	100	96.3	2.6
0.15	91	100	96.5	2.8
0.212	91	100	96.6	2.9
0.3	91	100	96.6	2.9
0.425	91	100	96.6	2.9
0.6	91	100	96.6	2.9
1.18	100	100	100.0	0.0
2	100	100	100.0	0.0
3.35	100	100	100.0	0.0
5	100	100	100.0	0.0
6.3	100	100	100.0	0.0
10	100	100	100.0	0.0
14	100	100	100.0	0.0
20	100	100	100.0	0.0
Prepared: 25/03/2011 17	100	100	100.0	0.0

Notes:

Project ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE

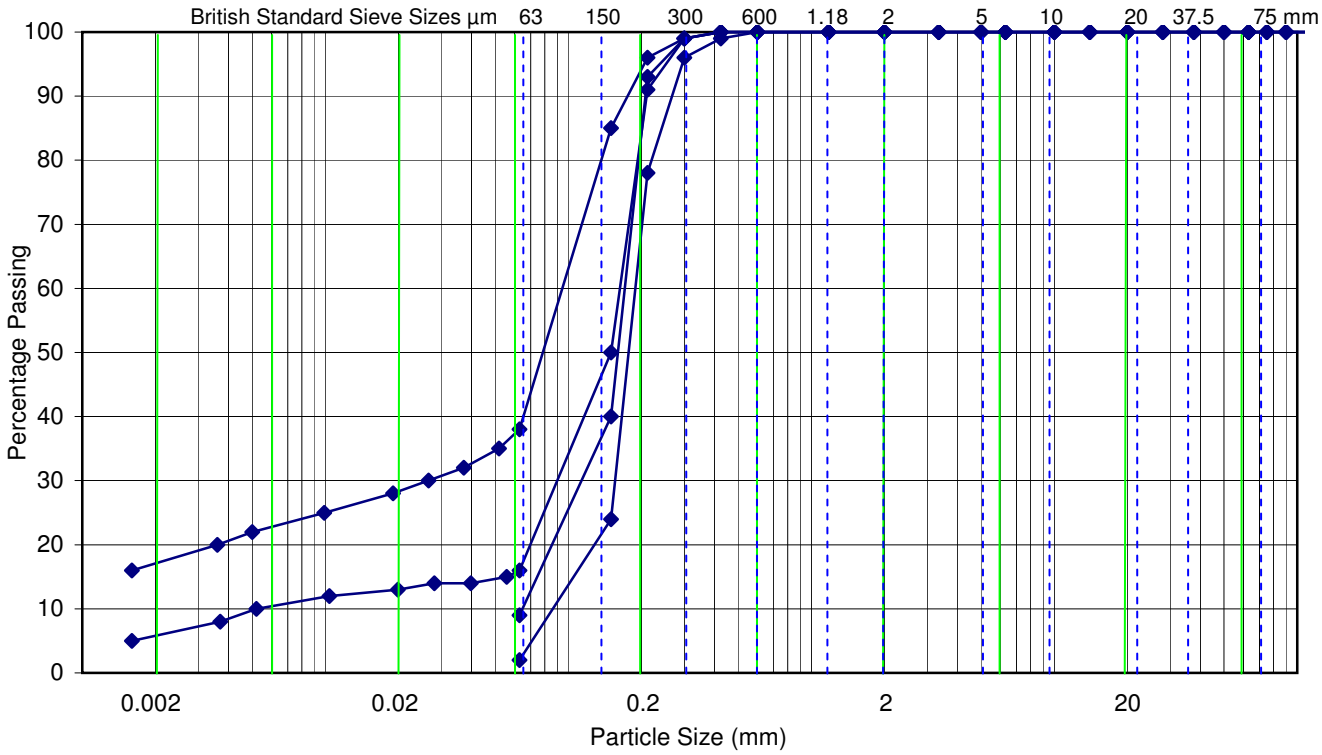
Project No. A0012-10

Carried out for NNB Generation Company Limited

Figure 6.5

Particle Size Distribution - Lower London Tertiaries Sand

Soil Mechanics



CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
	SILT			SAND			GRAVEL			

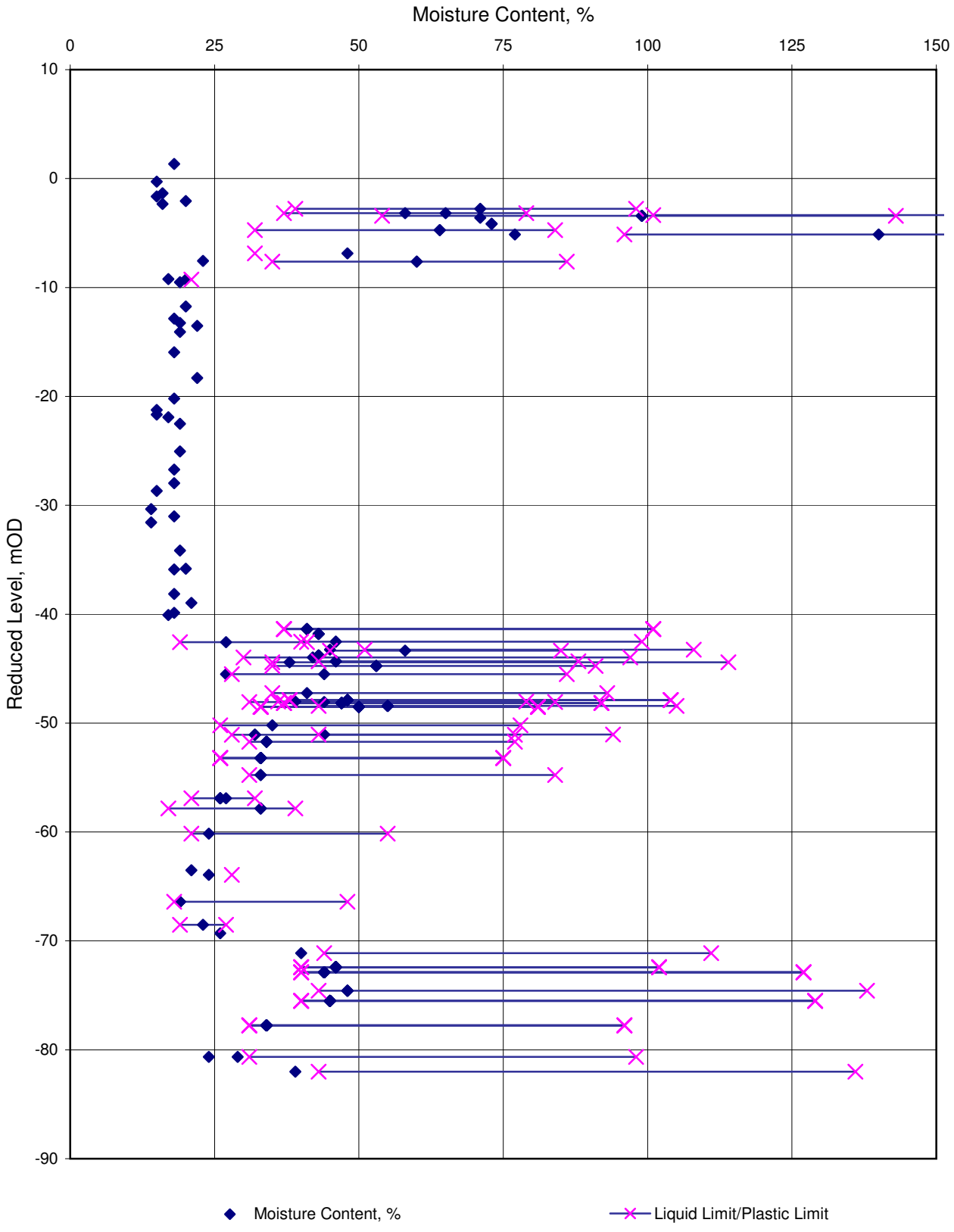
Notes: Statistical analysis not appropriate

Nominal particle	Percentage passing			
	Minimum	Maximum	Average	Standard deviation

Notes:	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Figure
	Project No.	A0012-10	6.6
	Carried out for	NNB Generation Company Limited	

Moisture Content and Atterberg Limits Profile - All Strata

Soil Mechanics

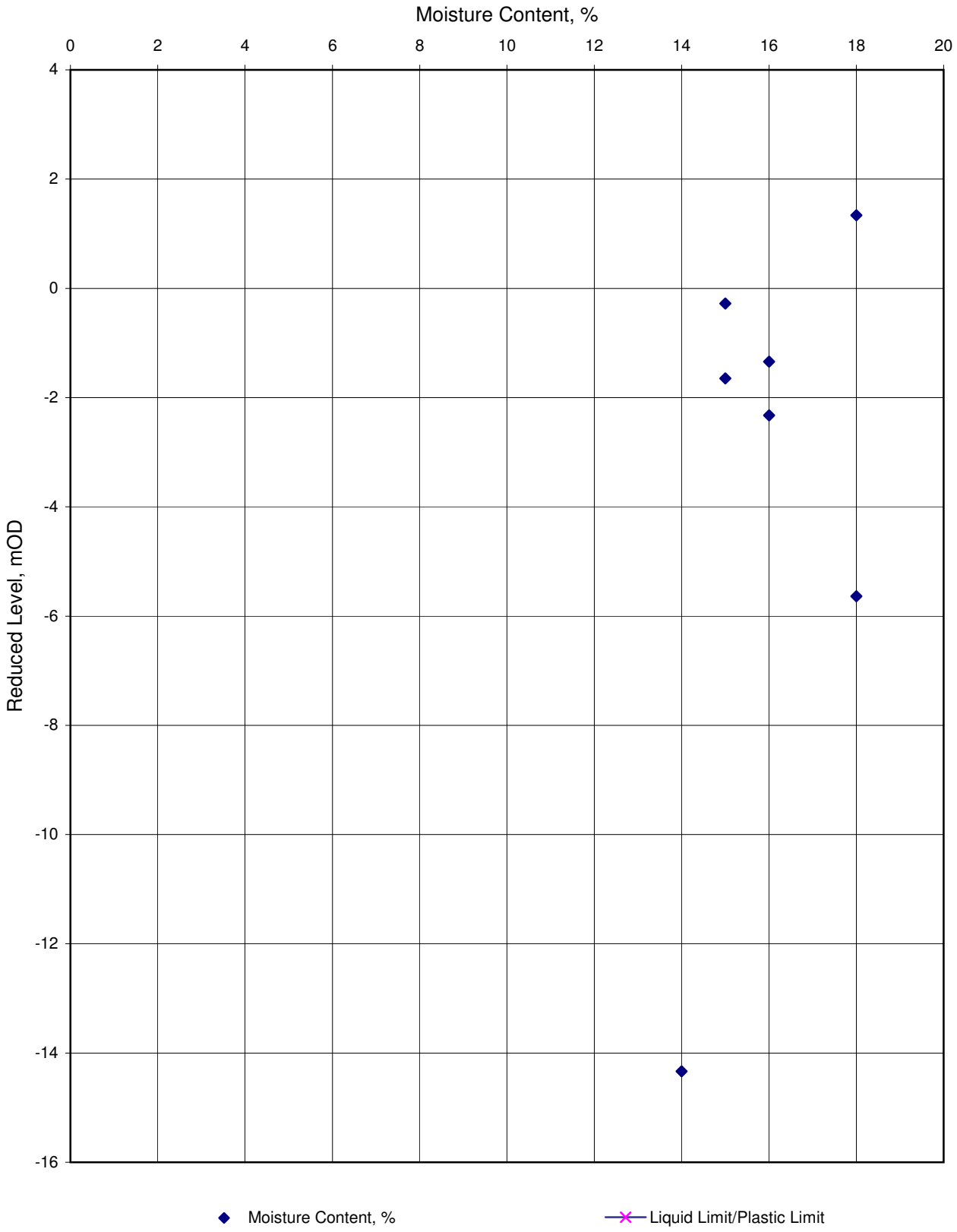


Prepared: 25/03/2011 14:01

Notes:	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Figure
	Project No.	A0012-10	7.1
	Carried out for	NNB Generation Company Limited	

Moisture Content and Atterberg Limits Profile - Made Ground

Soil Mechanics

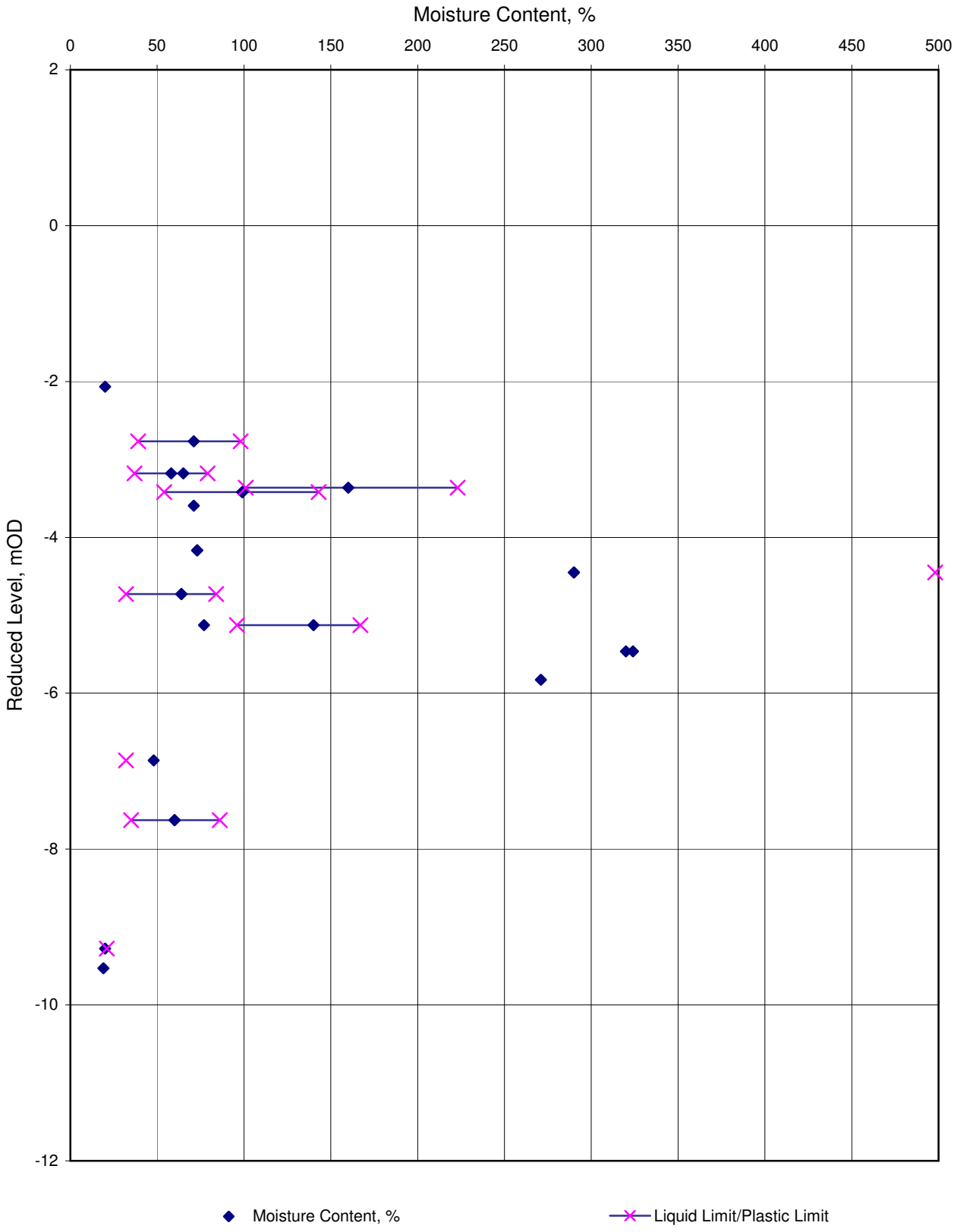


Prepared: 24/03/2011 17:43

Notes:	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Figure
	Project No.	A0012-10	7.2
	Carried out for	NNB Generation Company Limited	

Moisture Content and Atterberg Limits Profile - Recent Deposits

Soil Mechanics



Prepared: 24/03/2011 17:43

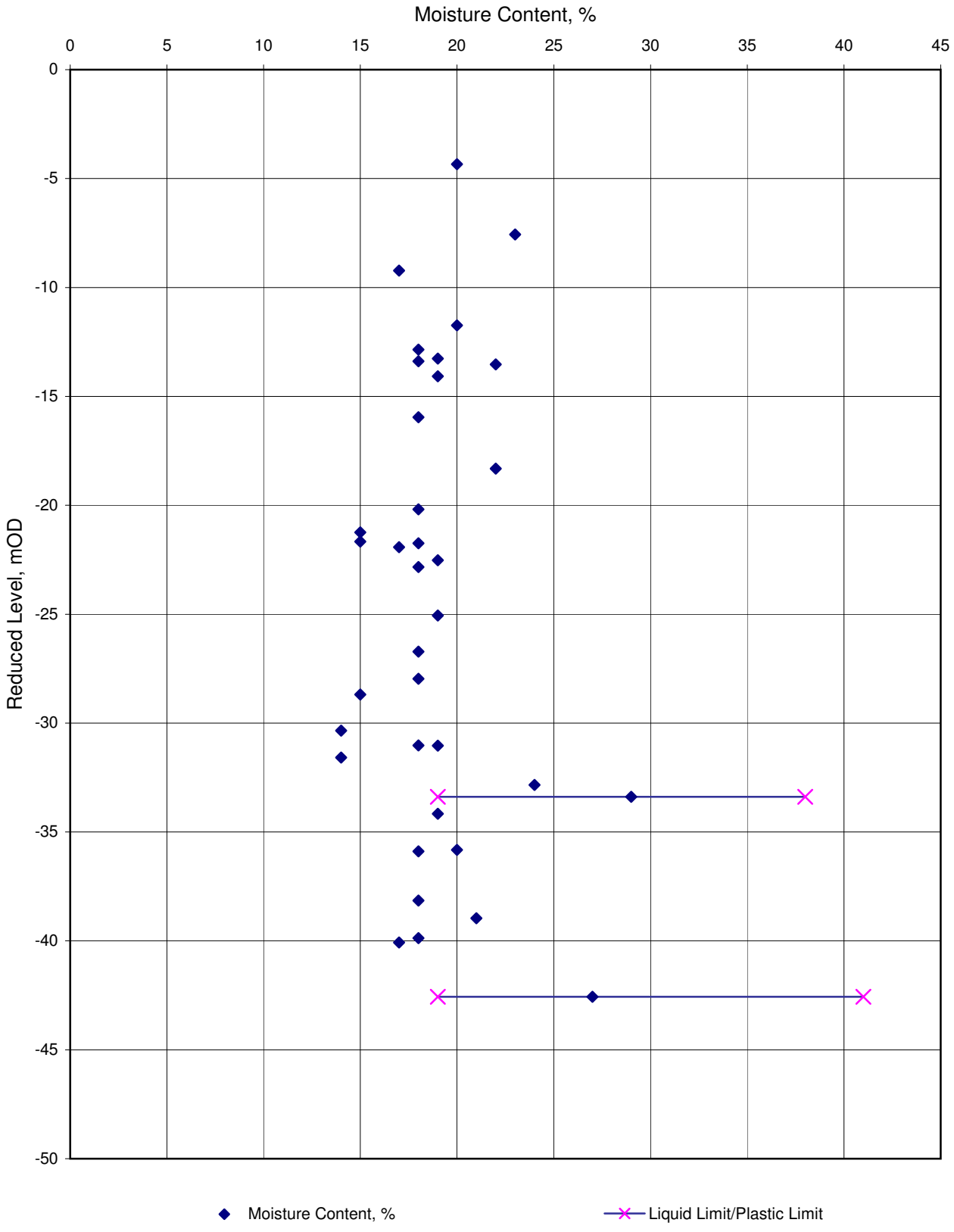
Notes: Values > 500% not shown

Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE
Project No.	A0012-10
Carried out for	NNB Generation Company Limited

Figure 7.3

Moisture Content and Atterberg Limits Profile - Crag Deposits

Soil Mechanics

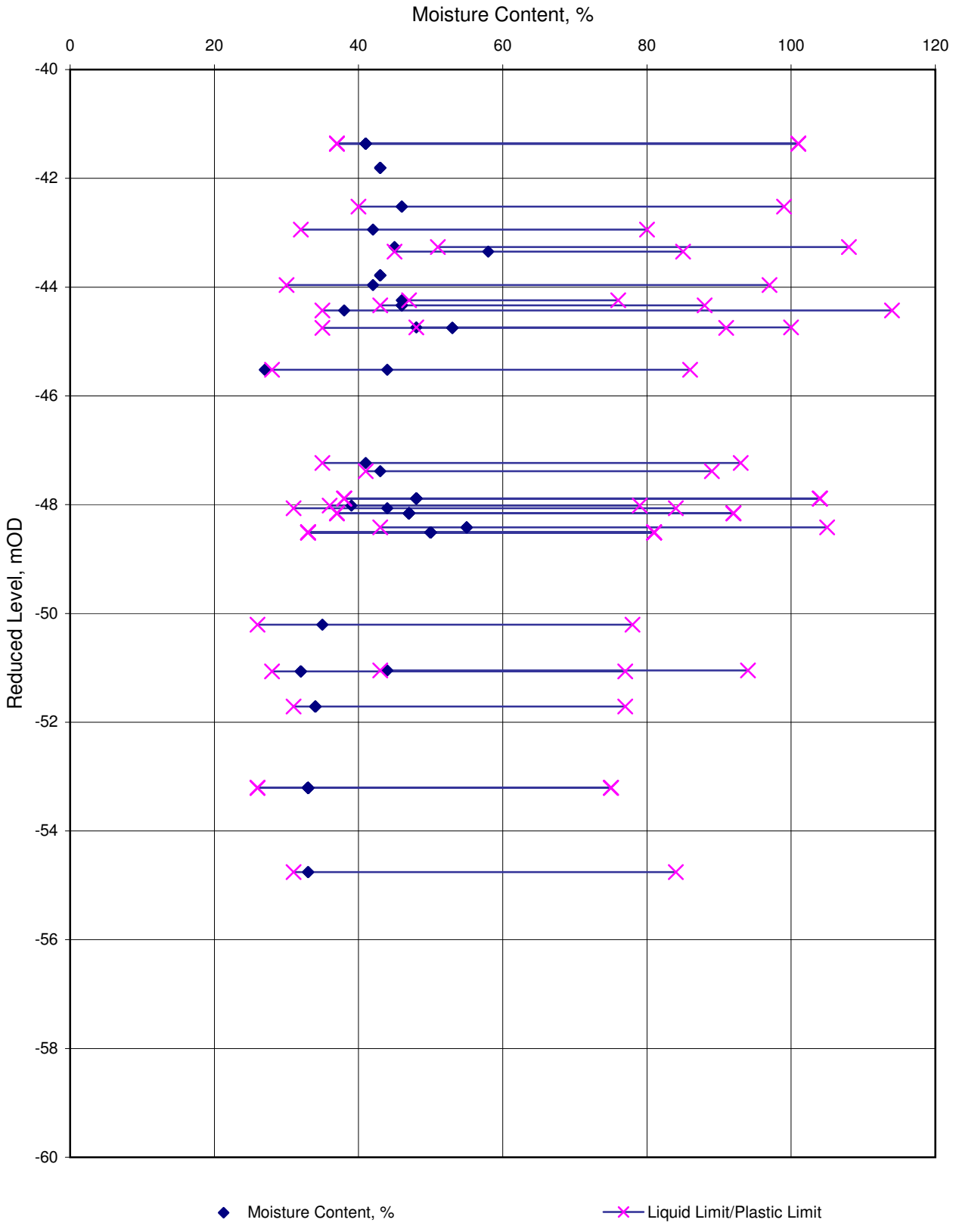


Prepared: 24/03/2011 17:43

Notes:	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Figure
	Project No.	A0012-10	7.4
	Carried out for	NNB Generation Company Limited	

Moisture Content and Atterberg Limits Profile - London Clay

Soil Mechanics

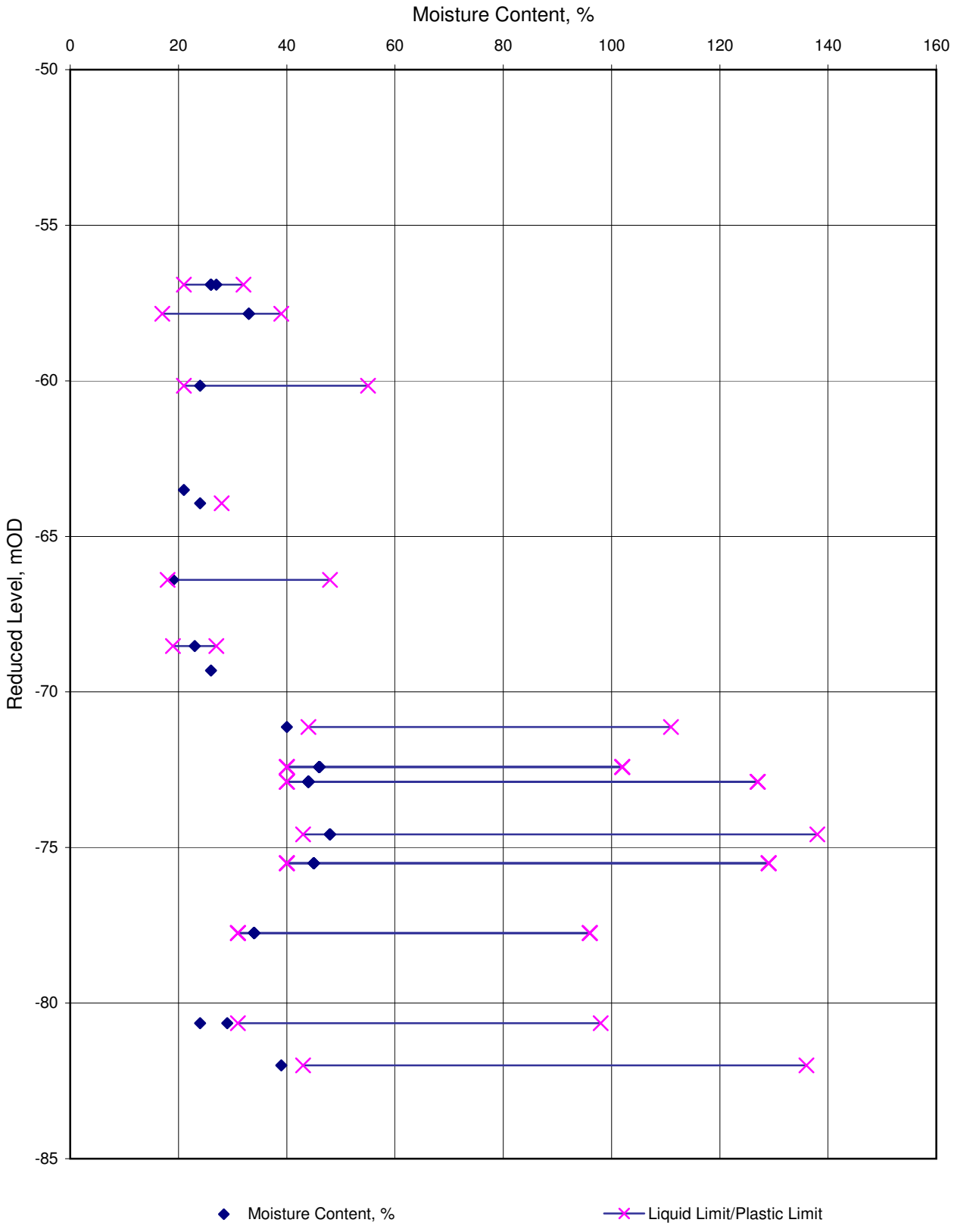


Prepared: 24/03/2011 17:43

Notes:	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Figure
	Project No.	A0012-10	7.5
	Carried out for	NNB Generation Company Limited	

Moisture Content and Atterberg Limits Profile - Lower London Tertiaries

Soil Mechanics

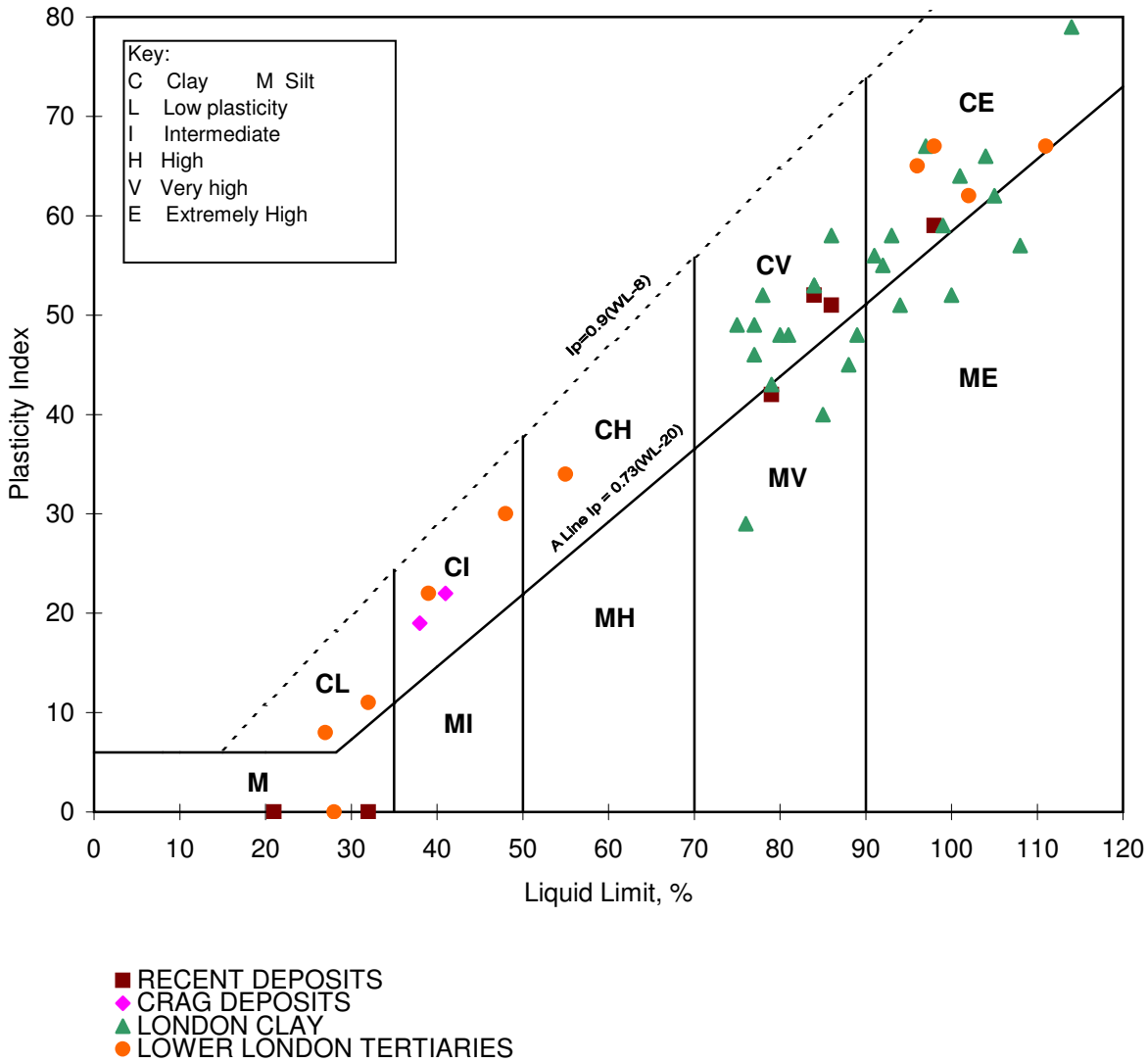


Prepared: 24/03/2011 17:43

Notes:	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Figure
	Project No.	A0012-10	7.6
	Carried out for	NNB Generation Company Limited	

Plasticity Chart - All Strata

Soil Mechanics



■ RECENT DEPOSITS
◆ CRAG DEPOSITS
▲ LONDON CLAY
● LOWER LONDON TERTIARIES

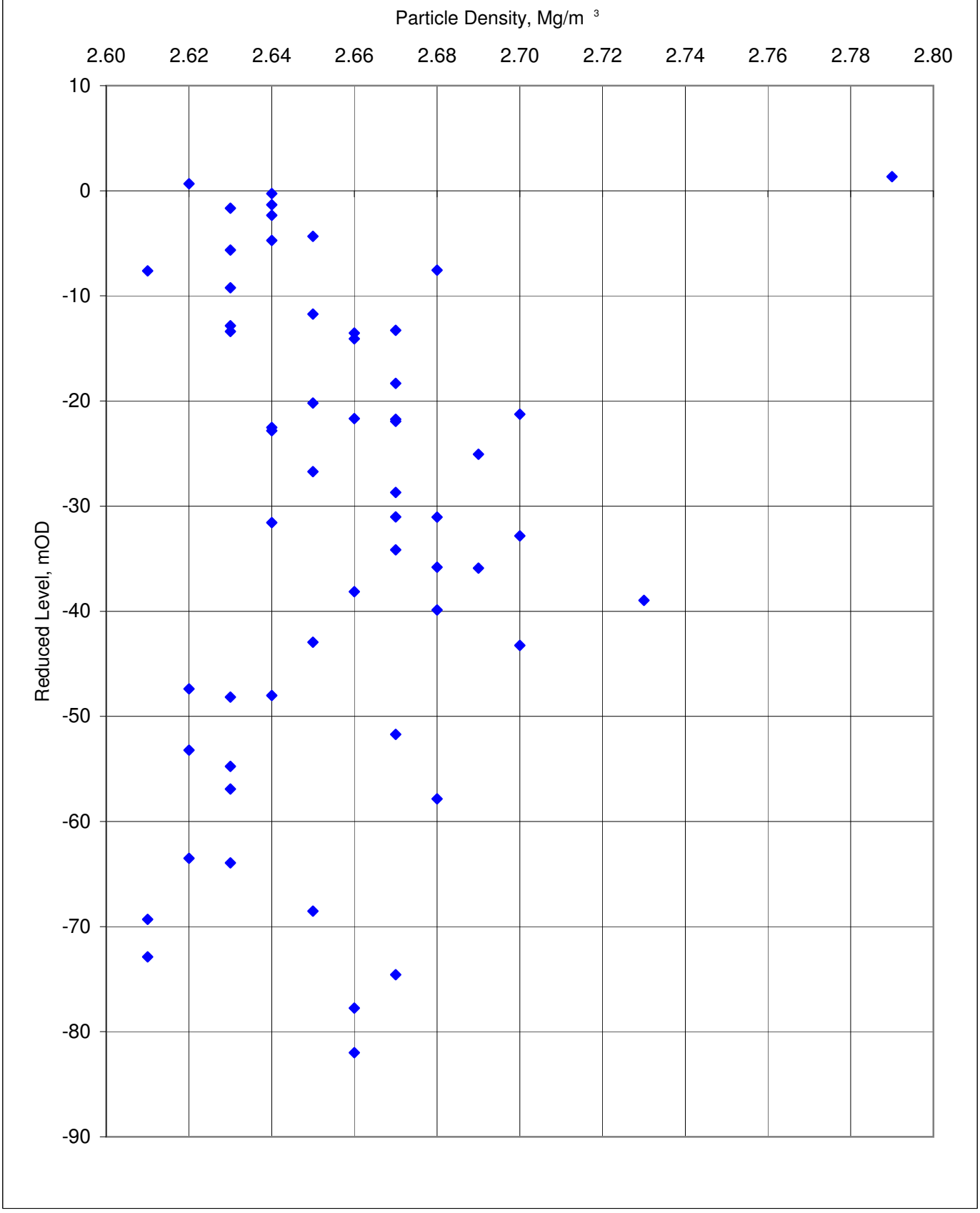
Notes: Liquid Limit values >120 not shown

Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE
Project No.	A0012-10
Carried out for	NNB Generation Company Limited

Figure 8

Particle Density - All Strata

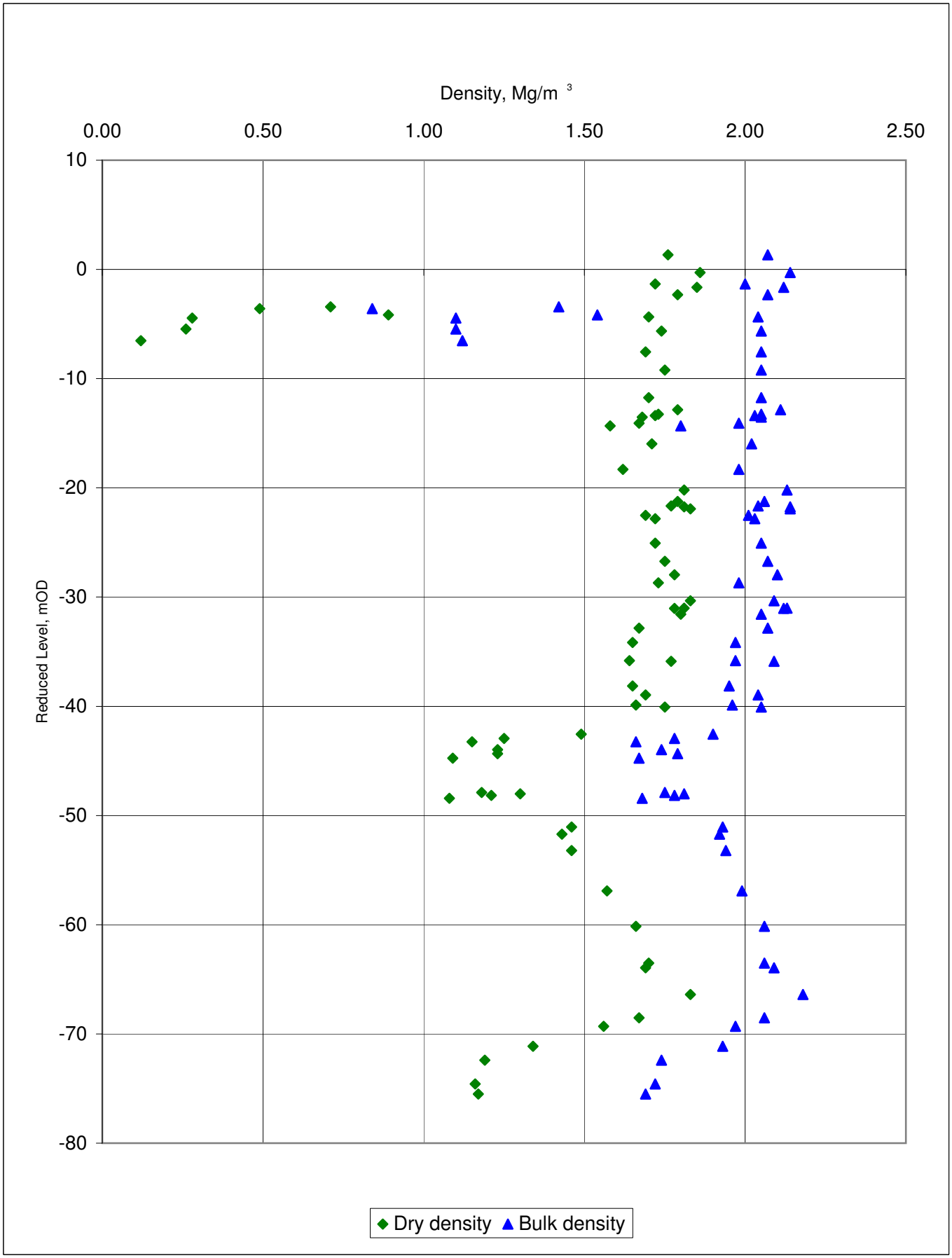
Soil Mechanics



Notes:	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Figure
	Project No.	A0012-10	9
	Carried out for	NNB Generation Company Limited	

Bulk and Dry Density - All Strata

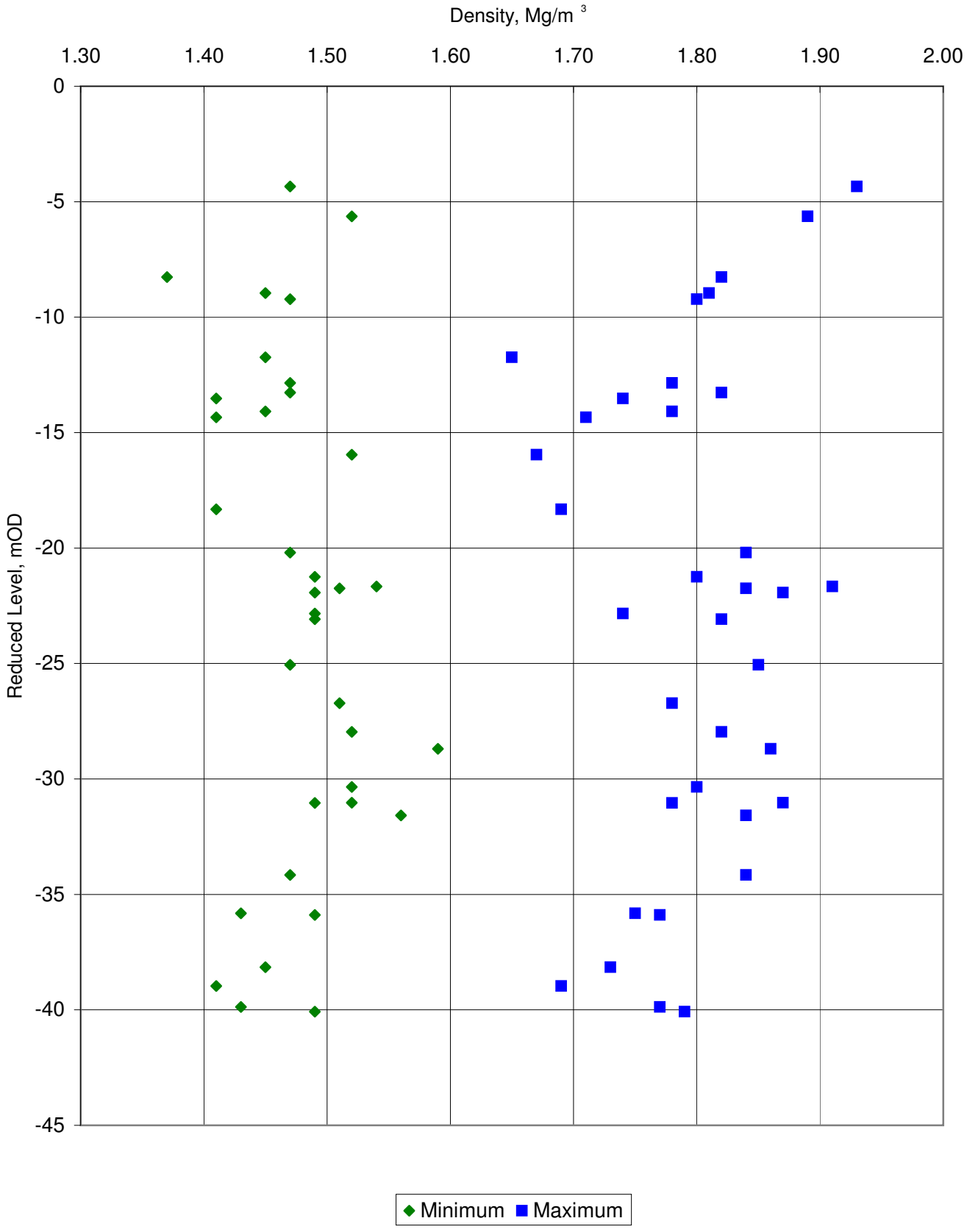
Soil Mechanics



Notes:			
	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	**Figure**
	Project No.	A0012-10	**10**
	Carried out for	NNB Generation Company Limited	

Minimum and Maximum Dry Density - Crag Deposits

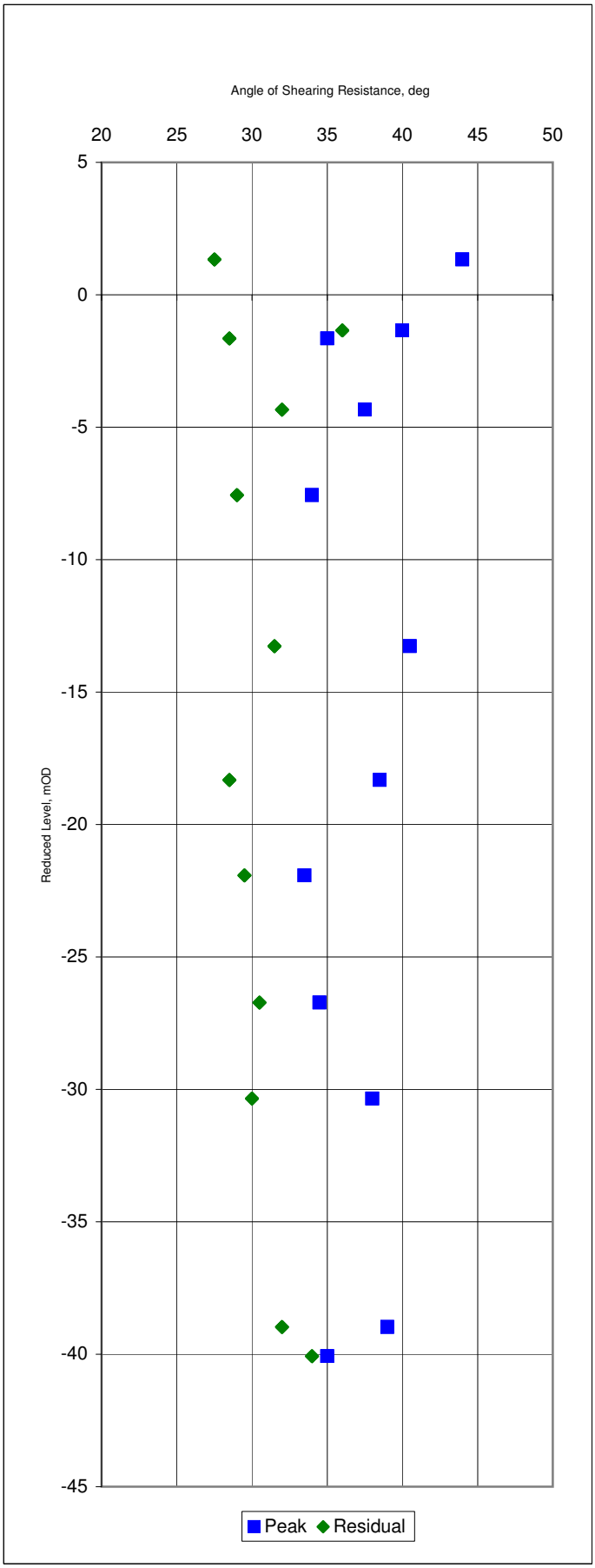
Soil Mechanics

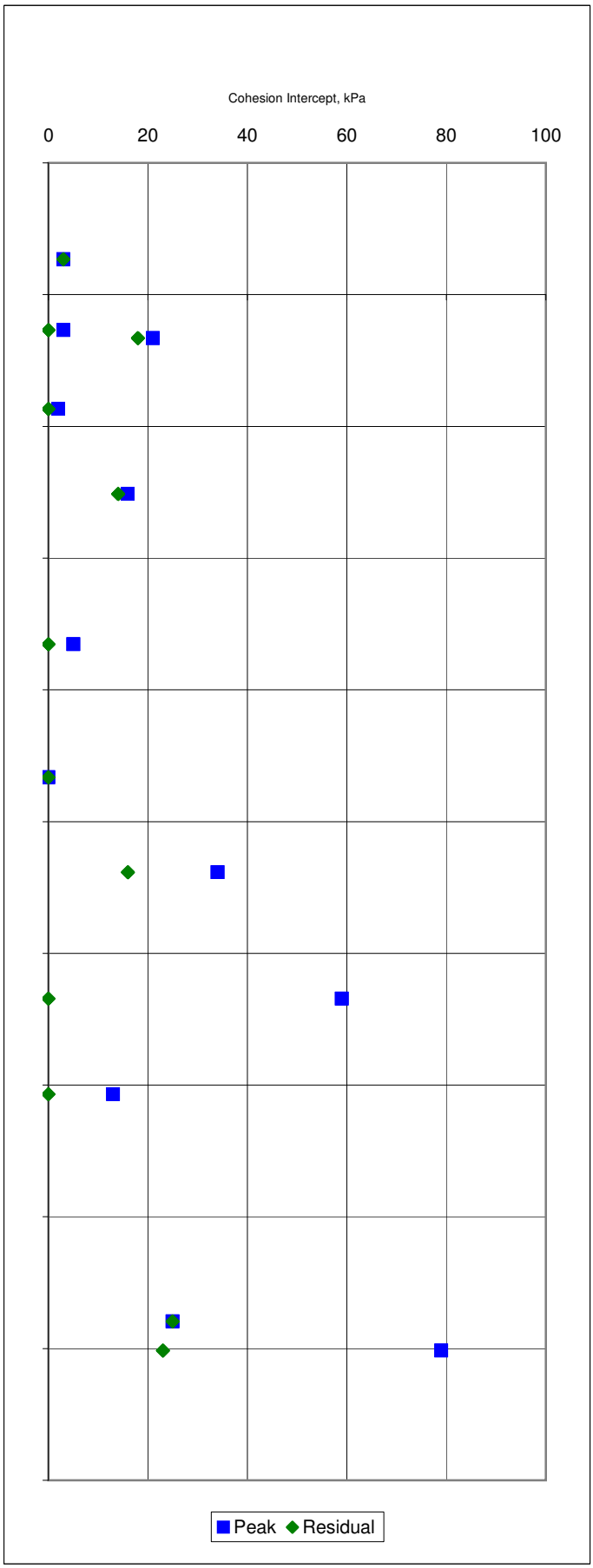


Notes:	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Figure
	Project No.	A0012-10	11
	Carried out for	NNB Generation Company Limited	

Shear Strength (Direct Shear) - Crag Deposits

Soil Mechanics

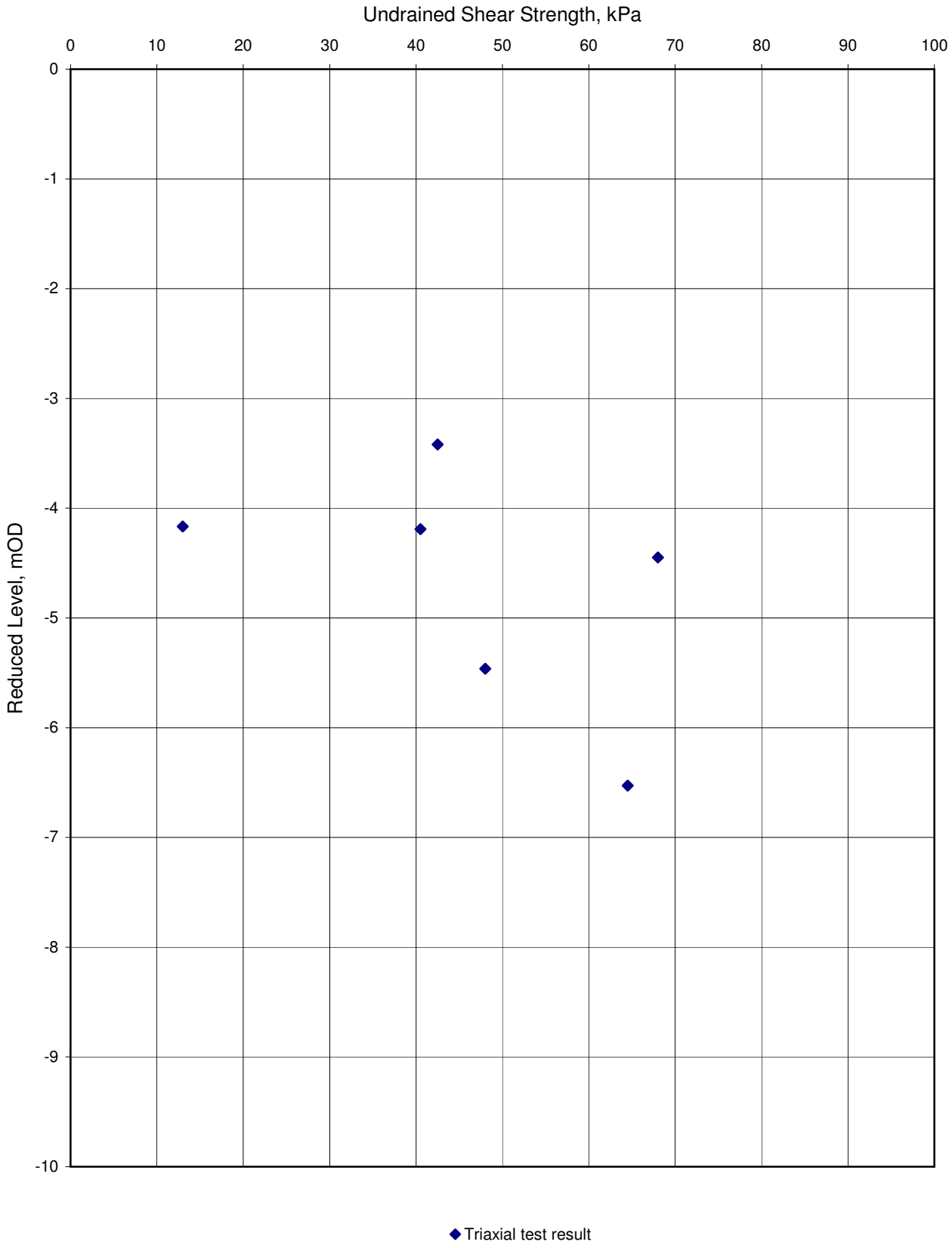




Notes:			
	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	**Figure**
	Project No.	A0012-10	**12**
	Carried out for	NNB Generation Company Limited	

Undrained Shear Strength Profile - Recent Deposits

Soil Mechanics

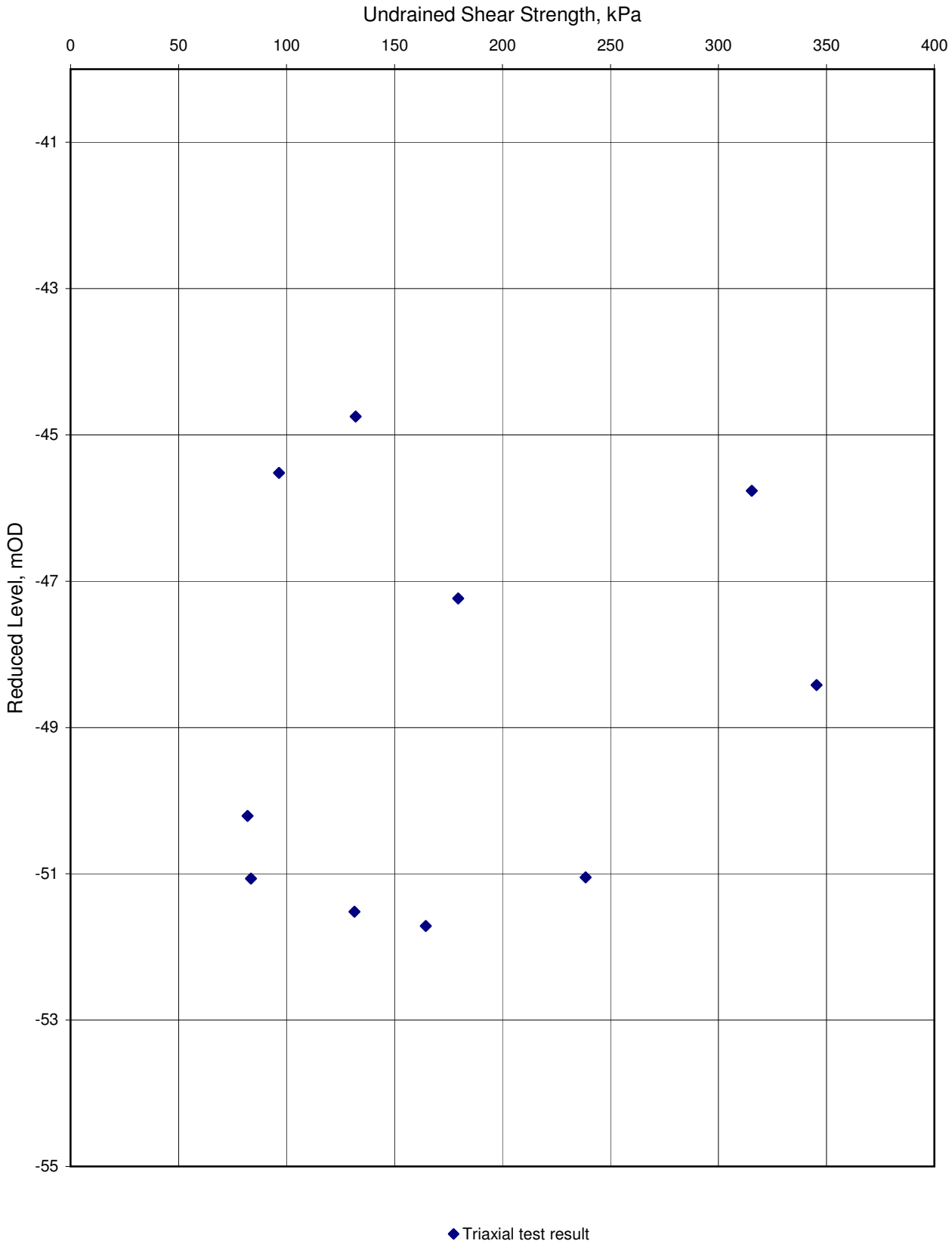


Prepared: 18/05/2011 11:41

Notes:			Figure
	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	
	Project No.	A0012-10	13.1
	Carried out for	NNB Generation Company Limited	

Undrained Shear Strength Profile - London Clay

Soil Mechanics

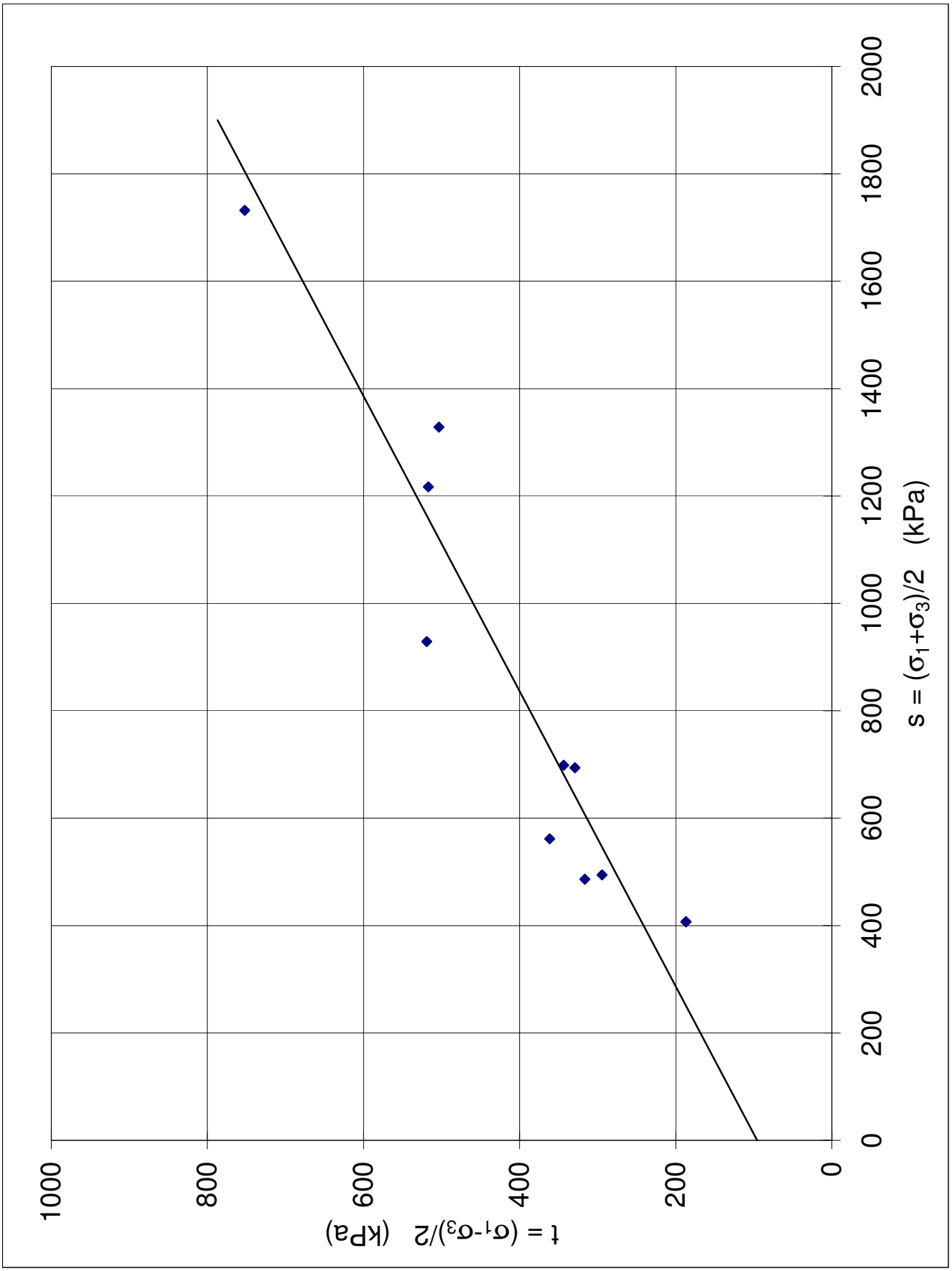


Prepared: 18/05/2011 11:41

Notes:	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Figure
	Project No.	A0012-10	13.2
	Carried out for	NNB Generation Company Limited	

Summary of Effective Stress Tests - London Clay

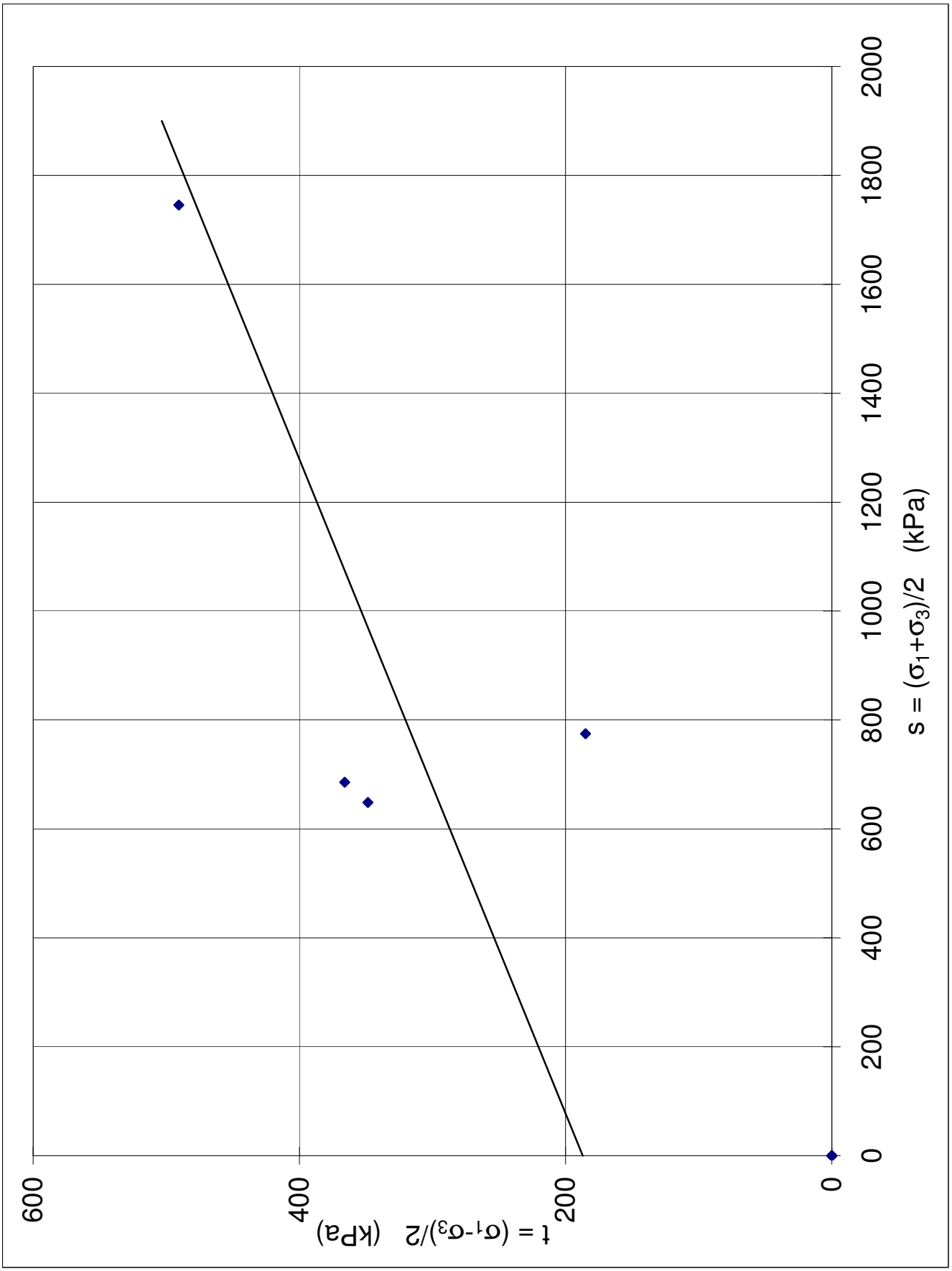
Soil Mechanics



Notes:	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Figure
	Project No.	A0012-10	14.1
	Carried out for	NNB Generation Company Limited	

Summary of Effective Stress Tests - Lower London Tertiaries

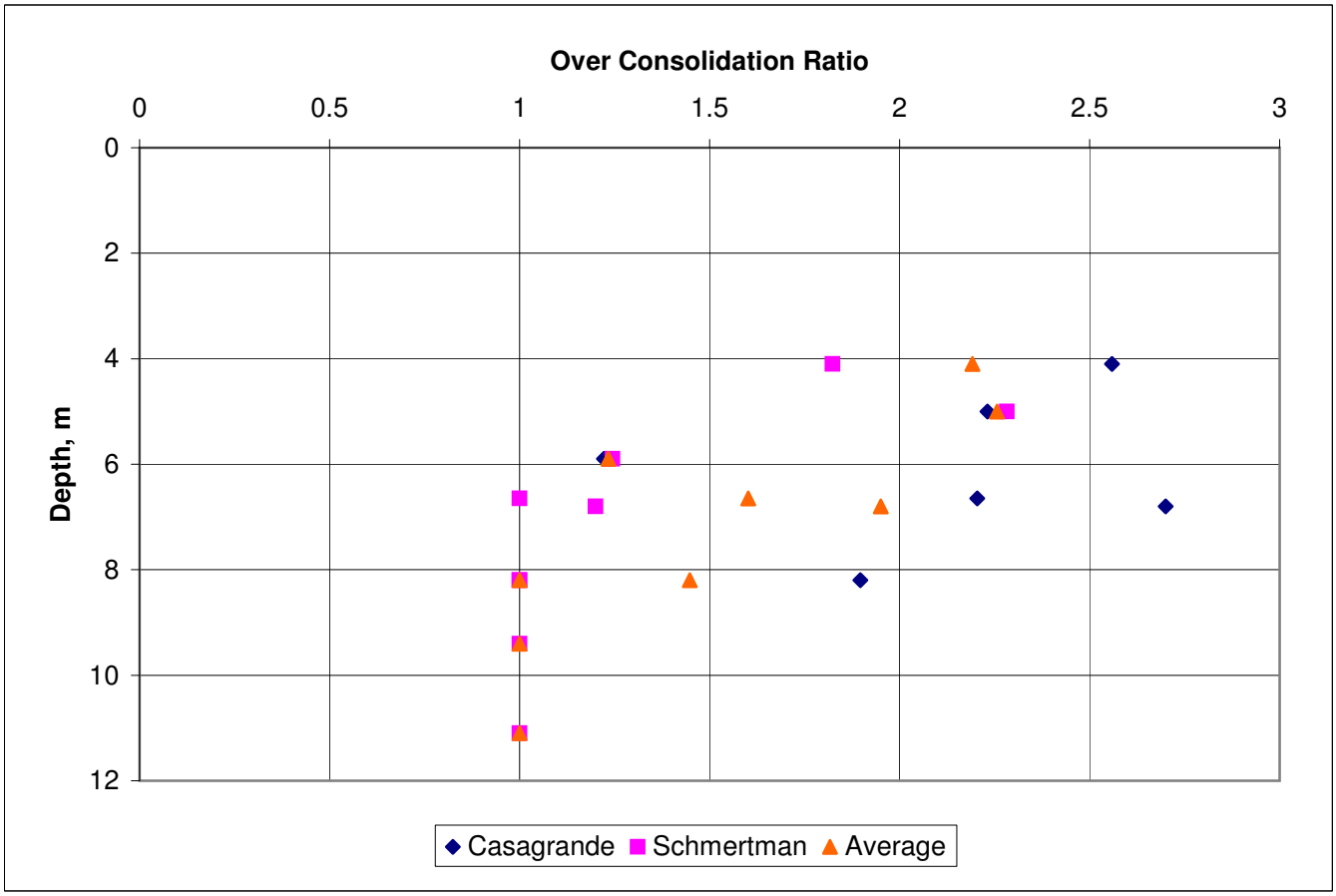
Soil Mechanics

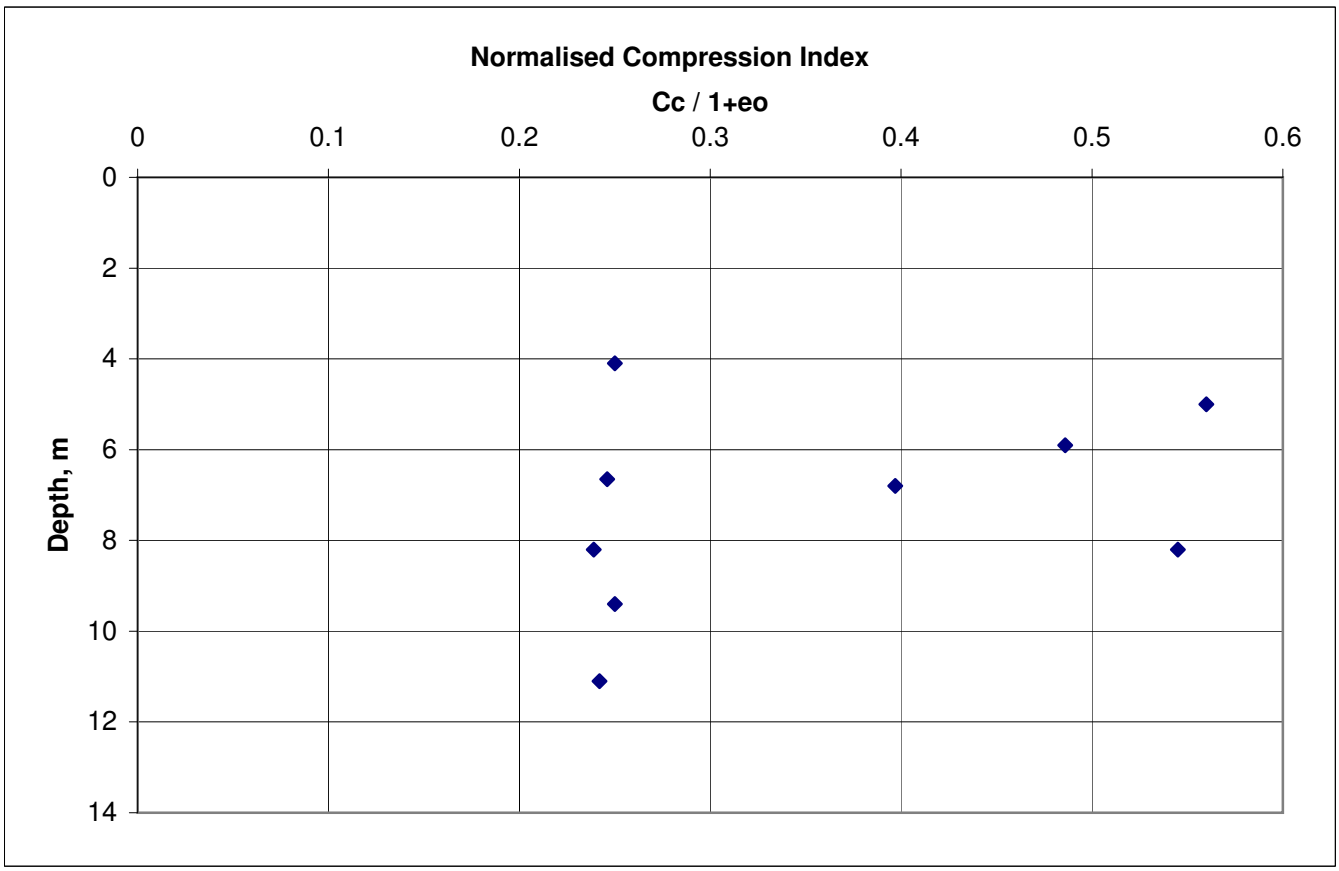


Notes:	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Figure
	Project No.	A0012-10	14.2
	Carried out for	NNB Generation Company Limited	

Oedometer Interpretation - Recent Deposits

Soil Mechanics

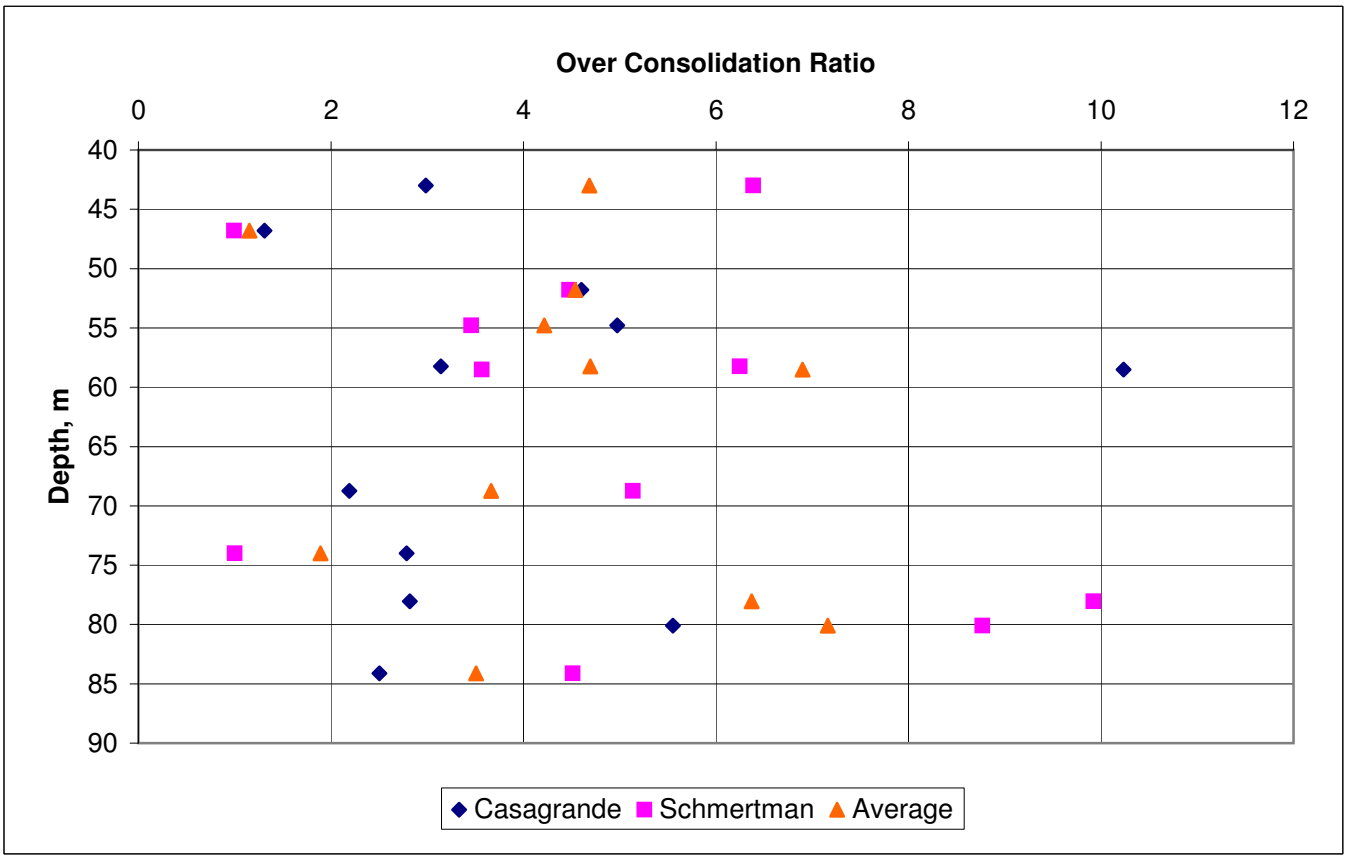


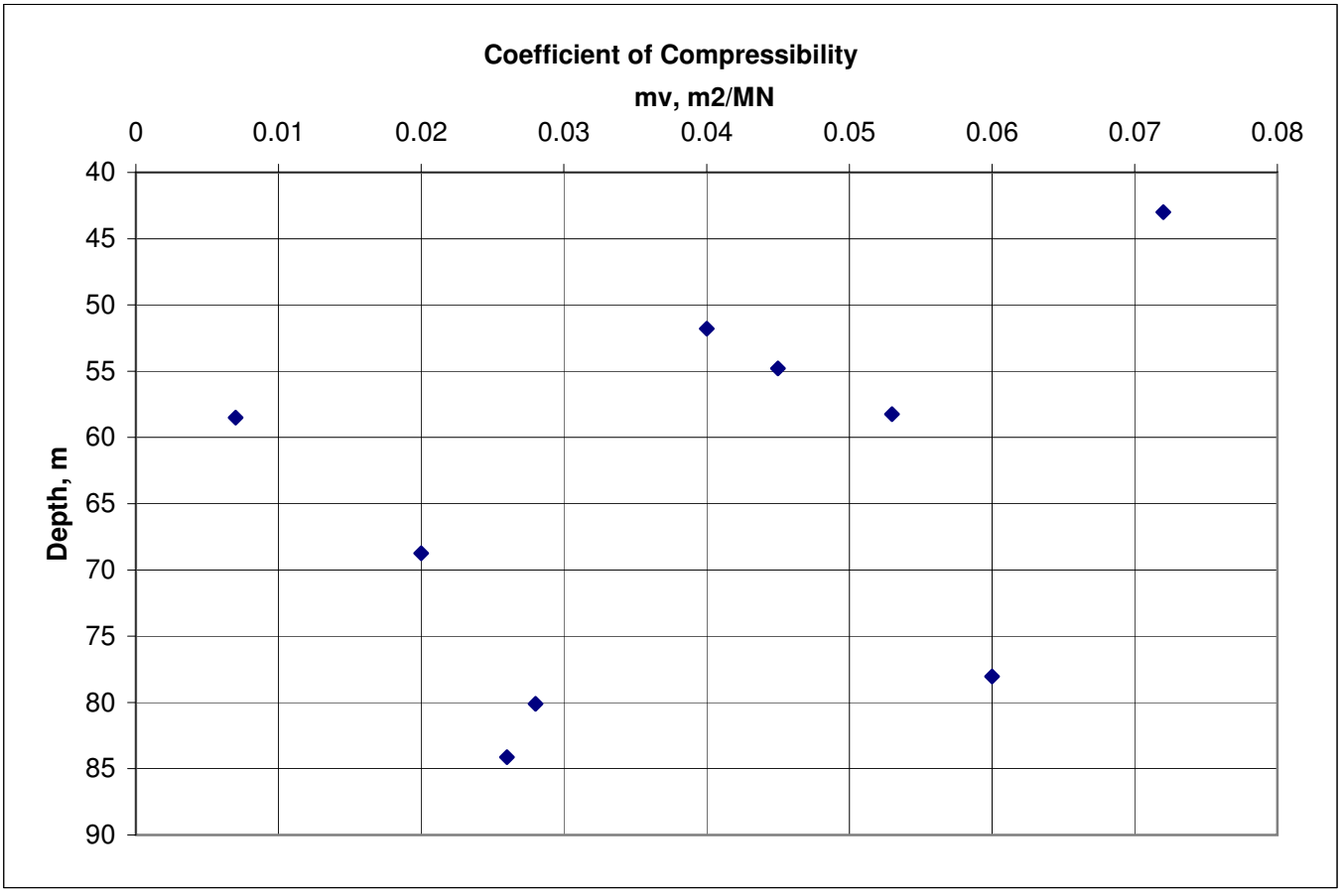


Notes:	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Figure
	Project No.	A0012-10	15
	Carried out for	NNB Generation Company Limited	

Oedometer Interpretation - London Clay and Lower London Tertiaries

Soil Mechanics

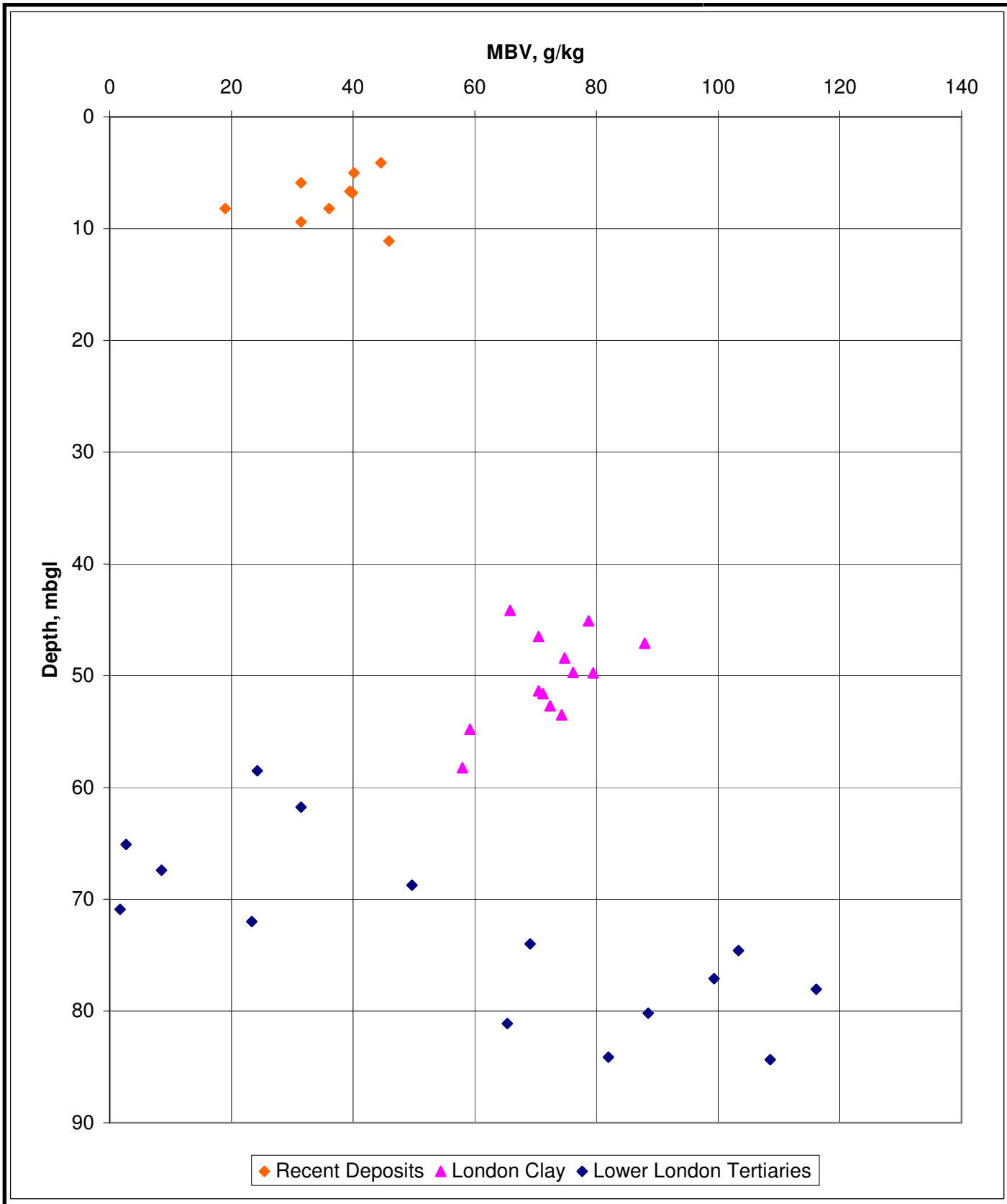




Notes:			
	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	**Figure**
	Project No.	A0012-10	**16**
	Carried out for	NNB Generation Company Limited	

Methylene Blue Value

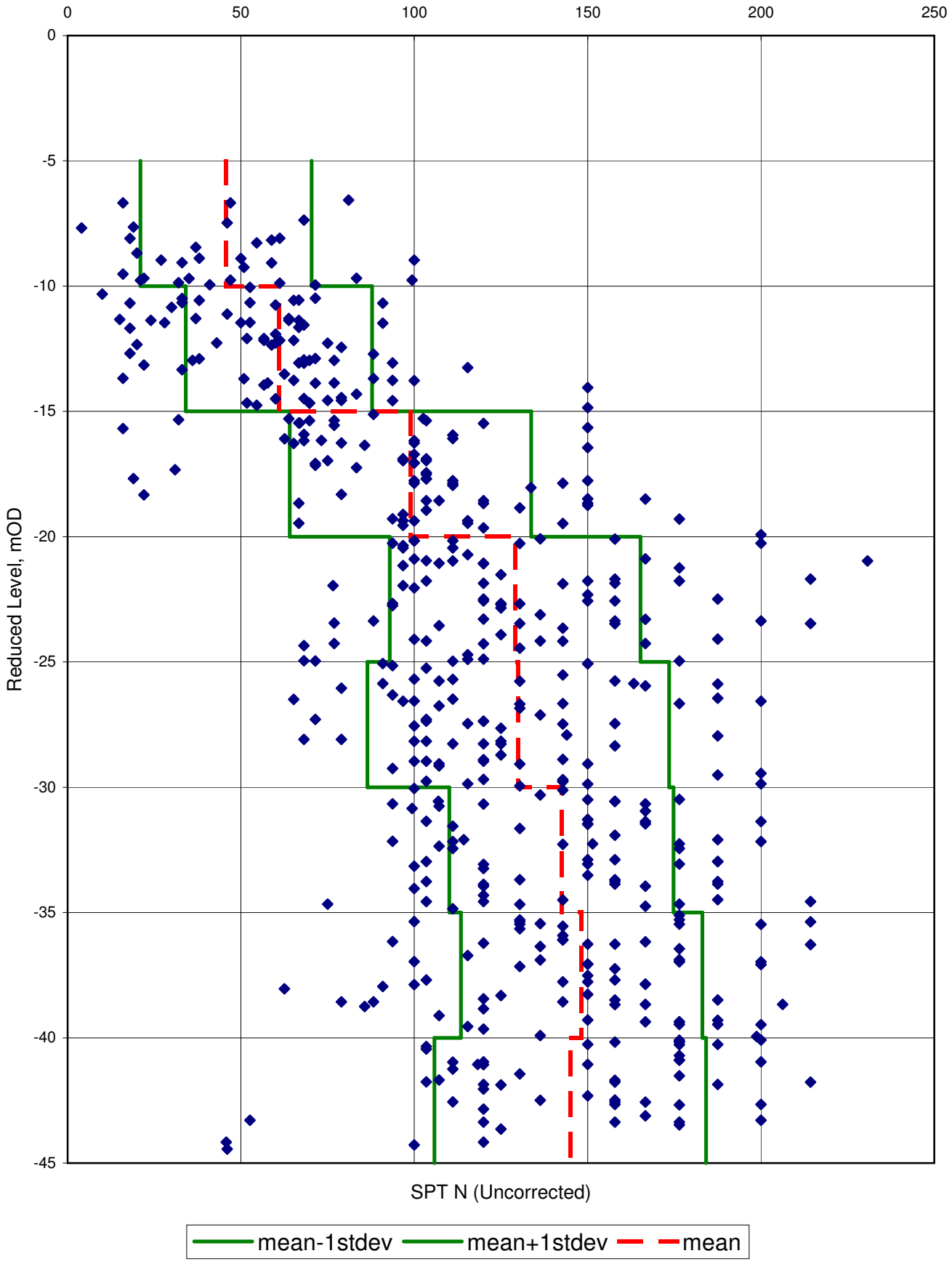
Soil Mechanics



Notes:	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Figure
	Project No.	A0012-10	17
	Carried out for	NNB Generation Compnay Limited	

SPT N Depth Profile - Crag Deposits

Soil Mechanics

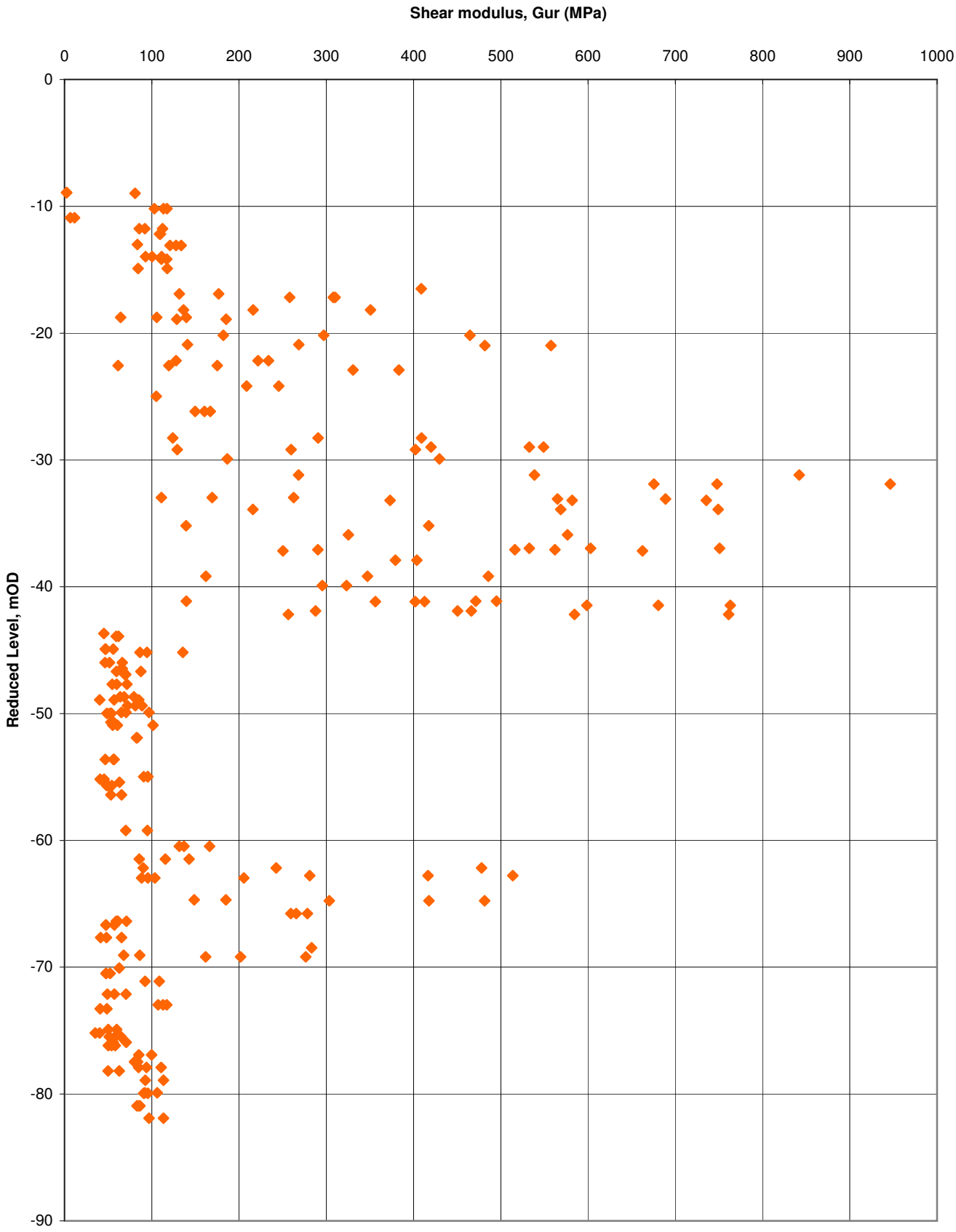


Prepared: 23/12/2010 14:35

Notes:	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Figure
	Project No.	A0012-10	18
	Carried out for	NNB Generation Company Limited	

Shear Modulus (SBP) - All Strata

Soil Mechanics



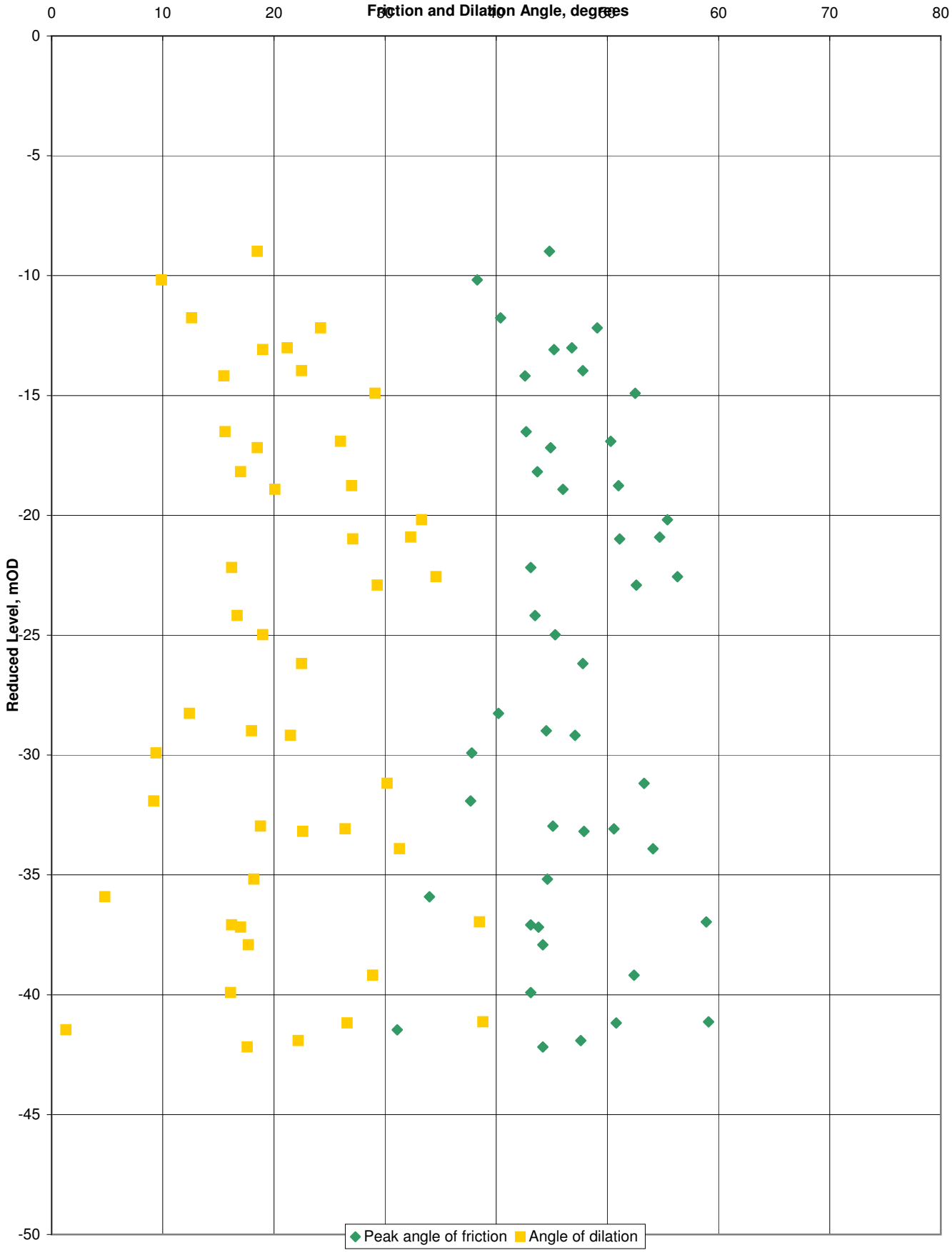
Notes: Gur for all loops shown

Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE
Project No.	A0012-10
Carried out for	NNB Generation Company Limited

Figure
19

Drained Strength Parameters (SBP) - Crag Deposits

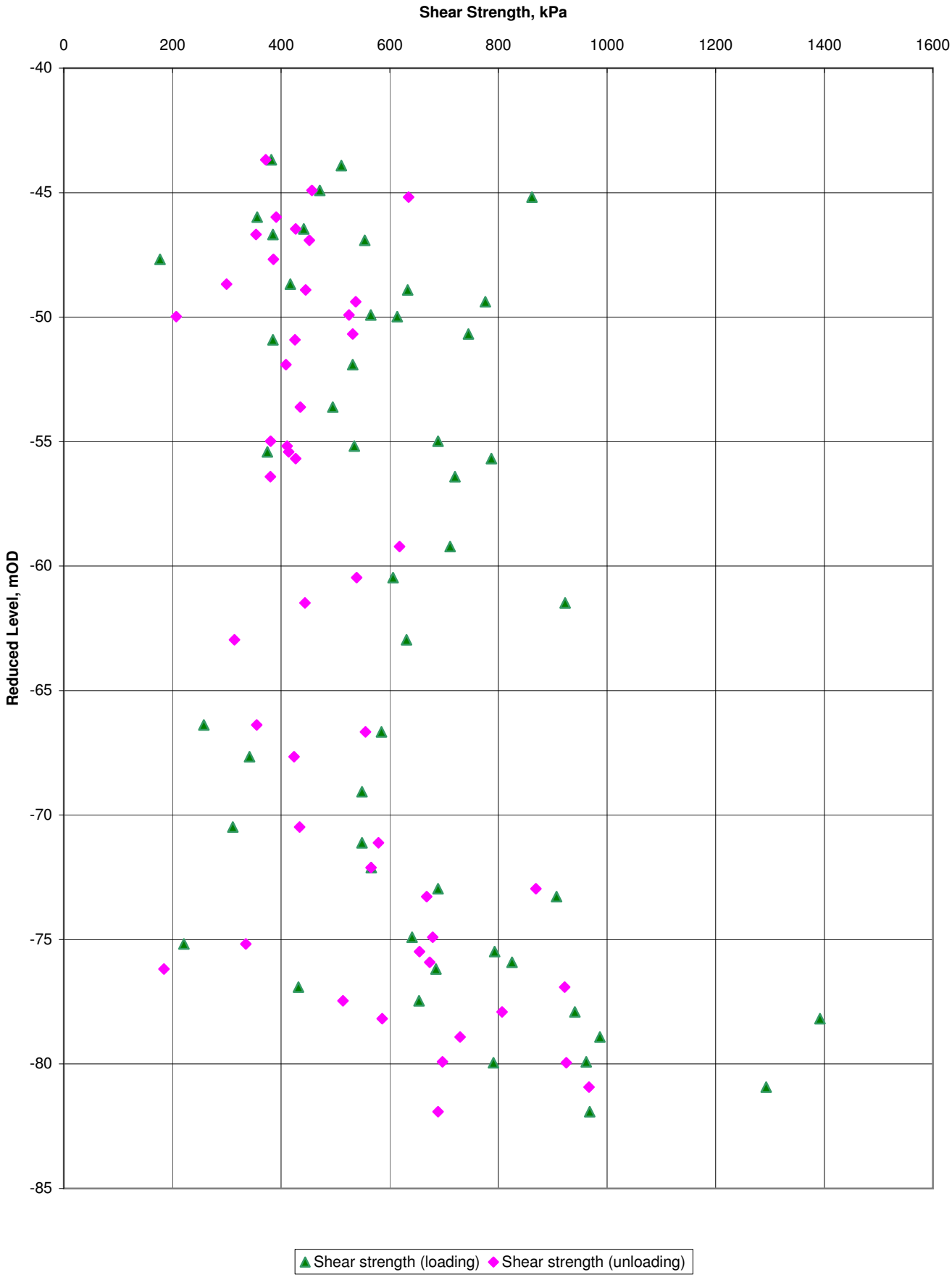
Soil Mechanics



Notes:	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Figure
	Project No.	A0012-10	20
	Carried out for	NNB Generation Company Limited	

Undrained Shear Strength (SBP) - London Clay and Lower London Tertiaries

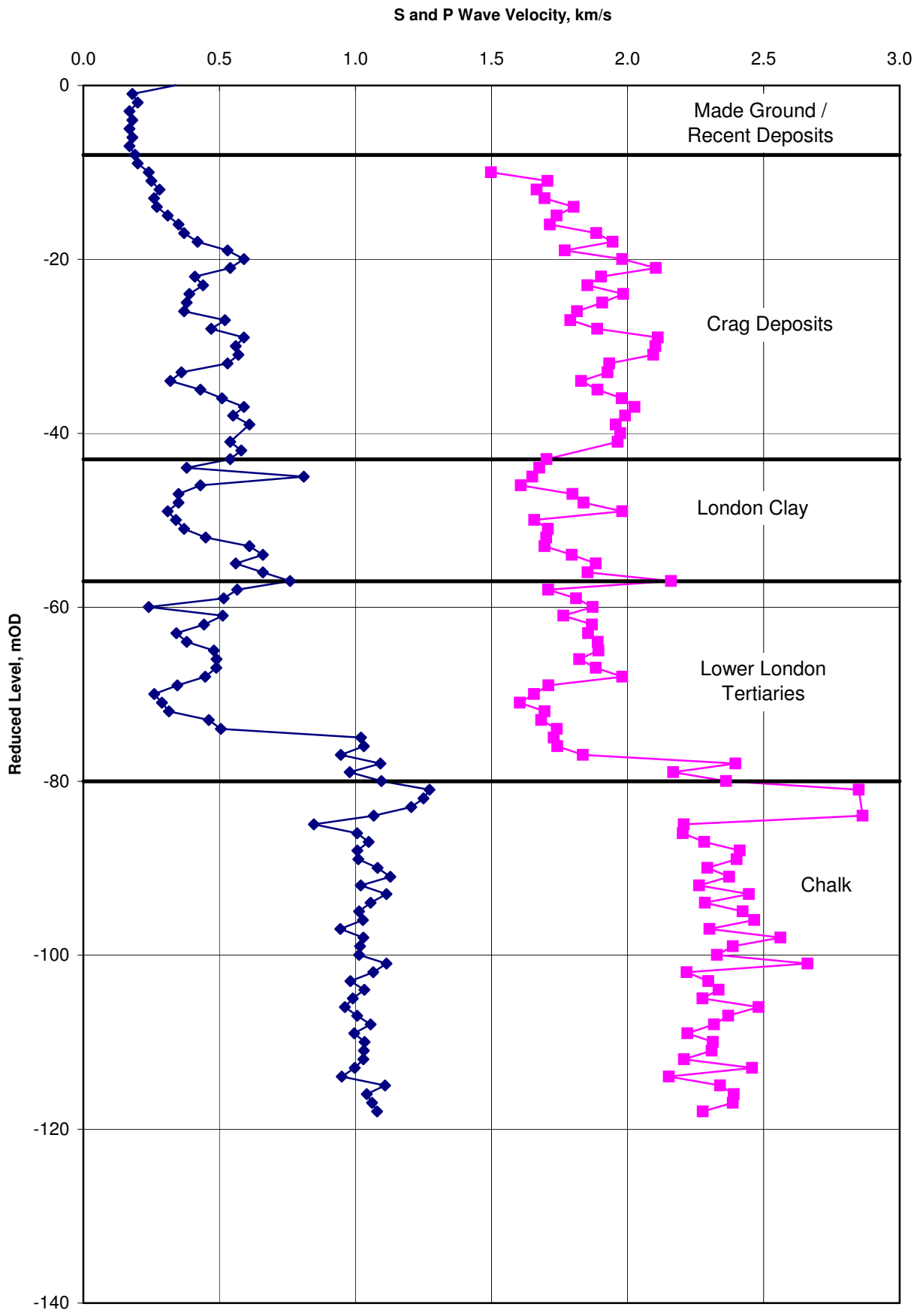
Soil Mechanics



Notes:	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Figure
	Project No.	A0012-10	21
	Carried out for	NNB Generation Company Limited	

Crosshole Seismic Test Results - All Strata

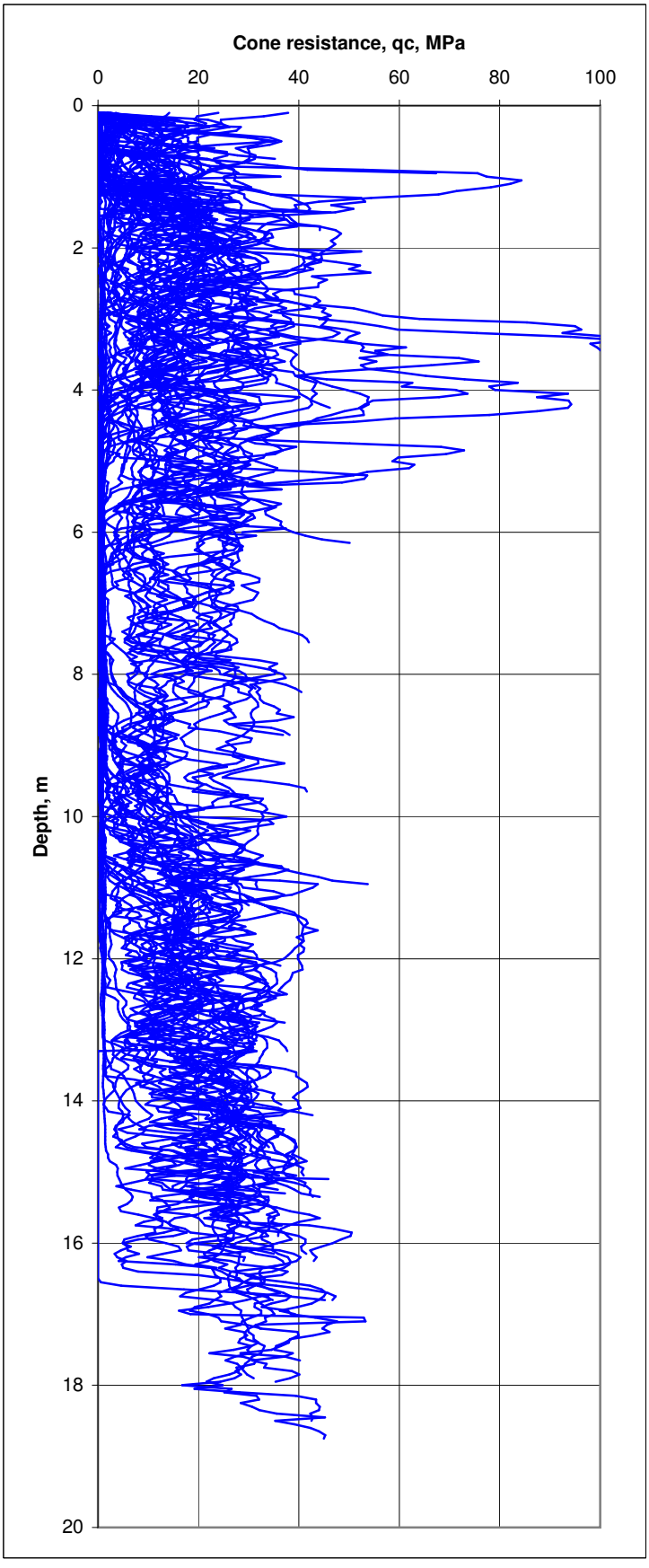
Soil Mechanics

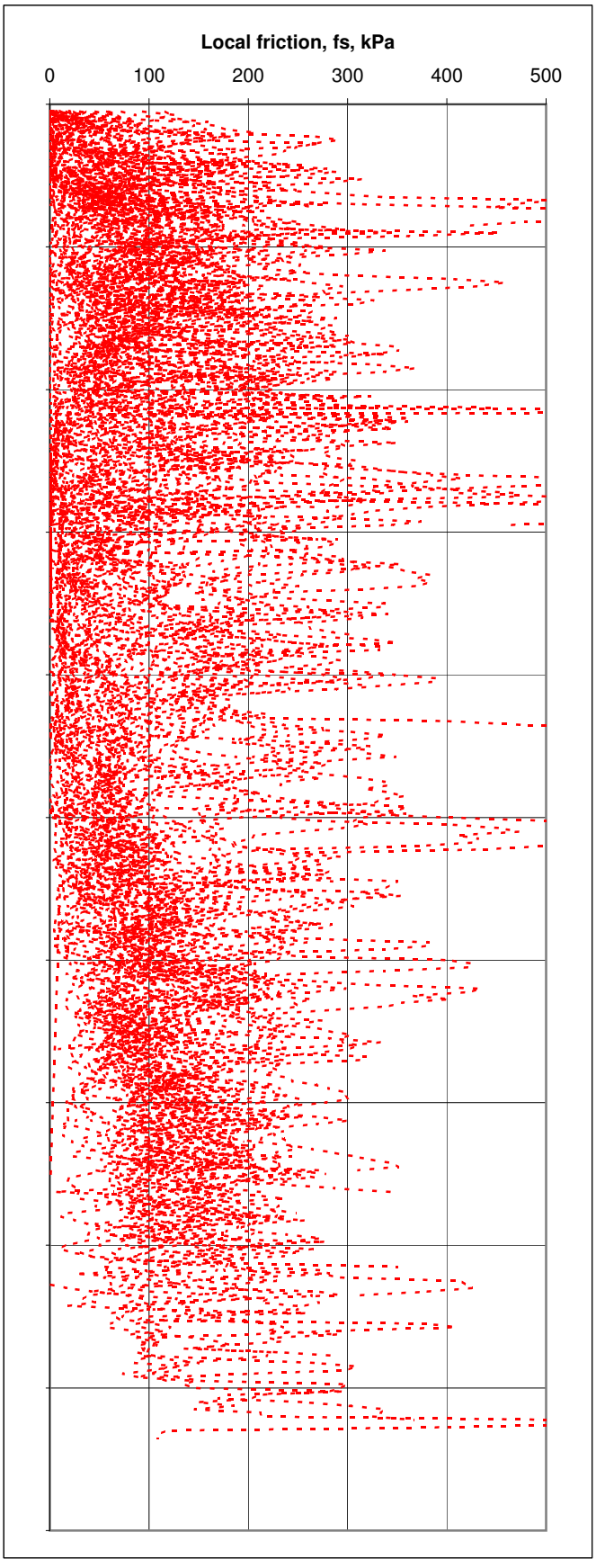


Notes:	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Figure
	Project No.	A0012-10	22
	Carried out for	NNB Generation Company Limited	

CPT Data Summary

Soil Mechanics

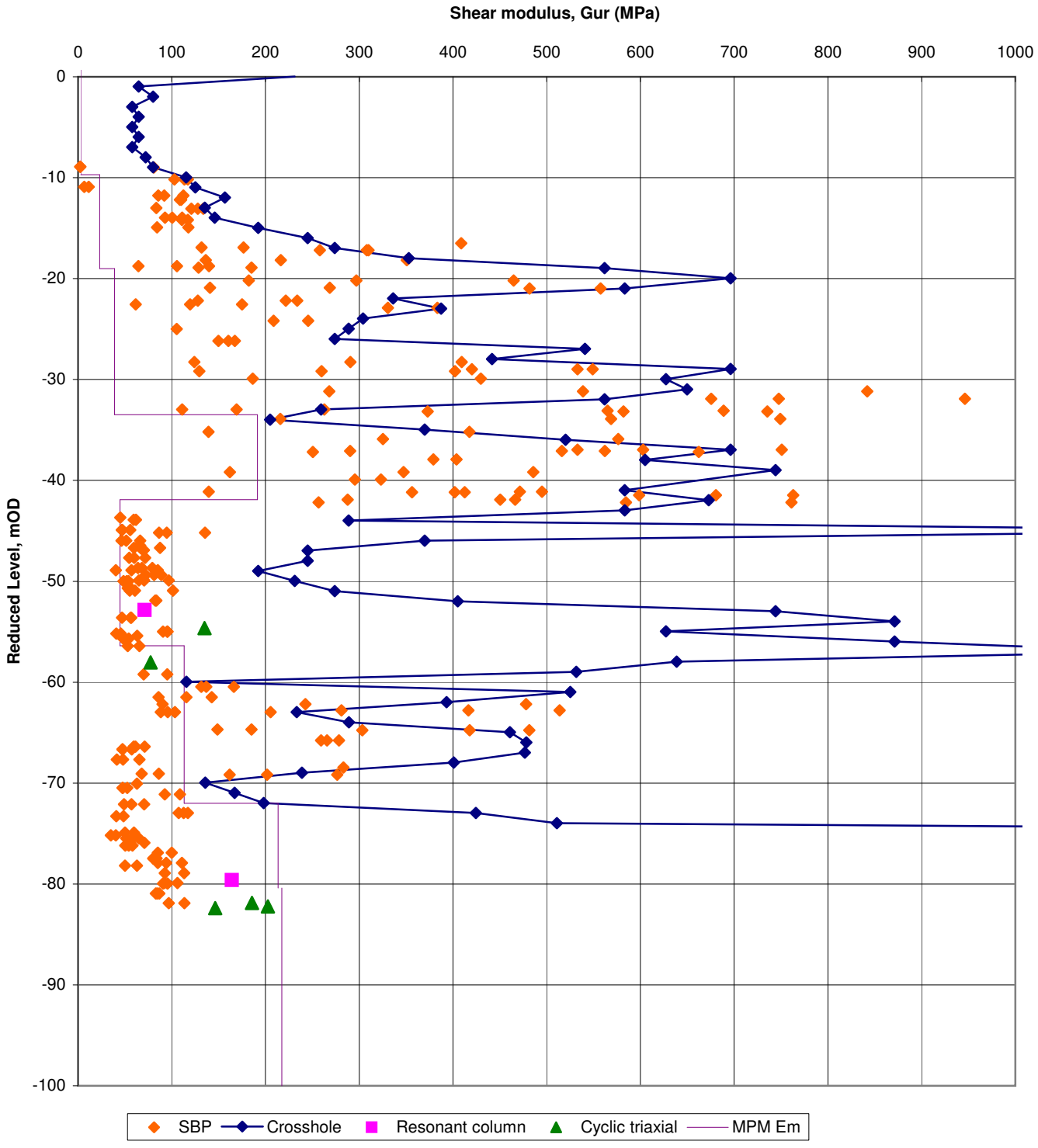




Notes:			
	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	**Figure**
	Project No.	A0012-10	**23**
	Carried out for	NNB Generation Company Limited	

Shear Modulus Summary

Soil Mechanics



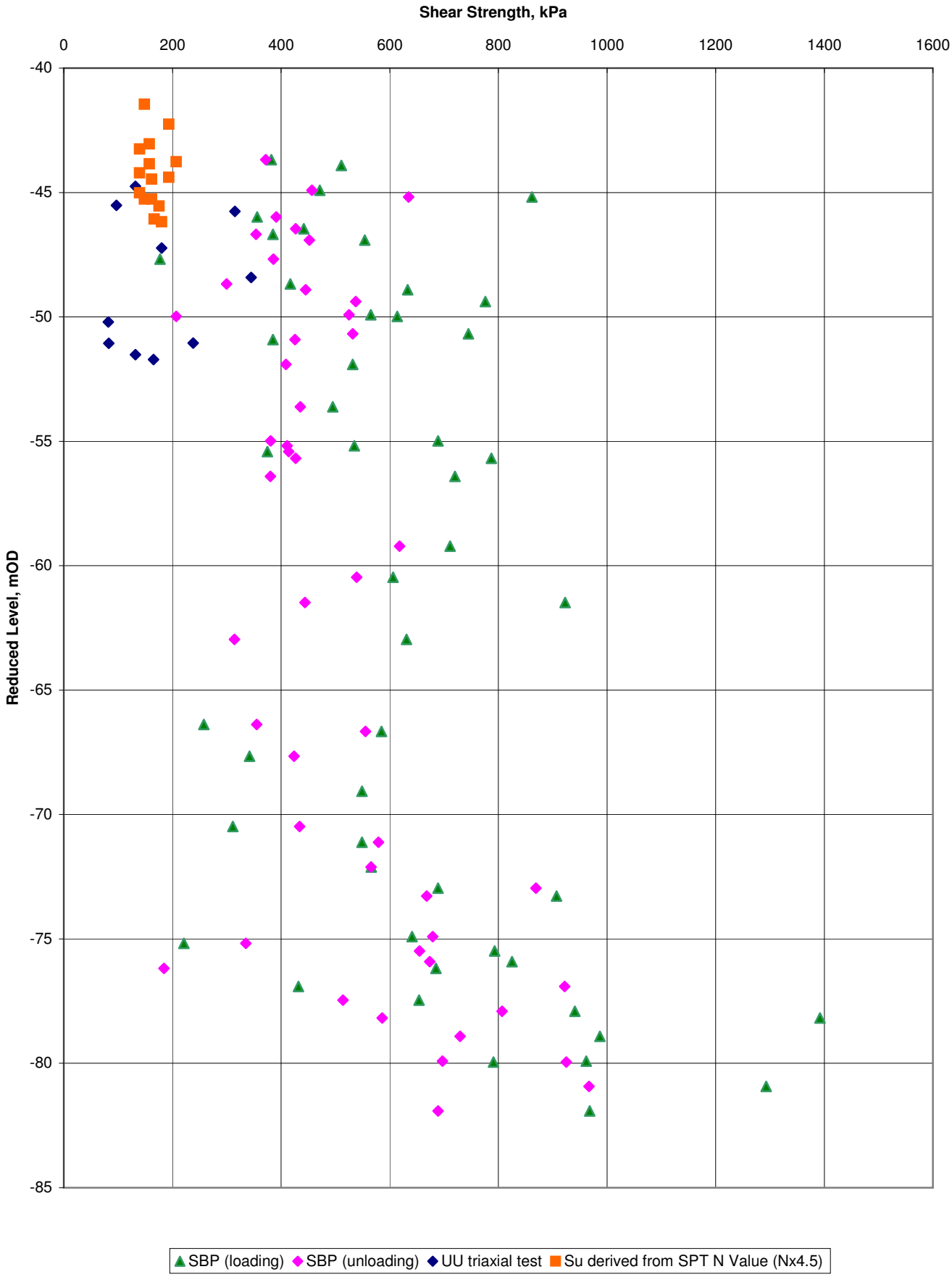
Notes:

1 SBP values from all unload-reload loops per test
2 Crosshole values from shear wave velocity profile and constant soil bulk density of 2 Mg/m3
3 Laboratory test values derived from measured Young's modulus E = 2 G (1+ν) and assuming ν = 0.5
4 MPM Em profile derived from statistical interpretation carried out by Fondasol on pressuremeter modulus values for all tests. Values are not shear modulus and are shown for comparative purposes only.

Notes: Gur for all loops shown	**Project**	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	**Figure**
	Project No.	A0012-10	**24**
	Carried out for	NNB Generation Company Limited	

Undrained Shear Strength Sumary - London Clay and Lower London Tertiaries

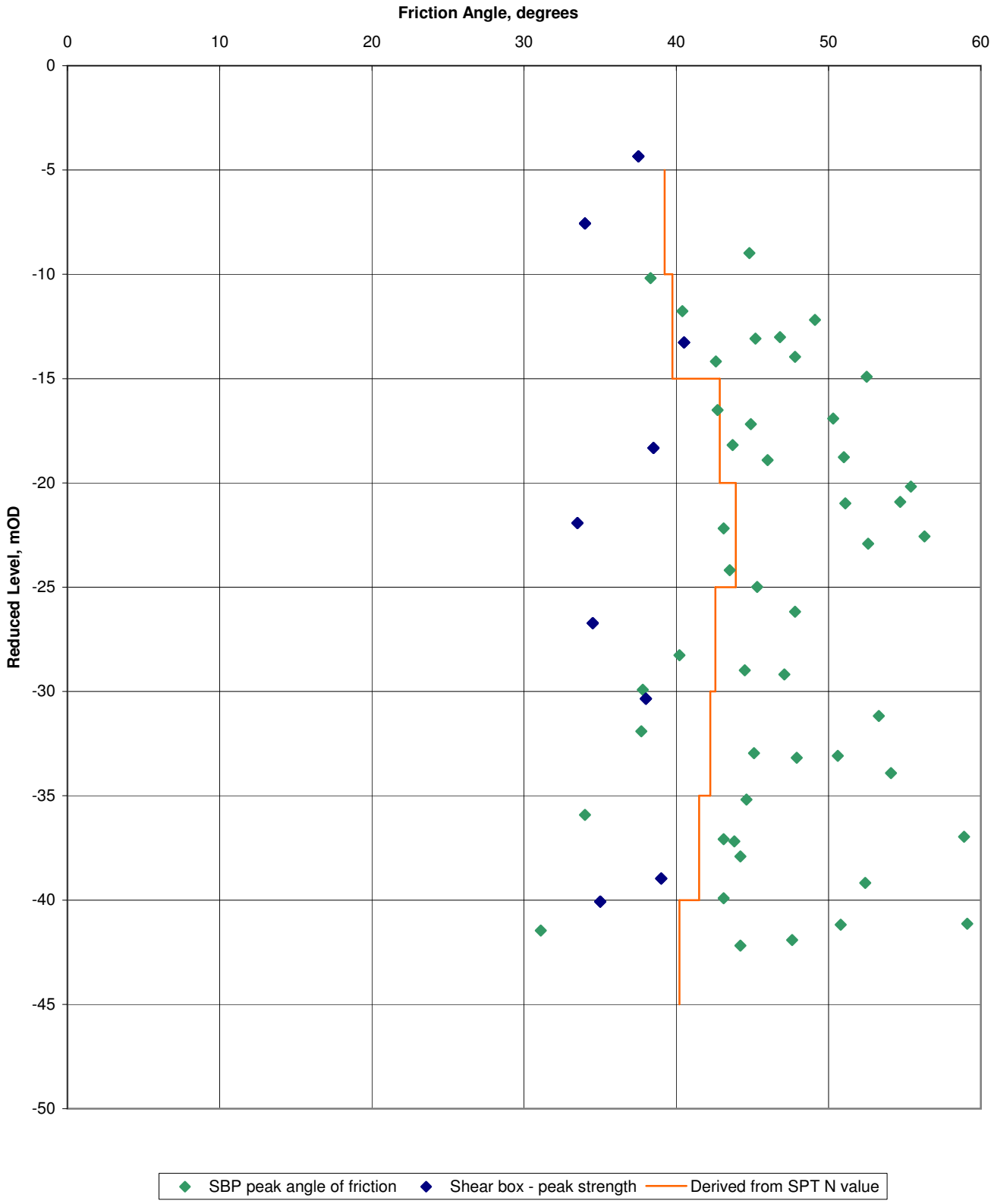
Soil Mechanics



Notes:	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Figure
	Project No.	A0012-10	25
	Carried out for	NNB Generation Company Limited	

Drained Shear Strength Summary - Crag Deposits

Soil Mechanics



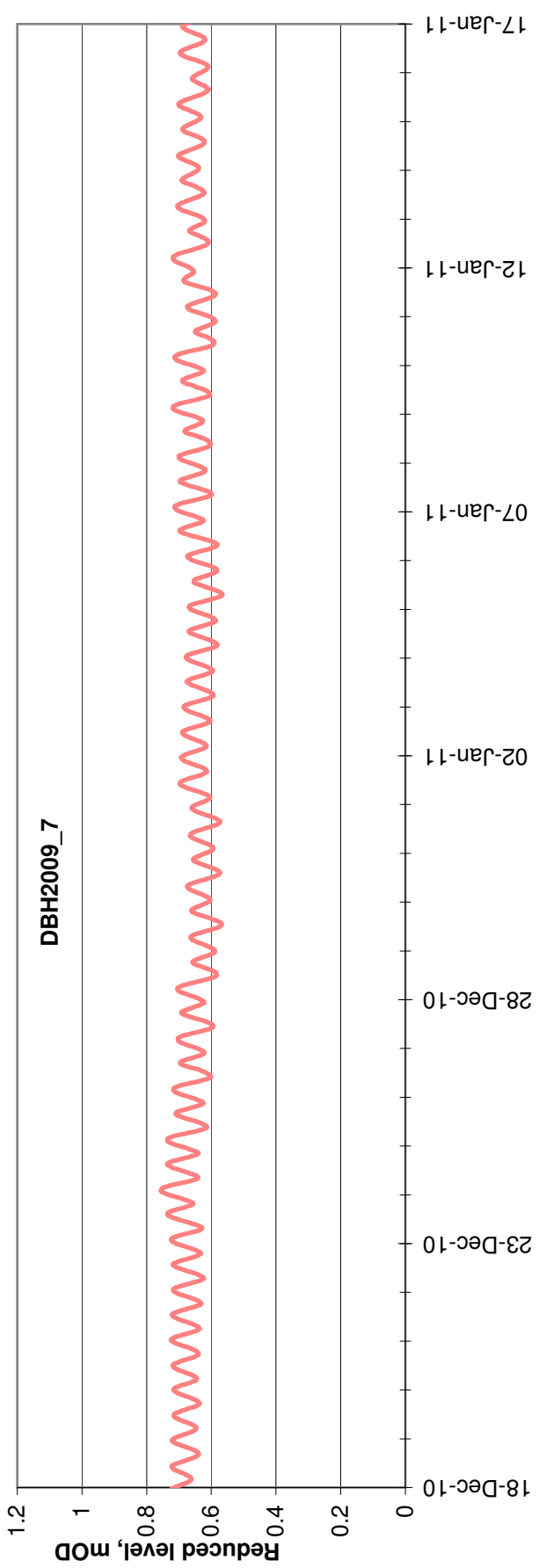
Notes:

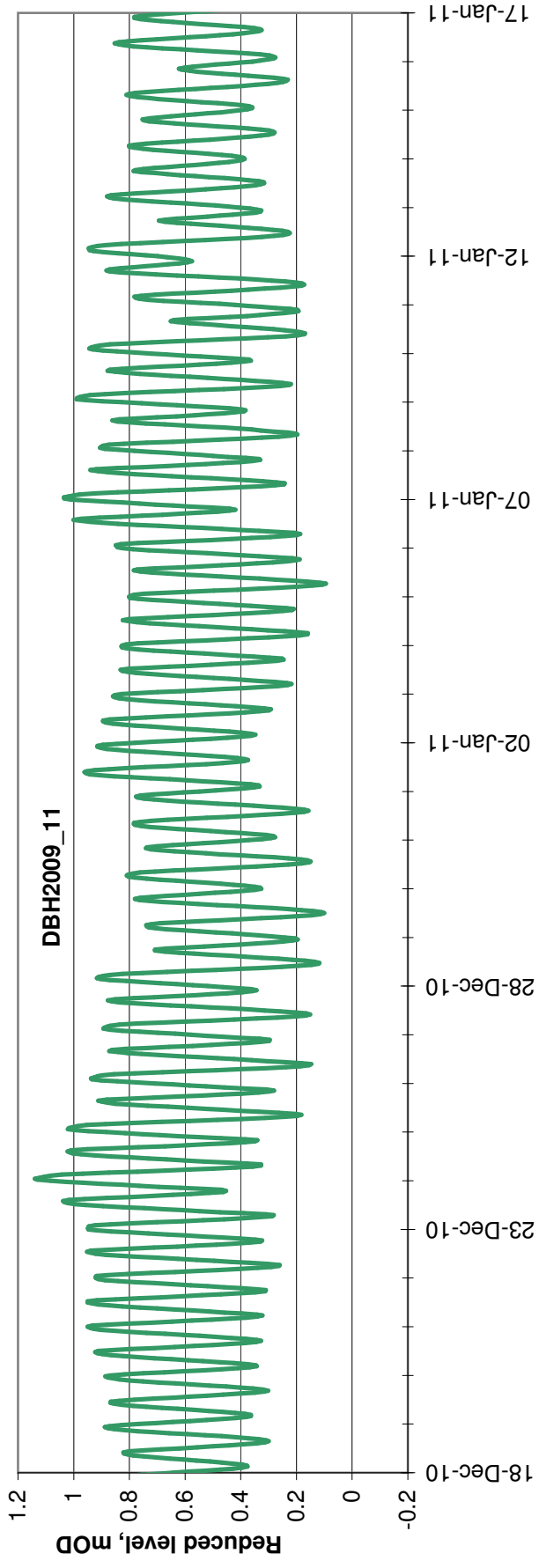
SPT N values corrected for overburden pressure using BS EN ISO 22476-3:2005 A.4 (overconsolidated)
SPT N value - ϕ relationship based on Peck, Hanson and Thorburn:1953 assuming OCR=3

Notes:	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Figure
	Project No.	A0012-10	26
	Carried out for	NNB Generation Company Limited	

Groundwater Elevation Variation Examples

Soil Mechanics

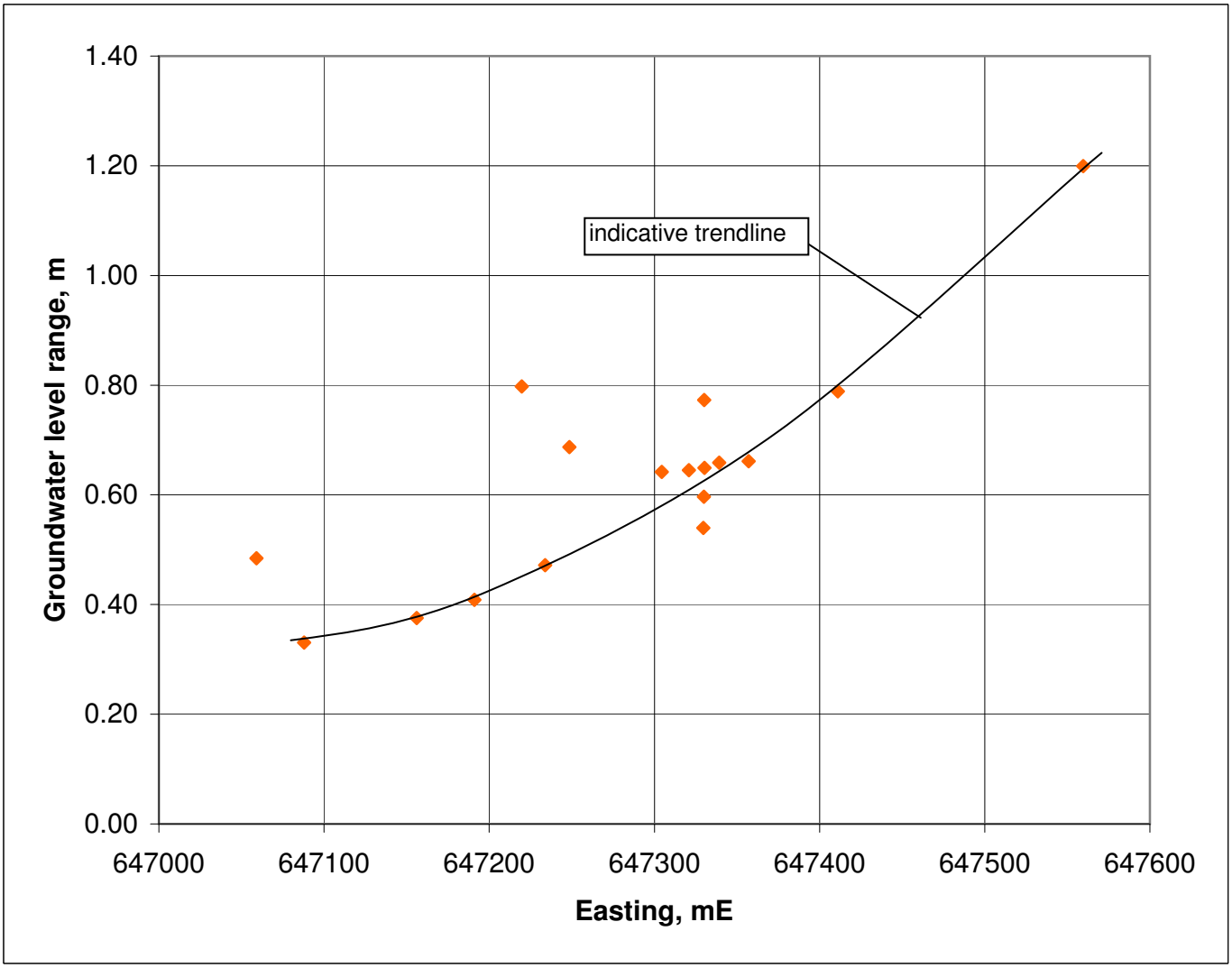




Notes:	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Figure
	Project No.	A0012-10	27
	Carried out for	NNB Generation Compnay Limited	

Groundwater Level Tidal Response

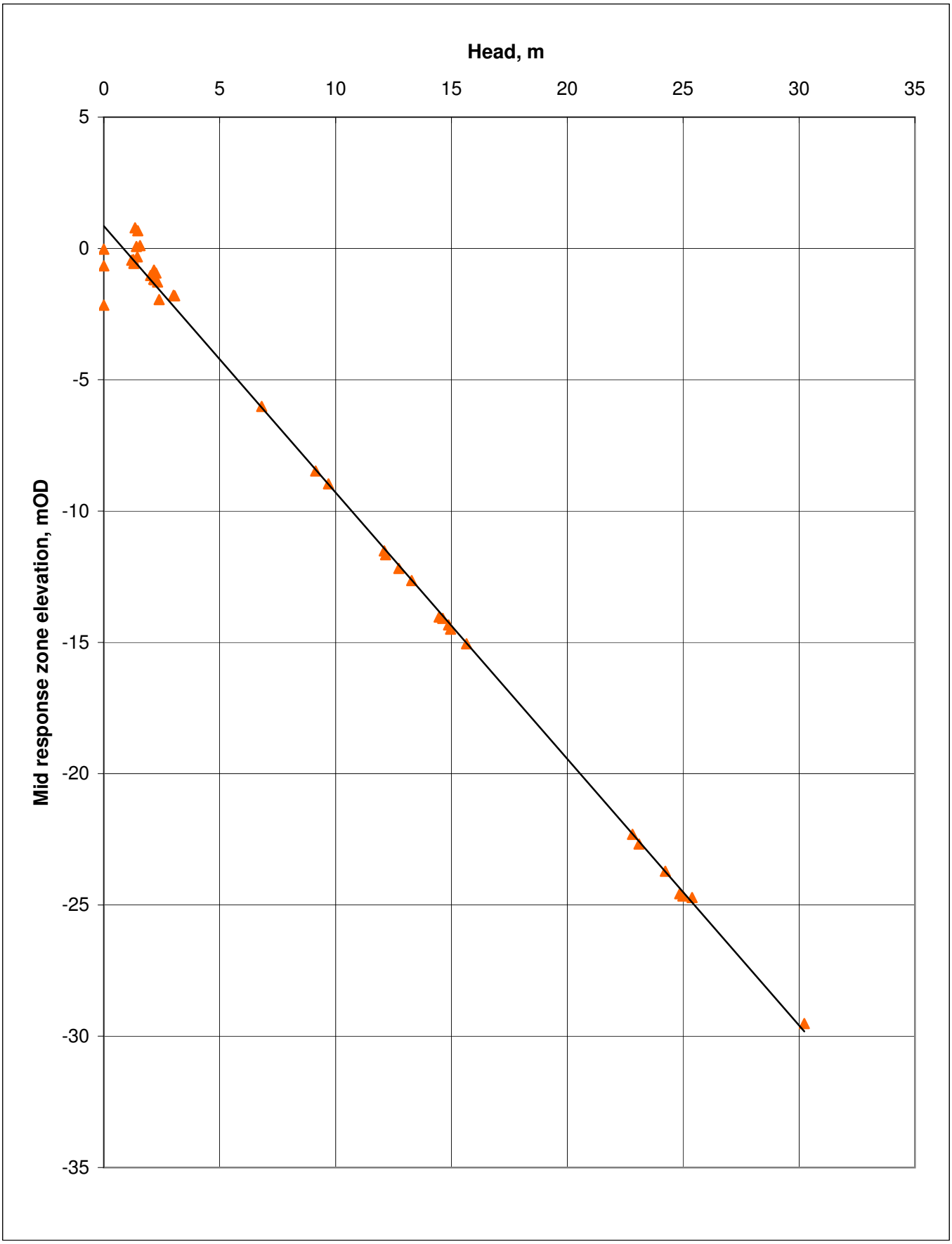
Soil Mechanics



Notes:	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	Figure
	Project No.	A0012-10	28
	Carried out for	NNB Generation Company Limited	

Piezometric Profile - Crag Deposits

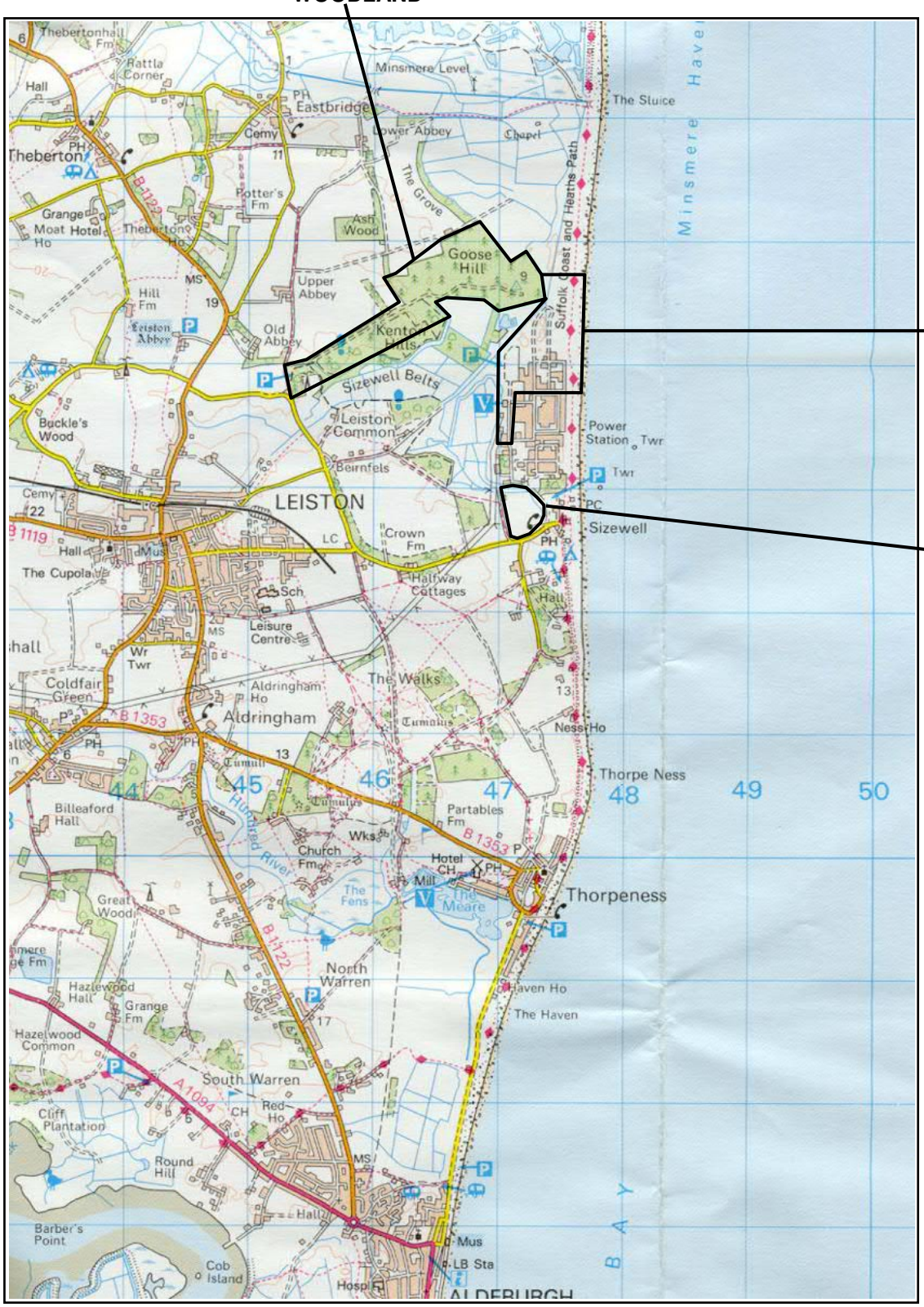
Soil Mechanics



Notes:			
	Project	ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE	**Figure**
	Project No.	A0012-10	**29**
	Carried out for	NNB Generation Company Limited	

Site Location Plan

Soil Mechanics



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Notes: Scale 1:50 000	**Project** ONSHORE INVESTIGATIONS PHASE 1 FOR SIZEWELL SITE **Project No.** A0012-10 **Carried out for** NNB Generation Company Limited	**Figure** **30**

ANNEXE

Pumping Test Interpretive Report WJ Groundwater Limited Report No. 424/1638. Dated 7 April 2011

Onshore Investigations Phase 1 for Sizewell Site

PUMPING TEST INTERPRETIVE REPORT

Client: Soil Mechanics

WJ GROUNDWATER LIMITED

Onshore Investigations Phase 1 for Sizewell Site

PUMPING TEST INTERPRETIVE REPORT

Client: Soil Mechanics

Report No.	Revision No.	Date of Issue:	Issued to:	Prepared by:	Checked by:
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f +44 (0)20 8950 7959

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w www.wjgl.com

Contents

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1 Introduction

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2 Methods of Analysis of Distance-Drawdown-Time Data

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2.1 Step Test

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2.2 Constant Rate Test (Initial Drawdown)

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2.3 Constant Rate Test (Steady State)

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2.4 Constant Rate Test (Recovery)

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3 Observations

3.1 Transmissivity and Hydraulic Conductivity

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3.2 Storage Coefficient

[illegible]

3.3 Radius of Influence

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3.4 Groundwater Levels and Drawdown

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3.5 Electrical Conductivity and Temperature

[illegible]

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4 Concluding Remarks

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WJ GROUNDWATER LIMITED

References

[illegible] *Onshore Investigations Phase 1 for Sizewell Site. Pumping Test Factual Report No. 423/1638.* [illegible]

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Tables

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Table 1: Transmissivity Values from Step Test Analysis

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Table 2: Results of Storage Coefficient and Transmissivity from Constant Discharge Test Analysis

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Table 3: Hydraulic Conductivity Values from Step Test Analysis

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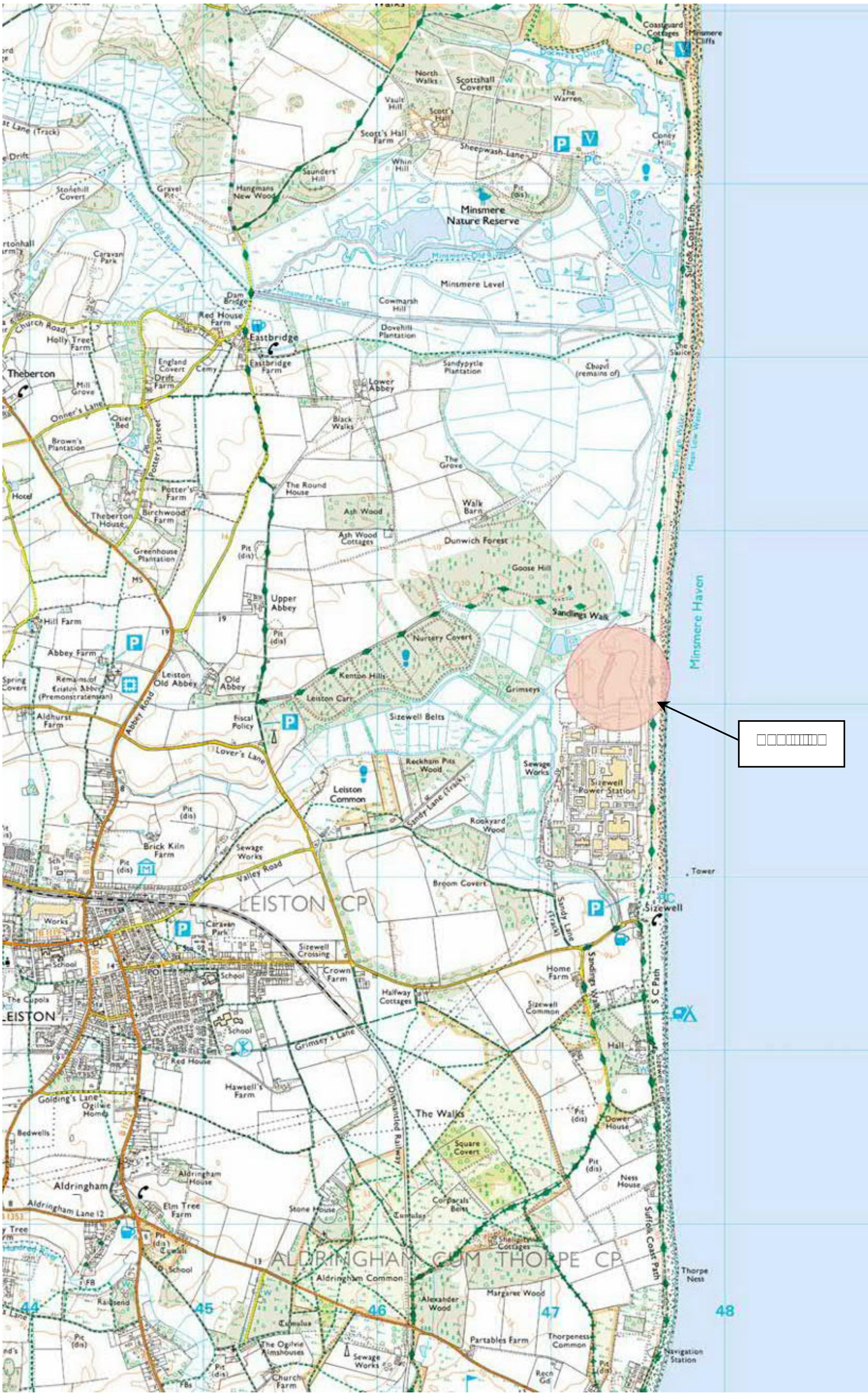
Table 4: Results of Hydraulic Conductivity from Constant Discharge Test Analysis

Figures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Minsmere Level
Minsmere Haven
Eastbridge
Theberton
Dunwich Forest
Sandlings Walk
Kenton Hills
Sizewell Belts
Sizewell Power Station
Sizewell
Leiston Common
LEISTON CP
LEISTON
Aldringham
ALDRINGHAM CUM THORPE CP
The Walks
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44
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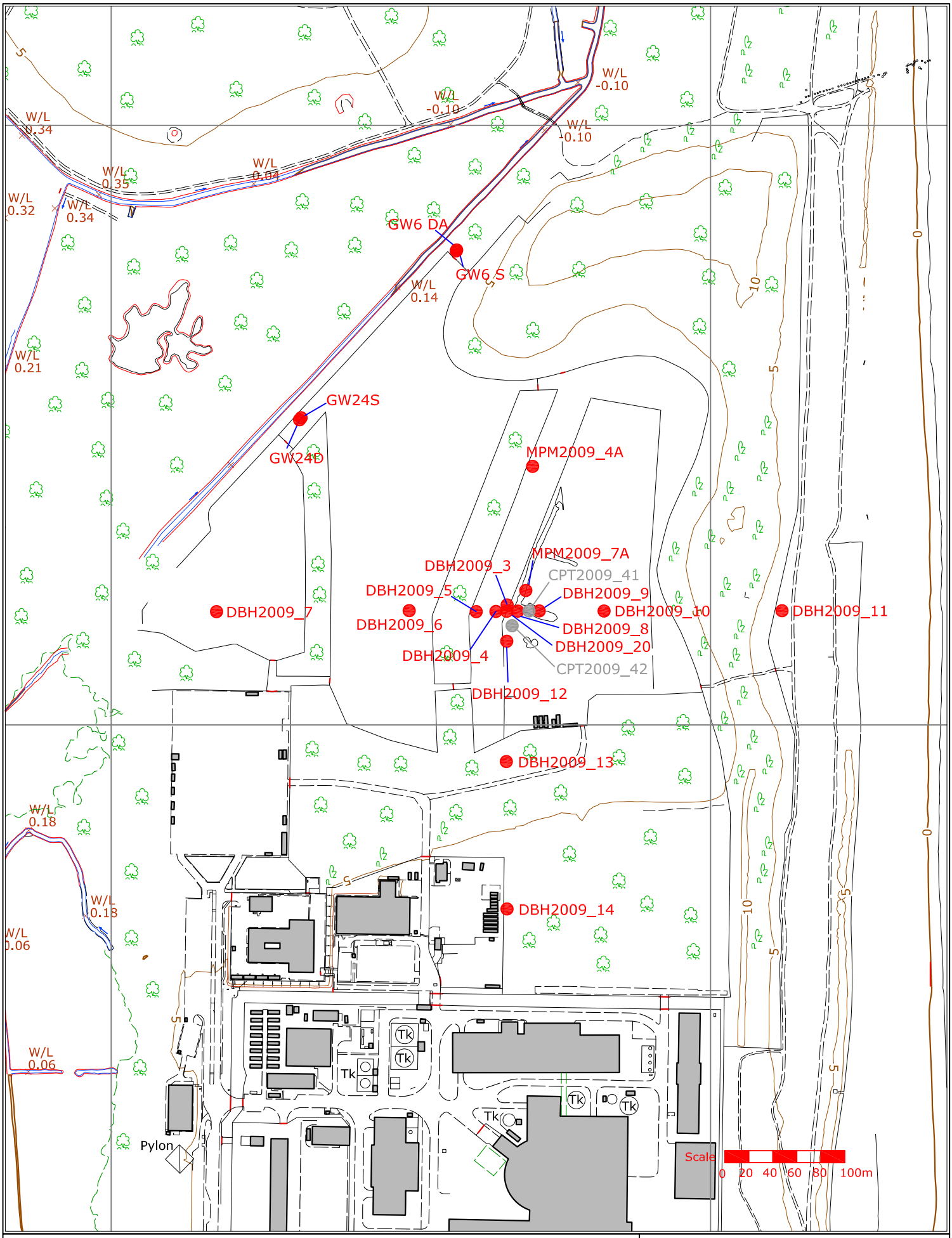

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Title: As Built Well Layout		
Drawing No:Figure 2	Rev: 1	By: QR
Scale: 1:4000@A4	Date: 16/03/11	Chk: GH

WJ GROUNDWATER LIMITED

Figure 3: Step Test

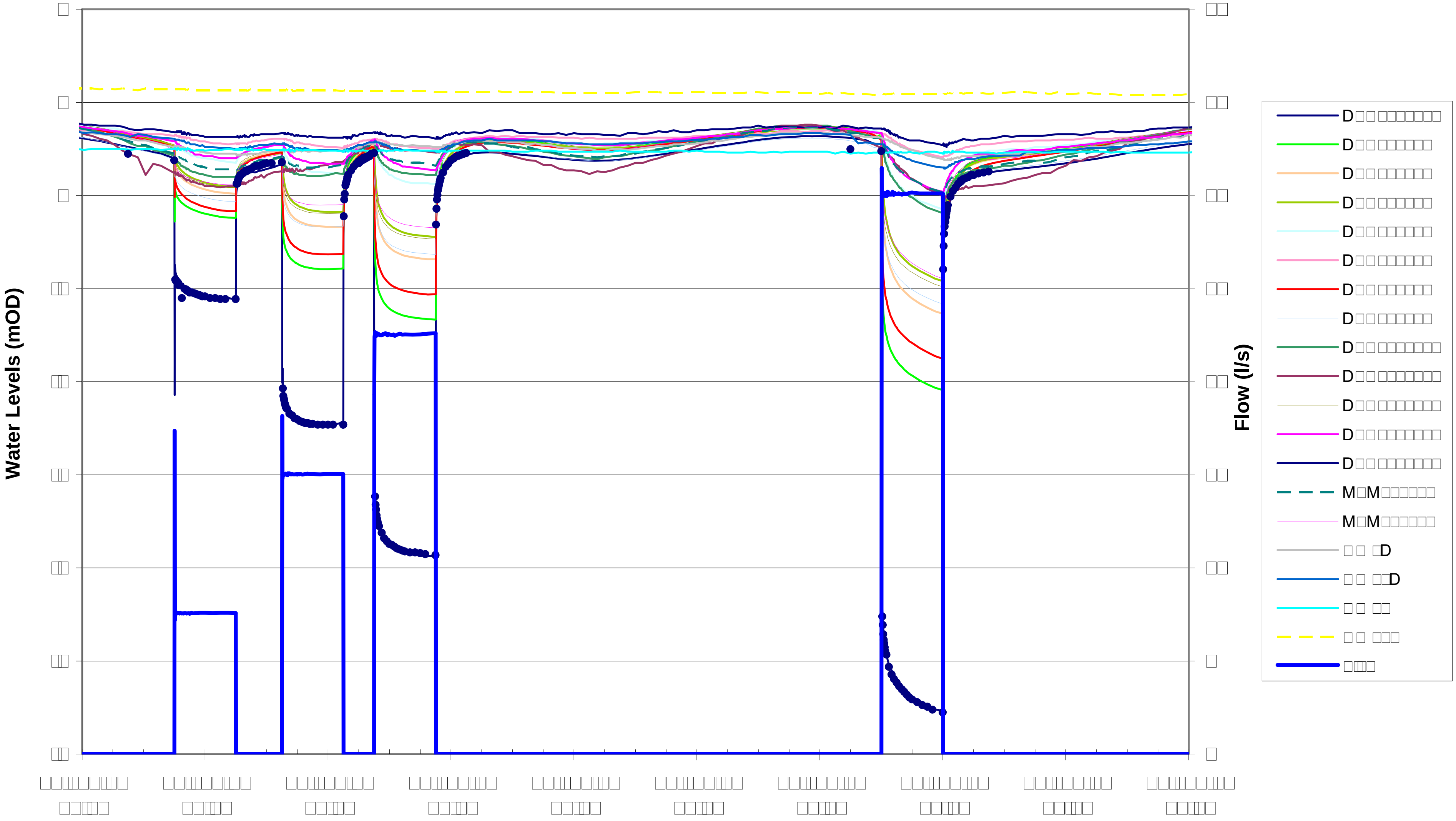


Figure 4: Constant Rate Test

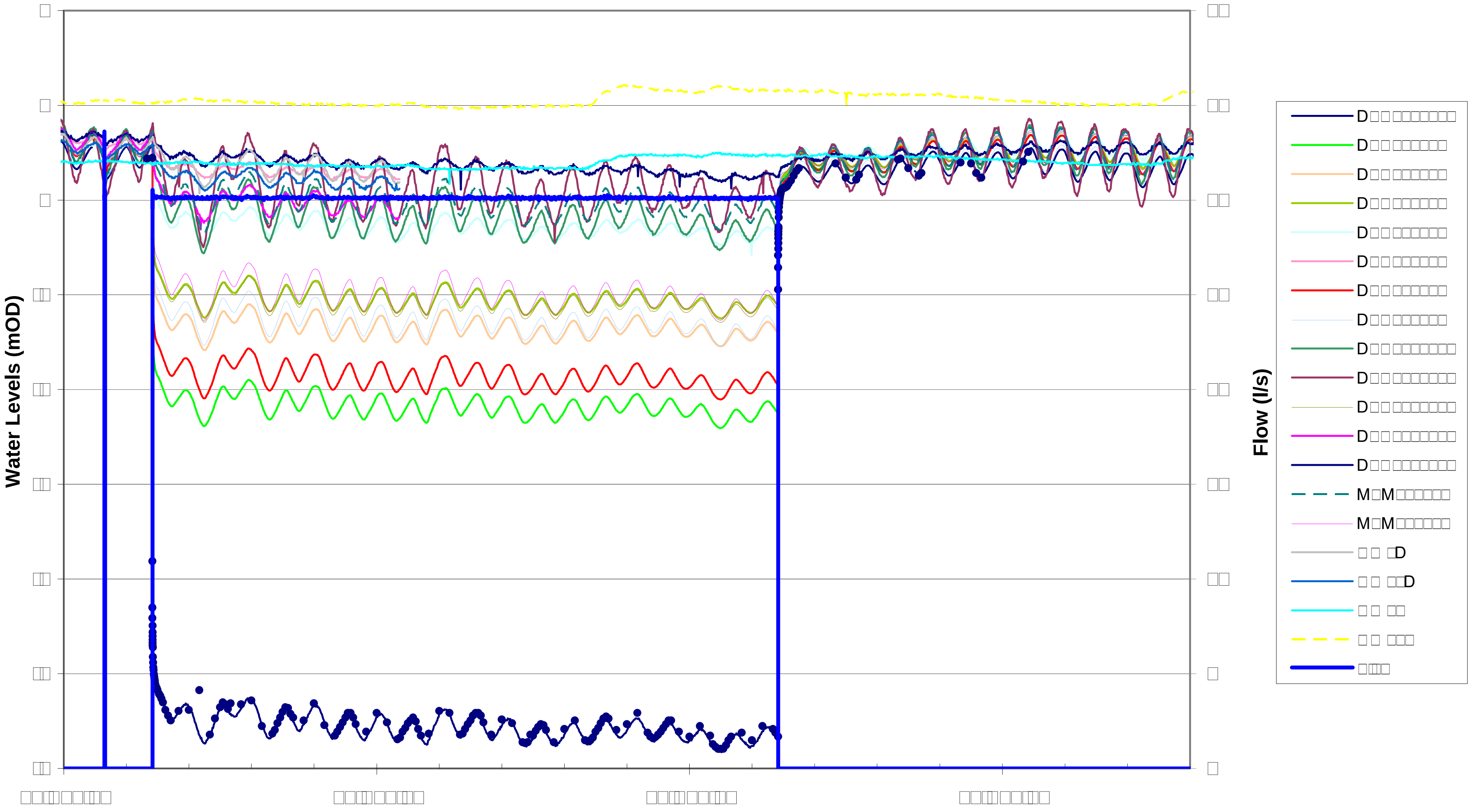
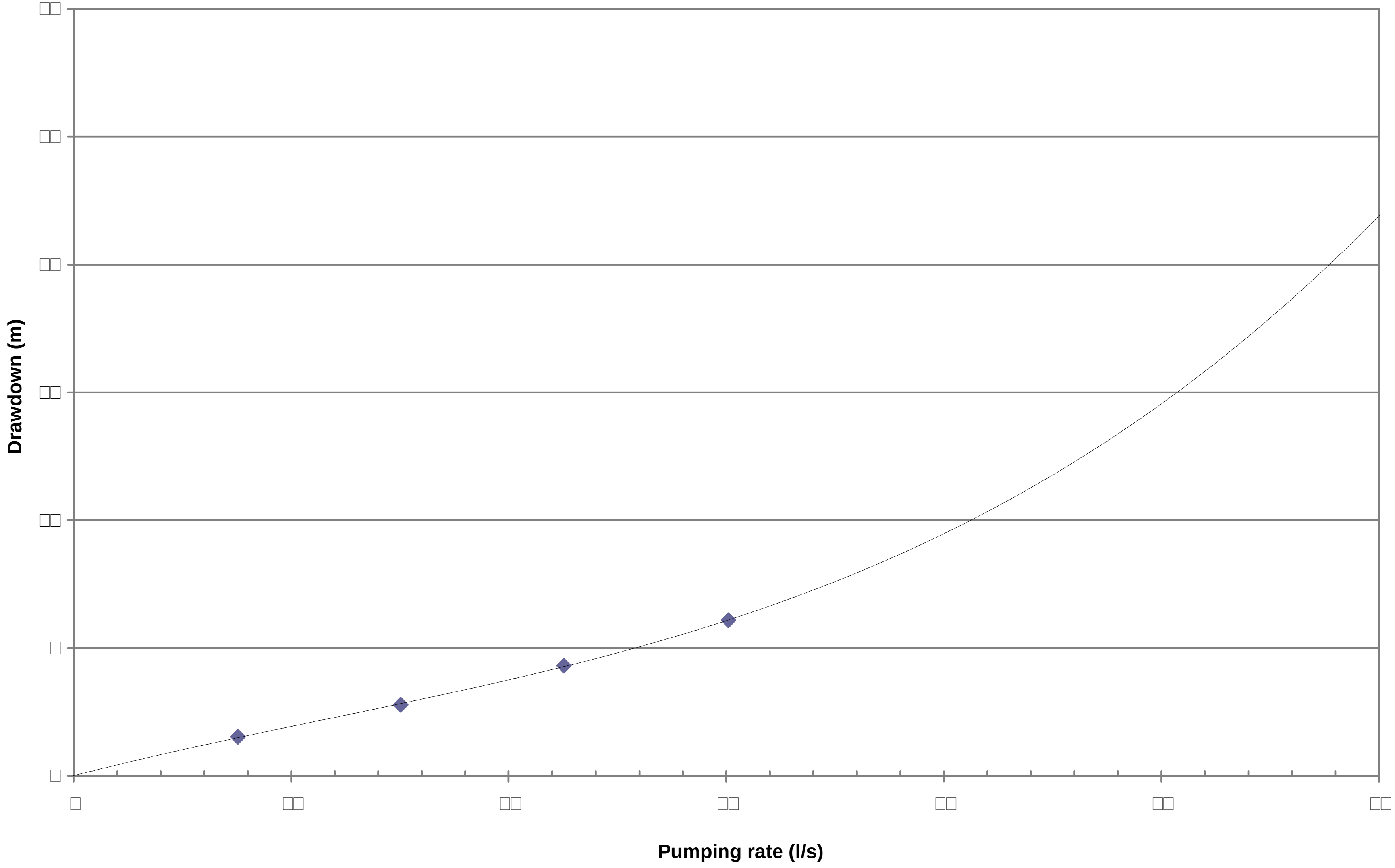
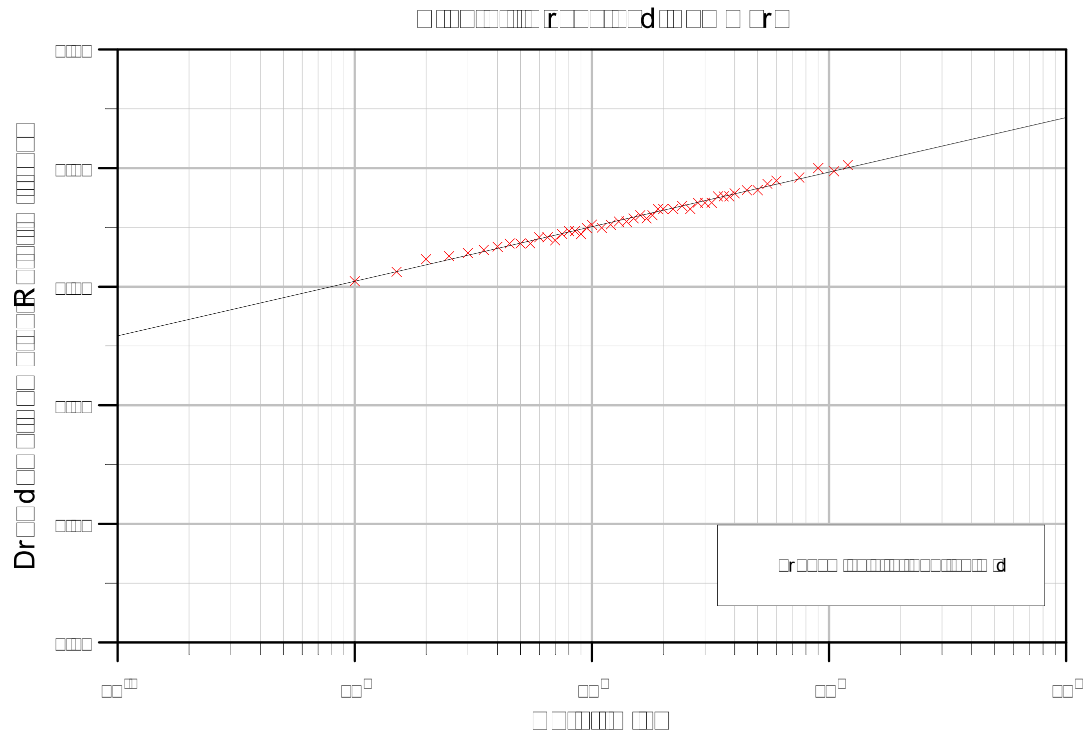


Figure 5: Step Test - Yield/Drawdown Plot





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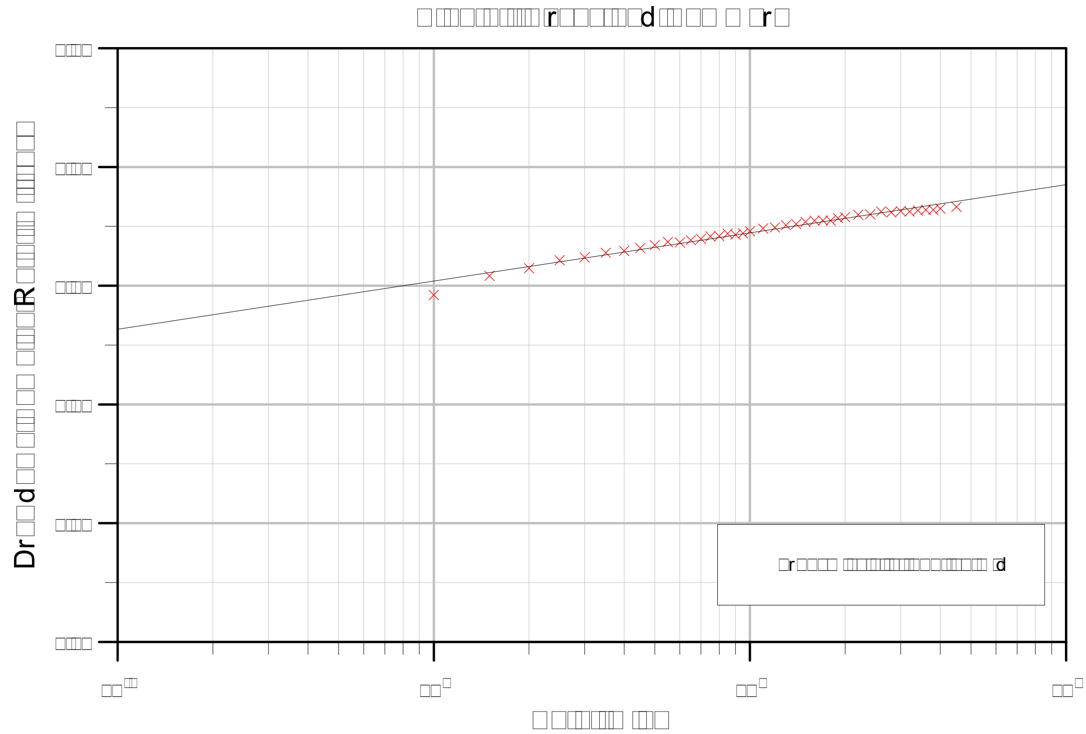

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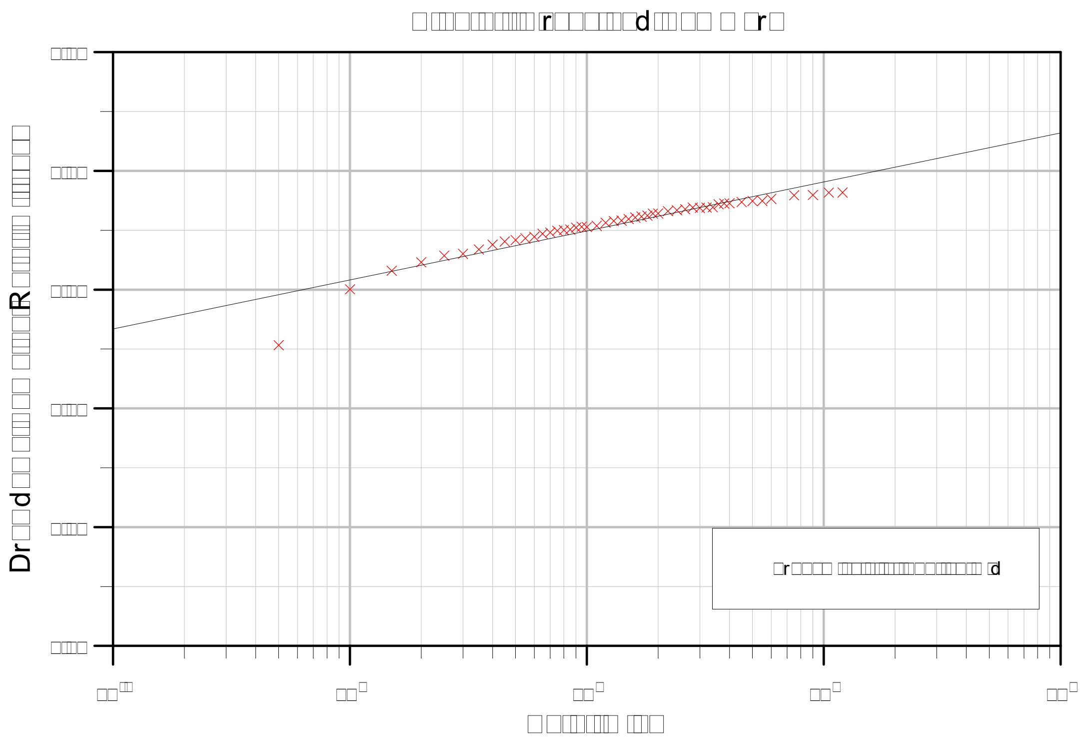

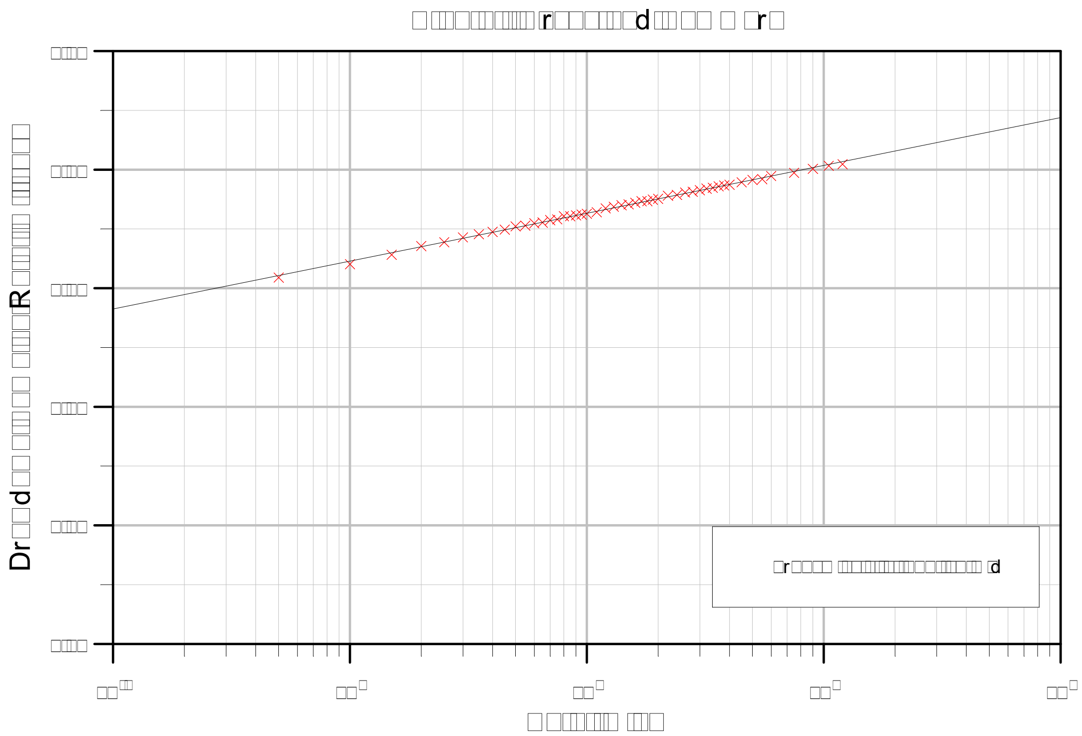

J16

Step 3 B rsoy an d Summe rs
25
20
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6 d
Beta (min)

Figure 8: Step Test – Step 3

Step 4 B rsoy an d Summe rs
25
20
15
10
05
00
Dr d R
4 d
Beta (min)

Figure 9: Step Test – Step 4

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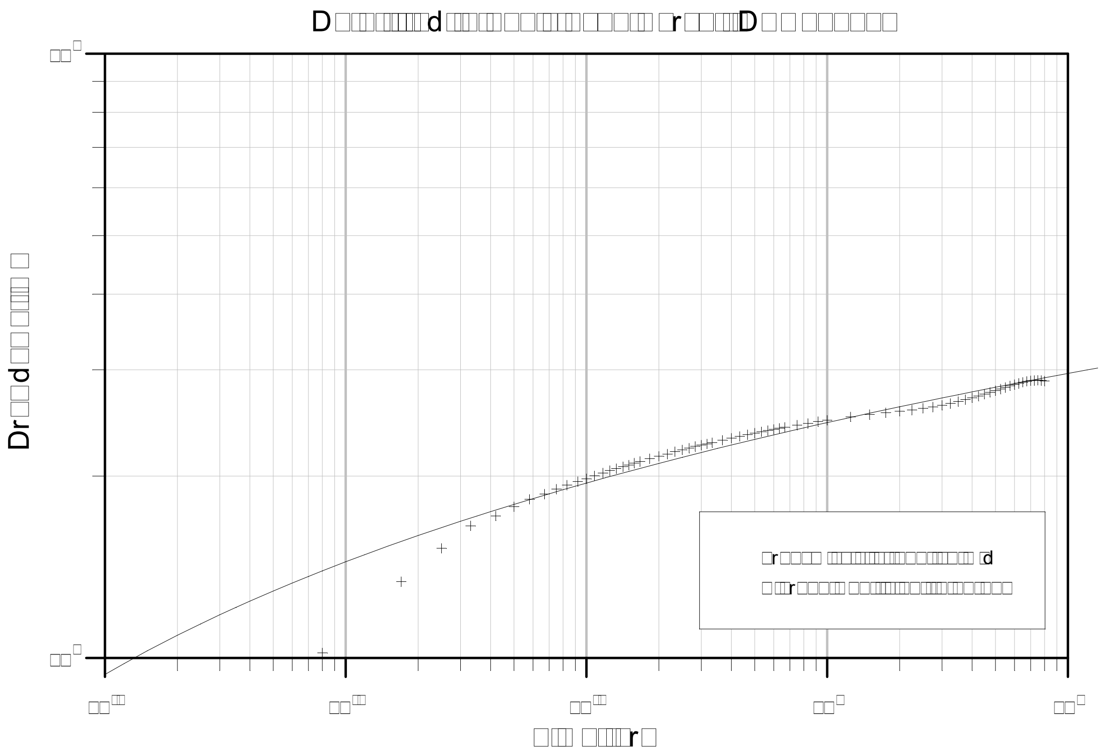

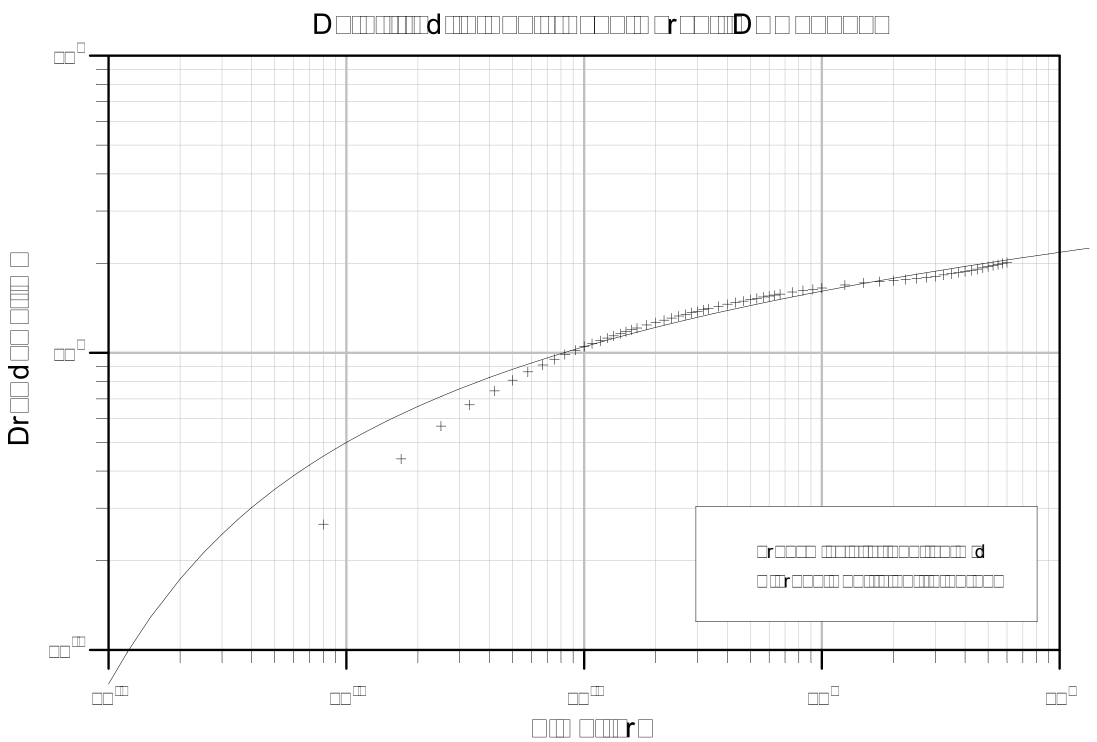

J16

Data fitte d Theis Type Cu rve D BH2009_3
Time (r)
Dr d

Figure 10: Theis Analysis – DBH2009_3

Data fitte d to Theis Type Cu rve D BH2009_4
Time (r)
Dr d

Figure 11: Theis Analysis – DBH2009_4

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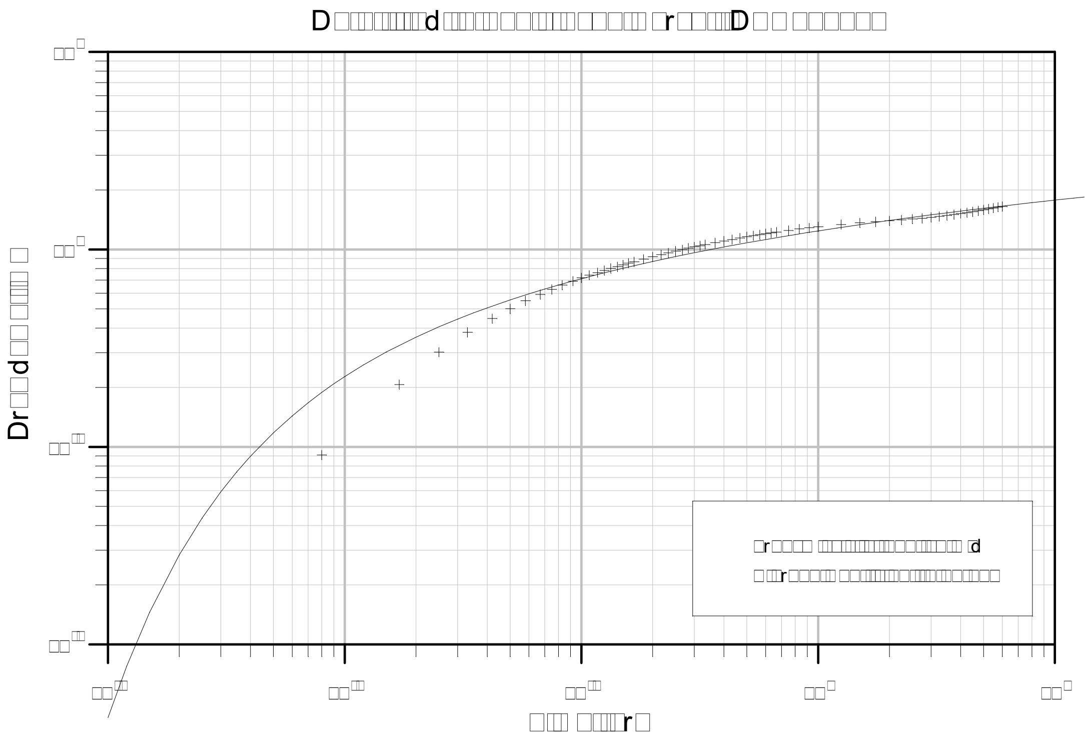

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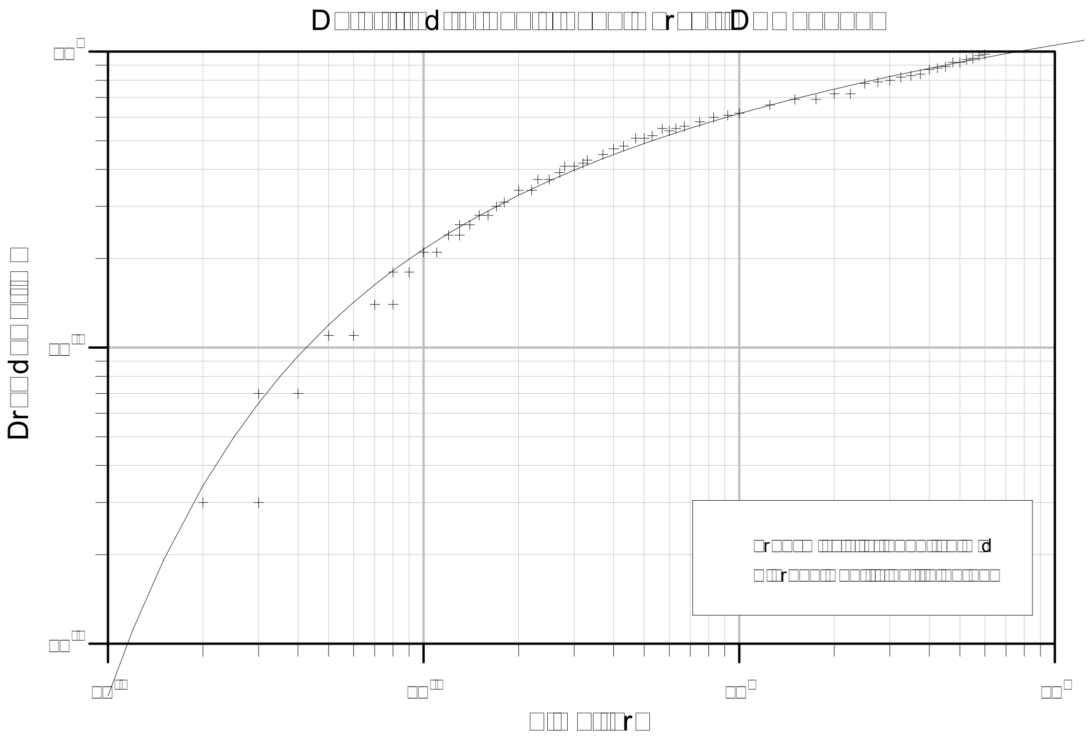

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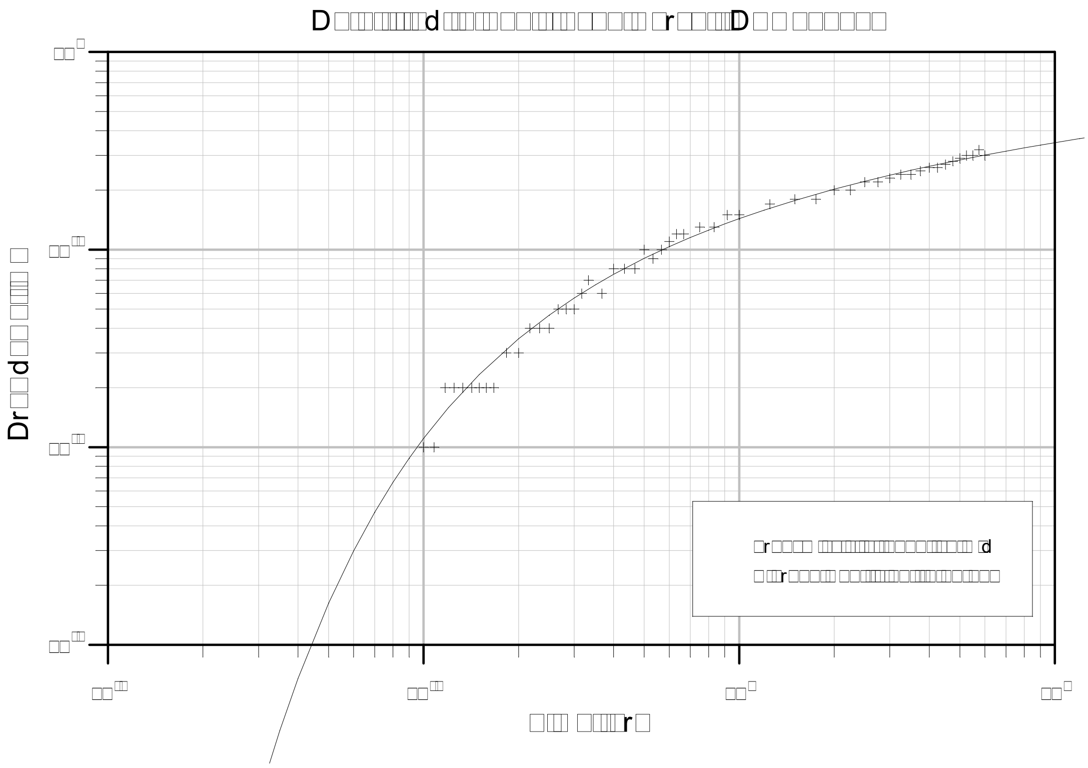

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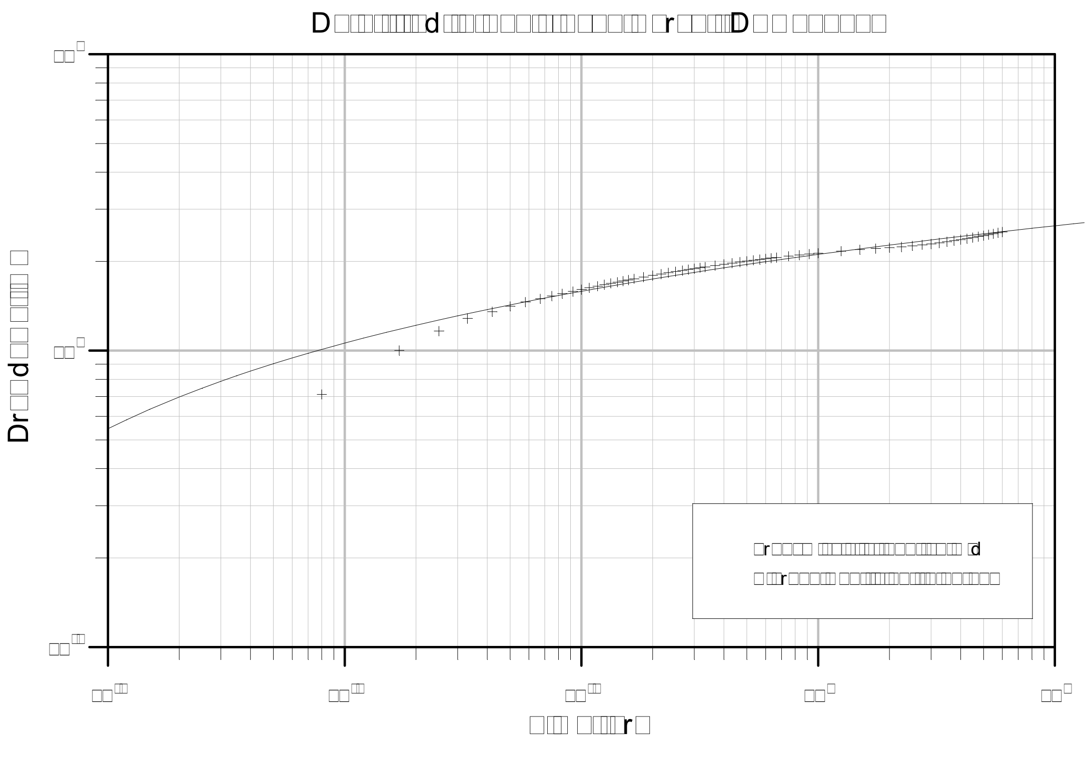

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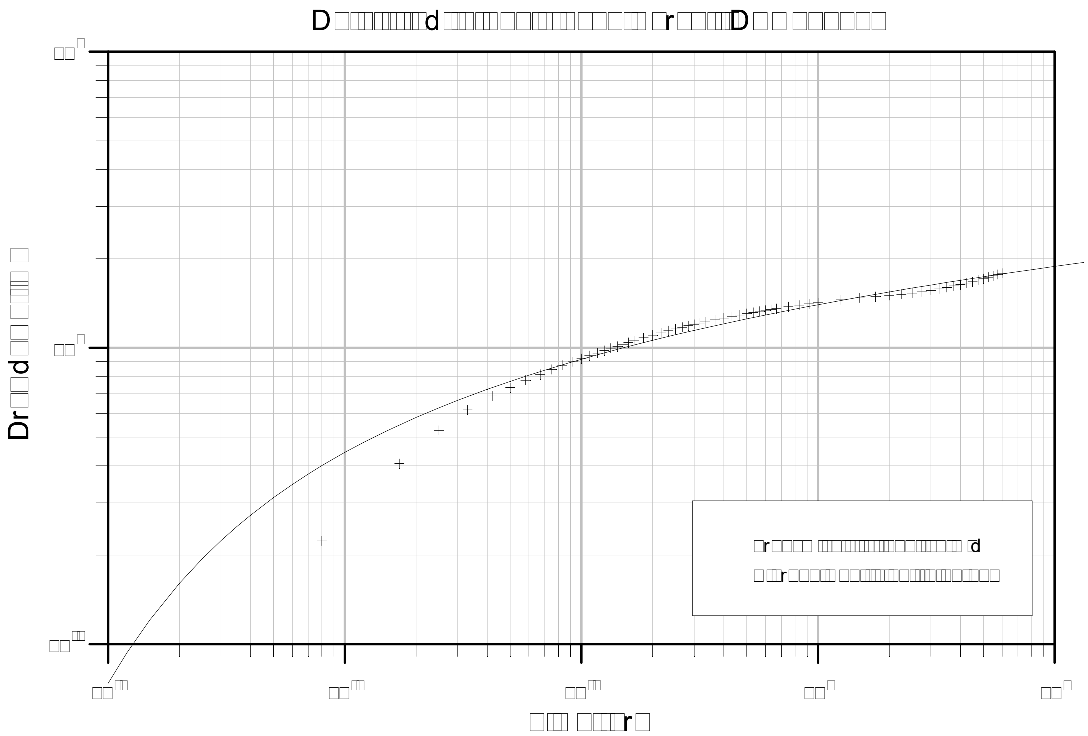

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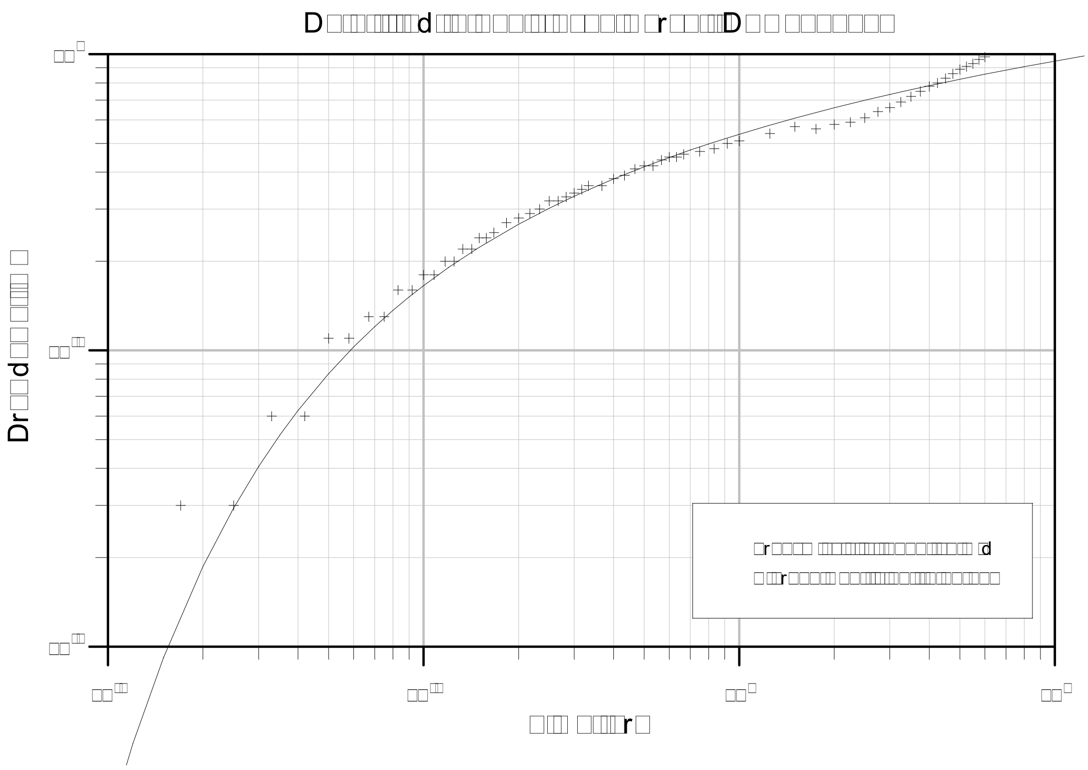
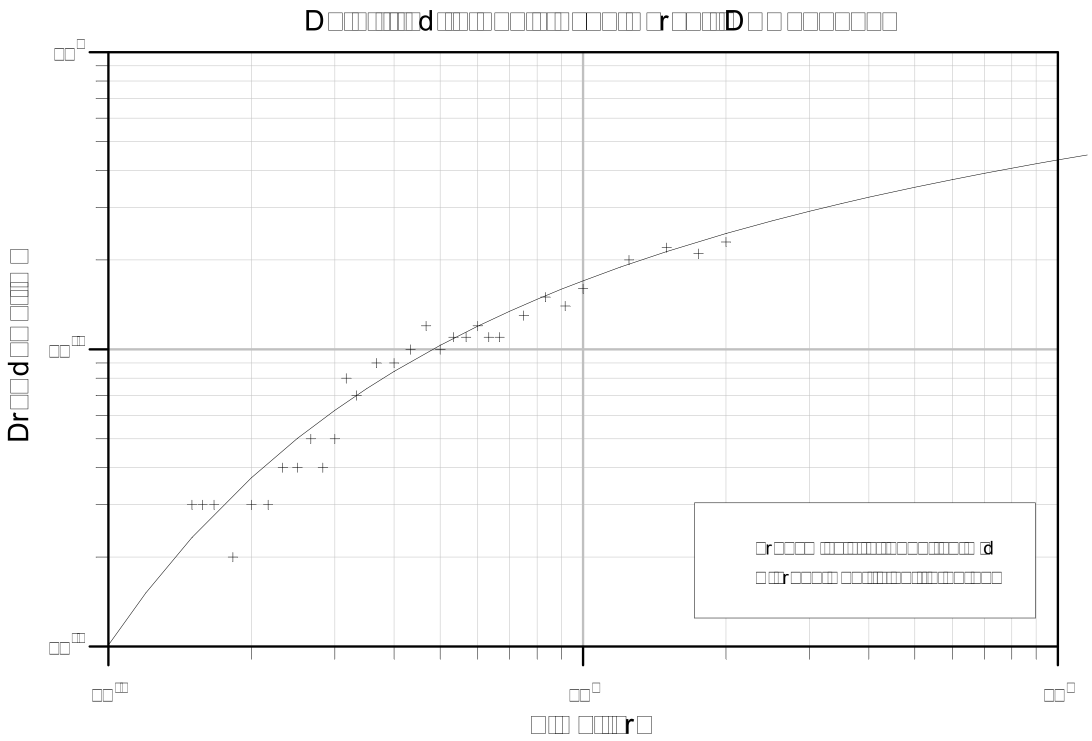


Figure 17: Theis Analysis – DBH2009_10



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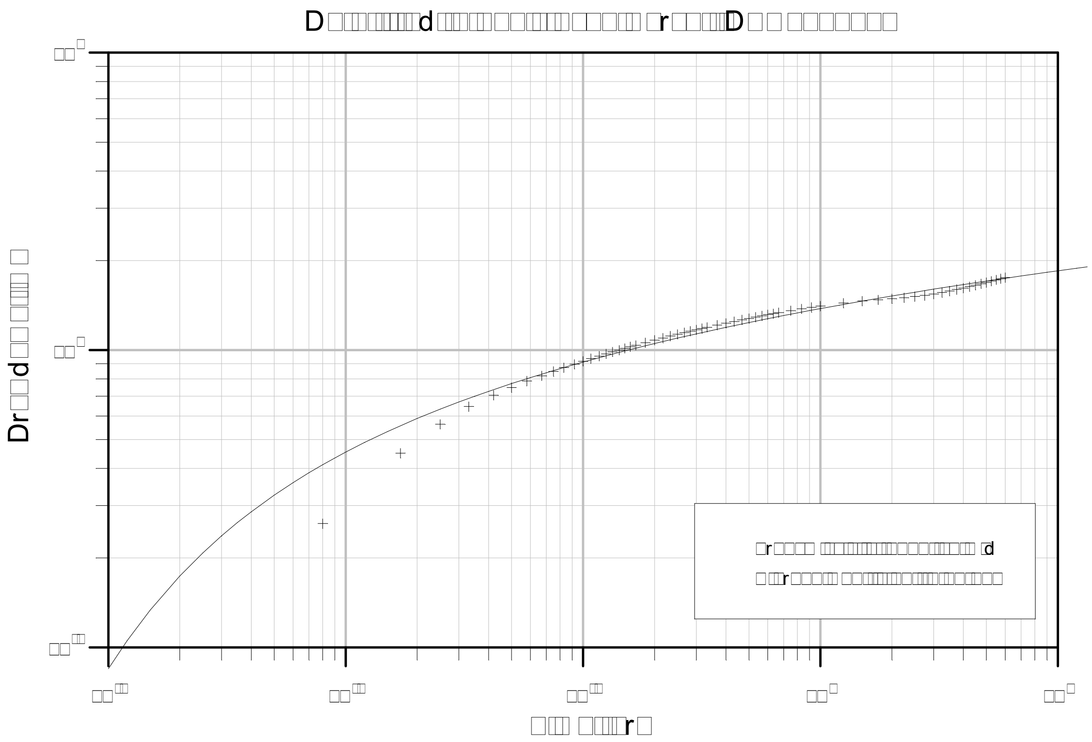

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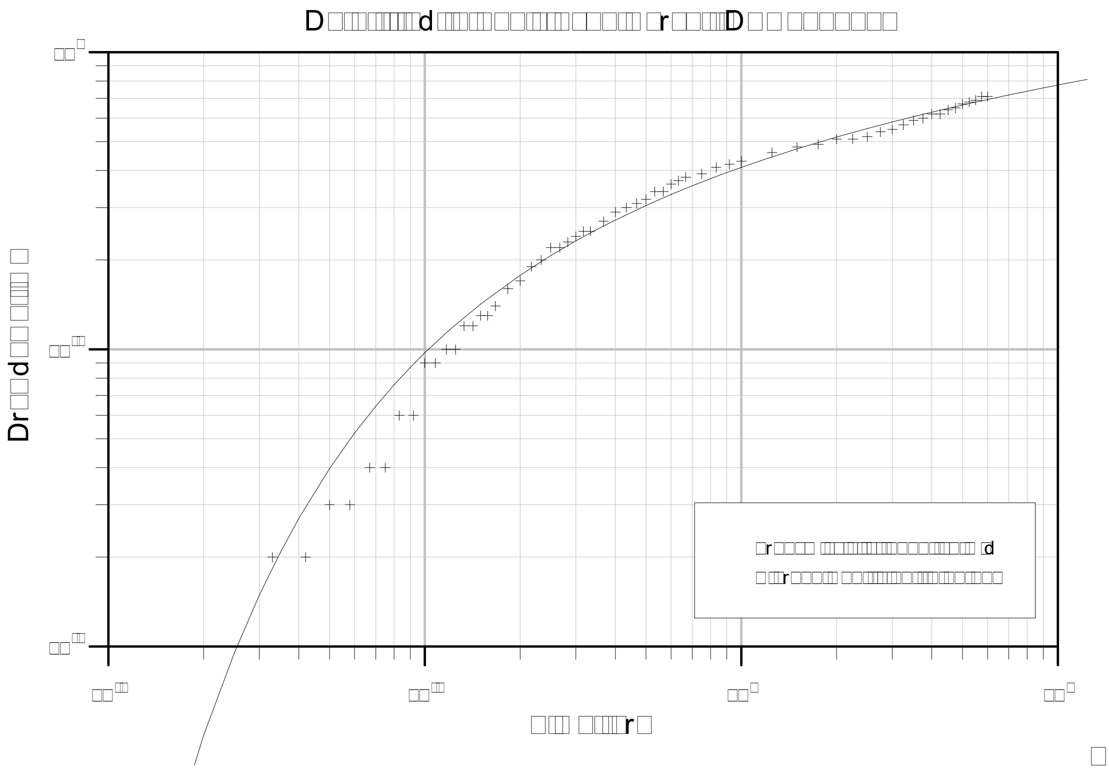

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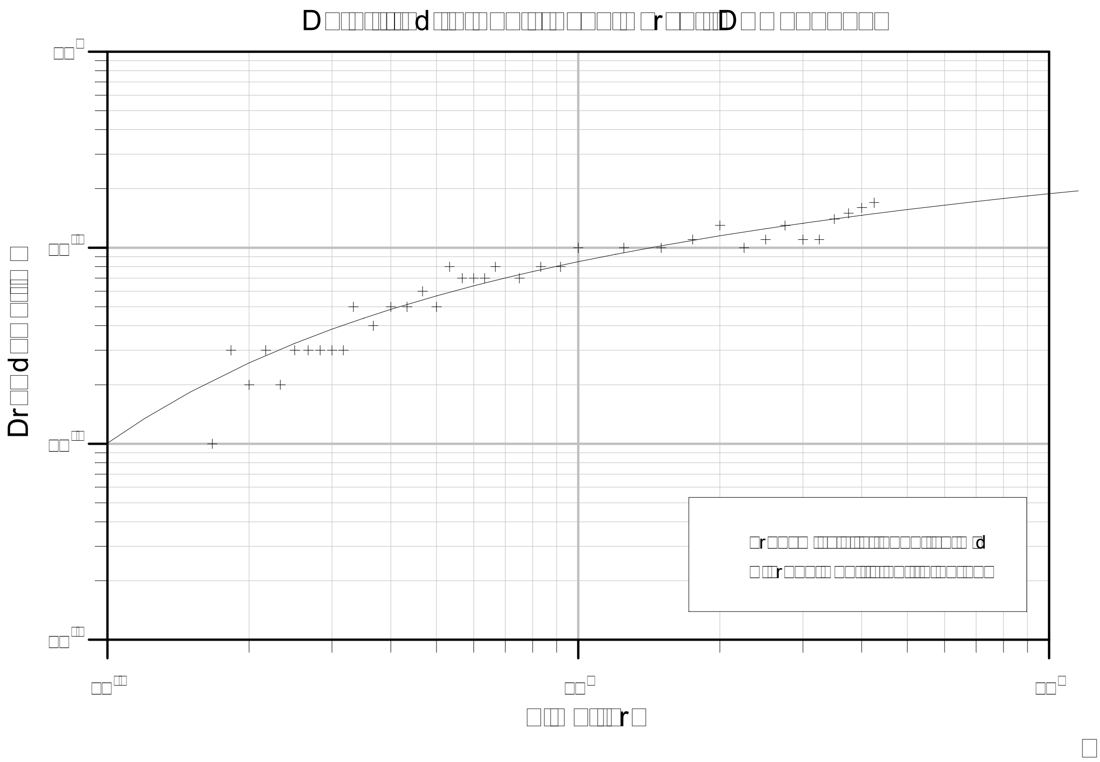

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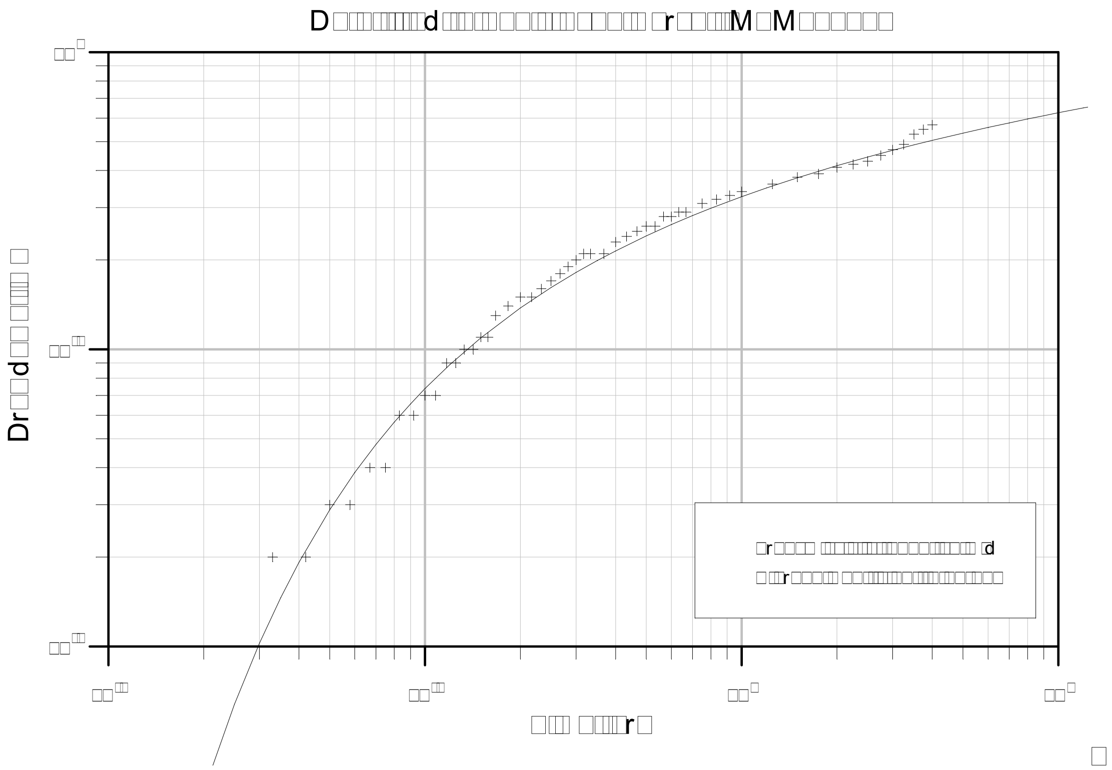

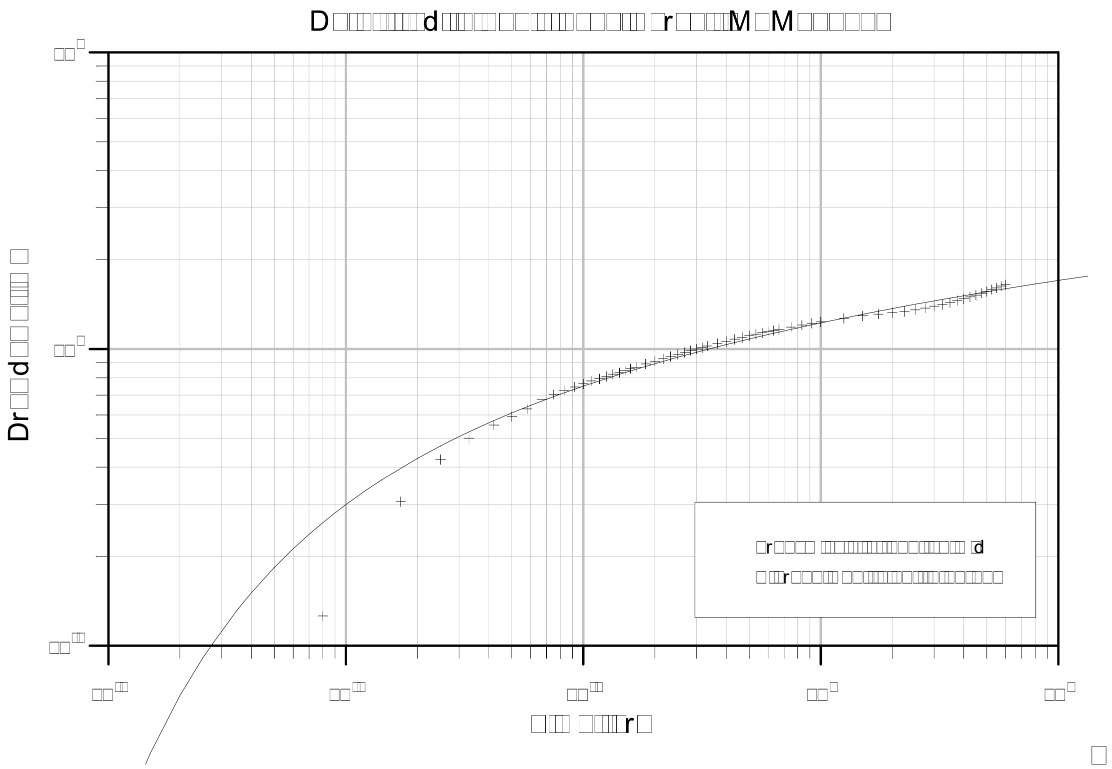

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Dr d
Time (r)

Figure 22: Theis Analysis – MPM2009_4

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Dr d
Time (r)

Figure 23: Theis Analysis – MPM2009_7

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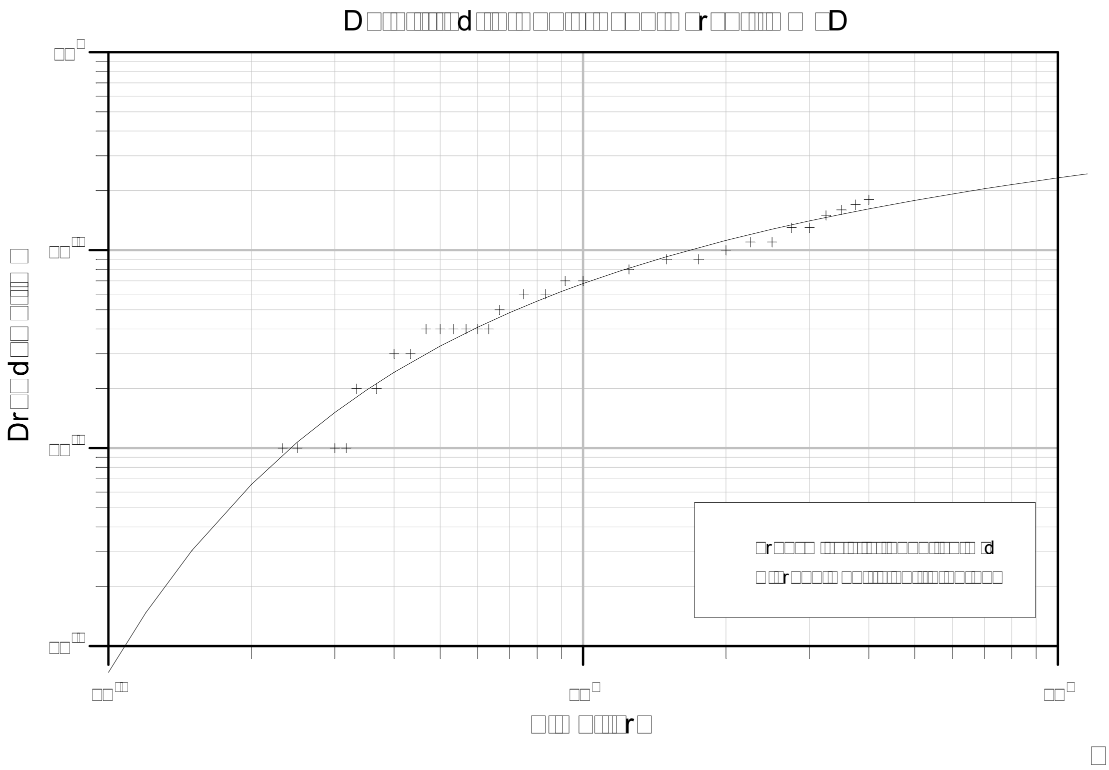


Figure 24: Theis Analysis – GW6D

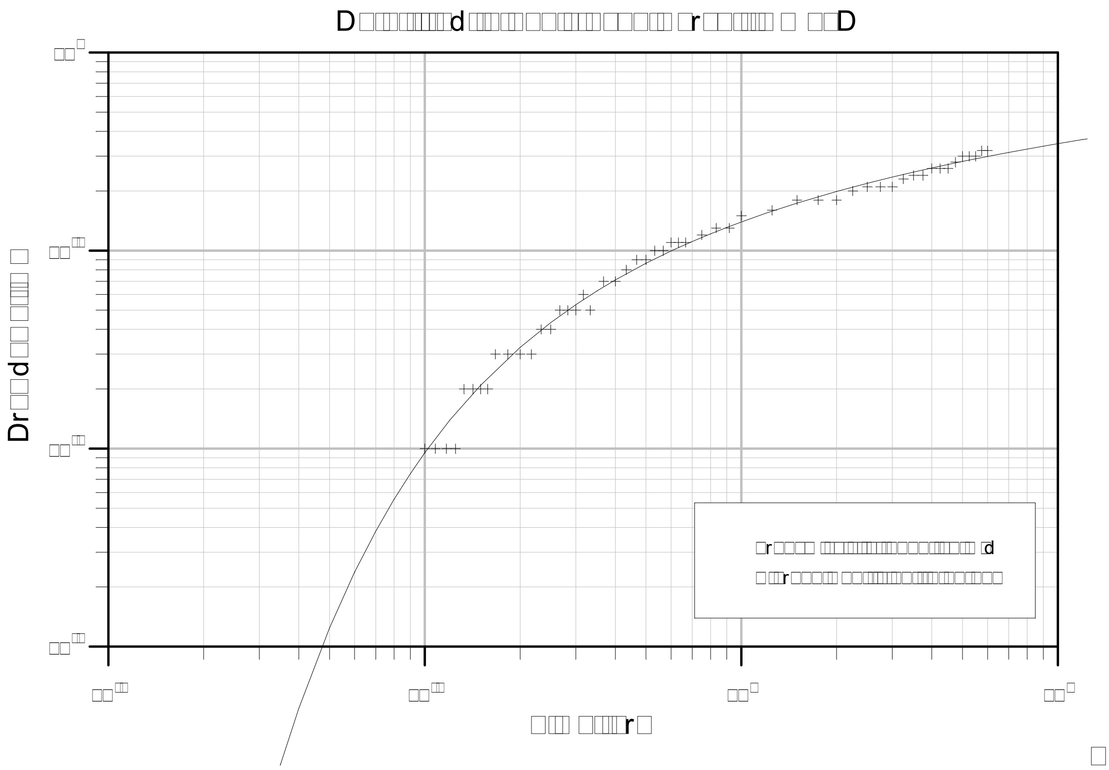
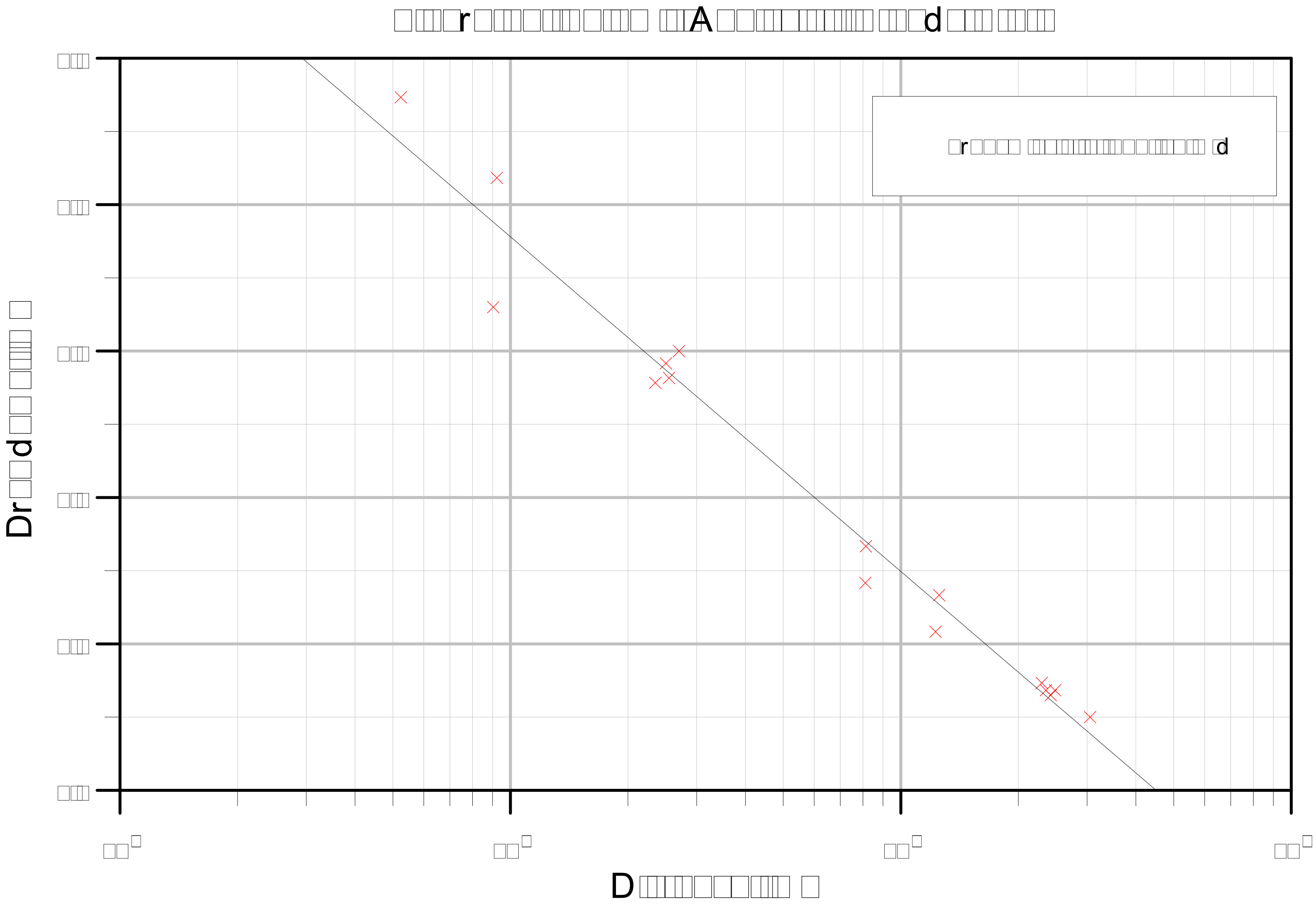


Figure 25: Theis Analysis – GW24D



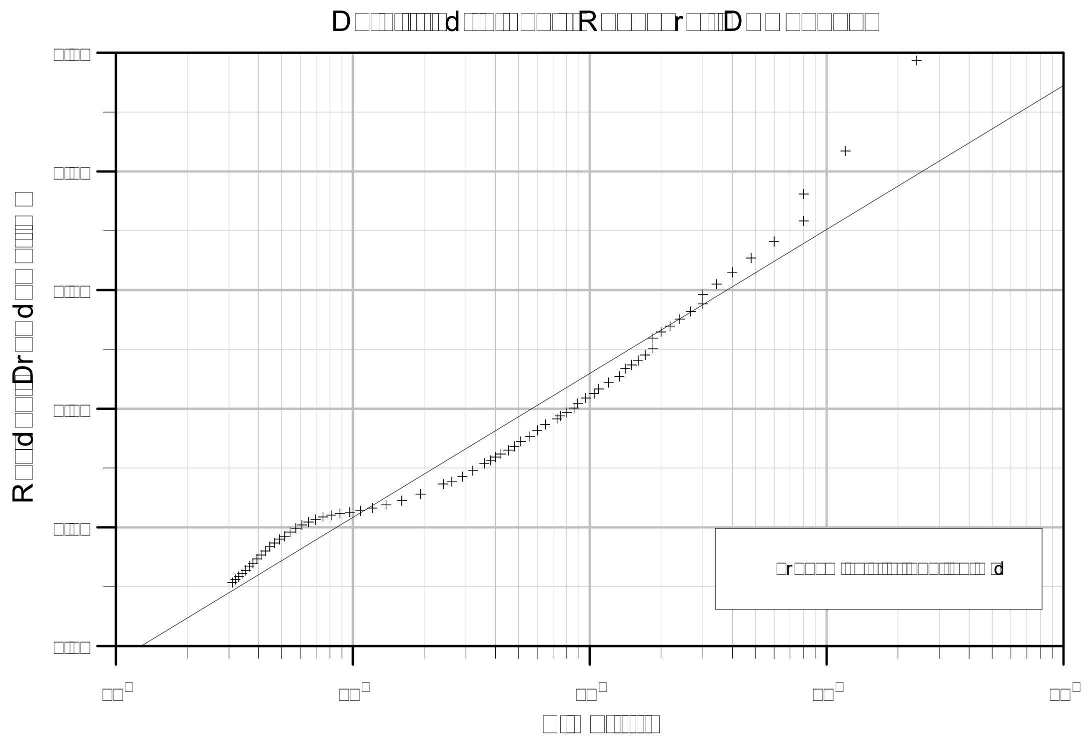


Figure 27: Theis Recovery Analysis – DBH2009_3

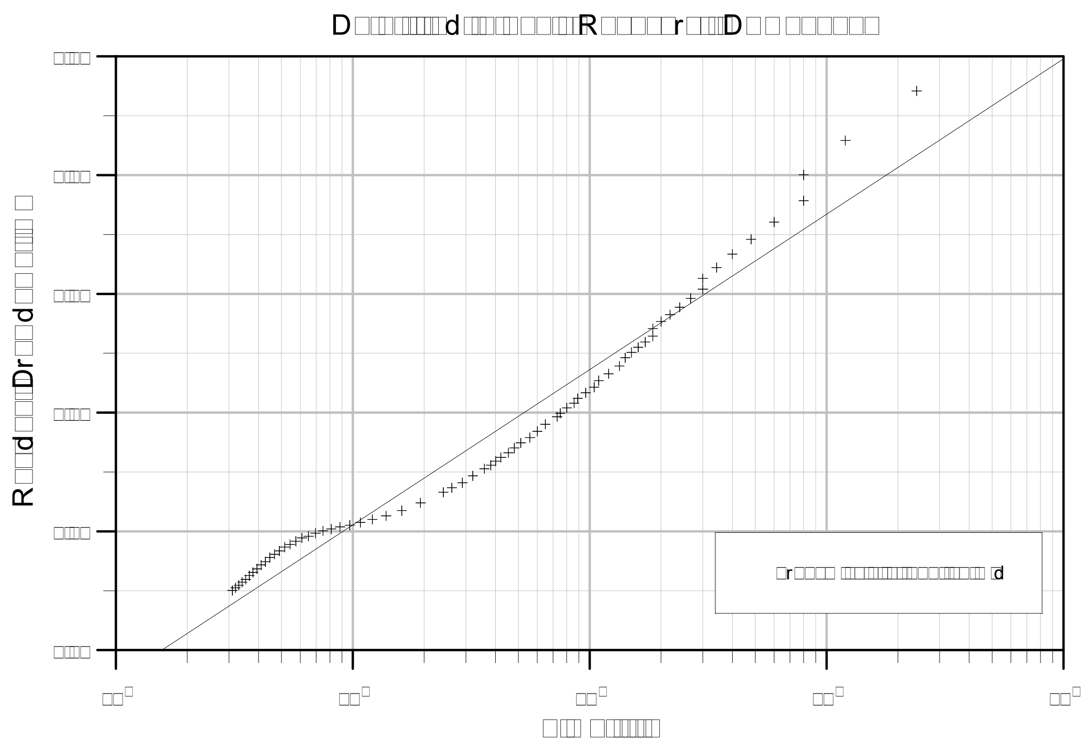


Figure 28: Theis Recovery Analysis – DBH2009_4

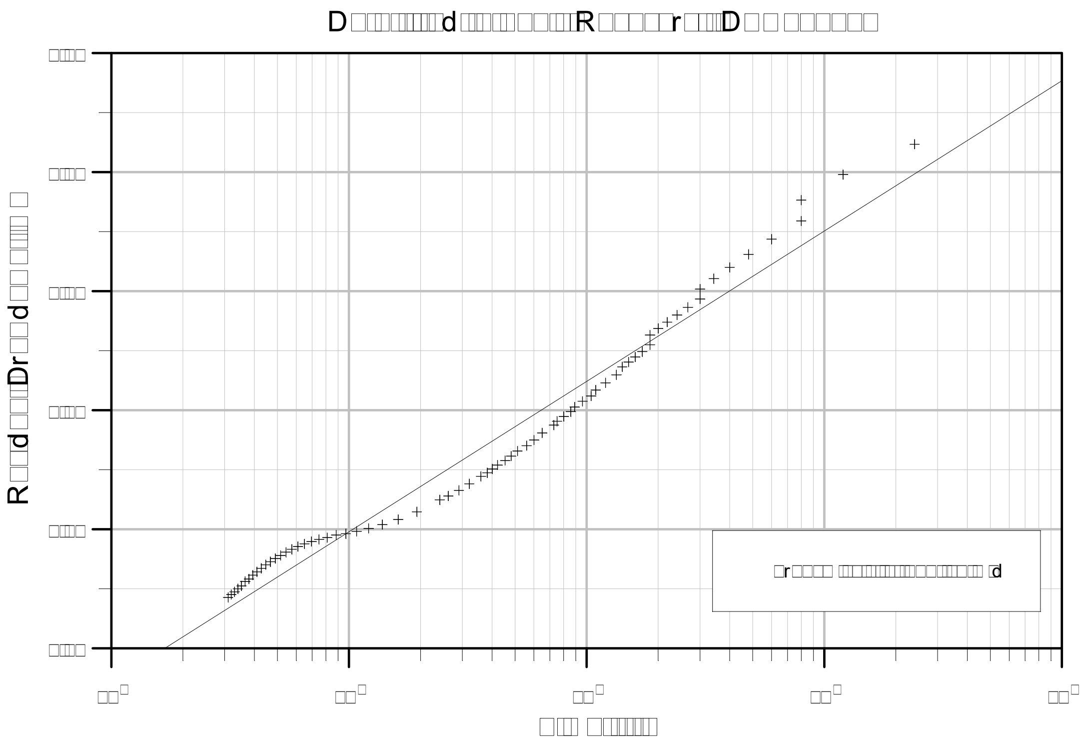


Figure 29: Theis Recovery Analysis – DBH2009_5

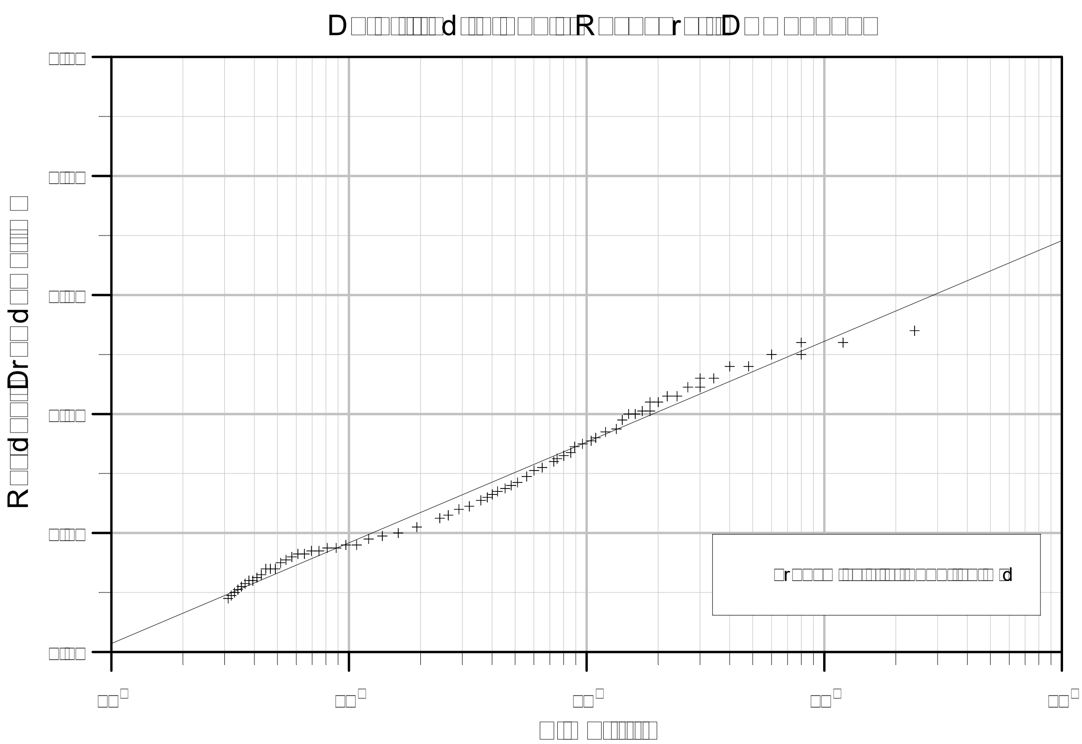


Figure 30: Theis Recovery Analysis – DBH2009_6

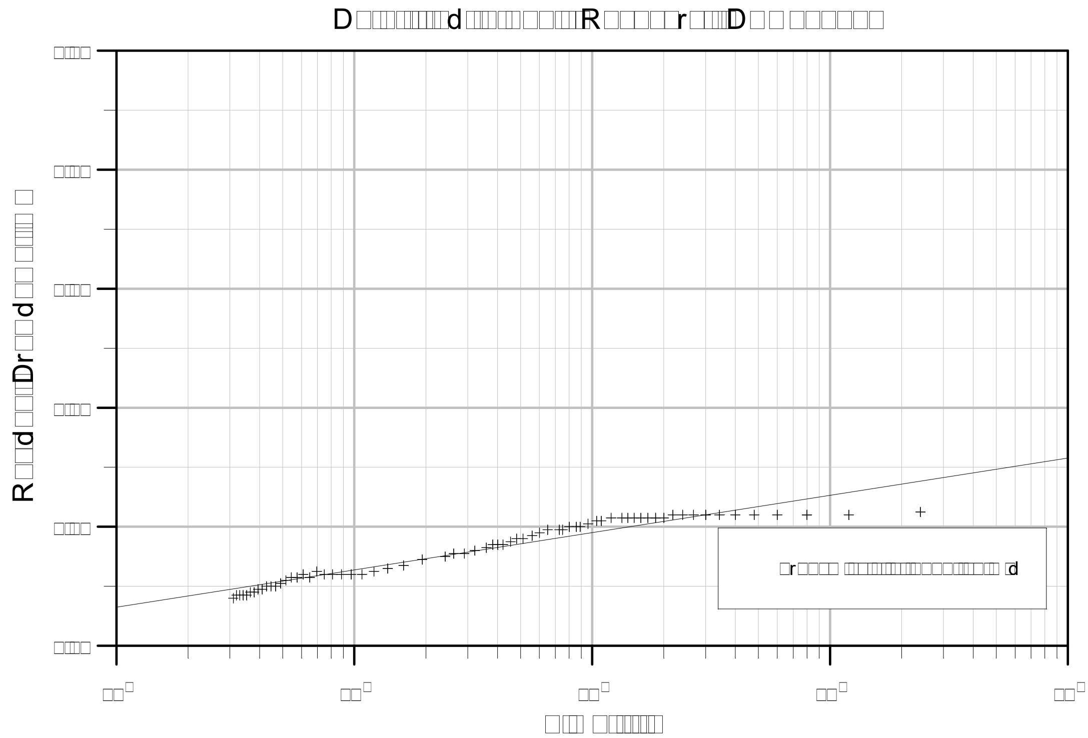


Figure 31: Theis Recovery Analysis – DBH2009_7

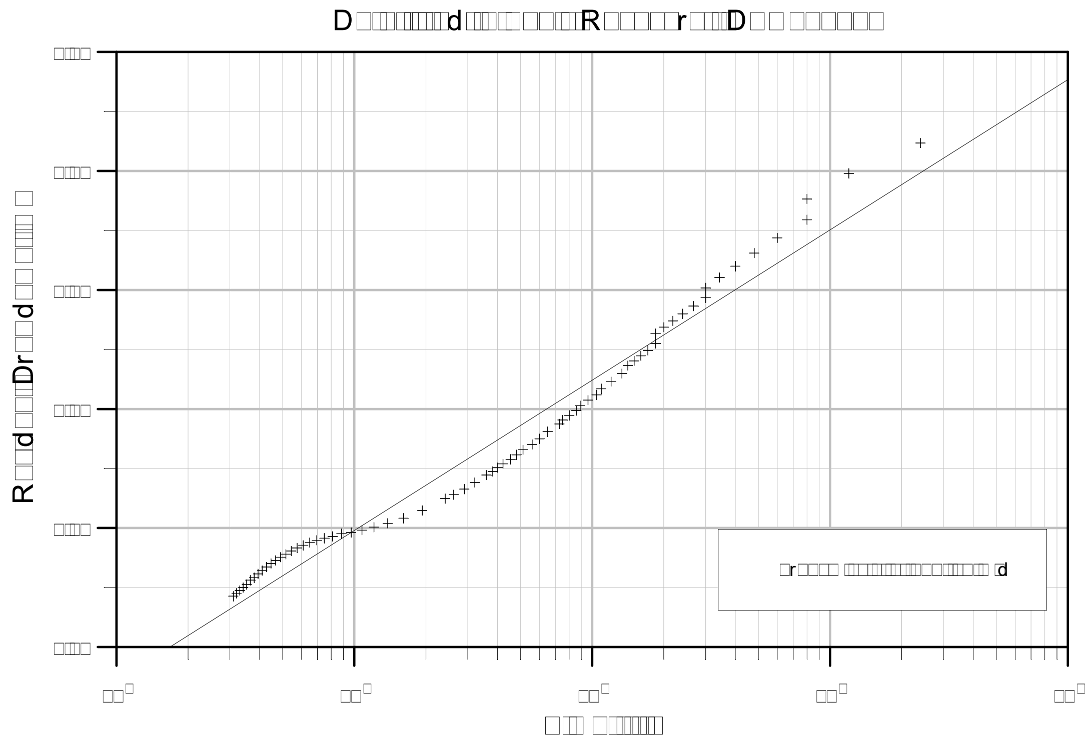


Figure 32: Theis Recovery Analysis – DBH2009_8

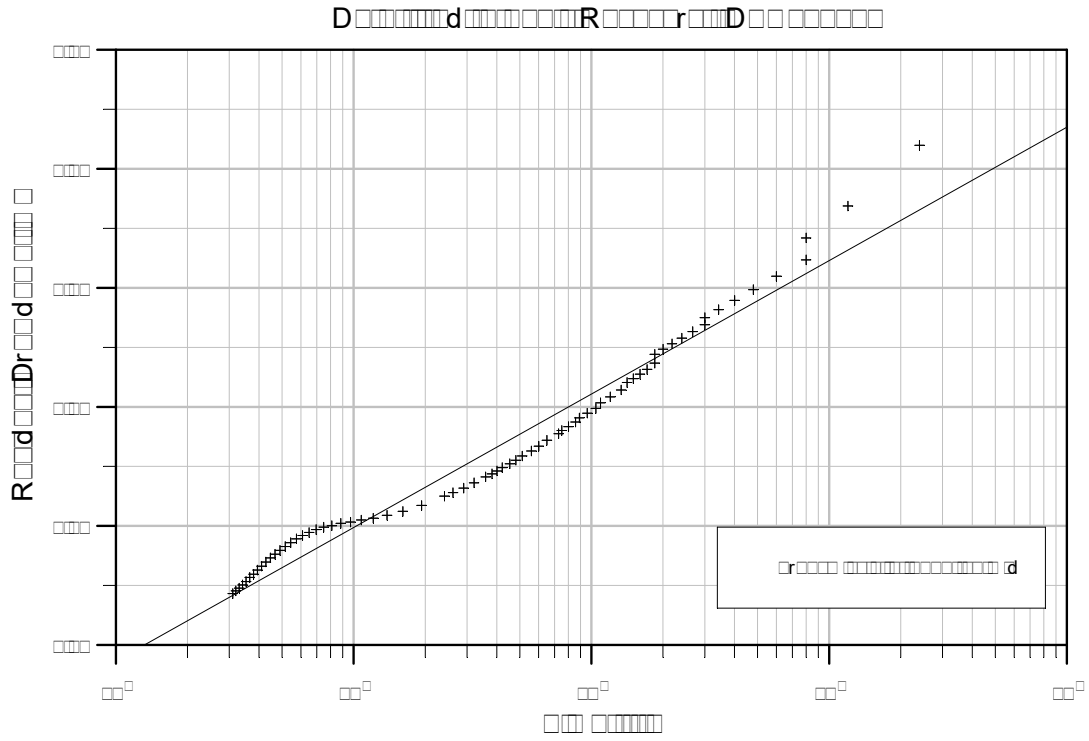


Figure 33: Theis Recovery Analysis – DBH2009_9

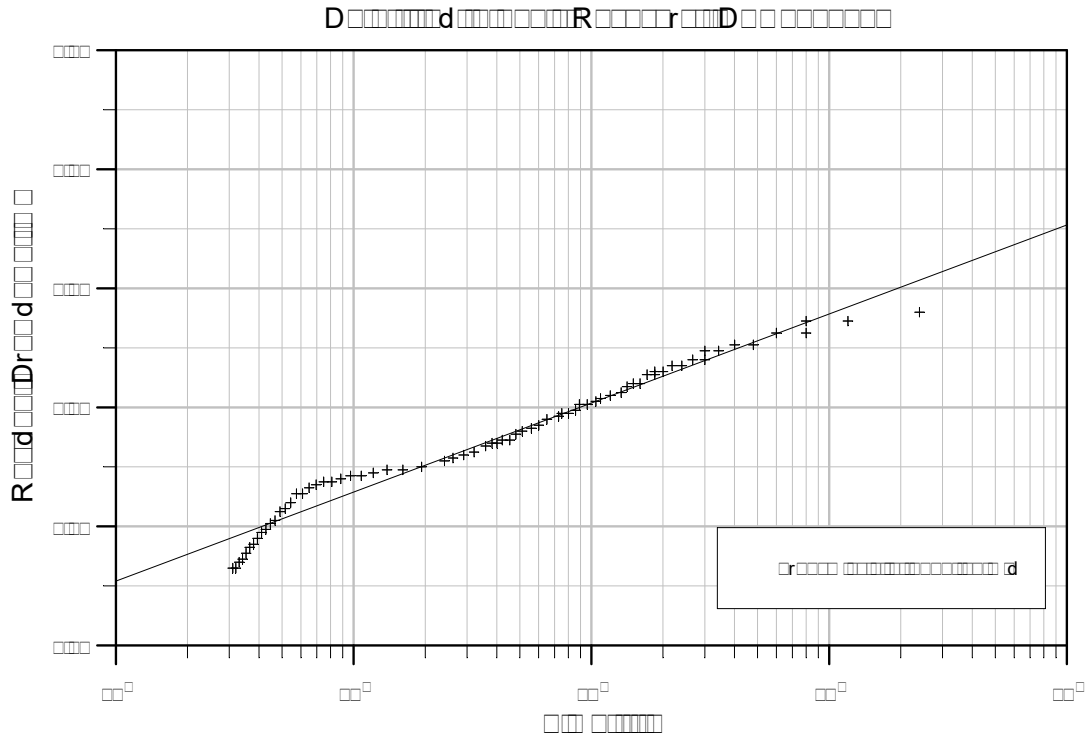


Figure 34: Theis Recovery Analysis – DBH2009_10

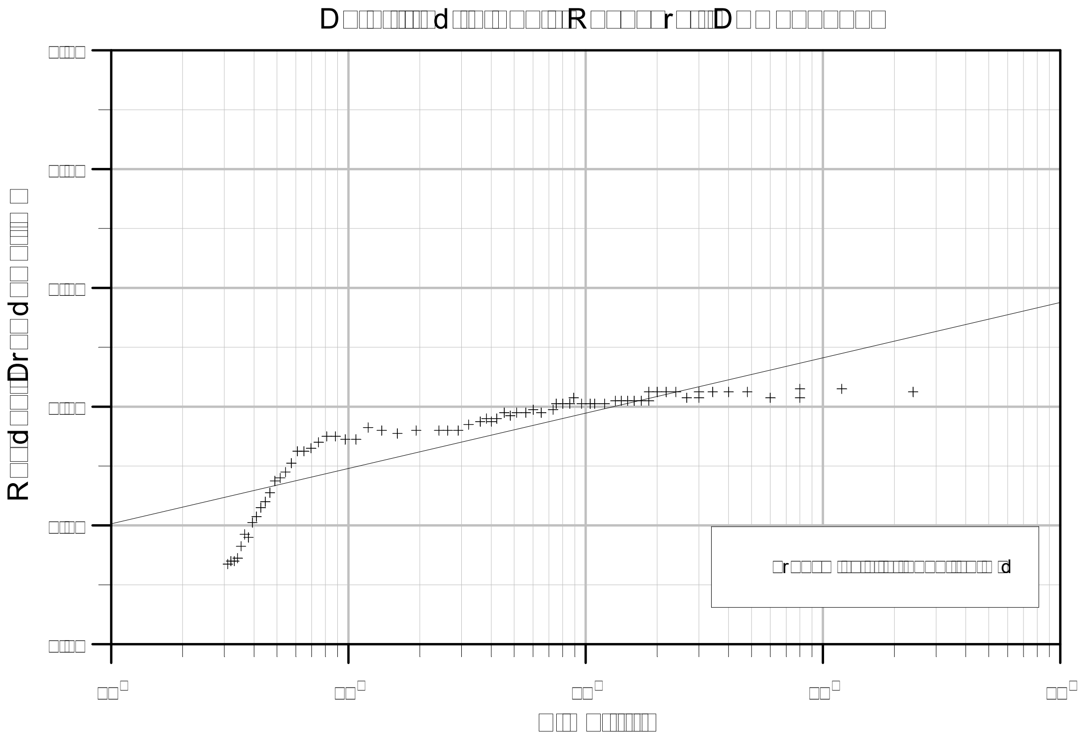


Figure 35: Theis Recovery Analysis – DBH2009_11

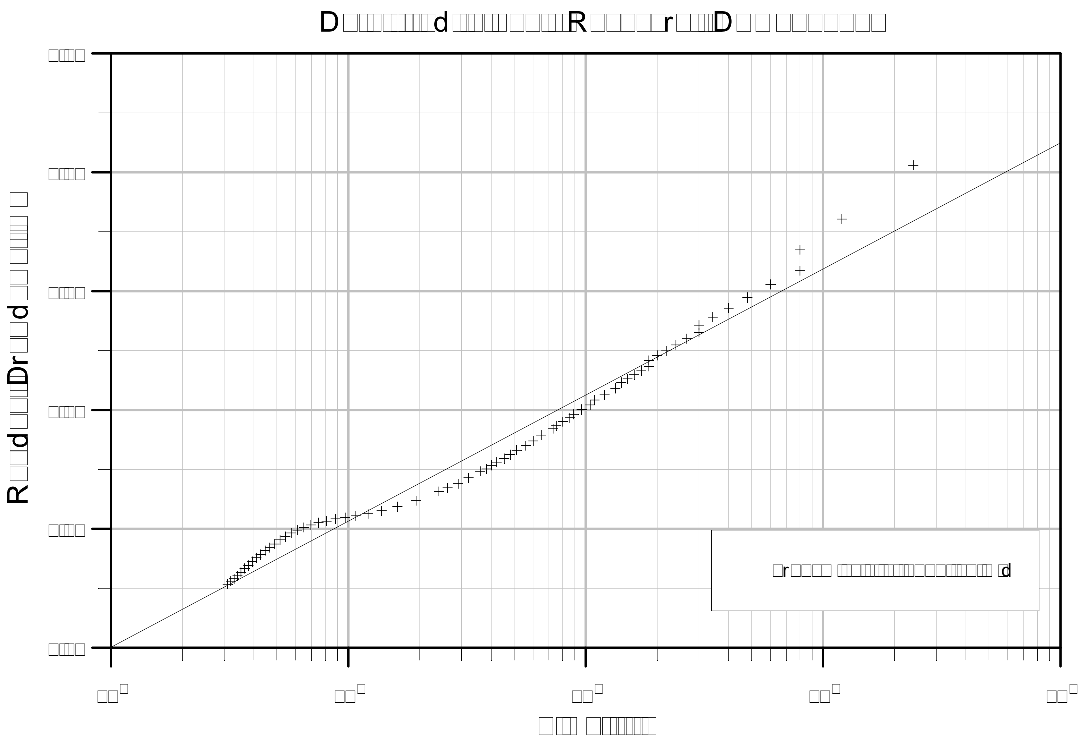


Figure 36: Theis Recovery Analysis – DBH2009_12

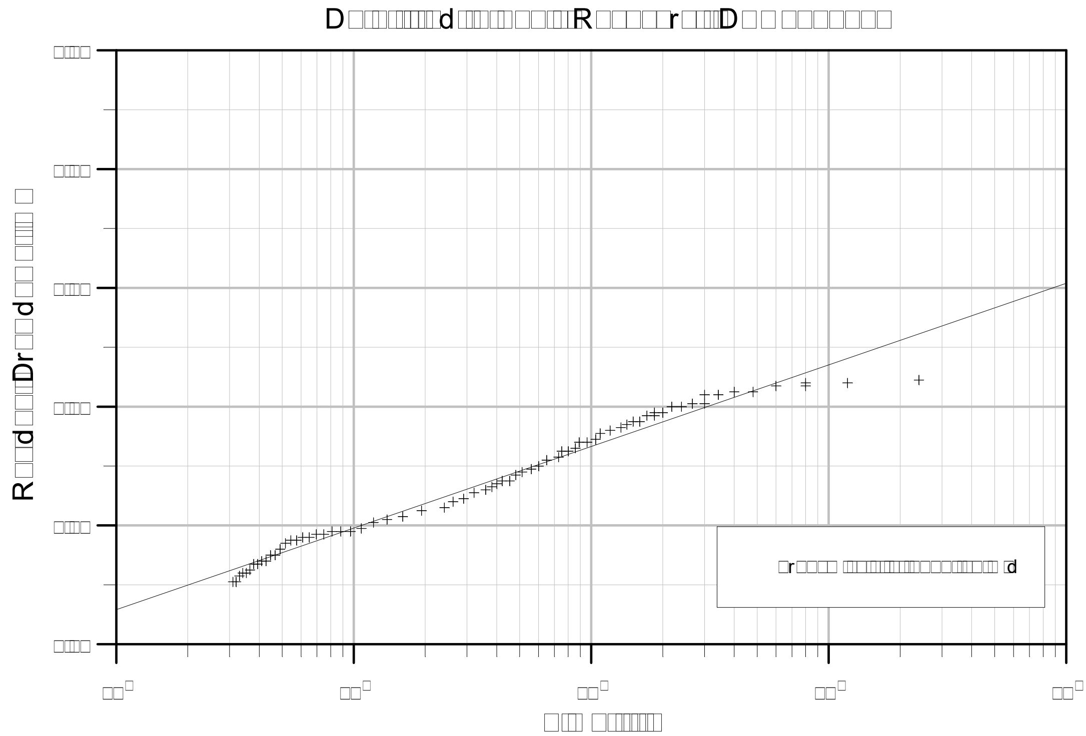


Figure 37: Theis Recovery Analysis – DBH2009_13

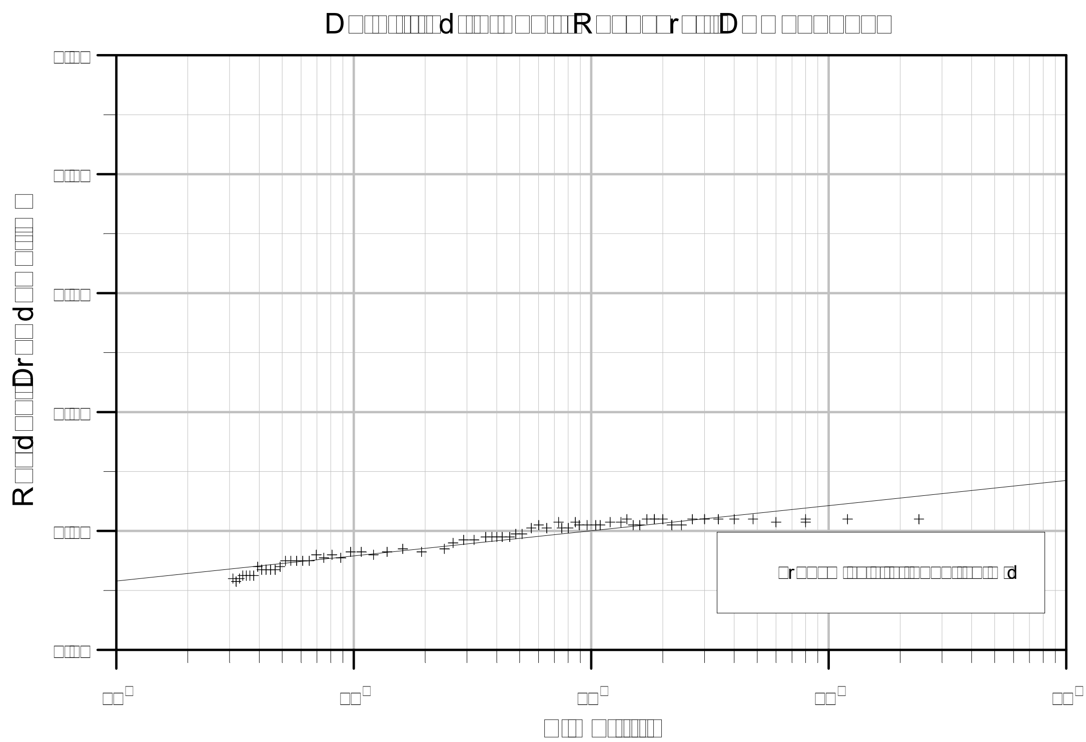


Figure 38: Theis Recovery Analysis – DBH2009_14

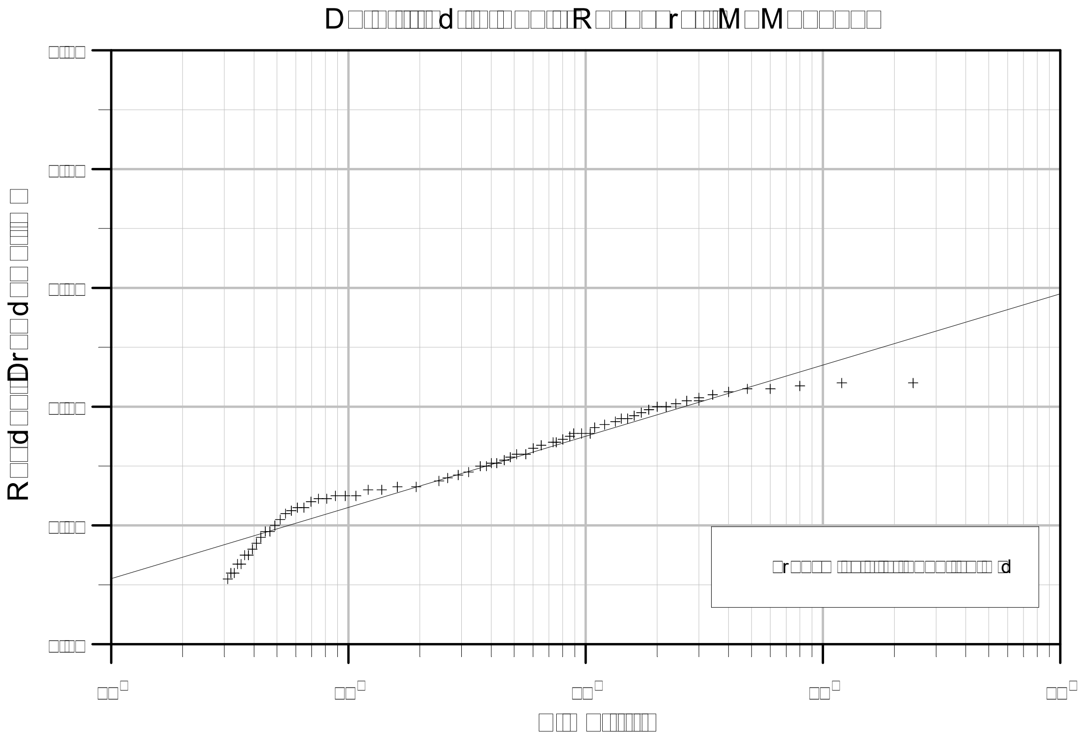


Figure 39: Theis Recovery Analysis – MPM2009_4

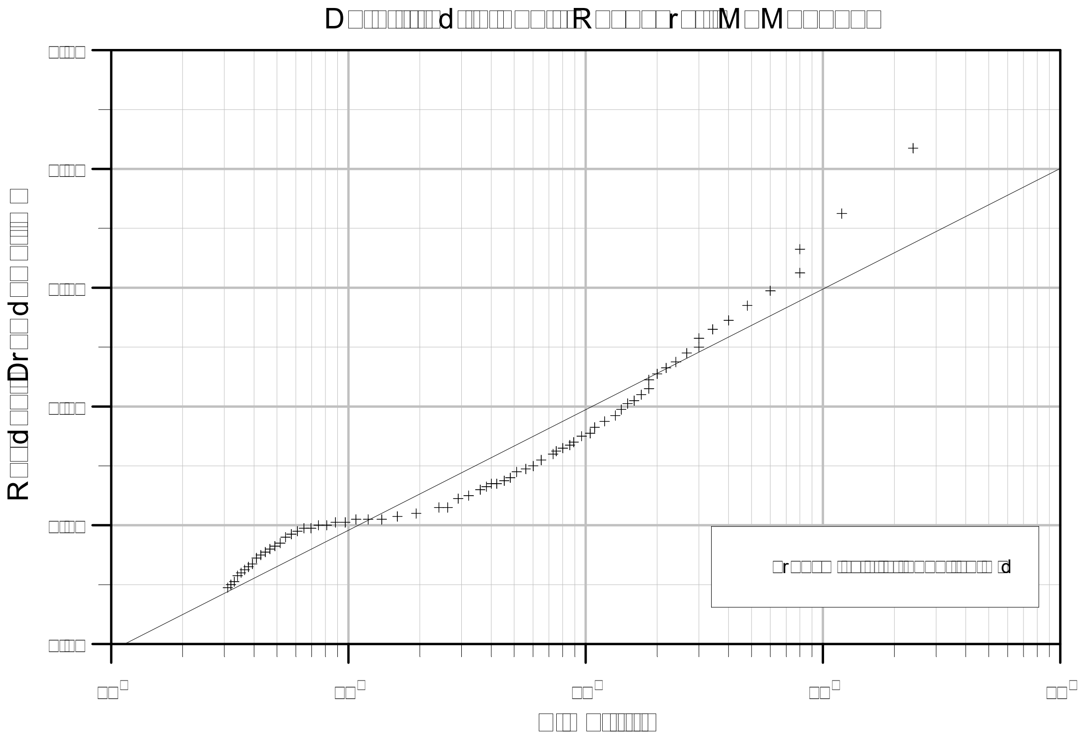


Figure 40: Theis Recovery Analysis – MPM2009_7

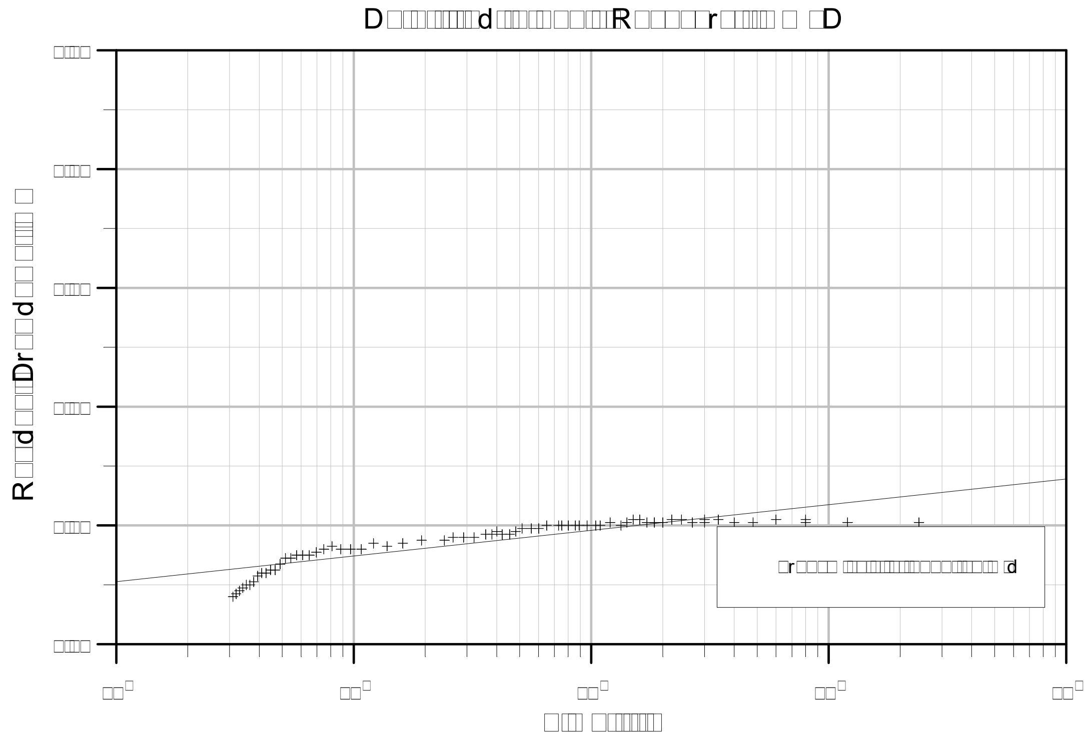


Figure 41: Theis Recovery Analysis – GW6D

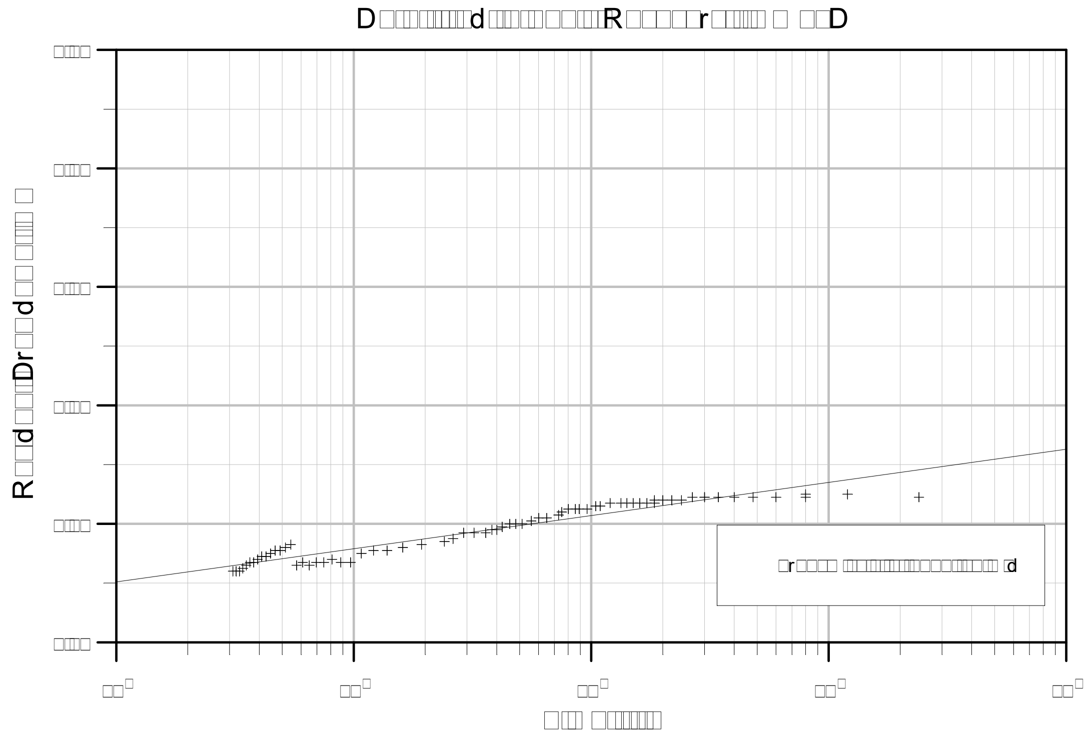
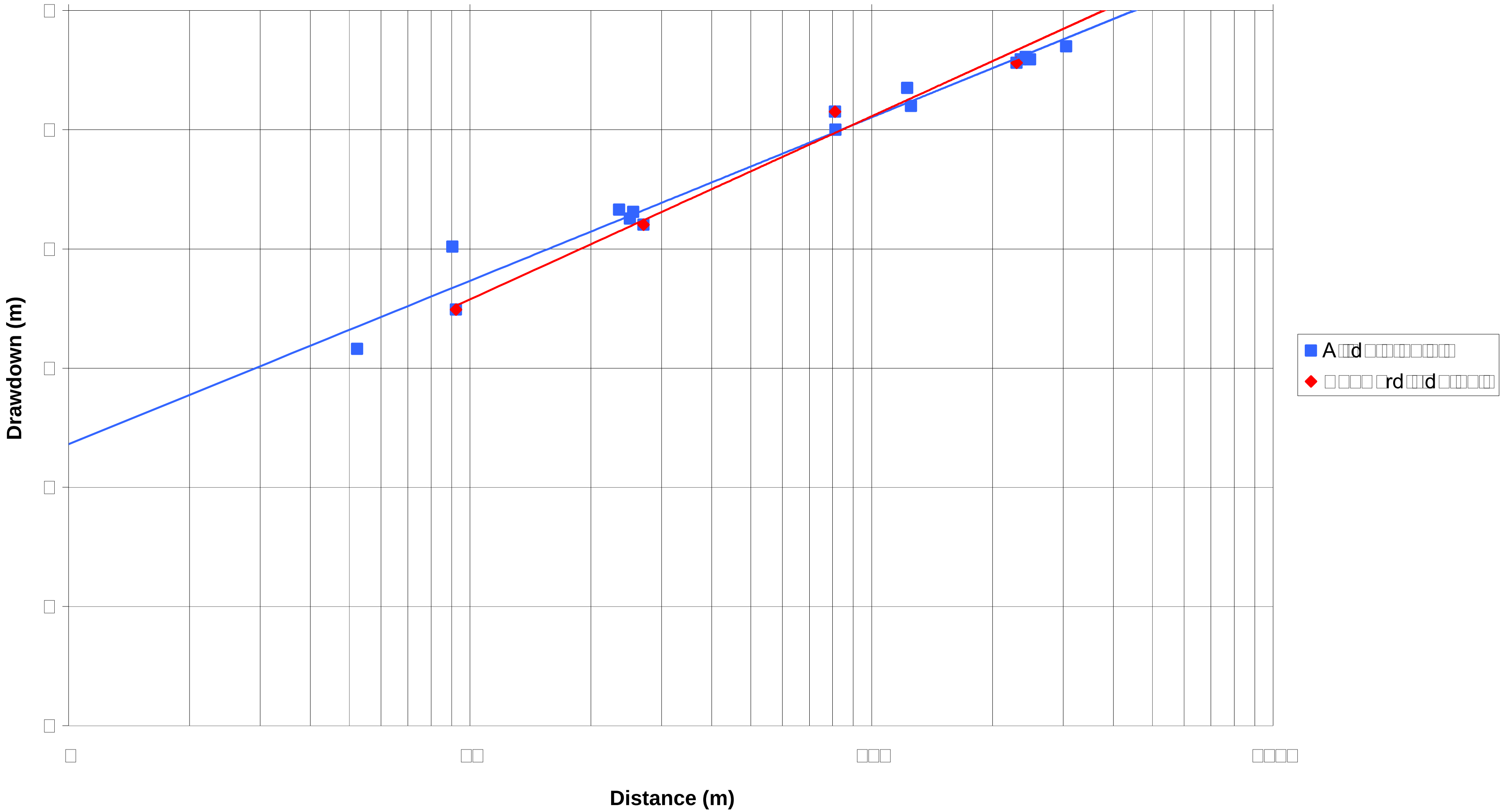
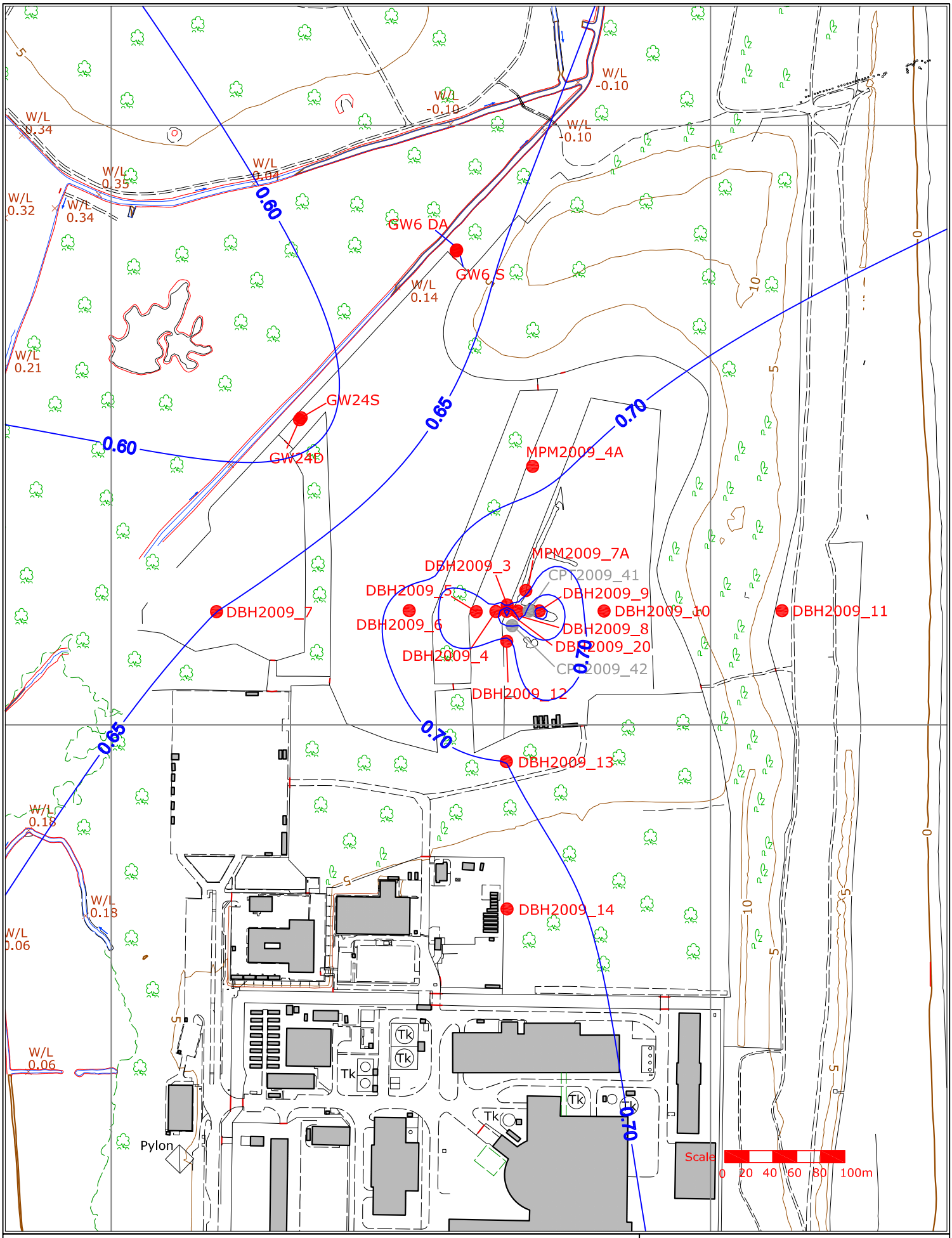


Figure 42: Theis Recovery Analysis – GW24D

Figure 43: Distance Drawdown Plot





Notes:
1. Water level contours shown in mOD
2. Based on readings taken at 00:02 03/02/2011

Project: Sizewell Pumping Test		
Title: Water Level Contours - Prior to Test		
Drawing No:Figure 44	Rev: 0	By: QR
Scale: 1:4000@A4	Date: 05/04/11	Chk: GH

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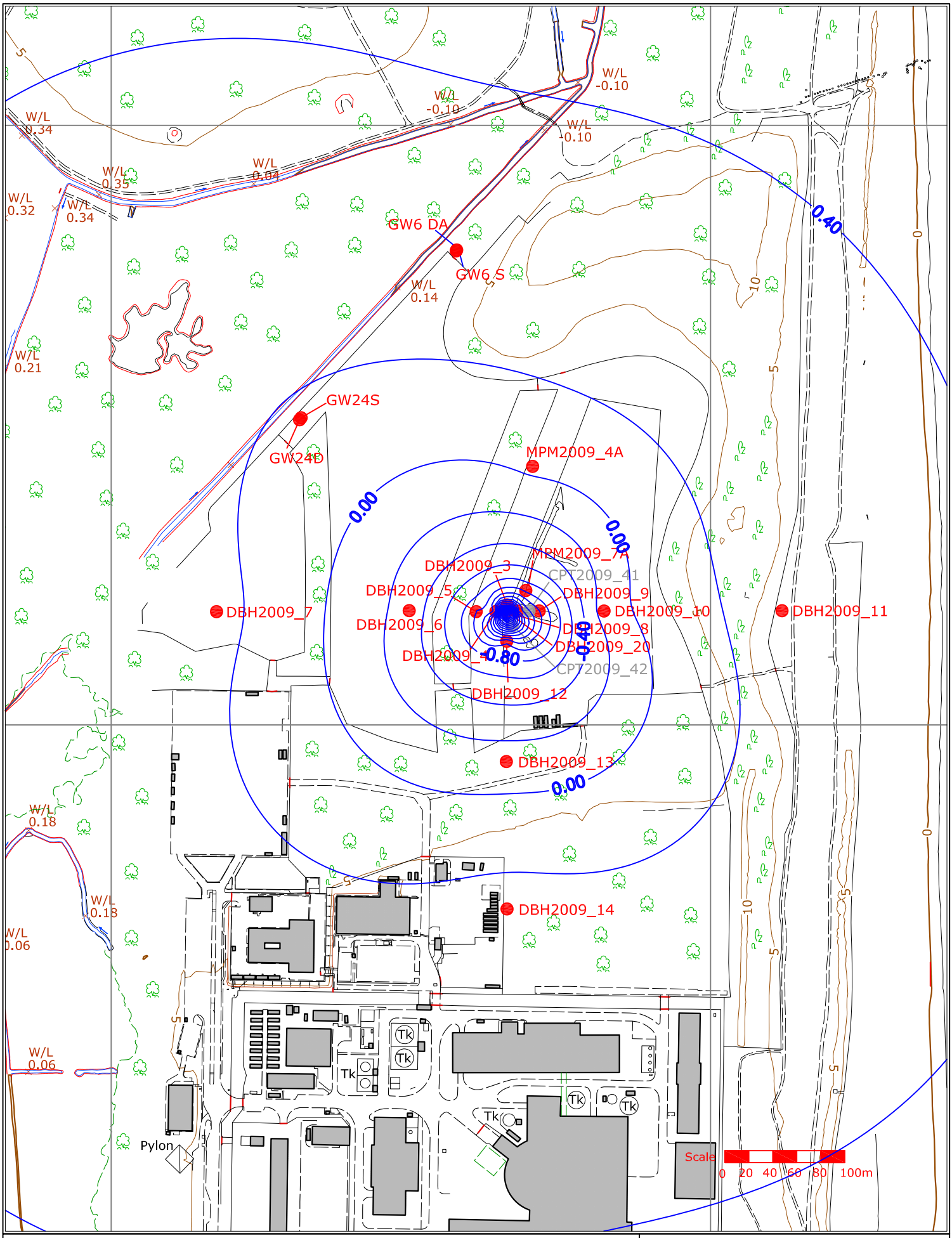
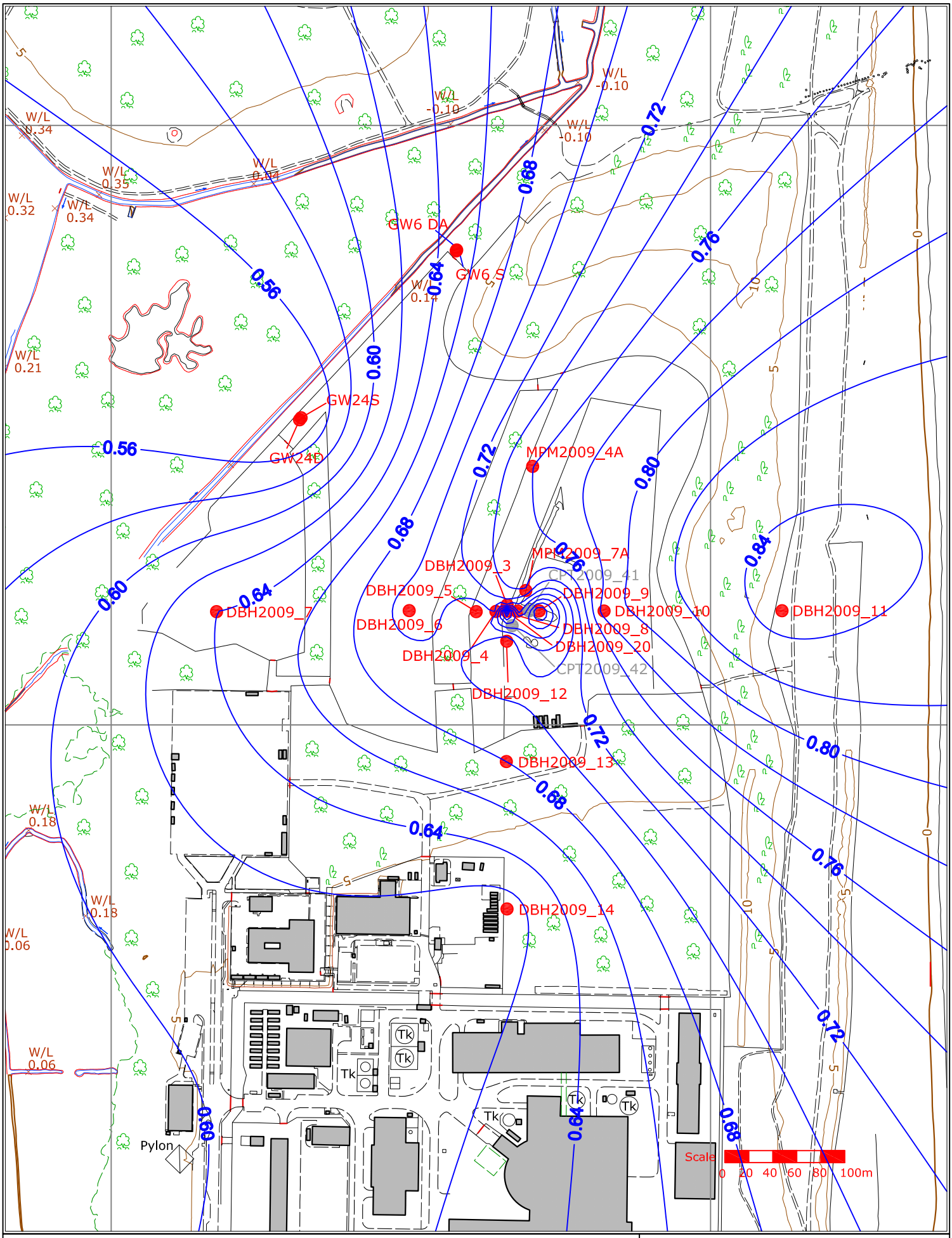


Notes:
1. Water level contours shown in mOD
2. Based on readings taken at 05:45 13/02/2011

Project: Sizewell Pumping Test		
Title: Water Level Contours - During Test		
Drawing No:Figure 45	Rev: 0	By: QR
Scale: 1:4000@A4	Date: 04/04/11	Chk: GH

WJ GROUNDWATER LIMITED



Notes:
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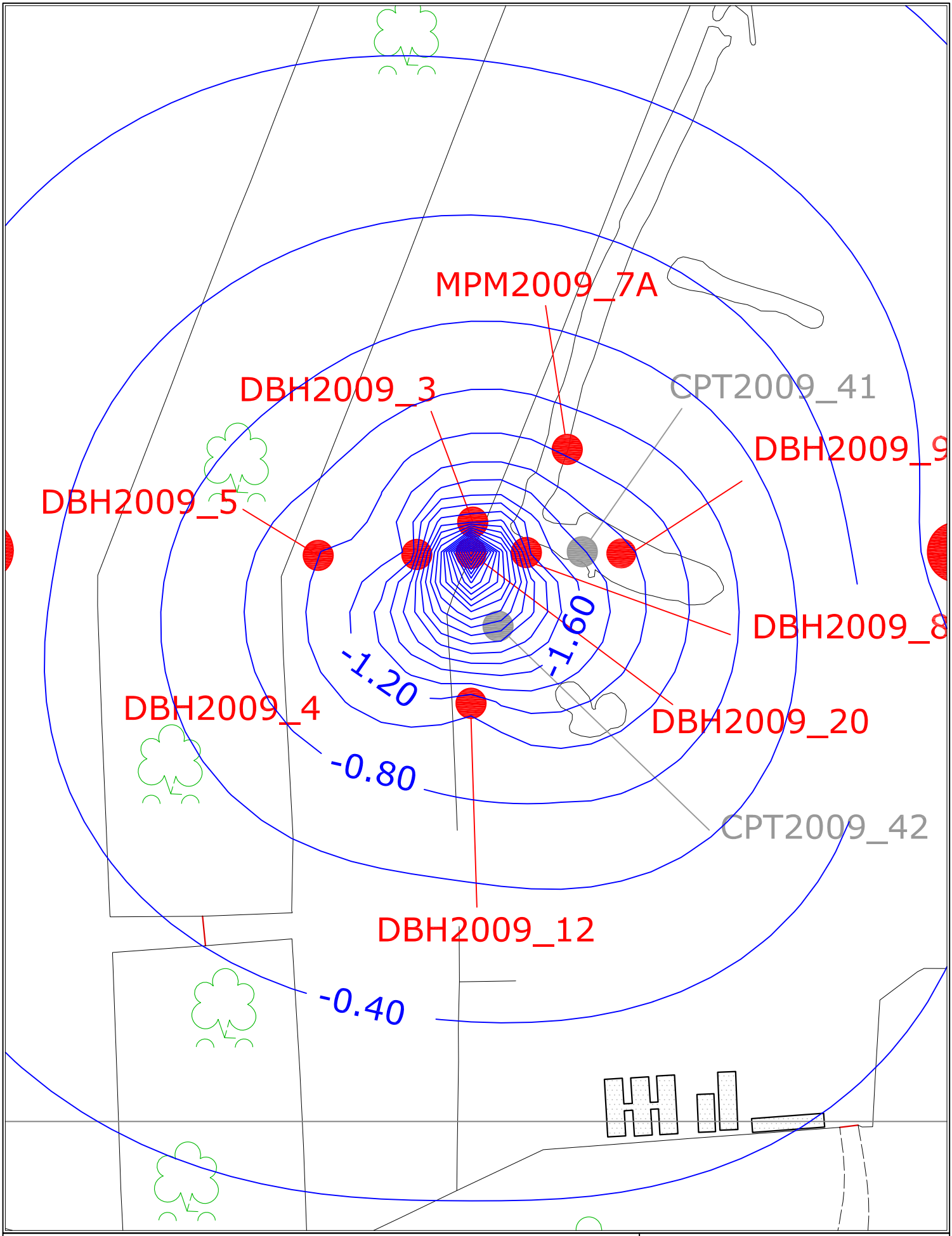
Project: Sizewell Pumping Test		
Title: Water Level Contours - After Test		
Drawing No:Figure 46	Rev: 0	By: QR
Scale: 1:4000@A4	Date: 04/04/11	Chk: GH

WJ GROUNDWATER LIMITED



Notes:
1. Water level contours shown in mOD
2. Based on readings taken at 05:45 13/02/2011

Project: Sizewell Pumping Test		
Title: Water Level Contours - During Test		
Drawing No:Figure 47	Rev: 0	By: QR
Scale: 1:800@A4	Date: 04/04/11	Chk: GH

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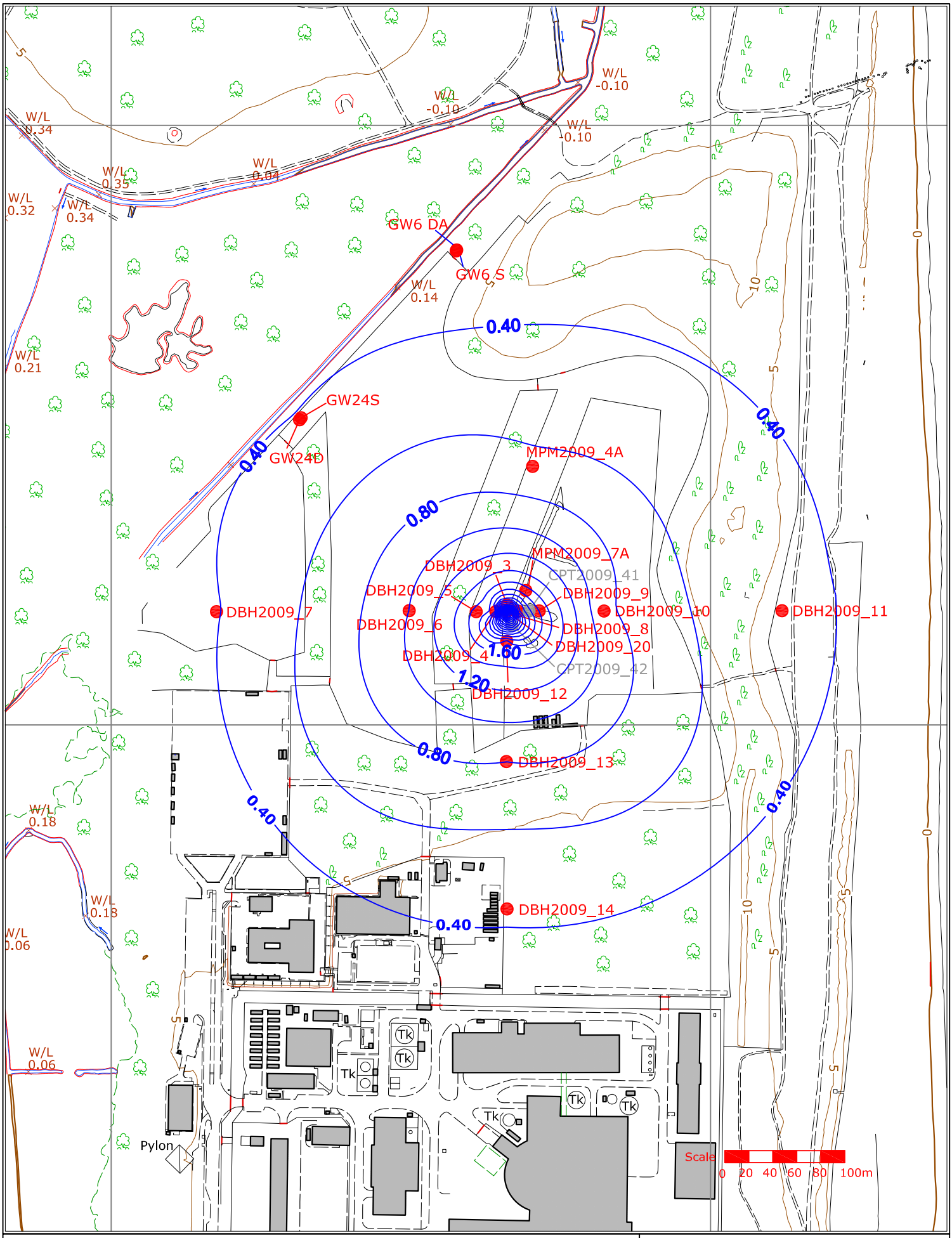
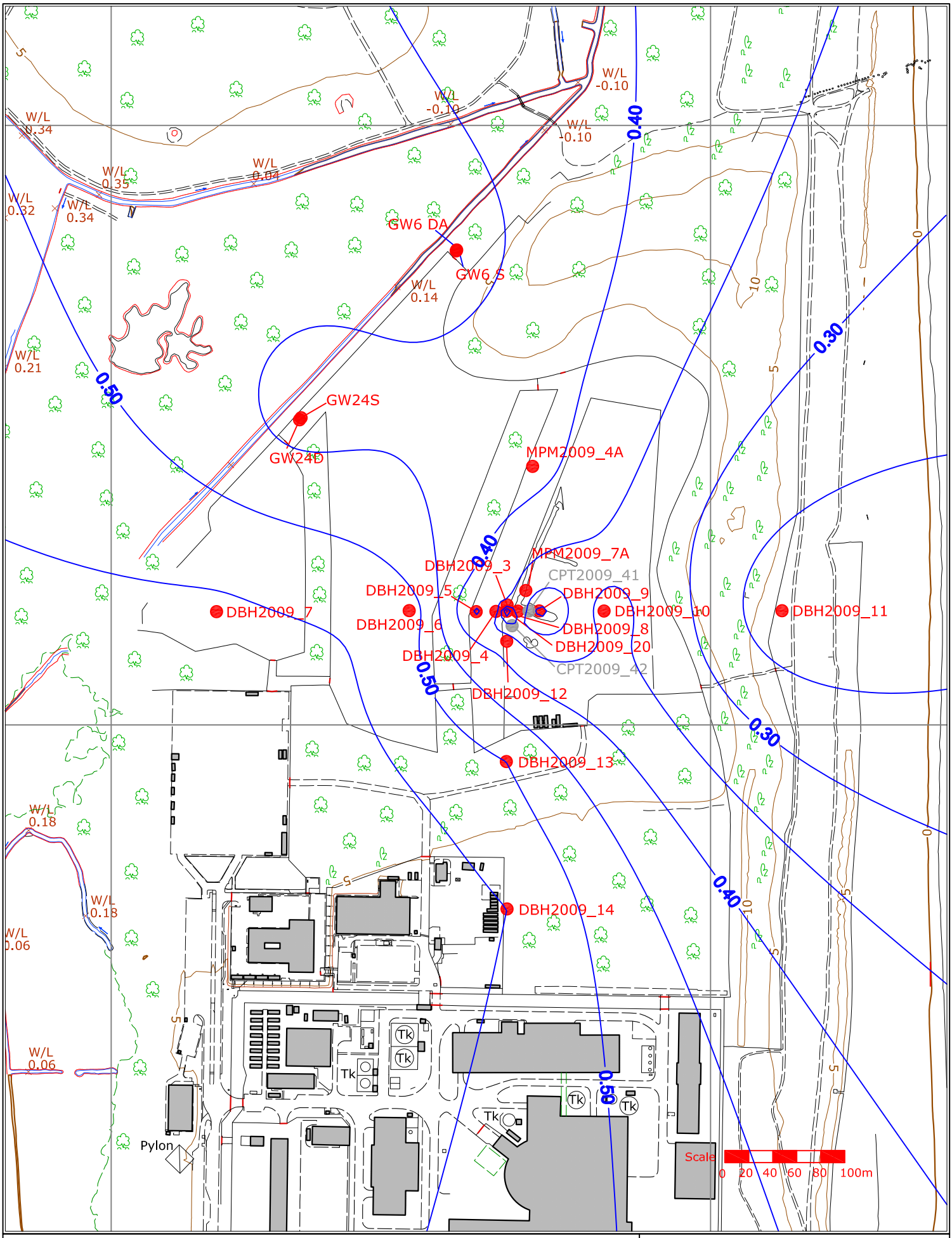


Notes:
1. Water level contours shown in mOD
2. Water level drawdown calculated based on readings taken at 00:02 03/02/2011 and at 05:45 13/02/2011

Project: Sizewell Pumping Test		
Title: Drawdown Contours - During Test		
Drawing No:Figure 48	Rev: 0	By: QR
Scale: 1:4000@A4	Date: 04/04/11	Chk: GH

WJ GROUNDWATER LIMITED



Notes:
1. Water level contours shown in mOD
2. Based on readings taken at 19:15 21/02/2011

Project: Sizewell Pumping Test		
Title: Water Level Contours - Low Tide		
Drawing No:Figure 49	Rev: 0	By: QR
Scale: 1:4000@A4	Date: 07/04/11	Chk: GH

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Figure 50: Temperature

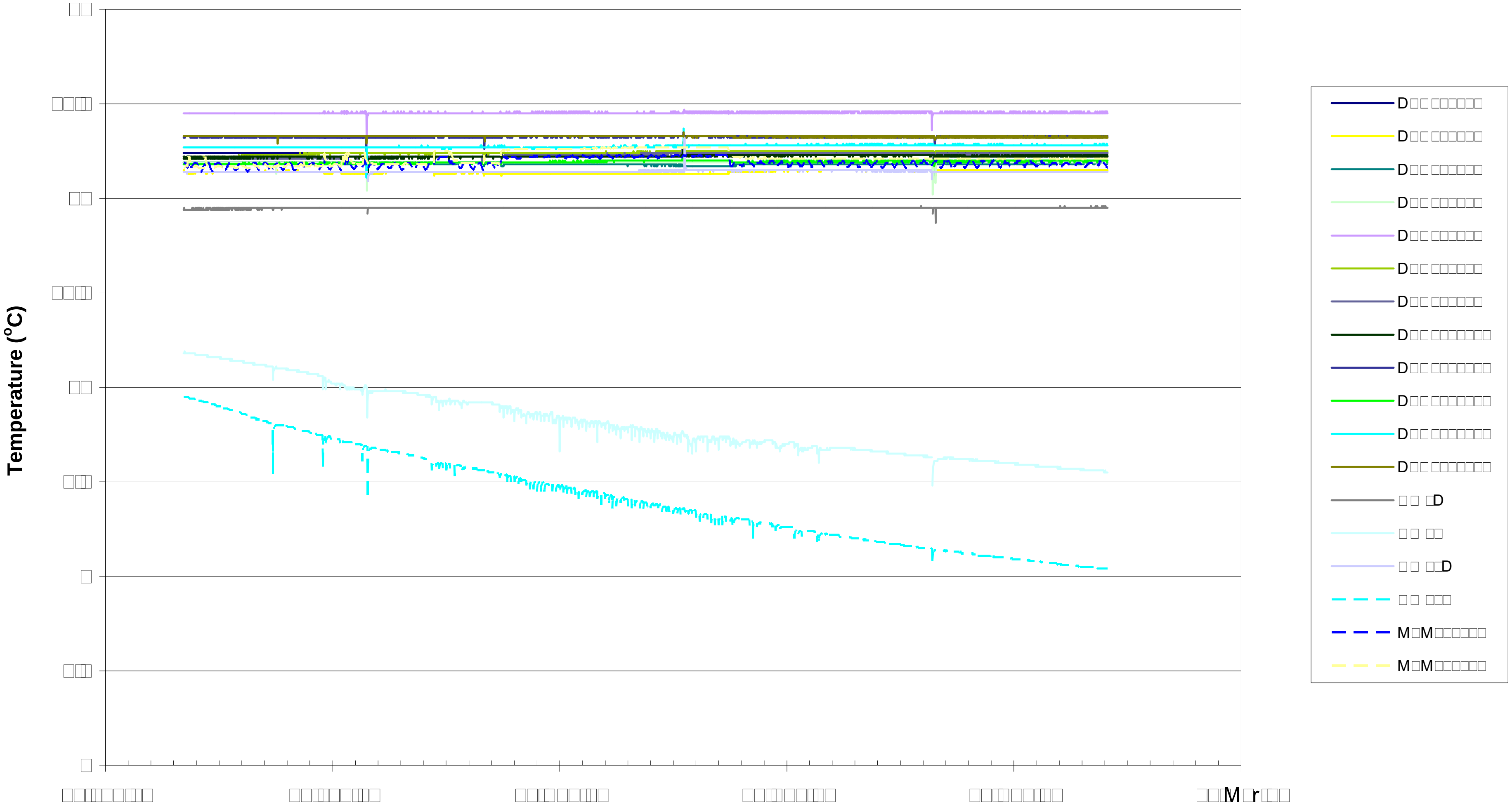


Figure 51: Electrical Conductivity

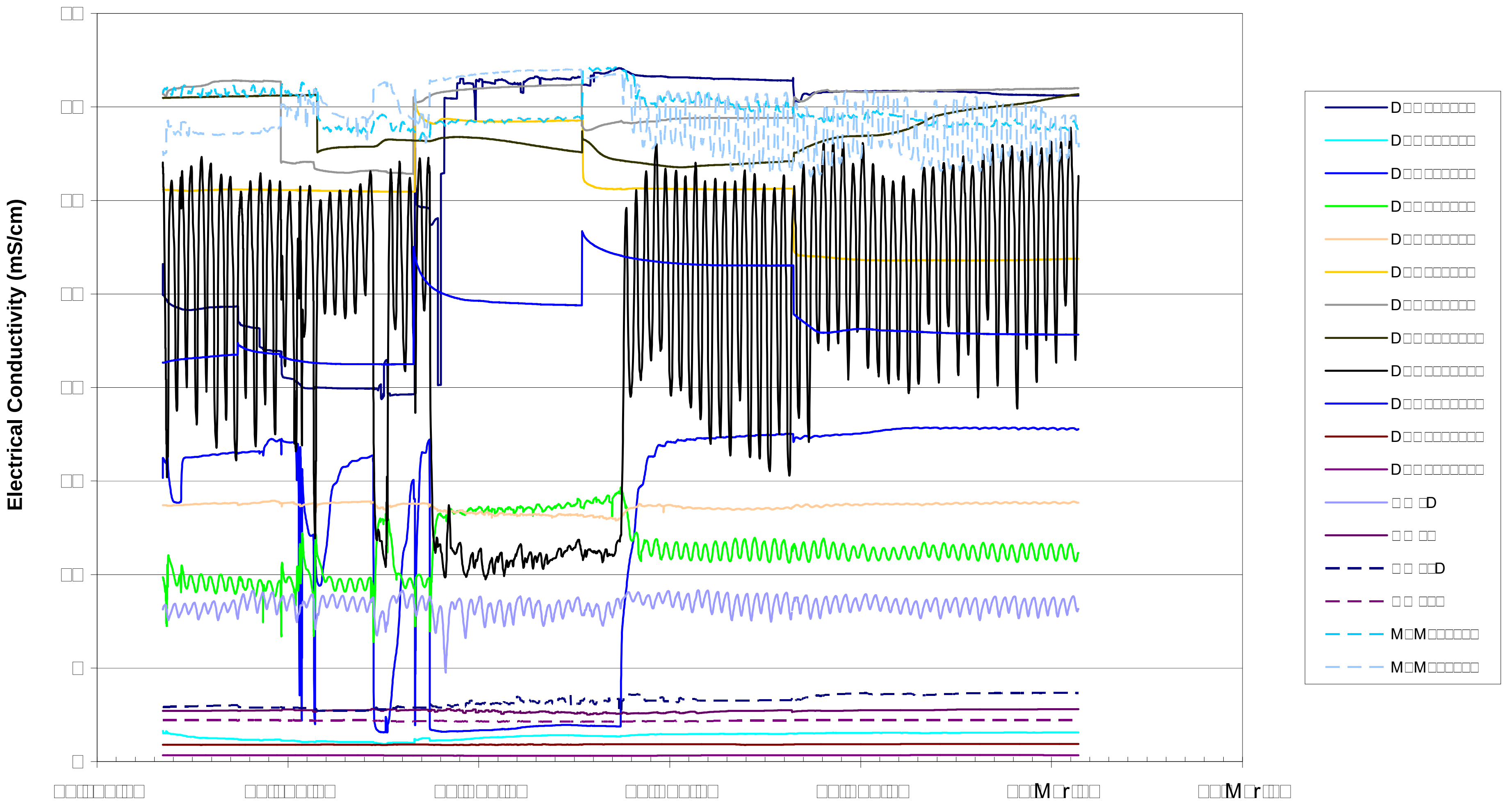
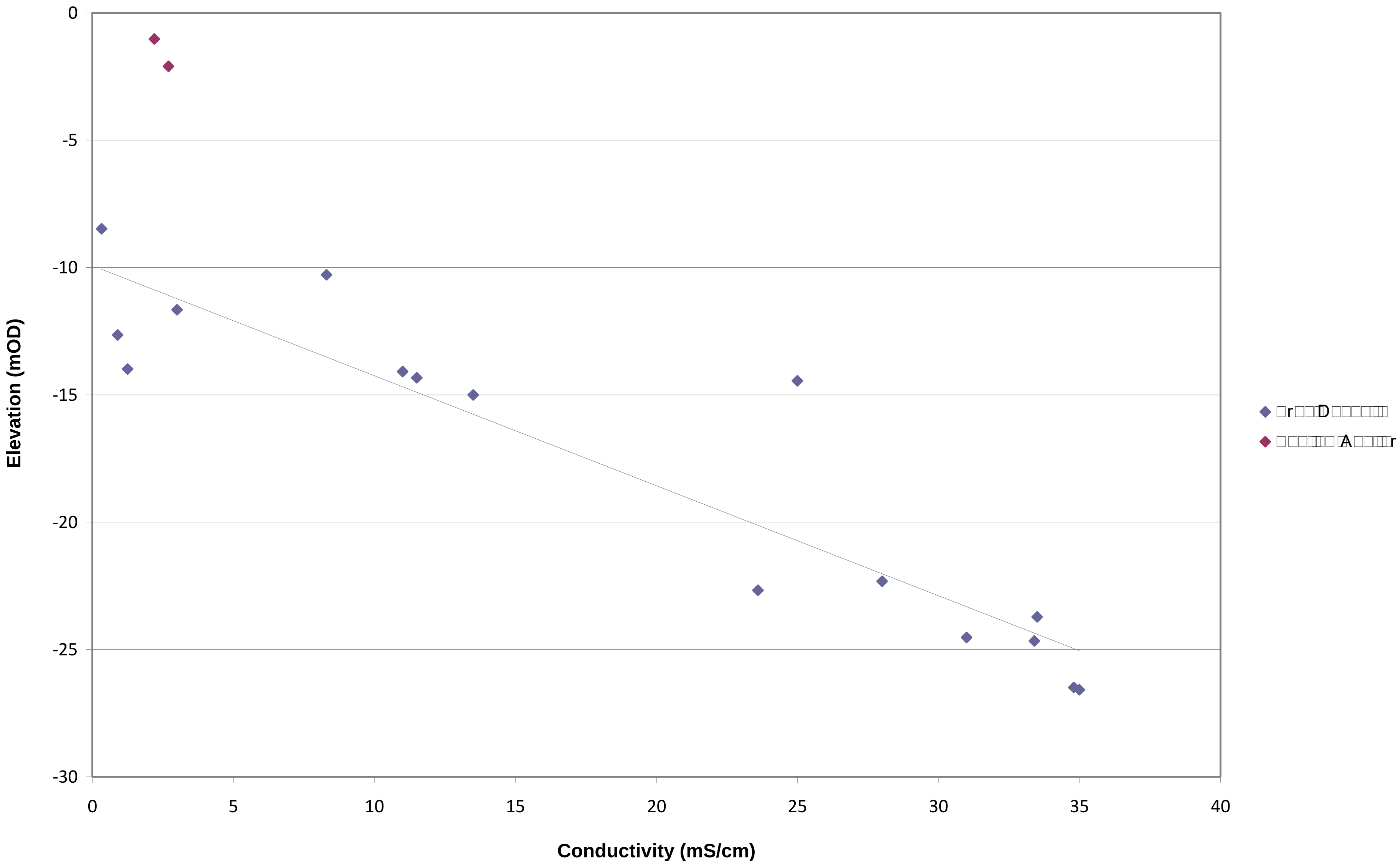


Figure 52: Electrical Conductivity vs. Elevation



Appendix F – Ground Investigation Factual Reports

Structural Soils 2009

BRITISH ENERGY LIMITED

FACTUAL REPORT

on

SUPPLEMENTARY GROUND

INVESTIGATION

at

PROPOSED NUCLEAR

DEVELOPMENT AT SIZEWELL 'C'

MARCH 2009

REPORT NO 722201

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DOCUMENT ISSUE RECORD

Contract No:	722201
Client:	British Energy Limited
Contract:	Proposed Nuclear Development at Sizewell 'C'
Document:	Factual Ground Investigation Report

Prep[redacted]Wild

App[redacted]R Handcock

Date[redacted]arch 2009

REVISION RECORD

Revision	Date	Description	Prepared by

STRUCTURAL SOILS LIMITED
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1 INTRODUCTION

This investigation was carried out on the instructions of Royal Haskoning UK Limited and on behalf of British Energy Limited. The purpose of the work was to investigate ground conditions at the proposed nuclear development at Sizewell 'C', and provide high quality samples of the alluvial clay and peat deposits for detailed logging, geotechnical and chemical (environmental) testing. The data obtained will be used to inform the further assessment of the alluvial materials for heathland creation and to provide additional geotechnical data to facilitate the construction and design of deep excavations and other earthworks.

This report details the work carried out both on site and in the geotechnical and chemical testing laboratories; it contains the exploratory hole logs and laboratory testing results.

The ground investigation has been carried out using cable percussive techniques of soft ground boring in general accordance with the recommendations of BS5930: 1999 *Code of Practice for Site Investigations* and with BS10175 *Investigation of Potentially Contaminated Sites: Code of Practice* (2001). Whilst every attempt is made to record full details of the strata encountered in the exploratory holes, techniques of hole formation and sampling will inevitably lead to disturbance, mixing or loss of material in some soils and rocks.

A comprehensive desk study, other than an inspection of geological maps, has not been requested or undertaken as part of this investigation.

All information given in this report is based on the ground conditions encountered during the site work, and on the results of laboratory and field tests performed during the investigation. However, there may be conditions at the site which have not been taken into account, such as unpredictable soil strata, contaminant concentrations, and water conditions between or below exploratory holes. It should be noted that groundwater levels usually vary due to seasonal and/or other effects and may at times differ to those measured during the investigation. This report does not consider ecological impacts (eg bats) or botanical risks (eg Japanese knotweed). It is recommended that these are considered as part of the assessment of development constraints for the site.

This report was prepared by Structural Soils Ltd for the sole and exclusive use of British Energy Limited in response to particular instructions. Any other parties using the information contained in this report do so at their own risk and any duty of care to those parties is excluded.

2 SITE DESCRIPTION

2.1 Location and Topography

The site is located to the north of Sizewell 'B' power station, approximately 1.5km to the northeast of the town centre of Leiston, Suffolk. The British National Grid Reference of the site is TM 473 641. The site is an irregular shape, approximately 700m north to south and 500m east to west in size at its maximum points (see exploratory hole location plan in Appendix A).

The site is generally flat and low-lying, with a covering of grass. Exceptions to this are in the south, where the ground is undulating and slopes up at an approximate angle of 5 degrees towards the boundary with the existing Sizewell 'B' power station. This rises to an elevated platform adjacent to the boundary fence in the south west. A 5m or so high bund has been formed along the eastern flanks, parallel to the existing coastal fringe sand dunes. The southern area and eastern bund have been planted with fir trees and gorse. The area to the north of the site is characterised by native trees and bushes.

Two small, rectangular shaped, wooded areas running north to south are located within the main grassed area of the site. The wooded area to the east and adjacent grassed area was found to be waterlogged, indicating poor drainage and making access to this part of the site difficult.

The site is bounded to the south by the existing Sizewell 'B' power station, to the east by the coastal fringes of the North Sea, to the north by the Minsmere and Walberswick Special Area of Conservation, Special Protection Area, SSSI and a Ramsar Site and to the west by the Sizewell Marshes SSSI.

The nearest surface water feature is a drainage ditch running parallel and adjacent to the western boundary of the site.

2.2 Geology

The Geological Survey Map of Great Britain (Saxmundham, sheet 191, scale 1:50,000) shows the site to be underlain by Made Ground overlying drift deposits of alluvium. In the northeast of the site this is shown as comprising marine deposits of mud with a tidal flat depositional environment and in the southwest as peat. These materials overlie the Crag Group of the Quaternary described as fine-grained buff to brown, locally shelly, micaceous sands.

2.3 Hydrogeology

The Environment Agency (EA) groundwater vulnerability maps (East Suffolk, sheet 33, scale 1:100,000) shows the site location as overlying a Minor aquifer (variably permeable).

The soils directly beneath the site have been classed as having intermediate leaching potential (I2), these being soils that can possibly transmit non-adsorbed, or weakly adsorbed pollutants and liquid discharges, but are unlikely to transmit adsorbed pollutants.

3 FIELDWORK

46 no. cable percussion boreholes (BH01 to BH40), were completed between 6 and 29 October 2008 at locations shown on the Exploratory Hole Location Plan in Appendix A. The scope of investigation and choice of investigation equipment was decided by Royal Haskoning UK Limited. The positions were selected by and set out by Royal Haskoning UK Limited.

The exploratory holes were logged by an engineer in general accordance with the recommendations of BS5930: 1999 including amendment 1 (2007). Detailed descriptions, together with relevant comments, are given in the logs included in Appendix B. Sampling and in-situ testing details were specified by Royal Haskoning UK Limited. Geotechnical samples were taken and returned to the laboratory for classification and potential testing. Groundwater samples were taken for each successive groundwater strike.

The boreholes were drilled using a cable tool percussion drilling rig and were between 150mm and 200mm diameter. The depths of the boreholes were up to 17.00m. Standard Penetration Tests were carried out at regular intervals in accordance with BS1377: Part 9: 1990: 3.3. Test results are given in detail in tabular format on the Summary of Standard Penetration Tests in Appendix B, and also summarised on the borehole logs. Where a Standard Penetration Test exceeded 50 blows, then the blow count for each seating and test drive is shown along with the penetration (mm) achieved for this test. No extrapolation of the test results has been undertaken.

Where the alluvium was encountered, continuous undisturbed sampling was undertaken in each of the boreholes. Various sampling methods were trialled on site to give the best sample quality and recovery in the range of deposits present.

The most effective method was using a drive sampler to drive a 100mm diameter by 450mm long sample tube into the base of the borehole. The tube was driven by a percussive hammer and on completion of driving was pulled from the borehole containing an undisturbed sample. This method was undertaken in 22 of the 26 boreholes where alluvium was encountered. The undisturbed U100 samples were extruded, photographed and logged by an Engineer on site in general accordance with the recommendations of BS5930. The photographs are presented in Appendix B.

An alternative method for continuous undisturbed sampling of the alluvium was undertaken along the western boundary of the site in four of the boreholes (BH7, BH36, BH39 and BH40). A thin-walled aluminium piston sampling tube of 100mm diameter by 900mm length was fitted to a shelby tube drive head and lowered on drill rods to the base of the borehole. A hydraulic

ram was attached to the top of the casing and the tube was driven by hydraulic pressure into the alluvium. The advancement of penetration was able to be measured from the surface, giving greater control of the sampling system. The sample tube remained in the ground for 10 minutes after penetration, it was then rotated carefully for two revolutions and withdrawn from the borehole.

On completion combined water/gas monitoring standpipes were installed within selected boreholes, the design was decided by Royal Haskoning UK Limited. The 50mm diameter standpipes were installed in four boreholes and 19mm standpipes in 16 boreholes. The remaining boreholes were backfilled with bentonite cement pellets.

Following the installation groundwater levels and gas monitoring was undertaken on a daily basis throughout the period of the site works. An infrared gas meter was used to measure concentrations of carbon dioxide (CO_2), methane (CH_4) and oxygen (O_2) in percentage by volume, whilst hydrogen sulphide (H_2S) and carbon monoxide (CO) were recorded in parts per million. Initial and steady state concentrations were recorded. A separate flow meter was used to measure borehole flow rates (initial and steady state) in litres per hour (l/hr). In addition the atmospheric pressure before and during monitoring, together with the weather conditions were recorded. All measurements taken are given in Appendix E.

Twenty one falling head permeability tests were undertaken in selected monitoring wells in accordance with BS5930: part 4 (1999) between 24 and 26 November 2008. The test results are present in tabular and graphical format in Appendix F.

Groundwater was not encountered in BH30 and BH34, hence soakaway tests were undertaken in these boreholes in general accordance to recommended practice given in BRE Digest 365. Due to time or other constraints, three fillings of each position were not undertaken. The results are contained in Appendix F.

4 LABORATORY TESTING

Samples for potential geotechnical testing were returned to the company's laboratory in Bristol and those for potential contamination testing were sent to UKAS accredited chemical testing laboratories. Geotechnical and contamination tests were scheduled by Royal Haskoning UK Limited.

The following laboratory tests were carried out on samples unless indicated otherwise generally in accordance with BS1377: 1990, *Methods of test for soils for civil engineering purposes*, parts 1 to 8. Where non-standard procedures have been undertaken, this will be recorded on the report sheet. The results are reported in tabular and/or graphical form included as Appendix C of this report.

4.1 Moisture Content

There were 100 moisture content tests undertaken using the oven-drying method in accordance with BS1377: Part 2: 1990. The results are tabulated below the Plasticity Chart (in accordance with BS5930: 1999) and the Summary of Classification Tests.

4.2 Liquid Limit, Plastic Limit and Plasticity Index

There were 98 liquid and plastic limit tests performed in accordance with BS1377: Part 2: 1990. The results are plotted on the Plasticity Chart and are tabulated below the chart (in accordance with BS5930: 1999) and in the Summary of Classification Tests.

4.3 Particle Size Distribution

There were 39 particle size distribution tests undertaken by sieving in accordance with BS1377: Part 2: 1990. The results are represented graphically as particle size distribution curves and in tabular format.

4.4 One - Dimensional Consolidation Test

There were 25 one-dimensional consolidation tests undertaken in accordance with BS1377: Part 5: 1990. There were 5 loading and 2 unloading stages undertaken on each sample with pressures of between 25kPa and 800kPa.

The results are represented as voids ratio e/log pressure together with values of the coefficients of compressibility (m_v) and consolidation (c_v).

4.5 Unconsolidated Undrained Triaxial Compressive Shear Strength Tests (without the measurement of pore pressure)

There were 20 single stage unconsolidated undrained triaxial compression tests without the measurement of pore pressure undertaken in accordance with BS1377: Part 7: 1990. Each test was carried out on a single specimen nominally 100mm in diameter and 200mm in length. The confining pressures ranged between 25kPa and 200kPa.

4.6 Hand Vane Tests

The undrained shear strengths of 28 undisturbed samples were measured directly using a hand vane. The results are tabulated in the Summary of Laboratory Hand Vane Test Results.

4.7 Chemical Analyses

There were 23 soil samples tested to determine their pH values and aqueous extract sulphate contents in accordance with BS1377: Part 3:1990 clause 5.

There were 69 organic determinations undertaken in accordance with BS1377: Part 3: 1990.

There were 37 loss of ignition tests undertaken in accordance with BS1377: Part 3: 1990.4.23.

4.8 Environmental Testing

There were 27 soil samples analysed in accordance with UKAS/MCERTS standards for Waste Characterisation (Total Soil Analysis) Testing, which included the following determinands; arsenic, cadmium, chromium, lead, mercury, selenium, copper, nickel, zinc, vanadium, boron, volatile organic compounds (VOC), semi-volatile organic compounds excluding PAH, polycyclic aromatic hydrocarbons (PAH), total petroleum hydrocarbons (TPH) (aromatic/aliphatic split), BTEX compounds (speciated), PCB, asbestos screen, phenols, pesticides (combined organochlorine and organophosphorus), cyanide, sulphur, pH, fraction organic carbon, loss on ignition.

There were 27 samples also analysed for Waste Characterisation (Total Leachate) Testing, which included the following determinands; arsenic, cadmium, chromium, lead, mercury, selenium, copper, nickel, zinc, vanadium, boron, selenium, volatile organic compounds (VOC), semi-volatile organic compuunds excluding PAH, polycyclic aromatic hydrocarbons (PAH), total petroleum hydrocarbons (TPH) (aromatic/aliphatic split), BTEX compounds (speciated), phenols, pesticides (combined organochlorine and organophosphorus), cyanide, sulphate, pH.

There were 33 samples also analysed for Peat Characterisation Test Suite A, which included the following determinands; available phosphorus, available potassium, available magnesium, calcium (total), sodium (total), sulphur (total), iron (total), magnesium (total), chloride (total), sulphate, pH, loss on ignition, conductivity.

There were 18 samples also analysed for Peat Characterisation Test Suite B, which included the following determinands; arsenic (total), cadmium (total), chromium (total), lead (total), mercury (total), copper (total), nickel (total), zinc (total), calcium carbonate, pyritic iron.

There were 17 samples also analysed for electrical conductivity, chloride, sodium, pH, loss on ignition.

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[redacted]

J Wild BSc (Hons)

[redacted]

A R Handcock MA CEng MICE CGeol FGS

5 REFERENCES

5.1 BS 5930:1999 *Code of Practice for Site Investigations: amendment 1* (2007).

5.2 BS 10175: 2001 *Investigation of potentially contaminated sites: Code of practice*.

5.3 Geological Survey of Great Britain, North London, sheet 270 scale 1:50,000.

5.4 NRA Groundwater Vulnerability Map East Suffolk sheet 33 scale 1:100,000

5.5 BS 1377:1990 *Methods of Test for Soils for Civil Engineering Purposes*.

5.6 BS 5930:1999 *Code of Practice for Site Investigations.*

APPENDIX A

(i) Site Location Plan

(ii) Exploratory Hole Location Plan

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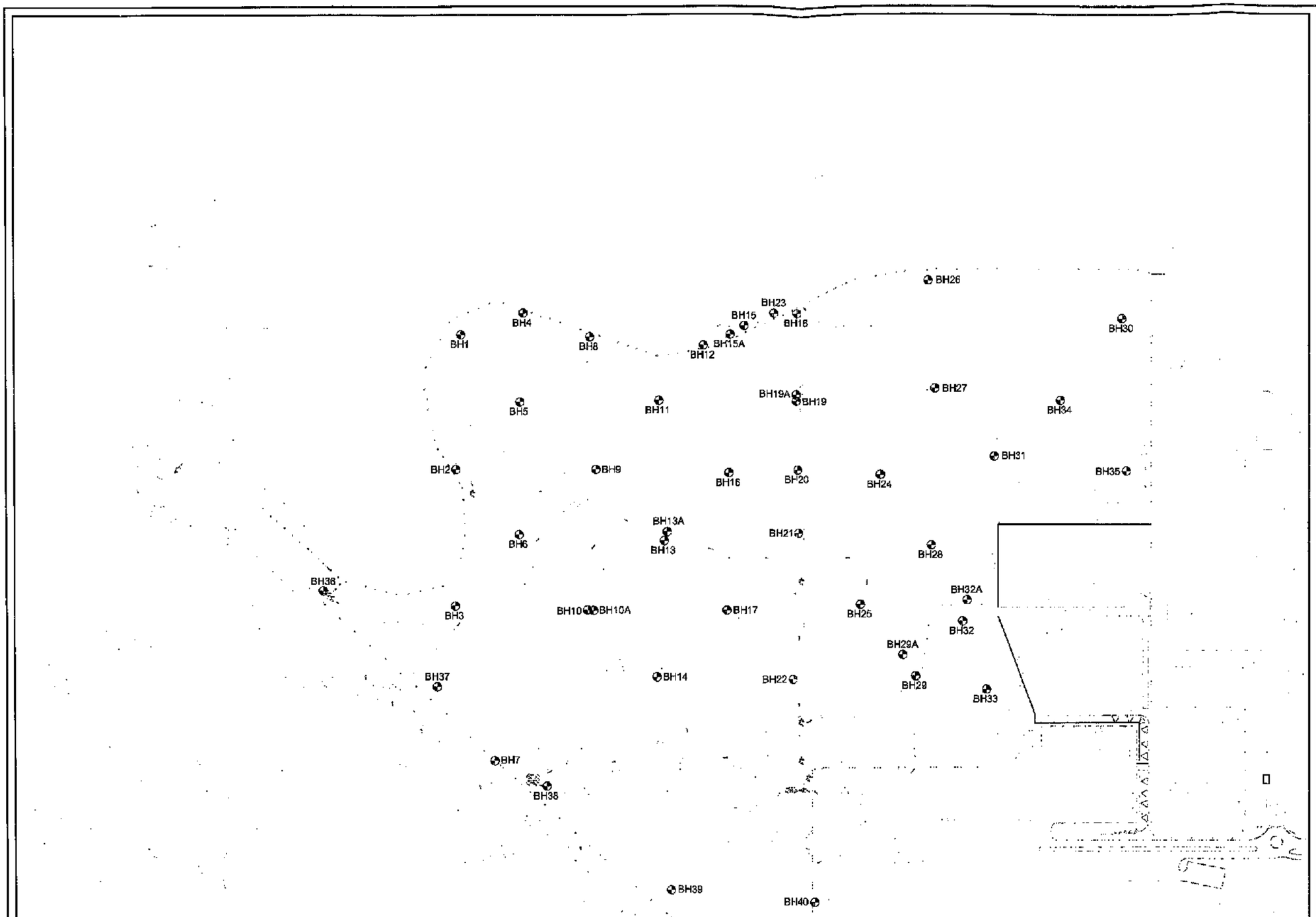
CLIENT: British Energy Ltd.

PROJECT: Sizewell 'C' - Supplementary Ground Investigation

TITLE: SITE LOCATION MAP

REV.	DATE	DESCRIPTION	BY	CHD.	APR.
00	17.02.2009	-	CPM	JW	-

DIMENSION	SCALE	ORIGIN SIZE	GRID REFERENCE	JOB NO.	DRAWING STATUS	FIGURE
m	1:50 000	A4	TM 473 641	722201	-	Figure 1



LEGEND

BH Borehole Location

N

REV.	DATE	DESCRIPTION	BY	CHD.	APR.
00	17.02.2009	-	CPM	JW	-

DIMENSION	SCALE	ORIGIN SIZE
m	1:300	A3

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CLIENT

British Energy Ltd.

PROJECT

Sizewell 'C' - Supplementary Ground Investigation

TITLE

EXPLORATORY HOLE LOCATION PLAN

JOB NO	FIGURE
722201	Figure 2

DRAWING STATUS	REV.
-	00

0 4 8 12 16m

APPENDIX B

(i) Borehole Logs

(ii) Summary of SPT tests

(iii) Borehole Photographs

GrfcTextLEGEND 14/03/2006 15:33:03

KEY TO EXPLORATORY HOLE LOGS

SAMPLING

B	Bulk disturbed sample.
BLK	Block sample.
C	Core sample.
CBR	CBR mould sample.
CS	Core sample taken from rotary core for laboratory testing.
D	Small disturbed sample.
J	Glass jar sample.
LB	Large bulk disturbed sample (for earthworks testing).
P	Undisturbed pushed piston sample - 102 mm diameter, 1000 mm long.
TW	Thin walled push in sample.
U	Undisturbed driven tube sample - 102 mm diameter, 450 mm long. Number of blows indicated.
VL	Vial sample.
W	Water sample.
U+, P+	No recovery in undisturbed sample.

IN-SITU TESTING

SPT	Standard Penetration Test using split spoon sampler. ($SPT_{(NR)}$ indicates 'No Sample Recovery').
$SPT_{(c)}$	Standard Penetration Test using a solid 60 degree cone.

The N Value is the number of blows required to complete a test drive of 300 mm after a seating drive of 150 mm or 25 blows.
Where the full test drive is not completed, a linearly extrapolated N value is given and suffixed by a '*' character.
'NP' denotes No Penetration in the Test Drive.

HP	Hand Penetrometer Test. Value given as shear strength cu, in kPa.
$V_{(Cu)}$	Field Vane Test. Peak value given as shear strength cu, in kPa.
$V_{(Cr)}$	Field Vane Test. Residual value given as shear strength cr, in kPa.
G	Gas Test
PID	Photo Ionisation Detector Results, in ppm.

DRILLING RECORDS

W	Water flush returns.	Core	Hole progressed by rotary coring techniques.
TCR	Total Core Recovery, %.	O/H	Hole progressed by rotary percussive drilling techniques.
SCR	Solid Core Recovery, %.	W/S	Hole progressed by dynamic drilling techniques.
RQD	Rock Quality Designation, %.		
If	Fracture spacing, mm. Where variable, the minimum, average and maximum spacing may be quoted. 'NI' denotes non intact core. 'NA' denotes not applicable.		

WATER COLUMN SYMBOLS

First water strike, second water strike etc.

Standing water level following first strike, standing water level following second strike etc.

Seepage.

Standing water level recorded at documented date.

INSTRUMENTATION SYMBOLS

Arisings

Gravel filter

Sand filter

Bentonite seal

Bentonite cement grout

Concrete

Solid pipe

Slotted pipe

Stopcock cover

Upstand cover

NOTES:

1. All soil and rock descriptions and legends in general accordance with BS5930:1999.
2. All lengths used to determine rock core mechanical properties taken along the centre line of the core. Obvious induced fractures have been ignored.
3. The assessment of solid core is based on lengths that show a full diameter and not necessarily a full circumference.
4. Material types divided by a broken line (- - -) indicates an unclear boundary.

The data on any sheet showing the AGS icon is available in the AGS format.

AGS

STRUCTURAL SOILS

BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH1**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **09.10.08**	**2.21**	**E:647469.0 N:264278.4**	**1** of **2**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
0.20	1	D				MADE GROUND: Grass over dense orangish brown fine to medium SAND with rare fine gravel sized shell fragments.			
0.50-1.00	1	B						(1.50)	
1.20-1.65	1	SPT(c)	N=33						
1.20	2	D					0.71	1.50	
1.70	3	D		1		POSSIBLE MADE GROUND: Dense grey very sandy subrounded to rounded fine to coarse GRAVEL of flint and chert with fine gravel sized shell fragments.			
2.30	1	W		1		. . . ingress of water at 2.30m depth.			
2.50-3.00	2	B							
2.70	4	D						(2.80)	
3.20-3.65	2	SPT(c)	N=9			. . . becoming loose from 3.20m depth.			
3.70	5	D					-2.09	4.30	
4.30-4.75	3	SPT	N=2			Soft slightly organic grey slightly gravelly silty CLAY. Gravel is subrounded fine to coarse flint.	-2.39	4.60	
4.30-4.80	3	B							
4.30	6	D				Soft slightly organic bluish grey silty CLAY with pseudo-fibrous plant remains (up to 2mm diameter).		(0.50)	
4.80-5.25	1	$U_{(100)}$	15 blows 100% recovery	2			-2.89	5.10	
5.15		HP	c_u=50			Firm brown pseudo-fibrous PEAT with plant remains and reed fragments (up to 5mm diameter).	-3.09	5.30	
5.20	1	ES	Tubx3				-3.29	5.50	
5.45	7	D				Soft slightly organic bluish grey silty CLAY with pseudo-fibrous plant remains and reed fragments (up to 5mm diameter).			
5.50-5.95	2	$U_{(100)}$	18 blows 100% recovery			Soft becoming very soft bluish grey silty CLAY with occasional pseudo-fibrous plant remains and reed fragments (up to 5mm diameter).		(1.00)	
6.15	8	D				. . . dampness of strata from 5.50m depth.			
6.20-6.65	3	$U_{(100)}$	20 blows 100% recovery			. . . organic content decreasing with depth from 5.60m depth.	-4.29	6.50	
6.50	2	ES	Tubx3			Spongy dark brown fibrous PEAT with reed fragments (up to 10mm diameter).	-4.69	6.90	
6.85	9	D							
6.90-7.33	4	$U_{(100)}$	20 blows 100% recovery			Soft grey silty CLAY with occasional pseudo-fibrous plant remains and reed fragments increasing with depth.		(0.80)	
7.55	10	D					-5.49	7.70	
7.60-8.05	5	$U_{(100)}$	25 blows 100% recovery			Firm dark brown mottled red orange and black amorphous PEAT with occasional pseudo-fibrous plant remains (up to 2mm diameter).		(0.80)	
7.90		HP	c_u=60			. . . fine gravel sized shell fragments from 7.75m-7.80m depth.			
8.25	11	D		2		. . . no recovery within U100 sample from 8.30m-8.75m depth.	-6.29	8.50	
8.30-8.75	6	$U_{(100)}$	35 blows 0% recovery			Very loose dark grey silty fine to medium SAND. (Norwich Crag)			
8.50	2	W						(0.95)	

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth
09/10/08		2.30	2.30	200	1.80
09/10/08		8.80	5.00	200	5.25

Chiselling		
From	To	Duration (hh:mm)

General Remarks

1. Inspection pit from 0.00-1.20m depth.
2. Water added from 1.20m to 2.50m depth.
3. Groundwater strikes at 2.30m and 8.50m depth.
4. Backfilled with bentonite cement pellets on completion.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**RJ**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH1**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	**09.10.08**	**2.21**	**E:647469.0 N:264278.4**	**2** of **2**
	End: **09.10.08**			

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
9.00-9.45	4	SPT	N=2			Very loose dark grey silty fine to medium SAND. (Norwich Crag) *(stratum text copied from layer at 8.50m depth from previous sheet)*	-7.24	9.45	
						Borehole terminated at 9.45 m depth.			

Boring Progress and Water Observations						Chiselling			General Remarks
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth	From	To	Duration (hh:mm)	

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**RJ**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH2**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **08.10.08**	**1.77**	**E:647369.3 N:264282.0**	**1** of **1**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
0.20	1	D				MADE GROUND: Grass over yellowish brown gravelly fine to medium SAND. Gravel is subangular to subrounded fine to coarse flint and rare subangular concrete.		(1.10)	
0.50-1.00	1	B					0.67	1.10	
1.20-1.65	1	SPT(c)	N=35			POSSIBLE MADE GROUND: Dense greyish brown very sandy subangular to subrounded fine to medium GRAVEL of flint and chert.			
1.20	2	D							
1.70	3	D						(2.50)	
2.40	1	W							
2.50-3.00	2	B							
2.70	4	D							
3.20-3.65	2	SPT(c)	N=1			. . . becoming very loose at 3.20m depth.	-1.83	3.60	
3.70	5	D				Very loose grey gravelly fine to coarse SAND with fine gravel sized shell fragments. Gravel is subangular to subrounded fine to medium flint and chert.		(1.40)	
4.50-5.00	3	B							
4.70	6	D					-3.23	5.00	
						Borehole terminated at 5.00 m depth.			

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth
08/10/08		1.80	1.70	200	1.80
08/10/08		2.40	2.40	200	1.10

Chiselling		
From	To	Duration (hh:mm)

General Remarks

1. Inspection pit from 0.00-1.20m depth.
2. Water added from 1.20m to 2.50m depth.
3. Groundwater strikes at 1.80m and 2.40m depth.
4. Backfilled with bentonite cement pellets.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**RJ**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH3**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **10.10.08**	**1.84**	**E:647268.1 N:264282.5**	**1** of **2**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
0.30	1	D				MADE GROUND: Grass over medium dense orangish brown silty gravelly fine to medium SAND. Gravel is subangular fine shell fragments.			
0.50-1.00	2	B				. . . rootlets up to 2mm diameter to 0.50m depth.			
1.00	3	D							
1.50-1.95	4	SPT	N=20					(3.70)	
2.00	6	D							
2.50-3.00	7	B							
2.95	5	D							
3.00	8	D							
3.50	1	W				. . . ingress of water at 3.50m depth.	-1.86	3.70	
3.50-3.95	9	SPT	N=1			Very loose greyish brown slightly silty slightly sandy subrounded to rounded fine to coarse GRAVEL of flint and chert.			
3.50-4.00	10	B							
4.00	11	D							
4.50-5.00	12	B						(2.30)	
5.00	13	D							
5.50-5.95	14	SPT(c)	N=6			. . . becoming loose from 5.50m depth.			
5.50	15	B					-4.16	6.00	
						Loose greyish brown very gravelly fine to coarse SAND. Gravel is subangular to subrounded fine to medium flint and chert and rare subangular fine to medium shell fragments.	-4.56	6.40	
6.40-6.70	17	B				Stiff dark brown fibrous PEAT with plant remains and reed fragments up to 15mm diameter.		(0.80)	
6.70-7.10	18	$U_{(100)}$	20 blows						
6.90	1	ES	Tubx3						
7.00		HP	c_u=80				-5.36	7.20	
7.10	19	D				Soft slightly organic light grey silty CLAY with pseudo-fibrous plant remains and reed fragments up to 5mm diameter.			
7.10-7.60	20	$U_{(100)}$	20 blows				-5.76	7.60	
7.35		HP	c_u=30			. . . organic content decreasing with depth from 7.30m.			
7.60	21	D				Stiff friable dark brown mottled red orange and black amorphous PEAT with some pseudo-fibrous plant remains and reed fragments up to 5mm diameter.		(0.90)	
7.60-8.10	22	$U_{(100)}$	30 blows						
7.80	2	ES	Tubx3						
7.80		HP	c_u=90						
8.10	23	D				. . . rare plant remains and reed fragments from 8.10m depth.			
8.10-8.50	24	$U_{(100)}$	30 blows				-6.66	8.50	
8.30	3	ES	Tubx3			Loose dark grey slightly silty fine to medium SAND. (Norwich Crag)			
8.30		HP	c_u=80						
8.50	25	D							

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth
10/10/08	09:00	6.00	6.00	200	3.50

Chiselling		
From	To	Duration (hh:mm)

General Remarks

1. Inspection pit dug from 0.00m to 1.20m depth.
2. Groundwater struck at 3.50m depth.
3. Backfilled with bentonite cement pellets on completion.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**SJ**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH3**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **09.10.08** / **10.10.08**	**1.84**	**E:647268.1 N:264282.5**	**2** of **2**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
8.80-9.30	26	B				Loose dark grey slightly silty fine to medium SAND. (Norwich Crag) *(stratum text copied from layer at 8.50m depth from previous sheet)*		(1.50)	
9.40-9.85	27	SPT	N=4						
9.90	28	D					-8.16	10.00	
						Borehole terminated at 10.00m depth.			

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth

Chiselling		
From	To	Duration (hh:mm)

General Remarks

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**SJ**	**JWild**	

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STRUCTURAL SOILS

BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH4**

Contract Ref:	Start: **10.10.08**	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **10.10.08**	**2.35**	**E:647485.0 N:264232.4**	**1** of **2**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
0.20	1	D				MADE GROUND: Grass over orangish brown fine to medium SAND with rare subangular fine gravel sized shell fragments and pockets of firm clay up to 30mm.			
0.50-1.00	1	B						(1.35)	
1.20-1.65	1	SPT(c)	N=22				1.00	1.35	
1.20	2	D				POSSIBLE MADE GROUND: Medium dense brownish grey very sandy subrounded to rounded fine to coarse GRAVEL of flint and chert with occasional fibrous rootlets up to 2mm diameter.			
1.70	3	D		2 1					
2.50-3.00	2	B							
2.70	4	D							
3.20-3.65	2	SPT(c)	N=22					(4.25)	
3.70	5	D		2					
4.00	1	W		3					
4.50-5.00	3	B							
4.70	6	D							
5.20-5.65	3	SPT(c)	N=3				-3.25	5.60	
5.60	7	D				Firm grey slightly organic slightly sandy silty CLAY with frequent pseudo-fibrous plant remains and reed fragments up to 10mm diameter.			
5.75-6.20	1	$U_{(100)}$	15 blows				-3.65	6.00	
5.75	8	D							
5.80		HP	c_u=40						
6.10		HP	c_u=30			Soft bluish grey slightly sandy silty CLAY with occasional pseudo-fibrous plant remains and organic matter.		(0.55)	
6.40	9	D					-4.20	6.55	
6.50-6.95	2	$U_{(100)}$	15 blows			Firm dark brown pseudo-fibrous PEAT with plant remains and reed fragments.			
6.70		HP	c_u=60					(0.60)	
7.00	1	ES	Tbx4+VLx4+Jx4				-4.80	7.15	
7.15	10	D				Firm organic brownish grey silty CLAY with pseudo-fibrous plant remains and reed fragments up to 10mm diameter.			
7.20-7.65	3	$U_{(100)}$	18 blows					(1.05)	
7.85	11	D							
7.90	4	$U_{(100)}$	18 blows			. . . organic content decreasing from 8.00m.	-5.85	8.20	
8.30		HP	c_u=10			. . . fine gravel sized shell fragments from 8.10 to 8.20m. Soft bluish grey silty CLAY with rare fine to coarse gravel sized shell fragments and reed fragments up to 5mm diameter.			
8.55	12	D						(1.10)	
8.60-9.05	5	$U_{(100)}$	18 blows			. . . dampness of strata from 8.70m depth.			

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth
10/10/08		2.20	2.20	200	1.90
10/10/08		4.00	4.00	200	2.00
10/10/08		9.90	5.75	200	4.30

Chiselling		
From	To	Duration (hh:mm)

General Remarks

1. Inspection pit from 0.00-1.20m depth.
2. Groundwater strikes at 2.20m, 4.00m and 9.90m depth.
3. Water added from 1.20m to 3.80m.
4. Backfilled with bentonite cement pellets on completion.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**RJ**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH4**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **10.10.08**	**2.35**	**E:647485.0 N:264232.4**	**2** of **2**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
9.00	2	ES	Tbx4+VLx4+Jx4				-6.95	9.30	
9.20	13	D							
9.30-9.70	6	$U_{(100)}$	25 blows			Firm friable black amorphous PEAT with occasional plant remains.		(0.60)	
9.50	3	ES	Tbx4+VLx4+Jx4						
9.50		HP	c_u=55	3			-7.55	9.90	
9.90	14	D				Very loose dark grey slightly silty fine to medium SAND. (Norwich Crag)		(0.60)	
9.90	2	W							
10.00-10.45	4	SPT	N=3				-8.15	10.50	
						Borehole terminated at 10.50m depth.			

Boring Progress and Water Observations						Chiselling			General Remarks
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth	From	To	Duration (hh:mm)	

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**RJ**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH5**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	**08.10.08** End: **09.10.08**	**1.63**	**E:647419.2 N:264234.9**	**1** of **2**

Samples and In-situ Tests				Water	Backfill & Instru-mentation	Description of Strata	Reduced Level	Depth (Thick ness)	Material Graphic Legend
Depth	No	Type	Results						
0.20	1	D				MADE GROUND: Grass over yellowish brown slightly gravelly fine to coarse SAND with fine gravel sized shell fragments. Gravel is subangular fine flint.			
0.50-1.00	1	B						(1.20)	
				1, 2			0.43	1.20	
1.20-1.65	1	SPT(c)	N=13			MADE GROUND: Medium dense greyish brown slightly silty very gravelly fine to coarse SAND with fine to medium gravel sized shell fragments. Gravel is subangular to subrounded fine to medium flint and chert.			
1.20	2	D		2					
1.70	3	D							
1.75	1	W						(2.30)	
2.50-3.00	2	B							
2.70	4	D							
3.20-3.65	2	SPT	N=2	4			-1.87	3.50	
3.50-4.00	3	B				MADE GROUND: Very loose black slightly gravelly very silty fine to coarse SAND with synthetic fibres possibly nylon (1mm diameter). Gravel is subrounded medium to coarse flint.			
3.65	5	D		3				(1.40)	
4.65	6	D		3			-3.27	4.90	
4.90	2	W				POSSIBLE MADE GROUND: Very loose brown slightly gravelly fine to coarse SAND. Gravel is subrounded fine to coarse flint.			
5.00	7	D						(0.60)	
5.20-5.65	3	SPT(c)	N=2				-3.87	5.50	
5.50	8	D				Soft grey silty CLAY with reed fragments and fibrous plant remains (<5mm diameter).	-4.12	5.75	
5.75-6.20	1	$U_{(100)}$	15 blows 100% recovery			Spongy friable dark brown pseudo-fibrous PEAT with frequent plant remains and reed fragments (<10mm diameter).			
5.75	9	D							
6.00	1	ES	Tub x3					(1.35)	
6.40	10	D							
6.45	2	ES	Tubx3						
6.45-6.90	2	$U_{(100)}$	18 blows 100% recovery				-5.47	7.10	
7.10	11	D				Soft dark brown organic silty CLAY with pseudo-fibrous plant remains (<5mm diameter).	-5.82	7.45	
7.15-7.60	3	$U_{(100)}$	20 blows 100% recovery			Soft grey silty CLAY with pseudo-fibrous plant remains (<5mm diameter).		(0.50)	
7.80	12	D					-6.32	7.95	
7.85-8.30	4	$U_{(100)}$	25 blows 100% recovery			Firm friable dark brown amorphous with rare pseudo-fibrous plant material.			
8.00	3	ES	Tubx3					(0.95)	
8.50	13	D							
8.55-9.00	5	$U_{(100)}$	35 blows 100% recovery	4			-7.27	8.90	

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth
08/10/08		1.20	-	200	1.10
08/10/08		1.75	1.75	200	1.25
08/10/08		4.90	4.90	200	4.15
09/10/08	08:30	5.00	5.00	200	1.40
09/10/08		9.05	5.75	200	3.60

Chiselling		
From	To	Duration (hh:mm)

General Remarks

1. Inspection pit from 0.00-1.20m depth.
2. Water added from 1.20m to 2.20m depth.
3. Groundwater strikes at 1.20m, 1.75m, 4.90m and 8.90m depth.
4. Gas monitoring standpipe installed to depth of 9.00m.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**RJ**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH5**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **09.10.08**	**1.63**	**E:647419.2 N:264234.9**	**2** of **2**

Samples and In-situ Tests				Water	Backfill & Instru-mentation	Description of Strata	Reduced Level	Depth (Thick ness)	Material Graphic Legend
Depth	No	Type	Results						
9.00 9.05-9.50 9.05	3 4 14	W SPT D	N=0			Very loose grey slightly silty fine to medium SAND. (Norwich Crag) *(stratum text copied from layer at 8.90m depth from previous sheet)*	-7.87	(0.60) 9.50	
						Borehole terminated at 9.50 m depth.			

Boring Progress and Water Observations						Chiselling			General Remarks
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth	From	To	Duration (hh:mm)	

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**RJ**	**JWild**	

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STRUCTURAL SOILS

BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH6**

Contract Ref:	Start: **10.10.08**	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **13.10.08**	**1.40**	**E:647320.8 N:264235.4**	**1** of **1**

Samples and In-situ Tests				Water	Backfill & Instrumentation	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
0.30	1	D				MADE GROUND: Grass over loose orangish brown fine to coarse SAND with frequent subangular fine gravel sized shell fragments and pockets of firm clay up to 20mm.			
0.50-1.00	2	B							
0.80	1	W							
1.00	3	D							
1.50-1.95	4	SPT	N=6						
1.95	5	D						(4.30)	
2.00	6	D							
2.50-3.00	7	B							
3.00	8	D							
3.50-3.95	9	SPT	N=10						
3.95	10	D							
4.00	11	D		2			-2.90	4.30	
4.40	12	D				Soft slightly organic grey mottled brown silty CLAY with some pseudo-fibrous plant remains up to 2mm diameter.			
4.50-5.00	13	$U_{(100)}$	15 blows			. . . sand lens of 30mm at 4.60m depth.	-3.35	4.75	
4.60		HP	c_u=25			Stiff dark brown pseudo-fibrous PEAT with plant remains and reed fragments up to 3mm diameter.	-3.60	5.00	
4.80	1	ES	Tubx3				-3.75	5.15	
4.80		HP	c_u=80			Soft slightly organic bluish grey mottled brown silty CLAY with pseudo-fibrous plant remains and fine gravel sized shell fragments.	-3.85	5.25	
5.00	14	D				Greyish brown slightly gravelly silty fine to medium SAND. Gravel is subangular medium flint and fine shell fragments.			
5.00-5.50	15	$U_{(100)}$	15 blows			. . . dampness of strata from 5.15m to 5.25m depth.	-4.25	5.65	
5.40	2	ES	Tubx3					(0.55)	
5.40		HP	c_u=50			Firm organic dark brown CLAY with frequent fibrous plant remains and reed fragments up to 5mm diameter.	-4.80	6.20	
5.50	16	D				. . . organic content decreasing from 5.50m depth.	-5.15	6.55	
5.50-6.00	17	$U_{(100)}$	15 blows			Soft grey slightly sandy silty CLAY with some pseudo-fibrous plant material.			
6.00	18	D				. . . dampness of strata from 5.70m depth.		(0.95)	
6.00-6.50	19	$U_{(100)}$	20 blows			Firm friable dark brown fibrous PEAT with frequent plant remains and reed fragments up to 5mm diameter.	-6.10	7.50	
6.00	3	ES	Tubx3						
6.30		HP	c_u=65			Firm friable dark brown mottled orange and black amorphous PEAT with some pseudo-fibrous plant remains and reed fragments up to 5mm diameter.			
6.50	20	D				. . . becoming stiff from 7.10m depth.			
6.50-7.00	21	$U_{(100)}$	20 blows			Loose grey slightly silty fine to medium SAND. (Norwich Crag)		(1.50)	
6.75		HP	c_u=70						
7.00	22	D							
7.00-7.50	23	$U_{(100)}$	20 blows						
7.10		HP	c_u=80	2			-7.60	9.00	
7.20	4	ES	Tubx3						
7.50	2	W							
7.50	24	D							
8.50-8.95	25	SPT	N=8						

Borehole terminated at 9.00m depth.

Boring Progress and Water Observations						Chiselling		
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth	From	To	Duration (hh:mm)
13/10/08	09:00	3.95	3.50	200	0.80			

General Remarks

1. Inspection pit dug from 0.00-1.20m depth.
2. Seepage at 0.80m depth.
3. Groundwater strike at 7.50m depth.
4. Standpipe piezometer 19mm diameter installed to 7.00m depth.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**SJ**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH7**

Contract Ref:	Start: **22.10.08**	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **23.10.08**	**1.49**	**E:647153.4 N:264253.5**	**1** of **2**

Samples and In-situ Tests				Water	Backfill & Instru-mentation	Description of Strata	Reduced Level	Depth (Thick ness)	Material Graphic Legend
Depth	No	Type	Results						
0.30	1	D				MADE GROUND: Grass over orangish brown slightly gravelly fine to coarse SAND with rare pockets of soft grey clay up to 30mm and rootlets up to 3mm diameter. Gravel is fine subangular shell fragments, and medium concrete, subrounded medium to coarse flint and siltstone.			
0.50-1.00	2	B						(1.20)	
1.00	3	D					0.29	1.20	
1.20-1.40	4	B				MADE GROUND: Soft organic dark grey mottled red silty CLAY with rare plant material up to 3mm diameter.	0.09	1.40	
1.50-1.95	5	SPT	N=4			MADE GROUND: Grass over orangish brown slightly gravelly slightly silty fine to coarse SAND with rare pockets of soft grey clay up to 30mm and rootlets up to 3mm diameter. Gravel is fine subangular shell fragments, and medium concrete, subrounded medium to coarse flint and siltstone.			
1.95	6	D							
2.00	7	D						(2.10)	
2.50-3.00	8	B							
3.00	9	D					-2.01	3.50	
3.50-3.95	10	SPT	N=2			Very soft dark grey slightly gravelly silty CLAY. Gravel is subangular fine shell fragments.	-2.31	3.80	
3.50-3.80	11	B							
3.80	12	B				Soft brownish grey organic silty CLAY with rare subangular fine gravel sized shell fragments and plant remains and reed fragments up to 3mm diameter.	-2.61	4.10	
3.80	13	P						(0.50)	
						Firm brown mottled orange and black fibrous PEAT with plant remains and reed fragments up to 20mm.	-3.11	4.60	
				1			-3.31	4.80	
4.80	14	P				Firm dark brown pseudo-fibrous PEAT with plant remains and reed fragments up tp 10mm.	-3.66	5.15	
						Very soft grey slightly organic silty CLAY.	-3.86	5.35	
						Plastic dark brown pseudo-fibrous PEAT with plant remains and reed fragments up to 5mm.		(0.55)	
						Spongy friable black amorphous PEAT with occasional fine gravel sized shell fragments.	-4.41	5.90	
5.80	15	P				Spongy dark brown to black pseudo-fibrous PEAT with occasional plant remains up to 2mm diameter. . . . pockets of soft grey silty clay of 30mm diameter at 6.20m depth.	-5.01	(0.60) 6.50	
6.80	16	P				Plastic dark brown to black amorphous PEAT with occasional fine grained sized shell framents .		(1.30)	
							-6.31	7.80	
7.80	17	P				Very soft grey sightly organic silty CLAY with occasional plant remains and reed fragments up to 5mm.	-6.41	7.90	
						Plastic black amorphous PEAT with occasional fine gravel sized shell fragments.		(0.90)	
8.50-9.00	18	$U_{(100)}$	15 blows 0% recovery				-7.31	8.80	
8.50-9.00	19	B				*Description on next sheet*			

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth

Chiselling		
From	To	Duration (hh:mm)

General Remarks

1. Inspection pit dug from 0.00-1.20m depth.
2. Seep-age at 1.50m depth.
3. Groundwater strike at 9.00m depth.
4. Standpipe 50mm diameter installed up to 12.50m depth.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**SJ**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH7**

Contract Ref:	Start: **22.10.08** End: **23.10.08**	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201		**1.49**	**E:647153.4 N:264253.5**	**2** of **2**

Samples and In-situ Tests				Water	Backfill & Instru-mentation	Description of Strata	Reduced Level	Depth (Thick ness)	Material Graphic Legend
Depth	No	Type	Results						
9.00	20	D				Medium dense brown slightly silty fine to medium SAND. (Norwich Crag) *(stratum text copied from layer at 8.80m depth from previous sheet)*			
9.50-9.95	21	SPT	N=12						
10.00	1	W				. . . becoming grey from 10.00m depth.			
10.00	22	D						(4.70)	
						. . . becoming coarse with frequent subangular fine shell fragments from 13.00m depth.	-12.01	13.50	
						Borehole terminated at 13.50m depth.			

Boring Progress and Water Observations						Chiselling			General Remarks
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth	From	To	Duration (hh:mm)	

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**SJ**	**JWild**	

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STRUCTURAL SOILS

BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH8**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **13.10.08**	**2.12**	**E:647467.3 N:264183.5**	**1** of **2**

Samples and In-situ Tests				Water	Backfill & Instru-mentation	Description of Strata	Reduced Level	Depth (Thick ness)	Material Graphic Legend
Depth	No	Type	Results						
0.20	1	D				MADE GROUND: Grass over orangish brown slightly silty slightly gravelly fine to medium SAND with occasional rootlets of up to 2mm diameter.			
0.50-1.00	1	B						(1.10)	
							1.02	1.10	
1.20-1.65	1	SPT(c)	N=24			MADE GROUND: Medium dense greyish brown slightly silty gravelly fine to medium SAND with fragments of wood and timber. Gravel is subrounded fine to coarse flint and subangular fine shell fragments.			
1.20	2	D		1					
1.70	3	D							
2.50-3.00	2	B		1					
2.70	4	D						(3.70)	
3.20-3.65	2	SPT(c)	N=18	2					
3.70	5	D							
4.50-4.80	3	B							
4.70	6	D					-2.68	4.80	
4.90	7	D				Soft slightly organic grey silty CLAY with occasional pseudo-fibrous plant remains and reed fragments up to 5mm diameter.			
5.00-5.45	1	$U_{(100)}$	15 blows						
5.25		HP	c_u=25					(0.95)	
5.65	8	D					-3.63	5.75	
5.70-6.15	2	$U_{(100)}$	18 blows			Spongy dark brown pseudo-fibrous PEAT with plant remains and reed fragments up to 3mm diameter.	-3.73	5.85	
5.80	1	ES	Tubx3						
6.00		HP	c_u=50					(0.60)	
6.20	2	ES	Tubx3			Firm organic brown silty CLAY with pseudo-fibrous plant remains and reed fragments up to 10mm diameter.			
6.35	9	D					-4.33	6.45	
6.40-6.85	3	$U_{(100)}$	20 blows			Soft grey silty CLAY with some pseudo-fibrous plant remains and reed fragments up to 3mm diameter.			
6.60		HP	c_u=25						
7.05	10	D							
7.10-7.55	4	$U_{(100)}$	18 blows						
7.75	11	D						(2.75)	
7.80-8.25	5	$U_{(100)}$	18 blows			. . . organic content decreasing from 7.80m depth. . . . fine gravel sized shell fragments from 8.00m depth. . . . dampness of strata from 8.10m depth.			
8.45	12	D							
8.50-8.95	6	$U_{(100)}$	20 blows						

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth
13/10/08		2.60	2.60	200	1.55
13/10/08		10.40	5.00	200	3.60

Chiselling		
From	To	Duration (hh:mm)
1.30	1.60	00:25

General Remarks

1. Inspection pit from 0.00-1.20m depth.
2. Water added from 1.20m to 3.00m depth.
3. Groundwater strikes at 2.60m and 10.40m depth.
4. Standpipe piezometer 19mm diameter installed to 6.00m depth.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**RJ**	**JWild**	AGS

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH8**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **13.10.08**	**2.12**	**E:647467.3 N:264183.5**	**2** of **2**

Samples and In-situ Tests				Water	Backfill & Instru-mentation	Description of Strata	Reduced Level	Depth (Thick ness)	Material Graphic Legend
Depth	No	Type	Results						
							-7.08	9.20	
9.15	13	D				Firm friable dark brown amorphous PEAT with rare pseudo-fibrous plant remains up to 2mm diameter.			
9.20-9.65	7	$U_{(100)}$	25 blows						
9.50	3	ES	Tubx3					(0.80)	
9.50		HP	c_u=55						
9.85	14	D					-7.88	10.00	
9.90-10.30	8	$U_{(100)}$	30 blows	▼2		Plastic moist dark brown slightly sandy amorphous PEAT with rare subangular fine to medium flint gravel.	-8.28	10.40	
10.60-11.05	3	SPT	N=14			Medium dense grey slightly silty fine to medium SAND. (Norwich Crag)	-8.93	(0.65) 11.05	
						Borehole terminated at 11.05m depth.			

Boring Progress and Water Observations						Chiselling			General Remarks
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth	From	To	Duration (hh:mm)	

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**RJ**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH9**

Contract Ref:	Start: **23.10.08**	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **24.10.08**	**1.56**	**E:647369.0 N:264178.8**	**1** of **2**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
0.20	1	D				MADE GROUND: Grass over medium dense orangish brown slightly silty slightly gravelly fine to medium SAND with rare rootlets up to 3mm diameter and wood up to 25mm diameter. Gravel is subangular fine shell fragments, subangular medium to coarse flint and subangular medium concrete.			
0.40-0.40	1	B							
0.80-1.20	2	B				. . . low content of subangular to rounded flint and subangular concrete cobbles up to 100mm from 0.80m depth.		(2.25)	
1.20-1.65	1	SPT(c)	N=17						
1.20	2	D							
1.60	1	W		1					
1.70	3	D					-0.69	2.25	
2.50-3.00	3	B				MADE GROUND: Medium dense greyish brown silty gravelly fine to medium SAND. Gravel is subangular fine shell fragments, medium concrete and subrounded fine to medium flint.			
2.70	4	D							
3.20-3.65	2	SPT(c)	N=4	1 2		. . . becoming loose at 3.20m depth.		(1.75)	
3.70	5	D							
3.90	6	D					-2.44	4.00	
4.00-4.45	1	$U_{(100)}$	15 blows			Very soft light grey organic silty CLAY with occasional reed fragments up to 5mm diameter.		(0.70)	
4.65	7	D					-3.14	4.70	
4.70-5.15	2	$U_{(100)}$	15 blows			Firm dark brown to black fibrous PEAT with plant remains and reed fragments up to 10mm diameter.		(0.65)	
4.90		HP	c_u=50						
5.00	1	ES	Tubx3				-3.79	5.35	
5.35	8	D				Very soft grey organic slightly sandy CLAY with occasional fine gravel sized shell fragments and rare plant remains up to 2mm diameter.			
5.40-5.85	3	$U_{(100)}$	10 blows					(0.95)	
6.05	9	D				. . . becoming damp from 6.10m depth.	-4.74	6.30	
6.10-6.55	4	$U_{(100)}$	15 blows			Spongy dark brown pseudo-fibrous PEAT with frequent reed fragments up to 10mm diameter.			
6.40		HP	c_u=30						
6.50	2	ES	Tubx3						
6.75	10	D				. . . pockets of soft grey clay up to 40mm diameter from 6.70m depth.		(1.30)	
6.80-7.25	5	$U_{(100)}$	15 blows						
7.45	11	D					-6.04	7.60	
7.50-7.95	6	$U_{(100)}$	25 blows			Soft brownish grey organic silty CLAY with frequent reed fragments up to 10mm diameter.	-6.34	7.90	
7.70		HP	c_u=30			Plastic dark brown mottled orange and black amorphous PEAT.			
8.15	12	D				. . . occasional reed fragments up to 5mm diameter from 7.90m to 7.95m depth.		(1.00)	
8.20-8.60	7	$U_{(100)}$	25 blows						
8.50	3	ES	Tubx3				-7.34	8.90	
8.85	13	D							

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth
24/10/08		3.20	3.20	200	1.90
24/10/08		9.10	4.00	200	3.20

Chiselling		
From	To	Duration (hh:mm)

General Remarks

1. Inspection pit from 0.00-1.2m depth.
2. Water added from 2.25m to 3.00m depth.
3. Groundwater strikes at 3.20m and 9.10m depth.
4. Backfilled with bentonite cement pellets.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**RJ**	**JWild**	AGS

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH9**

Contract Ref:	Start: **23.10.08** End: **24.10.08**	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201		**1.56**	**E:647369.0 N:264178.8**	**2** of **2**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
9.55-10.00	3	SPT	N=4			Loose grey medium to coarse SAND. (Norwich Crag) *(stratum text copied from layer at 8.90m depth from previous sheet)*	-8.44	(1.10) 10.00	
						Borehole terminated at 10.00m depth.			

Boring Progress and Water Observations						Chiselling			General Remarks
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth	From	To	Duration (hh:mm)	

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**RJ**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH10**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **13.10.08**	**1.51**	**E:647264.6 N:264185.1**	**1** of **1**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
0.30	1	D				MADE GROUND: Grass over loose orangish brown slightly silty gravelly SAND with pockets of firm clay up to 40mm diameter. Gravel is fine subangular shell fragments and rare subrounded fine to coarse flint.			
0.50-1.00	2	B							
1.00	3	D							
1.50-1.95	4	SPT	N=5					(3.00)	
1.95	5	D							
2.00	6	D							
2.50-3.00	7	B							
						. . . concrete from 2.80m depth.	-1.49	3.00	
						Borehole terminated at 3.00m depth.			

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth

Chiselling		
From	To	Duration (hh:mm)
2.80	3.00	01:00

General Remarks

1. Inspection pit dug from 0.00-1.20m depth.
2. Borehole aborted at 3.00m depth due to obstruction, possibly concrete.
3. Backfilled with bentonite cement pellets on completion.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**SJ**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH10A**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **15.10.08**	**1.59**	**E:647264.3 N:264180.5**	**1** of **2**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
0.30	1	D				MADE GROUND: Grass over loose orangish brown silty gravelly fine to medium SAND with pockets of soft grey clay up to 50mm. Gravel is subangular fine shell fragments and rare subrounded fine to medium flint and subangular fine to coarse concrete.			
0.50-1.00	2	B							
1.00	3	D							
1.50-1.95	4	SPT	N=9						
1.95	5	D						(4.00)	
2.00	6	D							
2.50-3.00	7	B							
3.00	8	D							
3.50-3.95	9	SPT	N=6						
3.95	10	D					-2.41	4.00	
4.00	11	D				Very soft light grey mottled brown organic silty CLAY with some subangular fine gravel sized shell fragments and frequent pseudo-fibrous plant remains and reed fragments up to 15mm diameter.			
4.00-4.50	12	$U_{(100)}$	15 blows	1			-2.86	4.45	
4.25	1	ES	Tbx4+VLx4+Jx4						
4.50	13	D				. . . lens of brown silty fine to medium sand from 4.00m to 4.15m depth.	-3.21	4.80	
4.50-5.00	14	$U_{(100)}$	15 blows						
4.60	2	ES	Tbx4+VLx4+Jx4						
4.90		HP	c_u=20			Spongy dark brown pseudo-fibrous PEAT with plant remains and reed fragments up to 10mm diameter.		(0.70)	
5.00	15	D					-3.91	5.50	
5.00-5.50	16	$U_{(100)}$	12 blows			Soft slightly organic light grey mottled brown silty CLAY with pseudo-fibrous plant remains and reed fragments up to 5mm diameter.			
5.20	3	ES	Tbx4+VLx4+Jx4						
5.50	17	D							
5.50-6.00	18	$U_{(100)}$	12 blows						
5.50	4	ES	Tubx3			Plastic friable dark brown fibrous PEAT with plant remains and reed fragments up to 5mm diameter.		(1.00)	
5.60		HP	c_u=20			. . . 0.05m band of firm grey organic silty clay at 5.85m depth.			
6.00	19	D					-4.91	6.50	
6.00-6.50	20	$U_{(100)}$	15 blows						
6.00	5	ES	Tbx4+VLx4+Jx4			. . . band of 0.05m soft organic grey clay at 6.45m depth.			
6.50	21	D							
6.50-7.00	22	$U_{(100)}$	12 blows			Spongy friable dark brown mottled red orange and black amorphous PEAT with occasional pseudo-fibrous plant remains and reed fragments up to 5mm diameter.			
7.00	23	D							
7.00-7.50	24	$U_{(100)}$	12 blows			. . . pockets of soft grey silty clay up to 50mm diameter from 7.00m to 7.20m depth.		(1.80)	
7.00	6	ES	Tubx3						
7.50	25	D				. . . becoming soft and with no plant material from 7.50m depth.			
7.50-8.00	26	$U_{(100)}$	15 blows						
7.50	7	ES	Tbx4+VLx4+Jx4						
8.00	27	D							
8.00-8.50	28	$U_{(100)}$	20 blows 0% recovery	1			-6.71	8.30	
8.20		HP	c_u=20			Medium dense grey slightly silty fine to medium SAND. (Norwich Crag)			
8.40	29	D						(1.20)	

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth
14/10/08	16:30	4.50	4.50	200	Dry
15/10/08		8.50	4.50	200	4.50

Chiselling		
From	To	Duration (hh:mm)

General Remarks

1. Inspection pit from 0.00-1.20m depth.
2. Groundwater strike at 8.50m depth.
3. Backfilled with bentonite cement pellets on completion.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**SJ**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH10A**

Contract Ref:	Start: **14.10.08** End: **15.10.08**	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201		**1.59**	**E:647264.3 N:264180.5**	**2** of **2**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
9.00 9.00-9.45	1 30	W SPT	N=11			Medium dense grey slightly silty fine to medium SAND. (Norwich Crag) *(stratum text copied from layer at 8.30m depth from previous sheet)*	-7.91	9.50	
						Borehole terminated at 9.50m depth.			

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth

Chiselling		
From	To	Duration (hh:mm)

General Remarks

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**SJ**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH11**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **22.10.08**	**1.67**	**E:647419.9 N:264132.2**	**1** of **2**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
0.20	1	D				MADE GROUND: Grass over very loose orangish brown slightly silty gravelly fine to medium SAND with rare rootlets up to 2mm diameter. Gravel is subangular fine shell fragments and subrounded to rounded medium to coarse flint.			
0.50	2	B							
0.50	3	B							
1.00	4	D							
1.50-1.95	5	$SPT_{(NR)}$	N=1					(3.50)	
2.00	6	D							
2.50	7	B				. . . occasional pockets of soft grey silty clay up to 40mm from 2.50m depth.			
3.00	8	D							
							-1.83	3.50	
3.50-3.95	9	$SPT_{(NR)}$	N=15			POSSIBLE MADE GROUND: Medium dense greyish brown gravelly fine to medium SAND with rare plant remains (leaves). Gravel is subangular fine shell fragments and subrounded to rounded medium to coarse flint and chert.			
4.00	10	D						(1.20)	
4.50	11	B					-3.03	4.70	
4.70	12	D				Very soft light grey slightly sandy silty CLAY with rare pseudo-fibrous plant remains up to 3mm diameter.			
4.70	13	$U_{(100)}$	8 blows						
5.00	1	ES	Tbx4+VLx4+Jx4			. . . dampness of strata from 4.70m depth.			
5.30	14	D						(1.40)	
5.30	15	$U_{(100)}$	8 blows						
5.90	16	D					-4.43	6.10	
5.90	17	$U_{(100)}$	9 blows			Plastic dark brown pseudo-fibrous PEAT with occasional plant remains and reed fragments up to 5mm diameter.			
6.00	2	ES	Tbx4+VLx4+Jx4					(0.80)	
6.50	18	D							
6.50	19	$U_{(100)}$	15 blows				-5.23	6.90	
7.10	20	D				Soft slightly organic brownish grey silty CLAY with occasional pseudo-fibrous plant remains and reed fragments up to 2mm diameter.			
7.10	21	$U_{(100)}$	15 blows						
7.50	3	ES	Tbx4+VLx4+Jx4					(1.40)	
7.70	22	D							
7.70	23	$U_{(100)}$	16 blows						
							-6.63	8.30	
8.30	24	D				Very soft grey organic silty CLAY with rare plant remains up to 1mm diameter and fine gravel sized shell fragments.			
8.30	25	$U_{(100)}$	16 blows						
8.50	4	ES	Tbx4+VLx4+Jx4					(1.20)	

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth

Chiselling		
From	To	Duration (hh:mm)

General Remarks

1. Inspection pit from 0.00-1.20m depth.
2. Water added from 1.20m to 4.50m depth.
3. Groundwater strike at 11.30m depth.
4. Backfilled with bentonite cement pellets on completion.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**DS**	**JWild**	

AGS

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH11**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **22.10.08**	**1.67**	**E:647419.9 N:264132.2**	**2** of **2**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
8.90	26	D				Very soft grey organic silty CLAY with rare plant remains up to 1mm diameter and fine gravel sized shell fragments. *(stratum text copied from layer at 8.30m depth from previous sheet)*	-7.83	9.50	
8.90	27	$U_{(100)}$	30 blows						
9.50	28	$U_{(100)}$	16 blows			Spongy dark brown to black amorphous PEAT with occasional fine gravel sized shell fragments and pockets of soft clay up to 50mm diameter.			
10.00	5	ES	Tbx4+VLx4+Jx4			. . . becoming friable from 10.00m depth.			
10.10	29	D							
10.10	30	$U_{(100)}$	18 blows					(1.80)	
10.70	31	D							
10.70	32	$U_{(100)}$	14 blows 0% recovery	▼1			-9.63	11.30	
11.50-11.95	33	SPT	N=16			Medium dense grey fine to medium SAND. (Norwich Crag)	-10.13	(0.50) 11.80	
						Borehole terminated at 11.80m depth.			

Boring Progress and Water Observations						Chiselling			General Remarks
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth	From	To	Duration (hh:mm)	

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**DS**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH12**

Contract Ref:	Start: **23.10.08**	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **24.10.08**	**1.83**	**E:647460.9 N:264099.3**	**1** of **2**

Samples and In-situ Tests				Water	Backfill & Instru-mentation	Description of Strata	Reduced Level	Depth (Thick ness)	Material Graphic Legend
Depth	No	Type	Results						
0.20	1	D				MADE GROUND: Grass over medium dense orangish brown fine to medium SAND with occasional subangular cobbles of concrete up to 90mm and rare rootlets up to 3mm diameter. Gravel is subangular fine shell fragments and subangular to rounded fine to medium flint.			
0.50	2	B							
1.00	4	D						(2.00)	
1.50-1.95	5	$SPT_{(NR)}$	N=14				-0.17	2.00	
2.00	6	D				POSSIBLE MADE GROUND: Medium dense dark grey organic gravelly silty fine to medium SAND wih plant remains up to 3mm diameter. Gravel is subangular fine shell fragments and subrounded to rounded medium flint.			
2.50	7	B							
3.00	8	D						(2.90)	
3.50-3.95	9	SPT	N=18						
4.00	10	W							
4.00	11	D							
4.50	12	B					-3.07	4.90	
4.90	13	D				Soft grey slightly gravelly slightly sandy silty CLAY. Gravel is subrounded fine to medium flint.	-3.27	5.10	
4.90	14	$U_{(100)}$	8 blows						
5.20		HP	c_u=30			. . . becoming slightly silty from 4.00m depth.	-3.37	5.20	
5.30	1	ES	Tubx3			Soft grey mottled brown silty CLAY.	-3.67	5.50	
5.30		HP	c_u=80						
5.50	15	D				Stiff dark brown pseudo-fibrous PEAT with plant remains and reed fragments up to 5mm diameter.			
5.50	16	$U_{(100)}$	12 blows						
6.10	17	$U_{(100)}$	9 blows			Soft light grey silty CLAY with rare pseudo-fibrous plant remains and reed fragments up to 3mm diameter.		(1.45)	
6.70	18	D					-5.12	6.95	
6.70	19	$U_{(100)}$	12 blows			Plastic dark brown pseudo-fibrous PEAT with frequent plant remains and reed fragments up to 10mm diameter.	-5.37	7.20	
7.00	2	ES	Tubx3						
7.00		HP	c_u=25			Soft light grey silty CLAY with rare pseudo-fibrous plant remains and reed fragments up to 5mm diameter.			
7.30	20	D							
7.30	21	$U_{(100)}$	7 blows						
7.90	22	D				. . . becoming damp with no organic material from 7.90m to 8.10m depth.			
7.90	23	$U_{(100)}$	11 blows						
8.50	24	D						(2.85)	
8.50	25	$U_{(100)}$	8 blows						

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth
24/10/08	09:00	4.00	4.00	200	1.00
27/10/08	12:00	16.50	16.50	150	

Chiselling		
From	To	Duration (hh:mm)

General Remarks

1. Inspection pit from 0.00-1.20m depth.
2. Water added from 1.20m to 4.00m depth.
3. Standpipe 50mm diameter installed to 12.00m depth.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**DS**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH12**

Contract Ref:	Start: **23.10.08**	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **24.10.08**	**1.83**	**E:647460.9 N:264099.3**	**2** of **2**

Samples and In-situ Tests				Water	Backfill & Instru-mentation	Description of Strata	Reduced Level	Depth (Thick ness)	Material Graphic Legend
Depth	No	Type	Results						
9.10	26	D				Soft light grey silty CLAY with rare pseudo-fibrous plant remains and reed fragments up to 5mm diameter. *(stratum text copied from layer at 7.20m depth from previous sheet)*			
9.10	27	$U_{(100)}$	14 blows			. . . fine gravel sized shell fragments from 9.10m to 10.00m depth.			
9.70	28	D							
9.70	29	$U_{(100)}$	10 blows				-8.22	10.05	
10.10		HP	c_u=50			Firm friable black amorphous PEAT with occasional pseudo-fibrous plant remains up to 2mm diameter.			
10.30	30	D				. . . orange mottling between 10.40m to 11.35m depth.			
10.30	31	$U_{(100)}$	20 blows					(1.30)	
10.90	32	D							
10.90	33	$U_{(100)}$	19 blows						
11.00	3	ES	Tubx3				-9.52	11.35	
						Grey fine to medium SAND. (Norwich Crag)		(5.15)	
							-14.67	16.50	
						Borehole terminated at 16.50m depth.			

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth

Chiselling		
From	To	Duration (hh:mm)

General Remarks

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**DS**	**JWild**	

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STRUCTURAL SOILS

BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH13**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	**23.10.08** End: **23.10.08**	**1.31**	**E:647315.9 N:264128.2**	**1** of **1**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
0.20	1	D				MADE GROUND: Grass over orangish brown slightly silty gravelly SAND. Gravel is fine subangular shell fragments and rare subrounded fine to coarse flint.		(0.60)	
0.50	2	B				. . . obstruction from 0.60m depth.	0.71	0.60	
0.50	3	B				Borehole terminated at 0.60m depth.			

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth

Chiselling		
From	To	Duration (hh:mm)

General Remarks

1. Inspection pit dug from 0.00-0.60m depth.
2. Borehole aborted at 0.60m depth due to obstruction.
3. Backfilled with bentonite cement pellets on completion.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**DS**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH13A**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **23.10.08**	**1.47**	**E:647322.7 N:264126.1**	**1** of **2**

Samples and In-situ Tests				Water	Backfill & Instru-mentation	Description of Strata	Reduced Level	Depth (Thick ness)	Material Graphic Legend
Depth	No	Type	Results						
						POSSIBLE MADE GROUND: Grass over medium dense orangish brown slightly gravelly clayey fine to medium SAND with rare subangular fine gravel sized shell fragments and pockets of firm clay up to 30mm diameter. Gravel is subangular to round medium to coarse flint.			
1.00	1	D							
1.50-1.95	2	SPT	N=19						
2.00	3	D						(4.00)	
2.50	4	B				. . . rare coarse flint gravel at 2.50m depth.			
3.00	5	D							
3.50-3.95	6	SPT	N=13				-2.54	4.00	
4.00	7	D				Medium dense dark brownish grey very clayey fine to medium SAND with pockets of fibrous plant remains up to 40mm diameter.	-3.04	(0.50) 4.50	
4.50	8	B				Very soft bluish grey slightly sandy silty CLAY.	-3.24	4.70	
4.50	9	$U_{(100)}$	8 blows			. . . dampness of strata from 4.55m to 4.70m depth.	-3.44	4.90	
						Soft light grey silty CLAY.			
5.10	10	D				Soft slightly organic grey silty CLAY with occasional pseudo-fibrous plant remains and reed fragments up to 5mm diameter.			
5.10	11	$U_{(100)}$	8 blows			. . . pockets of pseudo-fibrous peat up to 40mm diameter from 4.90m to 5.20m depth.			
5.70	12	D							
5.70	13	$U_{(100)}$	8 blows					(2.75)	
6.30	14	$U_{(100)}$	16 blows			. . . dampness of strata from 6.30m to 6.90m depth.			
6.90	15	$U_{(100)}$							
7.50	16	D					-6.19	7.65	
8.00	1	ES	Tubx3			Plastic dark brown pseudo-fibrous PEAT with frequent plant remains and reed fragments up to 5mm diameter and pockets of soft silty clay up to 50mm diameter.	-6.64	8.10	
8.10	18	D				Very soft bluish grey silty CLAY with rare pseudo-fibrous plant remains up to 2mm diameter.	-6.94	8.40	
8.10	19	$U_{(100)}$	20 blows			. . . dampness of strata from 8.20m to 8.40m depth.			
8.70	20	D							
8.70	21	$U_{(100)}$	19 blows			*Description on next sheet*			

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth

Chiselling		
From	To	Duration (hh:mm)

General Remarks

1. Inspection pit dug from 0.00-1.20m depth.
2. Water added from 1.20m to 4.00m depth.
3. Standpipe piezometer 19mm diameter installed to 9.30m depth.
4. SPT test presented as 'as drilled' with no extrapolation of N value.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**DS**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH13A**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **23.10.08**	**1.47**	**E:647322.7 N:264126.1**	**2** of **2**

Samples and In-situ Tests				Water	Backfill & Instru-mentation	Description of Strata	Reduced Level	Depth (Thick ness)	Material Graphic Legend
Depth	No	Type	Results						
9.30	22	D				Spongy dark brown mottled black and red amorphous PEAT with rare pseudo-fibrous plant remains up to 2mm diameter and fine gravel sized shell fragments. *(stratum text copied from layer at 8.40m depth from previous sheet)*		(1.50)	
9.30	23	$U_{(100)}$	18 blows						
9.50	2	ES	Tubx3			. . . becoming locally friable from 9.30m depth.	-8.44	9.90	
9.90	24	D				Very dense brown fine to medium SAND with occasional subangular fine shell fragments. (Norwich Crag)		(0.50)	
9.90-10.31	25	SPT	1,4 / 7,11,18,14 for 30mm				-8.94	10.40	
						Borehole terminated at 10.40m depth.			

Boring Progress and Water Observations						Chiselling			General Remarks
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth	From	To	Duration (hh:mm)	

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**DS**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH14**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **28.10.08**	**1.56**	**E:647214.9 N:264133.5**	**1** of **2**

Samples and In-situ Tests				Water	Backfill & Instrumentation	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
0.20	1	D				MADE GROUND: Grass over loose orangish brown slightly gravelly slightly silty fine to medium SAND with rare rootlets up to 2mm diameter and pockets of soft clay up to 30mm. Gravel is subangular fine shell fragments, subangular to subrounded fine to medium siltstone and subrounded to rounded fine to medium flint.			
0.50	2	B							
1.00	4	D				. . . becoming silty from 1.00m depth.		(2.10)	
1.50-1.95	5	SPT	N=9						
2.00	6	D					-0.54	2.10	
2.50	7	B				POSSIBLE MADE GROUND: Loose dark brown mottled orange slightly gravelly silty fine to medium SAND. Gravel is subangular fine shell fragments and subrounded to rounded fine to medium flint.			
3.00	8	D				. . . becoming slightly silty from 3.00m depth. . . . low cobble content of subangular to subrounded flint up to 65mm.		(2.40)	
3.50-3.95	9	$SPT_{(NR)}$	N=9						
4.00	10	D					-2.94	4.50	
4.50	11	B				POSSIBLE MADE GROUND: Loose brown mottled orange slightly gravelly silty fine to medium SAND with a low content of subangular cobbles of flint up to 75mm. Gravel is subangular fine shell fragments and subangular to subrounded fine to medium flint.		(0.90)	
5.00	12	D					-3.84	5.40	
5.40	13	D				Soft grey slightly sandy silty CLAY.	-4.04	5.60	
5.40	14	$U_{(100)}$	14 blows			Firm grey silty CLAY with rare plant material and reed fragments up to 3mm diameter.			
5.50		HP	c_u=25						
5.70		HP	c_u=40						
6.00	15	D				. . . locally slightly sandy from 6.00m to 6.40m depth.			
6.00	16	$U_{(100)}$	14 blows					(1.85)	
6.60	17	D				. . . dampness of strata from 6.60m depth.			
6.60	18	$U_{(100)}$	20 blows						
7.20	19	D					-5.89	7.45	
7.20	20	$U_{(100)}$	20 blows			Spongy friable dark brown pseudo-fibrous PEAT with plant remains and reed fragments up to 5mm diameter.			
7.80	21	D						(1.05)	
7.80	22	$U_{(100)}$	19 blows						
8.00	1	ES	Tubx3			. . . pockets of soft grey clay up to 40mm diameter from 8.10m to 8.30m depth.	-6.94	8.50	
8.40	23	D							
8.40	24	$U_{(100)}$	23 blows			Firm dark brown to black locally clayey amorphous PEAT.		(0.50)	
8.50	2	ES	Tubx3						
8.60		HP	c_u=40				-7.44	9.00	

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth

Chiselling		
From	To	Duration (hh:mm)

General Remarks

1. Inspection pit from 0.00-1.20m depth.
2. Water added from 1.20m to 5.40m depth.
3. Standpipe piezometer 19mm diameter installed to 8.50m depth.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**DS**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH14**

Contract Ref:	Start: **28.10.08**	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **28.10.08**	**1.56**	**E:647214.9 N:264133.5**	**2** of **2**

Samples and In-situ Tests				Water	Backfill & Instru-mentation	Description of Strata	Reduced Level	Depth (Thick ness)	Material Graphic Legend
Depth	No	Type	Results						
9.00	25	D				Medium dense grey slightly silty fine to medium SAND. (Norwich Crag)			
9.00	26	$U_{(100)}$	25 blows					(1.10)	
9.60	27	D							
9.60-10.05	28	$SPT_{(NR)}$	N=16				-8.54	10.10	
						Borehole terminated at 10.10m depth.			

Boring Progress and Water Observations						Chiselling			General Remarks
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth	From	To	Duration (hh:mm)	

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**DS**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH15**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	**08.10.08**	**2.03**	**E:647475.3 N:264069.0**	**1** of **1**
	End: **08.10.08**			

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
						MADE GROUND: Grass over orangish brown sand fill. (Drillers description).	1.18	(0.85) 0.85	
						Borehole terminated at 0.85m depth due to concrete boulder moved borehole to borehole 15A.			

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth

Chiselling		
From	To	Duration (hh:mm)

General Remarks

1. Inspection pit from 0.00-0.85m depth
2. Obstruction of concrete boulder at 0.85m depth.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**RJ**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH15A**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **08.10.08**	**2.05**	**E:647468.8 N:264079.3**	**1** of **1**

Samples and In-situ Tests				Water	Backfill & Instrumentation	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
0.20	1	D				MADE GROUND: Grass over orangish brown slightly silty fine to medium SAND with occasional fine gravel sized shell fragments.			
0.50-1.00	1	B						(1.10)	
							0.95	1.10	
1.20-1.65	1	SPT(c)	N=52			POSSIBLE MADE GROUND: Very dense orangish brown sandy fine to coarse subrounded to rounded GRAVEL of flint and chert.			
1.20	2	D							
1.70	3	D		1				(1.40)	
							-0.46	2.50	
2.50-3.00	2	B				Dense grey sandy subrounded to rounded fine to coarse GRAVEL of flint and chert with rare fine gravel sized shell fragments.			
2.70	4	D							
3.20-3.65	2	SPT(c)	N=40	2					
3.60	1	W						(2.60)	
3.70	5	D							
4.50-5.00	3	B							
4.70	6	D							
							-3.06	5.10	
						Borehole terminated at 5.10 m depth.			

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth
08/10/08		2.00	2.00	200	1.70
08/10/08		3.60	3.20	200	1.60

Chiselling		
From	To	Duration (hh:mm)

General Remarks

1. Inspection pit from 0.00-1.20m depth.
2. Water added from 1.20m to 2.50m depth.
3. Groundwater strikes at 2.00m and 3.60m depth.
4. Backfilled with bentonite cement pellets on completion.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**RJ**	**JWild**	

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STRUCTURAL SOILS

BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH16**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **07.10.08**	**1.71**	**E:647366.2 N:264080.1**	**1** of **2**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
0.15	1	D				MADE GROUND: Grass over orangish brown fine to medium SAND with occasional fine to coarse gravel sized shell fragments and rare pockets of firm clay (up to 20mm).			
0.50-1.00	1	B						(1.55)	
1.15-1.95	2	D					0.16	1.55	
1.50-1.95	1	SPT	N=45			POSSIBLE MADE GROUND: Dense orangish brown silty gravelly fine to medium SAND with rare fine gravel sized shell fragments and pockets of firm clay (up to 20mm). Gravel is subrounded to rounded fine to medium flint.			
1.95	3	D							
2.50-3.00	2	B						(2.95)	
3.00	4	D							
3.50-3.95	2	SPT	N=49						
3.95	5	D					-2.79	4.50	
4.50-5.00	1	P				Very soft bluish grey organic silty CLAY with rare pseudo-fibrous plant remains (<2mm diameter).			
4.50	6	D							
5.10-6.10	2	P						(2.50)	
6.25-6.75	1	$U_{(100)}$	10 blows 100% recovery			. . . dampness of strata from 6.30m to 6.80m depth.			
6.95	7	D					-5.29	7.00	
7.00-7.50	2	$U_{(100)}$	20 blows 100% recovery			Spongy dark brown pseudo-fibrous PEAT with plant remains and reed fragments (<10mm diameter).		(0.80)	
7.20	1	ES	Tubx3						
7.20		HP	c_u=35				-6.09	7.80	
7.70	8	D				Soft organic greyish brown silty CLAY with frequent reed fragments (<10mm diameter).			
7.75-8.25	3	$U_{(100)}$	20 blows 100% recovery					(0.85)	
8.00	2	ES	Tubx3						
8.00		HP	c_u=35						
8.45	9	D				. . . organic content decreasing from 8.45m depth.	-6.94	8.65	
8.50-9.00	4	$U_{(100)}$	30 blows 100% recovery			Firm friable dark brown mottled red orangeand black amorphous PEAT with rare pseudo-fibrous plant remains (<2mm diameter).			

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth
06/10/08		4.40	4.40	200	4.05
07/10/08		10.80	5.20	200	4.50

Chiselling		
From	To	Duration (hh:mm)

General Remarks

1. Inspection pit from 0.00-1.20m depth.
2. Water added from 1.50m to 4.00m depth.
3. Seepage at 4.40m depth, groundwater strike at 10.80m.
4. Backfilled with bentonite cement pellets on completion.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**RJ**	**JWild**	

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STRUCTURAL SOILS

BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH16**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **07.10.08**	**1.71**	**E:647366.2 N:264080.1**	**2** of **2**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
8.80		HP	c_u=55			Firm friable dark brown mottled red orangeand black amorphous PEAT with rare pseudo-fibrous plant remains (<2mm diameter). *(stratum text copied from layer at 8.65m depth from previous sheet)*		(2.15)	
9.20	10	D							
9.25-9.75	5	$U_{(100)}$	45 blows 100% recovery						
9.50	3	ES	Tubx3						
9.50		HP	c_u=65						
9.95	11	D							
10.00-10.45	6	$U_{(100)}$	45 blows 100% recovery						
10.65	12	D		▼2			-9.09	10.80	
10.80	1	W				Loose grey slightly silty fine to medium SAND. (Norwich Crag)		(0.70)	
11.05-11.50	3	SPT	N=8				-9.79	11.50	
						Borehole terminated at 11.50m depth.			

Boring Progress and Water Observations						Chiselling			General Remarks
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth	From	To	Duration (hh:mm)	

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**RJ**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH17**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **08.10.08**	**1.42**	**E:647264.3 N:264081.6**	**1** of **2**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
0.30	1	D				MADE GROUND: Grass over orangish brown slightly gravelly fine to medium SAND with fine gravel sized shell fragments and rootlets (up to 4mm diameter). Gravel is subangular fine to coarse siltstone.			
0.50-1.00	2	B							
0.70	1	W		▼1		. . . ingress of water into borehole at 0.70m depth.		(1.60)	
1.00-2.00	3	D				. . . from 0.80m depth subangular coarse gravel and cobbles (up to 150mm) if concrete.			
1.50-1.95	4	SPT(c)	N=37				-0.18	1.60	
1.50-2.00	5	B				MADE GROUND: Dense orangish brown slightly gravelly silty fine to medium SAND with pockets (up to 100mm diameter) of firm brown sandy clay and fine gravel sized shell fragments. Gravel is subangular fine to medium siltstone, chert and flint.			
2.00	6	D							
2.50-3.00	7	B						(2.20)	
3.00	8	D							
3.50-3.95	9	$SPT_{(NR)}$	N=8	▼2			-2.38	3.80	
3.50-4.00	10	B							
4.00-4.50	11	$U_{(100)}$	10 blows			Soft grey silty CLAY with frequent fibrous plant remains and reed fragments (up to 10mm diameter) and rare fine gravel sized shell fragments.		(1.20)	
4.50	12	D							
4.50-5.00	13	$U_{(100)}$	7 blows				-3.58	5.00	
5.00	14	D				Soft grey silty CLAY with frequent fibrous plant remains and reed fragments (up to 10mm diameter) and rare fine gravel sized shell fragments.			
5.00-5.50	15	$U_{(100)}$	7 blows						
5.50	16	D							
5.50-6.00	17	$U_{(100)}$	12 blows			. . . from 5.75-6.25m depth becoming brownish grey with decreased plant content and dampness of strata.			
6.00	18	D							
6.00-6.50	19	$U_{(100)}$	12 blows						
6.50	20	D						(3.50)	
6.50-7.00	21	$U_{(100)}$	15 blows						
7.00	22	D							
7.00-7.50	23	$U_{(100)}$	15 blows						
7.50	24	D							
7.50-8.00	25	$U_{(100)}$	15 blows			. . . from 7.50m depth pockets of slightly organic brown clay (up to 30mm).			
8.00	26	D							
8.00-8.50	27	$U_{(100)}$	15 blows				-7.08	8.50	
8.50	1	ES	Tubx3			Firm dark brown amorphous PEAT with occasional pseudo-fibrous plant remains (up to 2mm diameter).			
8.50	28	D							
8.50-9.00	29	$U_{(100)}$	15 blows						

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth
06/10/08		0.70	-	200	0.70
07/10/08	16:00	7.50	4.50	200	Dry
08/10/08		11.50	7.50	200	3.50

Chiselling		
From	To	Duration (hh:mm)

General Remarks

1. Hand dug inspection pit from 0.00-1.20m depth.
2. Groundwater strike at 0.70m depth.
3. Groundwater strike at 10.50m rose to 3.50m after 20 minutes.
4. Exploratory hole backfilled with bentonite cement pellets on completion.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**SJ**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH17**

Contract Ref:	Start: **06.10.08** End: **08.10.08**	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201		**1.42**	**E:647264.3 N:264081.6**	**2** of **2**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
8.60		HP	c_u=40			Firm dark brown amorphous PEAT with occasional pseudo-fibrous plant remains (up to 2mm diameter). *(stratum text copied from layer at 8.50m depth from previous sheet)*		(1.55)	
9.00	30	D				. . . pockets of firm grey clay (up to 20mm) from 9.00-9.50m depth.			
9.00-9.45	31	$U_{(100)}$	20 blows						
9.45	32	D							
9.50	2	ES	Tubx3						
9.50-10.00	33	$U_{(100)}$					-8.63	10.05	
10.00	34	D				Firm friable dark brown to black pseudo-fibrous PEAT with layered fragments of reed.			
10.00-10.50	35	$U_{(100)}$	25 blows						
10.20		HP	c_u=60	▼2			-9.08	10.50	
10.50	2	W				Medium dense grey slightly silty slightly gravelly fine to coarse SAND. Gravel is subangular medium flint. (Norwich Crag)			
10.50	3	ES	Tubx3						
10.50	36	D						(1.00)	
11.05-11.50	37	SPT	N=14						
							-10.08	11.50	
						Borehole terminated at 11.50m depth.			

Boring Progress and Water Observations						Chiselling			General Remarks
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth	From	To	Duration (hh:mm)	

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**SJ**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH18**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **07.10.08**	**2.05**	**E:647484.7 N:264029.5**	**1** of **1**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
0.20	1	D				MADE GROUND: Grass over pinkish grey sandy subangular to angular fine to coarse GRAVEL of limestone.	1.65	0.40	
0.50-1.00	1	B				MADE GROUND: Very dense yellowish brown slightly gravelly fine to coarse SAND with rare pockets (up to 20mm) of firm clay and fine gravel sized shell fragments. Gravel is fine to medium subangular flint.		(1.60)	
1.20-1.59	1	SPT(c)	4,6 / 9,16,20,5 for 15mm	1					
1.20	2	D							
1.70	3	D		1 2					
						. . . ingress of water at 1.90m depth.	0.05	2.00	
2.50-3.00	2	B				MADE GROUND: Dense greyish brown gravelly fine to coarse SAND with occasional pockets of firm clay and metal nails. Gravel is subrounded to subangular medium to coarse flint.		(1.50)	
2.70	4	D							
3.20-3.65	2	SPT(c)	N=46	2			-1.45	3.50	
3.50	1	W				Medium dense grey slightly silty gravelly SAND with rare fine gravel sized shell fragments. Gravel is fine to coarse subrounded to rounded flint and chert.			
3.70	5	D							
4.50-5.00	3	B						(2.50)	
4.70	6	D							
5.20-5.65	3	SPT(c)	N=19						
5.70	7	D					-3.95	6.00	
						Borehole terminated at 6.00m depth.			

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth
07/10/08		1.90	1.90	200	1.60
07/10/08		3.50	3.20	200	1.90

Chiselling		
From	To	Duration (hh:mm)

General Remarks

1. Hand dug inspection pit from 0.00-1.20m depth.
2. Water added from 1.20m to 4.00m depth.
3. Groundwater strikes at 1.90m and 3.50m depth.
4. Backfilled with bentonite cement pellets on completion.
5. SPT test presented as 'as drilled' with no extrapolation of N value.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**RJ**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH19**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **14.10.08**	**1.60**	**E:647419.4 N:264029.9**	**1** of **1**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
						MADE GROUND: Grass over brownish orange gravelly fine to medium SAND. Gravel is subangular to subrounded fine to coarse flint and occasional subangular concrete.		(0.95)	
						. . . concrete from 0.90m depth.	0.65	0.95	
						Borehole terminated at 0.95m depth.			

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth

Chiselling		
From	To	Duration (hh:mm)
0.65	0.80	00:25
0.90	0.95	00:25

General Remarks

1. Inspection pit dug from 0.00-0.95m depth.
2. Borehole aborted at 0.95m depth due to obstruction, possibly concrete.
3. Backfilled with bentonite cement pellets on completion.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**RJ**	**JWild**	

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STRUCTURAL SOILS

BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH19A**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	**14.10.08** End: **15.10.08**	**1.69**	**E:647424.3 N:264030.0**	**1** of **2**

Samples and In-situ Tests				Water	Backfill & Instrumentation	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
0.20	1	D				MADE GROUND: Grass over pinkish grey sandy subangular to angular fine to coarse GRAVEL of limestone.	1.09	(0.60) 0.60	
0.60-1.10	1	B		1		MADE GROUND: Medium dense orangish brown silty gravelly fine to medium SAND with pockets of firm clay up to 30mm. Gravel is subangular fine shell fragments and fine to medium flint and medium brick.			
1.20-1.65	1	SPT(c)	N=27	1					
1.20	2	D							
1.70	3	D							
1.80	1	W							
2.50-3.00	2	B							
2.70	4	D						(4.50)	
3.20-3.65	2	SPT(c)	N=4			. . . becoming loose from 3.20m depth.			
3.70	5	D							
4.50-5.00	3	B							
4.70	6	D					-3.42	5.10	
5.10	7	D		2		Soft slightly organic grey mottled brown to black silty CLAY with pseudo-fibrous plant remains up to 2mm diameter.	-3.62	5.30	
5.20-5.65	1	$U_{(100)}$	20 blows			Firm dark brown fibrous PEAT with abundant plant remains and reed fragments up to 3mm diameter.		(0.60)	
5.40		HP	c_u=40				-4.22	5.90	
5.50	1	ES	Tubx3						
5.85	8	D				Soft light grey silty CLAY with some reed fragments up to 10mm diameter.			
5.90-6.35	2	$U_{(100)}$	15 blows			. . . becoming rare from 6.20m depth.			
6.55	9	D						(1.40)	
6.60-7.05	3	$U_{(100)}$	15 blows			. . . dampness of strata from 7.10m depth.	-5.62	7.30	
7.25	10	D				Spongy dark brown pseudo-fibrous PEAT with frequent plant remains and reed fragments.			
7.30-7.75	4	$U_{(100)}$	15 blows						
7.50	2	ES	Tubx3						
7.50		HP	c_u=40					(1.40)	
7.95	11	D							
8.00-8.45	5	$U_{(100)}$	18 blows			. . . band of 0.10m soft grey clay at 8.10m depth.			
8.65	12	D					-7.02	8.70	
8.70-9.15	6	$U_{(100)}$	20 blows			*Description on next sheet*			

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth
14/10/08		1.20	-	200	1.00
15/10/08		10.10	5.85	200	5.30

Chiselling		
From	To	Duration (hh:mm)

General Remarks

1. Inspection pit dug from 0.00-1.20m depth.
2. Water added from 1.20m to 3.00m depth.
3. Groundwater strikes at 1.20m and 10.10m depth.
4. Standpipe 50mm diameter installed to 8.80m depth.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**RJ**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH19A**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **15.10.08**	**1.69**	**E:647424.3 N:264030.0**	**2** of **2**

Samples and In-situ Tests				Water	Backfill & Instru-mentation	Description of Strata	Reduced Level	Depth (Thick ness)	Material Graphic Legend
Depth	No	Type	Results						
8.90	3	ES	Tubx3			Plastic dark brown mottled red and orange pseudo-fibrous PEAT with occasional plant remains and reed fragments up to 40mm diameter. *(stratum text copied from layer at 8.70m depth from previous sheet)*		(1.05)	
9.35	13	D					-8.07	9.75	
9.40	4	ES	Tubx3						
9.40-9.85	7	$U_{(100)}$	30 blows						
				2		Spongy dark brown to black amorphous PEAT with occasional pseudo-fibrous plant remains.	-8.12	9.80	
10.05-10.50	13	SPT	N=15			Medium dense grey slightly silty fine to medium SAND.		(0.70)	
10.05	14	D							
10.10	2	W					-8.82	10.50	
						Borehole terminated at 10.50m depth.			

Boring Progress and Water Observations						Chiselling			General Remarks
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth	From	To	Duration (hh:mm)	

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**RJ**	**JWild**	

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STRUCTURAL SOILS

BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH20**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **14.10.08**	**1.63**	**E:647368.3 N:264028.8**	**1** of **2**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
0.20	1	D				MADE GROUND: Grass over orangish brown slightly silty slightly gravelly fine to medium SAND with pockets of firm clay up to 40mm diameter. Gravel is subangular medium to coarse flint and fine shell fragments.			
0.30-0.80	1	B		1			0.83	(0.80)	
0.80-1.20	2	B				MADE GROUND: Dense brown slightly gravelly silty fine to medium SAND with pockets of firm clay up to 30mm diameter. Gravel is subangular fine to medium shell fragments and rare subangular fine to medium flint.			
1.20-1.65	1	SPT(c)	N=44						
1.20	1	W							
1.70	3	D							
								(3.05)	
2.50-3.00	3	B							
2.70	4	D							
3.20-3.65	2	SPT(c)	N=32						
3.70	5	D					-2.22	3.85	
3.85	6	D				Very soft light grey slightly sandy silty CLAY with occasional pseudo-fibrous rootlets up to 2mm diameter.			
3.90-4.35	1	$U_{(100)}$	15 blows						
4.00	1	ES	Tbx4+VLx4+Jx4	2			-2.67	4.30	
4.10		HP	c_u=15			Spongy dark brown locally clayey pseudo-fibrous PEAT with plant remains and reed fragments up to 10mm diameter.			
4.55	7	D						(0.50)	
4.60	2	ES	Tbx4+VLx4+Jx4				-3.17	4.80	
4.60-5.05	2	$U_{(100)}$	8 blows			Soft light grey silty CLAY with frequent pseudo-fibrous plant remains and reed fragments up to 5mm diameter.			
5.15	8	D							
5.20-5.65	3	$U_{(100)}$	8 blows			. . . plant remains and reed fragments becoming rare from 5.20m depth.			
5.85	9	D							
5.90-6.35	4	$U_{(100)}$	8 blows			. . . becoming very soft from 5.90m depth with no plant remains and dampness of strata.			
								(3.20)	
6.55	10	D							
6.60-7.05	5	$U_{(100)}$	8 blows						
7.00	3	ES	Tbx4+VLx4+Jx4						
7.25	11	D							
7.30-7.75	6	$U_{(100)}$	8 blows						
							-6.37	8.00	
7.95	12	D				Firm dark brown pseudo-fibrous PEAT with plant remains and reed fragments up to 10mm diameter.			
8.00-8.45	7	$U_{(100)}$	20 blows						
8.20		HP	c_u=40					(0.90)	
8.30	4	ES	Tbx4+VLx4+Jx4						
8.50	1	ES	Tubx3						
8.65	13	D					-7.27	8.90	
8.70-9.15	8	$U_{(100)}$	20 blows						

Boring Progress and Water Observations

Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth
14/10/08	09:00	1.20	-	200	0.80
14/10/08		10.75	4.00	200	4.30

Chiselling

From	To	Duration (hh:mm)

General Remarks

1. Inspection pit dug from 0.00-1.20m depth.
2. Water added from 1.20m to 2.20m depth.
3. Groundwater strikes at 1.20m and 10.75m depth.
4. Backfilled with bentonite cement pellets on completion.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**RJ**	**JWild**	

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STRUCTURAL SOILS

BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH20**

Contract Ref:	Start: **14.10.08**	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **14.10.08**	**1.63**	**E:647368.3 N:264028.8**	**2** of **2**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
9.10		HP	c_u=80			Stiff friable dark brown mottled red orange and black amorphous PEAT with occasional pseudo-fibrous plant remains up to 1mm diameter, *(stratum text copied from layer at 8.90m depth from previous sheet)*			
9.35	14	D				. . . no plant remains from 9.60m depth.		(1.85)	
9.40-9.85	9	$U_{(100)}$	30 blows						
10.00	2	ES	Tubx3			. . . becoming friable from 10.10m depth.			
10.05	15	D				. . . pockets of soft clay up to 30mm diameter from 10.20m depth.			
10.10-10.50	10	$U_{(100)}$	25 blows						
10.50	5	ES	Tbx4+VLx4+Jx4	▼2			-9.12	10.75	
10.75	2	W				Medium dense grey fine to medium SAND.		(0.75)	
11.05-11.50	3	SPT	N=14				-9.87	11.50	
						Borehole terminated at 11.50m depth.			

Boring Progress and Water Observations						Chiselling			General Remarks
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth	From	To	Duration (hh:mm)	

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**RJ**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH21**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **23.10.08**	**1.45**	**E:647321.3 N:264028.1**	**1** of **2**

Samples and In-situ Tests				Water	Backfill & Instrumentation	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
0.30	1	D				MADE GROUND: Grass over dense orangish brown silty gravelly fine to medium SAND with rare pockets of firm clay up to 30mm diameter. Gravel is subangular fine shell fragments and subangular to subrounded fine to medium siltstone.			
0.50-1.00	1	B							
				1					
1.20-1.65	1	SPT(c)	N=37						
1.20	2	D							
				1					
1.70	3	D						(3.70)	
1.80	1	W							
2.60-3.00	2	B							
2.70	4	D				. . . becoming dark brown mottled orange from 2.70m depth.			
						. . . low content of subangular cobbles of flint up to 65mm from 2.80m depth.			
3.20-3.65	2	SPT(c)	N=47			. . . rare plant remains up to 2mm diameter from 2.90m depth.			
						. . . firm pockets of organic material up to 30mm from 3.60m depth.	-2.25	3.70	
3.70-4.20	3	B				POSSIBLE MADE GROUND: Dense dark brown mottled orange silty fine to medium SAND with rare subangular fine shell fragments.			
3.70	5	D						(0.80)	
4.35	6	D					-3.05	4.50	
4.50-4.95	1	$U_{(100)}$	25 blows			. . . bands of dark brown to black organic silty fine to medium clay from 4.35m depth.	-3.30	4.75	
4.80		HP	c_u=40			Very soft light grey silty CLAY with rare reed fragments up to 5mm diameter.		(0.55)	
5.00	1	ES	Tubx3						
5.15	7	D				Firm dark brown to black fibrous PEAT with occasional reed fragments and plant remains up to 5mm diameter.	-3.85	5.30	
5.20-5.65	2	$U_{(100)}$	20 blows			Very soft light grey silty CLAY with rare reed fragments up to 5mm diameter and fine gravel sized shell fragments.			
				2		. . . sandy from 5.30m to 5.35m depth.			
5.85	8	D							
5.90-6.35	3	$U_{(100)}$	15 blows			. . . dampness of strata and no organic material from 6.30m depth.			
6.55	9	D						(2.60)	
6.60-7.05	4	$U_{(100)}$	10 blows						
7.25	10	D							
7.30-7.75	5	$U_{(100)}$	15 blows						
							-6.45	7.90	
7.95	11	D				Plastic dark brown pseudo-fibrous PEAT with occasional plant remains up to 2mm diameter.			
8.00-8.45	6	$U_{(100)}$	15 blows						
8.20		HP	c_u=25			. . . pockets of soft grey clay up to 50mm diameter from 8.00m to 8.30m depth.			
8.50	2	ES	Tubx3					(1.50)	
8.65	12	D							
8.70-9.15	7	$U_{(100)}$	25 blows						

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth
23/10/08		1.80	1.70	150	1.20
23/10/08		11.00	4.50	150	5.50

Chiselling		
From	To	Duration (hh:mm)

General Remarks

1. Inspection pit dug from 0.00-1.20m depth.
2. Water added from 1.20m to 2.00m depth.
3. Groundwater strikes at 1.80m and 11.00m depth.
4. Standpipe 50mm diameter installed to 9.00m depth.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**RJ**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH21**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **23.10.08**	**1.45**	**E:647321.3 N:264028.1**	**2** of **2**

Samples and In-situ Tests				Water	Backfill & Instru-mentation	Description of Strata	Reduced Level	Depth (Thick ness)	Material Graphic Legend
Depth	No	Type	Results						
						Plastic dark brown pseudo-fibrous PEAT with occasional plant remains up to 2mm diameter. *(stratum text copied from layer at 7.90m depth from previous sheet)*	-7.95	9.40	
9.35	13	D							
9.40-9.85	8	$U_{(100)}$	25 blows			Spongy friable black mottled orange amorphous PEAT.		(1.15)	
10.00	3	ES	Tubx3						
10.05	14	D							
10.10-10.55	9	$U_{(100)}$	25 blows			. . . becoming firm from 10.30m depth.	-9.10	10.55	
10.30		HP	c_u=40						
						Loose grey slightly silty fine to medium SAND. (Norwich Crag)			
10.75	15	D		▼				(1.10)	
11.00	2	W							
11.20-11.65	3	SPT	N=7				-10.20	11.65	
						Borehole terminated at 11.65m depth.			

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth

Chiselling		
From	To	Duration (hh:mm)

General Remarks

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**RJ**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH22**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **29.10.08**	**1.75**	**E:647212.9 N:264032.3**	**1** of **2**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
0.20	1	D				MADE GROUND: Grass over very dense orangish brown slightly gravelly silty fine to medium SAND with rare rootlets up to 3mm diameter. Gravel is subangular fine shell fragments, subangular to subrounded fine to medium flint and siltstone.			
0.50	2	B		1					
0.50	3	B							
1.00	4	D		1		. . . rare plant material up to 2mm diameter from 1.00m depth.			
1.50-1.67	5	SPT	2,10 / 50 for 15mm						
2.00	6	D						(4.00)	
2.50	7	B				. . . rare pockets of firm clay up to 30mm from 2.50m depth.			
3.00	8	D							
3.50-3.95	9	SPT	N=24			. . . becoming medium dense at 3.50m depth.			
							-2.25	4.00	
4.00	10	W				POSSIBLE MADE GROUND: Medium dense dark brown mottled orange slightly gravelly silty fine to medium SAND with rare pockets of soft brown clay up to 20mm. Gravel is subangular fine shell fragments and subangular to subrounded fine to coarse flint.			
4.00	11	D							
4.50	12	B						(1.40)	
5.00	13	D							
							-3.65	5.40	
5.40	14	D				Firm brown clayey fibrous PEAT with frequent plant remains and reed fragments up to 10mm diameter.	-3.95	5.70	
5.40	15	$U_{(100)}$	8 blows						
5.50	1	ES	Tubx3			Very soft light grey silty CLAY with reed fragments up to 10mm diameter and fine gravel sized shell fragments.			
5.50		HP	c_u=40						
6.00	16	D							
6.00	17	$U_{(100)}$	8 blows						
6.60	18	D							
6.60	19	$U_{(100)}$	10 blows						
7.20	20	D						(3.40)	
7.20	21	$U_{(100)}$	10 blows						
7.80	22	D							
7.80	23	$U_{(100)}$	18 blows			. . . becoming damp with no plant material from 8.00m depth.			
8.40	24	D							
8.40	25	$U_{(100)}$	17 blows						

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth
29/10/08		1.20	-	150	0.80

Chiselling		
From	To	Duration (hh:mm)
1.60	1.80	00:30

General Remarks

1. Inspection pit dug from 0.00-1.20m depth.
2. Groundwater strike at 1.20m depth.
3. Backfilled with bentonite cement pellets on completion.
4. SPT test presented as 'as drilled' with no extrapolation of N value.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**DS**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH22**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **29.10.08**	**1.75**	**E:647212.9 N:264032.3**	**2** of **2**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
9.00	26	D					-7.35	9.10	
9.00	27	$U_{(100)}$	21 blows			Spongy friable black mottled orange amorphous PEAT.			
9.60	28	D				. . . pockets of soft grey clay up to 30mm diameter from 9.60m to 9.90m depth.		(1.45)	
9.60	29	$U_{(100)}$	18 blows						
10.00	2	ES	Tubx3						
10.20	30	D							
10.20	31	$U_{(100)}$	23 blows				-8.80	10.55	
10.80	32	D				Dense grey slightly silty fine to medium SAND. (Norwich Crag)		(0.75)	
10.80-11.25	33	SPT	N=31				-9.55	11.30	
						Borehole terminated at 11.30m depth.			

Boring Progress and Water Observations						Chiselling			General Remarks
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth	From	To	Duration (hh:mm)	

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**DS**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH23**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **15.10.08**	**2.20**	**E:647484.6 N:264046.9**	**1** of **2**

Samples and In-situ Tests				Water	Backfill & Instru-mentation	Description of Strata	Reduced Level	Depth (Thick ness)	Material Graphic Legend
Depth	No	Type	Results						
0.20	1	D				MADE GROUND: Grass over dense orangish brown fine to medium SAND with subangular fine gravel sized shell fragments and pockets of soft clay up to 30mm diameter and rare subrounded medium to coarse flint gravel.			
0.50-1.00	1	B						(1.45)	
1.20-1.65	1	SPT(c)	N=41						
1.20	2	D					0.75	1.45	
1.70	3	D		1		MADE GROUND: Dense greyish brown slightly silty gravelly fine to coarse SAND. Gravel is subangular to subrounded fine to coarse flint.			
2.30	1	W							
2.50-3.00	2	B							
2.70	4	D							
3.20-3.65	2	SPT	N=40					(4.25)	
3.70	5	D							
4.50-5.00	3	B							
4.70	6	D							
5.20-5.65	3	SPT(c)	N=10	3		. . . becoming medium dense at 5.20m depth			
5.70	7	D					-3.50	5.70	
5.75-6.20	1	$U_{(100)}$	15 blows			Soft grey slightly sandy silty CLAY.	-3.55	5.75	
5.80		HP	c_u=80			Stiff dark brown fibrous PEAT with plant remains and reed fragments up to 10mm diameter.	-3.75	5.95	
5.90	1	ES	Tbx4+VLx4+Jx4					(0.50)	
6.00		HP	c_u=30			Soft grey slightly organic silty CLAY with reed fragments up to 5mm diameter.	-4.25	6.45	
6.40	8	D							
6.45-6.90	2	$U_{(100)}$	12 blows			Very soft grey mottled black silty CLAY with rare reed fragments up to 5mm diameter.			
7.00	2	ES	Tbx4+VLx4+Jx4			. . . no plant content and dampness from 6.60m depth.		(1.35)	
7.10	9	D							
7.15-7.60	3	$U_{(100)}$	15 blows				-5.60	7.80	
7.80	10	D				Stiff dark brown mottled red pseudo-fibrous PEAT with plant remains up to 3mm diameter.			
7.85-8.30	4	$U_{(100)}$	20 blows						
7.90		HP	c_u=80						
8.00	3	ES	Tbx4+VLx4+Jx4					(1.40)	
8.50	11	D							
8.55-9.00	5	$U_{(100)}$	20 blows						

Boring Progress and Water Observations

Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth
15/10/08		2.30	2.20	200	1.90
15/10/08		6.40	5.70	200	6.40
15/10/08		9.75	6.80	200	5.60

Chiselling

From	To	Duration (hh:mm)

General Remarks

1. Inspection pit dug from 0.00-1.20m depth.
2. Water added from 1.20m to 2.50m depth.
3. Groundwater strikes at 2.30m, 6.40m and 9.75m depth.
4. Standpipe piezometer 19mm diameter installed to 7.20m depth.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**RJ**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH23**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	**15.10.08** End: **15.10.08**	**2.20**	**E:647484.6 N:264046.9**	**2** of **2**

Samples and In-situ Tests				Water	Backfill & Instru-mentation	Description of Strata	Reduced Level	Depth (Thick ness)	Material Graphic Legend
Depth	No	Type	Results						
8.90	4	ES	Tbx4+VLx4+Jx4			. . . 20mm band of firm grey silty clay at 8.90m depth.	-7.00	9.20	
8.90		HP	c_u=80			Medium dense grey slightly silty fine to medium SAND. (Norwich Crag)			
9.20	12	D							
9.25-9.70	6	$U_{(100)}$	30 blows 0% recovery	3				(1.30)	
9.75	2	W							
10.05-10.50	4	SPT	N=19						
							-8.30	10.50	
						Borehole terminated at 10.50m depth.			

Boring Progress and Water Observations						Chiselling			General Remarks
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth	From	To	Duration (hh:mm)	

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**RJ**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH24**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **16.10.08**	**2.59**	**E:647364.7 N:263967.2**	**1** of **2**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
0.20	1	D				MADE GROUND: Grass over medium dense orangish brown slightly gravelly slightly silty fine to medium SAND with rare pockets of firm clay up to 30mm and rootlets up to 2mm diameter. Gravel is subangular fine shell fragments, subrounded to rounded fine to medium siltstone and subangular to subrounded fine to medium flint.			
0.50-1.00	1	B							
1.20-1.65	1	SPT(c)	N=22					(2.30)	
1.20	2	D							
1.70	3	D				. . . bands of firm clay from 1.70m depth.			
							0.29	2.30	
2.50-3.00	2	B		1		POSSIBLE MADE GROUND: Very dense orangish brown silty gravelly fine to medium SAND. Gravel is subangular fine shell fragments and subangular to subrounded fine to medium flint.			
2.70	4	D							
3.20-3.60	2	SPT(c)	7,11 / 17,17,12,4 for 25mm	1					
3.30	1	W				. . . becoming dark brown from 3.50m depth.			
3.70	5	D				. . . low content of subangular to subrounded cobbles of flint at 3.70m depth.		(3.60)	
4.50-5.00	3	B							
4.70	6	D				. . . rare pockets of firm clay up to 30mm from 4.70m depth.			
5.20-5.65	3	SPT(c)	N=41			. . . becoming dense from 5.20m depth.			
5.70	7	D					-3.31	5.90	
6.00-6.45	1	$U_{(100)}$	17 blows	2		Soft light grey silty CLAY with occasional plant remains and reed fragments up to 5mm diameter.			
6.00	8	D						(0.80)	
6.20		HP	c_u=25				-4.11	6.70	
6.65	9	D				Firm dark brown pseudo-fibrous PEAT with plant remains and reed fragments up to 5mm diameter.			
6.70-7.15	2	$U_{(100)}$	25 blows					(0.70)	
6.80		HP	c_u=60						
7.00	1	ES	Tubx3				-4.81	7.40	
7.35	10	D				Stiff dark brown mottled orange amorphous PEAT with occasional pseudo-fibrous plant remains and reed fragments up to 10mm diameter.			
7.40-7.80	3	$U_{(100)}$	25 blows						
7.60		HP	c_u=80						
8.00	11	D				. . . becoming dark brown to black from 8.05m depth.		(1.50)	
8.00	2	ES	Tubx3			. . . friable between 8.05m and 8.20m depth.			
8.05-8.50	4	$U_{(100)}$	30 blows						
8.70	12	D					-6.31	8.90	
8.75-9.20	5	$U_{(100)}$	30 blows						

Boring Progress and Water Observations

Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth
16/10/08		3.30	3.20	150	2.80
16/10/08		9.20	6.00	150	6.30

Chiselling

From	To	Duration (hh:mm)
1.80	2.25	00:30

General Remarks

1. Inspection pit dug from 0.00-1.20m depth.
2. Water added from 1.20m to 3.50m depth.
3. Groundwater strikes at 3.30m and 9.20m depth.
4. Backfilled with bentonite cement pellets on completion.
5. SPT test presented as 'as drilled' with no extrapolation of N value.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**RJ**	**JWild**	AGS

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STRUCTURAL SOILS

BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH24**

Contract Ref:	Start: **16.10.08**	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **16.10.08**	**2.59**	**E:647364.7 N:263967.2**	**2** of **2**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
			0% recovery	▼ 2		Medium dense grey slightly silty fine to medium SAND. (Norwich Crag) *(stratum text copied from layer at 8.90m depth from previous sheet)*		(1.10)	
9.20	2	W							
9.55-10.00	4	SPT	N=11				-7.41	10.00	
10.00	13	D				Borehole terminated at 10.00m depth.			

Boring Progress and Water Observations						Chiselling			General Remarks
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth	From	To	Duration (hh:mm)	

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**RJ**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH25**

Contract Ref:	Start: **08.10.08**	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **09.10.08**	**1.80**	**E:647268.4 N:263981.9**	**1** of **2**

Samples and In-situ Tests				Water	Backfill & Instru-mentation	Description of Strata	Reduced Level	Depth (Thick ness)	Material Graphic Legend
Depth	No	Type	Results						
0.30	1	D				MADE GROUND: Grass over medium dense orangish brown slightly gravelly silty fine to medium SAND with rare pockets of firm clay (up to 30mm) and fine gravel sized shell fragments. Gravel is subangular to subrounded fine to medium siltstone and flint.			
0.50-1.00	2	B							
1.00	3	D							
1.50-1.95	4	SPT	N=21						
1.95	5	D							
2.00	6	D						(5.00)	
2.50-3.00	7	B							
3.00	8	D							
3.50-3.95	9	SPT	N=33			. . . becoming dense from 3.50m depth.			
3.95	10	D							
4.00	11	D							
4.50-5.00	12	B					-3.20	5.00	
5.00	13	D				Soft brownish grey slightly sandy clayey SILT with pseudo-fibrous plant remains and reed fragments (up to 10mm diameter).		(0.50)	
5.00-5.50	14	B					-3.70	5.50	
5.50-6.00	15	$U_{(100)}$	20 blows			Firm brownish grey orangish silty CLAY with frequent pseudo-fibrous plant remains (up to 5mm diameter). No discernible structure.			
5.50		HP	c_u=45				-4.05	5.85	
6.00	16	D				Firm dark brown pseudo-fibrous PEAT with fragments of reed (up to 10mm diameter).			
6.00-6.50	17	$U_{(100)}$	15 blows				-4.40	6.20	
6.20		HP	c_u=35			Soft brownish grey organic silty CLAY with frequent pseudo-fibrous plant remains and reed fragments (<10mm diameter). No discernible structure, plant content decreasing with depth.			
6.50	18	D					-4.70	6.50	
6.50-7.00	19	$U_{(100)}$	15 blows					(0.55)	
7.00	1	ES	Tubx3				-5.25	7.05	
7.00	20	D				Very soft light grey silty CLAY with rare pseudo-fibrous plant remains (<5mm diameter). Strata damp from 6.50m depth.		(0.50)	
7.00-7.50	21	$U_{(100)}$	12 blows				-5.75	7.55	
7.20		HP	c_u=70			Firm dark brown pseudo-fibrous PEAT with frequent reed fragments and plant remains.			
7.50	2	ES	Tubx3					(0.65)	
7.50	22	D				Firm friable dark brown amorphous PEAT with frequent pseudo-fibrous plant remains (<3mm diameter).			
7.50-8.00	23	$U_{(100)}$	15 blows				-6.40	8.20	
8.00	24	D				. . . pockets of soft grey organic slightly sandy silty clay (<30mm) from 8.10m-8.30m depth.			
8.00-8.50	25	$U_{(100)}$	12 blows					(0.75)	
8.00	3	ES	Tubx3			Spongy dark brown with orange mottling pseudo-fibrous PEAT.			
8.15	4	ES	Tubx3						
8.50	26	D							
8.50-9.00	27	$U_{(100)}$	12 blows				-7.15	8.95	

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth
09/10/08	09:00	6.00	6.00		Dry
09/10/08	12:00	10.50	6.00		6.50

Chiselling		
From	To	Duration (hh:mm)

General Remarks

1. Inspection pit from 0.00-1.20m depth.
2. Seepages at 0.80m and 4.90m depth and groundwater strike at 9.10m depth.
3. Standpipe piezometer 19mm diameter installed to 7.80m depth.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**SJ**	**JWild**	

AGS

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH25**

Contract Ref:	Start: **08.10.08** End: **09.10.08**	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201		**1.80**	**E:647268.4 N:263981.9**	**2** of **2**

Samples and In-situ Tests				Water	Backfill & Instrumentation	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
9.00	28	D				Spongy black amorphous PEAT. *(stratum text copied from layer at 8.95m depth from previous sheet)*	-7.30	9.10	
9.00-9.30	29	$U_{(100)}$	20 blows				-7.50	9.30	
9.10	1	W				Soft black slightly organic sandy SILT.			
9.30	30	D				Medium dense grey slightly silty fine to medium SAND with rare fine gravel sized shell fragments. (Norwich Crag)		(1.20)	
10.00-10.45	31	SPT	N=17						
							-8.70	10.50	
						Borehole terminated at 10.50 m depth.			

Boring Progress and Water Observations						Chiselling			General Remarks
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth	From	To	Duration (hh:mm)	

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**SJ**	**JWild**	

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STRUCTURAL SOILS

BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH26**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **22.10.08**	**6.03**	**E:647508.5 N:263932.0**	**1** of **2**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
0.20	1	D				POSSIBLE MADE GROUND: Grass over medium dense orangish brown slightly gravelly silty fine to medium SAND with rare pockets of soft clay up to 30mm. Gravel is subangular fine shell fragments and fine to medium flint.			
0.50-1.00	1	B							
1.20-1.65	1	SPT(c)	N=10						
1.20	2	D							
1.70	3	D						(4.10)	
2.50-3.00	2	B							
2.70	4	D				. . . bands of brown mottled orange firm sandy clay up to 50mm at 2.70m depth.			
3.20-3.65	2	SPT(c)	N=23						
3.70	5	D				. . . pockets of dark brown to black organic material up to 20mm from 3.70m depth.			
4.00-4.45	3	SPT(c)	N=26				1.93	4.10	
4.50-5.00	3	B				POSSIBLE MADE GROUND: Medium dense brown mottled orange very sandy fine GRAVEL. Gravel is subangular fine shell fragments, subangular to subrounded fine to medium flint and chert and subrounded to rounded fine sandstone and quartz.		(1.10)	
4.70	6	D					0.83	5.20	
5.20-5.65	4	SPT(c)	N=35			POSSIBLE MADE GROUND: Dense brown slightly gravelly silty fine to medium SAND with occasional pockets of brown to black firm organic clay. Gravel is subangular fine shell fragments, subangular to subrounded fine to medium flint and subrounded fine quartz.			
5.20-5.70	4	B							
5.70	7	D		1				(1.90)	
6.70	8	D		1			-1.08	7.10	
7.10	1	W				Dense brown slightly silty fine to medium SAND with rare subangular fine gravel sized shell fragments. (Norwich Crag)			
7.20-7.65	5	SPT(c)	N=34						
7.20-7.70	5	B							
7.70	9	D						(2.90)	
8.70	10	D							

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth
22/10/08		7.10	7.10	150	6.10

Chiselling		
From	To	Duration (hh:mm)

General Remarks

1. Inspection pit dug from 0.00-1.20m depth.
2. Water added from 1.20m to 2.00m, and from 2.00m to 6.50m depth.
3. Groundwater strike at 7.10m depth.
4. Backfilled with bentonite cement pellets on completion.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**RJ**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH26**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **22.10.08**	**6.03**	**E:647508.5 N:263932.0**	**2** of **2**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
9.20-9.65 9.20-9.70	6 6	SPT(c) B	N=37			Dense brown slightly silty fine to medium SAND with rare subangular fine gravel sized shell fragments. (Norwich Crag) *(stratum text copied from layer at 7.10m depth from previous sheet)*	-3.98	10.00	
10.00	11	D				Borehole terminated at 10.00m depth.			

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth

Chiselling		
From	To	Duration (hh:mm)

General Remarks

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**RJ**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH27**

Contract Ref:	Start: **21.10.08**	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **21.10.08**	**5.98**	**E:647428.5 N:263927.0**	**1** of **2**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
0.20	1	D				POSSIBLE MADE GROUND: Grass over medium dense orangish brown slightly gravelly slightly silty fine to medium SAND. Gravel is subangular fine shell fragments and subangular to subrounded fine to medium siltstone and flint.			
0.50-1.00	1	B							
1.20-1.65	1	SPT(c)	N=12						
1.20	2	D							
1.70	3	D							
2.50-3.00	2	B							
2.70	4	D						(7.00)	
3.70-4.15	2	SPT(c)	N=14			. . . pockets of soft brown clay up to 30mm from 3.70m depth.			
3.70	5	D							
4.50-5.00	3	B							
4.70	6	D							
5.20-5.65	3	SPT(c)	N=26						
5.70	7	D		1					
6.50-7.00	4	B							
6.70	8	D		1			-1.02	7.00	
7.00	1	W				Dense orangish brown mottled dark grey silty fine to medium SAND with some subangular fine gravel sized shell fragments. (Norwich Crag)			
7.20-7.65	4	SPT(c)	N=36						
7.70	9	D							
8.50-9.00	5	B							
8.70	10	D							

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth
21/10/08		7.00	6.75	150	5.90

Chiselling		
From	To	Duration (hh:mm)

General Remarks

1. Inspection pit dug from 0.00-1.20m depth.
2. Water added from 1.20m to 12.00m depth.
3. Groundwater strike at 7.00m depth.
4. Backfilled with bentonite cement pellets on completion.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**RJ**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH27**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **21.10.08**	**5.98**	**E:647428.5 N:263927.0**	**2** of **2**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
9.20-9.65	5	SPT(c)	N=41			Dense orangish brown mottled dark grey silty fine to medium SAND with some subangular fine gravel sized shell fragments. (Norwich Crag) *(stratum text copied from layer at 7.00m depth from previous sheet)*			
9.70	11	D							
10.50-11.00	6	B							
10.70	12	D						(8.00)	
11.20-11.65	6	SPT(c)	N=43						
11.70	13	D							
12.50-13.00	7	B							
12.70	14	D							
13.20-13.65	7	SPT(c)	N=37						
13.70	15	D							
14.50-15.00	8	B							
14.70	16	D					-9.02	15.00	
						Borehole terminated at 15.00m depth.			

Boring Progress and Water Observations						Chiselling			General Remarks
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth	From	To	Duration (hh:mm)	

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**RJ**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH28**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **16.10.08**	**2.59**	**E:647312.3 N:263929.5**	**1** of **1**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
0.20	1	D				POSSIBLE MADE GROUND: Grass over medium dense orangish brown slightly gravelly fine to medium SAND with rare pockets of soft clay up to 30mm and rootlets up to 2mm diameter. Gravel is subangular fine shell fragments, subrounded fine to medium siltstone and subangular to subrounded fine to medium flint.		(1.60)	
0.50-1.00	1	B							
1.20-1.65	1	SPT(c)	N=25						
1.20	2	D					0.99	1.60	
1.70	3	D				POSSIBLE MADE GROUND: Medium dense dark grey mottled orange slightly gravelly silty fine to medium SAND with frequent black fibrous plant remains up to 2mm diameter. Gravel is subangular fine shell fragments and subangular to subrounded fine to medium flint.		(2.05)	
2.50-3.00	2	B							
2.70	4	D							
3.20-3.65	2	SPT(c)	N=42			. . . becoming dense from 3.20m depth.	-1.06	3.65	
3.70	5	D				Soft dark brown mottled orange and black slightly sandy clayey SILT with rare pseudo-fibrous plant remains up to 2mm diameter.	-1.41	4.00	
3.90	6	D							
4.00-4.45	1	$U_{(100)}$	15 blows			Soft grey silty CLAY with occasional pseudo-fibrous plant remains up to 2mm diameter.		(0.65)	
4.20	1	ES	Tbx4+VLx4+Jx4				-2.06	4.65	
4.65	7	D				Spongy friable dark brown amorphous PEAT with occasional pseudo-fibrous plant remains up to 5mm diameter and fine gravel sized shell fragments.		(1.35)	
4.70-5.15	2	$U_{(100)}$	15 blows						
5.35	8	D				. . . becoming dark brown to black from 5.40m depth.			
5.40	2	ES	Tbx4+VLx4+Jx4						
5.40-5.85	3	$U_{(100)}$	30 blows				-3.41	6.00	
6.05-6.50	3	SPT	N=12			Medium dense grey slightly silty fine to medium SAND. (Norwich Crag)		(0.50)	
6.05	9	D					-3.91	6.50	
						Borehole terminated at 6.50m depth.			

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth

Chiselling		
From	To	Duration (hh:mm)

General Remarks

1. Inspection pit dug from 0.00-1.20m depth.
2. Water added from 1.20m to 3.00m depth.
3. No groundwater encountered during excavation.
4. Backfilled with bentonite cement pellets on completion.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**RJ**	**JWild**	

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STRUCTURAL SOILS

BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH29**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	**22.10.08**	**2.58**	**E:647215.4 N:263941.3**	**1** of **1**
	End: **22.10.08**			

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
						POSSIBLE MADE GROUND: Grass over grey sandy subrounded COBBLES up to 100mm of flint.		(0.80)	
						. . . unidentified service from 0.80m depth.	1.78	0.80	
						Borehole terminated at 0.80m depth due to unidentified service.			

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth

Chiselling		
From	To	Duration (hh:mm)

General Remarks

1. Inspection pit dug from 0.00-0.80m depth.
2. Borehole aborted at 0.80m depth, due to encountering unidentified service.
3. Backfilled with bentonite cement pellets on completion.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**RJ**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH29A**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **22.10.08**	**2.46**	**E:647231.2 N:263950.6**	**1** of **2**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
0.20	1	D				MADE GROUND: Grass over pinkish brown slightly gravelly fine to medium SAND with rare rootlets up to 2mm diameter. Gravel is subangular fine flint, chert, subangular to subrounded siltstone and subangular fine to medium granite.	1.96	(0.50) 0.50	
0.50-0.80	1	B				MADE GROUND: Medium dense orangish brown slightly silty very gravelly fine to medium SAND with rare rootlets up to 2mm diameter. Gravel is subangular fine shell fragments and subangular to subrounded fine to medium flint.			
0.80-1.20	2	B							
1.00-1.00	2	SPT(c)	NP						
1.20-1.70	3	B						(2.20)	
1.70	3	D		1		. . . low content of subangular concrete cobbles up to 75mm from 1.70m depth.	-0.25	2.70	
2.70	4	D				MADE GROUND: Medium dense orangish brown mottled grey slightly silty gravelly fine to medium SAND. Gravel is subangular fine shell fragments, subrounded fine to medium flint, subangular fine to coarse concrete.			
2.70-3.20	4	B							
2.90	1	W							
3.20-3.65	2	SPT(c)	N=18						
3.70	5	D						(2.90)	
4.70-5.20	5	B				. . . becoming slightly gravelly with a low content of subangular flint cobbles up to 70mm from 4.70m depth.			
4.70	6	D							
5.20-5.65	3	SPT(c)	N=17				-3.15	5.60	
5.70	7	D				Soft light brown mottled black silty CLAY with occasional pseudo-fibrous plant remains up to 2mm diameter.	-3.30	5.75	
5.75-6.20	1	$U_{(100)}$	20 blows				-3.55	6.00	
5.80	1	ES	Tbx4+VLx4+Jx4			Firm dark brown fibrous PEAT with plant remains and reed fragments up to 10mm diameter.			
5.80		HP	c_u=60						
6.05		HP	c_u=60			Firm organic greyish brown silty CLAY with frequent reed fragments up to 10mm diameter.	-4.00	6.45	
6.45-6.90	2	$U_{(100)}$	20 blows						
6.50	2	ES	Tbx4+VLx4+Jx4			Soft light grey mottled black silty CLAY with rare pseudo-fibrous plant remains and reed fragments.		(0.70)	
7.10	9	D					-4.70	7.15	
7.15-7.60	3	$U_{(100)}$	20 blows			Plastic friable dark brown amorphous PEAT with occasional plant remains and reed fragments up to 3mm diameter and rare fine gravel sized shell fragments.			
7.55		HP	c_u=30			. . . 0.10m band of soft brown pseudo-fibrous peat with frequent reed fragments up to 5mm diameter between 7.50m and 7.60m depth.			
7.80	10	D						(1.85)	
7.85-8.30	4	$U_{(100)}$	20 blows						
8.00	3	ES	Tbx4+VLx4+Jx4						
8.50	11	D							
8.55-9.00	5	$U_{(100)}$	20 blows			. . . becoming mottled orange and red from 8.70m depth.	-6.55	9.00	

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth
22/10/08		2.90	2.70	150	2.10
23/10/08	09:00	10.50	10.50	150	1.80

Chiselling		
From	To	Duration (hh:mm)
1.20	1.60	00:15
1.90	2.10	00:15
2.30	2.55	00:15

General Remarks

1. Inspection pit dug from 0.00-1.20m depth.
2. Groundwater strike at 2.90m depth.
3. Backfilled with bentonite cement pellets on completion.
4. SPT test presented as 'as drilled' with no extrapolation of N value.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**RJ**	**JWild**	AGS

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH29A**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	**22.10.08** End: **22.10.08**	**2.46**	**E:647231.2 N:263950.6**	**2** of **2**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
9.20	12	D				Medium dense grey fine to medium SAND. (Norwich Crag)			
9.25-9.70	6	$U_{(100)}$	35 blows 0% recovery					(1.50)	
10.05-10.50	4	SPT	N=14				-8.05	10.50	
						Borehole terminated at 10.50m depth.			

Boring Progress and Water Observations						Chiselling			General Remarks
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth	From	To	Duration (hh:mm)	

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**RJ**	**JWild**	

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STRUCTURAL SOILS

BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH30**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **20.10.08**	**6.49**	**E:647479.7 N:263787.7**	**1** of **1**

Samples and In-situ Tests				Water	Backfill & Instru-mentation	Description of Strata	Reduced Level	Depth (Thick ness)	Material Graphic Legend
Depth	No	Type	Results						
0.10-0.60	1	B				POSSIBLE MADE GROUND: Grass over dark orangish brown slightly gravelly slightly silty fine to medium SAND with rare subangular fine shell fragments and rootlets up to 2mm diameter. Gravel is subangular to subrounded fine to medium flint and fine to coarse siltstone.		(0.60)	
0.20	1	D					5.89	0.60	
0.60-1.10	2	B				Dense orangish brown silty gravelly fine to medium SAND. Gravel is subangular fine shell fragments. (Norwich Crag)			
1.20-1.65	1	SPT(c)	N=38					(3.05)	
1.70	3	D							
2.50-3.00	2	B							
2.70	4	D							
3.20-3.65	2	SPT(c)	N=34				2.84	3.65	
						Borehole terminated at 3.65m depth.			

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth
20/10/08		3.65	3.65	150	Dry

Chiselling		
From	To	Duration (hh:mm)

General Remarks

1. Inspection pit dug from 0.00-1.20m depth.
2. Water added from 1.20m to 3.20m depth.
3. No groundwater encountered during excavation.
4. Standpipe piezometer 19mm diameter installed up to 3.20m depth.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**RJ**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH31**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **22.10.08**	**6.08**	**E:647377.8 N:263883.0**	**1** of **1**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
0.20	1	D				POSSIBLE MADE GROUND: Grass over dense orangish brown slightly gravelly fine to medium SAND with rare pockets of soft clay up to 30mm and rootlets up to 2mm diameter. Gravel is subangular to subrounded siltstone and flint.			
0.50-1.00	1	B							
1.20-1.65	1	SPT(c)	N=36					(2.70)	
1.20	2	D							
1.70	3	D							
2.60-3.00	2	B					3.38	2.70	
2.70	4	D				Dense orangish brown silty fine to medium SAND. (Norwich Crag)			
3.20-3.65	2	SPT	N=51			. . . becoming very dense from 3.20m depth.			
3.65	5	D						(2.30)	
4.50-5.00	3	B							
4.70	6	D					1.08	5.00	
						Borehole terminated at 5.00m depth.			

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth
20/10/08		5.00	5.00	150	Dry

Chiselling		
From	To	Duration (hh:mm)

General Remarks

1. Inspection pit dug from 0.00-1.20m depth.
2. Water added from 1.20m to 5.00m depth.
3. No groundwater encountered during excavation.
4. Backfilled with bentonite cement pellets on completion.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**RJ**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH32**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	**17.10.08** End: **17.10.08**	**3.72**	**E:647255.8 N:263906.4**	**1** of **1**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
						POSSIBLE MADE GROUND: Grass over orangish brown fine to medium SAND with rare subangular fine gravel sized shell fragments.		(0.60)	
						. . . unidentified service from 0.60m depth.	3.12	0.60	
						Borehole terminated at 0.60m depth due to unidentified service.			

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth

Chiselling		
From	To	Duration (hh:mm)

General Remarks

1. Inspection pit dug from 0.00-0.60m depth.
2. Borehole aborted at 0.60m depth, due to encountering unidentified service.
3. Backfilled with bentonite cement pellets on completion.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**RJ**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH32A**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **17.10.08**	**3.96**	**E:647271.4 N:263903.1**	**1** of **1**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
0.20	1	D				MADE GROUND: Grass over medium dense dark orangish brown slightly gravelly fine to medium SAND with rare pockets (up to 30mm) of soft clay and rootlets up to 3mm diameter. Gravel is subangular fine shell fragments, subangular to subrounded fine to medium siltstone and subangular to subrounded fine to coarse granite.		(2.00)	
0.50-1.00	1	B							
1.20-1.65	1	SPT(c)	N=12						
1.20	2	D							
1.70	3	D					1.96	2.00	
2.50-3.00	2	B				POSSIBLE MADE GROUND: Medium dense dark brown mottled black silty very gravelly fine to medium SAND with a low cobble content of flint (<85mm) and occasional pockets up to 45mm of organic plant material. Gravel is subangular fine shell fragments and subangular to subrounded fine to coarse flint.		(2.50)	
2.70	4	D							
3.20-3.65	2	SPT(c)	N=13						
3.70	5	D					-0.54	4.50	
4.50	6	D				Plastic dark brown amorphous PEAT.	-0.69	4.65	
4.60-5.05	1	$U_{(100)}$	30 blows 0% recovery			Medium dense greyish brown fine to medium SAND. (Norwich Crag)		(1.05)	
5.25-5.70	3	SPT	N=13						
5.25	7	D					-1.74	5.70	
						Borehole terminated at 5.70m depth.			

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth
17/10/08	17:00	4.50	4.50	150	Dry
20/10/08		5.70	4.50	150	Dry

Chiselling		
From	To	Duration (hh:mm)

General Remarks

1. Inspection pit dug from 0.00-1.20m depth.
2. Water added from 1.20m to 4.00m depth.
3. No groundwater encountered during excavation.
4. Backfilled with bentonite cement pellets on completion.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**RJ**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH33**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **17.10.08**	**2.77**	**E:647205.1 N:263888.8**	**1** of **1**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
0.20	1	D				MADE GROUND: Grass over dense orangish brown slightly gravelly slightly silty fine to medium SAND with rare rootlets up to 2mm diameter. Gravel is subangular fine gravel sized shell fragments, subangular to subrounded fine to medium siltstone and flint.			
0.50-1.00	1	B						(1.30)	
1.20-1.65	1	SPT(c)	N=31				1.47	1.30	
1.20	2	D				MADE GROUND: Dense dark orangish brown slightly silty gravelly fine to medium SAND with rare rootlets up to 2mm diameter and pockets of firm grey clay up to 45mm. Gravel is subangular fine shell fragments and fine to medium subangular to subrounded flint.			
1.70	3	D		▽1					
2.40	1	W		▼1					
2.50-3.00	2	B							
2.70	4	D				. . . subangular fine to medium concrete from 2.70m depth.			
3.20-3.65	2	SPT(c)	N=51			. . . becoming very dense at 3.20m depth.		(3.70)	
3.70	5	D							
4.20	3	W							
4.50-5.00	3	B							
4.70	6	D				. . . concrete from 4.80m depth.	-2.23	5.00	
						Borehole terminated at 5.00m depth.			

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth
17/10/08		2.40	2.20	150	1.90

Chiselling		
From	To	Duration (hh:mm)
4.80	5.00	00:30

General Remarks

1. Inspection pit dug from 0.00-1.20m depth.
2. Water added from 1.20m to 2.70m depth.
3. Groundwater strike at 2.40m depth.
4. Backfilled with arisings on completion.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**RJ**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH34**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **20.10.08**	**6.51**	**E:647418.9 N:263833.6**	**1** of **1**

Samples and In-situ Tests				Water	Backfill & Instru-mentation	Description of Strata	Reduced Level	Depth (Thick ness)	Material Graphic Legend
Depth	No	Type	Results						
0.20	1	D				POSSIBLE MADE GROUND: Grass over dark orangish brown slightly gravellly fine to medium SAND with rare rootlets up to 2mm diameter. Gravel is subangular to subrounded fine to medium siltstone.		(1.05)	
0.50-1.00	1	B					5.46	1.05	
1.20-1.65	1	SPT(c)	N=36			Dense orangish brown silty gravelly fine to medium SAND. Gravel is subangular fine shell fragments. (Norwich Crag)		(2.60)	
1.20	2	D							
1.20-1.70	2	B							
2.50-3.00	3	B							
2.70	3	D							
3.20-3.65	2	SPT(c)	N=34				2.86	3.65	
						Borehole terminated at 3.65m depth.			

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth
20/10/08		3.65	3.20	150	Dry

Chiselling		
From	To	Duration (hh:mm)

General Remarks

1. Inspection pit dug from 0.00-1.20m depth.
2. Water added from 1.20m to 3.20m depth.
3. No groundwater encountered during excavation.
4. Standpipe piezometer 19mm diameter installed to 3.20m depth.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**RJ**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH35**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	**20.10.08**	**6.71**	**E:647366.6 N:263784.3**	**1** of **1**
	End: **20.10.08**			

Samples and In-situ Tests				Water	Backfill	Description of Strata	Reduced Level	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results						
						MADE GROUND: Grass over orangish brown fine to medium SAND with rare subangular gravel sized shell fragments.		(1.20)	
						. . . unidentified service pipe from 1.20m depth.	5.51	1.20	
						Borehole terminated at 1.20m depth, due to unidentified service pipe.			

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth

Chiselling		
From	To	Duration (hh:mm)

General Remarks

1. Inspection pit dug from 0.00-1.20m depth.
2. Borehole aborted at 1.20m depth due to unidentified service encountered.
3. Backfilled with arisings on completion.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**RJ**	**JWild**	

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STRUCTURAL SOILS

BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH36**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **16.10.08**	**0.94**	**E:647279.3 N:264380.6**	**1** of **2**

Samples and In-situ Tests				Water	Backfill & Instru-mentation	Description of Strata	Reduced Level	Depth (Thick ness)	Material Graphic Legend
Depth	No	Type	Results						
0.30	1	D				POSSIBLE MADE GROUND: Grass over orange brown slightly gravelly fine to medium SAND with subangular gravel sized shell fragments, rare rootlets up to 3mm diameter and 30mm sized pockets of soft orangish brown clay. Gravel is subangular to subrounded fine to coarse flint.			
0.50-1.00	2	B						(1.50)	
1.00	3	D					-0.56	1.50	
1.50-1.95	4	SPT(c)	N=6			Loose dark orangish brown silty gravelly fine to medium SAND with occasional 30mm sized pockets of soft orangish brown mottled grey clay, rare subangular fine to medium shell fragments and organic remains up to 4mm diameter. Gravel is subangular to subrounded fine to coarse flint.	-0.96	1.90	
1.50-2.00	5	B							
2.00-3.00	16	D				Soft grey organic slightly sandy silty CLAY with pseudo-fibrous plant remains up to 2mm diameter.		(1.10)	
2.00	6	D							
2.00	7	P					-2.06	3.00	
3.00-3.40	17	D				Spongy dark brown fibrous PEAT with plant remains and reed fragments up to 10mm diameter.	-2.46	3.40	
3.00	8	P							
						No recovery.	-3.06	(0.60) 4.00	
4.00-5.00	18	B				Plastic black pseudo-fibrous PEAT with plant remians and reed fragments up to 5mm diameter.			
4.00	9	P						(1.70)	
5.00	10	P							
5.00-5.70	19	B					-4.76	5.70	
6.00	11	P				Plastic black amorphous PEAT with occasional fine gravel sized shell fragments.			
6.00-7.00	20	D						(2.30)	
7.00-8.00	21	P					-7.06	8.00	
						. . . becoming slightly sandy from 7.90m.			
						Medium dense grey fine to medium SAND. (Norwich Crag)			
8.50	13	D						(1.50)	

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth
15/10/08		1.20	-	200	1.20
16/10/08		8.20	3.00	200	5.00

Chiselling		
From	To	Duration (hh:mm)

General Remarks

1. Inspection pit dug from 0.00-1.20m depth.
2. Seepage at 1.20m depth.
3. Groundwater strike at 8.20m depth.
4. Standpipe piezometer 19mm diameter installed to 7.80m depth.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**SJ**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH36**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	**15.10.08** End: **16.10.08**	**0.94**	**E:647279.3 N:264380.6**	**2** of **2**

Samples and In-situ Tests				Water	Backfill & Instru-mentation	Description of Strata	Reduced Level	Depth (Thick ness)	Material Graphic Legend
Depth	No	Type	Results						
9.00 9.00-9.45	1 14	W SPT	N=10			Medium dense grey fine to medium SAND. (Norwich Crag) *(stratum text copied from layer at 8.00m depth from previous sheet)*	-8.56	9.50	
						Borehole terminated at 9.50m depth.			

Boring Progress and Water Observations						Chiselling			General Remarks
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth	From	To	Duration (hh:mm)	

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**SJ**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH37**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **20.10.08**	**1.72**	**E:647208.4 N:264296.1**	**1** of **1**

Samples and In-situ Tests				Water	Backfill & Instru-mentation	Description of Strata	Reduced Level	Depth (Thick ness)	Material Graphic Legend
Depth	No	Type	Results						
0.30	1	D				MADE GROUND: Grass over orangish brown slightly gravelly fine to medium SAND with rare subangular gravel sized shell fragments, rootlets up to 3mm diameter and 30mm sized pockets of soft brown clay. Gravel is subangular to subrounded fine to coarse flint, slag and a 250mm piece of plastic with a low cobble content of flint up to 95mm diameter.			
0.50-1.00	2	B						(1.50)	
1.00	3	D							
							0.22	1.50	
1.50-1.95	4	SPT(c)	N=8			Loose dark orange brown slightly silty very sandy GRAVEL. Gravel is subangular to subrounded fine to coarse flint and rare subangular fine to medium shell fragments.			
1.50-2.00	5	B							
2.00	6	D						(1.20)	
							-0.98	2.70	
2.70-3.00	7	B				Soft brown PEAT. (Drillers description)			
3.00	8	D							
3.00-3.50	9	$U_{(100)}$	12 blows						
3.50	10	D							
3.50-4.00	11	$U_{(100)}$	15 blows						
4.00	12	D							
4.00-4.50	13	$U_{(100)}$	15 blows						
4.50	14	D							
4.50-5.00	15	$U_{(100)}$	15 blows					(4.70)	
5.00	16	D							
5.00-5.50	17	$U_{(100)}$	15 blows						
5.50	18	D							
5.50-6.00	19	$U_{(100)}$	15 blows						
6.00	20	D							
6.00-6.50	21	$U_{(100)}$	15 blows						
6.50	22	D							
6.50-7.00	23	$U_{(100)}$	12 blows						
7.00	24	D							
7.00-7.50	25	$U_{(100)}$	30 blows	11			-5.68	7.40	
7.50	26	D				Medium dense grey fine to medium SAND. (Norwich Crag)			
8.00	1	W						(1.60)	
8.00	27	D							
8.50-8.95	28	SPT	N=10						
							-7.28	9.00	

Borehole terminated at 9.00m depth.

Boring Progress and Water Observations						Chiselling		
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth	From	To	Duration (hh:mm)
20/10/08		7.50	3.00	200	7.50			

General Remarks

1. Inspection pit dug from 0.00-1.20m depth.
2. Groundwater strike at 7.50m depth.
3. Standpipe piezometer 19mm diameter installed up to 7.00m depth.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**SJ**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH38**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **17.10.08**	**1.65**	**E:647134.3 N:264215.0**	**1** of **1**

Samples and In-situ Tests				Water	Backfill & Instru-mentation	Description of Strata	Reduced Level	Depth (Thick ness)	Material Graphic Legend
Depth	No	Type	Results						
0.30	1	D				MADE GROUND: Grass over loose orangish brown silty gravelly fine to medium SAND with rare subangular gravel sized shell fragments and rootlets up to 3mm diameter. Gravel is subangular to subrounded fine to coarse flint and concrete with a low cobble content of concrete up to 190mm diameter.			
0.50-1.00	2	B							
1.00	3	D		1					
1.20	1	W							
1.50-1.95	4	SPT(c)	N=8			. . . becoming dark orange brown and gravelly from 1.50m depth.		(3.50)	
1.50-2.00	5	B							
2.00	6	D							
2.50-3.00	11	B							
3.00	7	D					-1.85	3.50	
3.50-3.95	8	SPT(c)	N=15	2		MADE GROUND: Medium dense dark orange brown slightly gravelly fine to medium SAND with rare subangular gravel sized shell fragments. Gravel is subangular to subrounded fine to coarse flint and concrete.			
3.50-4.00	9	B						(1.00)	
4.00	10	D					-2.85	4.50	
4.50-5.00	12	B				MADE GROUND: Loose dark orange brown slightly gravelly slightly silty fine to medium SAND with rare subangular gravel sized shell fragments and 50mm sized pockets of soft brown grey clay. Gravel is subangular to subrounded fine to coarse flint and concrete with a low cobble content of concrete up to 160mm diameter.			
5.00	13	D						(1.30)	
5.50-5.95	14	SPT	N=4				-4.15	5.80	
5.80-6.00	16	B				Spongy dark brown pseudo-fibrous PEAT with plant remains and reed fragments up to 12mm diameter.			
5.95	15	D							
6.00-6.50	17	$U_{(100)}$	12 blows					(1.00)	
6.50	18	D					-5.15	6.80	
7.00	20	D				Plastic friable black sandy amorphous PEAT with occasional fine gravel sized shell fragments.			
7.00-7.50	21	$U_{(100)}$	15 blows					(1.20)	
7.50	22	D							
7.50-8.00	23	$U_{(100)}$	20 blows	2			-6.35	8.00	
8.00	2	W				Medium dense grey slightly silty fine to medium SAND. (Norwich Crag)			
8.00	24	D						(1.00)	
8.50-8.95	25	SPT	N=13				-7.35	9.00	

Borehole terminated at 9.00m depth.

Boring Progress and Water Observations						Chiselling		
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth	From	To	Duration (hh:mm)
16/10/08		1.20	-	200	1.20			
17/10/08		8.00	6.00	200	3.80			

General Remarks

1. Inspection pit dug from 0.00-1.20m depth.
2. Groundwater strikes at 1.20m and 8.00m depth.
3. Standpipe piezometer 19mm diameter installed up to 7.80m depth.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**SJ**	**JWild**	

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STRUCTURAL SOILS

BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH39**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **21.10.08**	**1.63**	**E:647057.1 N:264123.0**	**1** of **2**

Samples and In-situ Tests				Water	Backfill & Instru-mentation	Description of Strata	Reduced Level	Depth (Thick ness)	Material Graphic Legend
Depth	No	Type	Results						
0.30	1	D				MADE GROUND: Grass over orange brown slightly gravelly fine to medium SAND with rare subangular gravel sized shell fragments and 30mm sized pockets of soft brown clay. Gravel is angular to subrounded fine to coarse concrete, flint, sandstone and mudstone.			
0.50-1.00	2	B						(1.50)	
1.00	3	D					0.13	1.50	
1.50-1.95	4	SPT(c)	N=10			Medium dense orange brown mottled grey slightly gravelly slightly silty fine to medium SAND with rare subangular fine to medium shell fragments. Gravel is subangular to subrounded fine to coarse sandstone and mudstone.			
1.50-2.00	5	B		1				(1.00)	
2.00	6	D					-0.87	2.50	
2.50-3.00	7	B				Dark orange brown silty fine to medium SAND with rare subangular gravel sized shell fragments and 45mm sized pockets of firm grey clay.			
								(1.00)	
3.50	1	W				Very loose dark orange brown mottled grey slightly silty fine to medium SAND with rare subangular gravel sized shell fragments and organic remains up to 3mm diameter.	-1.87	3.50	
3.50-3.95	9	$SPT_{(NR)}$	N=1						
3.50-4.00	10	B							
4.00	11	D							
4.50-5.00	12	B				. . . becoming silty from 4.50m depth.		(2.20)	
5.00	13	D							
5.50-5.95	14	SPT	N=4				-4.07	5.70	
5.95	15	D		2		Soft grey slightly organic silty CLAY with pseudo-fibrous plant remains and reed fragments up to 3mm diameter.		(0.80)	
6.00-7.00	16	P							
6.00-6.50	24	D					-4.87	6.50	
6.20		HP	c_u=25						
6.50-6.60	25	D				Firm black mottled brown fibrous PEAT with plant remains and reed fragments up to 5mm diameter.	-4.97	6.60	
6.50		HP	c_u=60					(0.50)	
6.60-7.00	26	D				Firm grey organic sandy silty CLAY with frequent plant remains and reed fragments up to 15mm diameter.	-5.47	7.10	
6.70		HP	c_u=50						
7.00-8.00	17	P							
7.10-7.70	27	B				Firm black mottled brown pseudo-fibrous PEAT with plant remians and reed fragments up to 20mm diameter.		(0.60)	
7.20		HP	c_u=60				-6.07	7.70	
8.00-8.50	18	$U_{(100)}$	30 blows			Plastic locally friable black amorphous PEAT.			
8.00-8.50	28	B						(1.30)	
8.50	19	D							
8.50-9.20	20	P					-7.37	9.00	

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth
21/10/08		2.00	2.00	200	2.00
21/10/08		9.20	6.00	200	6.10

Chiselling		
From	To	Duration (hh:mm)

General Remarks

1. Inspection pit dug from 0.00-1.20m depth.
2. Groundwater strikes at 2.00m and 9.20m depth.
3. Standpipe piezometer 19mm diameter installed up to 8.80m depth.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**SJ**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH39**

Contract Ref:	Start:	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **21.10.08**	**1.63**	**E:647057.1 N:264123.0**	**2** of **2**

Samples and In-situ Tests				Water	Backfill & Instru-mentation	Description of Strata	Reduced Level	Depth (Thick ness)	Material Graphic Legend
Depth	No	Type	Results						
9.20	21	D		▼ 2		Medium dense grey fine to medium SAND. (Norwich Crag)		(1.00)	
9.50	2	W							
9.50-9.95	22	SPT	N=14						
10.00	23	D				Borehole terminated at 10.00m depth.	-8.37	10.00	

Boring Progress and Water Observations						Chiselling			General Remarks
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth	From	To	Duration (hh:mm)	

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**SJ**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH40**

Contract Ref:	Start: **23.10.08**	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201	End: **24.10.08**	**3.96**	**E:647047.7 N:264016.0**	**1** of **2**

Samples and In-situ Tests				Water	Backfill & Instru-mentation	Description of Strata	Reduced Level	Depth (Thick ness)	Material Graphic Legend
Depth	No	Type	Results						
0.30	1	D				MADE GROUND: Grass over orange brown slightly gravelly fine to medium SAND with rare subangular fine gravel sized shell fragments, rootlets up to 18mm diameter and 25mm sized pockets of soft brown clay. Gravel is subangular to subrounded fine to coarse sandstone, mudstone, flint and granite.			
0.50-1.00	2	B						(1.50)	
1.00	3	D					2.46	1.50	
1.50-1.95	4	SPT(c)	N=11			Medium dense dark orange brown slightly gravelly slightly silty fine to medium SAND with rare subangular fine gravel sized shell fragments, rootlets up to 5mm diameter and 25mm sized pockets of soft brown clay. Gravel is subangular to subrounded fine to coarse mudstone.			
1.50-2.00	5	B							
2.00	6	D						(2.00)	
2.50-3.00	7	B							
3.00	8	D					0.46	3.50	
3.50-3.95	9	SPT(c)	N=6			Loose dark orange brown mottled grey slightly gravelly silty fine to medium SAND with rare subangular fine gravel sized shell fragments and 20mm sized pockets of soft grey clay. Gravel is subangular to subrounded fine to coarse mudstone.			
3.50-4.00	10	B							
4.00	11	D		▽1					
4.50-5.00	12	B						(3.00)	
5.00	13	D							
5.50-5.95	14	SPT	N=25			. . . becoming medium dense from 5.50m depth.			
5.95	15	D							
6.00	16	D					-2.54	6.50	
6.50-7.00	17	B				Medium dense dark orange mottled grey silty fine to medium SAND with rare fine gravel sized shell fragments.		(0.70)	
7.00	18	D					-3.24	7.20	
7.20-7.50	19	B				Firm dark brown fibrous PEAT with plant remains and reed fragments up to 15mm diameter.		(0.60)	
7.50	20	P							
7.50-7.70	27	D					-3.84	7.80	
7.60		HP	c_u=60			Soft grey organic silty CLAY with plant remains and reed fragments up to 10mm and occasional fine gravel sized shell fragments.			
7.80-8.40	28	B							
8.50	21	P							
8.50-9.20	29	B						(2.20)	

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth
24/10/08	08:00	7.50	7.50	200	Dry
24/10/08		12.20	12.00	200	4.60

Chiselling		
From	To	Duration (hh:mm)

General Remarks

1. Inspection pit dug from 0.00-1.20m depth.
2. Groundwater strike at 12.20m depth.
3. Standpipe 50mm diameter installed up to 16.00m depth.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**SJ**	**JWild**	

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BOREHOLE LOG

Contract:	Client:	Borehole:
Sizewell C Supplementary Investigation	**British Energy**	**BH40**

Contract Ref:	Start: **23.10.08** End: **24.10.08**	Ground Level (m AOD):	National Grid Co-ordinate:	Sheet:
722201		**3.96**	**E:647047.7 N:264016.0**	**2** of **2**

Samples and In-situ Tests				Water	Backfill & Instru-mentation	Description of Strata	Reduced Level	Depth (Thick ness)	Material Graphic Legend
Depth	No	Type	Results						
9.25	22	P				Soft grey organic silty CLAY with plant remains and reed fragments up to 10mm and occasional fine gravel sized shell fragments. *(stratum text copied from layer at 7.80m depth from previous sheet)*	-6.04	10.00	
9.30-10.00	30	B							
10.00-10.20	31	D				Firm dark brown fibrous PEAT with plant remains and reed fragments up to 5mm diameter.	-6.29	10.25	
10.25	23	P					-6.44	10.40	
10.40-11.00	32	B				Soft organic grey silty CLAY with plant remains up to 3mm diameter.		(0.60)	
						Spongy black pseudo-fibrous PEAT with plant remains and reed fragments up to 10mm diameter.	-7.04	11.00	
11.25	24	P				Firm friable black amorhous PEAT.			
11.30-11.70	33	B						(1.00)	
							-8.04	12.00	
				▼		Medium dense grey silty fine to medium SAND. (Norwich Crag)			
12.50-12.95	25	SPT(c)	N=11						
12.50-13.00	26	B						(5.00)	
							-13.04	17.00	
						Borehole terminated at 17.00m depth.			

Boring Progress and Water Observations						Chiselling			General Remarks
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth	From	To	Duration (hh:mm)	

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**SJ**	**JWild**	

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STANDARD PENETRATION TEST SUMMARY TABLE

Contract:	Client:	Job No:
Sizewell C Supplementary Investigation	**British Energy**	**722201**

Exploratory Position ID	Depth (m)	Hole Dia (mm)	Casing Depth (m)	Water Depth (m)	Seating Drive		Test Drive			Comments
					Blows	Pen (mm)	Blows	R (mm)	Result	
BH1	1.20		1.20		4,5	150	6,7,8,12		N=33	SPT(c)
	3.20		3.20	2.20	1,2	150	2,2,3,2		N=9	SPT(c)
	4.30		4.30		1,0	150	1,0,1,0		N=2	
	9.00		5.00	5.50	1,0	150	1,0,1,0		N=2	
BH2	1.20		1.20		1,2	150	5,10,10,10		N=35	SPT(c)
	3.20		3.20		1,1	150	0,0,1,0		N=1	SPT(c)
BH3	1.50				3,4	150	4,5,6,5		N=20	
	3.50				0,0	150	0,0,0,1		N=1	
	5.50				1,1	150	1,2,1,2		N=6	SPT(c)
	9.40				1,1	150	1,1,1,1		N=4	
BH4	1.20		1.20	Dry	2,4	150	5,4,6,7		N=22	SPT(c)
	3.20		3.20	2.80	2,3	150	5,6,5,6		N=22	SPT(c)
	5.20		5.20	2.60	1,2	150	1,1,1,0		N=3	SPT(c)
	10.00		5.75	4.30	1,1	150	1,1,1,0		N=3	
BH5	1.20		1.20	1.10	2,3	150	2,2,4,5		N=13	SPT(c)
	3.20		3.20	1.70	1,0	150	1,0,1,0		N=2	
	5.20		5.20	2.00	1,1	150	1,0,1,0		N=2	SPT(c)
	9.05		5.75	3.60	1,0	150	0,0,0,0		N=0	
BH6	1.50		1.50		1,2	150	1,2,1,2		N=6	
	3.50		3.50		2,2	150	1,2,3,4		N=10	
	8.50		4.50		1,2	150	2,1,2,3		N=8	
BH7	1.50		1.50		1,1	150	1,1,1,1		N=4	
	3.50				0,0	150	0,1,0,1		N=2	
	9.50		8.50		2,3	150	2,3,3,4		N=12	
BH8	1.20		1.20	Dry	2,4	150	6,8,6,4		N=24	SPT(c)

Notes:
1. Tests carried out in accordance with BS1377: Part 9: 1990: 3.3.
2. Reported blows are for 75mm penetration unless indicated "+".
3. Where full test drive was not achieved, actual penetration (R) and total test drive blows are reported.
4. Tests carried out using a split spoon sampler unless noted as CPT in comments column.

STRUCTURAL SOILS

STANDARD PENETRATION TEST SUMMARY TABLE

Contract:	Client:	Job No:
Sizewell C Supplementary Investigation	**British Energy**	**722201**

Exploratory Position ID	Depth (m)	Hole Dia (mm)	Casing Depth (m)	Water Depth (m)	Seating Drive		Test Drive			Comments
					Blows	Pen (mm)	Blows	R (mm)	Result	
BH8	3.20		3.20	2.40	2,3	150	3,4,5,6		N=18	SPT(c)
	10.60		5.00	3.60	1,2	150	4,4,3,3		N=14	
BH9	1.20		1.20	Dry	8,8	150	7,4,3,3		N=17	SPT(c)
	3.20		3.20	1.90	1,2	150	1,1,1,1		N=4	SPT(c)
	9.55		4.00	3.20	1,2	150	1,1,1,1		N=4	
BH10	1.50				1,2	150	1,2,1,1		N=5	
BH10A	1.50		1.50		2,1	150	3,2,2,2		N=9	
	3.50		3.50		0,1	150	1,2,1,2		N=6	
	9.00				3,2	150	3,3,2,3		N=11	
BH11	1.50				1,0	150	0,1,0,0		N=1	
	3.50				1,1	150	2,4,5,4		N=15	
	11.50				2,2	150	2,4,4,6		N=16	
BH12	1.50				1,1	150	2,3,5,4		N=14	
	3.50				2,3	150	4,4,5,5		N=18	
BH13A	1.50				0,2	150	3,5,5,6		N=19	
	3.50				1,2	150	3,3,4,3		N=13	
	9.90				1,4	150	7,11,18,14+	255	1,4 / 7,11,18,14	
									for 30mm	
BH14	1.50				1,2	150	3,2,2,2		N=9	
	3.50				1,3	150	2,2,2,3		N=9	
	9.60				1,1	150	3,3,5,5		N=16	
BH15A	1.20		1.20		5,8	150	10,12,14,16		N=52	SPT(c)
	3.20		3.20	2.40	4,7	150	8,10,10,12		N=40	SPT(c)
BH16	1.50		1.50		2,6	150	7,9,12,17		N=45	

Notes:
1. Tests carried out in accordance with BS1377: Part 9: 1990: 3.3.
2. Reported blows are for 75mm penetration unless indicated "+".
3. Where full test drive was not achieved, actual penetration (R) and total test drive blows are reported.
4. Tests carried out using a split spoon sampler unless noted as CPT in comments column.

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STRUCTURAL SOILS

STANDARD PENETRATION TEST SUMMARY TABLE

Contract:	Client:	Job No:
Sizewell C Supplementary Investigation	**British Energy**	**722201**

Exploratory Position ID	Depth (m)	Hole Dia (mm)	Casing Depth (m)	Water Depth (m)	Seating Drive		Test Drive			Comments
					Blows	Pen (mm)	Blows	R (mm)	Result	
BH16	3.50		3.50	3.00	3,4	150	7,10,16,16		N=49	
	11.05		5.20	4.50	1,1	150	1,2,2,3		N=8	
BH17	1.50				3,6	150	9,8,9,11		N=37	SPT(c)
	3.50				2,4	150	4,2,1,1		N=8	
	11.05				1,1	150	2,3,4,5		N=14	
BH18	1.20				4,6	150	9,16,20,5+	240	4,6 / 9,16,20,5	SPT(c)
									for 15mm	
	3.20				5,8	150	9,11,12,14		N=46	SPT(c)
	5.20				4,6	150	4,5,4,6		N=19	SPT(c)
BH19A	1.20				3,4	150	5,7,7,8		N=27	SPT(c)
	3.20				2,2	150	1,1,1,1		N=4	SPT(c)
	10.05				2,4	150	3,4,4,4		N=15	
BH20	1.20				3,5	150	8,10,12,14		N=44	SPT(c)
	3.20				4,6	150	8,10,8,6		N=32	SPT(c)
	11.05				1,2	150	2,3,4,5		N=14	
BH21	1.20				4,7	150	8,9,9,11		N=37	SPT(c)
	3.20				5,7	150	10,12,12,13		N=47	SPT(c)
	11.20				1,1	150	1,1,2,3		N=7	
BH22	1.50				2,10	150	50+	15	2,10 / 50	
									for 15mm	
	3.50				1,1	150	2,5,8,9		N=24	
	10.80				2,6	150	6,8,8,9		N=31	
BH23	1.20				5,6	150	8,9,11,13		N=41	SPT(c)
	3.20				4,6	150	8,10,10,12		N=40	
	5.20				2,3	150	2,3,2,3		N=10	SPT(c)

Notes:
1. Tests carried out in accordance with BS1377: Part 9: 1990: 3.3.
2. Reported blows are for 75mm penetration unless indicated "+".
3. Where full test drive was not achieved, actual penetration (R) and total test drive blows are reported.
4. Tests carried out using a split spoon sampler unless noted as CPT in comments column.

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STRUCTURAL SOILS

STANDARD PENETRATION TEST SUMMARY TABLE

Contract:	Client:	Job No:
Sizewell C Supplementary Investigation	**British Energy**	**722201**

Exploratory Position ID	Depth (m)	Hole Dia (mm)	Casing Depth (m)	Water Depth (m)	Seating Drive		Test Drive			Comments
					Blows	Pen (mm)	Blows	R (mm)	Result	
BH23	10.05				2,4	150	4,5,5,5		N=19	
BH24	1.20				2,4	150	4,5,7,6		N=22	SPT(c)
	3.20				7,11	150	17,17,12,4+	250	7,11 / 17,17,12,4 for 25mm	SPT(c)
	5.20				4,8	150	9,10,11,11		N=41	SPT(c)
	9.55				1,2	150	2,3,2,4		N=11	
BH25	1.50		1.50		1,2	150	4,5,6,6		N=21	
	3.50		3.50		2,3	150	5,7,10,11		N=33	
	10.00		6.00		2,3	150	3,4,5,5		N=17	
BH26	1.20				2,3	150	2,3,2,3		N=10	SPT(c)
	3.20				3,4	150	5,6,6,6		N=23	SPT(c)
	4.00				3,5	150	5,6,7,8		N=26	SPT(c)
	5.20				4,6	150	7,8,10,10		N=35	SPT(c)
	7.20				3,7	150	7,8,10,9		N=34	SPT(c)
	9.20				4,6	150	7,9,10,11		N=37	SPT(c)
BH27	1.20				3,3	150	2,3,4,3		N=12	SPT(c)
	3.70				3,3	150	2,3,4,5		N=14	SPT(c)
	5.20				3,4	150	5,7,7,7		N=26	SPT(c)
	7.20				4,6	150	7,9,10,10		N=36	SPT(c)
	9.20				5,9	150	9,10,10,12		N=41	SPT(c)
	11.20				6,9	150	10,11,10,12		N=43	SPT(c)
	13.20				5,7	150	8,9,9,11		N=37	SPT(c)
BH28	1.20				4,5	150	5,6,7,7		N=25	SPT(c)
	3.20				6,9	150	10,11,11,10		N=42	SPT(c)
	6.05				2,4	150	4,3,3,2		N=12	
BH29A	1.00				25,0	0	50+,0+,0+,0+	0	NP	SPT(c)

Notes:
1. Tests carried out in accordance with BS1377: Part 9: 1990: 3.3.
2. Reported blows are for 75mm penetration unless indicated "+".
3. Where full test drive was not achieved, actual penetration (R) and total test drive blows are reported.
4. Tests carried out using a split spoon sampler unless noted as CPT in comments column.

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STRUCTURAL SOILS

STANDARD PENETRATION TEST SUMMARY TABLE

Contract:		Client:	Job No:
Sizewell C Supplementary Investigation		**British Energy**	**722201**

Exploratory Position ID	Depth (m)	Hole Dia (mm)	Casing Depth (m)	Water Depth (m)	Seating Drive		Test Drive			Comments
					Blows	Pen (mm)	Blows	R (mm)	Result	
BH29A	3.20				2,3	150	4,5,4,5		N=18	SPT(c)
	5.20				2,3	150	4,6,4,3		N=17	SPT(c)
	10.05				2,4	150	3,4,3,4		N=14	
BH30	1.20				6,8	150	9,10,10,9		N=38	SPT(c)
	3.20				6,7	150	8,9,8,9		N=34	SPT(c)
BH31	1.20				4,6	150	7,8,10,11		N=36	SPT(c)
	3.20				5,8	150	11,13,13,14		N=51	
BH32A	1.20				3,3	150	3,2,3,4		N=12	SPT(c)
	3.20				2,3	150	3,4,3,3		N=13	SPT(c)
	5.25				1,2	150	2,3,4,4		N=13	
BH33	1.20				4,3	150	4,6,10,11		N=31	SPT(c)
	3.20				5,7	150	10,11,13,17		N=51	SPT(c)
BH34	1.20				5,7	150	8,9,9,10		N=36	SPT(c)
	3.20				4,6	150	7,8,9,10		N=34	SPT(c)
BH36	1.50				2,4	150	2,1,1,2		N=6	SPT(c)
	9.00				1,1	150	2,2,3,3		N=10	
BH37	1.50				6,4	150	3,2,1,2		N=8	SPT(c)
	8.50				2,3	150	2,3,3,2		N=10	
BH38	1.50				6,5	150	3,2,1,2		N=8	SPT(c)
	3.50				2,3	150	4,3,4,4		N=15	SPT(c)
	5.50				0,0	150	1,1,1,1		N=4	
	8.50				2,2	150	3,3,3,4		N=13	
BH39	1.50				1,1	150	2,3,2,3		N=10	SPT(c)

Notes:
1. Tests carried out in accordance with BS1377: Part 9: 1990: 3.3.
2. Reported blows are for 75mm penetration unless indicated "+".
3. Where full test drive was not achieved, actual penetration (R) and total test drive blows are reported.
4. Tests carried out using a split spoon sampler unless noted as CPT in comments column.

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STRUCTURAL SOILS

STANDARD PENETRATION TEST SUMMARY TABLE

Contract:	Client:	Job No:
Sizewell C Supplementary Investigation	**British Energy**	**722201**

Exploratory Position ID	Depth (m)	Hole Dia (mm)	Casing Depth (m)	Water Depth (m)	Seating Drive		Test Drive			Comments
					Blows	Pen (mm)	Blows	R (mm)	Result	
BH39	3.50				0,0	150	0,0,0,1		N=1	
	5.50				1,1	150	1,1,1,1		N=4	
	9.50				3,2	150	3,4,3,4		N=14	
BH40	1.50		1.50		3,2	150	3,3,2,3		N=11	SPT(c)
	3.50		3.50		0,1	150	1,2,1,2		N=6	SPT(c)
	5.50		5.50		3,4	150	5,6,7,7		N=25	
	12.50		7.50		1,2	150	3,2,3,3		N=11	SPT(c)

Notes:
1. Tests carried out in accordance with BS1377: Part 9: 1990: 3.3.
2. Reported blows are for 75mm penetration unless indicated "+".
3. Where full test drive was not achieved, actual penetration (R) and total test drive blows are reported.
4. Tests carried out using a split spoon sampler unless noted as CPT in comments column.

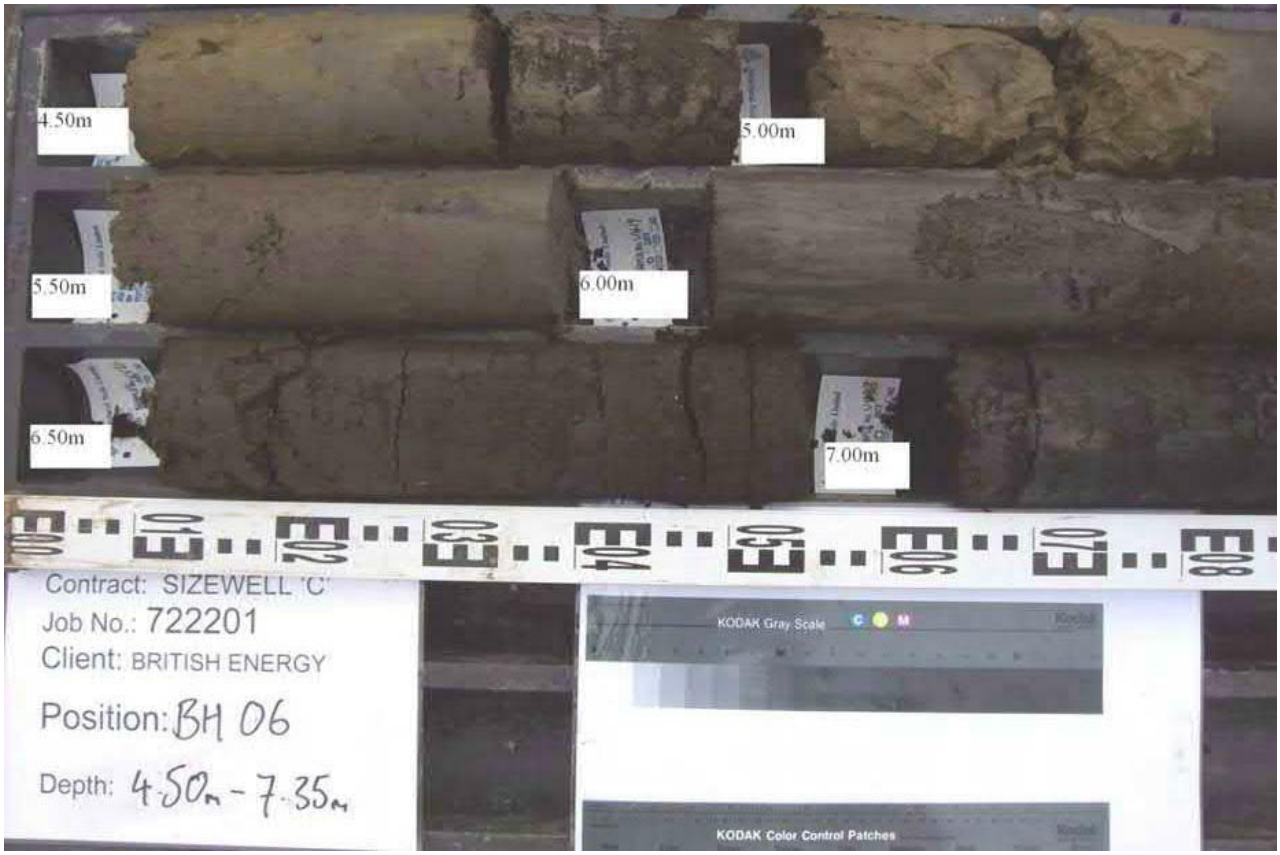
BH1 depth: 4.80m to 8.05m

BH3 depth: 6.70m to 8.50m

BH4 depth: 5.75m to 9.70m

BH5 depth: 5.75m to 9.00m

BH6 depth: 4.50m to 7.50m



BH7 depth: 3.80m to 8.50m

BH8 depth: 5.00m to 9.65m

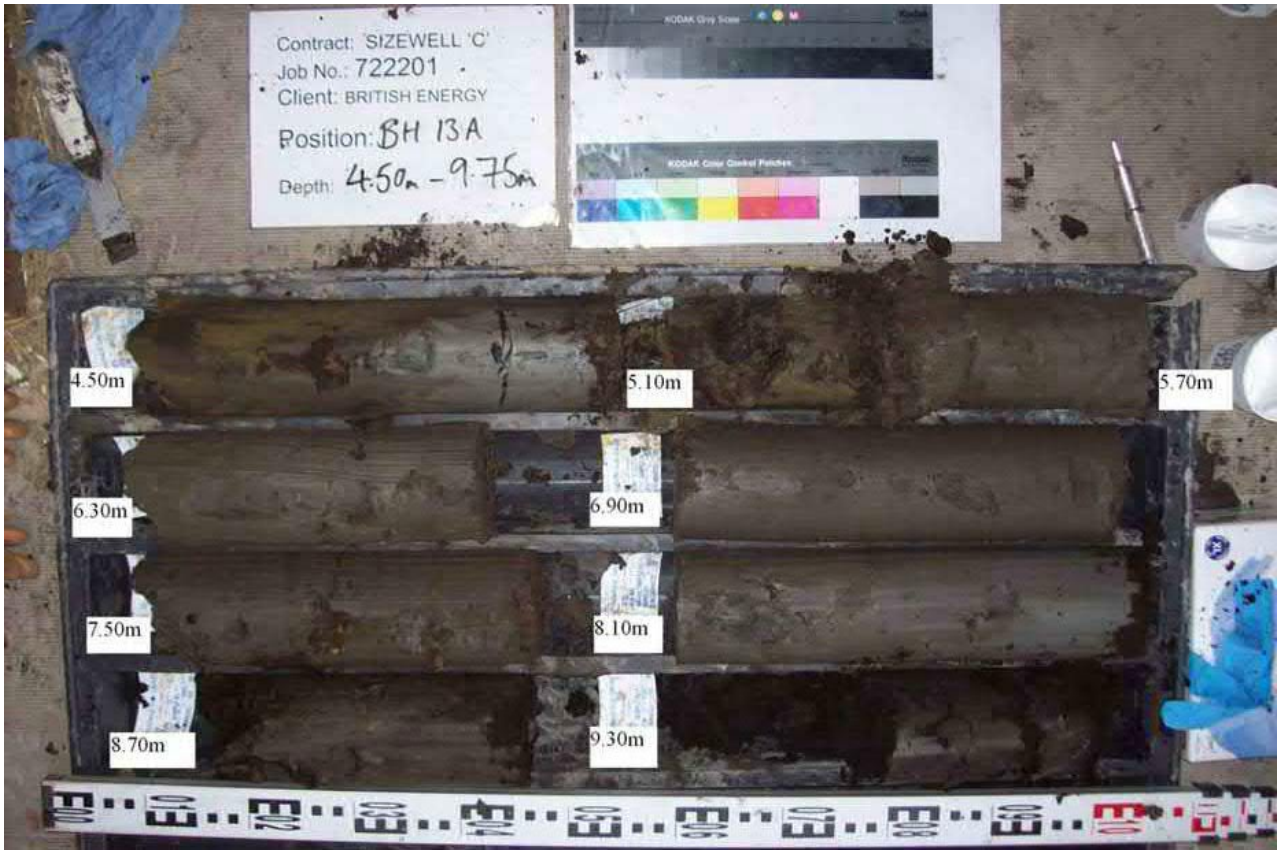
BH9 depth: 4.00m to 8.65m

BH10A depth: 4.00m to 8.00m

BH11 depth: 4.70m to 10.40m

BH12 depth 4.90m to 11.35m

BH13A depth: 4.70m to 9.75m

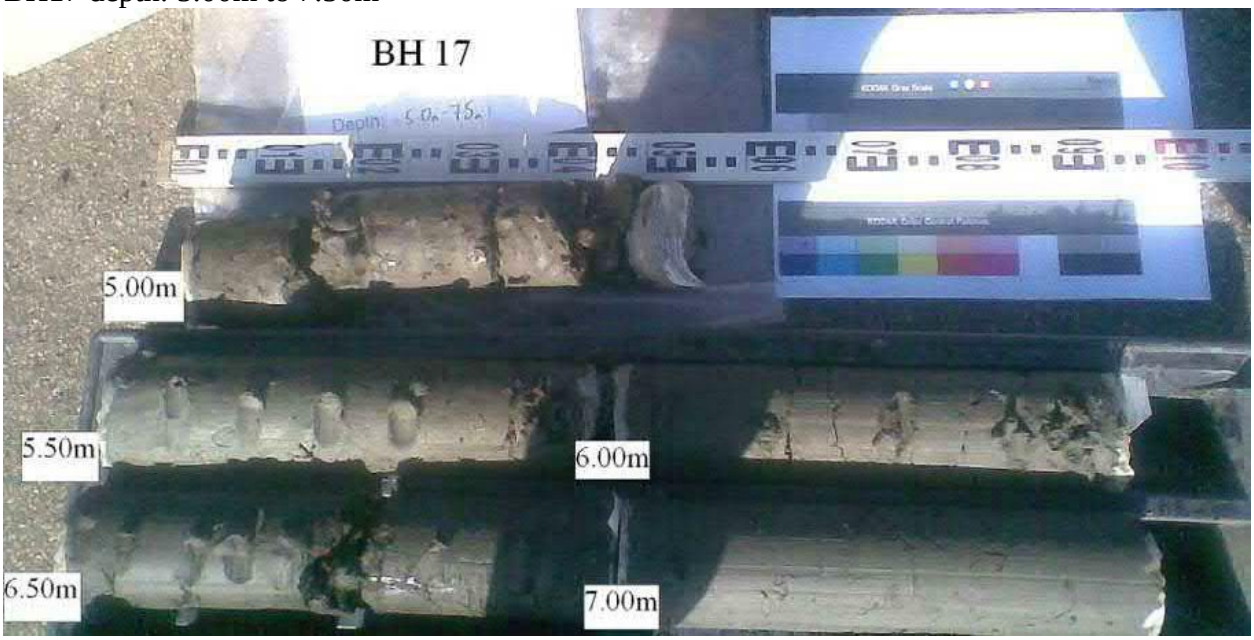


BH14 depth: 5.40m to 9.40m

BH16 depth: 6.25m to 10.45m

BH17 depth 4.00m to 5.00m

BH17 depth: 5.00m to 7.50m



BH17 depth: 7.50m to 10.50m

BH19A depth: 5.20m to 9.85m

BH20 depth: 3.90m to 10.50m

BH21 depth: 4.50m to 10.55m

BH22 depth 5.40m to 10.65m

BH23 depth: 5.75m to 9.00m

BH 24 depth: 6.00m to 8.50m

BH25 depth: 5.50m to 9.00m

BH28 depth 4.00m to 5.85m

BH29A depth: 5.75m to 9.00m

BH36 depth: 2.00m to 8.00m

BH38 depth: 6.00m to 8.00m

BH 39 depth: 6.00m to 9.20m

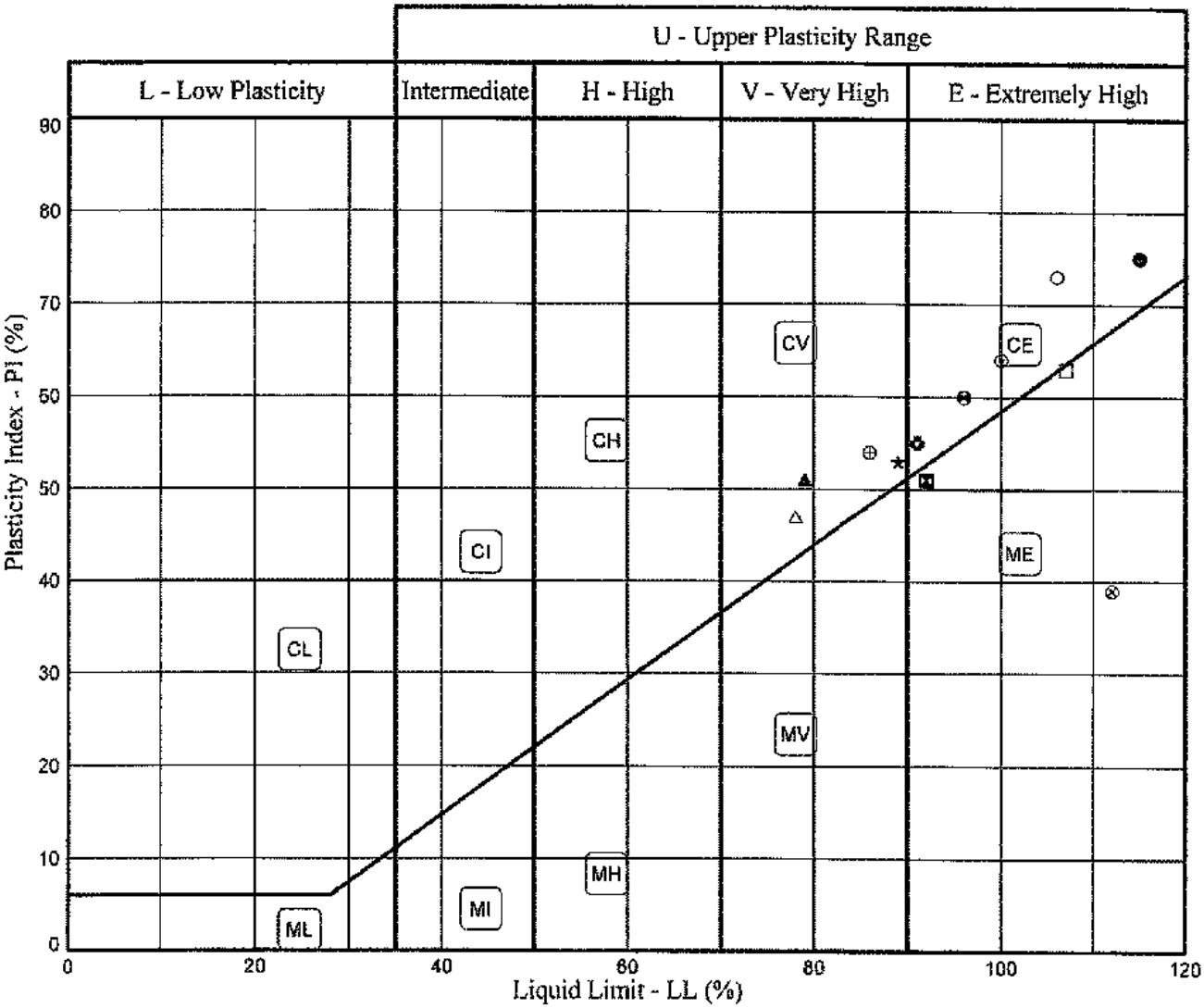
BH40 depth: 7.50m to 12.00m

APPENDIX C

(i) Laboratory Test Results

PLASTICITY CHART - PI Vs LL

In accordance with clause 42.3 of BS5930:1981
Testing in accordance with clauses 3.2,4.3,4.4,5.3,5.4 of BS1377:Part 2:1990



Sample Identification				MC	LL	PL	PI	<425um	Specimen Description
HoleID	Sample		Depth	%	%	%	%	%	
● BH1	8	D	6.15	152	115	40	75	87	Pale grey CLAY with some fibrous organic matter
⊠ BH4	9	D	6.40	75	92	41	51	100	Grey slightly sandy CLAY with occasional fibrous organic matter
▲ BH5	8	D	5.50	76	79	28	51	97	Grey slightly sandy CLAY with occasional organic matter
★ BH6	12	D	4.40	60	89	36	53	99	Grey mottled brown CLAY with occasional fibrous organic matter
⊙ BH7	14	P	4.85	80	100	36	64	98	Grey organic CLAY
✿ BH8	7	D	4.90	65	91	36	55	99	Grey CLAY with occasional fibrous organic matter
○ BH9	7	D	4.65	72	106	33	73	100	Grey organic CLAY
△ BH10A	11	D	4.00	64	78	31	47	93	Grey mottled brown slightly gravelly organic CLAY
⊗ BH10A	23	D	7.00	233	112	73	39	13	Grey organic CLAY coated in dark brown fibrous peat
⊕ BH11	14	D	5.30	77	86	32	54	99	Grey slightly sandy CLAY with occasional fibrous organic matter
□ BH11	16	D	5.90	82	107	44	63	99	Grey CLAY with occasional pockets of peat
⊖ BH11	26	D	8.90	84	96	36	60	100	Grey organic CLAY

* Non-standard test Approved Signatories: D. TROWBRIDGE A. FROST F. HAMILTON L. MARTIN

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The Old School
Stillhouse Lane
Bedminster
Bristol BS3 4EB

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Contract
Sizewell C Supplementary Investigation

Job No
722201

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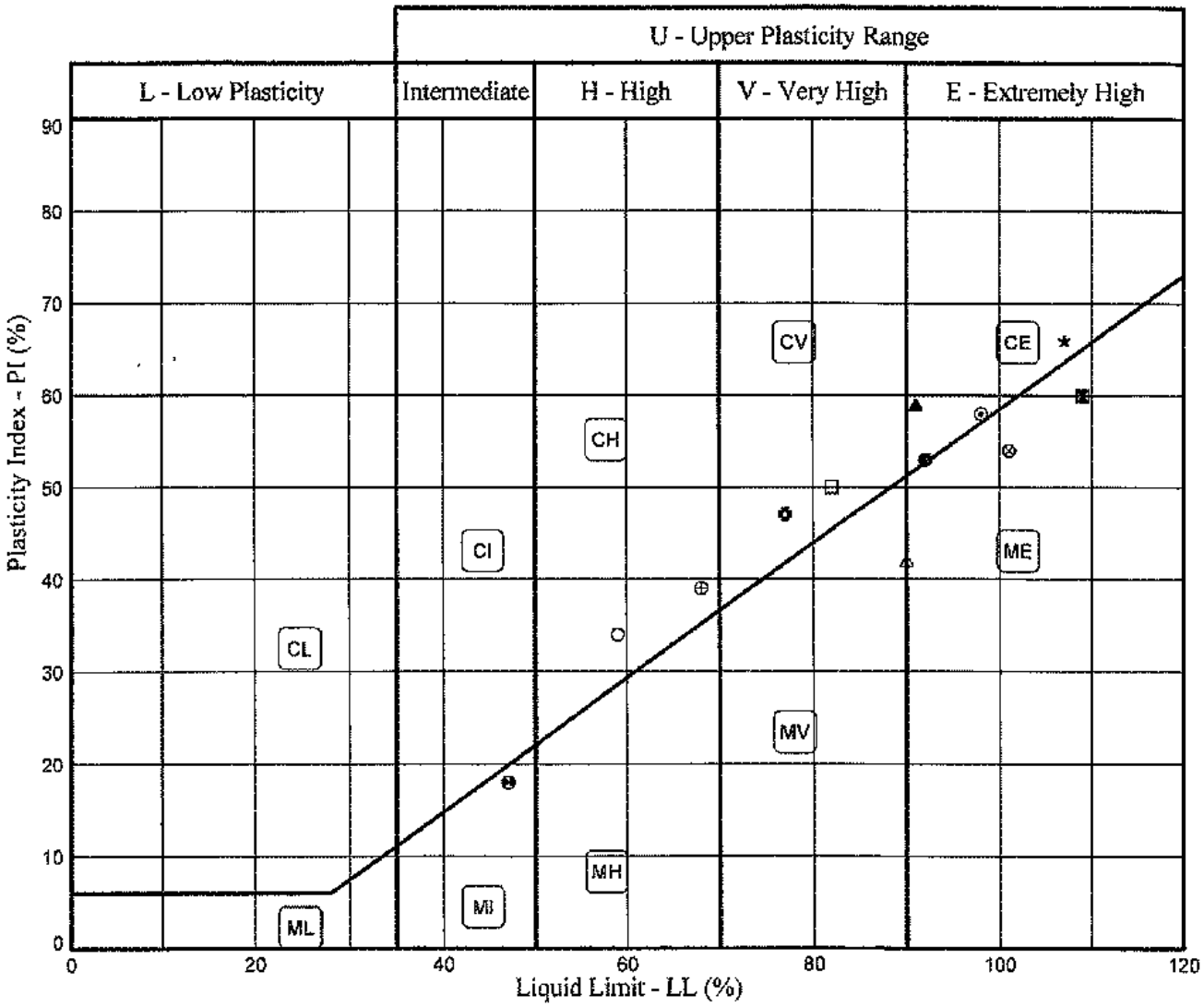
STRUCTURAL_SOILS_GINT_LIBRARY_08-11-05.GLB\L - ALINEMAX | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_02 [06/03/09 - 08:06

PLASTICITY CHART - PI Vs LL

In accordance with clause 42.3 of BS5930:1981
Testing in accordance with clauses 3.2,4.3,4.4,5.3,5.4 of BS1377:Part 2:1990



Sample Identification				MC	LL	PL	PI	<425um	Specimen Description
HoleID	Sample		Depth	%	%	%	%	%	
BH12	22	D	7.90	100	92	39	53	98	Grey CLAY with some fibrous organic matter
BH14	15	D	6.00	66	109	49	60	90	Grey CLAY with occasional fibrous organic matter
BH16	6	D	4.50	68	91	32	59	100	Grey organic CLAY
BH17	12	D	4.50	84	107	41	66	100	Grey CLAY with occasional fibrous organic matter
BH17	20	D	6.50	145	98	40	58	94	Grey CLAY with occasional fibrous organic matter
BH20	6	D	3.85	65	77	30	47	99	Grey slightly sandy CLAY with occasional fibrous organic matter
BH20	9	D	5.85	55	59	25	34	100	Grey CLAY
BH22	16	D	6.00	81	90	48	42	99	Grey slightly sandy SILT with occasional fibrous organic matter
BH22	20	D	7.20	78	101	47	54	100	Grey CLAY with occasional fibrous organic matter
BH23	7	D	5.70	44	68	29	39	98	Grey slightly sandy CLAY
BH23	9	D	7.10	64	82	32	50	100	Grey mottled brown CLAY with occasional fibrous organic matter
BH25	13	D	5.00	34	47	29	18	71	Brown mottled dark grey slightly gravelly slightly sandy SILT

* Non-standard test Approved Signatories: D. TROWBRIDGE A. FROST F. HAMILTON L. MARTIN

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[redacted]	06/03/09	[redacted]	6/3/09

Contract: **Sizewell C Supplementary Investigation**

Job No: **722201**

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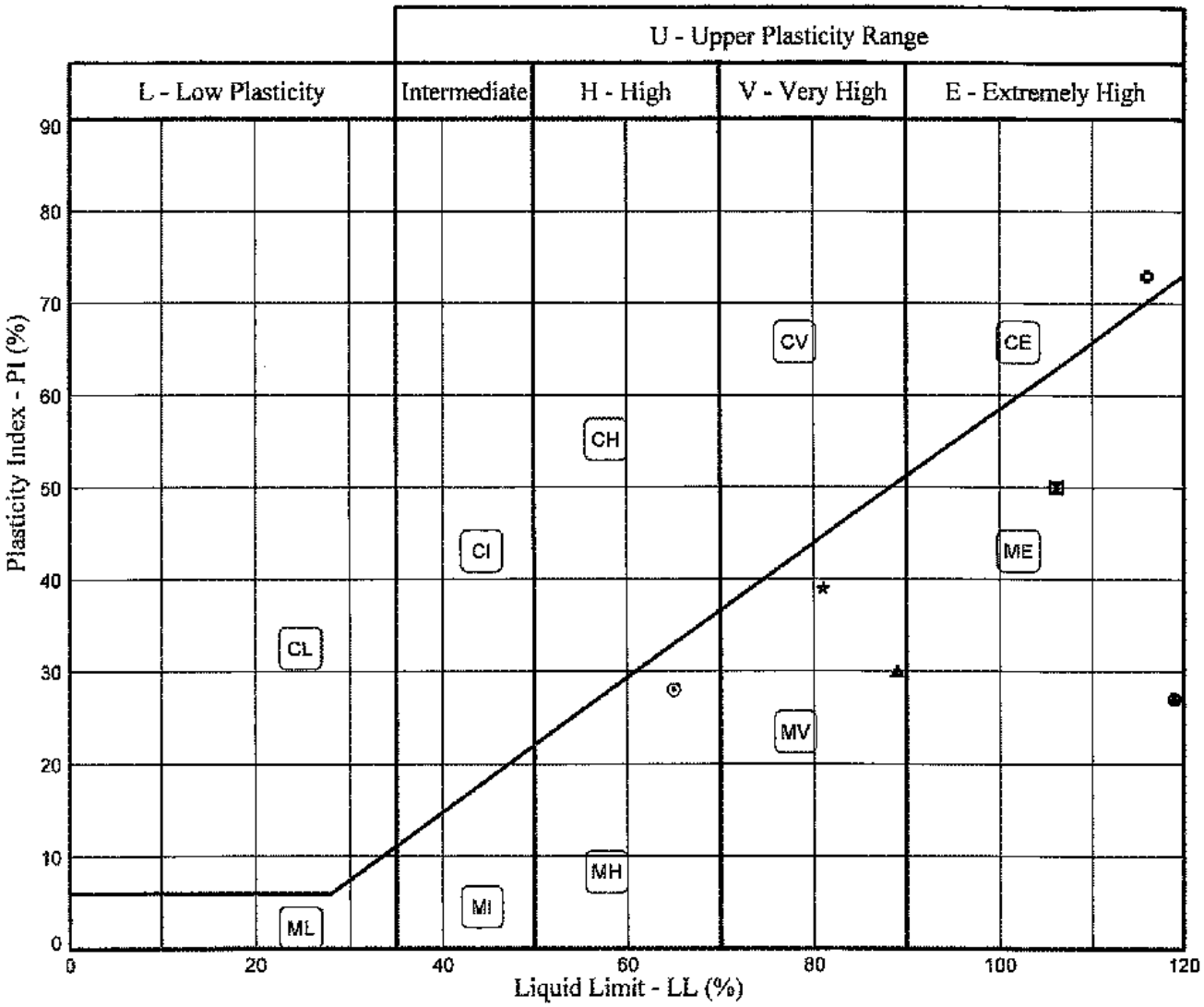
STRUCTURAL_SOILS_GINT_LIBRARY_08-11-06.GLB|L - ALINEMAX | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_02 | 05/03/09 - 08.06

PLASTICITY CHART - PI Vs LL

In accordance with clause 42.3 of BS5930:1981
Testing in accordance with clauses 3.2,4.3,4.4,5.3,5.4 of BS1377:Part 2:1990



Sample Identification				MC	LL	PL	PI	<425um	Specimen Description
HoleID	Sample		Depth	%	%	%	%	%	
BH28	6	D	3.90	184	119	92	27	76	Dark brown slightly sandy SILT with some fibrous organic matter
BH29A	7	D	5.70	80	106	56	50	95	Brown mottled grey CLAY with occasional organic matter
BH36	6	D	2.00	104	89	59	30	94	Dark brown mottled orange and grey slightly sandy organic SILT
BH36	7	P	2.12	107	81	42	39	93	Grey CLAY with occasional fibrous organic matter
BH39	15	D	5.95	60	65	37	28	87	Dark brown mottled grey sandy CLAY with occasional fibrous organic matter
BH39	16	P	6.89	79	116	43	73	92	Grey CLAY with occasional fibrous organic matter

* Non-standard test Approved Signatories: D. TROWBRIDGE A. FROST F. HAMILTON L. MARTIN

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Contract: **Sizewell C Supplementary Investigation**

Job No: **722201**

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SUMMARY OF SOIL CLASSIFICATION TESTS

In accordance with clauses 3.2,4.3,4.4,5.3,5.4,7.2,8.2,8.3 of BS1377:Part 2:1990

Hole Reference	Sample No	Sample Type	Depth m	Moisture Content %	Bulk Density Mg/m³	Dry Density Mg/m³	Particle Density Mg/m³	Liquid Limit %	Plastic Limit %	Plasticity Index %	% <425um	Description of Sample
BH1	7	D	5.45	100				154	91	63	96	Dark grey CLAY with some fibrous organic matter
BH1	8	D	6.15	150				115	40	75	87	Pale grey CLAY with some fibrous organic matter
BH1	9	D	6.85	290				304	154	150	85	Dark brown fibrous PEAT
BH1	11	D	8.25	290				284	213	71	70	Dark brown fibrous PEAT
BH3	19	D	7.10	250				350	194	156	73	Dark brown fibrous PEAT
BH3	23	D	8.10	280				511	320	191	84	Dark brown fibrous PEAT
BH4	9	D	6.40	75				92	41	51	100	Grey slightly sandy CLAY with occasional fibrous organic matter
BH4	14	D	9.90	300				500	293	207	69	Black fibrous PEAT

Approved Signatories: D. TROWBRIDGE A. FROST F. HAMILTON L. MARTIN

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[redacted]	06.03.09	[redacted]	6/3/09

Contract: **Sizewell C Supplementary Investigation**

Contract Ref: **722201**

SUMMARY OF SOIL CLASSIFICATION TESTS

In accordance with clauses 3.2,4.3,4.4,5.3,5.4,7.2,8.2,8.3 of BS1377:Part 2:1990

Hole Reference	Sample No	Sample Type	Depth m	Moisture Content %	Bulk Density Mg/m^3	Dry Density Mg/m^3	Particle Density Mg/m^3	Liquid Limit %	Plastic Limit %	Plasticity Index %	% <425um	Description of Sample
BH5	8	D	5.50	76				79	28	51	97	Grey slightly sandy CLAY with occasional organic matter
BH5	11	D	7.10	210				255	125	130	88	Dark brown fibrous PEAT
BH6	12	D	4.40	60				89	36	53	99	Grey mottled brown CLAY with occasional fibrous organic matter
BH6	20	D	6.50	300				510	378	132	77	Dark brown fibrous PEAT
BH7	14	P	4.85	80				100	36	64	98	Grey organic CLAY
BH7	15	P	6.20	490				431	329	102	59	Dark brown fibrous PEAT
BH7	16	P	7.17	440				557	437	120	89	Dark brown fibrous PEAT
BH7	16	P	7.65	420				503	343	160	94	Dark brown fibrous PEAT

Approved Signatories: D. TROWBRIDGE A. FROST F. HAMILTON L. MARTIN

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[redacted]	06.03.09	[redacted]	6/3/09

Contract:

Sizewell C Supplementary Investigation

Contract Ref:

722201

SUMMARY OF SOIL CLASSIFICATION TESTS

In accordance with clauses 3.2,4.3,4.4,5.3,5.4,7.2,8.2,8.3 of BS1377:Part 2:1990

Hole Reference	Sample No	Sample Type	Depth m	Moisture Content %	Bulk Density Mg/m^3	Dry Density Mg/m^3	Particle Density Mg/m^3	Liquid Limit %	Plastic Limit %	Plasticity Index %	% <425um	Description of Sample
BH7	17	P	8.35	400				587	428	159	64	Dark brown fibrous PEAT
BH8	7	D	4.90	65				91	36	55	99	Grey CLAY with occasional fibrous organic matter
BH8	14	D	9.85	300				516	348	168	61	Black mottled dark brown fibrous PEAT
BH9	7	D	4.65	72				106	33	73	100	Grey organic CLAY
BH9	10	D	6.75	130				196	78	118	100	Grey CLAY with occasional dark brown peat
BH9	12	D	8.15	160				308	170	138	100	Dark brown fibrous PEAT
BH10A	11	D	4.00	64				78	31	47	93	Grey mottled brown slightly gravelly organic CLAY
BH10A	19	D	6.00	440				597	335	262	53	Dark brown fibrous PEAT

Approved Signatories: D. TROWBRIDGE A. FROST F. HAMILTON L. MARTIN

STRUCTURAL SOILS
The Old School
Stillhouse Lane
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Compiled By	Date	Checked By	Date
[redacted]	06.03.09	[redacted]	6/3/09

Contract: **Sizewell C Supplementary Investigation**

Contract Ref: **722201**

SUMMARY OF SOIL CLASSIFICATION TESTS

In accordance with clauses 3.2,4.3,4.4,5.3.5.4,7.2,8.2,8.3 of BS1377:Part 2:1990

Hole Reference	Sample No	Sample Type	Depth m	Moisture Content %	Bulk Density Mg/m^3	Dry Density Mg/m^3	Particle Density Mg/m^3	Liquid Limit %	Plastic Limit %	Plasticity Index %	% <425um	Description of Sample
BH10A	23	D	7.00	230				112	73	39	13	Grey organic CLAY coated in dark brown fibrous peat
BH11	14	D	5.30	77				86	32	54	99	Grey slightly sandy CLAY with occasional fibrous organic matter
BH11	16	D	5.90	82				107	44	63	99	Grey CLAY with occasional pockets of peat
BH11	20	D	7.10	230				144	51	93	100	Brown mottled grey CLAY coated in dark brown peat
BH11	26	D	8.90	84				96	36	60	100	Grey organic CLAY
BH11	29	D	10.10	280				407	293	114	99	Dark brown fibrous PEAT
BH12	15	D	5.50	200				259	139	120	75	Dark brown fibrous PEAT
BH12	22	D	7.90	100				92	39	53	98	Grey CLAY with some fibrous organic matter

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[redacted]	06.03.09	[redacted]	6/3/09	722201

Contract:

Sizewell C Supplementary Investigation

SUMMARY OF SOIL CLASSIFICATION TESTS

In accordance with clauses 3.2,4.3,4.4,5.3,5.4,7.2,8.2,8.3 of BS1377:Part 2:1990

Hole Reference	Sample No	Sample Type	Depth m	Moisture Content %	Bulk Density Mg/m³	Dry Density Mg/m³	Particle Density Mg/m³	Liquid Limit %	Plastic Limit %	Plasticity Index %	% <425um	Description of Sample
BH12	30	D	10.30	300				487	321	166	72	Grey CLAY with some fibrous organic matter
BH13A	10	D	5.10	230				235	134	101	84	Grey CLAY with much fibrous organic matter
BH13A	16	D	7.50	65				168	89	79	97	Grey CLAY with some fibrous organic matter
BH13A	18	D	8.10	140				180	75	105	100	Grey CLAY with some fibrous organic matter
BH13A	20	D	8.70	95				260	206	54	88	Grey CLAY with much fibrous organic matter
BH14	15	D	6.00	66				109	49	60	90	Grey CLAY with occasional fibrous organic matter
BH14	21	D	7.80	290				287	201	86	87	Dark brown fibrous PEAT
BH14	23	D	8.40	340				579	408	171	50	Dark brown fibrous PEAT

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[redacted]	06.03.09	[redacted]	6/3/09	722201

Contract:

Sizewell C Supplementary Investigation

SUMMARY OF SOIL CLASSIFICATION TESTS

In accordance with clauses 3.2,4.3.4.4,5.3,5.4,7.2,8.2,8.3 of BS1377:Part 2:1990

Hole Reference	Sample No	Sample Type	Depth m	Moisture Content %	Bulk Density Mg/m^3	Dry Density Mg/m^3	Particle Density Mg/m^3	Liquid Limit %	Plastic Limit %	Plasticity Index %	% <425um	Description of Sample
BH16	6	D	4.50	68				91	32	59	100	Grey organic CLAY
BH16	8	D	7.70	240				315	217	98	70	Dark brown fibrous PEAT
BH17	12	D	4.50	84				107	41	66	100	Grey CLAY with occasional fibrous organic matter
BH17	20	D	6.50	150				98	40	58	94	Grey CLAY with occasional fibrous organic matter
BH17	30	D	9.00	300				486	353	133	100	Dark brown fibrous PEAT
BH18	7	D	5.70	8.4				NP	NP	NP	60	Grey slightly silty gravelly SAND
BH19A	11	D	7.95	280				146	104	42	63	Dark brown fibrous PEAT
BH19A	14	D	10.05	27				NP	NP	NP	94	Light grey mottled dark grey silty SAND

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Sizewell C Supplementary Investigation

SUMMARY OF SOIL CLASSIFICATION TESTS

In accordance with clauses 3.2,4.3,4.4,5.3,5.4,7.2,8.2,8.3 of BS1377:Part 2:1990

Hole Reference	Sample No	Sample Type	Depth m	Moisture Content %	Bulk Density Mg/m³	Dry Density Mg/m³	Particle Density Mg/m³	Liquid Limit %	Plastic Limit %	Plasticity Index %	% <425um	Description of Sample
BH20	6	D	3.85	65				77	30	47	99	Grey slightly sandy CLAY with occasional fibrous organic matter
BH20	9	D	5.85	55				59	25	34	100	Grey CLAY
BH20	14	D	9.35	270				456	347	109	63	Dark brown fibrous PEAT
BH21	9	D	6.55	87				127	49	78	100	Grey CLAY with occasional fibrous organic matter
BH21	11	D	7.95	320				430	283	147	59	Dark brown fibrous PEAT
BH21	13	D	9.35	250				514	338	176	81	Dark brown fibrous PEAT
BH22	14	D	5.40	88				182	86	96	100	Grey CLAY with some fibrous organic matter
BH22	16	D	6.00	81				90	48	42	99	Grey slightly sandy SILT with occasional fibrous organic matter

Approved Signatories: D. TROWBRIDGE A. FROST F. HAMILTON L. MARTIN

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Sizewell C Supplementary Investigation

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SUMMARY OF SOIL CLASSIFICATION TESTS

In accordance with clauses 3.2,4.3,4.4,5.3,5.4,7.2,8.2,8.3 of BS1377:Part 2:1990

Hole Reference	Sample No	Sample Type	Depth m	Moisture Content %	Bulk Density Mg/m^3	Dry Density Mg/m^3	Particle Density Mg/m^3	Liquid Limit %	Plastic Limit %	Plasticity Index %	% <425um	Description of Sample
BH22	20	D	7.20	78				101	47	54	100	Grey CLAY with occasional fibrous organic matter
BH22	24	D	8.40	140				162	75	87	97	Grey CLAY with some fibrous organic matter
BH22	28	D	9.60	330				501	385	116	86	Dark brown fibrous PEAT
BH23	7	D	5.70	44				68	29	39	98	Grey slightly sandy CLAY
BH23	9	D	7.10	64				82	32	50	100	Grey mottled brown CLAY with occasional fibrous organic matter
BH23	10	D	7.80	240				208	149	59	71	Dark brown fibrous PEAT
BH23	11	D	8.50	200				285	193	92	82	Dark brown fibrous PEAT
BH24	8	D	6.00	130				221	135	86	96	Brown mottled orange and grey CLAY with some fibrous organic matter

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Stillhouse Lane
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[redacted]	06.03.09	[redacted]	6/3/09

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Sizewell C Supplementary Investigation

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SUMMARY OF SOIL CLASSIFICATION TESTS

In accordance with clauses 3.2,4.3,4.4,5.3,5.4,7.2,8.2,8.3 of BS1377:Part 2:1990

Hole Reference	Sample No	Sample Type	Depth m	Moisture Content %	Bulk Density Mg/m³	Dry Density Mg/m³	Particle Density Mg/m³	Liquid Limit %	Plastic Limit %	Plasticity Index %	% <425um	Description of Sample
BH24	11	D	8.00	370				576	445	131	61	Dark brown fibrous PEAT
BH25	13	D	5.00	34				47	29	18	71	Brown mottled dark grey slightly gravelly slightly sandy SILT
BH25	20	D	7.00	87				122	51	71	99	Grey CLAY with occasional fibrous organic matter
BH25	22	D	7.50	340				502	384	118	81	Dark brown fibrous PEAT
BH25	26	D	8.50	340				452	361	91	100	Dark brown fibrous PEAT
BH28	6	D	3.90	180				119	92	27	76	Dark brown slightly sandy SILT with some fibrous organic matter
BH28	8	D	5.35	290				304	279	25	88	Dark brown fibrous PEAT
BH29A	7	D	5.70	80				106	56	50	95	Brown mottled grey CLAY with occasional organic matter

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STRUCTURAL SOILS
The Old School
Stillhouse Lane
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Date: 06.03.09

[redacted]

Date: 6/3/09

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Sizewell C Supplementary Investigation

Contract Ref:

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SUMMARY OF SOIL CLASSIFICATION TESTS

In accordance with clauses 3.2,4.3,4.4,5.3,5.4,7.2,8.2,8.3 of BS1377:Part 2:1990

Hole Reference	Sample No	Sample Type	Depth m	Moisture Content %	Bulk Density Mg/m³	Dry Density Mg/m³	Particle Density Mg/m³	Liquid Limit %	Plastic Limit %	Plasticity Index %	% <425um	Description of Sample
BH29A	10	D	7.80	310				528	396	132	97	Dark brown fibrous PEAT
BH29A	11	D	8.50	330				484	398	86	68	Dark brown fibrous PEAT
BH36	6	D	2.00	100				89	59	30	94	Dark brown mottled orange and grey slightly sandy organic SILT
BH36	7	P	2.12	110				81	42	39	93	Grey CLAY with occasional fibrous organic matter
BH36	8	P	3.05	310				243	147	96	36	Dark brown fibrous PEAT
BH36	8	P	3.16	410				403	309	94	77	Dark brown fibrous PEAT
BH36	9	P	4.35	590				653	618	35	89	Dark brown fibrous PEAT
BH36	10	P	5.20	470				336	155	181	78	Dark brown fibrous PEAT

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[redacted]	06.03.09	[redacted]	6/3/09	722201

Contract:

Sizewell C Supplementary Investigation

SUMMARY OF SOIL CLASSIFICATION TESTS

In accordance with clauses 3.2,4.3,4.4,5.3,5.4,7.2,8.2,8.3 of BS1377:Part 2:1990

Hole Reference	Sample No	Sample Type	Depth m	Moisture Content %	Bulk Density Mg/m³	Dry Density Mg/m³	Particle Density Mg/m³	Liquid Limit %	Plastic Limit %	Plasticity Index %	% <425um	Description of Sample
BH36	20	D	6.00	460				443	348	95	76	Dark brown fibrous PEAT
BH36	21	P	7.45	440				538	466	72	72	Dark brown fibrous PEAT
BH38	17	U	6.00	160				346	285	61	13	Dark brown fibrous PEAT
BH38	21	U	7.00	320				409	325	84	71	Black amorphous PEAT
BH38	23	U	7.50	120				NP	NP	NP	95	Black sandy amorphous PEAT
BH39	15	D	5.95	60				65	37	28	87	Dark brown mottled grey sandy CLAY with occasional fibrous organic matter
BH39	16	P	6.10	78				143	49	94	100	Grey CLAY with some fibrous organic matter
BH39	16	P	6.50	340				487	351	136	37	Dark brown fibrous PEAT

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Compiled By	Date	Checked By	Date	Contract Ref:
[redacted]	06.03.09	[redacted]	6/3/09	722201

Contract: **Sizewell C Supplementary Investigation**

SUMMARY OF SOIL CLASSIFICATION TESTS

In accordance with clauses 3.2,4.3,4.4,5.3,5.4,7.2,8.2,8.3 of BS1377:Part 2:1990

Hole Reference	Sample No	Sample Type	Depth m	Moisture Content %	Bulk Density Mg/m^3	Dry Density Mg/m^3	Particle Density Mg/m^3	Liquid Limit %	Plastic Limit %	Plasticity Index %	% <425um	Description of Sample
BH39	16	P	6.89	79				116	43	73	92	Grey CLAY with occasional fibrous organic matter
BH39	17	P	7.35	350				429	348	81	78	Dark brown fibrous PEAT
BH39	17	P	7.75	310				347	277	70	78	Dark brown fibrous PEAT
BH39	18	U	8.00	230				457	392	65	86	Dark brown fibrous PEAT
BH39	20	P	8.80	260				467	348	119	100	Black amorphous PEAT
BH40	20	P	7.50	280				161	147	14	27	Dark brown fibrous PEAT
BH40	20	P	7.84	81				123	63	60	97	Grey CLAY with occasional fibrous organic matter
BH40	22	P	9.55	140				193	98	95	93	Dark brown fibrous PEAT

Approved Signatories: D. TROWBRIDGE A. FROST F. HAMILTON L. MARTIN

STRUCTURAL SOILS
The Old School
Stillhouse Lane
Bedminster
Bristol BS3 4EB

Compiled By	Date	Checked By	Date
[redacted]	06.03.09	[redacted]	6/3/09

Contract: **Sizewell C Supplementary Investigation**

Contract Ref: **722201**

SUMMARY OF SOIL CLASSIFICATION TESTS

In accordance with clauses 3.2,4.3,4.4,5.3,5.4,7.2,8.2,8.3 of BS1377:Part 2:1990

Hole Reference	Sample No	Sample Type	Depth m	Moisture Content %	Bulk Density Mg/m³	Dry Density Mg/m³	Particle Density Mg/m³	Liquid Limit %	Plastic Limit %	Plasticity Index %	% <425um	Description of Sample
BH40	22	P	10.20	230				275	195	80	76	Dark brown fibrous PEAT
BH40	23	P	10.30	190				164	117	47	99	Dark brown fibrous PEAT
BH40	23	P	10.70	160				332	246	86	96	Dark brown fibrous PEAT
BH40	24	P	11.55	140				158	131	27	64	Black amorphous PEAT

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STRUCTURAL SOILS
The Old School
Stillhouse Lane
Bedminster
Bristol BS3 4EB

Compiled By: [redacted] Date: 06.03.09

[redacted] Date: 6/3/09

Contract: Sizewell C Supplementary Investigation

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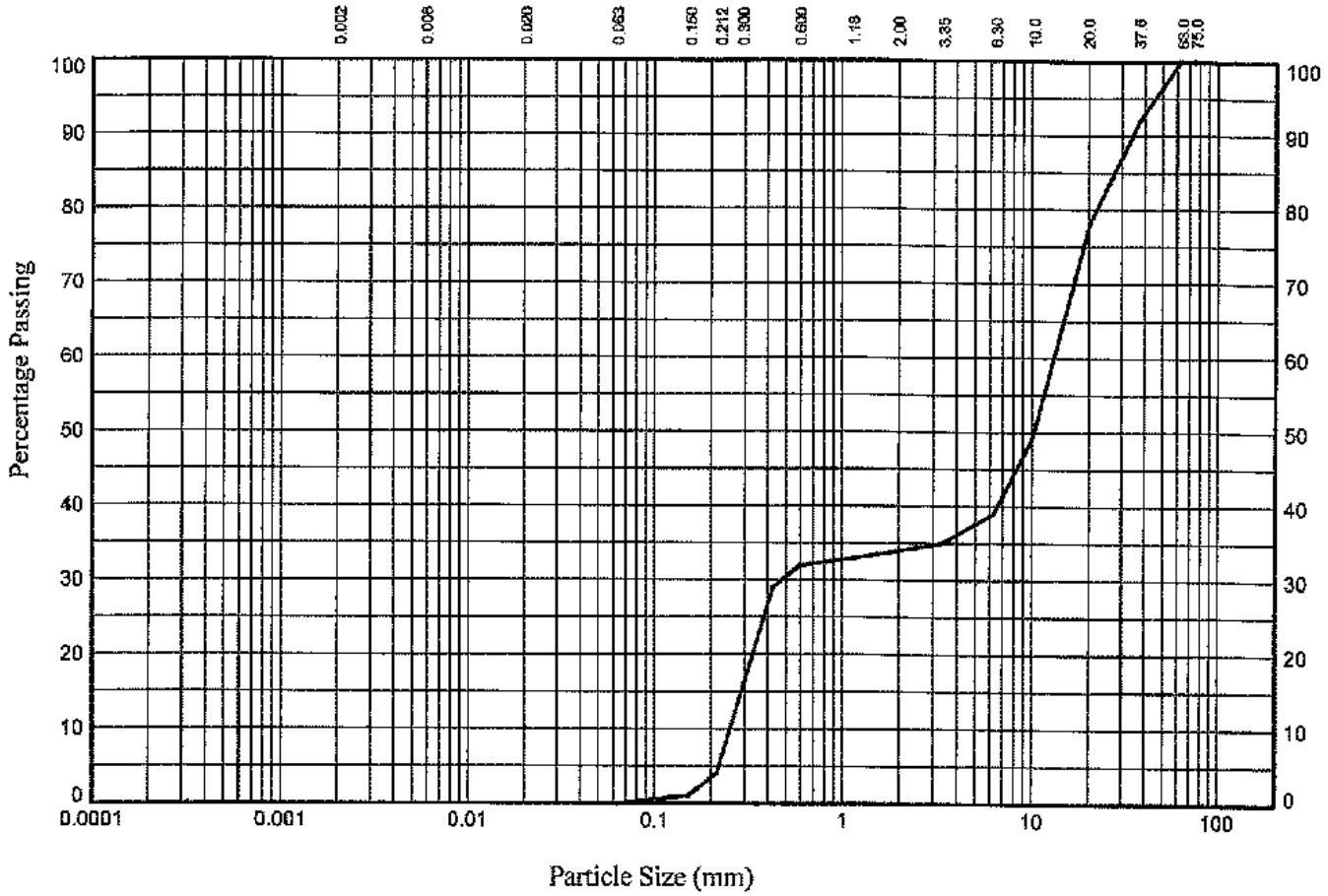
PARTICLE SIZE DISTRIBUTION TEST

In accordance with clauses 9.2,9.5 of BS1377:Part 2:1990

Borehole : **BH1** Sample Ref: **2** Sample Type: **B** Depth (m): **2.50**



CLAY	fine	medium	coarse	fine	medium	coarse	fine	medium	coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve (mm)	Percentage Passing
125.0	100
75.0	100
63.0	100
37.5	92
20.0	78
10.0	49
6.30	39
5.00	
3.35	35
2.00	34
1.18	33
0.600	32
0.425	29
0.300	
0.212	4
0.150	1
0.063	0

Particle Diameter	Percentage Passing

Soil Fraction	Sieve Percentage
GRAVEL	**66**
SAND	**34**
SILT/CLAY	**0**

Soil Description:
Light brown very sandy GRAVEL

Approved Signatories: D. TROWBRIDGE A. FROST F. HAMILTON L. MARTIN

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Stillhouse Lane
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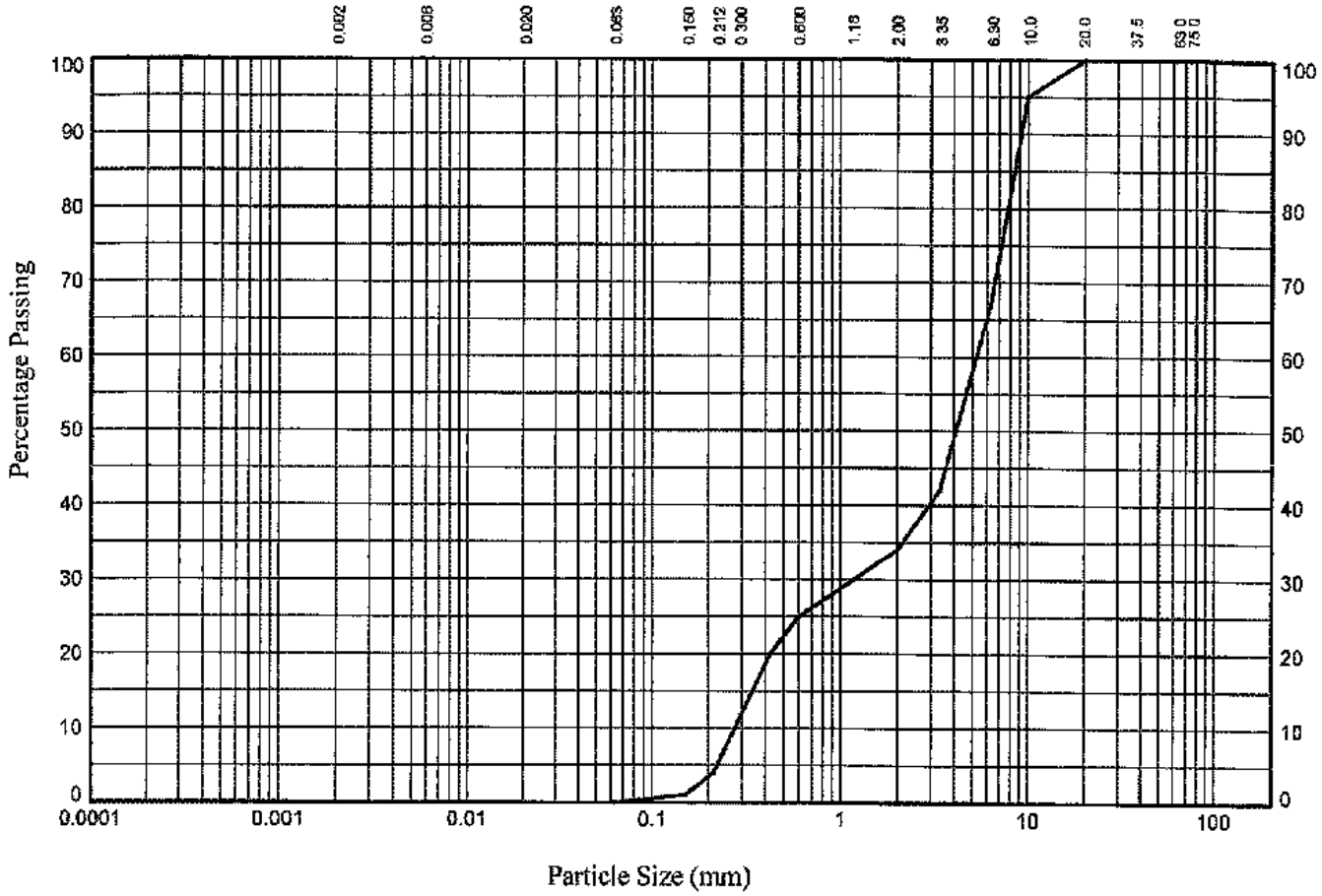
PARTICLE SIZE DISTRIBUTION TEST

In accordance with clauses 9.2,9.5 of BS1377:Part 2:1990

Borehole : **BH2** Sample Ref: **2** Sample Type: **B** Depth (m): **2.50**



CLAY	fine	medium	coarse	fine	medium	coarse	fine	medium	coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve (mm)	Percentage Passing
125.0	100
75.0	100
63.0	100
37.5	100
20.0	100
10.0	95
6.30	67
5.00	
3.35	42
2.00	34
1.18	30
0.600	25
0.425	20
0.300	
0.212	4
0.150	1
0.063	0

Particle Diameter	Percentage Passing

Soil Fraction	Sieve Percentage
GRAVEL	**66**
SAND	**34**
SILT/CLAY	**0**

Soil Description:
Brown very sandy GRAVEL

Approved Signatories: D. TROWBRIDGE A. FROST F. HAMILTON L. MARTIN

STRUCTURAL SOILS
The Old School
Stillhouse Lane
Bedminster
Bristol BS3 4EB

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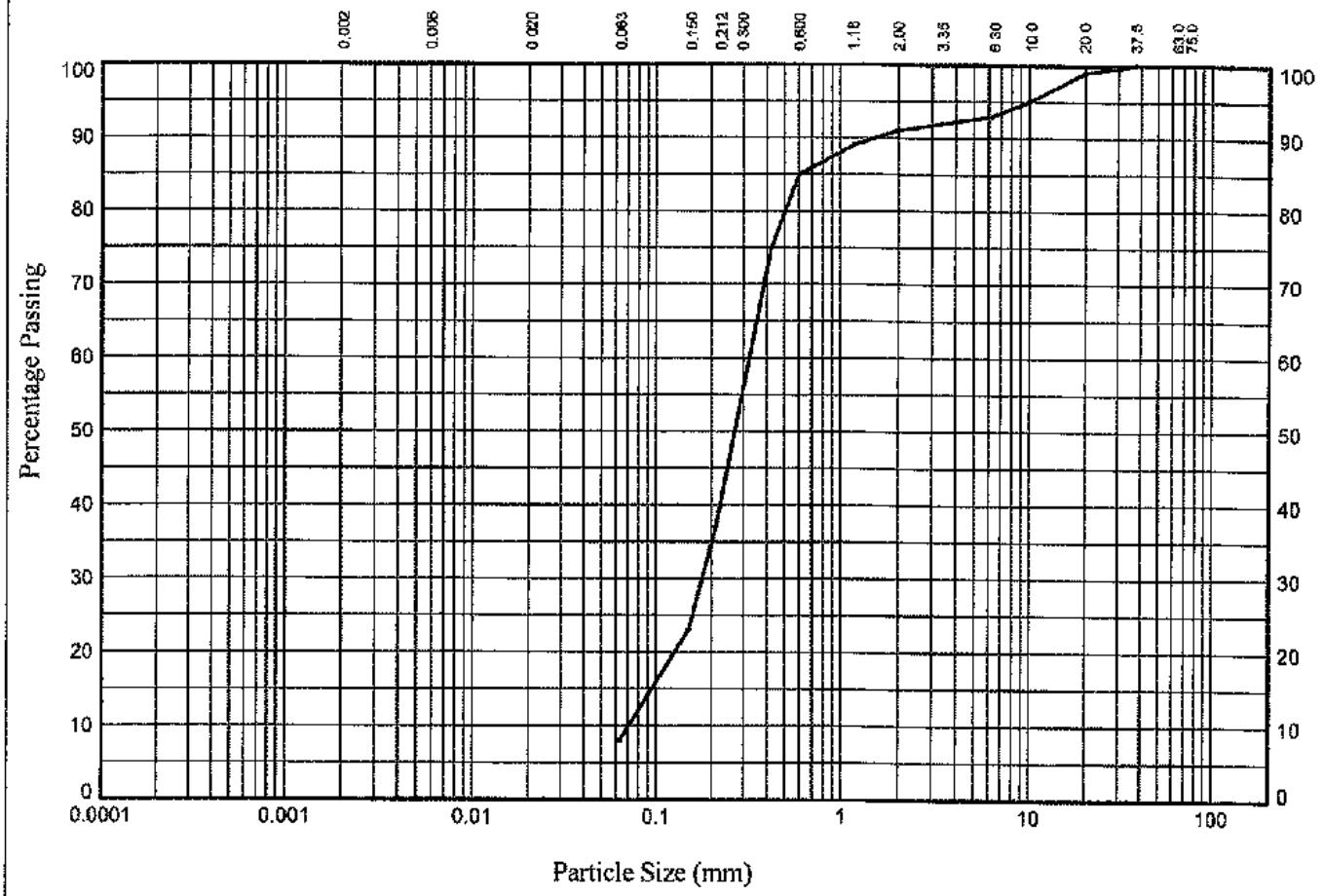
PARTICLE SIZE DISTRIBUTION TEST

In accordance with clauses 9.2,9.5 of BS1377:Part 2:1990

Borehole : **BH3** Sample Ref: **7** Sample Type: **B** Depth (m): **2.50**



CLAY	fine	medium	coarse	fine	medium	coarse	fine	medium	coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve (mm)	Percentage Passing
125.0	100
75.0	100
63.0	100
37.5	100
20.0	99
10.0	95
6.30	93
5.00	
3.35	92
2.00	91
1.18	89
0.600	85
0.425	75
0.300	
0.212	37
0.150	23
0.063	8

Particle Diameter	Percentage Passing

Soil Fraction	Sieve Percentage
GRAVEL	**9**
SAND	**83**
SILT/CLAY	**8**

Soil Description:
Brown silty/clayey sandy GRAVEL

Approved Signatories: D. TROWBRIDGE A. FROST F. HAMILTON L. MARTIN

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The Old School
Stillhouse Lane
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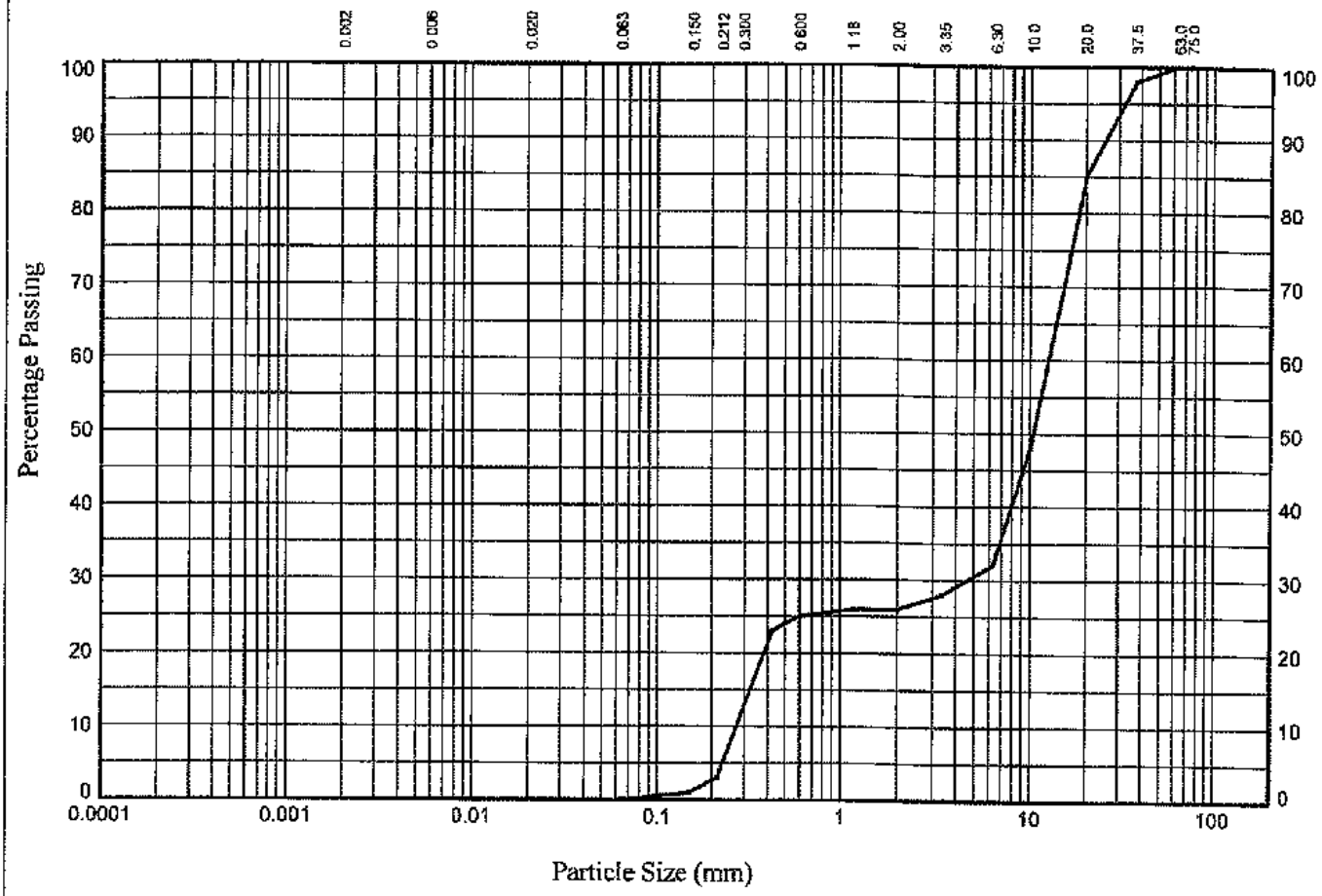
PARTICLE SIZE DISTRIBUTION TEST

In accordance with clauses 9.2,9.5 of BS1377:Part 2:1990

Borehole : **BH4** Sample Ref: **2** Sample Type: **B** Depth (m): **2.50**



CLAY	fine	medium	coarse	fine	medium	coarse	fine	medium	coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve (mm)	Percentage Passing
125.0	100
75.0	100
63.0	100
37.5	98
20.0	85
10.0	48
6.30	32
5.00	
3.35	28
2.00	26
1.18	26
0.600	25
0.425	23
0.300	
0.212	3
0.150	1
0.063	0

Particle Diameter	Percentage Passing

Soil Fraction	Sieve Percentage
GRAVEL	**74**
SAND	**26**
SILT/CLAY	**0**

Soil Description:
Brown mottled grey very sandy GRAVEL

Approved Signatories: D. TROWBRIDGE A. FROST F. HAMILTON L. MARTIN

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[redacted]	29/01/09	[redacted]	4/3/09

Contract: **Sizewell C Supplementary Investigation**

Job No: **722201**

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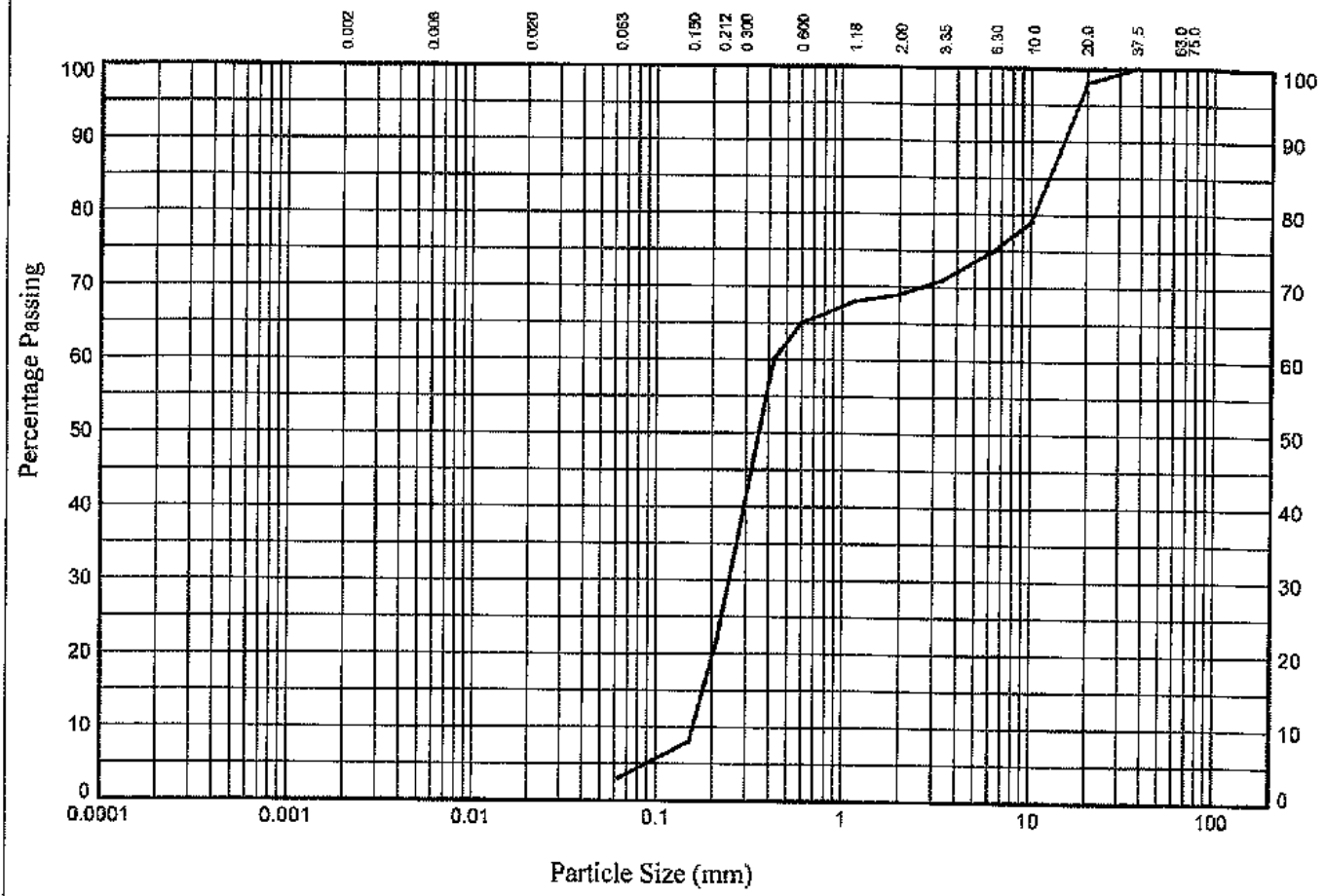
PARTICLE SIZE DISTRIBUTION TEST

In accordance with clauses 9.2,9.5 of BS1377:Part 2:1990

Borehole : **BH5** Sample Ref: **2** Sample Type: **B** Depth (m): **2.50**



CLAY	fine	medium	coarse	fine	medium	coarse	fine	medium	coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve (mm)	Percentage Passing
125.0	100
75.0	100
63.0	100
37.5	100
20.0	98
10.0	79
6.30	75
5.00	
3.35	71
2.00	69
1.18	68
0.600	65
0.425	60
0.300	
0.212	22
0.150	8
0.063	3

Particle Diameter	Percentage Passing

Soil Fraction	Sieve Percentage
GRAVEL	**31**
SAND	**66**
SILT/CLAY	**3**

Soil Description:

Brown mottled grey slightly silty/clayey very gravelly SAND

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The Old School
Stillhouse Lane
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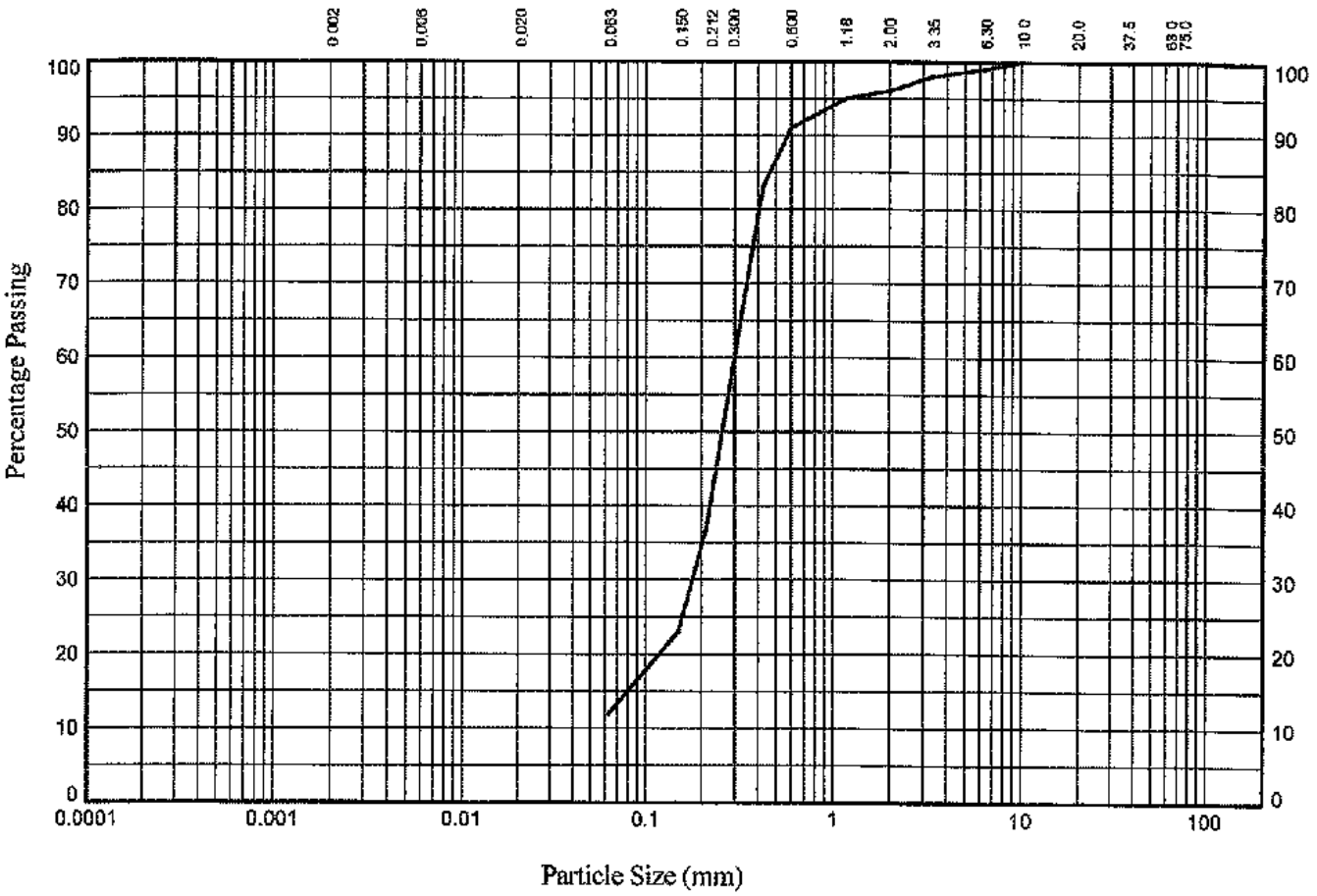
PARTICLE SIZE DISTRIBUTION TEST

In accordance with clauses 9.2,9.5 of BS1377:Part 2:1990

Borehole : **BH6** Sample Ref: **7** Sample Type: **B** Depth (m): **2.50**



CLAY	fine	medium	coarse	fine	medium	coarse	fine	medium	coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve (mm)	Percentage Passing
125.0	100
75.0	100
63.0	100
37.5	100
20.0	100
10.0	100
6.30	99
5.00	
3.35	98
2.00	96
1.18	95
0.600	91
0.425	83
0.300	
0.212	37
0.150	23
0.063	12

Particle Diameter	Percentage Passing

Soil Fraction	Sieve Percentage
GRAVEL	**4**
SAND	**84**
SILT/CLAY	**12**

Soil Description:

Brown mottled grey slightly gravelly silty/clayey SAND

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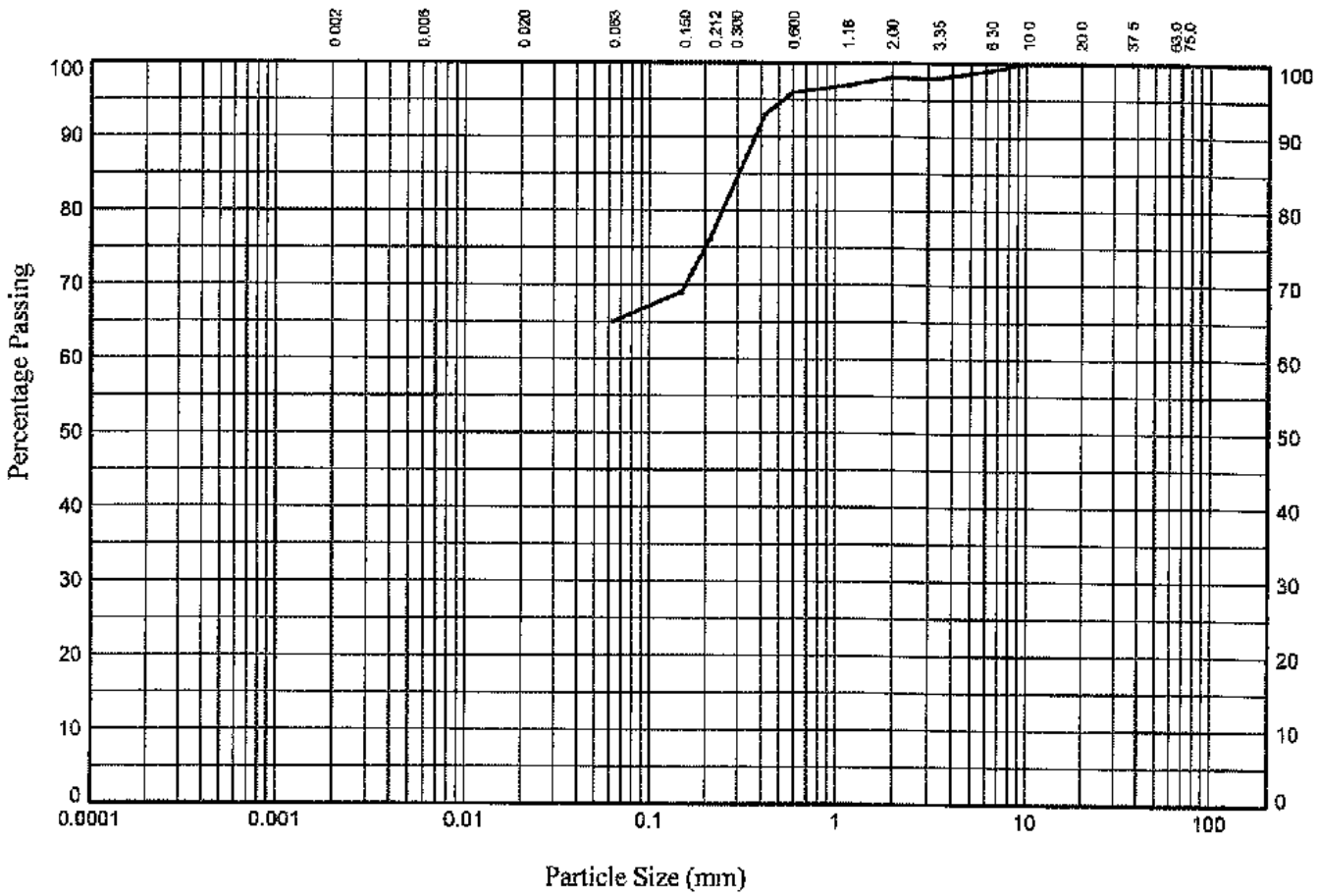
PARTICLE SIZE DISTRIBUTION TEST

In accordance with clauses 9.2,9.5 of BS1377:Part 2:1990

Borehole : **BH7** Sample Ref: **4** Sample Type: **B** Depth (m): **1.20**



CLAY	fine	medium	coarse	fine	medium	coarse	fine	medium	coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve (mm)	Percentage Passing
125.0	100
75.0	100
63.0	100
37.5	100
20.0	100
10.0	100
6.30	99
5.00	
3.35	98
2.00	98
1.18	97
0.600	96
0.425	93
0.300	
0.212	76
0.150	69
0.063	65

Particle Diameter	Percentage Passing

Soil Fraction	Sieve Percentage
GRAVEL	2
SAND	33
SILT/CLAY	65

Soil Description:
Grey mottled orangish brown slightly gravelly slightly sandy CLAY

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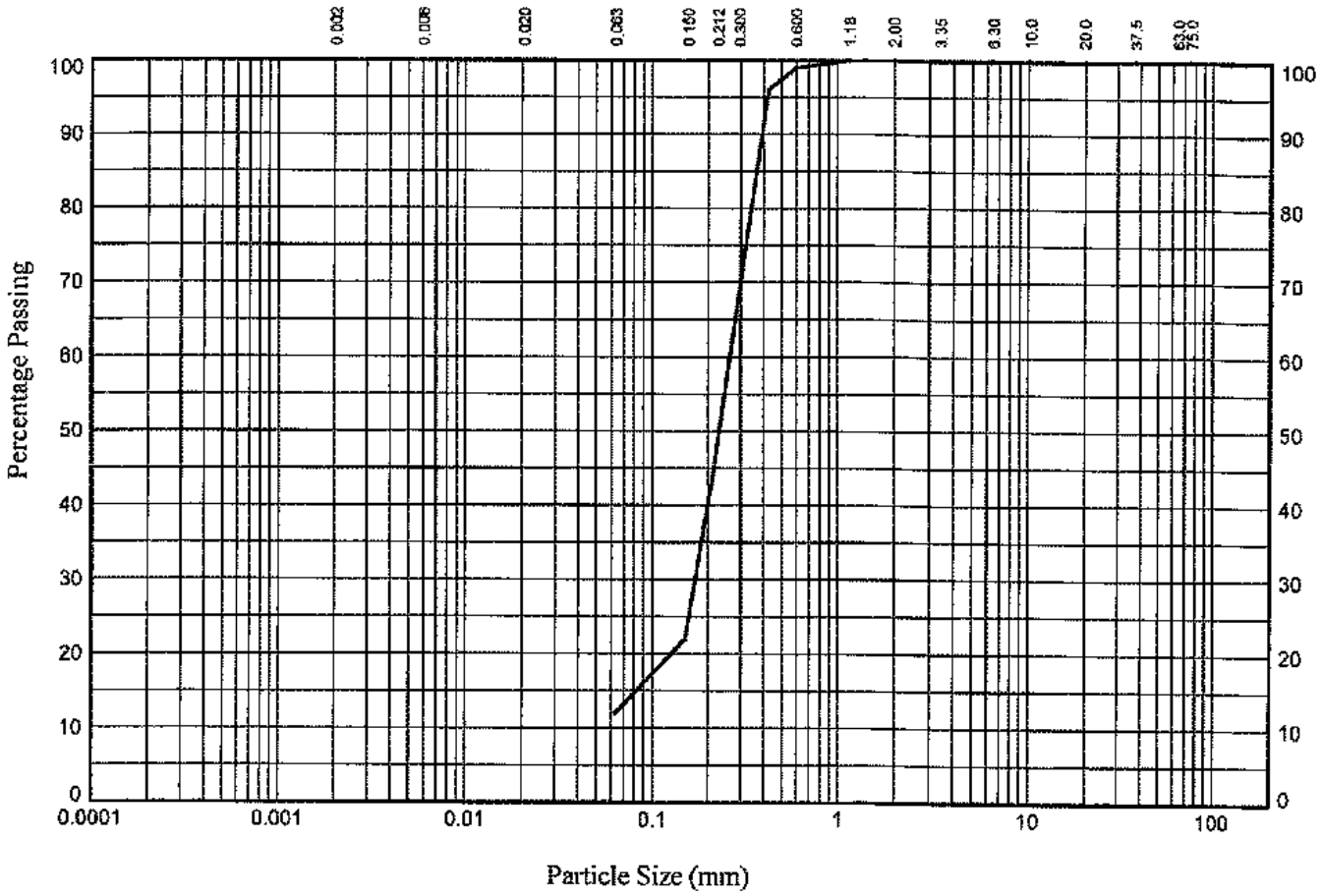
PARTICLE SIZE DISTRIBUTION TEST

In accordance with clauses 9.2,9.5 of BS1377:Part 2:1990

Borehole : **BH7** Sample Ref: **19** Sample Type: **B** Depth (m): **8.50**



CLAY	fine	medium	coarse	fine	medium	coarse	fine	medium	coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve (mm)	Percentage Passing
125.0	100
75.0	100
63.0	100
37.5	100
20.0	100
10.0	100
6.30	100
5.00	
3.35	100
2.00	100
1.18	100
0.600	99
0.425	96
0.300	
0.212	44
0.150	22
0.063	12

Particle Diameter	Percentage Passing

Soil Fraction	Sieve Percentage
GRAVEL	**0**
SAND	**88**
SILT/CLAY	**12**

Soil Description:

Dark brown mottled light brown silty/clayey SAND

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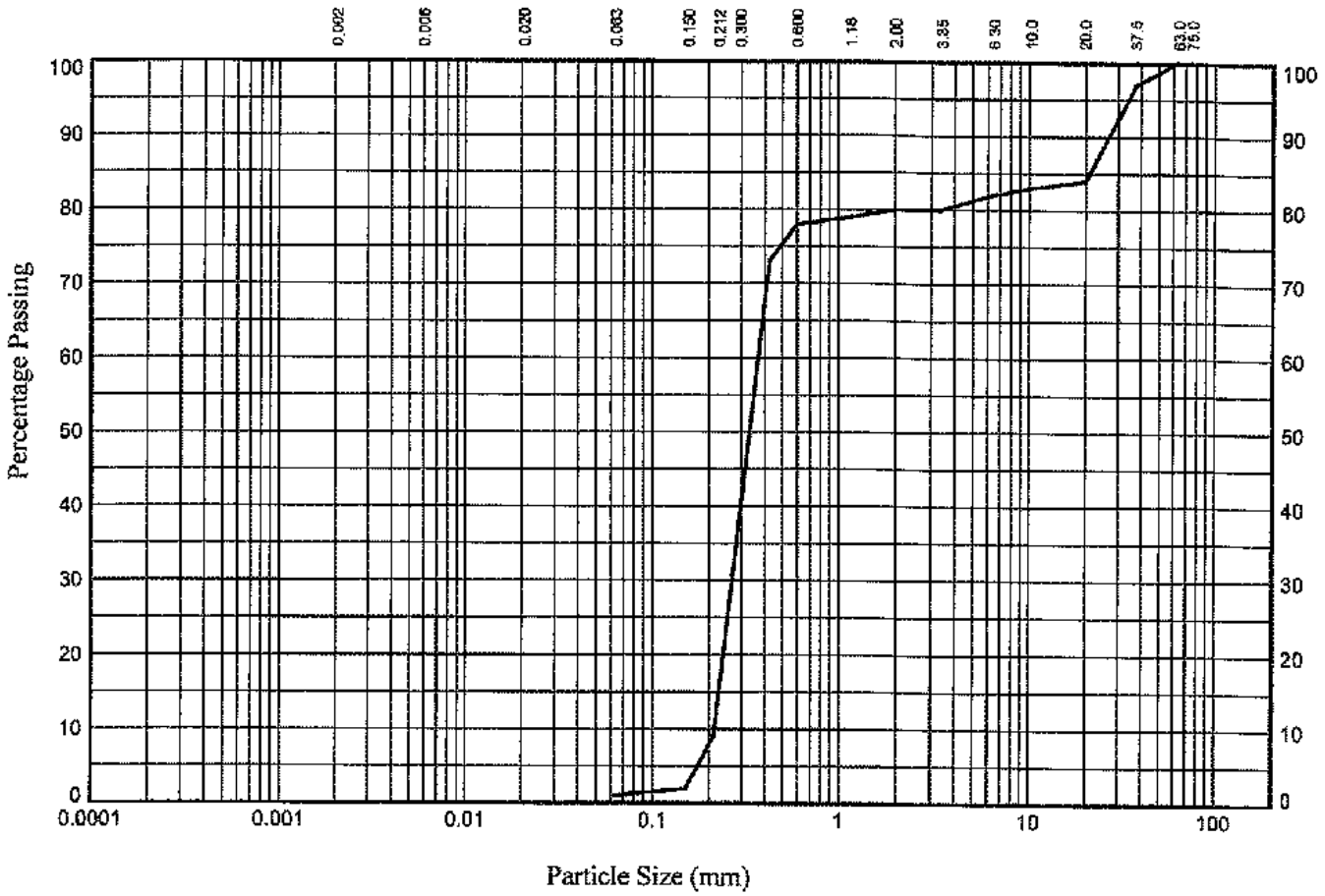
PARTICLE SIZE DISTRIBUTION TEST

In accordance with clauses 9.2,9.5 of BS1377:Part 2:1990

Borehole : **BH8** Sample Ref: **2** Sample Type: **B** Depth (m): **2.50**



CLAY	fine	medium	coarse	fine	medium	coarse	fine	medium	coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve (mm)	Percentage Passing
125.0	100
75.0	100
63.0	100
37.5	97
20.0	84
10.0	83
6.30	82
5.00	
3.35	80
2.00	80
1.18	79
0.600	78
0.425	73
0.300	
0.212	9
0.150	2
0.063	1

Particle Diameter	Percentage Passing

Soil Fraction	Sieve Percentage
GRAVEL	**20**
SAND	**79**
SILT/CLAY	**1**

Soil Description:
Brown mottled grey slightly silty gravelly SAND

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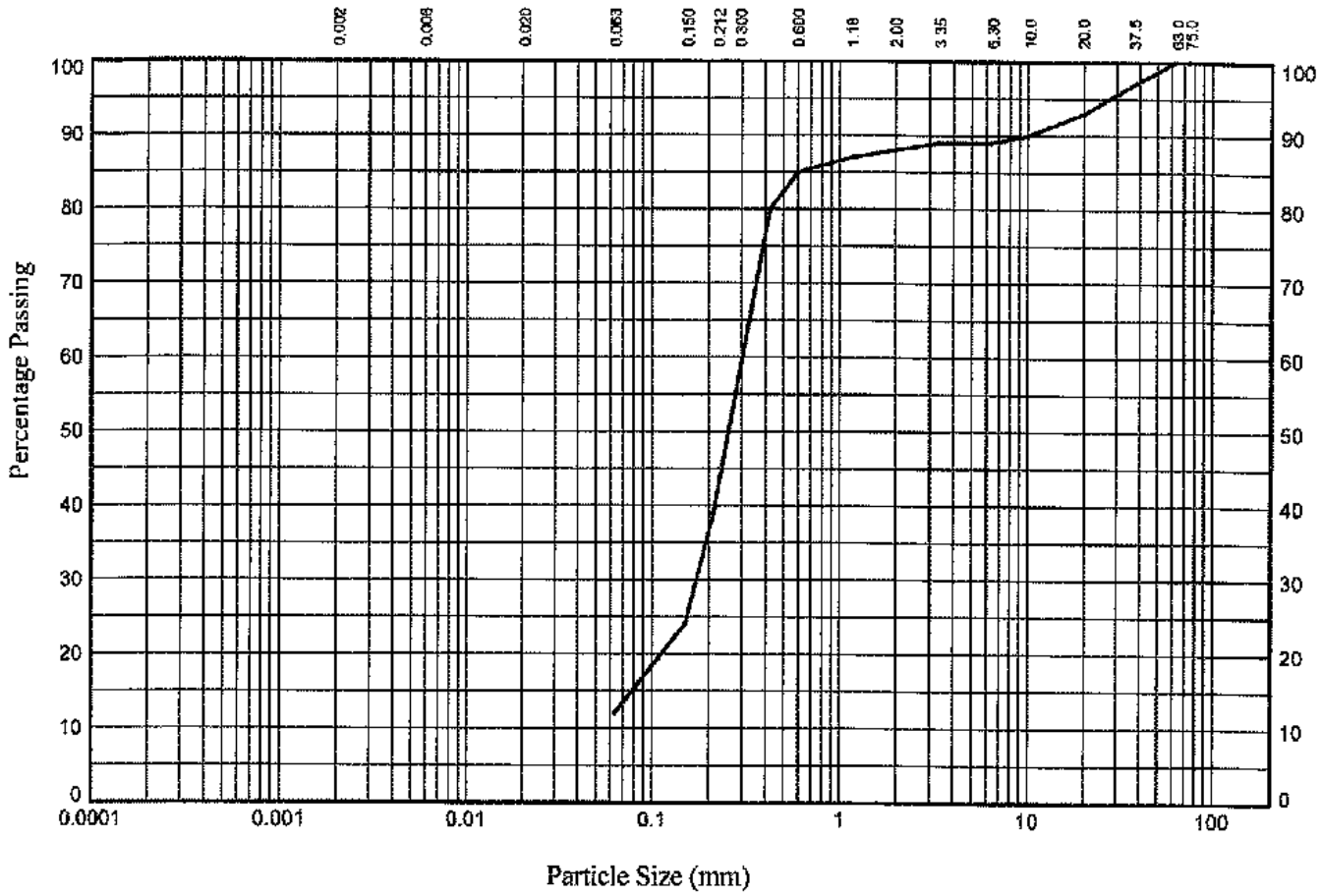
PARTICLE SIZE DISTRIBUTION TEST

In accordance with clauses 9.2,9.5 of BS1377:Part 2:1990

Borehole : **BH9** Sample Ref: **3** Sample Type: **B** Depth (m): **2.50**



CLAY	fine	medium	coarse	fine	medium	coarse	fine	medium	coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve (mm)	Percentage Passing
125.0	100
75.0	100
63.0	100
37.5	97
20.0	93
10.0	90
6.30	89
5.00	
3.35	89
2.00	88
1.18	87
0.600	85
0.425	80
0.300	
0.212	39
0.150	24
0.063	12

Particle Diameter	Percentage Passing

Soil Fraction	Sieve Percentage
GRAVEL	**12**
SAND	**76**
SILT/CLAY	**12**

Soil Description:

Brown mottled orangish brown silty/clayey gravelly SAND

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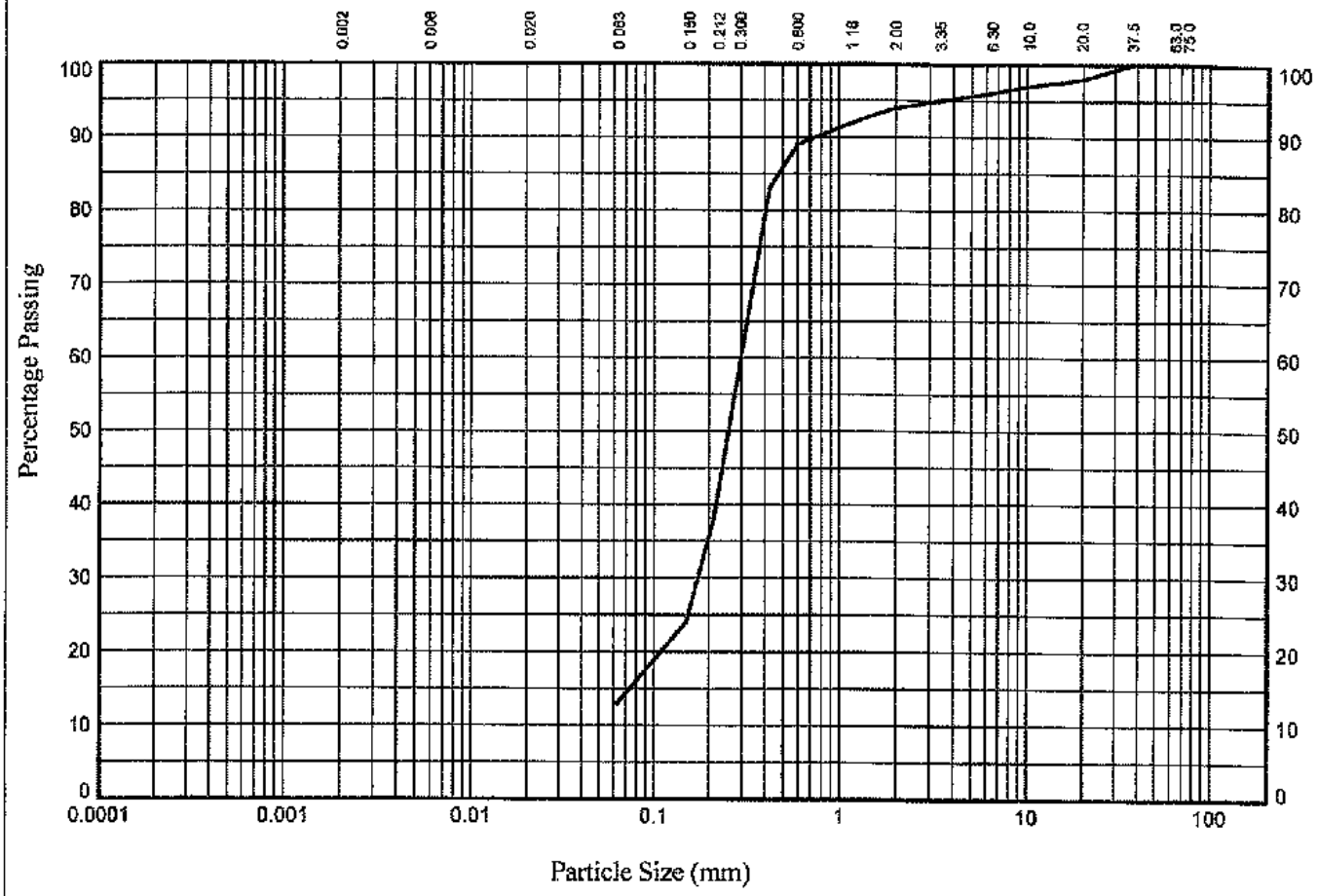
PARTICLE SIZE DISTRIBUTION TEST

In accordance with clauses 9.2,9.5 of BS1377:Part 2:1990

Borehole : **BH10A** Sample Ref: **7** Sample Type: **B** Depth (m): **2.50**



CLAY	fine	medium	coarse	fine	medium	coarse	fine	medium	coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve (mm)	Percentage Passing
125.0	100
75.0	100
63.0	100
37.5	100
20.0	98
10.0	97
6.30	96
5.00	
3.35	95
2.00	94
1.18	92
0.600	89
0.425	83
0.300	
0.212	38
0.150	24
0.063	13

Particle Diameter	Percentage Passing

Soil Fraction	Sieve Percentage
GRAVEL	**6**
SAND	**81**
SILT/CLAY	**13**

Soil Description:

Orangish brown mottled greenish brown gravelly silty/clayey SAND

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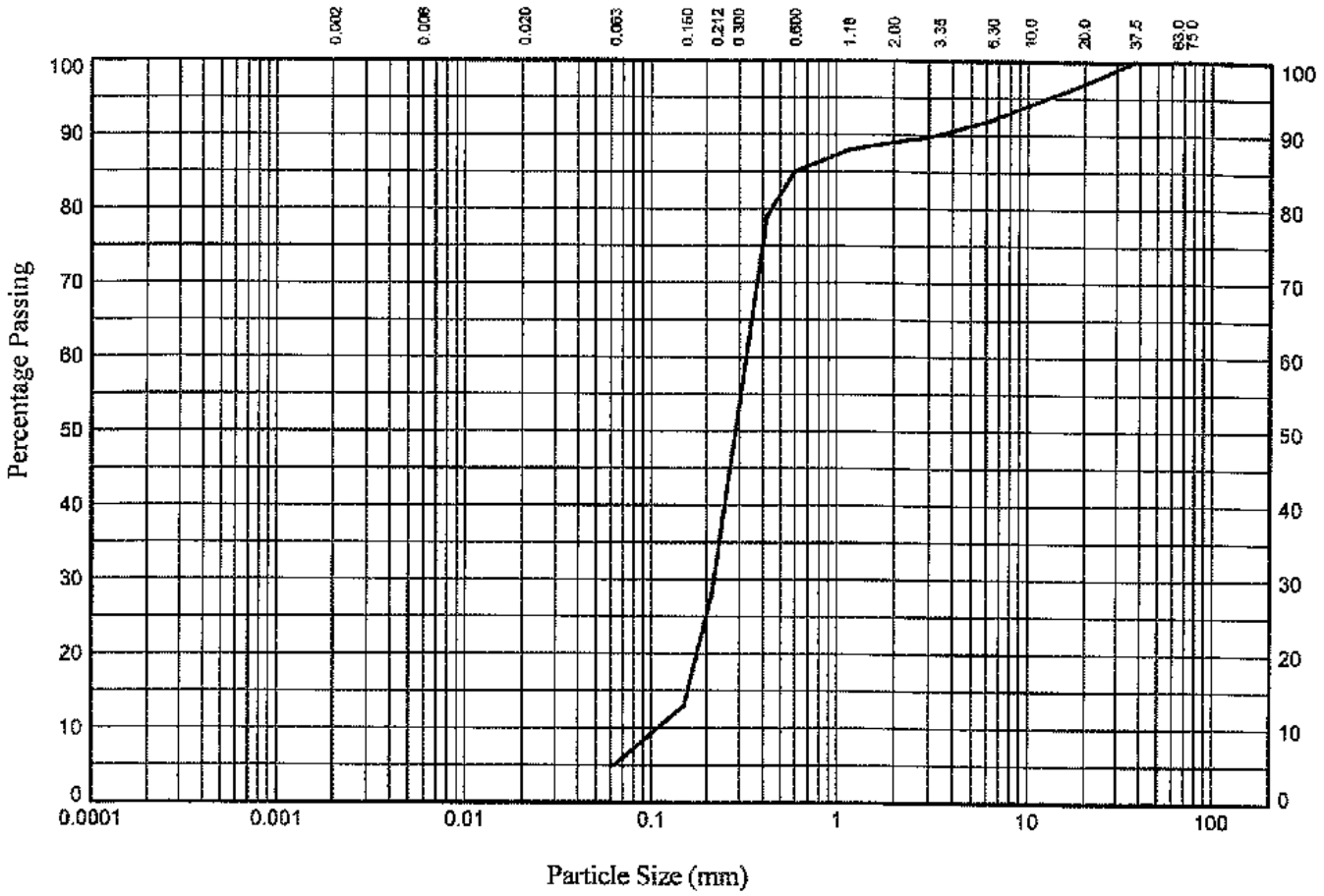
PARTICLE SIZE DISTRIBUTION TEST

In accordance with clauses 9.2,9.5 of BS1377:Part 2:1990

Borehole : **BH11** Sample Ref: **7** Sample Type: **B** Depth (m): **2.50**



CLAY	fine	medium	coarse	fine	medium	coarse	fine	medium	coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve (mm)	Percentage Passing
125.0	100
75.0	100
63.0	100
37.5	100
20.0	97
10.0	94
6.30	92
5.00	
3.35	90
2.00	89
1.18	88
0.600	85
0.425	79
0.300	
0.212	28
0.150	13
0.063	5

Particle Diameter	Percentage Passing

Soil Fraction	Sieve Percentage
GRAVEL	**11**
SAND	**84**
SILT/CLAY	**5**

Soil Description:

Brown mottled grey slightly silty/clayey gravelly SAND

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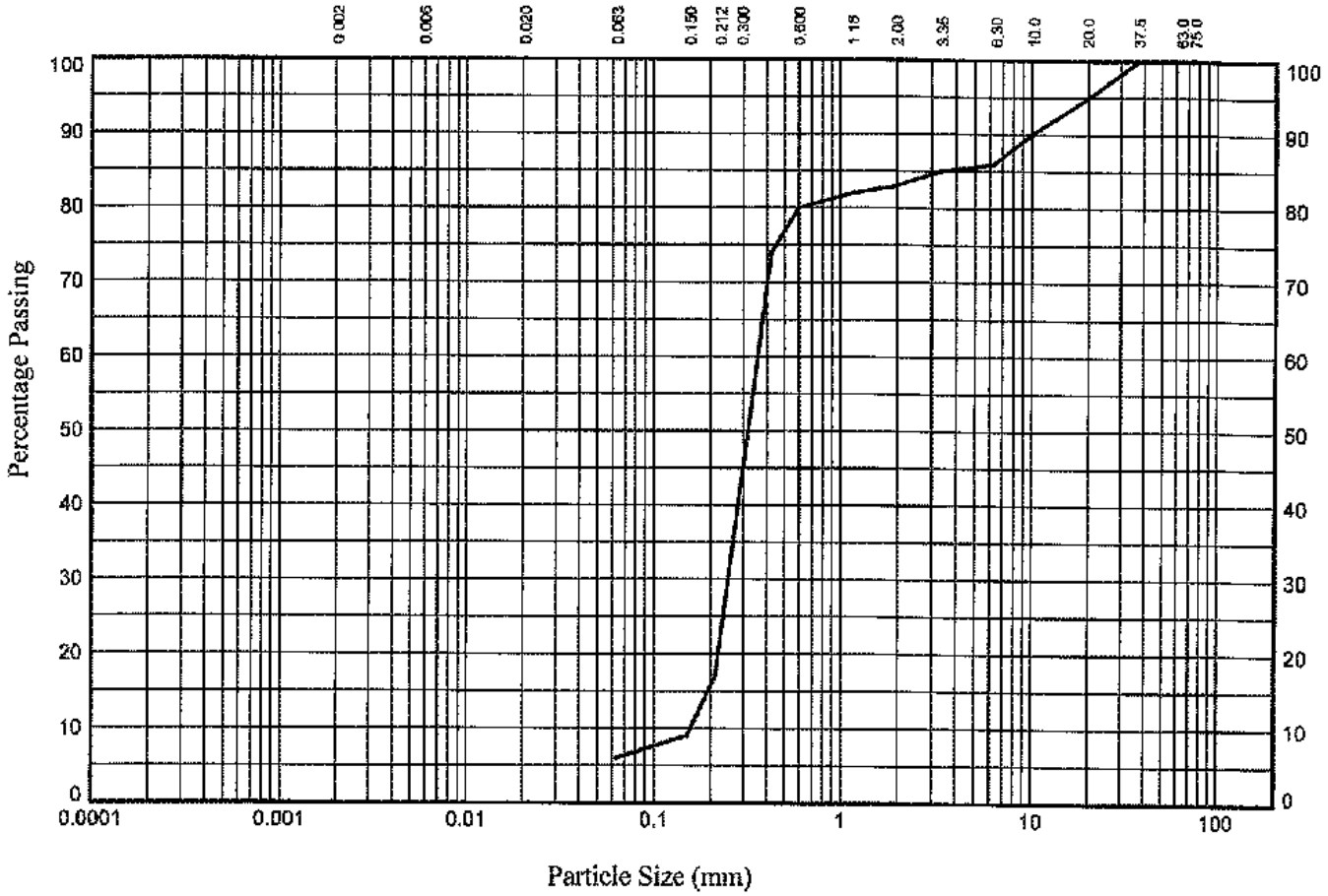
PARTICLE SIZE DISTRIBUTION TEST

In accordance with clauses 9.2,9.5 of BS1377:Part 2:1990

Borehole : **BH12** Sample Ref: **7** Sample Type: **B** Depth (m): **2.50**



CLAY	fine	medium	coarse	fine	medium	coarse	fine	medium	coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve (mm)	Percentage Passing
125.0	100
75.0	100
63.0	100
37.5	100
20.0	95
10.0	90
6.30	86
5.00	
3.35	85
2.00	83
1.18	82
0.600	80
0.425	74
0.300	
0.212	17
0.150	9
0.063	6

Particle Diameter	Percentage Passing

Soil Fraction	Sieve Percentage
GRAVEL	**17**
SAND	**77**
SILT/CLAY	**6**

Soil Description:

Brown mottled grey silty/clayey gravelly SAND

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The Old School
Stillhouse Lane
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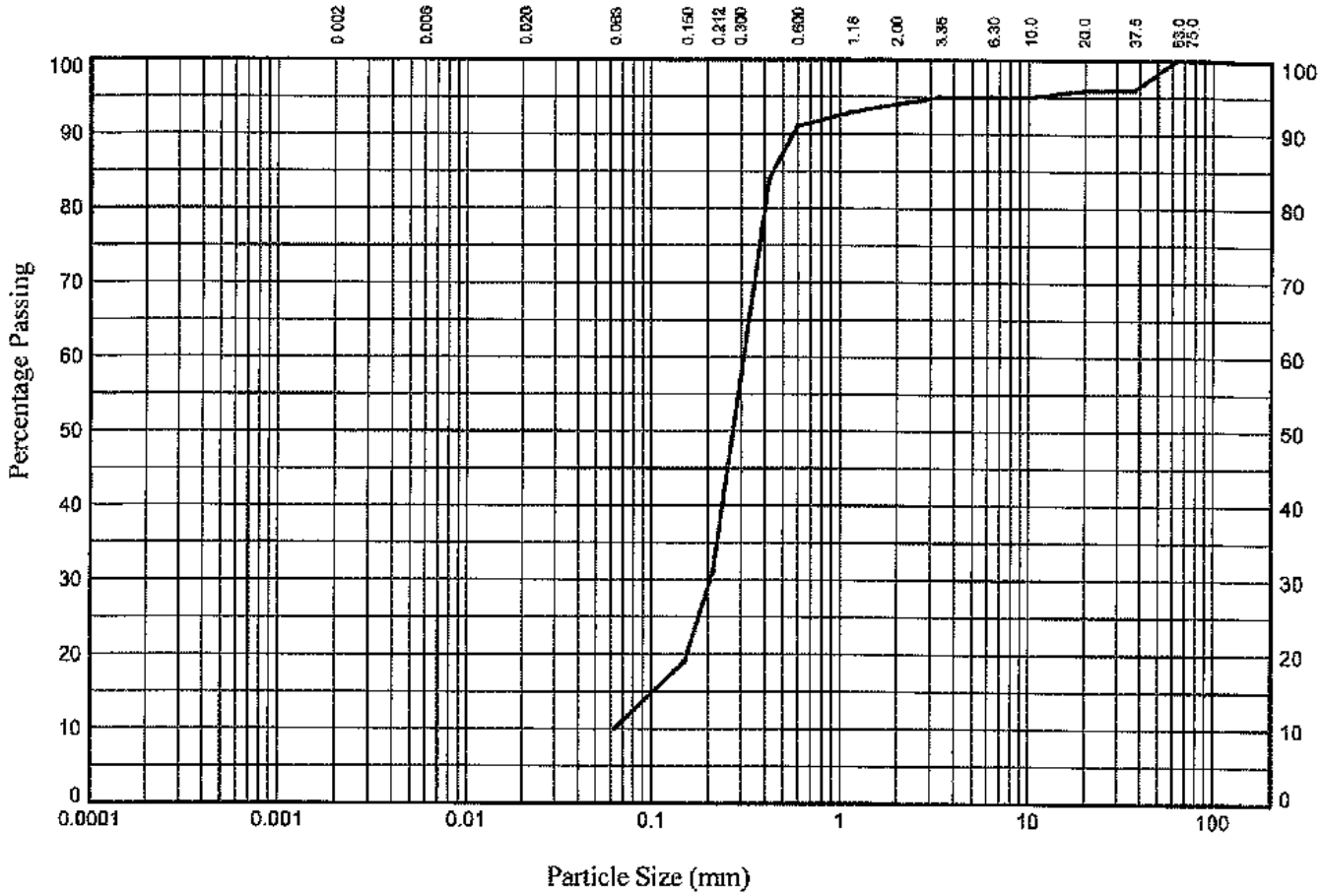
PARTICLE SIZE DISTRIBUTION TEST

In accordance with clauses 9.2,9.5 of BS1377:Part 2:1990

Borehole : **BH13A** Sample Ref: **4** Sample Type: **B** Depth (m): **2.50**



CLAY	fine	medium	coarse	fine	medium	coarse	fine	medium	coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve (mm)	Percentage Passing
125.0	100
75.0	100
63.0	100
37.5	96
20.0	96
10.0	95
6.30	95
5.00	
3.35	95
2.00	94
1.18	93
0.600	91
0.425	84
0.300	
0.212	31
0.150	19
0.063	10

Particle Diameter	Percentage Passing

Soil Fraction	Sieve Percentage
GRAVEL	**6**
SAND	**84**
SILT/CLAY	**10**

Soil Description:

Orangish brown mottled brown gravelly silty/clayey SAND

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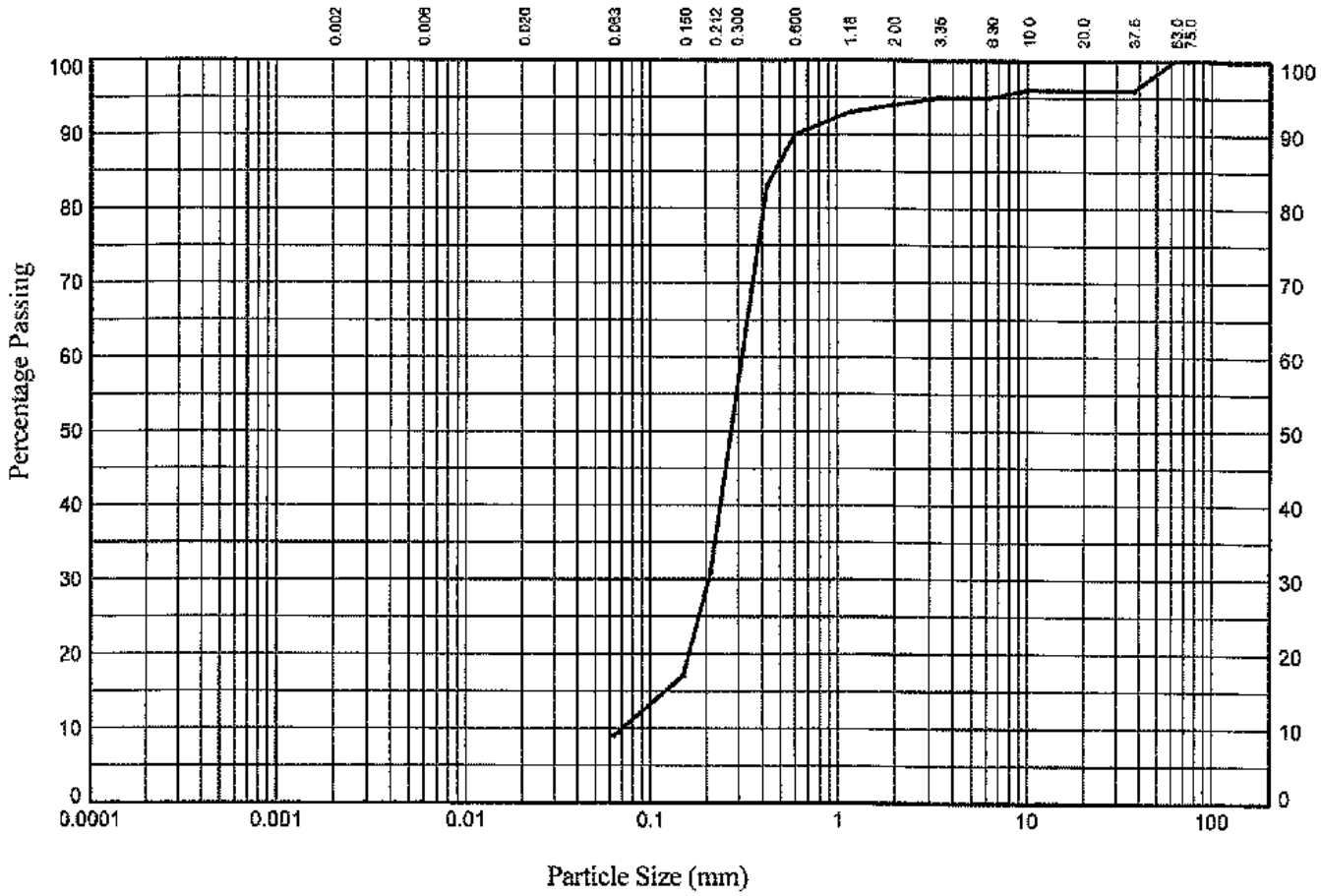
PARTICLE SIZE DISTRIBUTION TEST

In accordance with clauses 9.2,9.5 of BS1377:Part 2:1990

Borehole : **BH14** Sample Ref: **11** Sample Type: **B** Depth (m): **4.50**



CLAY	fine	medium	coarse	fine	medium	coarse	fine	medium	coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve (mm)	Percentage Passing
125.0	100
75.0	100
63.0	100
37.5	96
20.0	96
10.0	96
6.30	95
5.00	
3.35	95
2.00	94
1.18	93
0.600	90
0.425	83
0.300	
0.212	31
0.150	17
0.063	9

Particle Diameter	Percentage Passing

Soil Fraction	Sieve Percentage
GRAVEL	**6**
SAND	**85**
SILT/CLAY	**9**

Soil Description:
Orangish brown mottled greenish grey gravelly silty/clayey SAND

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The Old School
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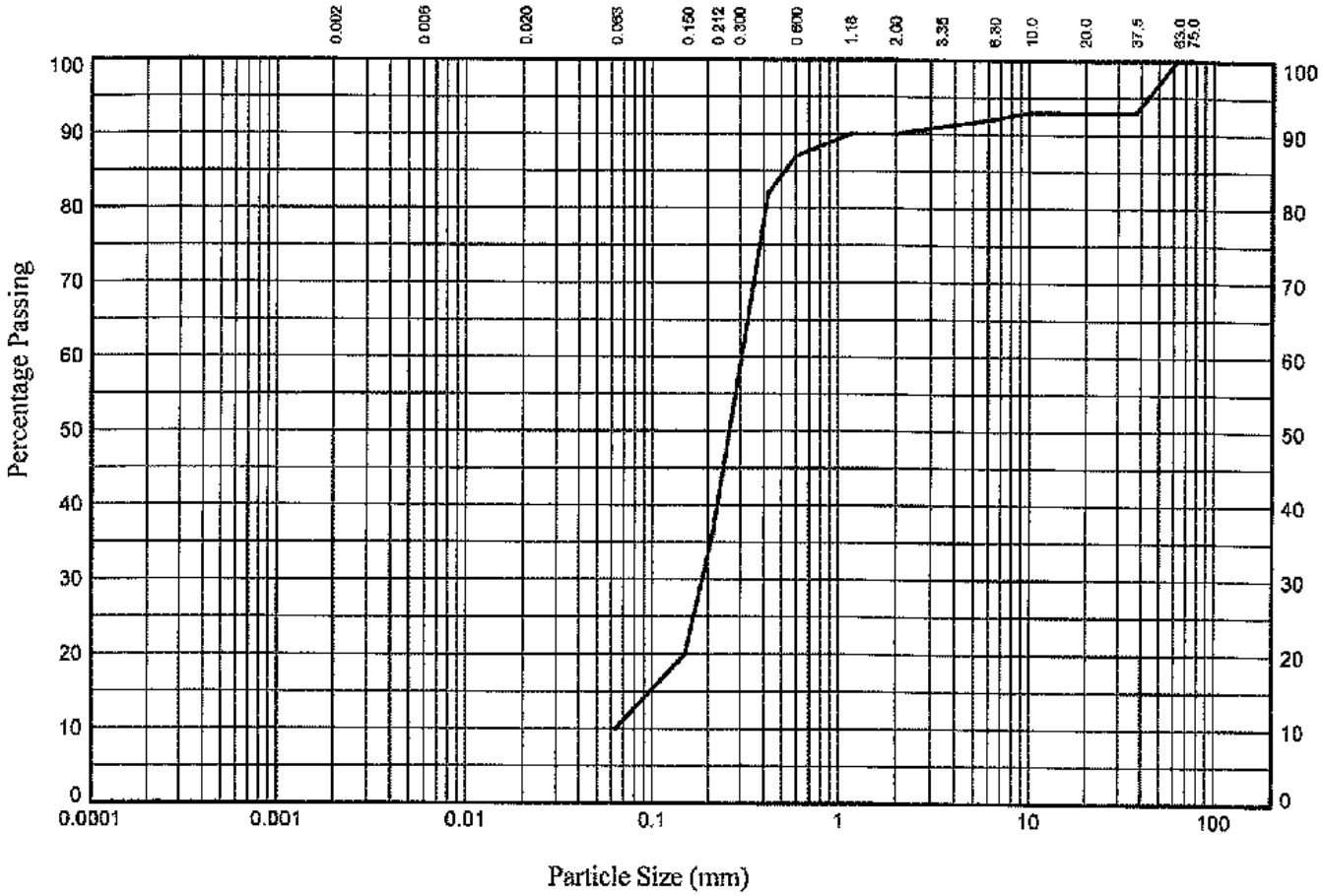
PARTICLE SIZE DISTRIBUTION TEST

In accordance with clauses 9.2,9.5 of BS1377:Part 2:1990

Borehole : **BH16** Sample Ref: **2** Sample Type: **B** Depth (m): **2.50**



CLAY	fine	medium	coarse	fine	medium	coarse	fine	medium	coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve (mm)	Percentage Passing
125.0	100
75.0	100
63.0	100
37.5	93
20.0	93
10.0	93
6.30	92
5.00	
3.35	91
2.00	90
1.18	90
0.600	87
0.425	82
0.300	
0.212	36
0.150	20
0.063	10

Particle Diameter	Percentage Passing

Soil Fraction	Sieve Percentage
GRAVEL	**10**
SAND	**80**
SILT/CLAY	**10**

Soil Description:

Orangish brown mottled greenish grey silty/clayey gravelly SAND

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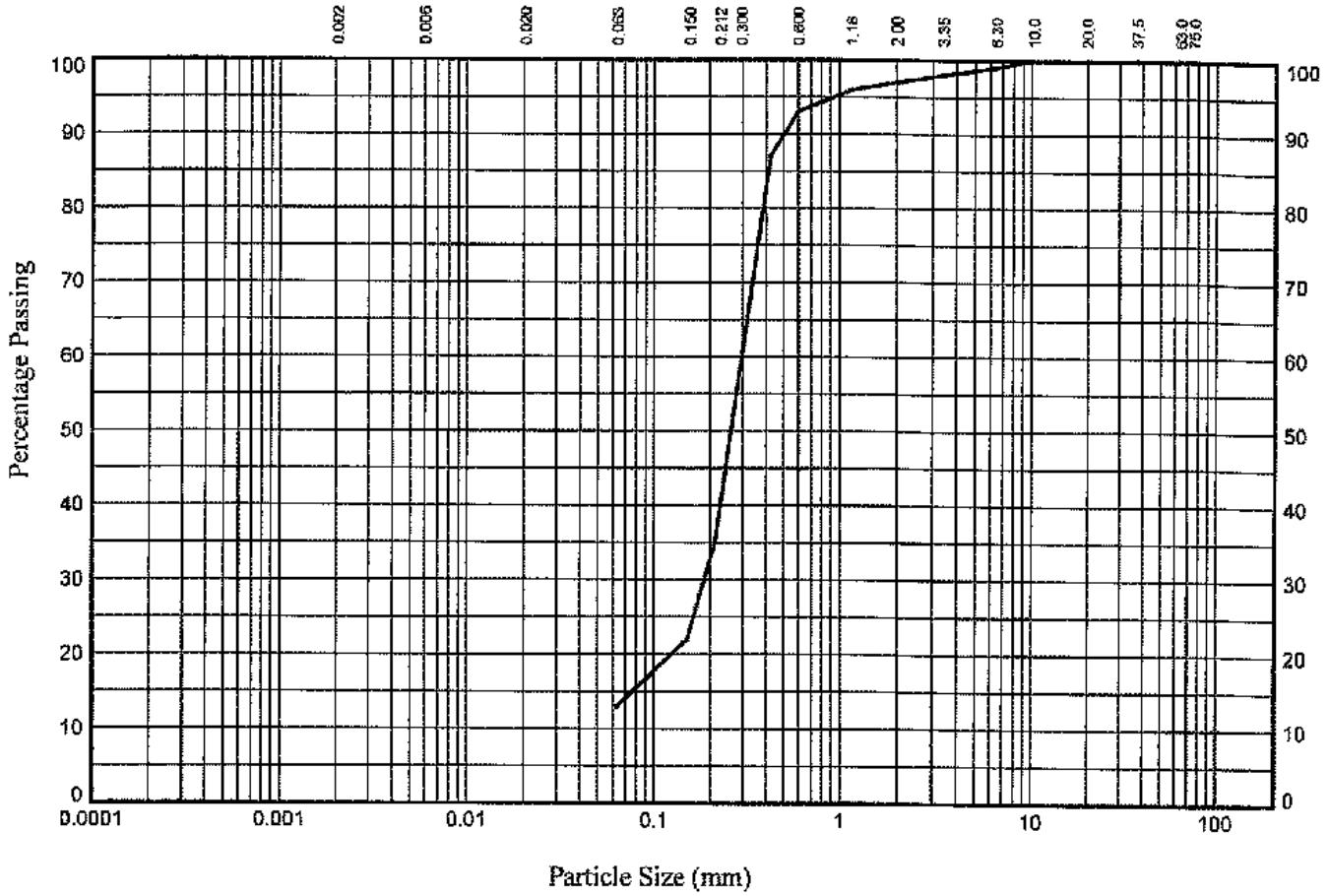
PARTICLE SIZE DISTRIBUTION TEST

In accordance with clauses 9.2,9.5 of BS1377:Part 2:1990

Borehole : **BH17** Sample Ref: **7** Sample Type: **B** Depth (m): **2.50**



CLAY	fine	medium	coarse	fine	medium	coarse	fine	medium	coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve (mm)	Percentage Passing
125.0	100
75.0	100
63.0	100
37.5	100
20.0	100
10.0	100
6.30	99
5.00	
3.35	98
2.00	97
1.18	96
0.600	93
0.425	87
0.300	
0.212	35
0.150	22
0.063	13

Particle Diameter	Percentage Passing

Soil Fraction	Sieve Percentage
GRAVEL	3
SAND	84
SILT/CLAY	13

Soil Description:
Brown mottled orangish brown slightly gravelly silty/clayey SAND

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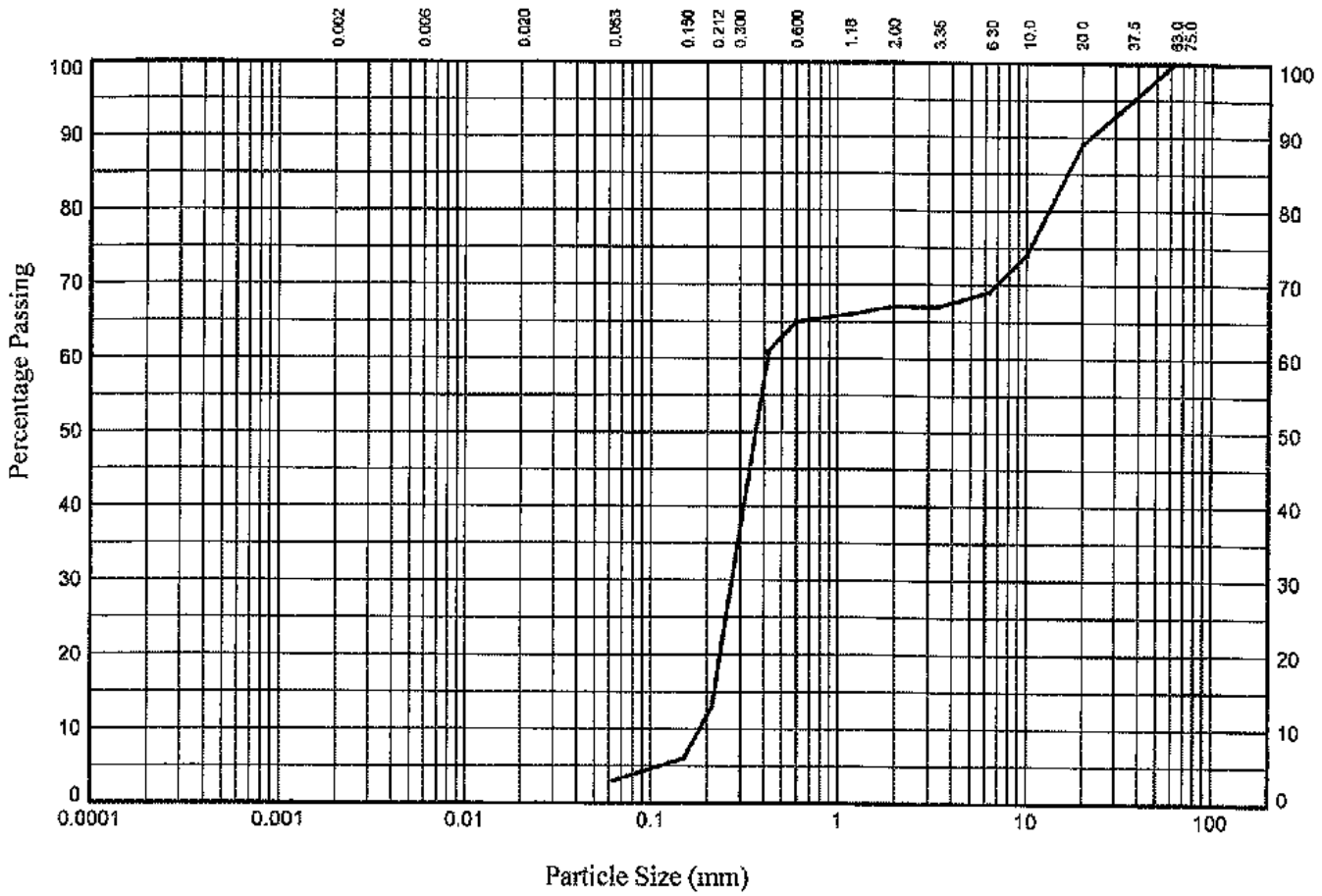
PARTICLE SIZE DISTRIBUTION TEST

In accordance with clauses 9.2,9.5 of BS1377:Part 2:1990

Borehole : **BH18** Sample Ref: **2** Sample Type: **B** Depth (m): **2.50**



CLAY	fine	medium	coarse	fine	medium	coarse	fine	medium	coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve (mm)	Percentage Passing
125.0	100
75.0	100
63.0	100
37.5	95
20.0	89
10.0	74
6.30	69
5.00	
3.35	67
2.00	67
1.18	66
0.600	65
0.425	61
0.300	
0.212	13
0.150	6
0.063	3

Particle Diameter	Percentage Passing

Soil Fraction	Sieve Percentage
GRAVEL	**33**
SAND	**64**
SILT/CLAY	**3**

Soil Description:

Brown mottled grey slightly silty/clayey very gravelly SAND

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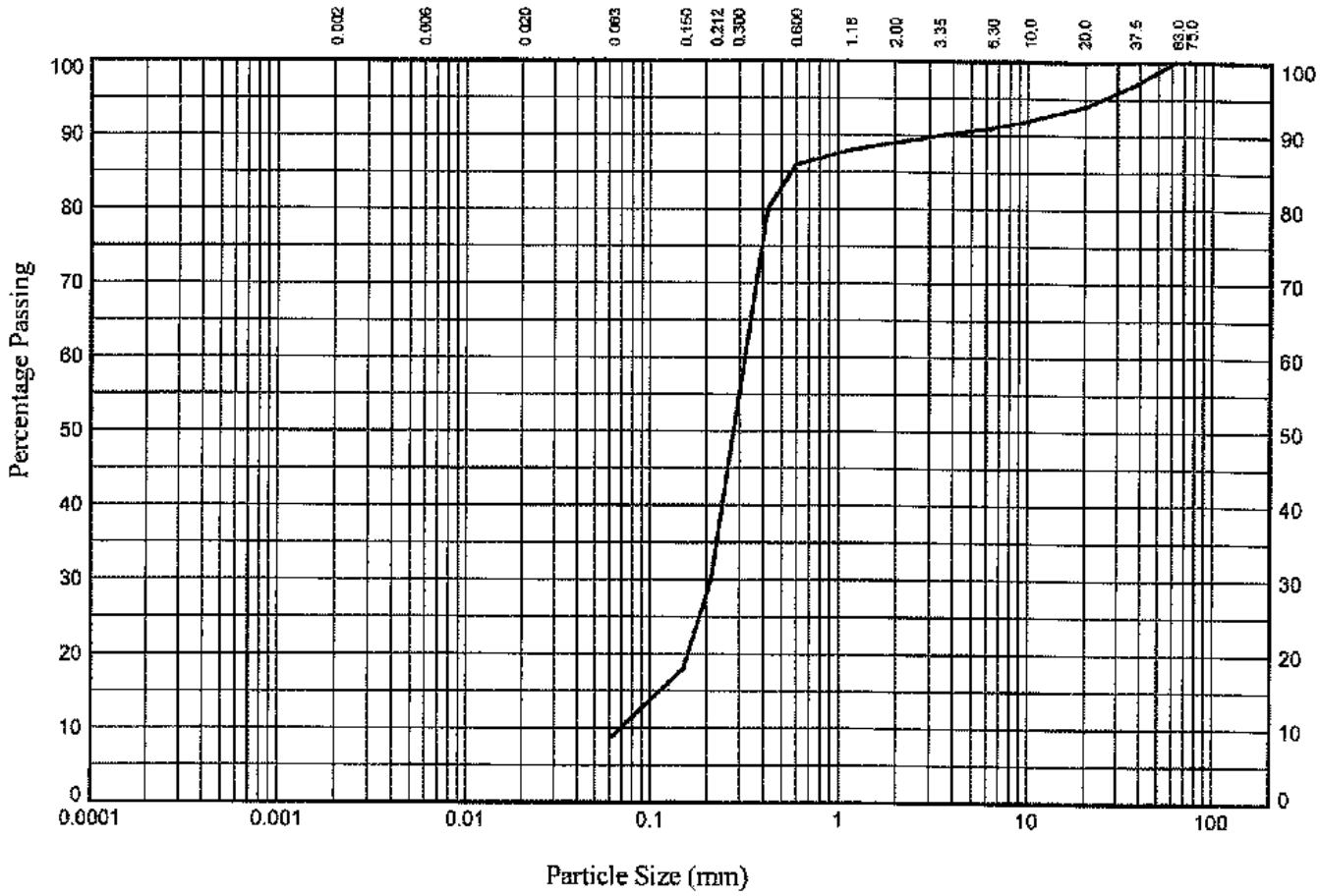
PARTICLE SIZE DISTRIBUTION TEST

In accordance with clauses 9.2,9.5 of BS1377:Part 2:1990

Borehole : **BH19A** Sample Ref: **2** Sample Type: **B** Depth (m): **2.50**



CLAY	fine	medium	coarse	fine	medium	coarse	fine	medium	coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve (mm)	Percentage Passing
125.0	100
75.0	100
63.0	100
37.5	97
20.0	94
10.0	92
6.30	91
5.00	
3.35	90
2.00	89
1.18	88
0.600	86
0.425	80
0.300	
0.212	30
0.150	18
0.063	9

Particle Diameter	Percentage Passing

Soil Fraction	Sieve Percentage
GRAVEL	**11**
SAND	**80**
SILT/CLAY	**9**

Soil Description:
Brown mottled orangish brown silty/clayey gravelly SAND

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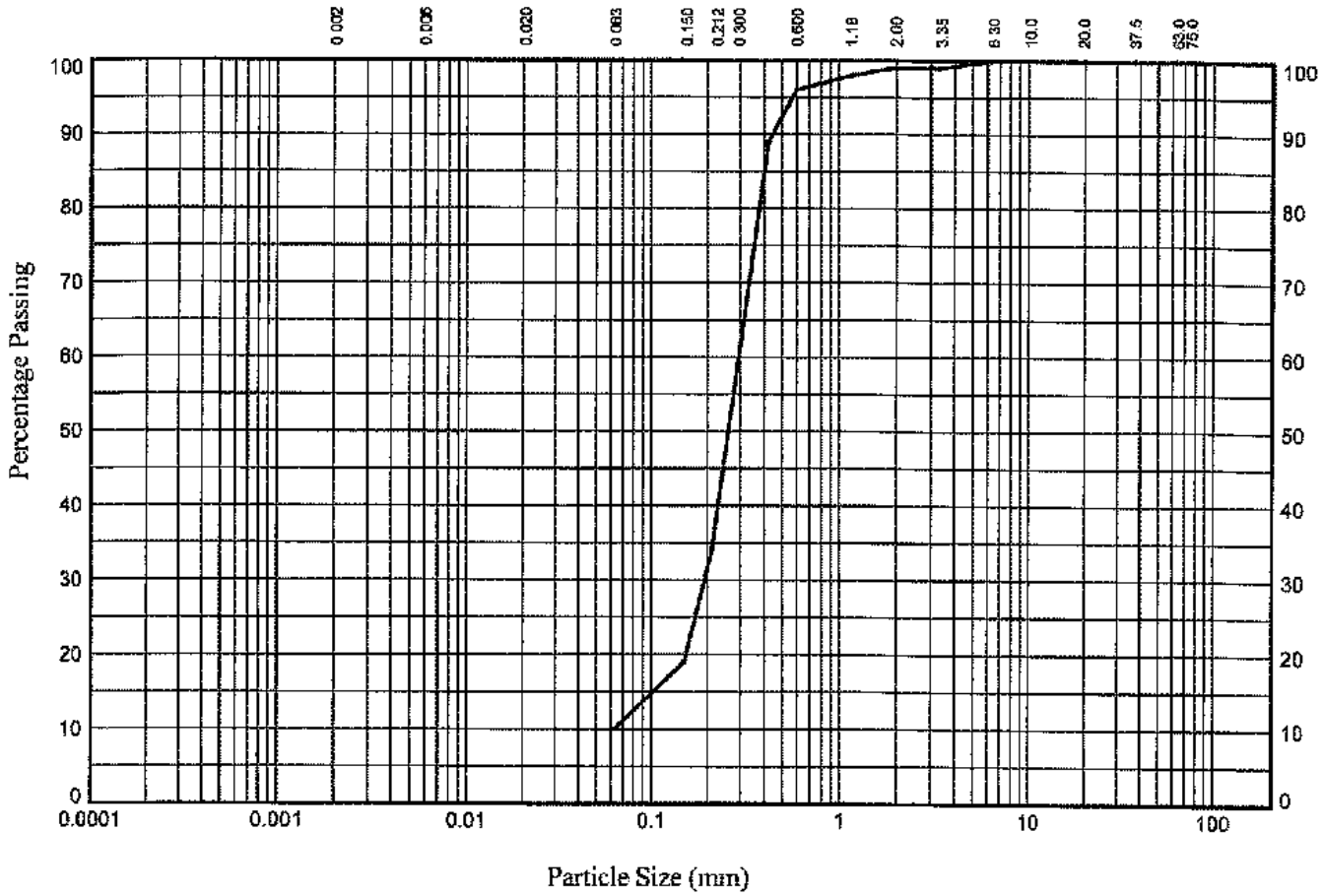
PARTICLE SIZE DISTRIBUTION TEST

In accordance with clauses 9.2,9.5 of BS1377:Part 2:1990

Borehole : **BH20** Sample Ref: **3** Sample Type: **B** Depth (m): **2.50**



CLAY	fine	medium	coarse	fine	medium	coarse	fine	medium	coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve (mm)	Percentage Passing
125.0	100
75.0	100
63.0	100
37.5	100
20.0	100
10.0	100
6.30	100
5.00	
3.35	99
2.00	99
1.18	98
0.600	96
0.425	89
0.300	
0.212	34
0.150	19
0.063	10

Particle Diameter	Percentage Passing

Soil Fraction	Sieve Percentage
GRAVEL	**1**
SAND	**89**
SILT/CLAY	**10**

Soil Description:

Brown mottled orangish brown slightly gravelly silty/clayey SAND

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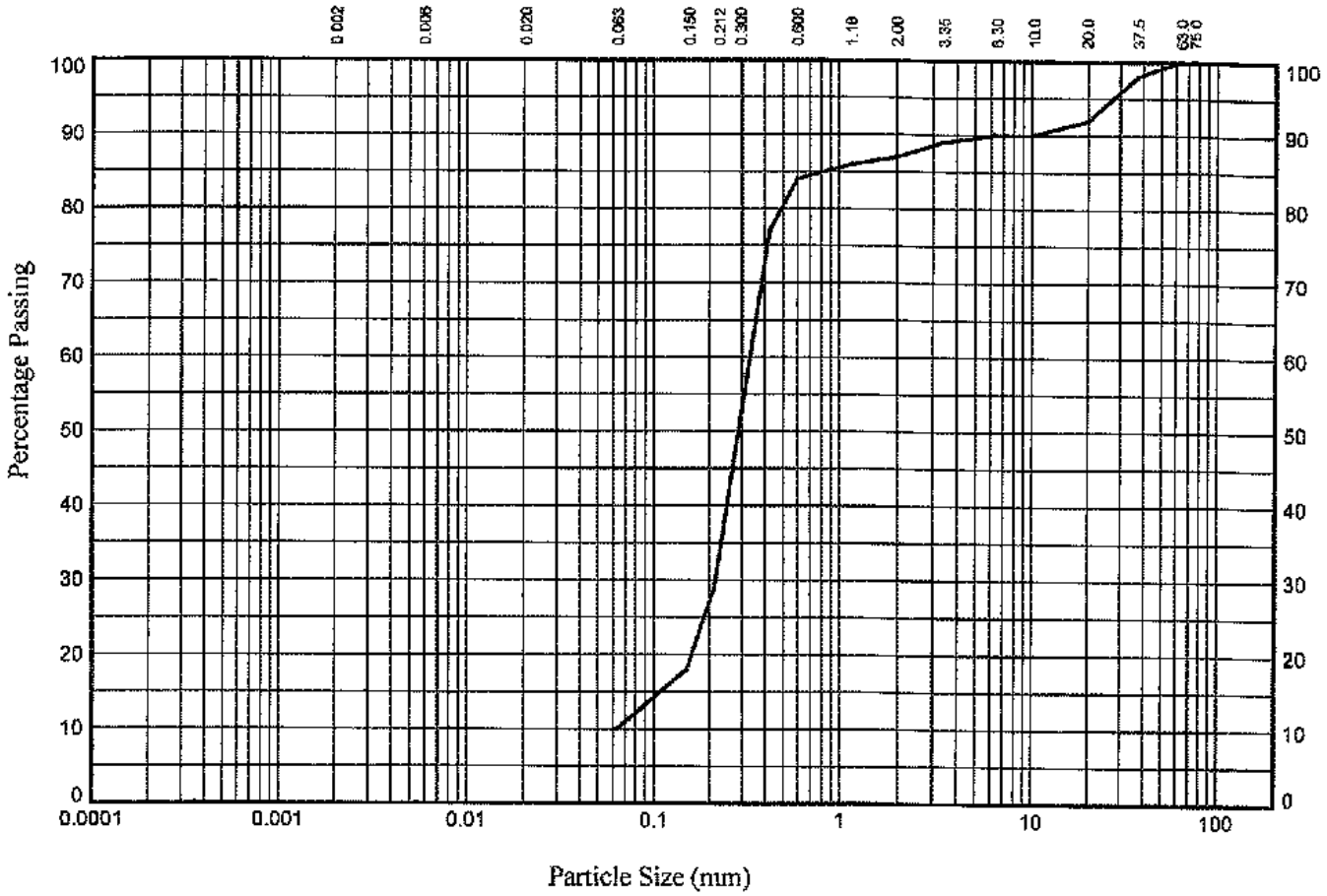
PARTICLE SIZE DISTRIBUTION TEST

In accordance with clauses 9.2,9.5 of BS1377:Part 2:1990

Borehole : **BH21** Sample Ref: **2** Sample Type: **B** Depth (m): **2.60**



CLAY	fine	medium	coarse	fine	medium	coarse	fine	medium	coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve (mm)	Percentage Passing
125.0	100
75.0	100
63.0	100
37.5	98
20.0	92
10.0	90
6.30	90
5.00	
3.35	89
2.00	87
1.18	86
0.600	84
0.425	77
0.300	
0.212	29
0.150	18
0.063	10

Particle Diameter	Percentage Passing

Soil Fraction	Sieve Percentage
GRAVEL	**13**
SAND	**77**
SILT/CLAY	**10**

Soil Description:

Brown mottled orangish brown silty/clayey gravelly SAND

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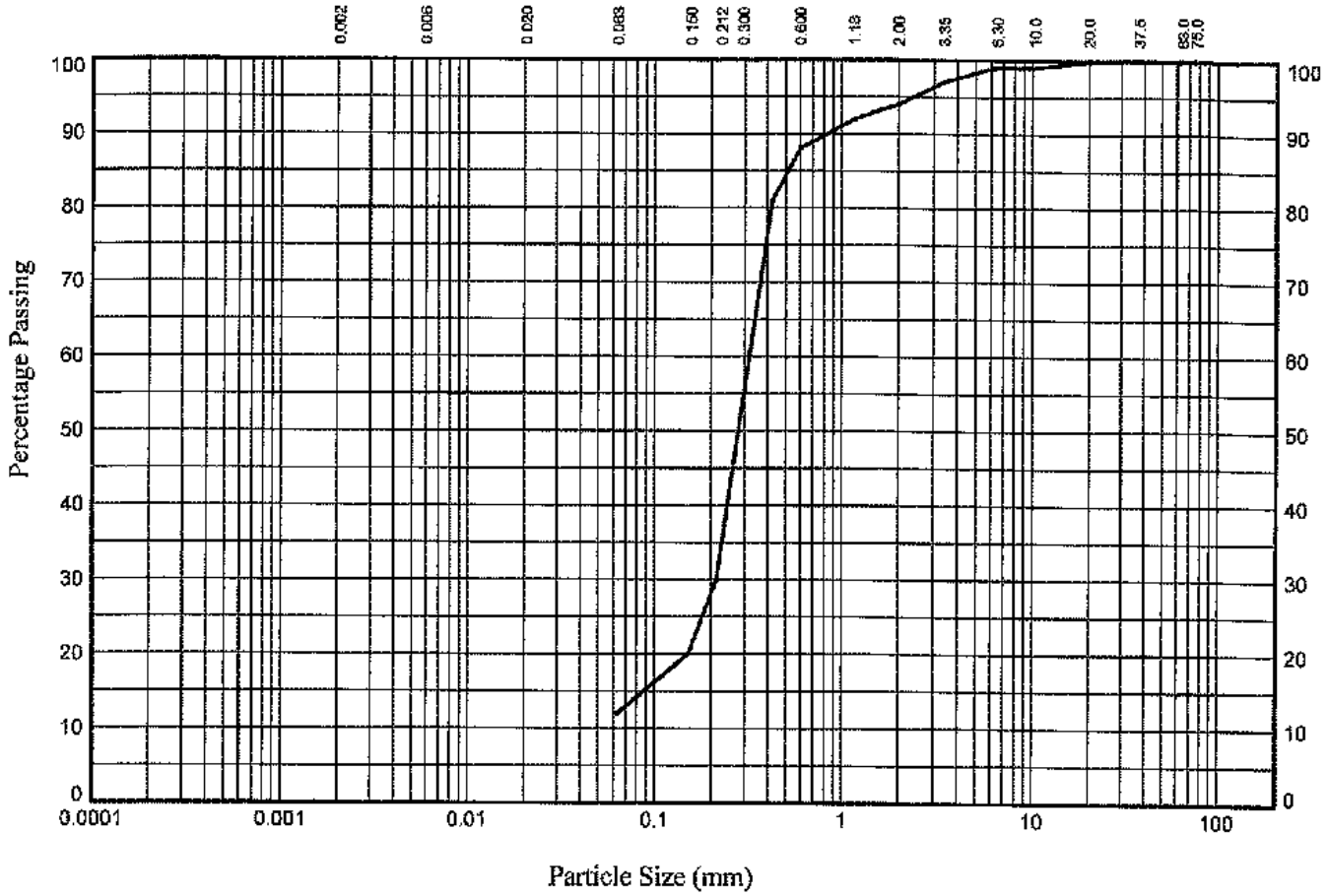
PARTICLE SIZE DISTRIBUTION TEST

In accordance with clauses 9.2,9.5 of BS1377:Part 2:1990

Borehole : **BH22** Sample Ref: **7** Sample Type: **B** Depth (m): **2.50**



CLAY	fine	medium	coarse	fine	medium	coarse	fine	medium	coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve (mm)	Percentage Passing
125.0	100
75.0	100
63.0	100
37.5	100
20.0	100
10.0	99
6.30	99
5.00	
3.35	97
2.00	94
1.18	92
0.600	88
0.425	81
0.300	
0.212	30
0.150	20
0.063	12

Particle Diameter	Percentage Passing

Soil Fraction	Sieve Percentage
GRAVEL	**6**
SAND	**82**
SILT/CLAY	**12**

Soil Description:

Orangish brown mottled brown gravelly silty/clayey SAND

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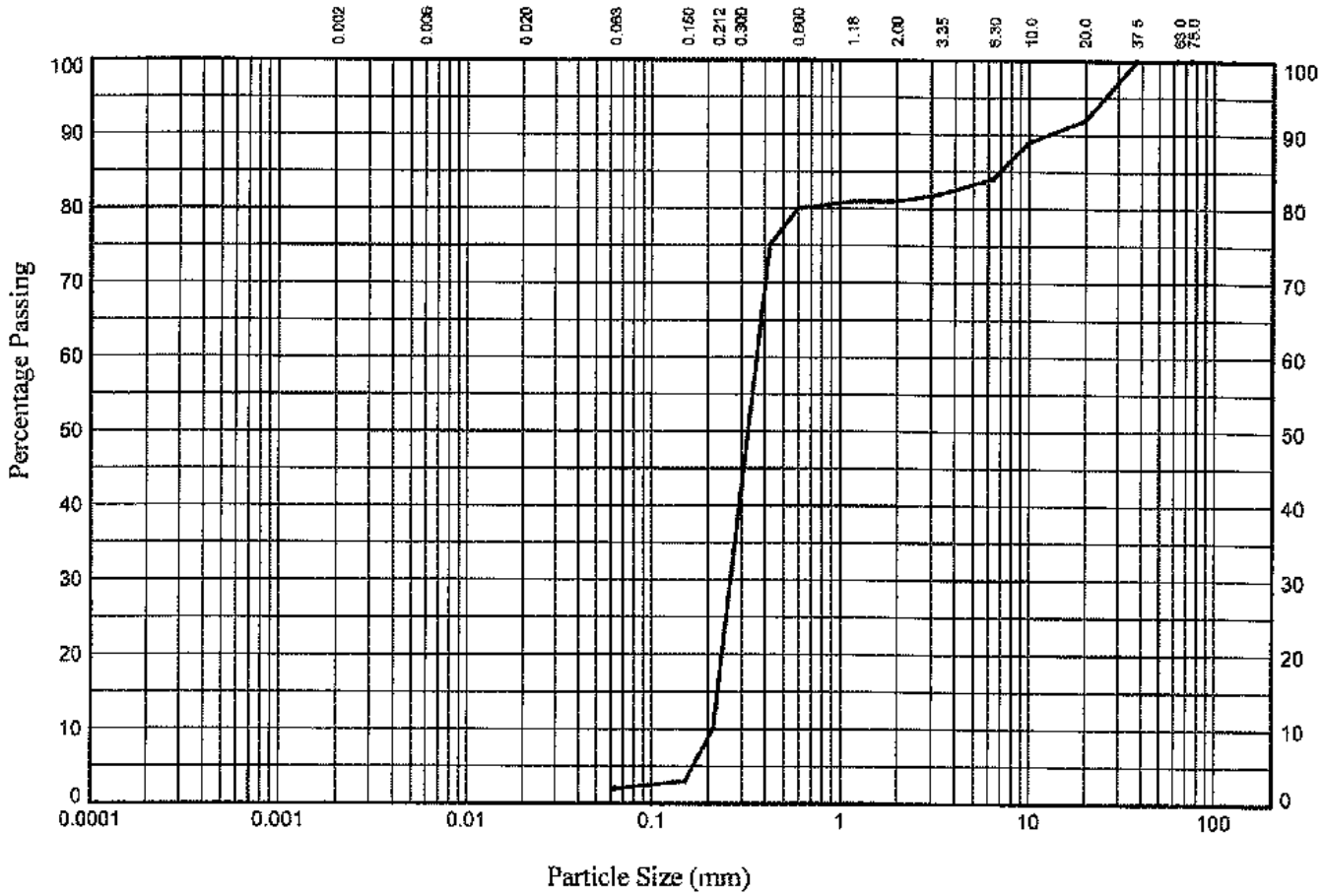
PARTICLE SIZE DISTRIBUTION TEST

In accordance with clauses 9.2,9.5 of BS1377:Part 2:1990

Borehole : **BH23** Sample Ref: **2** Sample Type: **B** Depth (m): **2.50**



CLAY	fine	medium	coarse	fine	medium	coarse	fine	medium	coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve (mm)	Percentage Passing
125.0	100
75.0	100
63.0	100
37.5	100
20.0	92
10.0	89
6.30	84
5.00	
3.35	82
2.00	81
1.18	81
0.600	80
0.425	75
0.300	
0.212	10
0.150	3
0.063	2

Particle Diameter	Percentage Passing

Soil Fraction	Sieve Percentage
GRAVEL	**19**
SAND	**79**
SILT/CLAY	**2**

Soil Description:

Brown mottled grey slightly silty gravelly SAND

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Checked: [redacted] Date: 3/2/09

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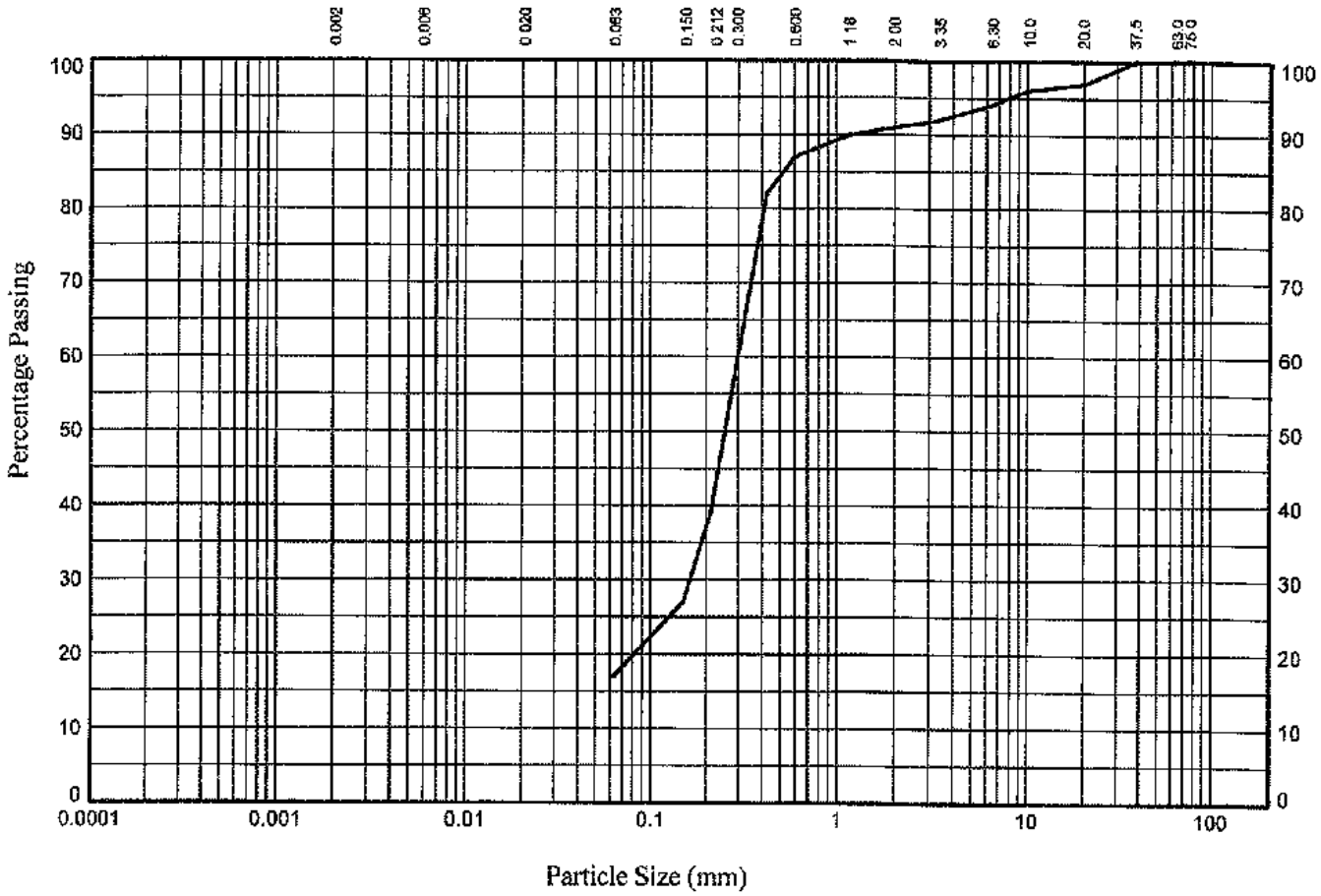
PARTICLE SIZE DISTRIBUTION TEST

In accordance with clauses 9.2,9.5 of BS1377:Part 2:1990

Borehole : **BH24** Sample Ref: **2** Sample Type: **B** Depth (m): **2.50**



CLAY	fine	medium	coarse	fine	medium	coarse	fine	medium	coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve (mm)	Percentage Passing
125.0	100
75.0	100
63.0	100
37.5	100
20.0	97
10.0	96
6.30	94
5.00	
3.35	92
2.00	91
1.18	90
0.600	87
0.425	82
0.300	
0.212	39
0.150	27
0.063	17

Particle Diameter	Percentage Passing

Soil Fraction	Sieve Percentage
GRAVEL	9
SAND	74
SILT/CLAY	17

Soil Description:

Orangish brown gravelly silty/clayey SAND

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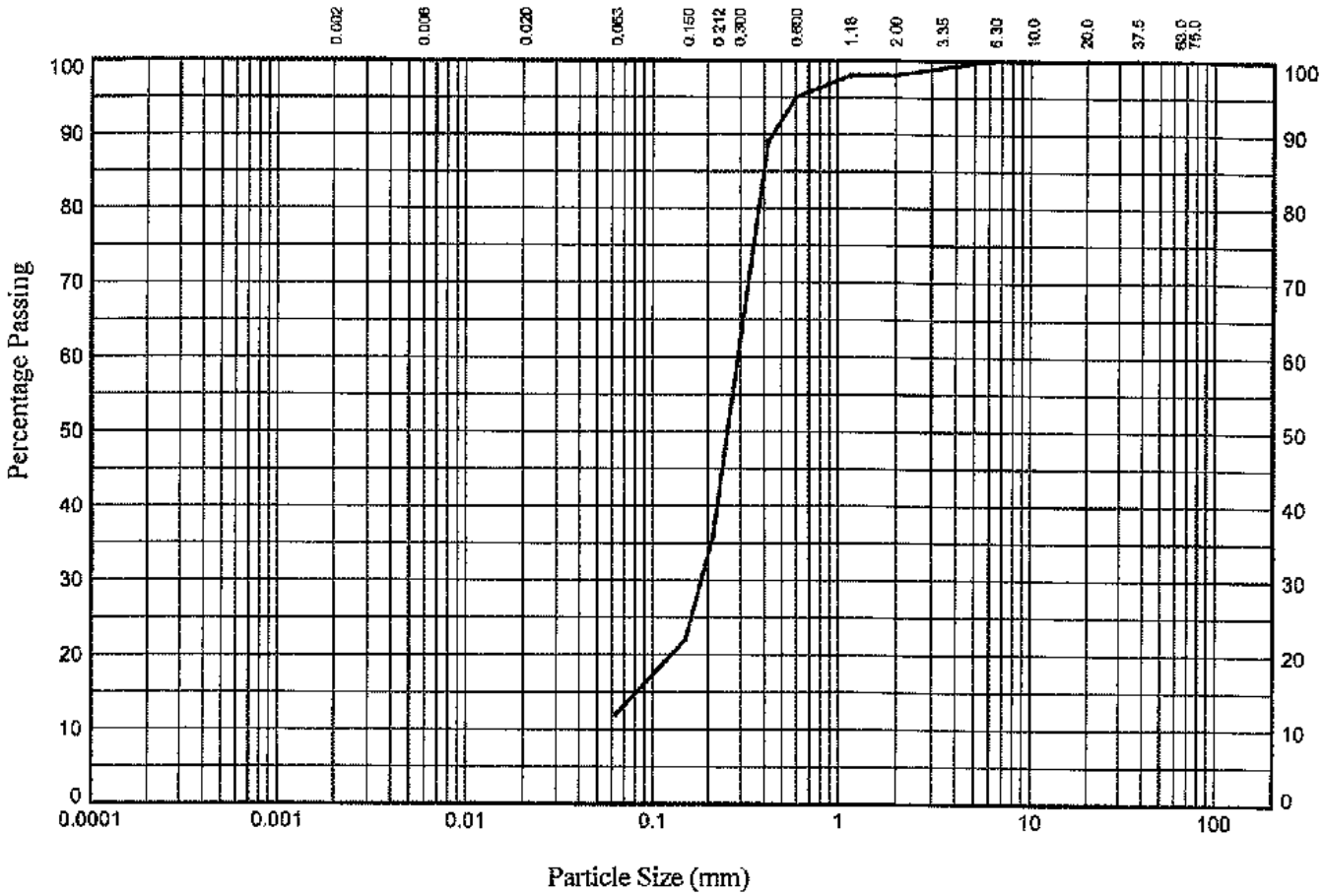
PARTICLE SIZE DISTRIBUTION TEST

In accordance with clauses 9.2,9.5 of BS1377:Part 2:1990

Borehole : **BH25** Sample Ref: **7** Sample Type: **B** Depth (m): **2.50**



CLAY	fine	medium	coarse	fine	medium	coarse	fine	medium	coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve (mm)	Percentage Passing
125.0	100
75.0	100
63.0	100
37.5	100
20.0	100
10.0	100
6.30	100
5.00	
3.35	99
2.00	98
1.18	98
0.600	95
0.425	89
0.300	
0.212	36
0.150	22
0.063	12

Particle Diameter	Percentage Passing

Soil Fraction	Sieve Percentage
GRAVEL	2
SAND	86
SILT/CLAY	12

Soil Description:

Orangish brown mottled greenish brown slightly gravelly silty/clayey SAND

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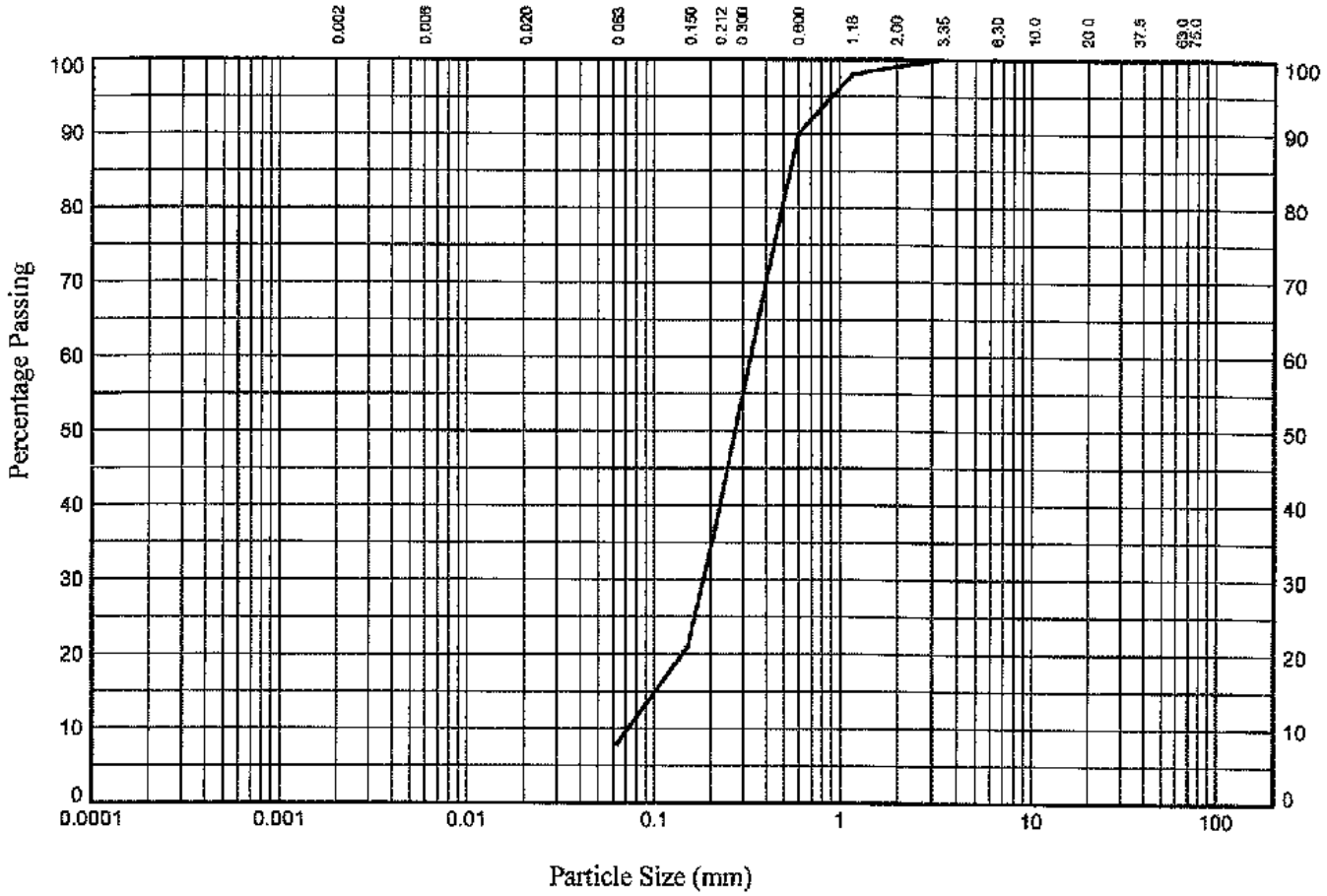
PARTICLE SIZE DISTRIBUTION TEST

In accordance with clauses 9.2,9.5 of BS1377:Part 2:1990

Borehole : **BH26** Sample Ref: **6** Sample Type: **B** Depth (m): **9.20**



CLAY	fine	medium	coarse	fine	medium	coarse	fine	medium	coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve (mm)	Percentage Passing
125.0	100
75.0	100
63.0	100
37.5	100
20.0	100
10.0	100
6.30	100
5.00	
3.35	100
2.00	99
1.18	98
0.600	90
0.425	73
0.300	
0.212	37
0.150	21
0.063	8

Particle Diameter	Percentage Passing

Soil Fraction	Sieve Percentage
GRAVEL	**1**
SAND	**91**
SILT/CLAY	**8**

Soil Description:

Brown mottled orangish brown slightly gravelly silty/clayey SAND

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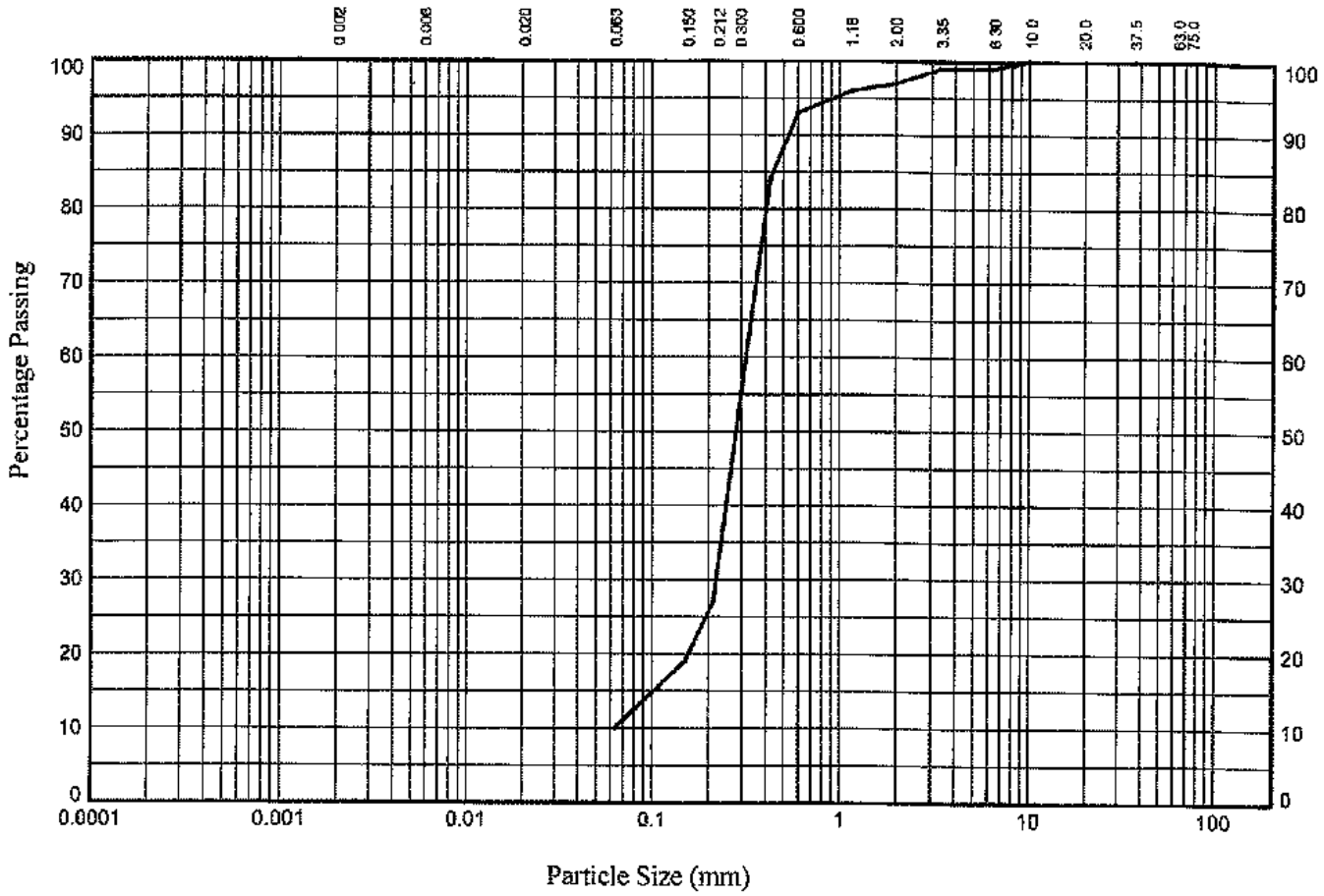
PARTICLE SIZE DISTRIBUTION TEST

In accordance with clauses 9.2,9.5 of BS1377:Part 2:1990

Borehole : **BH27** Sample Ref: **8** Sample Type: **B** Depth (m): **14.50**



CLAY	fine	medium	coarse	fine	medium	coarse	fine	medium	coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve (mm)	Percentage Passing
125.0	100
75.0	100
63.0	100
37.5	100
20.0	100
10.0	100
6.30	99
5.00	
3.35	99
2.00	97
1.18	96
0.600	93
0.425	84
0.300	
0.212	27
0.150	19
0.063	10

Particle Diameter	Percentage Passing

Soil Fraction	Sieve Percentage
GRAVEL	3
SAND	87
SILT/CLAY	10

Soil Description:
Brown slightly gravelly silty/clayey SAND

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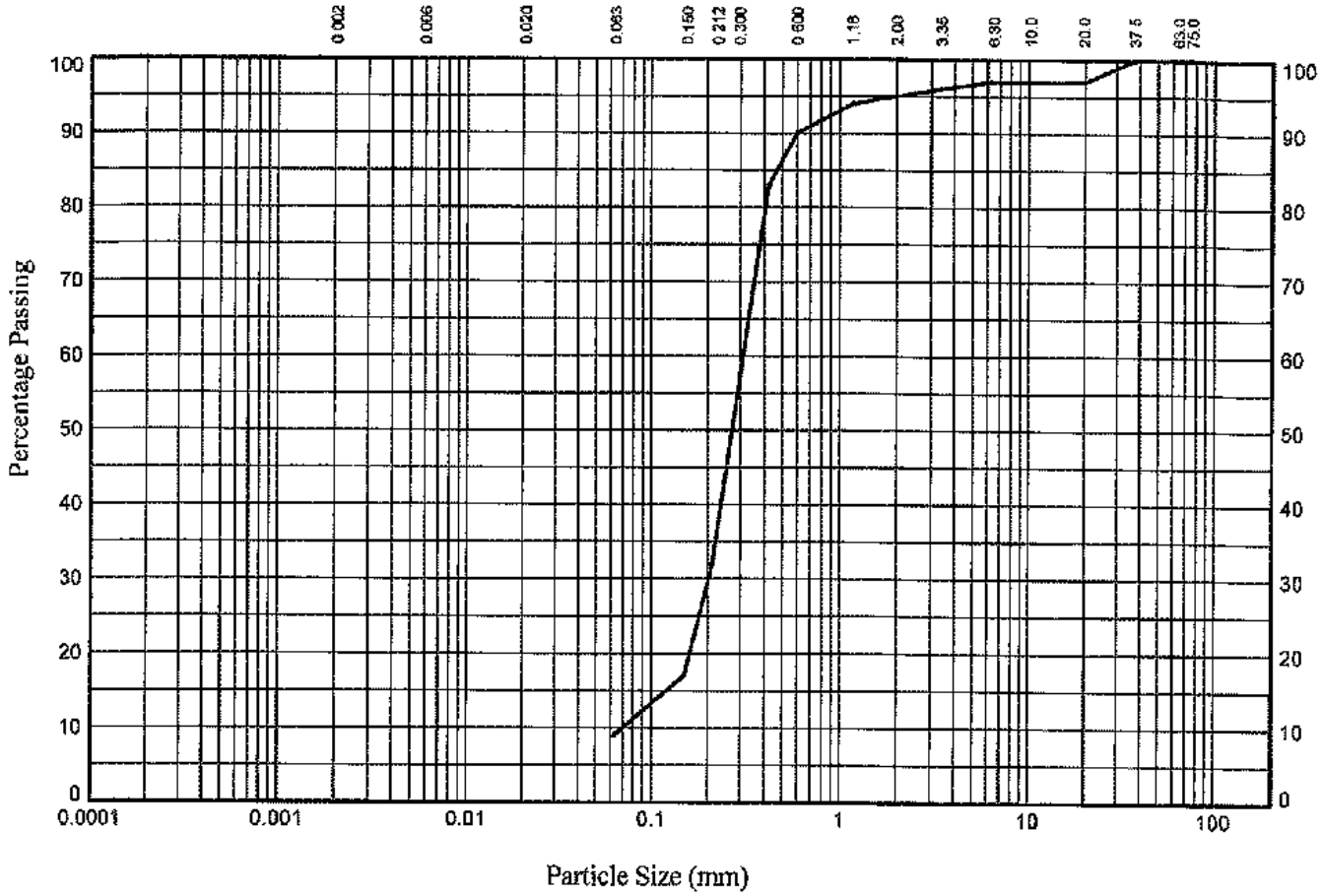
PARTICLE SIZE DISTRIBUTION TEST

In accordance with clauses 9.2,9.5 of BS1377:Part 2:1990

Borehole : **BH28** Sample Ref: **2** Sample Type: **B** Depth (m): **2.50**



CLAY	fine	medium	coarse	fine	medium	coarse	fine	medium	coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve (mm)	Percentage Passing
125.0	100
75.0	100
63.0	100
37.5	100
20.0	97
10.0	97
6.30	97
5.00	
3.35	96
2.00	95
1.18	94
0.600	90
0.425	83
0.300	
0.212	32
0.150	17
0.063	9

Particle Diameter	Percentage Passing

Soil Fraction	Sieve Percentage
GRAVEL	**5**
SAND	**86**
SILT/CLAY	**9**

Soil Description:

Brown mottled orange slightly gravelly silty/claycy SAND

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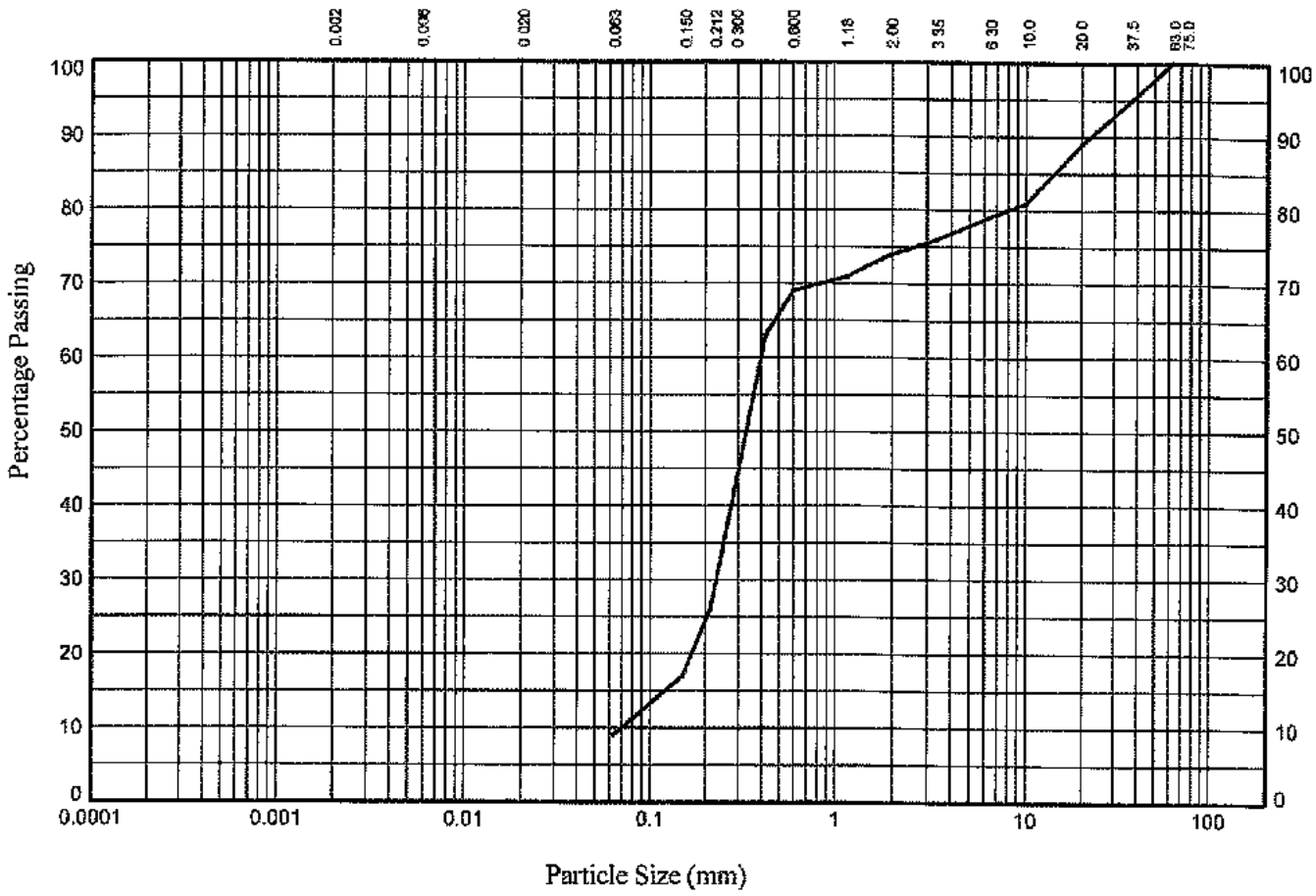
PARTICLE SIZE DISTRIBUTION TEST

In accordance with clauses 9.2,9.5 of BS1377:Part 2:1990

Borehole : **BH29A** Sample Ref: **2** Sample Type: **B** Depth (m): **0.80**



CLAY	fine	medium	coarse	fine	medium	coarse	fine	medium	coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve (mm)	Percentage Passing
125.0	100
75.0	100
63.0	100
37.5	95
20.0	89
10.0	81
6.30	79
5.00	
3.35	76
2.00	74
1.18	71
0.600	69
0.425	63
0.300	
0.212	26
0.150	17
0.063	9

Particle Diameter	Percentage Passing

Soil Fraction	Sieve Percentage
GRAVEL	**26**
SAND	**65**
SILT/CLAY	**9**

Soil Description:
Brown silty/clayey very gravelly SAND

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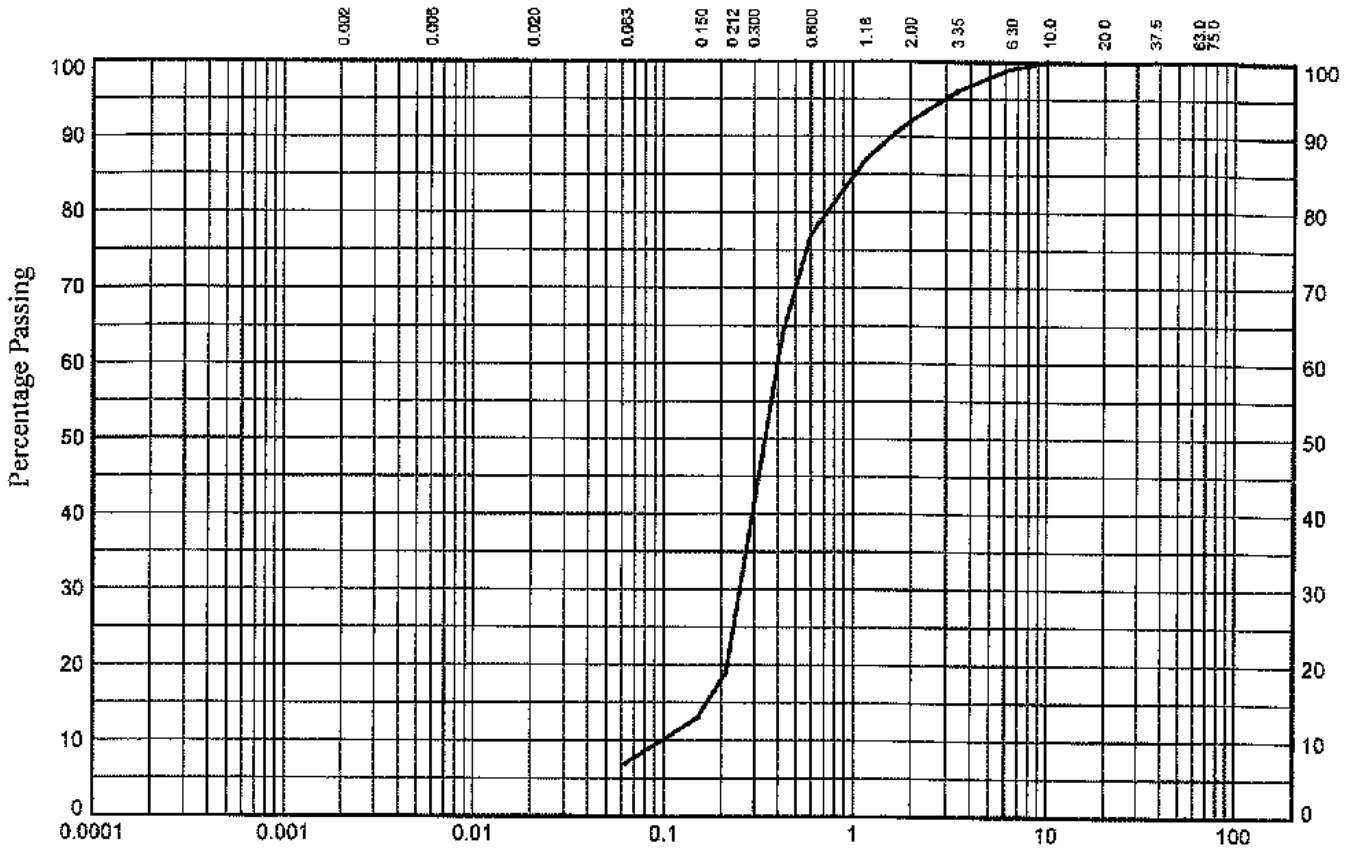
PARTICLE SIZE DISTRIBUTION TEST

In accordance with clauses 9.2,9.5 of BS1377:Part 2:1990

Borehole : **BH30** Sample Ref: **2** Sample Type: **B** Depth (m): **2.50**



CLAY	fine	medium	coarse	fine	medium	coarse	fine	medium	coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve (mm)	Percentage Passing
125.0	100
75.0	100
63.0	100
37.5	100
20.0	100
10.0	100
6.30	99
5.00	
3.35	96
2.00	92
1.18	87
0.600	77
0.425	64
0.300	
0.212	19
0.150	13
0.063	7

Particle Diameter	Percentage Passing

Soil Fraction	Sieve Percentage
GRAVEL	**8**
SAND	**85**
SILT/CLAY	7

Soil Description:
Brown silty/clayey gravelly SAND

Approved Signatories: D. TROWBRIDGE A. FROST F. HAMILTON L. MARTIN

STRUCTURAL SOILS
The Old School
Stillhouse Lane
Bedminster
Bristol BS3 4EB

Compiled By	Date	Checked By	Date
[redacted]	29/01/09	[redacted]	6/3/09

Contract: **Sizewell C Supplementary Investigation**

Job No: **722201**

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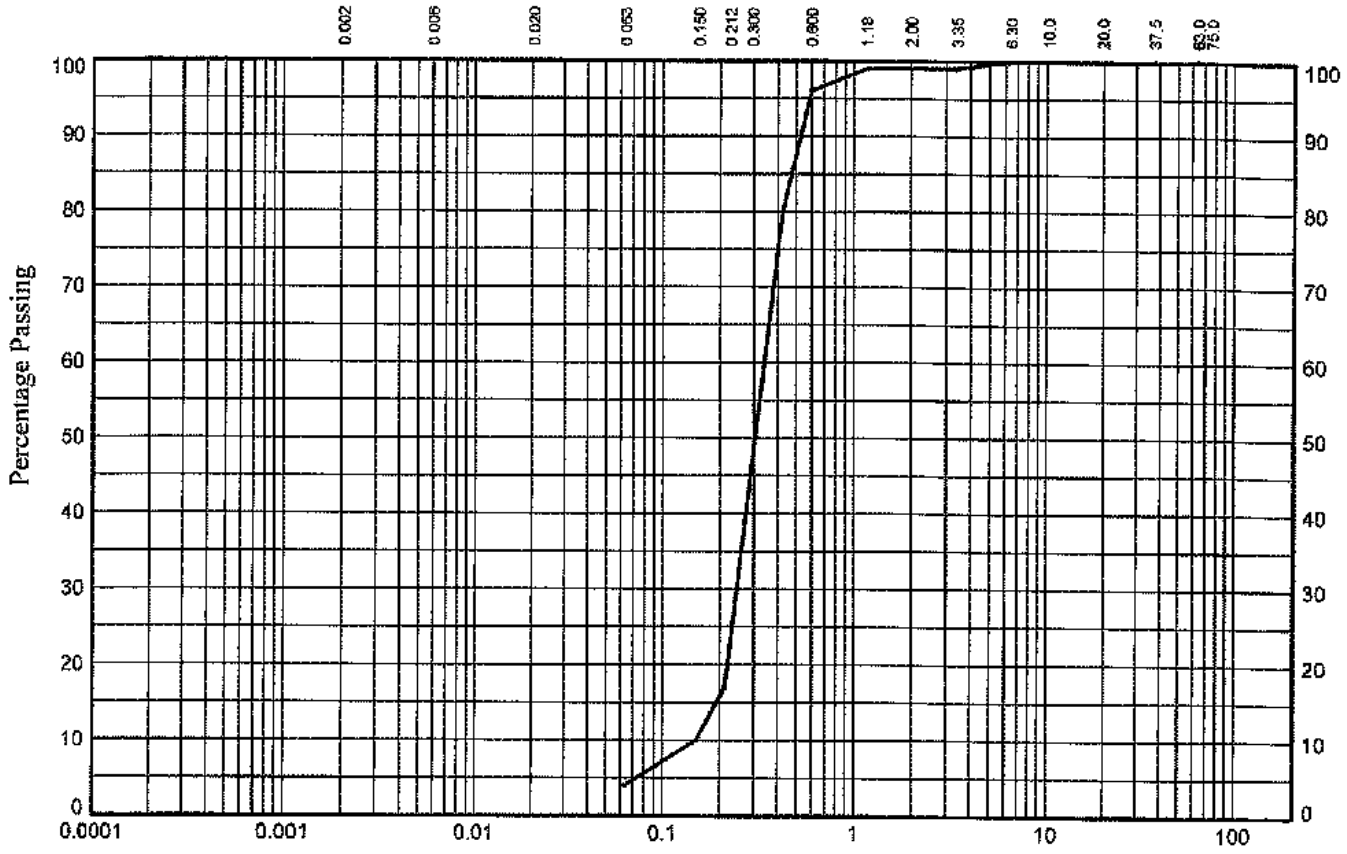
STRUCTURAL_SOILS_GINT_LIBRARY_06-11-08 GLB3L - PSD | 722201_SIZEWELL_C_SUPPLEMENTARY_INVESTIGATION.GPJ - v8_02 | 29/01/09 - 12.50.

PARTICLE SIZE DISTRIBUTION TEST

In accordance with clauses 9.2,9.5 of BS1377:Part 2:1990

Borehole : **BH31** Sample Ref: **3** Sample Type: **B** Depth (m): **4.50**



CLAY	fine	medium	coarse	fine	medium	coarse	fine	medium	coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve (mm)	Percentage Passing
125.0	100
75.0	100
63.0	100
37.5	100
20.0	100
10.0	100
6.30	100
5.00	
3.35	99
2.00	99
1.18	99
0.600	96
0.425	80
0.300	
0.212	17
0.150	10
0.063	4

Particle Diameter	Percentage Passing

Soil Fraction	Sieve Percentage
GRAVEL	1
SAND	95
SILT/CLAY	4

Soil Description:

Orangish brown slightly gravelly slightly silty/clayey SAND

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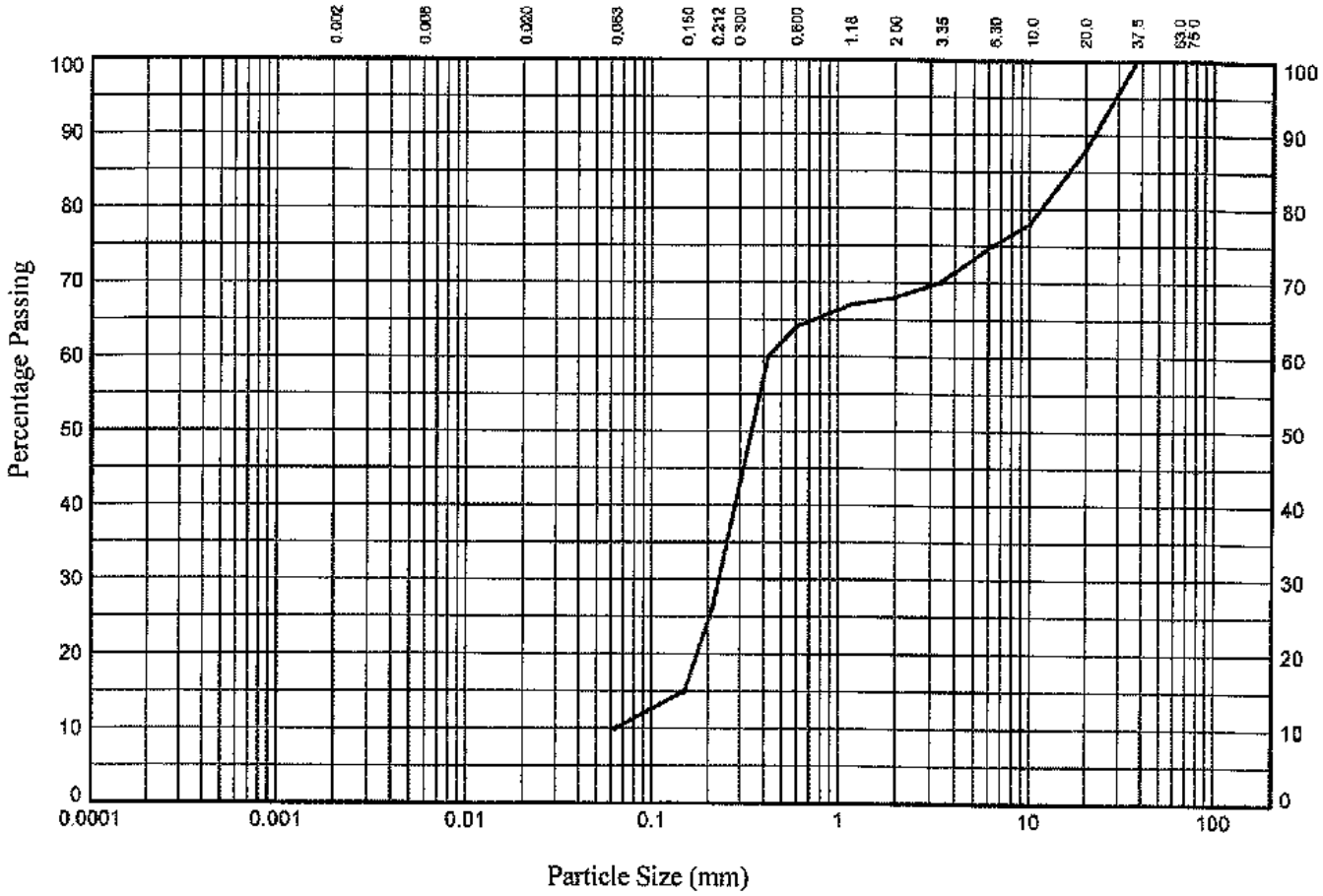
PARTICLE SIZE DISTRIBUTION TEST

In accordance with clauses 9.2,9.5 of BS1377:Part 2:1990

Borehole : **BH32A** Sample Ref: **2** Sample Type: **B** Depth (m): **2.50**



CLAY	fine	medium	coarse	fine	medium	coarse	fine	medium	coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve (mm)	Percentage Passing
125.0	100
75.0	100
63.0	100
37.5	100
20.0	88
10.0	78
6.30	75
5.00	
3.35	70
2.00	68
1.18	67
0.600	64
0.425	60
0.300	
0.212	26
0.150	15
0.063	10

Particle Diameter	Percentage Passing

Soil Fraction	Sieve Percentage
GRAVEL	**32**
SAND	**58**
SILT/CLAY	**10**

Soil Description:

Brown mottled greyish brown silty/clayey very gravelly SAND

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Contract: **Sizewell C Supplementary Investigation**

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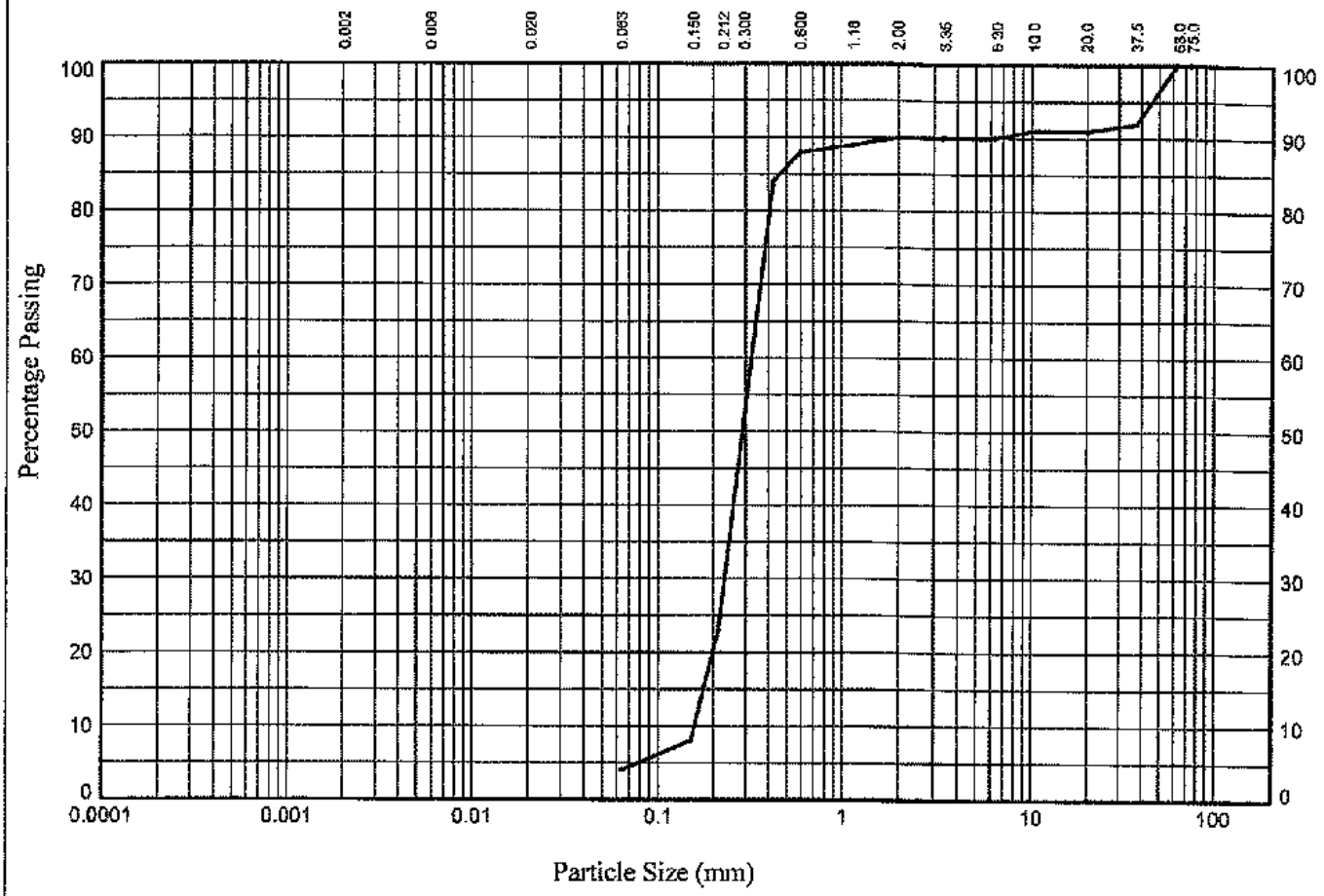
PARTICLE SIZE DISTRIBUTION TEST

In accordance with clauses 9.2,9.5 of BS1377:Part 2:1990

Borehole : **BH33** Sample Ref: **3** Sample Type: **B** Depth (m): **4.50**



CLAY	fine	medium	coarse	fine	medium	coarse	fine	medium	coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve (mm)	Percentage Passing
125.0	100
75.0	100
63.0	100
37.5	92
20.0	91
10.0	91
6.30	90
5.00	
3.35	90
2.00	90
1.18	89
0.600	88
0.425	84
0.300	
0.212	23
0.150	8
0.063	4

Particle Diameter	Percentage Passing

Soil Fraction	Sieve Percentage
GRAVEL	**10**
SAND	**86**
SILT/CLAY	**4**

Soil Description:
Brown mottled greenish grey slightly silty/clayey gravelly SAND

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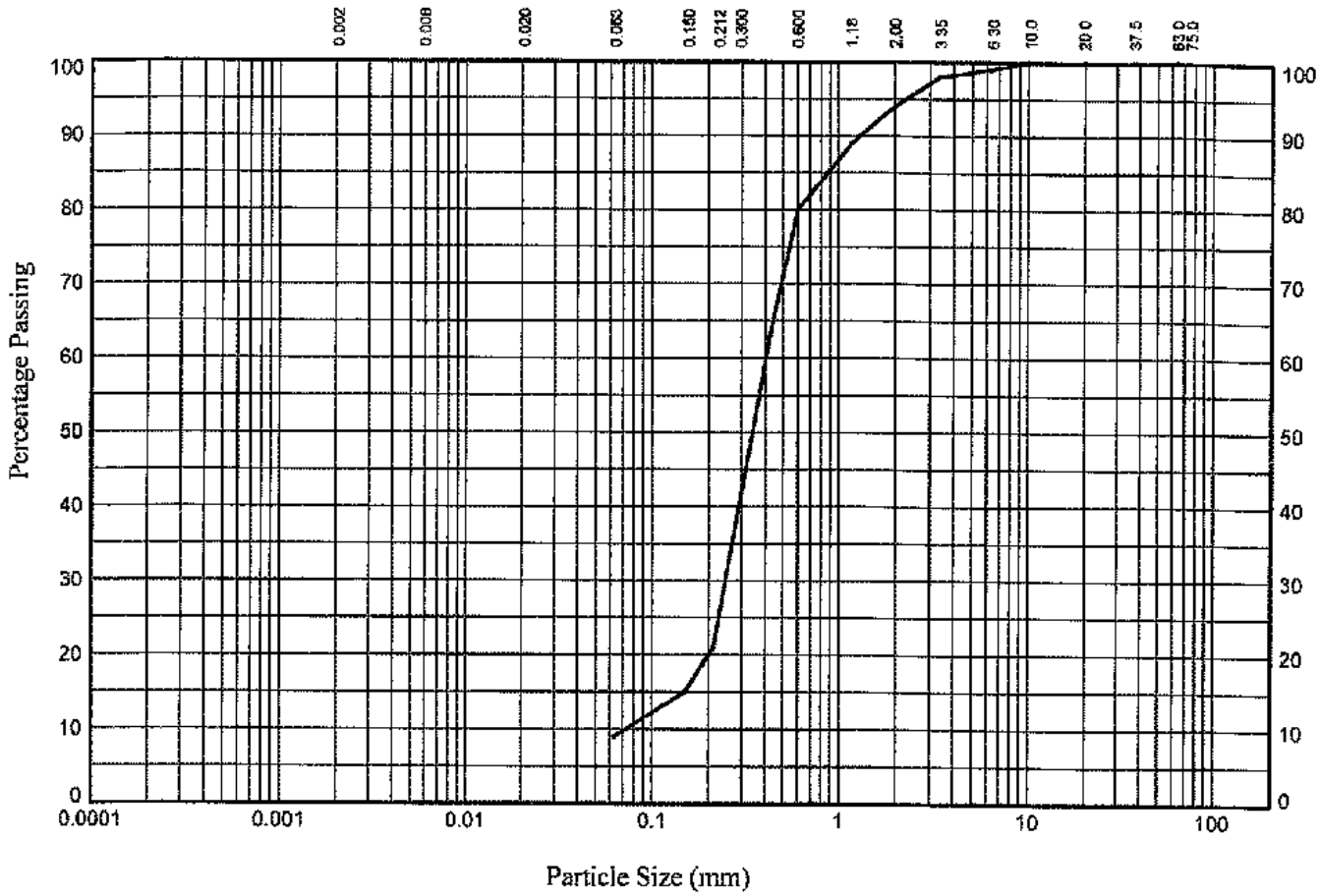
PARTICLE SIZE DISTRIBUTION TEST

In accordance with clauses 9.2,9.5 of BS1377:Part 2:1990

Borehole : **BH34** Sample Ref: **3** Sample Type: **B** Depth (m): **2.50**



CLAY	fine	medium	coarse	fine	medium	coarse	fine	medium	coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve (mm)	Percentage Passing
125.0	100
75.0	100
63.0	100
37.5	100
20.0	100
10.0	100
6.30	99
5.00	
3.35	98
2.00	94
1.18	89
0.600	80
0.425	63
0.300	
0.212	21
0.150	15
0.063	9

Particle Diameter	Percentage Passing

Soil Fraction	Sieve Percentage
GRAVEL	**6**
SAND	**85**
SILT/CLAY	**9**

Soil Description:
Brown gravelly silty/clayey SAND

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Contract: **Sizewell C Supplementary Investigation**

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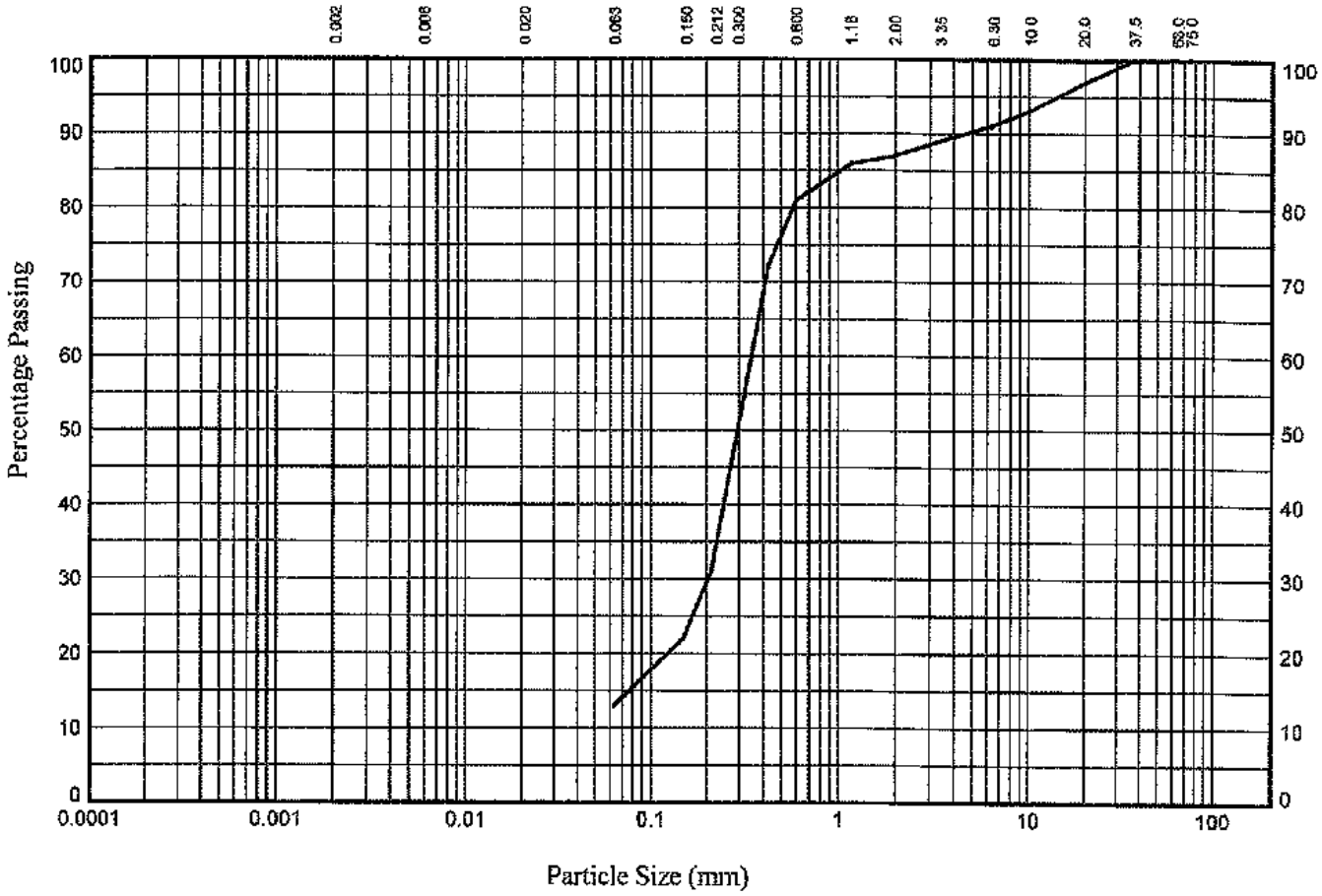
PARTICLE SIZE DISTRIBUTION TEST

In accordance with clauses 9.2,9.5 of BS1377:Part 2:1990

Borehole : **BH36** Sample Ref: **5** Sample Type: **B** Depth (m): **1.50**



CLAY	fine	medium	coarse	fine	medium	coarse	fine	medium	coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve (mm)	Percentage Passing
125.0	100
75.0	100
63.0	100
37.5	100
20.0	97
10.0	93
6.30	91
5.00	
3.35	89
2.00	87
1.18	86
0.600	81
0.425	72
0.300	
0.212	31
0.150	22
0.063	13

Particle Diameter	Percentage Passing

Soil Fraction	Sieve Percentage
GRAVEL	13
SAND	74
SILT/CLAY	13

Soil Description:
Brown mottled grey silty/clayey gravelly SAND

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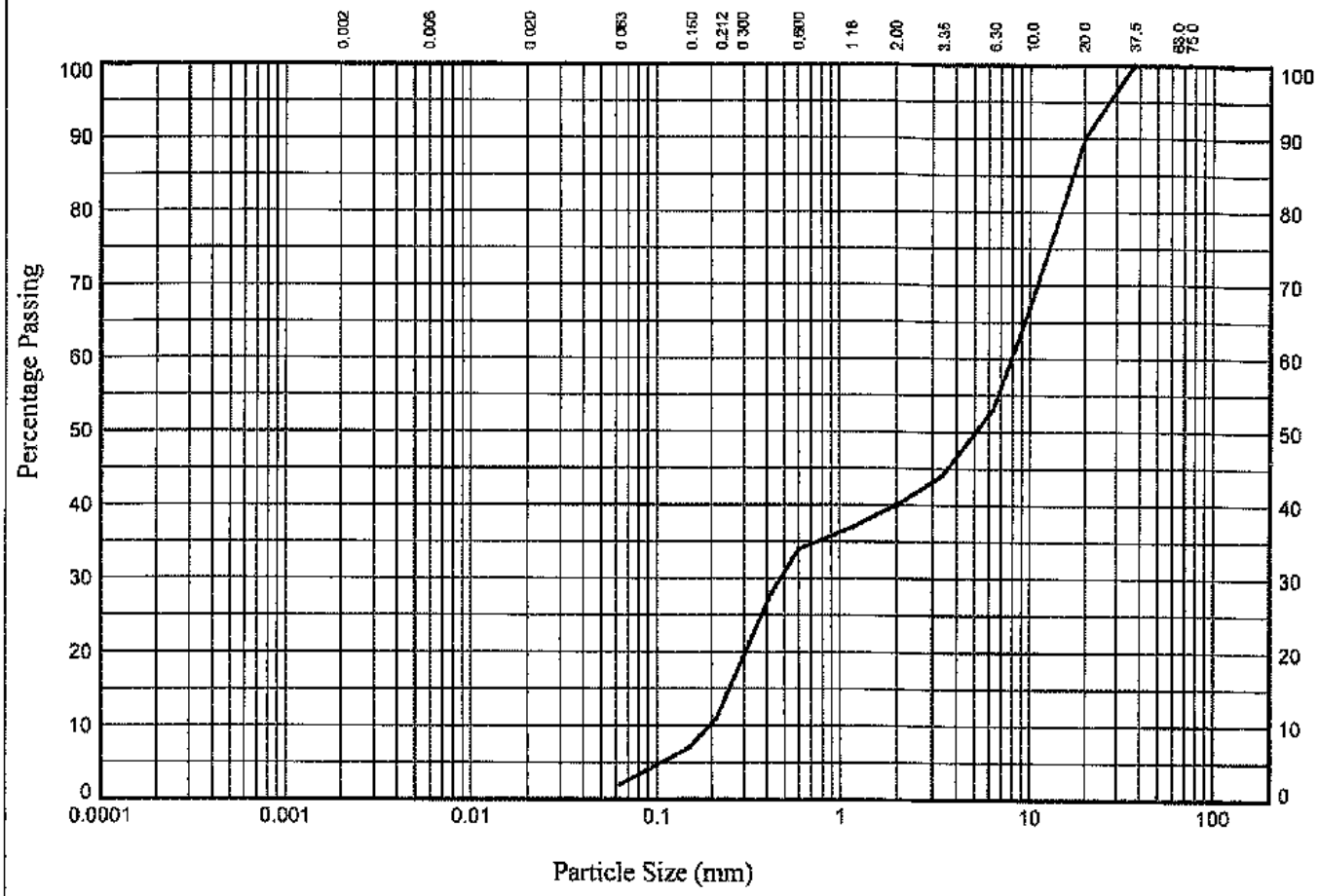
PARTICLE SIZE DISTRIBUTION TEST

In accordance with clauses 9.2,9.5 of BS1377:Part 2:1990

Borehole : **BH37** Sample Ref: **5** Sample Type: **B** Depth (m): **1.50**



CLAY	fine	medium	coarse	fine	medium	coarse	fine	medium	coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve (mm)	Percentage Passing
125.0	100
75.0	100
63.0	100
37.5	100
20.0	90
10.0	67
6.30	53
5.00	
3.35	44
2.00	40
1.18	37
0.600	34
0.425	28
0.300	
0.212	11
0.150	7
0.063	2

Particle Diameter	Percentage Passing

Soil Fraction	Sieve Percentage
GRAVEL	**60**
SAND	**38**
SILT/CLAY	**2**

Soil Description:
Brown slightly silty very sandy GRAVEL

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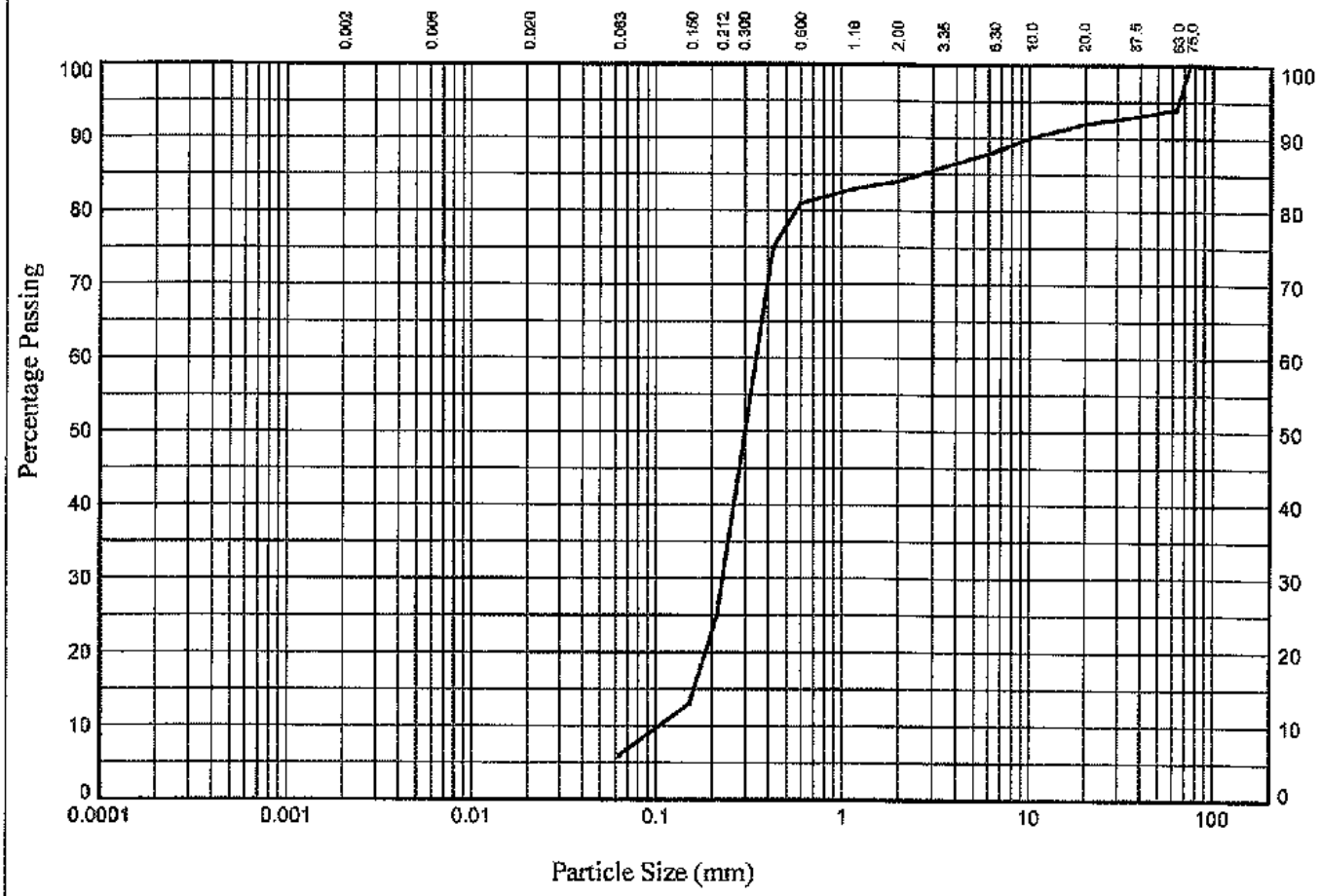
PARTICLE SIZE DISTRIBUTION TEST

In accordance with clauses 9.2,9.5 of BS1377:Part 2:1990

Borehole : **BH38** Sample Ref: **11** Sample Type: **B** Depth (m): **2.50**



CLAY	fine	medium	coarse	fine	medium	coarse	fine	medium	coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve (mm)	Percentage Passing
125.0	100
75.0	100
63.0	94
37.5	93
20.0	92
10.0	90
6.30	88
5.00	
3.35	86
2.00	84
1.18	83
0.600	81
0.425	75
0.300	
0.212	25
0.150	13
0.063	6

Particle Diameter	Percentage Passing

Soil Fraction	Sieve Percentage
COBBLES	6
GRAVEL	10
SAND	78
SILT/CLAY	6

Soil Description:
Brown silty/clayey gravelly SAND with some cobbles

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Contract: **Sizewell C Supplementary Investigation**

Job No: **722201**

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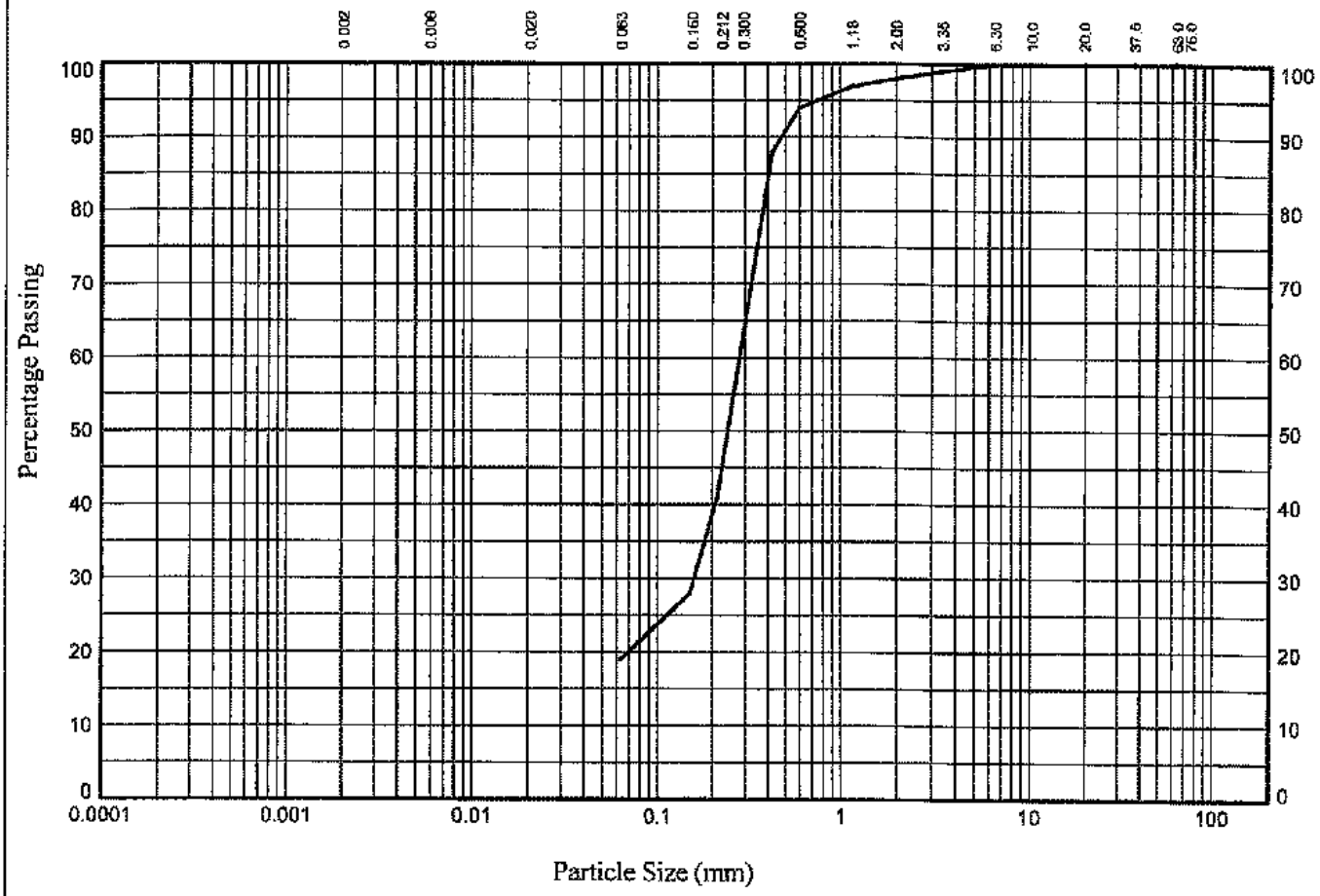
PARTICLE SIZE DISTRIBUTION TEST

In accordance with clauses 9.2,9.5 of BS1377:Part 2:1990

Borehole : **BH39** Sample Ref: **7** Sample Type: **B** Depth (m): **2.50**



CLAY	fine	medium	coarse	fine	medium	coarse	fine	medium	coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve (mm)	Percentage Passing
125.0	100
75.0	100
63.0	100
37.5	100
20.0	100
10.0	100
6.30	100
5.00	
3.35	99
2.00	98
1.18	97
0.600	94
0.425	88
0.300	
0.212	41
0.150	28
0.063	19

Particle Diameter	Percentage Passing

Soil Fraction	Sieve Percentage
GRAVEL	2
SAND	79
SILT/CLAY	19

Soil Description:
Orangish brown mottled greenish grey slightly gravelly silty/clayey SAND

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Contract	Job No
Sizewell C Supplementary Investigation	**722201**

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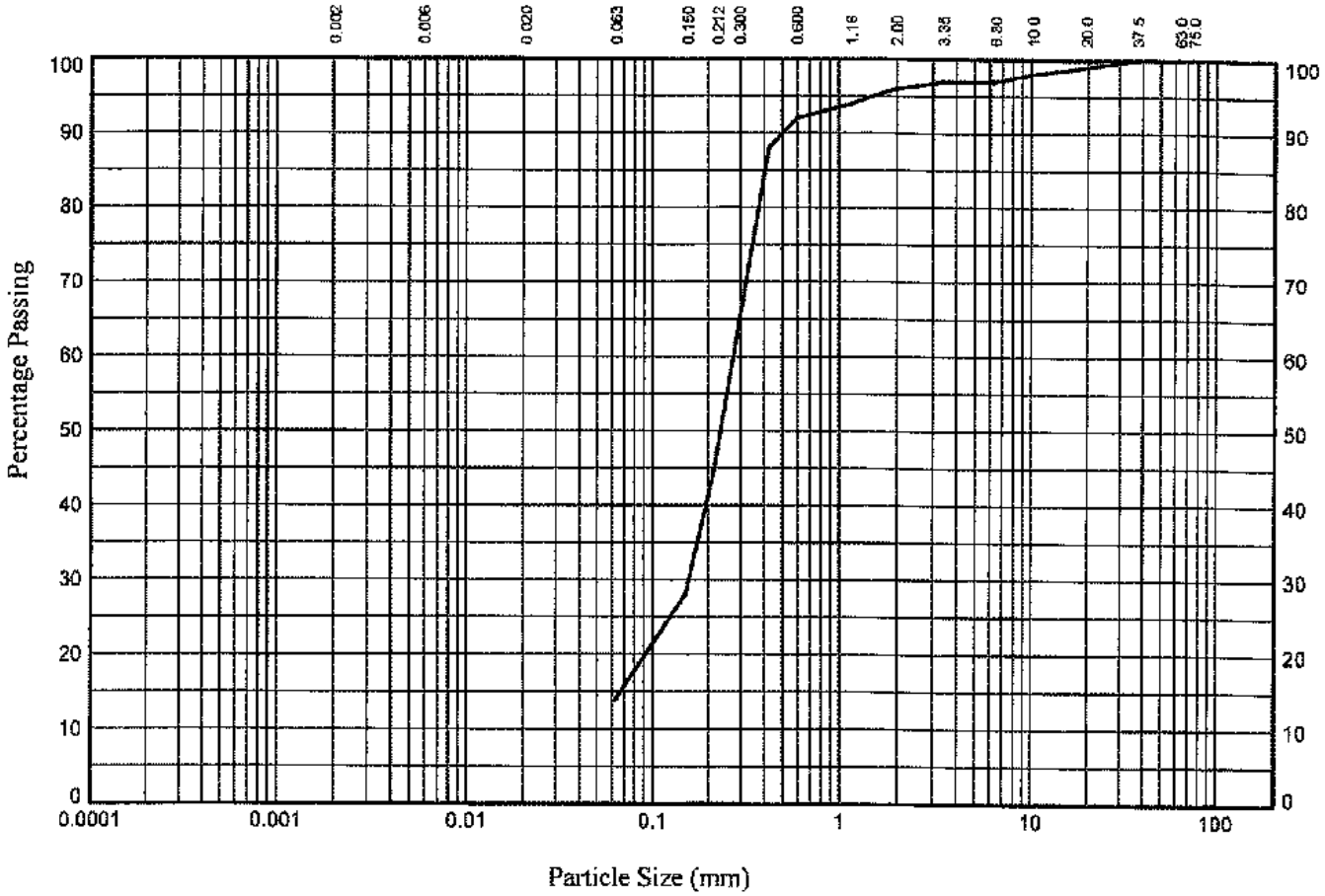
PARTICLE SIZE DISTRIBUTION TEST

In accordance with clauses 9.2,9.5 of BS1377:Part 2:1990

Borehole : **BH40** Sample Ref: **12** Sample Type: **B** Depth (m): **4.50**



CLAY	fine	medium	coarse	fine	medium	coarse	fine	medium	coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve (mm)	Percentage Passing
125.0	100
75.0	100
63.0	100
37.5	100
20.0	99
10.0	98
6.30	97
5.00	
3.35	97
2.00	96
1.18	94
0.600	92
0.425	88
0.300	
0.212	44
0.150	28
0.063	14

Particle Diameter	Percentage Passing

Soil Fraction	Sieve Percentage
GRAVEL	4
SAND	82
SILT/CLAY	14

Soil Description:
Orangish brown mottled brown slightly gravelly silty/clayey SAND

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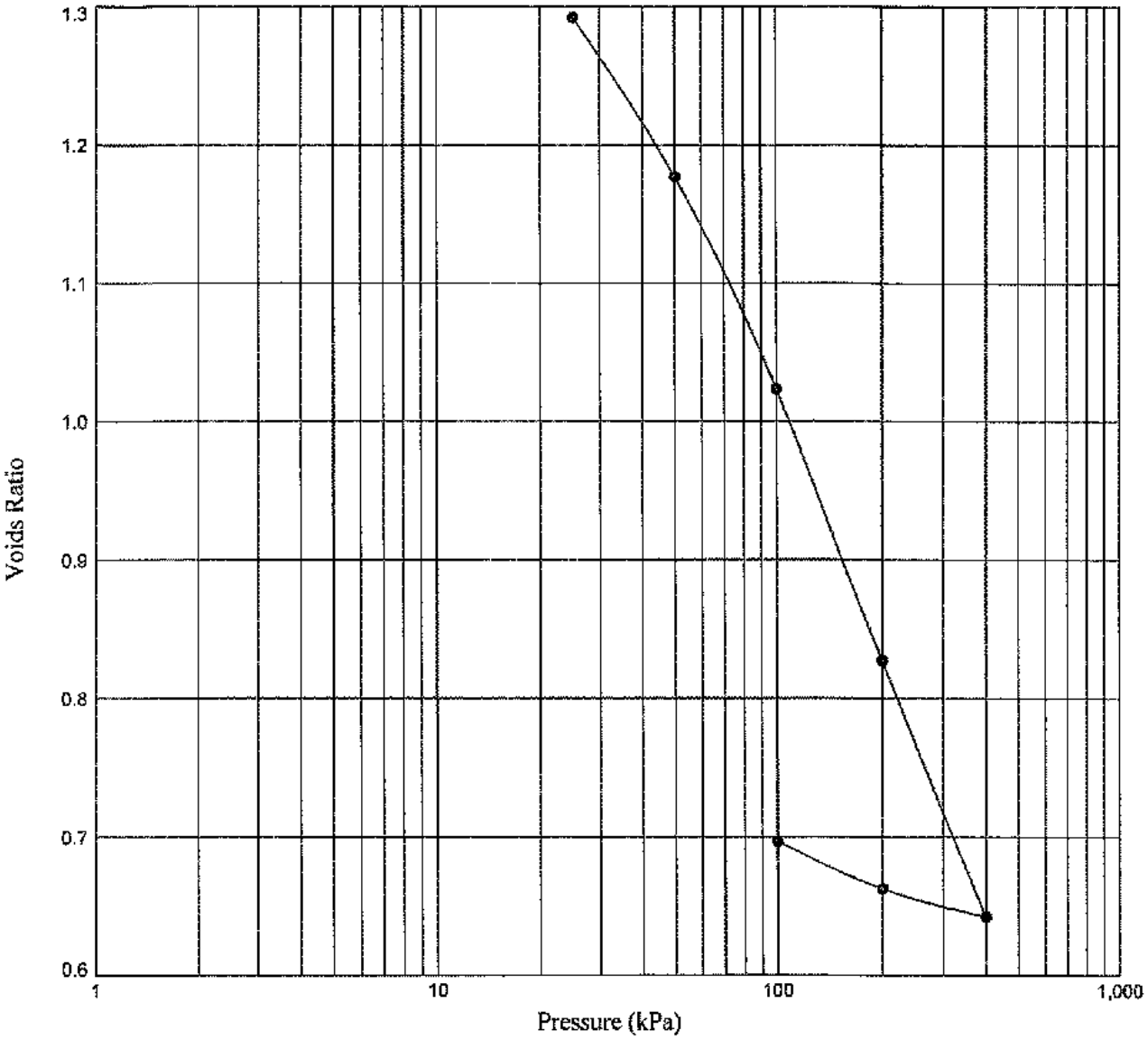
ONE DIMENSIONAL CONSOLIDATION TEST

In accordance with BS1377:Part 5:1990

Borehole : **BH7** Sample Ref: **14** Sample Type: **P** Depth (m): **4.80**



Initial Specimen Condition			Final Specimen Condition		
Moisture Content (%)	:	84	Moisture Content (%)	:	48
Bulk Density (Mg/m³)	:	1.50	Bulk Density (Mg/m³)	:	1.74
Dry Density (Mg/m³)	:	0.81	Dry Density (Mg/m³)	:	1.18
Void Ratio	:	1.457	Void Ratio	:	0.6967

Specimen Details			
Description	Height (mm)	:	19.42
	Diameter (mm)	:	74.98
Grey organic CLAY	Particle Density (Mg/m³) (assumed)	:	2.00
	Swelling Pressure (kPa)	:	NA

Test Results		
Pressure Range (kPa)	Mv (m²/MN)	Cv (m²/yr)
0 - 25	**2.7**	**0.74**
25 - 50	**2.0**	**0.46**
50 - 100	**1.4**	**0.48**
100 - 200	**0.97**	**0.32**
200 - 400	**0.51**	**0.32**
400 - 200	**0.062**	**1.4**
200 - 100	**0.20**	**0.55**

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Contract: **Sizewell C Supplementary Investigation**

Job No: **722201**

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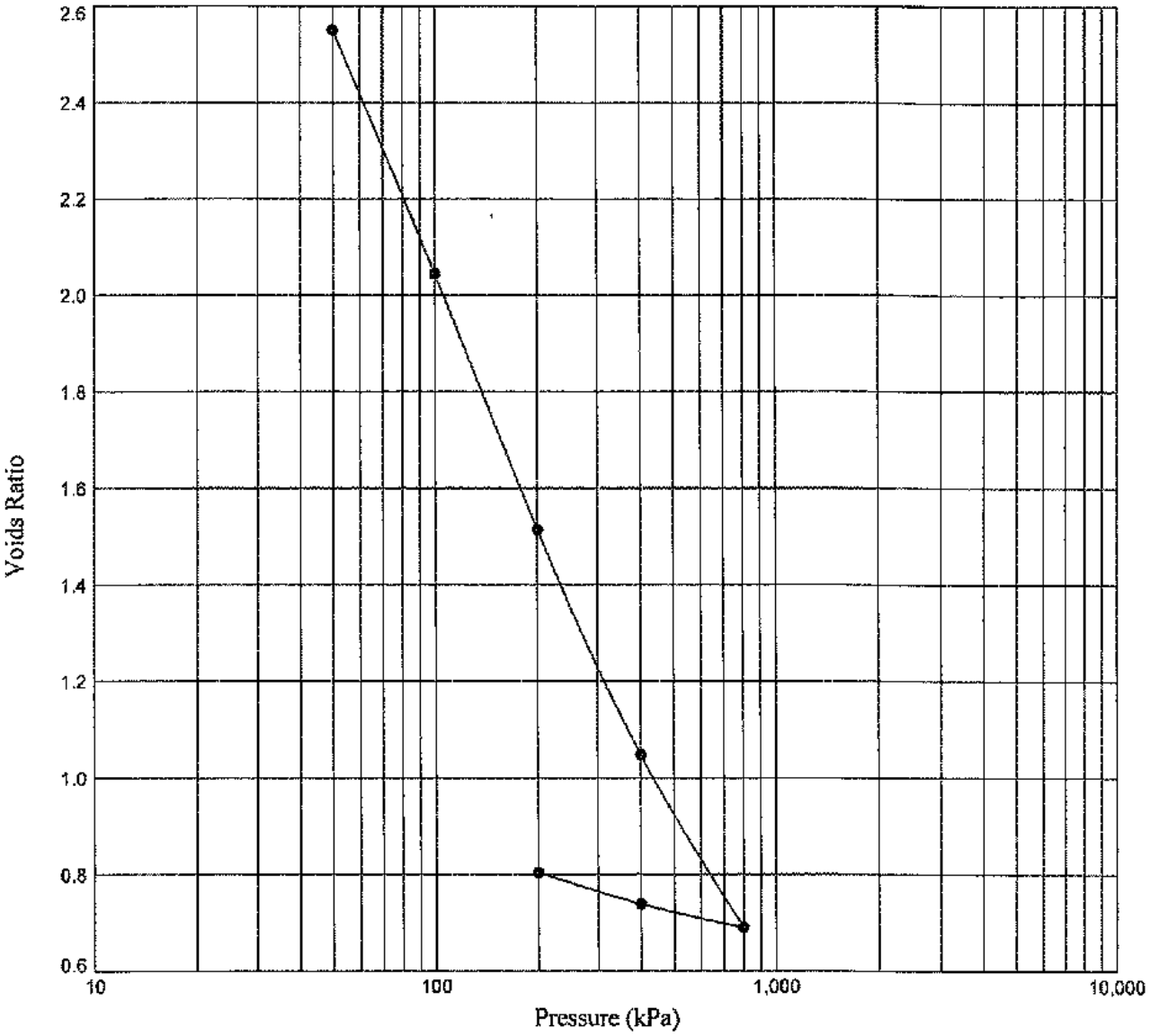
ONE DIMENSIONAL CONSOLIDATION TEST

In accordance with BS1377:Part 5:1990

Borehole : **BH7** Sample Ref: **15** Sample Type: **P** Depth (m): **5.90**



Initial Specimen Condition			Final Specimen Condition		
Moisture Content (%)	:	292	Moisture Content (%)	:	110
Bulk Density (Mg/m³)	:	1.09	Bulk Density (Mg/m³)	:	1.40
Dry Density (Mg/m³)	:	0.28	Dry Density (Mg/m³)	:	0.67
Void Ratio	:	3.299	Void Ratio	:	0.8042

Specimen Details			
Description	Height (mm)	:	19.87
Dark brown fibrous PEAT	Diameter (mm)	:	76.07
	Particle Density (Mg/m³) (assumed)	:	1.20
	Swelling Pressure (kPa)	:	NA

Test Results		
Pressure Range (kPa)	Mv (m²/MN)	Cv (m²/yr)
0 - 50	3.5	17
50 - 100	2.9	2.6
100 - 200	1.7	0.86
200 - 400	0.93	0.30
400 - 800	0.44	0.17
800 - 400	0.072	0.55
400 - 200	0.19	0.27

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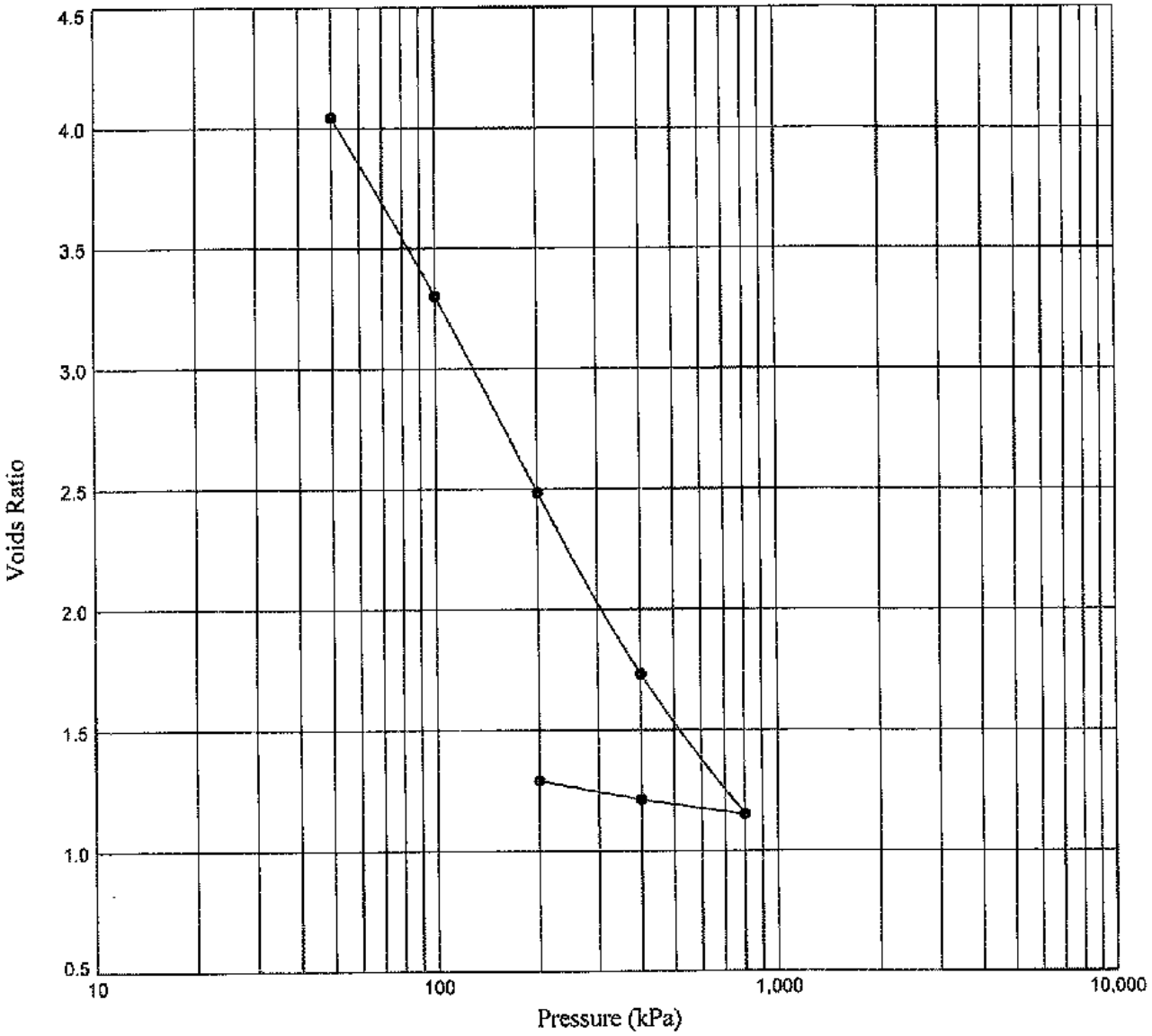
ONE DIMENSIONAL CONSOLIDATION TEST

In accordance with BS1377:Part 5:1990

Borehole : **BH7** Sample Ref: **16** Sample Type: **P** Depth (m): **6.90**



Initial Specimen Condition			Final Specimen Condition		
Moisture Content (%)	:	424	Moisture Content (%)	:	150
Bulk Density (Mg/m^3)	:	1.04	Bulk Density (Mg/m^3)	:	1.31
Dry Density (Mg/m^3)	:	0.20	Dry Density (Mg/m^3)	:	0.52
Void Ratio	:	5.070	Void Ratio	:	1.291

Specimen Details			
Description	Height (mm)	:	19.42
Dark brown fibrous PEAT	Diameter (mm)	:	75.16
	Particle Density (Mg/m^3) (assumed)	:	1.20
	Swelling Pressure (kPa)	:	NA

Test Results		
Pressure Range (kPa)	Mv (m^2/MN)	Cv (m^2/yr)
0 - 50	3.4	23
50 - 100	2.9	7.1
100 - 200	1.9	1.5
200 - 400	1.1	0.45
400 - 800	0.53	0.14
800 - 400	0.072	0.69
400 - 200	0.18	0.48

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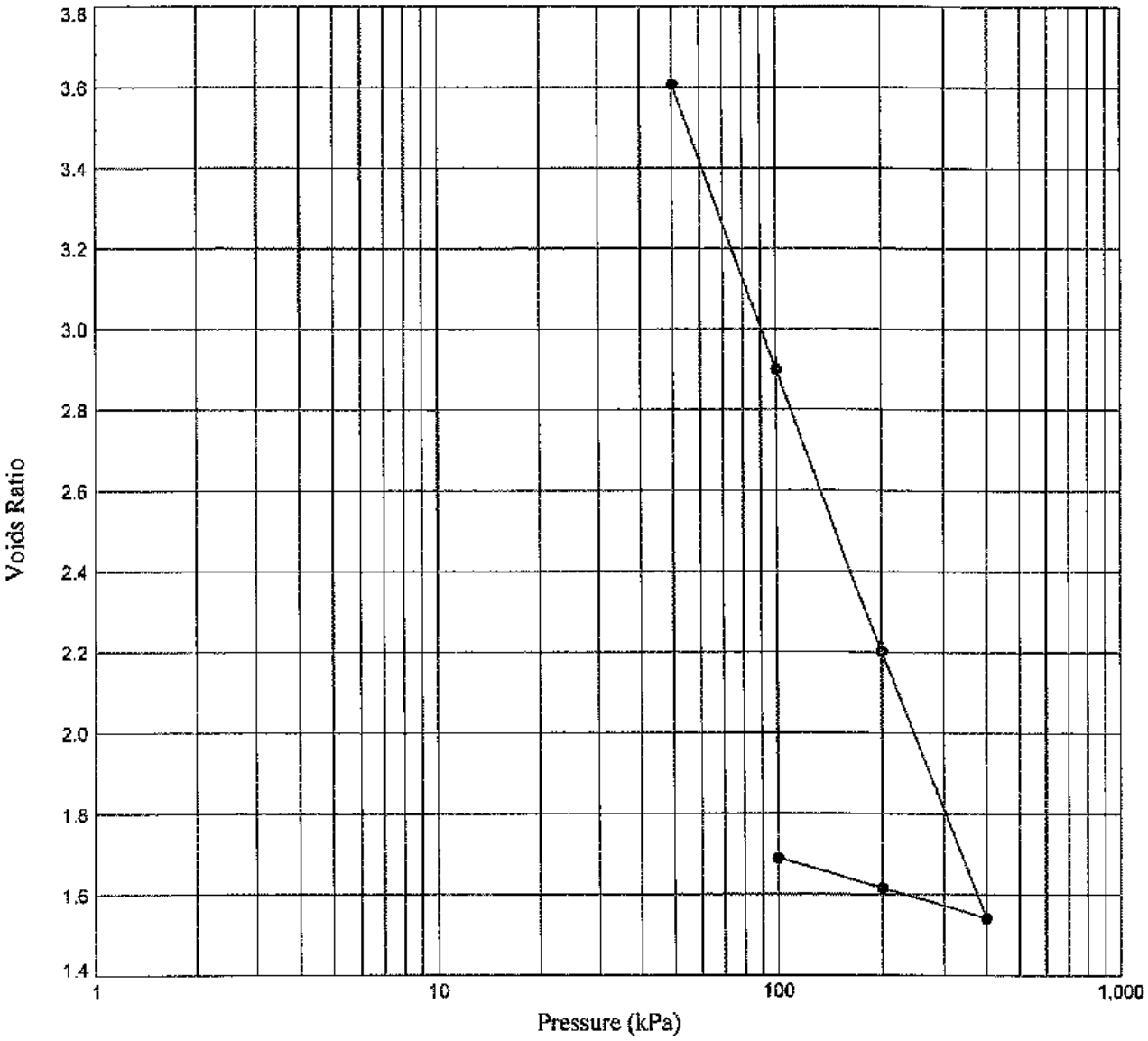
STRUCTURAL_SOILS_GINT_LIBRARY_06-11-06.GLB | 1-D CONSOL DATALOGGED | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_02 | 17/02/09 - 11:34

ONE DIMENSIONAL CONSOLIDATION TEST

In accordance with BS1377:Part 5:1990

Borehole : **BH7** Sample Ref: **16** Sample Type: **P** Depth (m): **7.60**



Initial Specimen Condition			Final Specimen Condition		
Moisture Content (%)	:	413	Moisture Content (%)	:	173
Bulk Density (Mg/m³)	:	1.06	Bulk Density (Mg/m³)	:	1.22
Dry Density (Mg/m³)	:	0.21	Dry Density (Mg/m³)	:	0.45
Void Ratio	:	4.816	Void Ratio	:	1.690

Specimen Details			
Description	Height (mm)	:	19.43
Dark brown fibrous PEAT	Diameter (mm)	:	75.03
	Particle Density (Mg/m³) (assumed)	:	1.20
	Swelling Pressure (kPa)	:	NA

Test Results		
Pressure Range (kPa)	Mv (m²/MN)	Cv (m²/yr)
0 - 50	4.2	7.8
50 - 100	3.1	0.95
100 - 200	1.8	0.41
200 - 400	1.0	0.21
400 - 200	0.14	0.76
200 - 100	0.28	0.84

Approved Signatories: D. TROWBRIDGE A. FROST F. HAMILTON L. MARTIN

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The Old School
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Contract: **Sizewell C Supplementary Investigation**

Job No: **722201**

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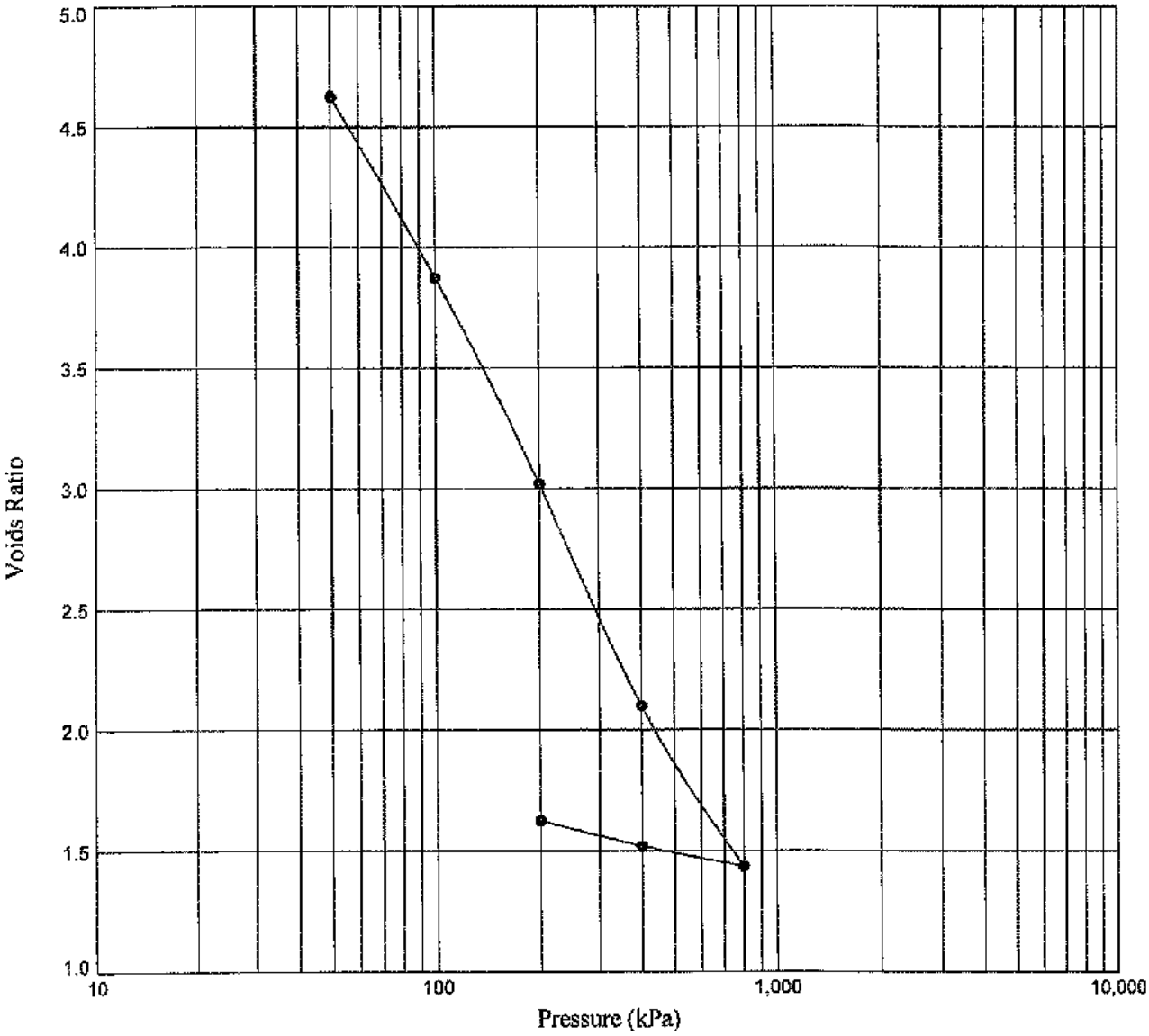
STRUCTURAL_SOILS_GINT_LIBRARY_08-11-06.GLB\L - 1-D CONSOL DATALOGGED) 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION GPJ - v8_D2 | 17/02/09 - 11:38.

ONE DIMENSIONAL CONSOLIDATION TEST

In accordance with BS1377:Part 5:1990

Borehole : **BH7** Sample Ref: **17** Sample Type: **P** Depth (m): **8.22**



Initial Specimen Condition			Final Specimen Condition		
Moisture Content (%)	:	458	Moisture Content (%)	:	168
Bulk Density (Mg/m³)	:	1.04	Bulk Density (Mg/m³)	:	1.23
Dry Density (Mg/m³)	:	0.19	Dry Density (Mg/m³)	:	0.46
Void Ratio	:	5.411	Void Ratio	:	1.624

Specimen Details			
Description	Height (mm)	:	19.34
	Diameter (mm)	:	75.00
Dark brown fibrous PEAT	Particle Density (Mg/m³) (assumed)	:	1.20
	Swelling Pressure (kPa)	:	NA

Test Results		
Pressure Range (kPa)	Mv (m²/MN)	Cv (m²/yr)
0 - 50	**2.5**	**18**
50 - 100	**2.7**	**2.5**
100 - 200	**1.7**	**0.42**
200 - 400	**1.1**	**0.14**
400 - 800	**0.54**	**0.046**
800 - 400	**0.086**	**0.33**
400 - 200	**0.21**	**0.19**

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Contract: **Sizewell C Supplementary Investigation**

Job No: **722201**

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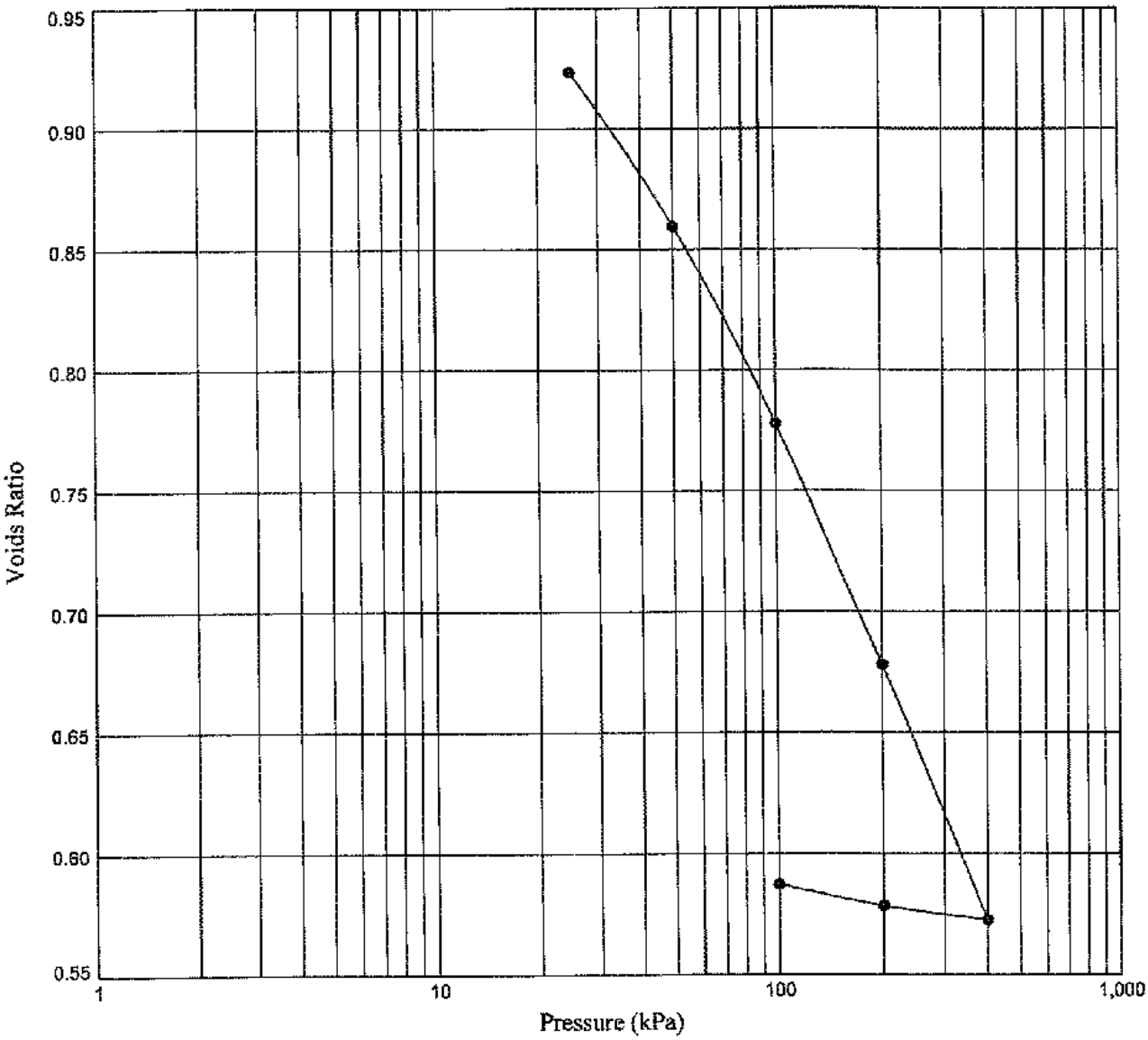
STRUCTURAL_SOILS_GINT_LIBRARY_08-11-06.GLB\L - 1-D CONSOL DATALOGGED | 722201_SIZEWELL_C_SUPPLEMENTARY_INVESTIGATION.GPJ - v6_02 | 17/02/09 - 11:59.

ONE DIMENSIONAL CONSOLIDATION TEST

In accordance with BS1377:Part 5:1990

Borehole : **BH36** Sample Ref: **7** Sample Type: **P** Depth (m): **2.00**



Initial Specimen Condition			Final Specimen Condition		
Moisture Content (%)	:	52	Moisture Content (%)	:	33
Bulk Density (Mg/m³)	:	1.66	Bulk Density (Mg/m³)	:	1.88
Dry Density (Mg/m³)	:	1.10	Dry Density (Mg/m³)	:	1.41
Void Ratio	:	1.053	Void Ratio	:	0.5873

Specimen Details			
Description	Height (mm)	:	19.60
Grey CLAY with occasional fibrous organic matter	Diameter (mm)	:	75.93
	Particle Density (Mg/m³) (assumed)	:	2.25
	Swelling Pressure (kPa)	:	NA

Test Results		
Pressure Range (kPa)	Mv (m²/MN)	Cv (m²/yr)
0 - 25	2.5	2.5
25 - 50	1.3	2.2
50 - 100	0.88	1.7
100 - 200	0.56	1.4
200 - 400	0.31	1.8
400 - 200	0.019	8.7
200 - 100	0.056	7.9

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Contract: **Sizewell C Supplementary Investigation**

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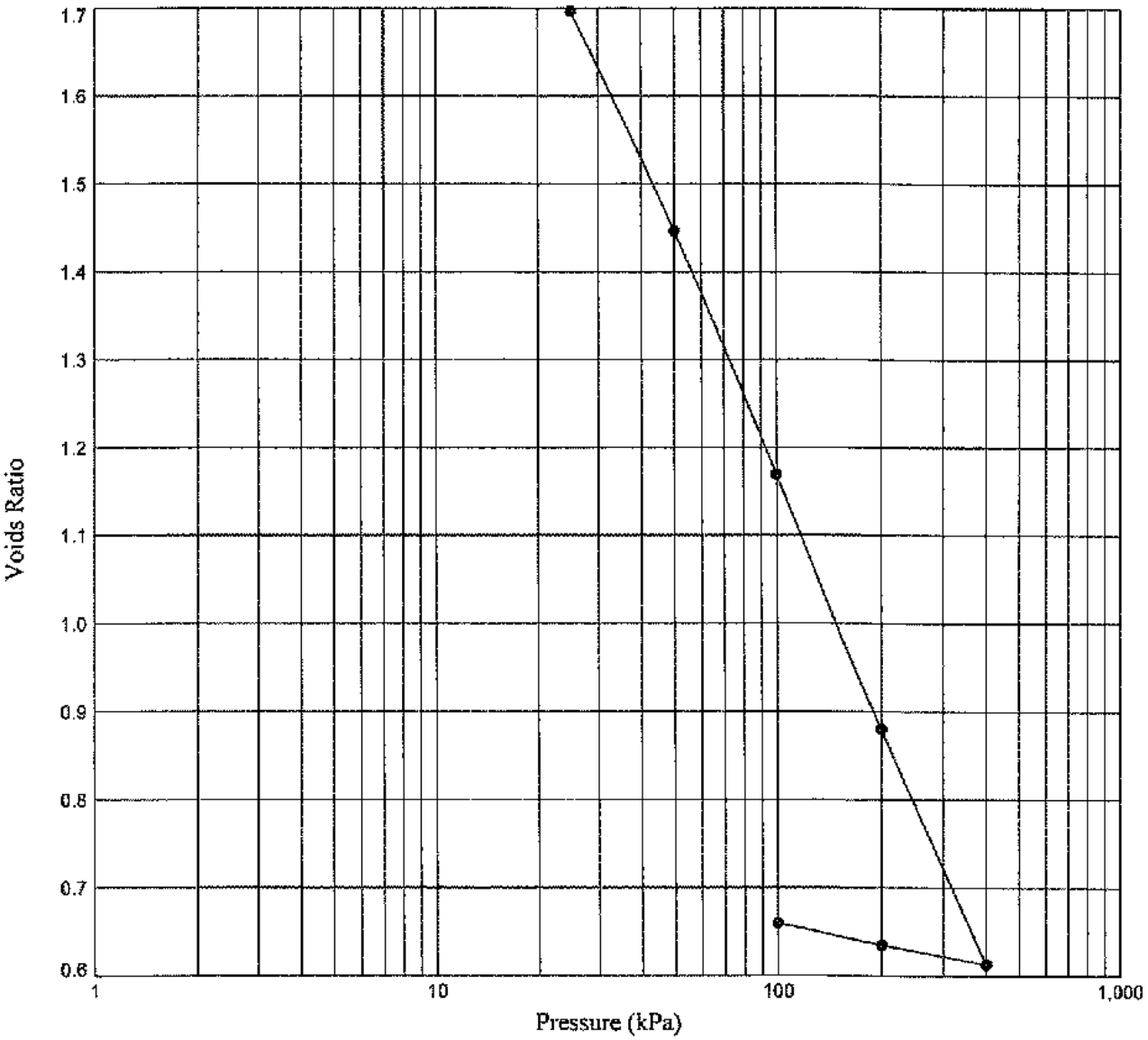
STRUCTURAL_SOILS_GINT_LIBRARY_08-11-06.GLB|L - 1-D CONSOL DATALOGGED | 722201 _SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_02 | 17/02/09 - 12:00.

ONE DIMENSIONAL CONSOLIDATION TEST

In accordance with BS1377:Part 5:1990

Borehole : **BH36** Sample Ref: **8** Sample Type: **P** Depth (m): **3.00**



Initial Specimen Condition			Final Specimen Condition		
Moisture Content (%)	:	146	Moisture Content (%)	:	69
Bulk Density (Mg/m³)	:	1.26	Bulk Density (Mg/m³)	:	1.52
Dry Density (Mg/m³)	:	0.51	Dry Density (Mg/m³)	:	0.90
Void Ratio	:	1.922	Void Ratio	:	0.6598

Specimen Details			
Description	Height (mm)	:	20.92
Dark brown fibrous PEAT with pockets of grey clay	Diameter (mm)	:	75.06
	Particle Density (Mg/m³) (assumed)	:	1.50
	Swelling Pressure (kPa)	:	NA

Test Results		
Pressure Range (kPa)	Mv (m²/MN)	Cv (m²/yr)
0 - 25	3.1	9.2
25 - 50	3.7	0.66
50 - 100	2.3	1.5
100 - 200	1.3	0.61
200 - 400	0.71	0.36
400 - 200	0.069	1.8
200 - 100	0.15	2.4

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Contract: **Sizewell C Supplementary Investigation**

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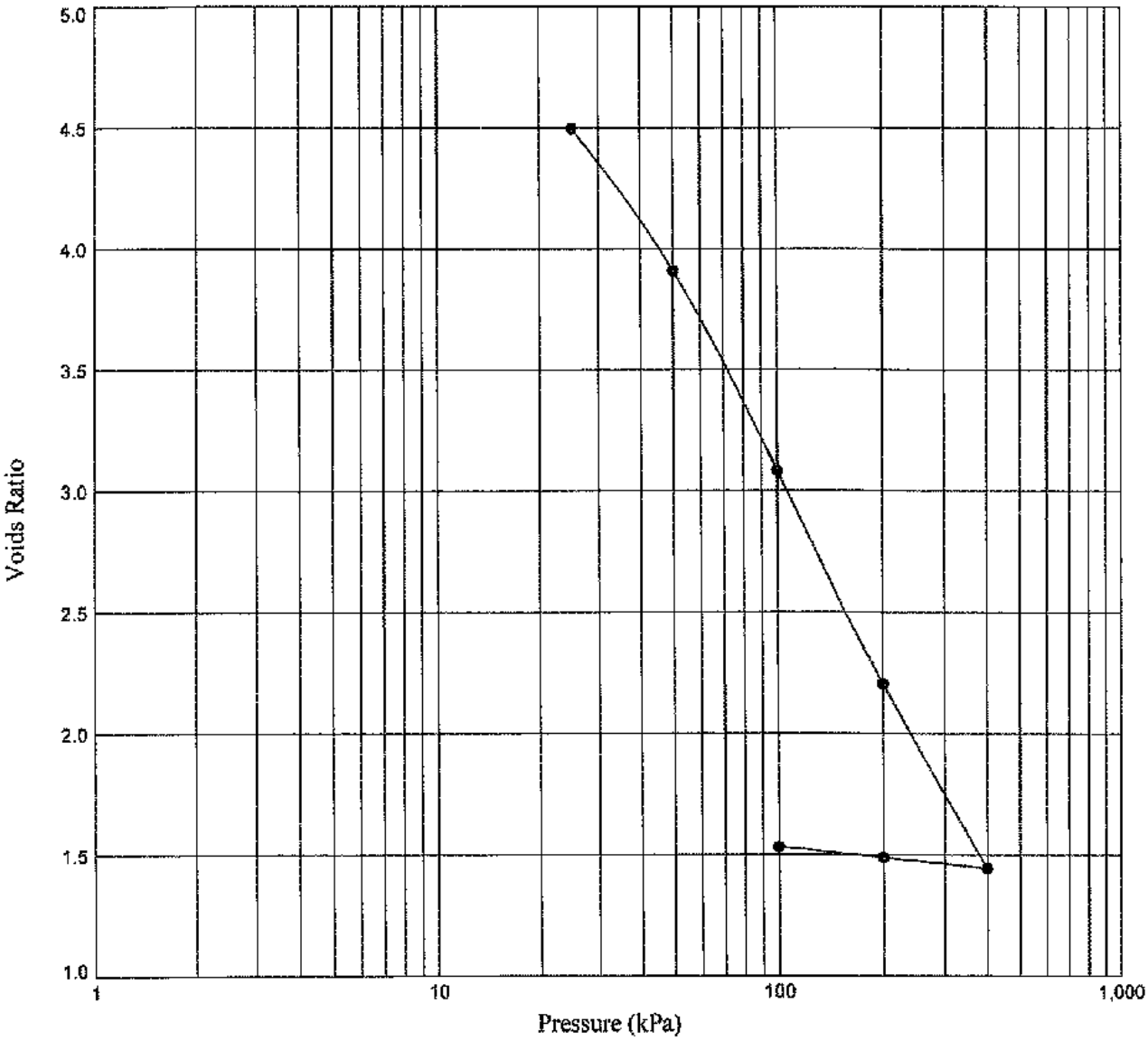
STRUCTURAL_SOILS_GINT_LIBRARY_08-11-06.GLB | L - 1-D CONSOL DATALOGGED | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_02 | 17/02/09 - 12:02

ONE DIMENSIONAL CONSOLIDATION TEST

In accordance with BS1377:Part 5:1990

Borehole : **BH36** Sample Ref: **8** Sample Type: **P** Depth (m): **3.10**



Initial Specimen Condition			Final Specimen Condition		
Moisture Content (%)	:	391	Moisture Content (%)	:	167
Bulk Density (Mg/m³)	:	1.01	Bulk Density (Mg/m³)	:	1.27
Dry Density (Mg/m³)	:	0.21	Dry Density (Mg/m³)	:	0.47
Void Ratio	:	4.827	Void Ratio	:	1.532

Specimen Details			
Description	Height (mm)	:	20.74
Dark brown fibrous PEAT	Diameter (mm)	:	75.15
	Particle Density (Mg/m³) (assumed)	:	1.20
	Swelling Pressure (kPa)	:	NA

Test Results		
Pressure Range (kPa)	Mv (m²/MN)	Cv (m²/yr)
0 - 25	2.3	56
25 - 50	4.3	27
50 - 100	3.4	8.9
100 - 200	2.1	2.3
200 - 400	1.2	0.60
400 - 200	0.090	1.6
200 - 100	0.17	3.2

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Contract: **Sizewell C Supplementary Investigation**

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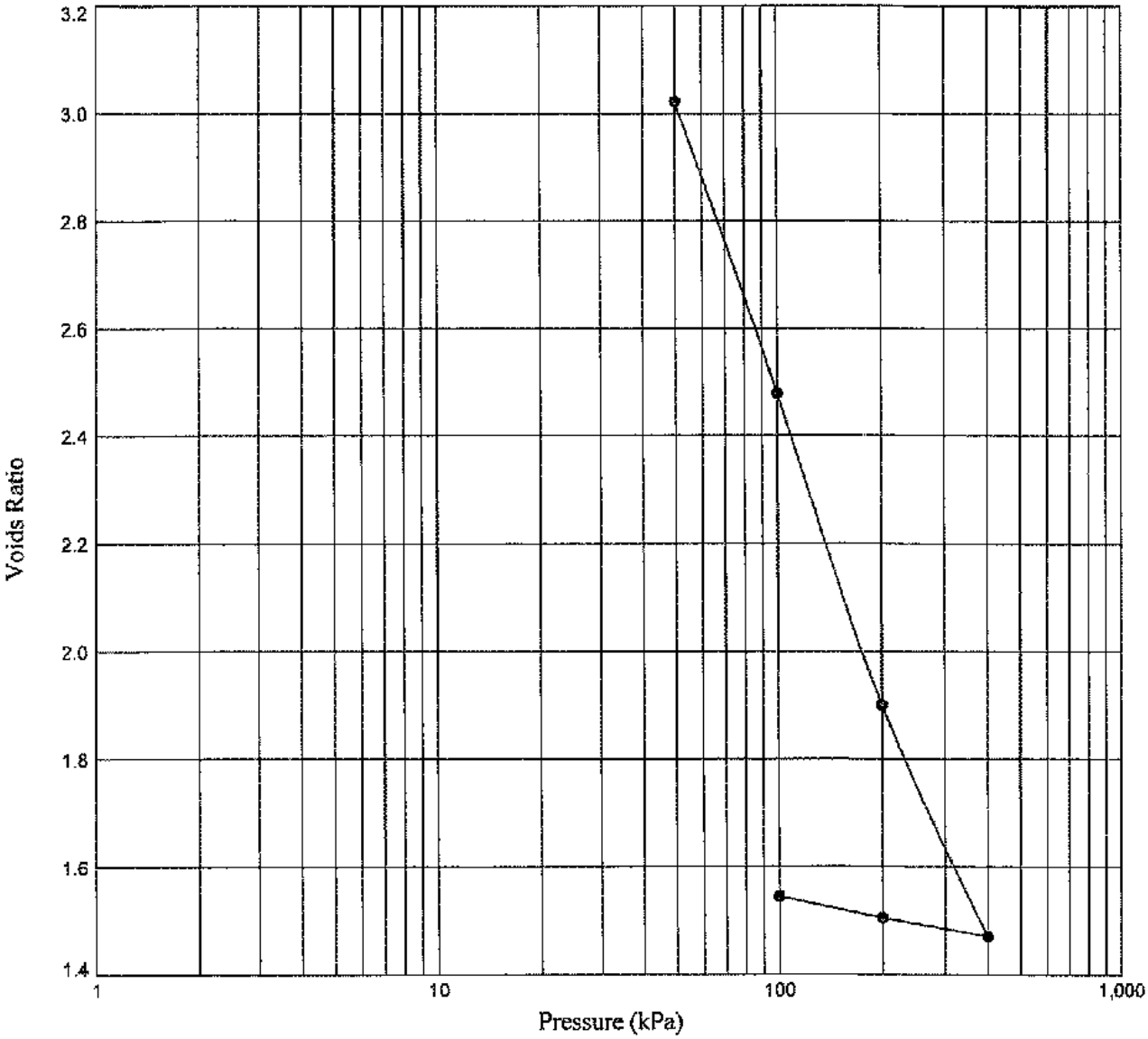
STRUCTURAL_SOILS_GINT_LIBRARY_08-11-06.GLB|L - 1-D CONSOL DATALOGGED | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_02 | 17/02/09 - 12:03

ONE DIMENSIONAL CONSOLIDATION TEST

In accordance with BS1377:Part 5:1990

Borehole : **BH36** Sample Ref: **9** Sample Type: **P** Depth (m): **4.00**



Initial Specimen Condition		
Moisture Content (%)	:	327
Bulk Density (Mg/m³)	:	1.07
Dry Density (Mg/m³)	:	0.25
Void Ratio	:	3.793

Final Specimen Condition		
Moisture Content (%)	:	164
Bulk Density (Mg/m³)	:	1.24
Dry Density (Mg/m³)	:	0.47
Void Ratio	:	1.545

Specimen Details		
Description	Height (mm)	: 20.10
Dark brown fibrous PEAT	Diameter (mm)	: 75.00
	Particle Density (Mg/m³) (assumed)	: 1.20
	Swelling Pressure (kPa)	: NA

Test Results		
Pressure Range (kPa)	Mv (m²/MN)	Cv (m²/yr)
0 - 50	3.2	47
50 - 100	2.7	8.9
100 - 200	1.7	4.5
200 - 400	0.74	1.9
400 - 200	0.068	2.8
200 - 100	0.16	10

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Sizewell C Supplementary Investigation

722201

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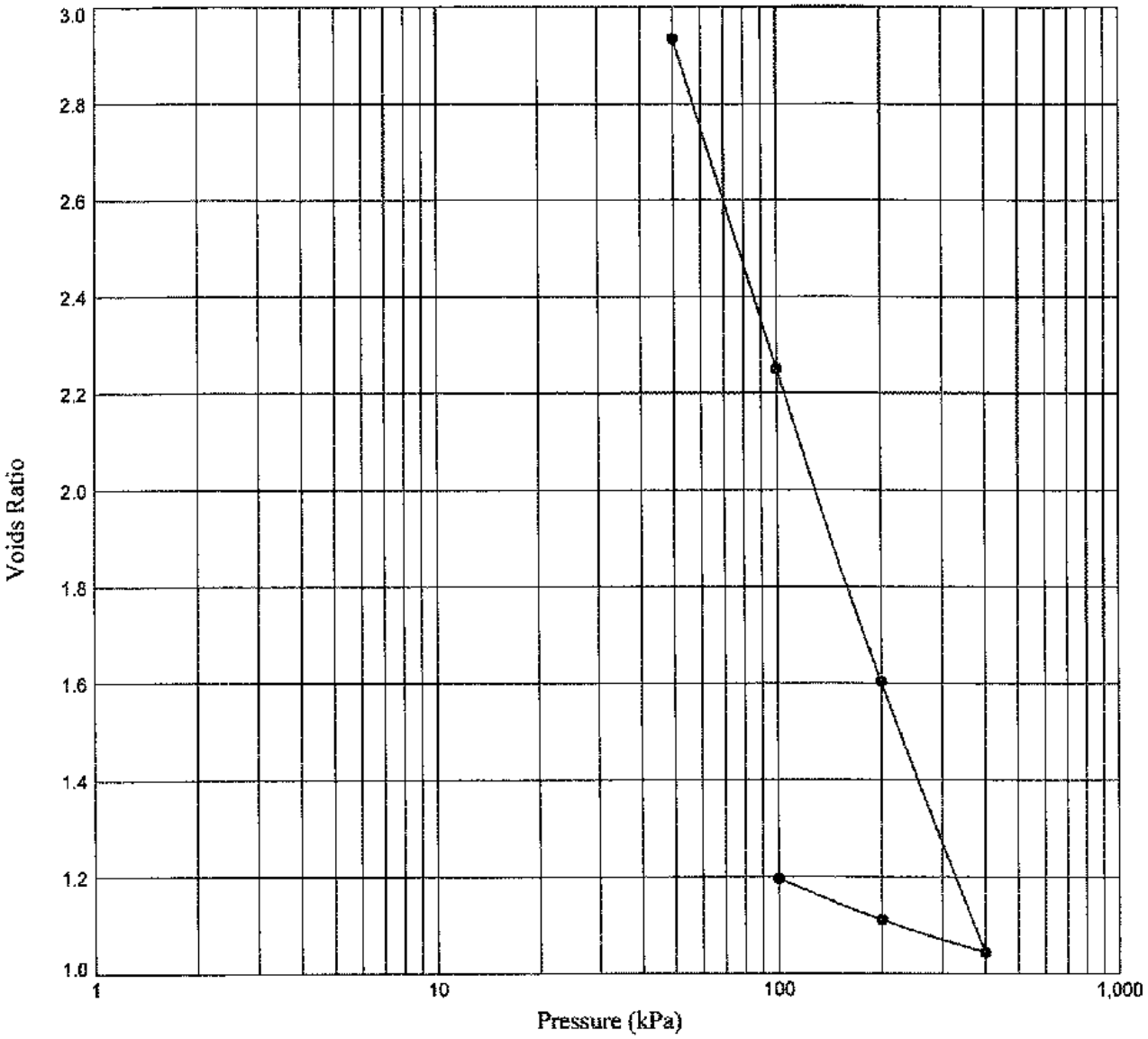
ONE DIMENSIONAL CONSOLIDATION TEST

In accordance with BS1377:Part 5:1990

Borehole : **BH36** Sample Ref: **10** Sample Type: **P** Depth (m): **5.00**



Initial Specimen Condition			Final Specimen Condition		
Moisture Content (%)	:	421	Moisture Content (%)	:	151
Bulk Density (Mg/m³)	:	1.12	Bulk Density (Mg/m³)	:	1.37
Dry Density (Mg/m³)	:	0.21	Dry Density (Mg/m³)	:	0.55
Void Ratio	:	4.586	Void Ratio	:	1.196

Specimen Details			
Description	Height (mm)	:	19.52
	Diameter (mm)	:	75.16
Dark brown fibrous PEAT	Particle Density (Mg/m³) (assumed)	:	1.20
	Swelling Pressure (kPa)	:	NA

Test Results		
Pressure Range (kPa)	Mv (m²/MN)	Cv (m²/yr)
0 - 50	5.9	7.3
50 - 100	3.5	0.66
100 - 200	2.0	0.28
200 - 400	1.1	0.12
400 - 200	0.17	0.41
200 - 100	0.40	0.46

Approved Signatories: D. TROWBRIDGE A. FROST F. HAMILTON L. MARTIN

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Contract: **Sizewell C Supplementary Investigation**

Job No: **722201**

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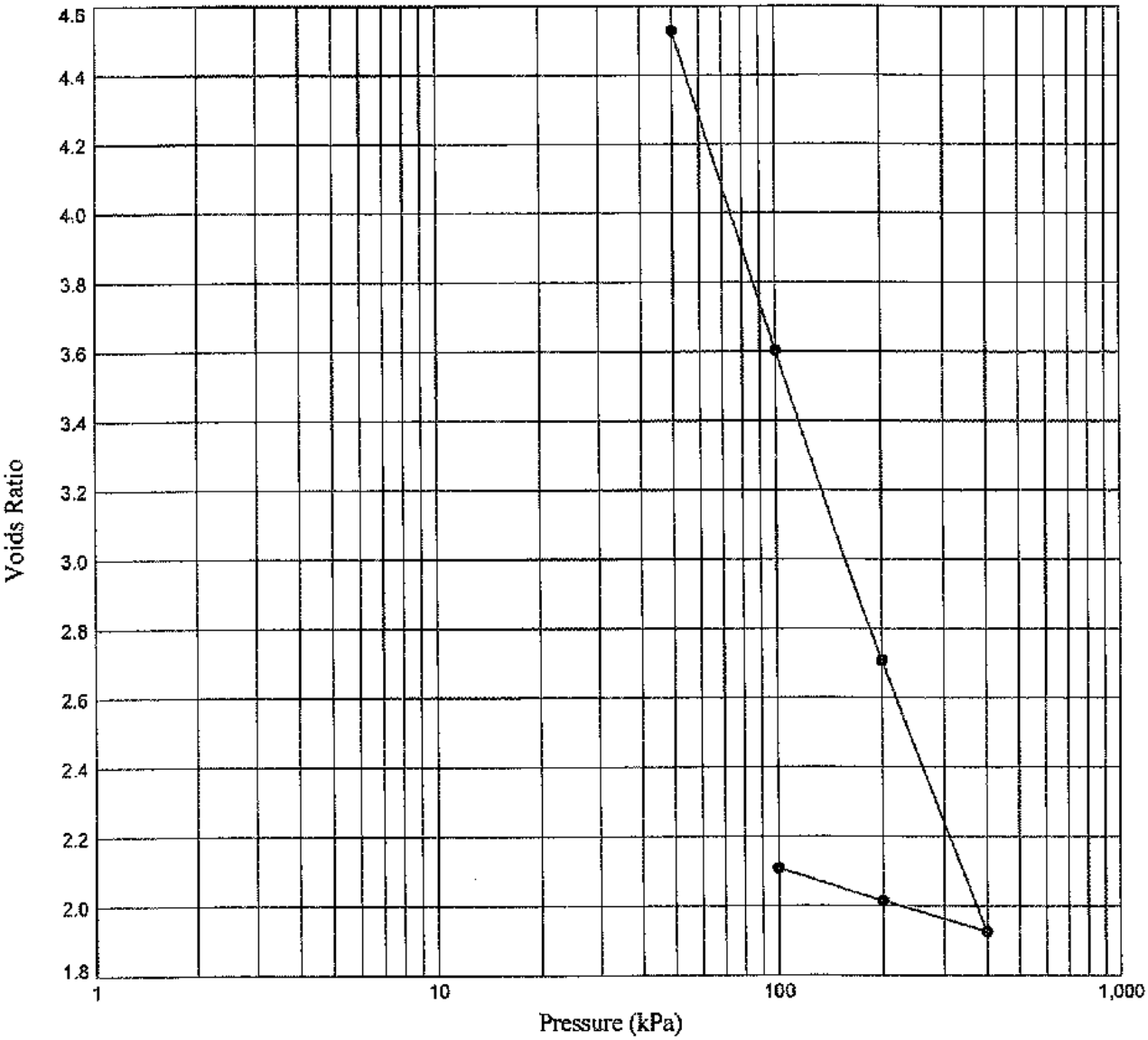
STRUCTURAL_SOILS_GINT_LIBRARY 08-11-06.GLB\L - 1-D CONSOL DATALOGGED | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_02 | 17/02/09 - 12:05

ONE DIMENSIONAL CONSOLIDATION TEST

In accordance with BS1377:Part 5:1990

Borehole : **BH36** Sample Ref: **10** Sample Type: **P** Depth (m): **5.70**



Initial Specimen Condition			Final Specimen Condition		
Moisture Content (%)	:	510	Moisture Content (%)	:	211
Bulk Density (Mg/m³)	:	1.03	Bulk Density (Mg/m³)	:	1.20
Dry Density (Mg/m³)	:	0.17	Dry Density (Mg/m³)	:	0.39
Void Ratio	:	6.136	Void Ratio	:	2.109

Specimen Details			
Description	Height (mm)	:	19.95
Dark brown fibrous PEAT	Diameter (mm)	:	76.07
	Particle Density (Mg/m³) (assumed)	:	1.20
	Swelling Pressure (kPa)	:	NA

Test Results		
Pressure Range (kPa)	Mv (m²/MN)	Cv (m²/yr)
0 - 50	4.5	18
50 - 100	3.3	2.1
100 - 200	1.9	0.62
200 - 400	1.1	0.26
400 - 200	0.15	0.68
200 - 100	0.31	0.98

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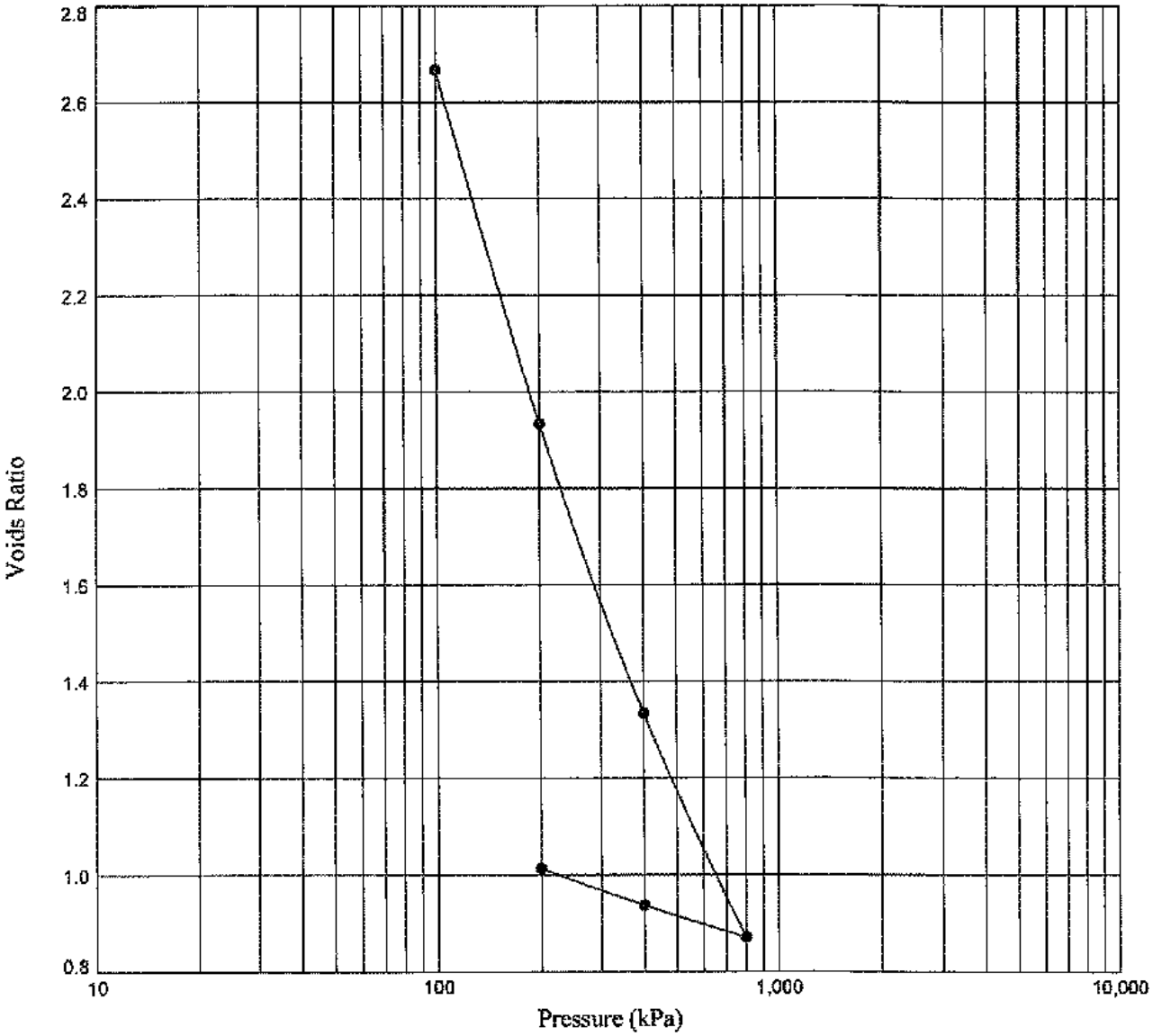
ONE DIMENSIONAL CONSOLIDATION TEST

In accordance with BS1377:Part 5:1990

Borehole : **BH36** Sample Ref: **21** Sample Type: **P** Depth (m): **7.73**



Initial Specimen Condition			Final Specimen Condition		
Moisture Content (%)	:	375	Moisture Content (%)	:	130
Bulk Density (Mg/m^3)	:	1.08	Bulk Density (Mg/m^3)	:	1.37
Dry Density (Mg/m^3)	:	0.23	Dry Density (Mg/m^3)	:	0.60
Void Ratio	:	4.290	Void Ratio	:	1.013

Specimen Details			
Description	Height (mm)	:	20.12
Dark brown fibrous PEAT	Diameter (mm)	:	75.06
	Particle Density (Mg/m^3) (assumed)	:	1.20
	Swelling Pressure (kPa)	:	NA

Test Results		
Pressure Range (kPa)	Mv (m^2/MN)	Cv (m^2/yr)
0 - 100	3.1	32
100 - 200	2.0	2.2
200 - 400	1.0	0.96
400 - 800	0.50	0.45
800 - 400	0.089	1.1
400 - 200	0.19	2.2

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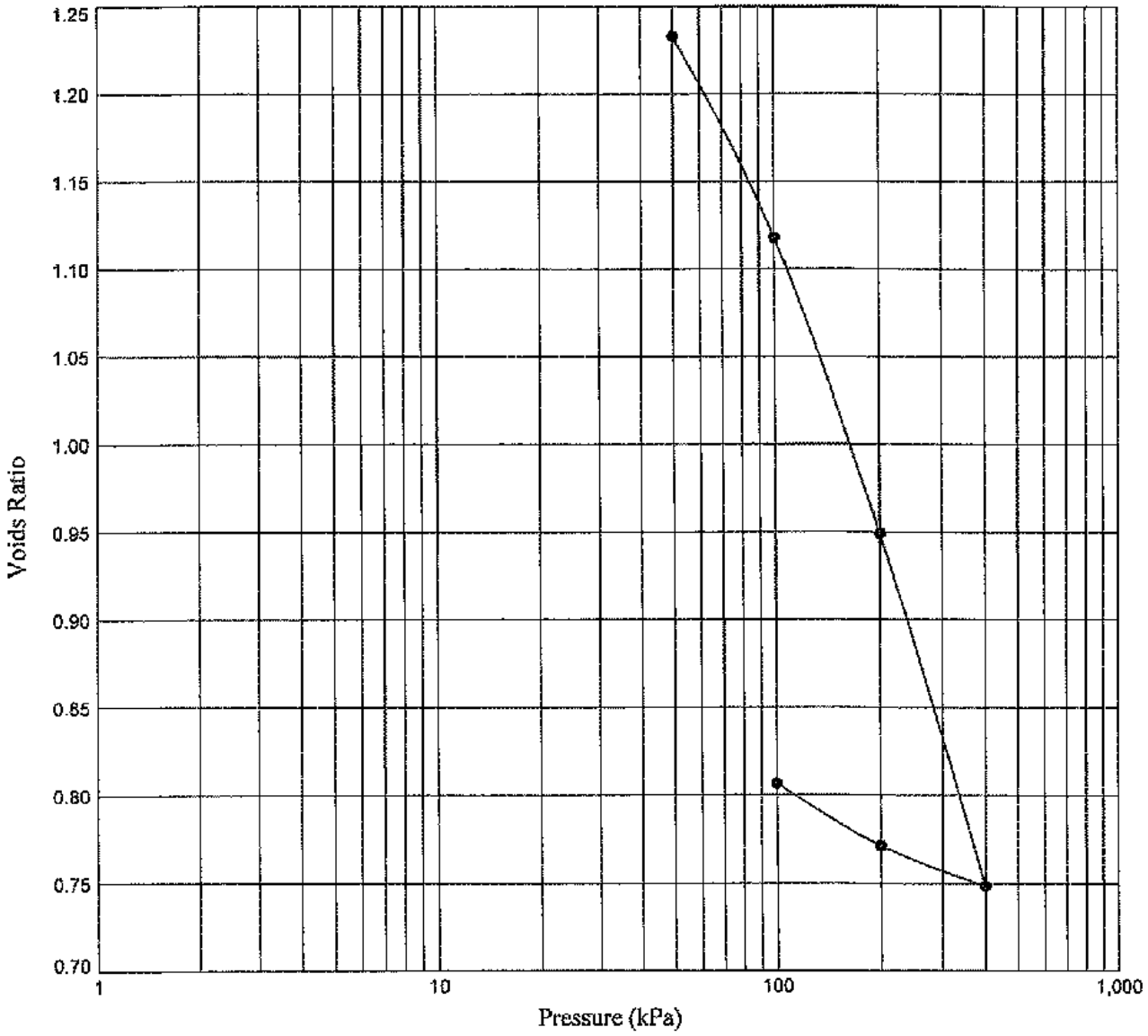
ONE DIMENSIONAL CONSOLIDATION TEST

In accordance with BS1377:Part 5:1990

Borehole : **BH39** Sample Ref: **16** Sample Type: **P** Depth (m): **6.00**



Initial Specimen Condition			Final Specimen Condition		
Moisture Content (%)	:	78	Moisture Content (%)	:	54
Bulk Density (Mg/m³)	:	1.50	Bulk Density (Mg/m³)	:	1.70
Dry Density (Mg/m³)	:	0.84	Dry Density (Mg/m³)	:	1.10
Void Ratio	:	1.377	Void Ratio	:	0.8067

Specimen Details			
Description	Height (mm)	:	19.41
	Diameter (mm)	:	75.01
Grey CLAY with some fibrous organic matter	Particle Density (Mg/m³) (assumed)	:	2.00
	Swelling Pressure (kPa)	:	NA

Test Results		
Pressure Range (kPa)	Mv (m²/MN)	Cv (m²/yr)
0 - 50	1.2	0.66
50 - 100	1.0	0.72
100 - 200	0.80	0.45
200 - 400	0.52	0.34
400 - 200	0.066	1.6
200 - 100	0.20	0.65

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Contract	Job No
Sizewell C Supplementary Investigation	**722201**

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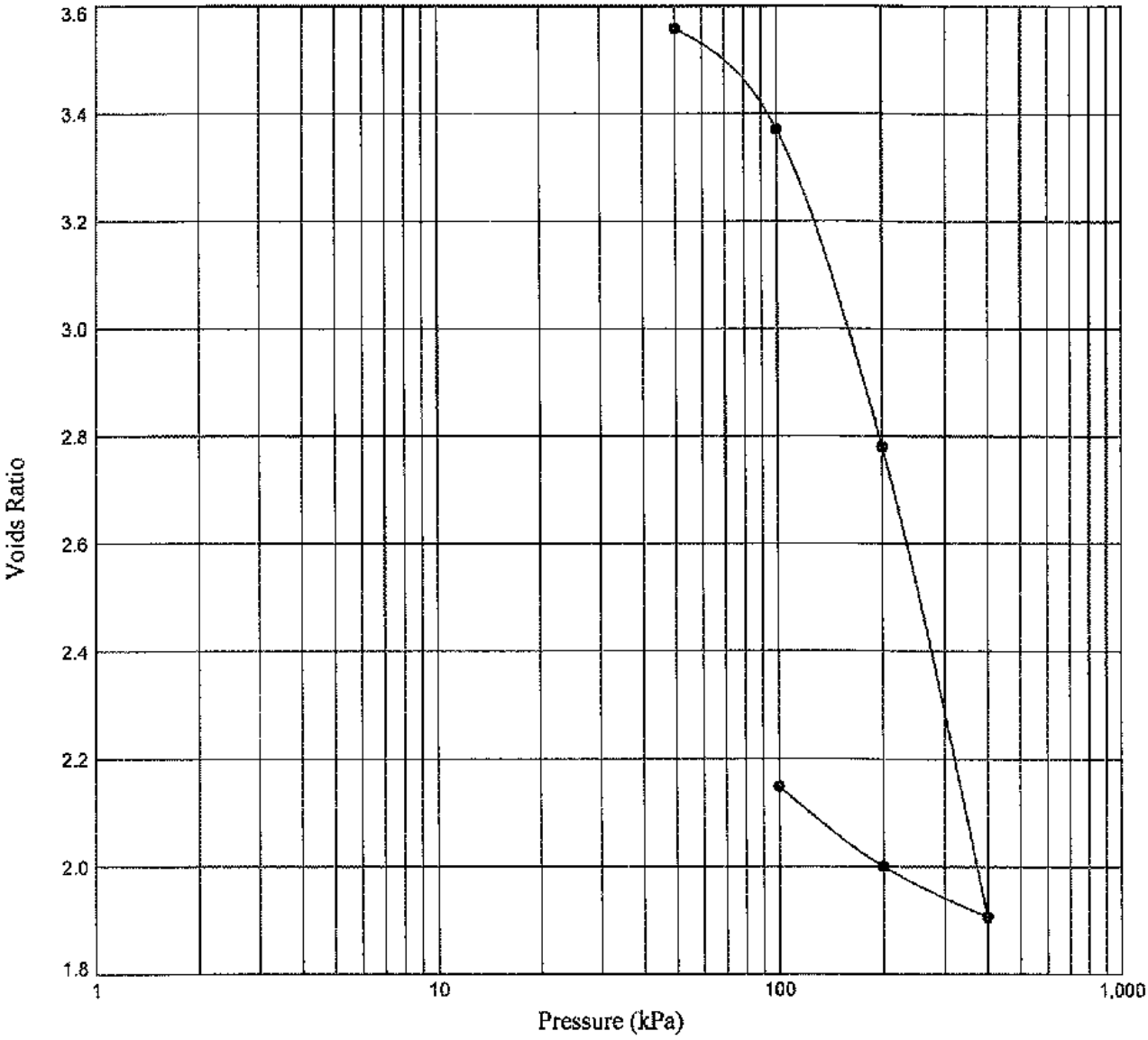
ONE DIMENSIONAL CONSOLIDATION TEST

In accordance with BS1377:Part 5:1990

Borehole : **BH39** Sample Ref: **16** Sample Type: **P** Depth (m): **6.55**



Initial Specimen Condition			Final Specimen Condition		
Moisture Content (%)	:	304	Moisture Content (%)	:	208
Bulk Density (Mg/m³)	:	1.02	Bulk Density (Mg/m³)	:	1.17
Dry Density (Mg/m³)	:	0.25	Dry Density (Mg/m³)	:	0.38
Void Ratio	:	3.769	Void Ratio	:	2.149

Specimen Details			
Description	Height (mm)	:	21.14
Dark brown fibrous PEAT	Diameter (mm)	:	75.10
	Particle Density (Mg/m³) (assumed)	:	1.20
	Swelling Pressure (kPa)	:	NA

Test Results		
Pressure Range (kPa)	Mv (m²/MN)	Cv (m²/yr)
0 - 50	**0.88**	**34**
50 - 100	**0.82**	**13**
100 - 200	**1.4**	**2.3**
200 - 400	**1.2**	**0.37**
400 - 200	**0.16**	**5.1**
200 - 100	**0.49**	**0.18**

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Contract: **Sizewell C Supplementary Investigation**

Job No: **722201**

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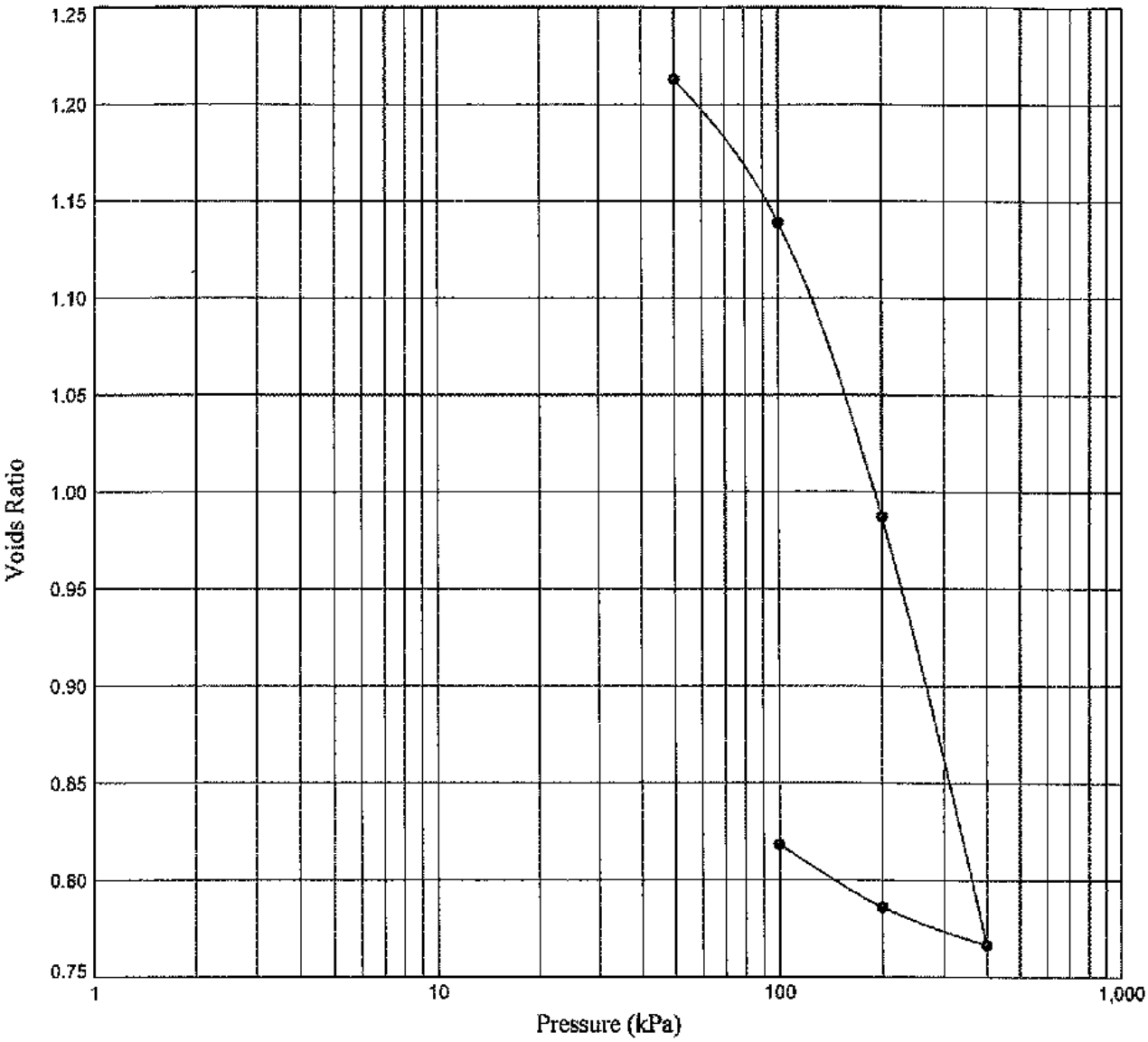
ONE DIMENSIONAL CONSOLIDATION TEST

In accordance with BS1377:Part 5:1990

Borehole : **BH39** Sample Ref: **16** Sample Type: **P** Depth (m): **6.96**



Initial Specimen Condition			Final Specimen Condition		
Moisture Content (%)	:	75	Moisture Content (%)	:	56
Bulk Density (Mg/m^3)	:	1.51	Bulk Density (Mg/m^3)	:	1.71
Dry Density (Mg/m^3)	:	0.87	Dry Density (Mg/m^3)	:	1.10
Void Ratio	:	1.307	Void Ratio	:	0.8183

Specimen Details			
Description	Height (mm)	:	19.74
Grey CLAY with occasional fibrous organic matter	Diameter (mm)	:	75.15
	Particle Density (Mg/m^3) (assumed)	:	2.00
	Swelling Pressure (kPa)	:	NA

Test Results		
Pressure Range (kPa)	Mv (m^2/MN)	Cv (m^2/yr)
0 - 50	0.82	8.8
50 - 100	0.66	1.3
100 - 200	0.71	0.69
200 - 400	0.56	0.33
400 - 200	0.055	2.9
200 - 100	0.18	1.4

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STRUCTURAL SOILS
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Contract: **Sizewell C Supplementary Investigation**

Job No: **722201**

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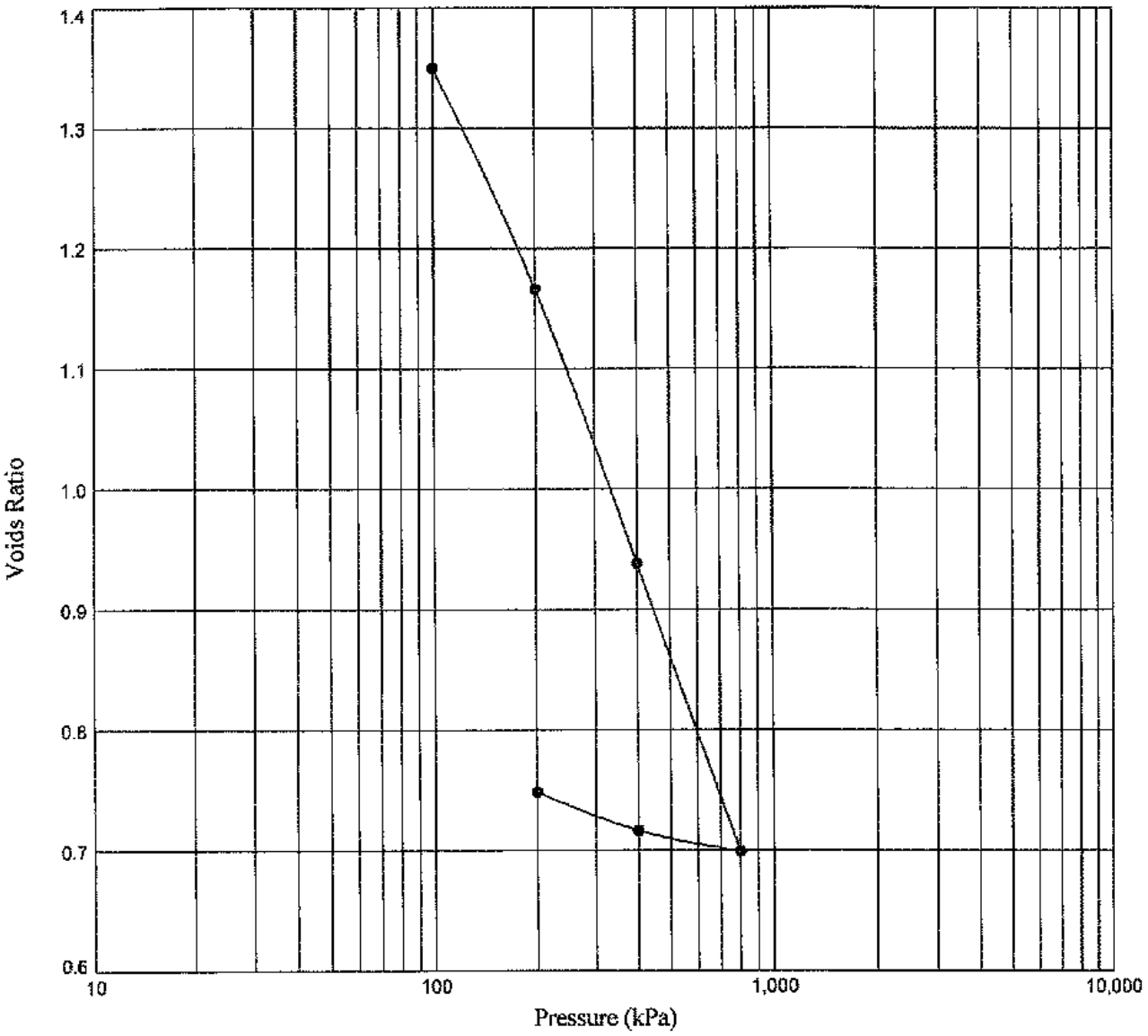
STRUCTURAL_SOILS_GINT_LIBRARY_08-11-06.GLB | - 1-D CONSOL DATALOGGED | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - V8_02 | 17/02/09 - 12:11.

ONE DIMENSIONAL CONSOLIDATION TEST

In accordance with BS1377:Part 5:1990

Borehole : **BH39** Sample Ref: **17** Sample Type: **P** Depth (m): **7.10**



Initial Specimen Condition			Final Specimen Condition		
Moisture Content (%)	:	102	Moisture Content (%)	:	59
Bulk Density (Mg/m³)	:	1.32	Bulk Density (Mg/m³)	:	1.60
Dry Density (Mg/m³)	:	0.66	Dry Density (Mg/m³)	:	1.00
Void Ratio	:	1.669	Void Ratio	:	0.7482

Specimen Details			
Description	Height (mm)	:	19.82
	Diameter (mm)	:	74.98
Dark brown fibrous PEAT with many pockets of grey clay	Particle Density (Mg/m³) (assumed)	:	1.75
	Swelling Pressure (kPa)	:	NA

Test Results		
Pressure Range (kPa)	Mv (m²/MN)	Cv (m²/yr)
0 - 100	1.2	11
100 - 200	0.78	1.0
200 - 400	0.53	0.69
400 - 800	0.31	0.37
800 - 400	0.026	2.7
400 - 200	0.093	1.0

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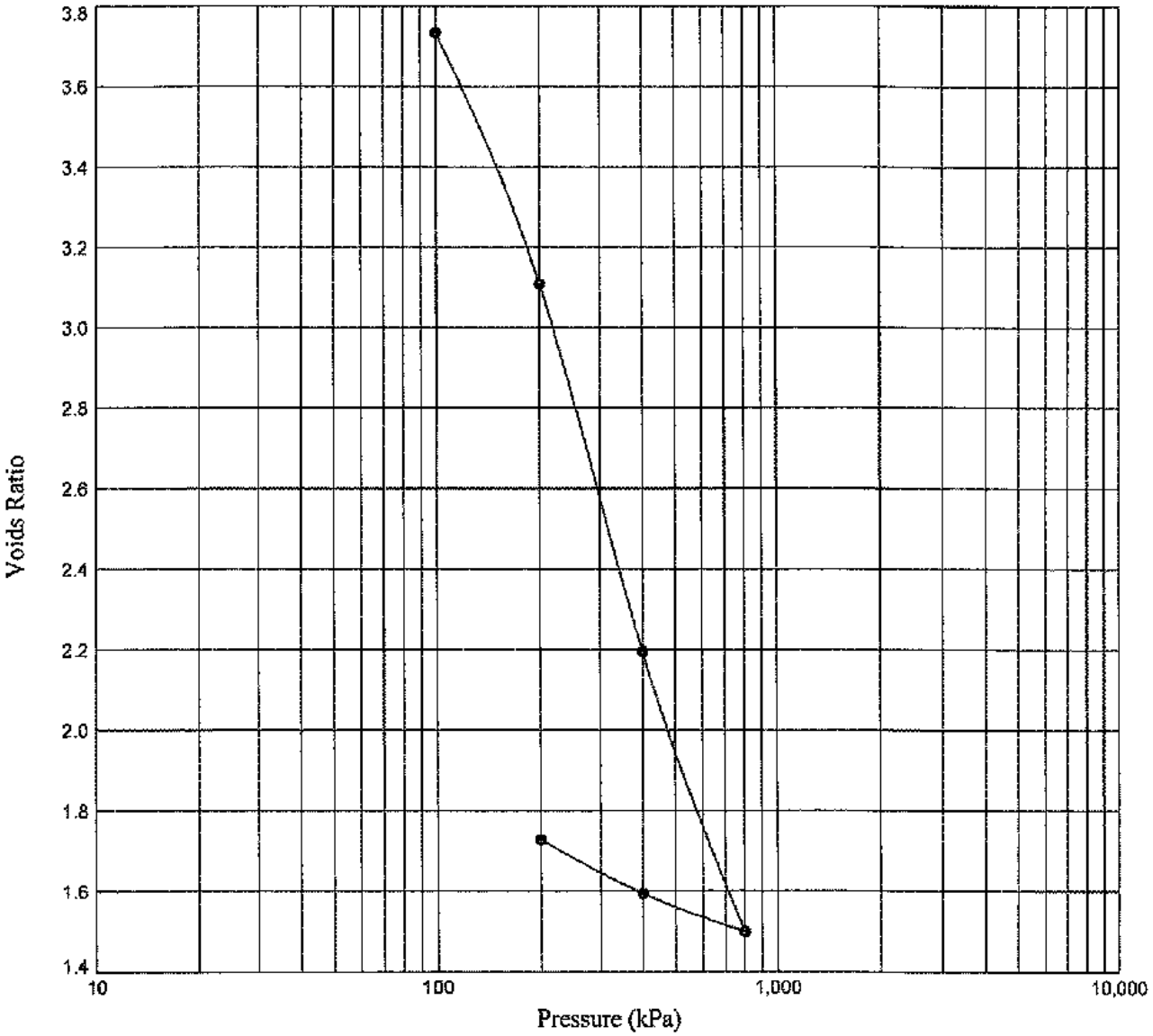
ONE DIMENSIONAL CONSOLIDATION TEST

In accordance with BS1377:Part 5:1990

Borehole : **BH39** Sample Ref: **17** Sample Type: **P** Depth (m): **7.70**



Initial Specimen Condition			Final Specimen Condition		
Moisture Content (%)	:	351	Moisture Content (%)	:	173
Bulk Density (Mg/m³)	:	1.04	Bulk Density (Mg/m³)	:	1.20
Dry Density (Mg/m³)	:	0.23	Dry Density (Mg/m³)	:	0.44
Void Ratio	:	4.185	Void Ratio	:	1.727

Specimen Details			
Description	Height (mm)	:	21.12
Black fibrous PEAT	Diameter (mm)	:	75.10
	Particle Density (Mg/m³) (assumed)	:	1.20
	Swelling Pressure (kPa)	:	NA

Test Results		
Pressure Range (kPa)	Mv (m²/MN)	Cv (m²/yr)
0 - 100	**0.87**	**7.3**
100 - 200	**1.3**	**0.71**
200 - 400	**1.1**	**0.15**
400 - 800	**0.54**	**0.052**
800 - 400	**0.094**	**0.19**
400 - 200	**0.26**	**0.070**

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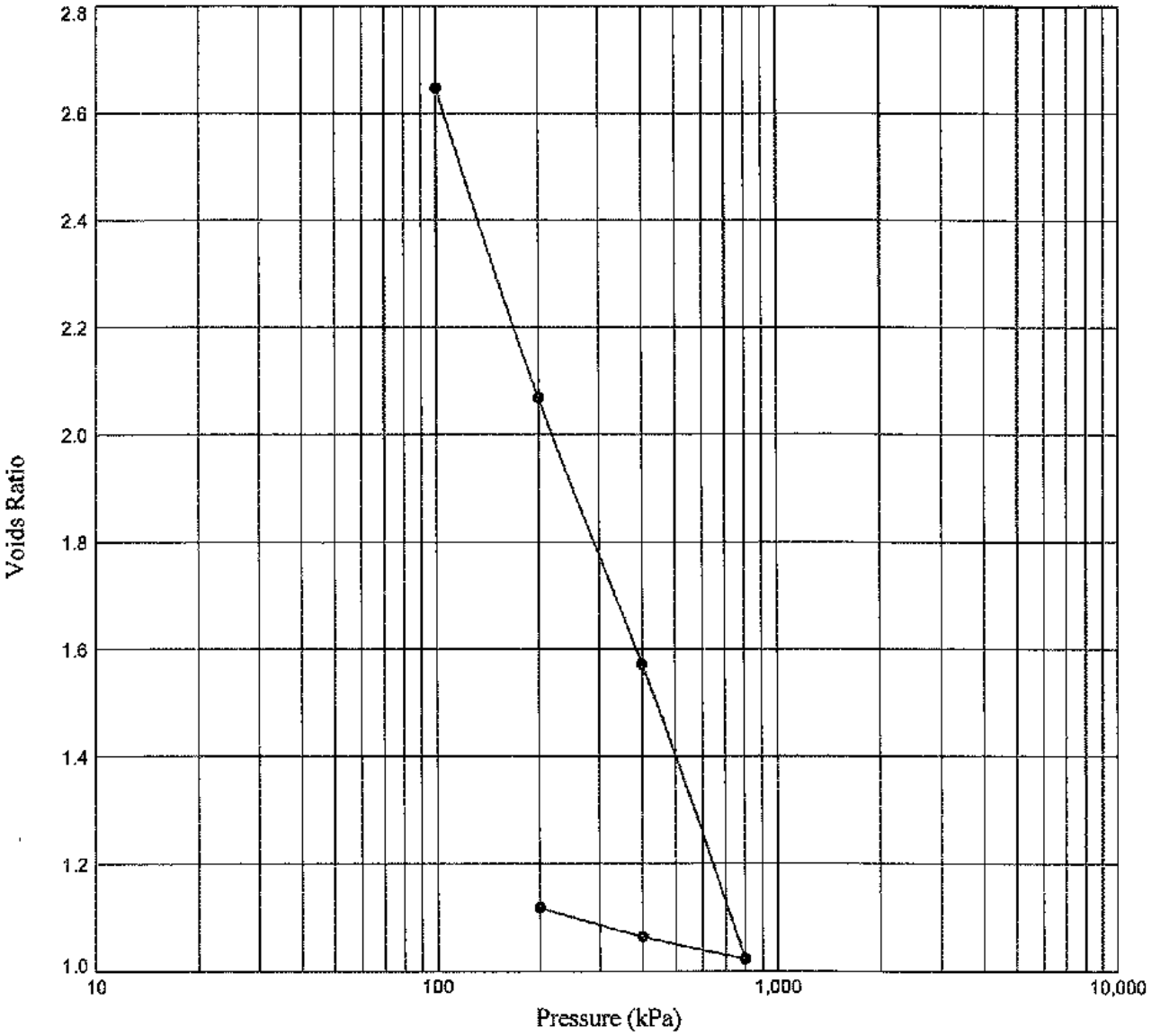
ONE DIMENSIONAL CONSOLIDATION TEST

In accordance with BS1377:Part 5:1990

Borehole : **BH39** Sample Ref: **20** Sample Type: **P** Depth (m): **8.50**



Initial Specimen Condition			Final Specimen Condition		
Moisture Content (%)	:	300	Moisture Content (%)	:	137
Bulk Density (Mg/m³)	:	1.05	Bulk Density (Mg/m³)	:	1.34
Dry Density (Mg/m³)	:	0.26	Dry Density (Mg/m³)	:	0.57
Void Ratio	:	3.575	Void Ratio	:	1.118

Specimen Details			
Description	Height (mm)	:	21.19
Black fibrous PEAT	Diameter (mm)	:	75.10
	Particle Density (Mg/m³) (assumed)	:	1.20
	Swelling Pressure (kPa)	:	NA

Test Results		
Pressure Range (kPa)	Mv (m²/MN)	Cv (m²/yr)
0 - 100	**2.0**	**40**
100 - 200	**1.6**	**7.7**
200 - 400	**0.81**	**3.3**
400 - 800	**0.53**	**0.62**
800 - 400	**0.051**	**3.0**
400 - 200	**0.13**	**1.9**

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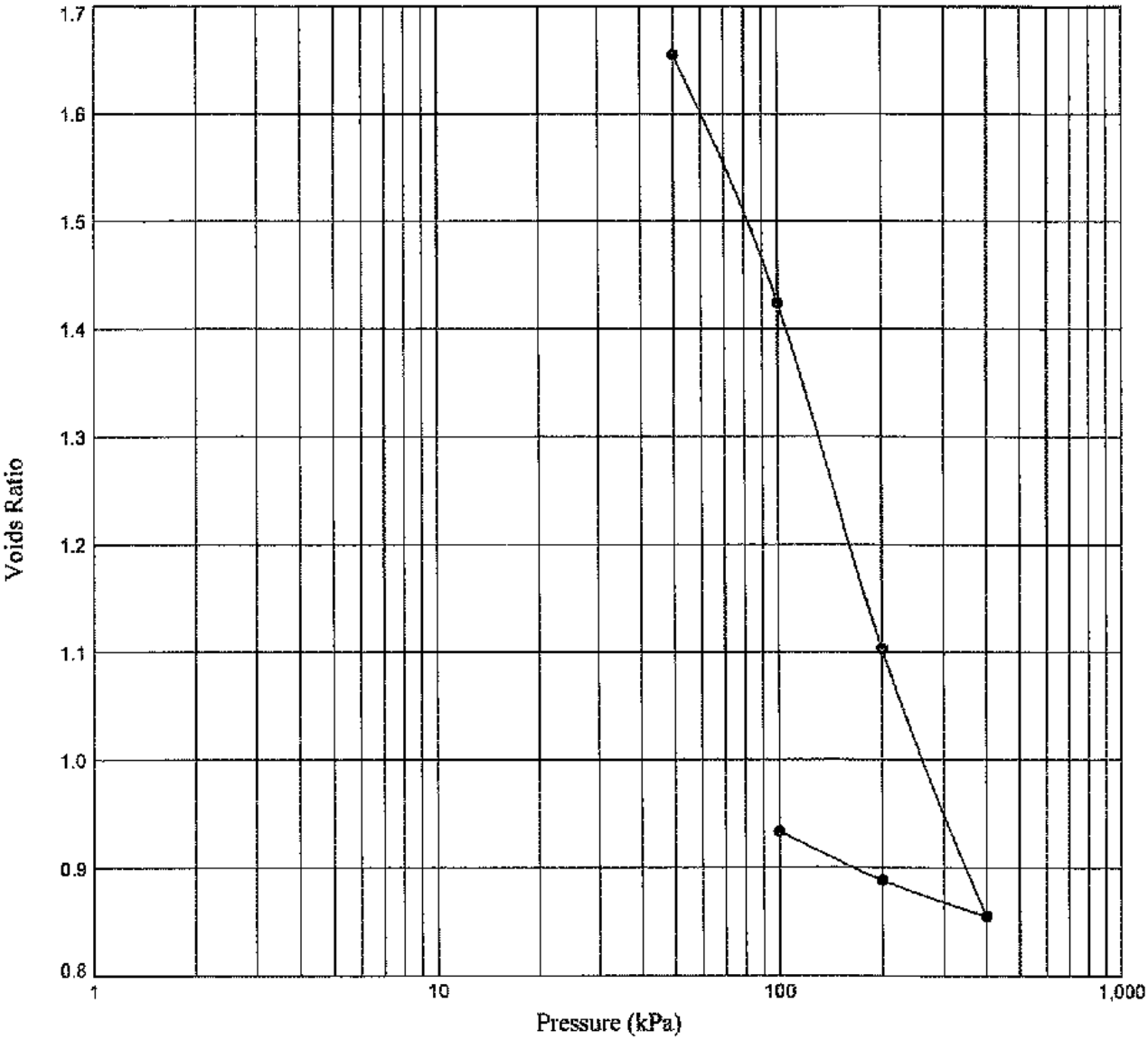
STRUCTURAL_SOILS_GINT_LIBRARY_08-11-05.GLB\L - 1-D CONSOL DATALOGGED | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_02 | 17/02/09 - 12:15

ONE DIMENSIONAL CONSOLIDATION TEST

In accordance with BS1377:Part 5:1990

Borehole : **BH40** Sample Ref: **20** Sample Type: **P** Depth (m): **7.50**



Initial Specimen Condition			Final Specimen Condition		
Moisture Content (%)	:	145	Moisture Content (%)	:	111
Bulk Density (Mg/m^3)	:	0.96	Bulk Density (Mg/m^3)	:	1.31
Dry Density (Mg/m^3)	:	0.39	Dry Density (Mg/m^3)	:	0.62
Void Ratio	:	2.079	Void Ratio	:	0.9335

Specimen Details			
Description	Height (mm)	:	20.92
Dark brown fibrous PEAT	Diameter (mm)	:	75.10
	Particle Density (Mg/m^3) (assumed)	:	1.20
	Swelling Pressure (kPa)	:	NA

Test Results		
Pressure Range (kPa)	Mv (m^2/MN)	Cv (m^2/yr)
0 - 50	2.8	60
50 - 100	1.7	25
100 - 200	1.3	18
200 - 400	0.59	9.6
400 - 200	0.090	3.7
200 - 100	0.24	7.2

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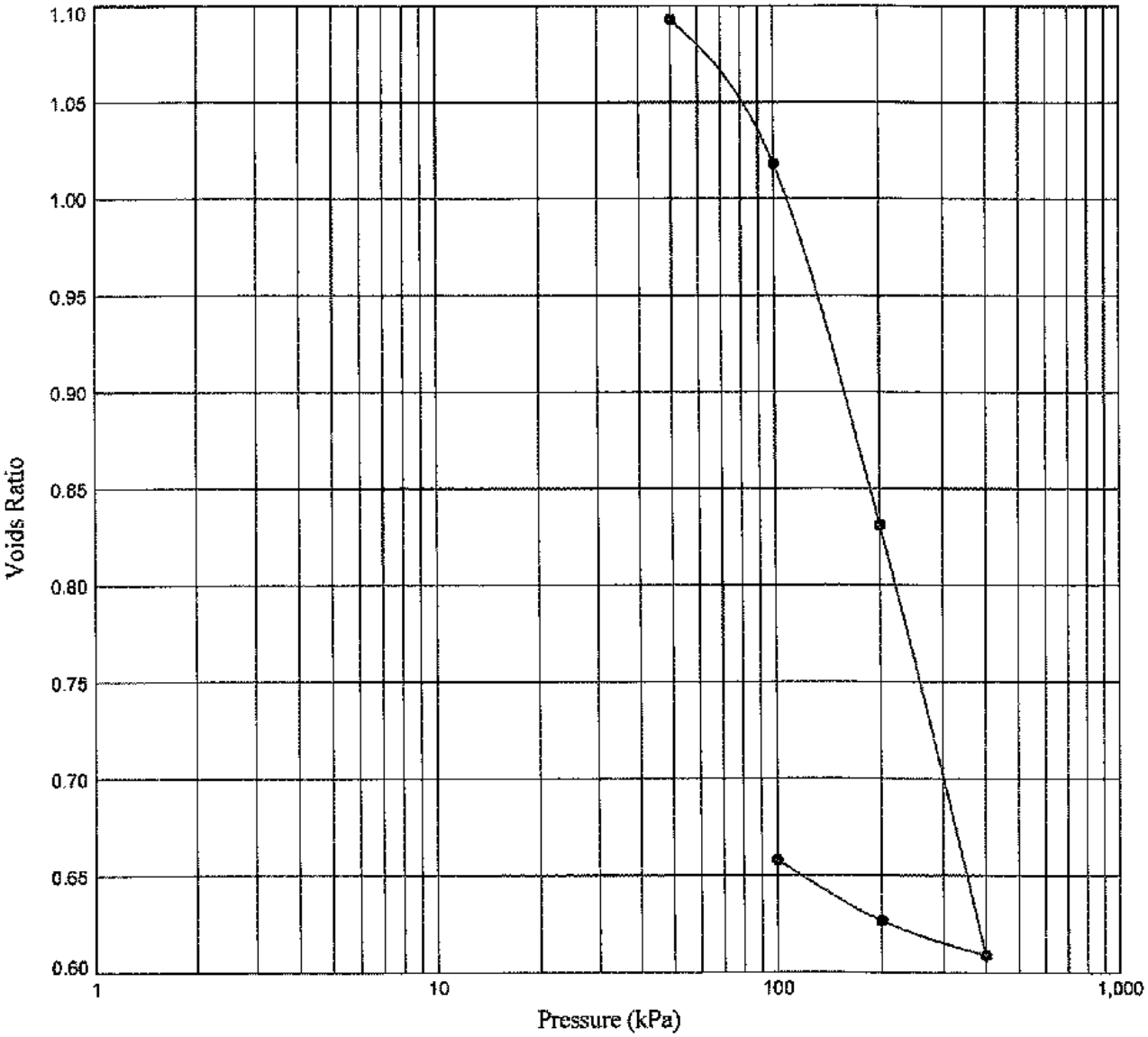
ONE DIMENSIONAL CONSOLIDATION TEST

In accordance with BS1377:Part 5:1990

Borehole : **BH40** Sample Ref: **20** Sample Type: **P** Depth (m): **7.70**



Initial Specimen Condition			Final Specimen Condition		
Moisture Content (%)	:	82	Moisture Content (%)	:	59
Bulk Density (Mg/m³)	:	1.46	Bulk Density (Mg/m³)	:	1.67
Dry Density (Mg/m³)	:	0.80	Dry Density (Mg/m³)	:	1.05
Void Ratio	:	1.179	Void Ratio	:	0.6581

Specimen Details			
Description	Height (mm)	:	19.11
Grey CLAY with occasional pockets of peat	Diameter (mm)	:	75.93
	Particle Density (Mg/m³) (assumed)	:	1.75
	Swelling Pressure (kPa)	:	NA

Test Results		
Pressure Range (kPa)	Mv (m²/MN)	Cv (m²/yr)
0 - 50	0.79	24
50 - 100	0.71	2.7
100 - 200	0.93	0.70
200 - 400	0.61	0.37
400 - 200	0.056	3.6
200 - 100	0.19	0.66

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Contract: **Sizewell C Supplementary Investigation**

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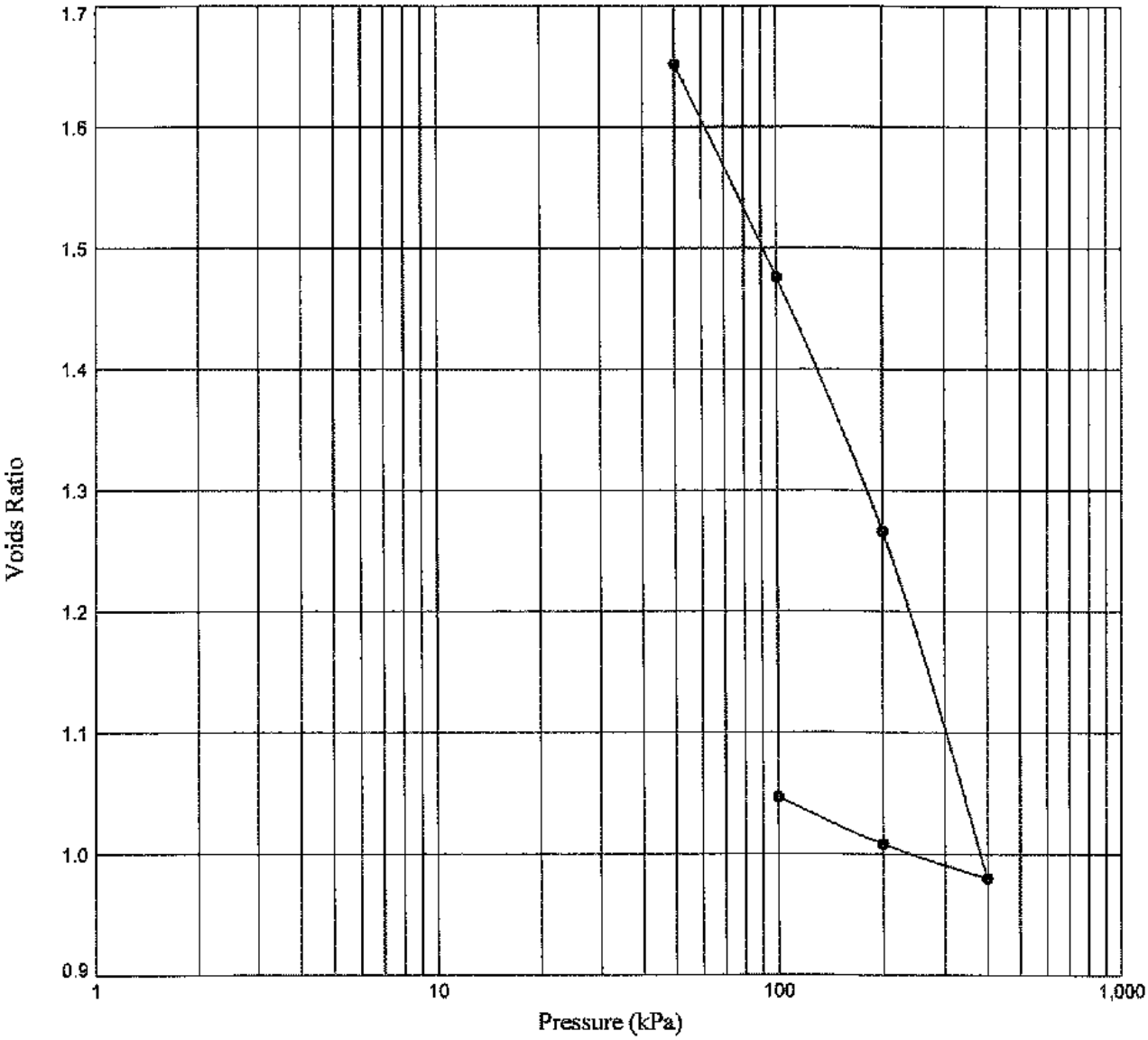
ONE DIMENSIONAL CONSOLIDATION TEST

In accordance with BS1377:Part 5:1990

Borehole : **BH40** Sample Ref: **21** Sample Type: **P** Depth (m): **9.32**



Initial Specimen Condition			Final Specimen Condition		
Moisture Content (%)	:	112	Moisture Content (%)	:	79
Bulk Density (Mg/m³)	:	1.30	Bulk Density (Mg/m³)	:	1.53
Dry Density (Mg/m³)	:	0.62	Dry Density (Mg/m³)	:	0.85
Void Ratio	:	1.845	Void Ratio	:	1.047

Specimen Details			
Description	Height (mm)	:	19.74
	Diameter (mm)	:	75.02
Grey CLAY with some fibrous organic matter	Particle Density (Mg/m³) (assumed)	:	1.75
	Swelling Pressure (kPa)	:	NA

Test Results		
Pressure Range (kPa)	Mv (m²/MN)	Cv (m²/yr)
0 - 50	1.4	14
50 - 100	1.3	3.9
100 - 200	0.85	1.7
200 - 400	0.63	0.93
400 - 200	0.071	3.0
200 - 100	0.20	1.0

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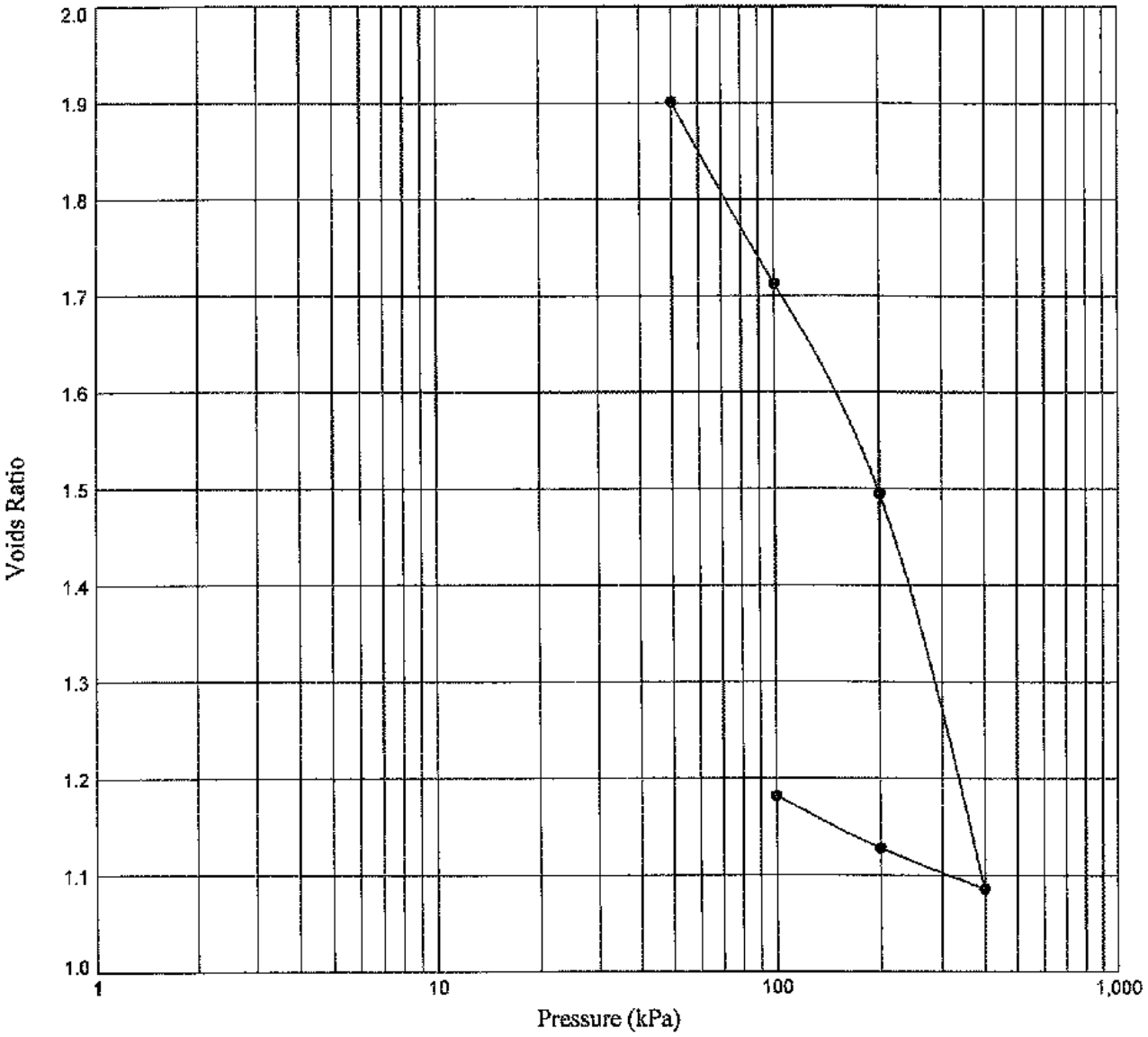
ONE DIMENSIONAL CONSOLIDATION TEST

In accordance with BS1377:Part 5:1990

Borehole : **BH40** Sample Ref: **22** Sample Type: **P** Depth (m): **10.20**



Initial Specimen Condition			Final Specimen Condition		
Moisture Content (%)	:	179	Moisture Content (%)	:	135
Bulk Density (Mg/m³)	:	1.10	Bulk Density (Mg/m³)	:	1.29
Dry Density (Mg/m³)	:	0.40	Dry Density (Mg/m³)	:	0.55
Void Ratio	:	2.037	Void Ratio	:	1.182

Specimen Details			
Description	Height (mm)	:	19.81
	Diameter (mm)	:	75.03
Dark brown fibrous PEAT	Particle Density (Mg/m³) (assumed)	:	1.20
	Swelling Pressure (kPa)	:	NA

Test Results		
Pressure Range (kPa)	Mv (m²/MN)	Cv (m²/yr)
0 - 50	**0.90**	**59**
50 - 100	**1.3**	**18**
100 - 200	**0.80**	**9.4**
200 - 400	**0.82**	**0.82**
400 - 200	**0.100**	**2.3**
200 - 100	**0.26**	**1.0**

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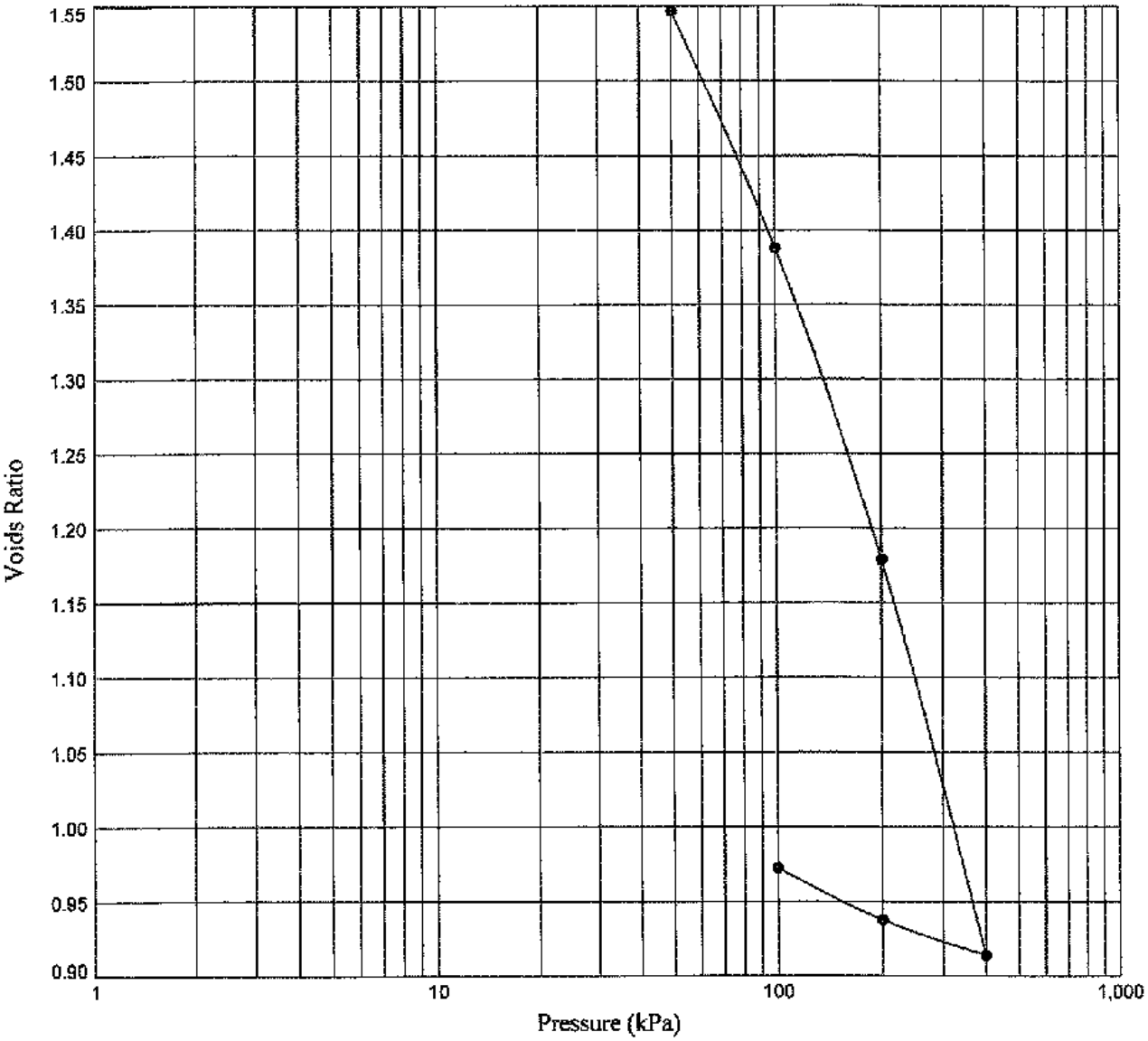
ONE DIMENSIONAL CONSOLIDATION TEST

In accordance with BS1377:Part 5:1990

Borehole : **BH40** Sample Ref: **23** Sample Type: **P** Depth (m): **10.25**



Initial Specimen Condition			Final Specimen Condition		
Moisture Content (%)	:	112	Moisture Content (%)	:	73
Bulk Density (Mg/m³)	:	1.33	Bulk Density (Mg/m³)	:	1.53
Dry Density (Mg/m³)	:	0.63	Dry Density (Mg/m³)	:	0.89
Void Ratio	:	1.783	Void Ratio	:	0.9723

Specimen Details			
Description	Height (mm)	:	20.49
Grey CLAY with occasional fibrous organic matter	Diameter (mm)	:	75.15
	Particle Density (Mg/m³) (assumed)	:	1.75
	Swelling Pressure (kPa)	:	NA

Test Results		
Pressure Range (kPa)	Mv (m²/MN)	Cv (m²/yr)
0 - 50	1.7	5.0
50 - 100	1.2	1.2
100 - 200	0.88	0.90
200 - 400	0.61	0.58
400 - 200	0.062	2.0
200 - 100	0.18	1.4

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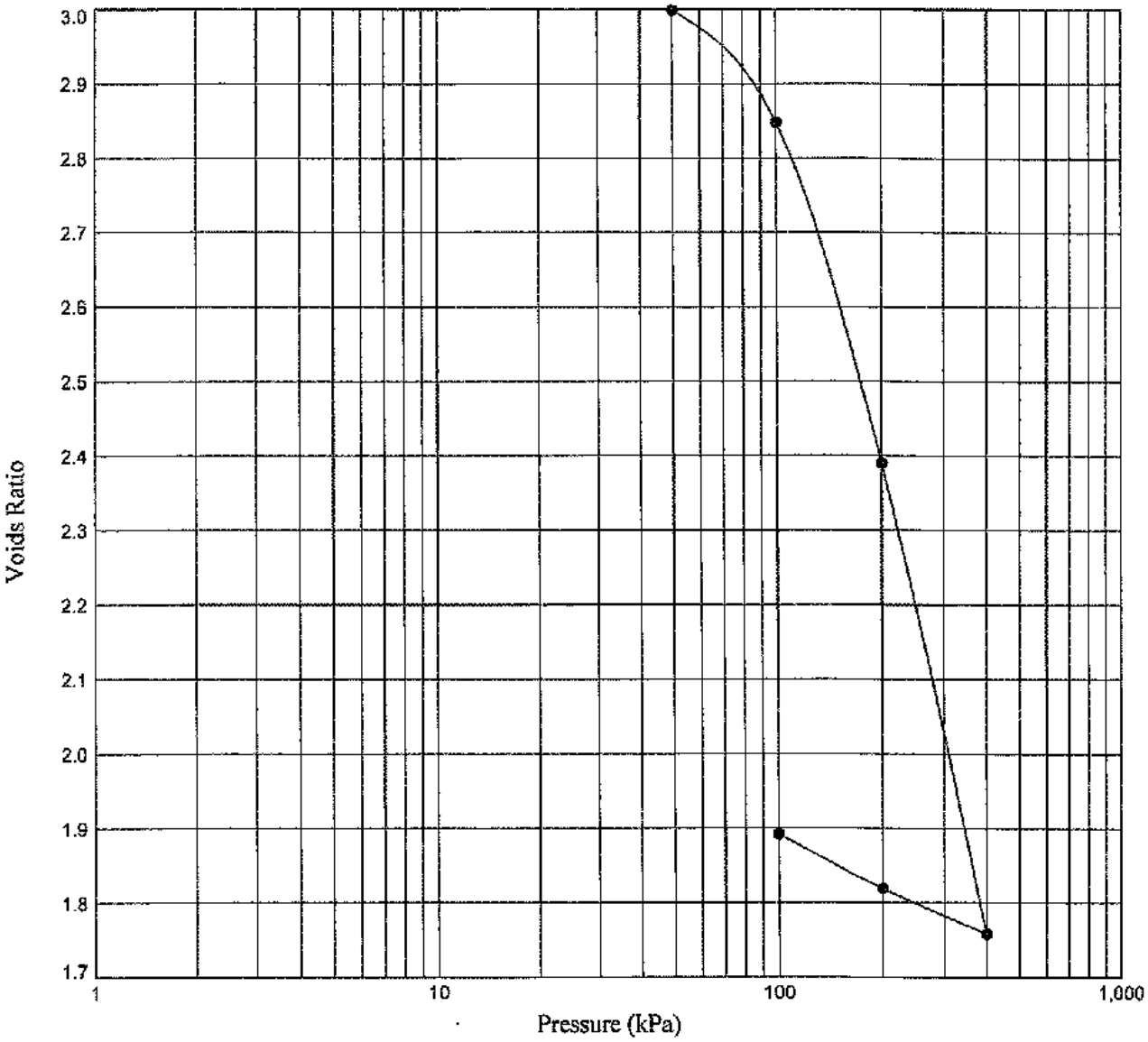
ONE DIMENSIONAL CONSOLIDATION TEST

In accordance with BS1377:Part 5:1990

Borehole : **BH40** Sample Ref: **23** Sample Type: **P** Depth (m): **10.97**



Initial Specimen Condition			Final Specimen Condition		
Moisture Content (%)	:	266	Moisture Content (%)	:	193
Bulk Density (Mg/m^3)	:	1.05	Bulk Density (Mg/m^3)	:	1.21
Dry Density (Mg/m^3)	:	0.29	Dry Density (Mg/m^3)	:	0.41
Void Ratio	:	3.175	Void Ratio	:	1.892

Specimen Details			
Description	Height (mm)	:	19.29
Dark brown fibrous PEAT	Diameter (mm)	:	75.01
	Particle Density (Mg/m^3) (assumed)	:	1.20
	Swelling Pressure (kPa)	:	NA

Test Results		
Pressure Range (kPa)	Mv (m^2/MN)	Cv (m^2/yr)
0 - 50	0.84	40
50 - 100	0.76	33
100 - 200	1.2	21
200 - 400	0.93	8.6
400 - 200	0.11	4.5
200 - 100	0.26	6.7

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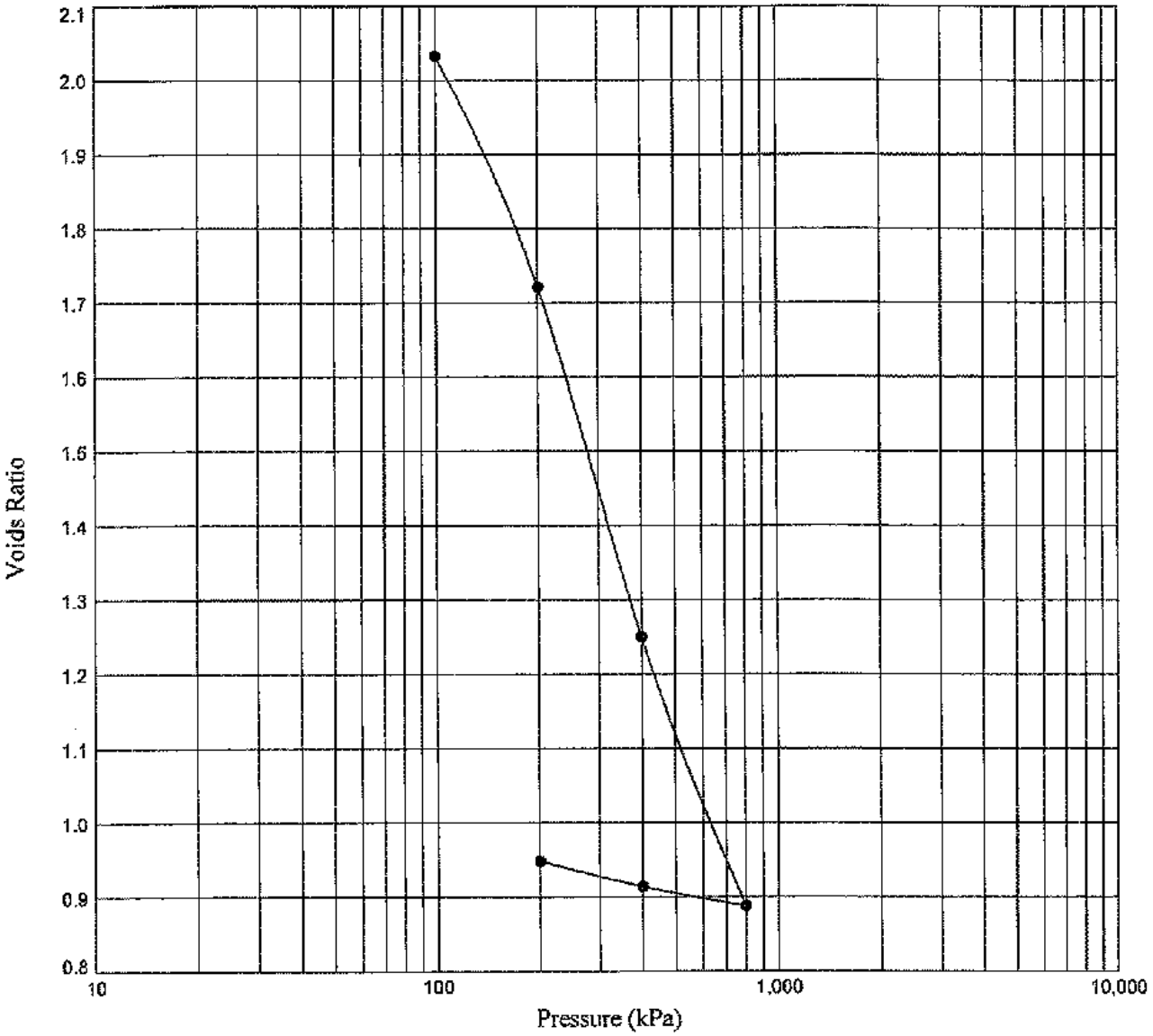
ONE DIMENSIONAL CONSOLIDATION TEST

In accordance with BS1377:Part 5:1990

Borehole : **BH40** Sample Ref: **24** Sample Type: **P** Depth (m): **11.50**



Initial Specimen Condition			Final Specimen Condition		
Moisture Content (%)	:	166	Moisture Content (%)	:	89
Bulk Density (Mg/m³)	:	1.12	Bulk Density (Mg/m³)	:	1.46
Dry Density (Mg/m³)	:	0.42	Dry Density (Mg/m³)	:	0.77
Void Ratio	:	2.547	Void Ratio	:	0.9479

Specimen Details			
Description	Height (mm)	:	21.34
Black amorphous PEAT	Diameter (mm)	:	75.10
	Particle Density (Mg/m³) (assumed)	:	1.50
	Swelling Pressure (kPa)	:	NA

Test Results		
Pressure Range (kPa)	Mv (m²/MN)	Cv (m²/yr)
0 - 100	**1.4**	**72**
100 - 200	**1.0**	**42**
200 - 400	**0.87**	**12**
400 - 800	**0.40**	**3.4**
800 - 400	**0.034**	**9.1**
400 - 200	**0.090**	**12**

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SUMMARY OF LABORATORY HAND PENETROMETER & VANE TEST RESULTS

Hole Reference	Sample Ref	Sample Type	Sample Depth (m)	Moisture Content (%)	Vane Type	Average Reading (kPa)	Sample Description
BH7	13	P	3.85	108	HVP	16	Grey organic CLAY
BH7	13	P	4.70	276	HVP	50	Dark brown fibrous PEAT
BH7	14	P	4.90	91	HVP	15	Grey organic CLAY
BH7	14	P	5.65	472	HVP	19	Dark brown fibrous PEAT
BH7	15	P	6.00	430	HVP	11	Dark brown fibrous PEAT
BH7	15	P	6.63	388	HVP	25	Dark brown fibrous PEAT
BH7	16	P	7.00	454	HVP	10	Dark brown fibrous PEAT
BH7	16	P	7.50	452	HVP	11	Black fibrous PEAT

Key : HVP = Hand Vane (Peak), HVR = Hand Vane (Remoulded), PP = Pocket Penetrometer.

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Contract:

Sizewell C Supplementary Investigation

SUMMARY OF LABORATORY HAND PENETROMETER & VANE TEST RESULTS

Hole Reference	Sample Ref	Sample Type	Sample Depth (m)	Moisture Content (%)	Vane Type	Average Reading (kPa)	Sample Description
BH7	16	P	7.65	389	HVP	8	Dark brown fibrous PEAT
BH7	17	P	8.20	449	HVP	12	Dark brown fibrous PEAT
BH36	8	P	3.10	401	HVP	37	Dark brown fibrous PEAT
BH36	9	P	4.60	585	HVP	22	Dark brown fibrous PEAT
BH36	10	P	5.03	372	HVP	4	Dark brown fibrous PEAT
BH36	10	P	5.90	485	HVP	8	Dark brown fibrous PEAT
BH36	21	P	7.95	539	HVP	17	Black fibrous PEAT
BH39	16	P	6.15	95	HVP	40	Grey CLAY with some fibrous organic matter

Key : HVP = Hand Vane (Peak), HVR = Hand Vane (Remoulded), PP = Pocket Penetrometer.

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Contract:

Sizewell C Supplementary Investigation

SUMMARY OF LABORATORY HAND PENETROMETER & VANE TEST RESULTS

Hole Reference	Sample Ref	Sample Type	Sample Depth (m)	Moisture Content (%)	Vane Type	Average Reading (kPa)	Sample Description
BH39	16	P	6.96	78	HVP	59	Grey CLAY with occasional fibrous organic matter
BH39	17	P	7.10	286	HVP	51	Dark brown fibrous PEAT
BH39	17	P	7.87	308	HVP	86	Black fibrous PEAT
BH39	20	P	8.60	299	HVP	110	Black amorphous PEAT
BH39	20	P	9.25	31	HVP	65	Grey silty SAND with occasional organic matter
BH40	20	P	7.53	292	HVP	141	Dark brown fibrous PEAT
BH40	20	P	8.40	44	HVP	50	Grey CLAY with occasional fibrous organic matter
BH40	21	P	8.55	73	HVP	24	Grey CLAY with occasional fibrous organic matter

Key : HVP = Hand Vane (Peak), HVR = Hand Vane (Remoulded), PP = Pocket Penetrometer.

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SUMMARY OF LABORATORY HAND PENETROMETER & VANE TEST RESULTS

Hole Reference	Sample Ref	Sample Type	Sample Depth (m)	Moisture Content (%)	Vane Type	Average Reading (kPa)	Sample Description
BH40	21	P	9.05	52	HVP	25	Grey CLAY with occasional fibrous organic matter
BH40	22	P	9.37	87	HVP	31	Dark brown fibrous PEAT with pockets of grey clay
BH40	22	P	10.20	197	HVP	105	Dark brown fibrous PEAT
BH40	23	P	11.20	219	HVP	83	Black amorphous PEAT

Key : HVP = Hand Vane (Peak), HVR = Hand Vane (Remoulded), PP = Pocket Penetrometer.

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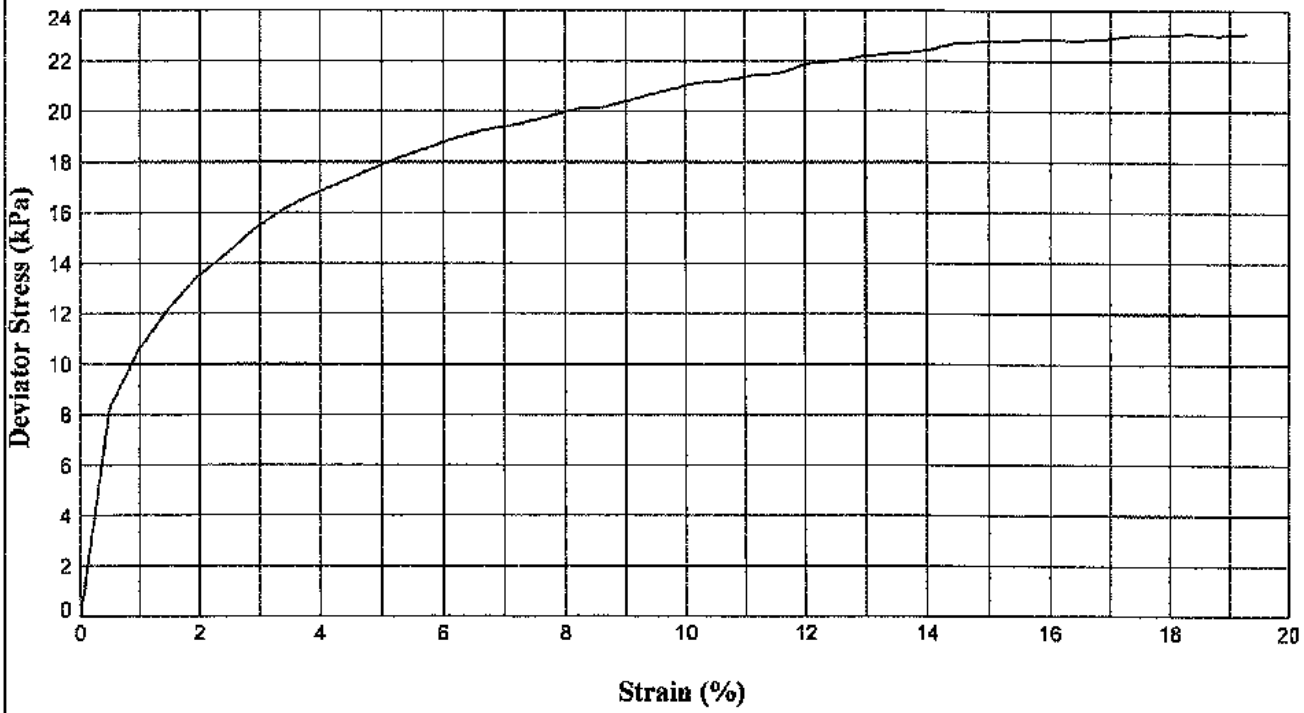
UNCONSOLIDATED QUICK UNDRAINED (SINGLE STAGE) TRIAXIAL COMPRESSION TEST

In accordance with BS1377:Part 7:1990, Clause 8

Borehole : **BH7** Sample Ref: **14** Sample Type: **P** Depth (m): **4.85**

Description : **Grey organic CLAY**

STAGE NUMBER			1	2	3
SAMPLE DETAILS	Sample Condition		Undisturbed		
	Orientation of sample		Vertical		
	Diameter	(mm)	99.25		
	Height	(mm)	207.33		
	Moisture Content	(%)	91		
	Bulk Density	(Mg/m^3)	1.49		
	Dry Density	(Mg/m^3)	0.78		
TEST DETAILS	Membrane Thickness	(mm)	0.32		
	Rate of Axial Displacement	(%/min)	1.21		
	Cell Pressure	(kPa)	50		
	Membrane Correction	(kPa)	1.15		
	Corrected Deviator Stress	(kPa)	22		
	Undrained Shear Strength	(kPa)	11		
	Strain at Failure	(%)	18.3		
	Mode of Failure		Plastic		



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Job No: **722201**

Sizewell C Supplementary Investigation

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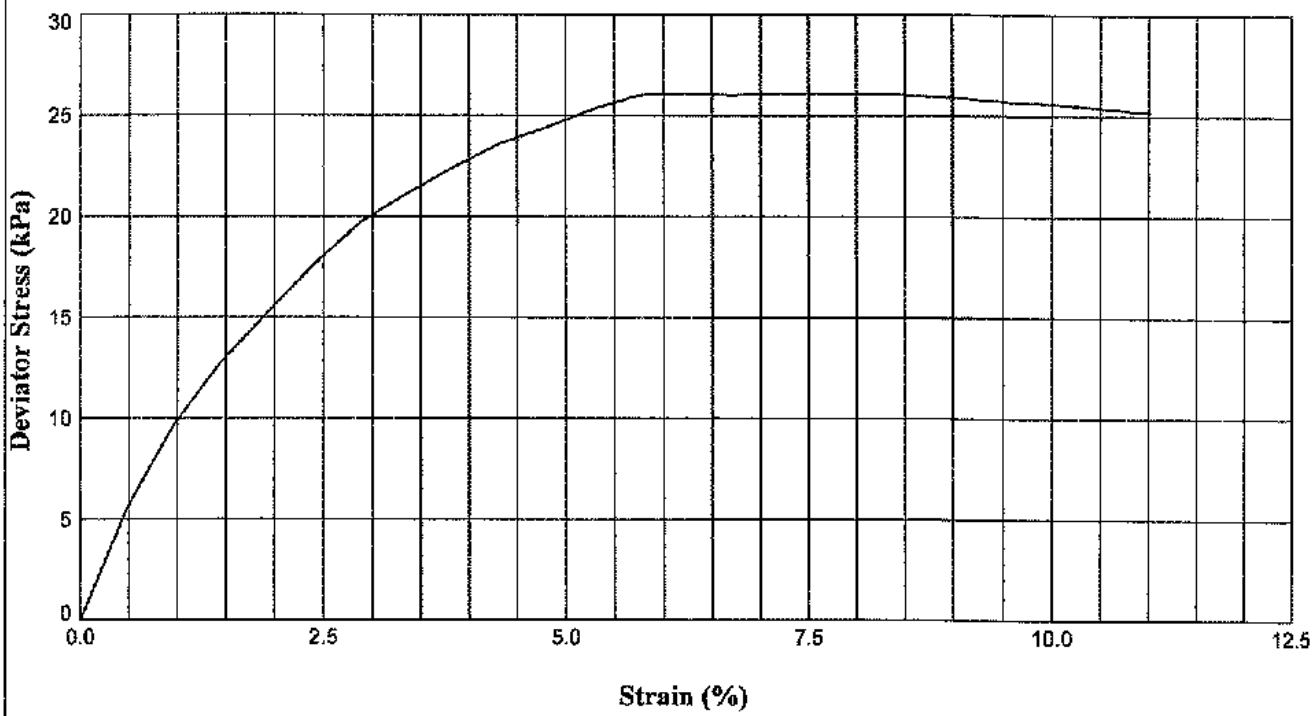
UNCONSOLIDATED QUICK UNDRAINED (SINGLE STAGE) TRIAXIAL COMPRESSION TEST

In accordance with BS1377:Part 7:1990, Clause 8

Borehole : **BH7** Sample Ref: **15** Sample Type: **P** Depth (m): **6.00**

Description : **Dark brown fibrous PEAT**

STAGE NUMBER			1	2	3
SAMPLE DETAILS	Sample Condition		Undisturbed		
	Orientation of sample		Vertical		
	Diameter	(mm)	100.32		
	Height	(mm)	208.67		
	Moisture Content	(%)	430		
	Bulk Density	(Mg/m^3)	1.08		
	Dry Density	(Mg/m^3)	0.20		
TEST DETAILS	Membrane Thickness	(mm)	0.30		
	Rate of Axial Displacement	(%/min)	1.20		
	Cell Pressure	(kPa)	75		
	Membrane Correction	(kPa)	0.47		
	Corrected Deviator Stress	(kPa)	26		
	Undrained Shear Strength	(kPa)	13		
	Strain at Failure	(%)	6.2		
	Mode of Failure		Compound		



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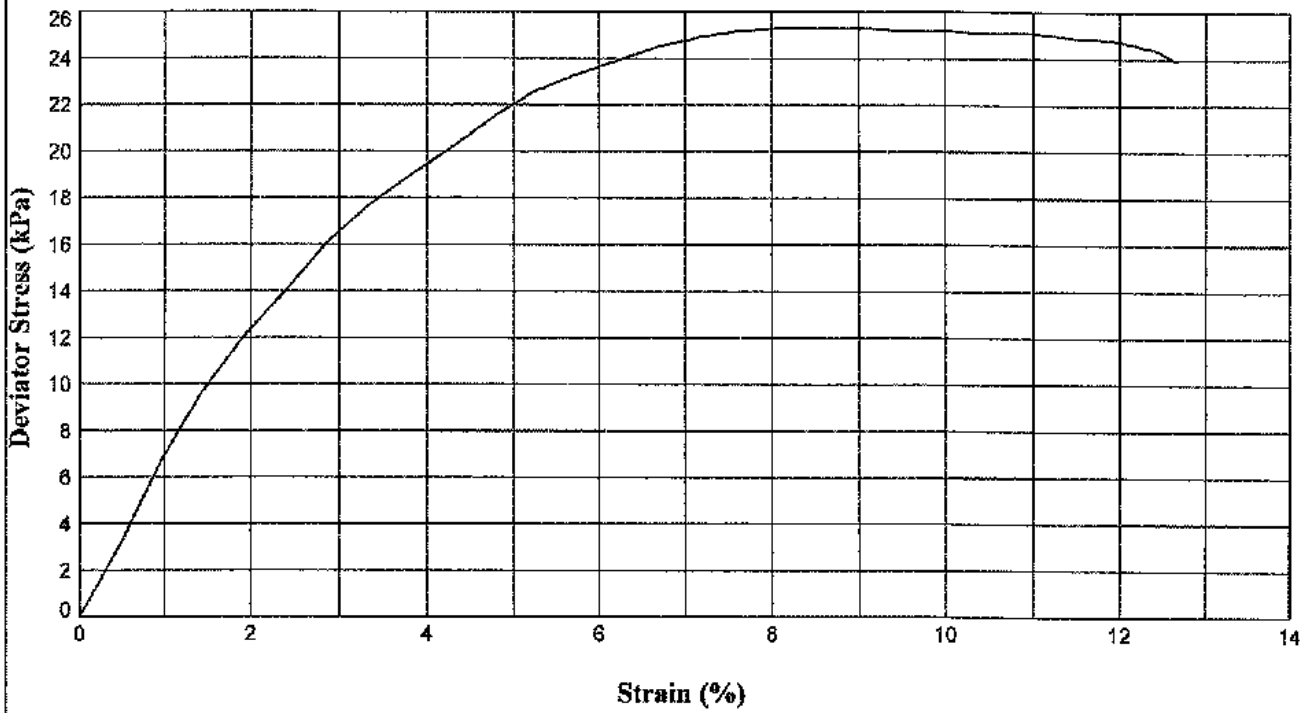
UNCONSOLIDATED QUICK UNDRAINED (SINGLE STAGE) TRIAXIAL COMPRESSION TEST

In accordance with BS1377:Part 7:1990, Clause 8

Borehole : **BH7** Sample Ref: **16** Sample Type: **P** Depth (m): **6.96**

Description : **Dark brown fibrous PEAT**

STAGE NUMBER			1	2	3
SAMPLE DETAILS	Sample Condition		Undisturbed		
	Orientation of sample		Vertical		
	Diameter	(mm)	99.27		
	Height	(mm)	209.33		
	Moisture Content	(%)	454		
	Bulk Density	(Mg/m^3)	1.06		
	Dry Density	(Mg/m^3)	0.19		
TEST DETAILS	Membrane Thickness	(mm)	0.55		
	Rate of Axial Displacement	(%/min)	1.19		
	Cell Pressure	(kPa)	100		
	Membrane Correction	(kPa)	1.08		
	Corrected Deviator Stress	(kPa)	24		
	Undrained Shear Strength	(kPa)	12		
	Strain at Failure	(%)	8.1		
	Mode of Failure		Compound		



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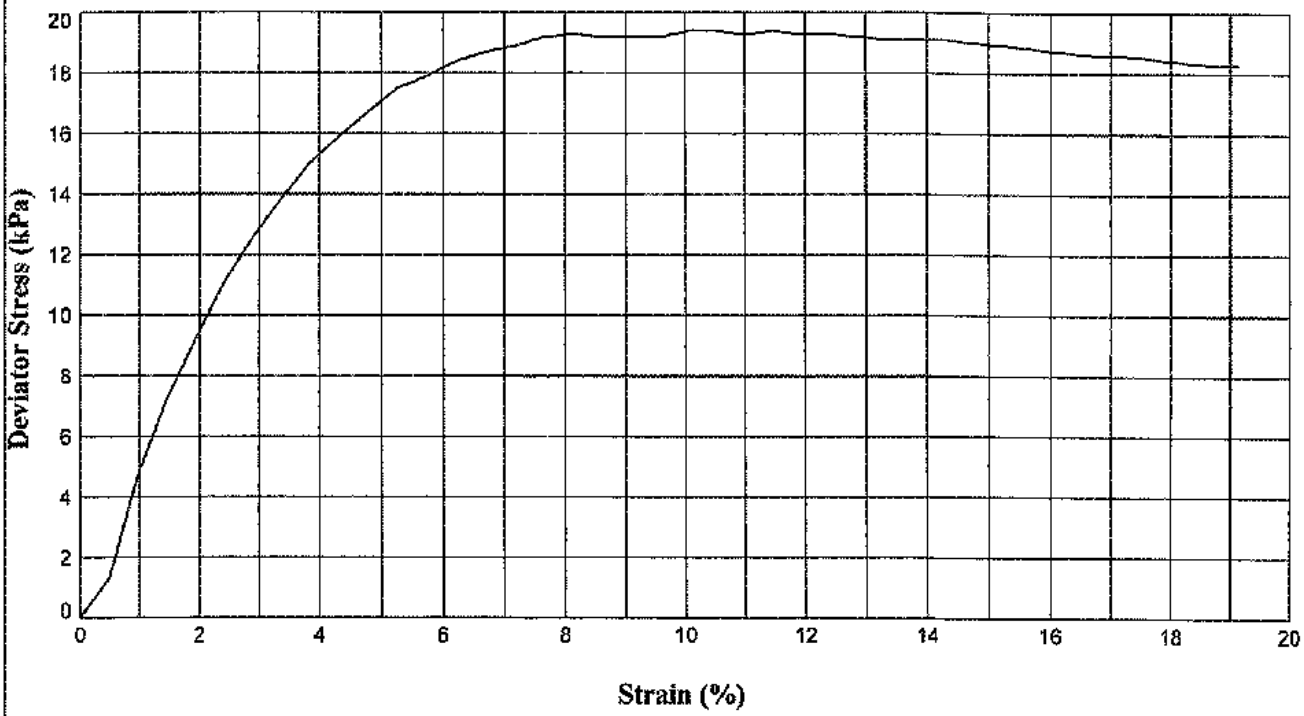
UNCONSOLIDATED QUICK UNDRAINED (SINGLE STAGE) TRIAXIAL COMPRESSION TEST

In accordance with BS1377:Part 7:1990, Clause 8

Borehole : **BH7** Sample Ref: **16** Sample Type: **P** Depth (m): **7.65**

Description : **Dark brown fibrous PEAT**

STAGE NUMBER			1	2	3
SAMPLE DETAILS	Sample Condition		Undisturbed		
	Orientation of sample		Vertical		
	Diameter	(mm)	99.23		
	Height	(mm)	209.00		
	Moisture Content	(%)	389		
	Bulk Density	(Mg/m^3)	1.08		
	Dry Density	(Mg/m^3)	0.22		
TEST DETAILS	Membrane Thickness	(mm)	0.31		
	Rate of Axial Displacement	(%/min)	1.20		
	Cell Pressure	(kPa)	125		
	Membrane Correction	(kPa)	0.58		
	Corrected Deviator Stress	(kPa)	19		
	Undrained Shear Strength	(kPa)	9		
	Strain at Failure	(%)	7.7		
	Mode of Failure		Compound		



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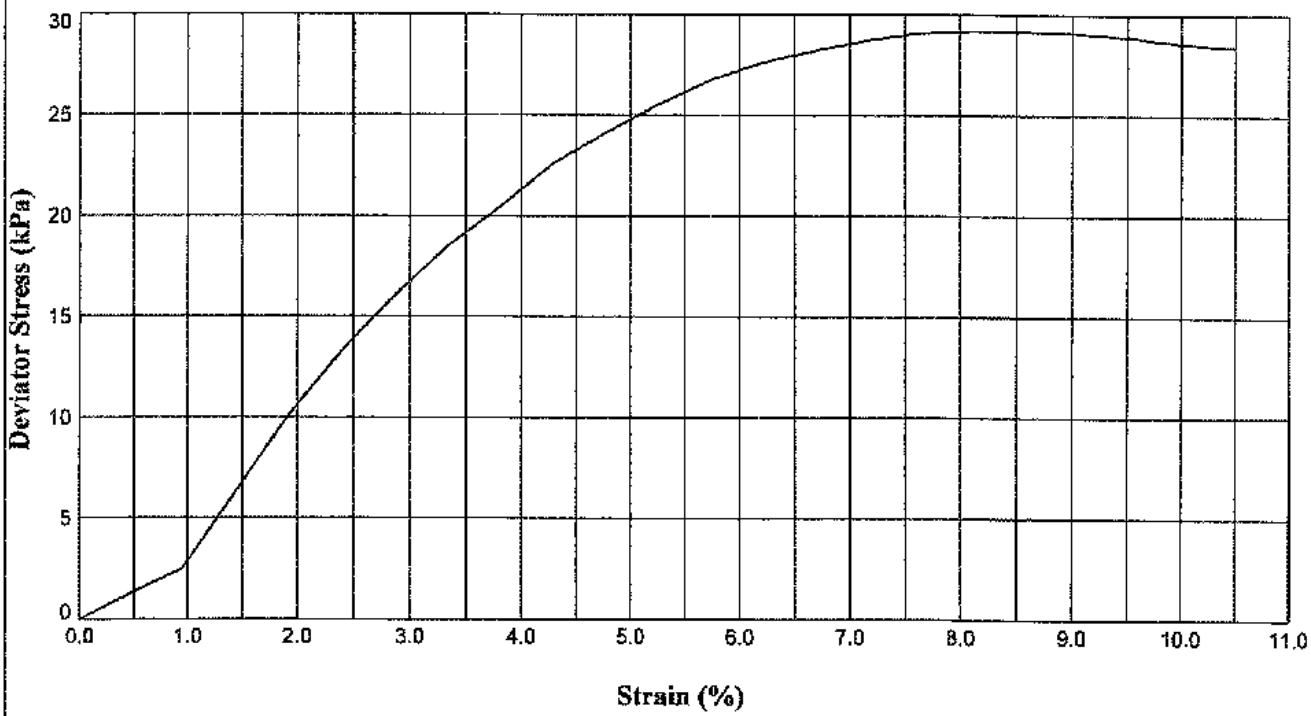
UNCONSOLIDATED QUICK UNDRAINED (SINGLE STAGE) TRIAXIAL COMPRESSION TEST

In accordance with BS1377:Part 7:1990, Clause 8

Borehole : **BH7** Sample Ref: **17** Sample Type: **P** Depth (m): **8.00**

Description : **Dark brown fibrous PEAT**

STAGE NUMBER			1	2	3
SAMPLE DETAILS	Sample Condition		Undisturbed		
	Orientation of sample		Vertical		
	Diameter	(mm)	100.08		
	Height	(mm)	209.67		
	Moisture Content	(%)	449		
	Bulk Density	(Mg/m^3)	1.05		
	Dry Density	(Mg/m^3)	0.19		
TEST DETAILS	Membrane Thickness	(mm)	0.30		
	Rate of Axial Displacement	(%/min)	1.19		
	Cell Pressure	(kPa)	150		
	Membrane Correction	(kPa)	0.58		
	Corrected Deviator Stress	(kPa)	29		
	Undrained Shear Strength	(kPa)	14		
	Strain at Failure	(%)	8.1		
	Mode of Failure		Compound		



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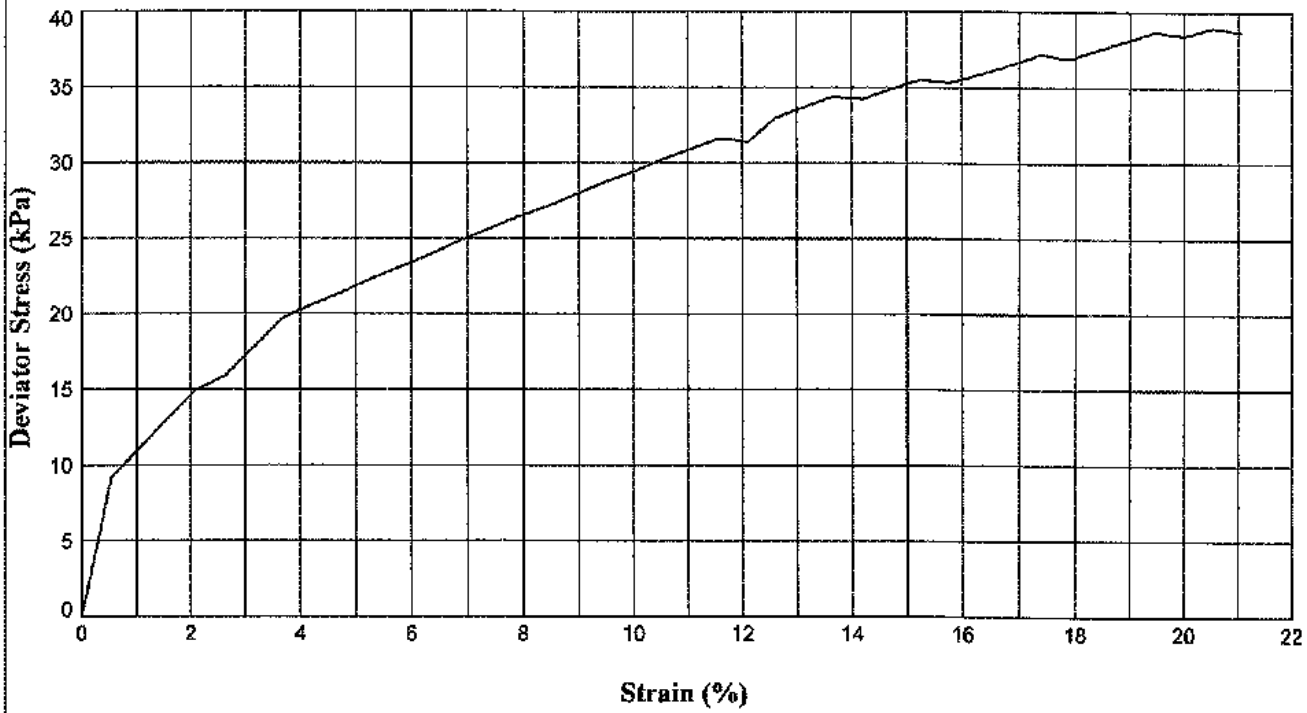
UNCONSOLIDATED QUICK UNDRAINED (SINGLE STAGE) TRIAXIAL COMPRESSION TEST

In accordance with BS1377:Part 7:1990, Clause 8

Borehole : **BH36** Sample Ref: **7** Sample Type: **P** Depth (m): **2.09**

Description : **Grey CLAY with occasional fibrous organic matter**

STAGE NUMBER			1	2	3
SAMPLE DETAILS	Sample Condition		Undisturbed		
	Orientation of sample		Vertical		
	Diameter	(mm)	38.00		
	Height	(mm)	76.00		
	Moisture Content	(%)	85		
	Bulk Density	(Mg/m^3)	1.48		
	Dry Density	(Mg/m^3)	0.80		
TEST DETAILS	Membrane Thickness	(mm)	0.28		
	Rate of Axial Displacement	(%/min)	1.32		
	Cell Pressure	(kPa)	25		
	Membrane Correction	(kPa)	2.87		
	Corrected Deviator Stress	(kPa)	36		
	Undrained Shear Strength	(kPa)	18		
	Strain at Failure	(%)	20.5		
	Mode of Failure		Plastic		



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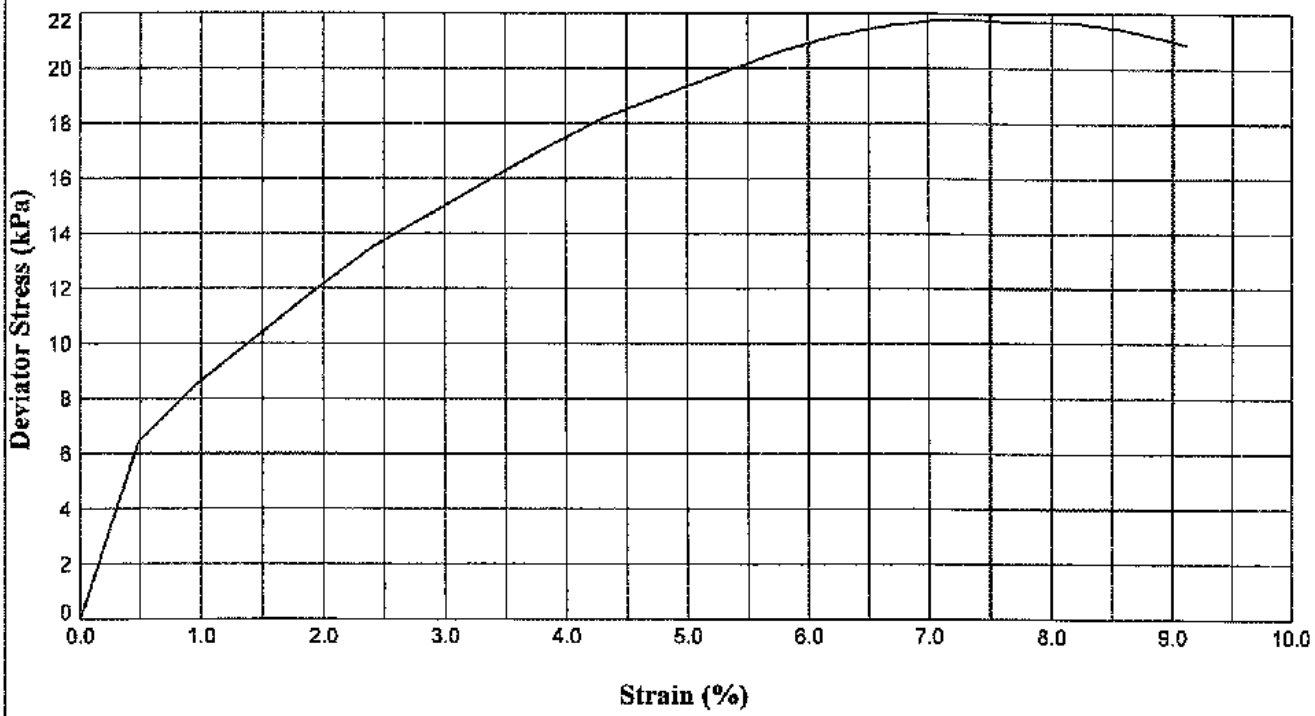
UNCONSOLIDATED QUICK UNDRAINED (SINGLE STAGE) TRIAXIAL COMPRESSION TEST

In accordance with BS1377:Part 7:1990, Clause 8

Borehole : **BH36** Sample Ref: **9** Sample Type: **P** Depth (m): **4.14**

Description : **Dark brown fibrous PEAT**

STAGE NUMBER			1	2	3
SAMPLE DETAILS	Sample Condition		Undisturbed		
	Orientation of sample		Vertical		
	Diameter	(mm)	99.67		
	Height	(mm)	208.67		
	Moisture Content	(%)	529		
	Bulk Density	(Mg/m^3)	1.01		
	Dry Density	(Mg/m^3)	0.16		
TEST DETAILS	Membrane Thickness	(mm)	0.34		
	Rate of Axial Displacement	(%/min)	0.96		
	Cell Pressure	(kPa)	50		
	Membrane Correction	(kPa)	0.60		
	Corrected Deviator Stress	(kPa)	21		
	Undrained Shear Strength	(kPa)	11		
	Strain at Failure	(%)	7.2		
	Mode of Failure		Compound		



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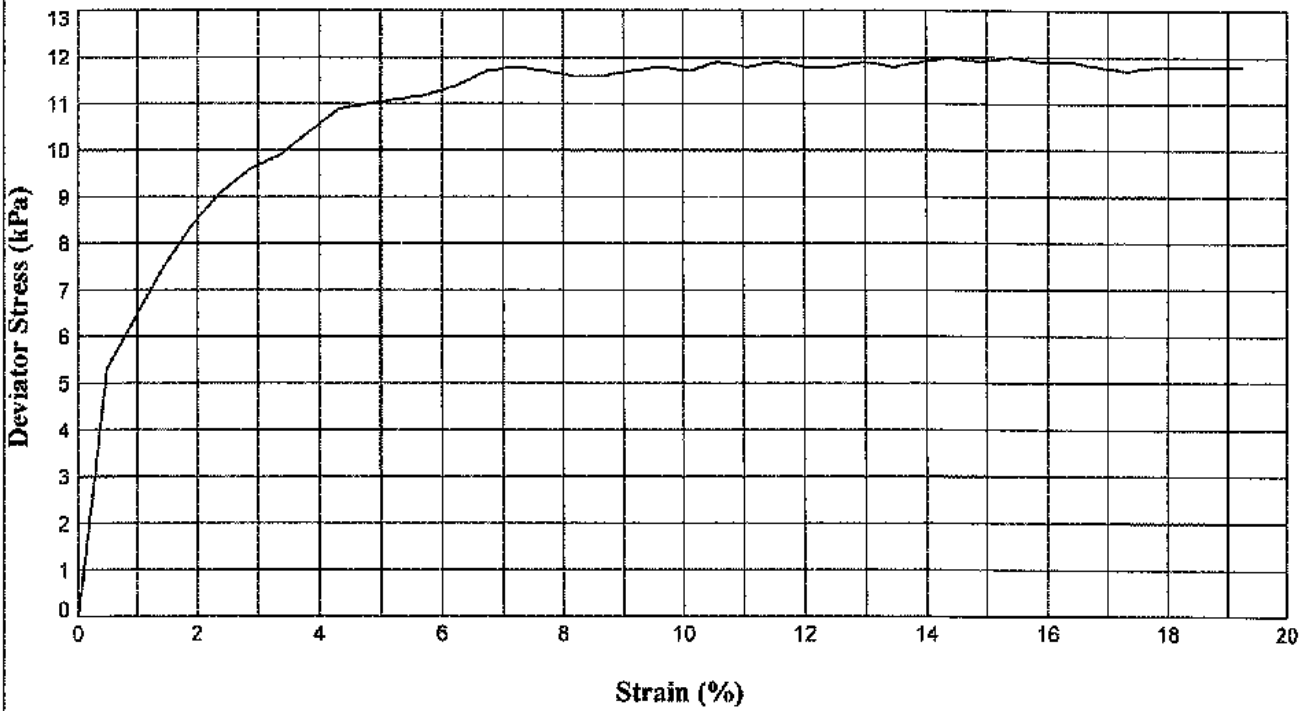
UNCONSOLIDATED QUICK UNDRAINED (SINGLE STAGE) TRIAXIAL COMPRESSION TEST

In accordance with BS1377:Part 7:1990, Clause 8

Borehole : **BH36** Sample Ref: **10** Sample Type: **P** Depth (m): **5.26**

Description : **Dark brown fibrous PEAT**

STAGE NUMBER			1	2	3
SAMPLE DETAILS	Sample Condition		Undisturbed		
	Orientation of sample		Vertical		
	Diameter	(mm)	99.50		
	Height	(mm)	208.00		
	Moisture Content	(%)	475		
	Bulk Density	(Mg/m^3)	1.07		
	Dry Density	(Mg/m^3)	0.19		
TEST DETAILS	Membrane Thickness	(mm)	0.34		
	Rate of Axial Displacement	(%/min)	1.20		
	Cell Pressure	(kPa)	75		
	Membrane Correction	(kPa)	0.61		
	Corrected Deviator Stress	(kPa)	11		
	Undrained Shear Strength	(kPa)	6		
	Strain at Failure	(%)	7.2		
	Mode of Failure		Compound		



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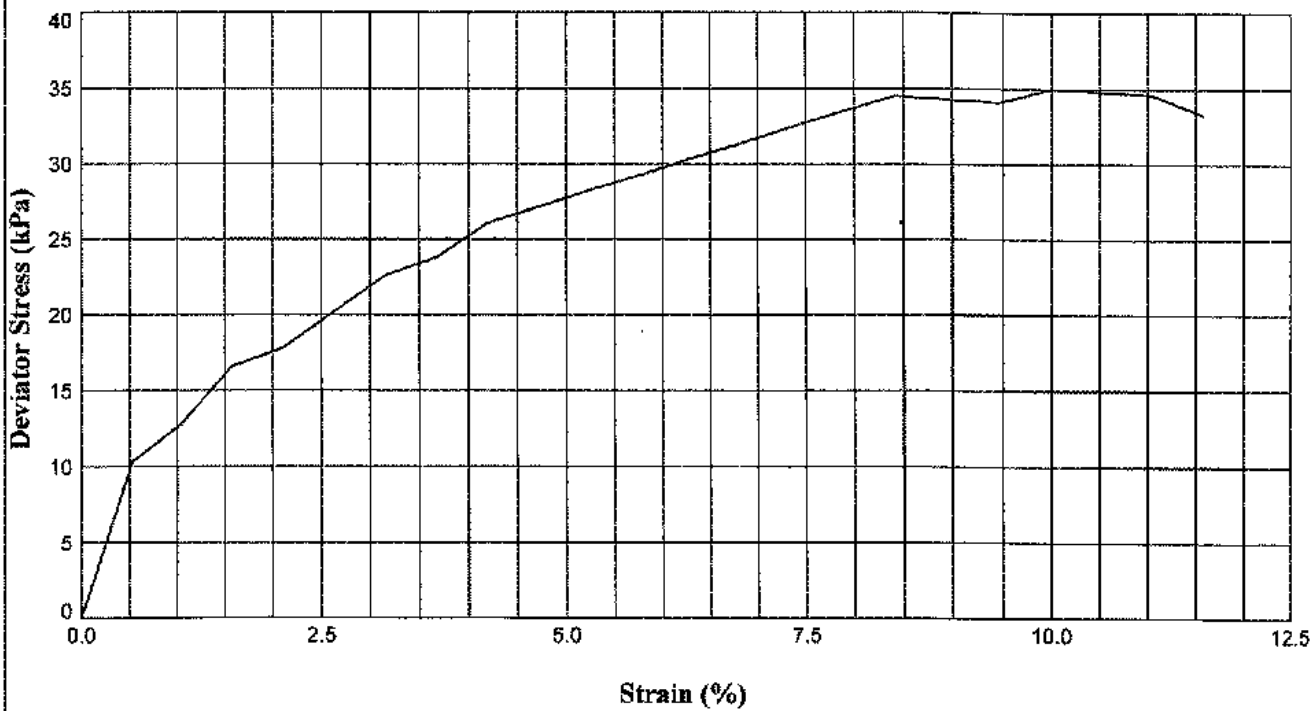
UNCONSOLIDATED QUICK UNDRAINED (SINGLE STAGE) TRIAXIAL COMPRESSION TEST

In accordance with BS1377:Part 7:1990. Clause 8

Borehole : **BH36** Sample Ref: **11** Sample Type: **P** Depth (m): **6.10**

Description : **Black amorphous PEAT**

STAGE NUMBER			1	2	3
SAMPLE DETAILS	Sample Condition		Undisturbed		
	Orientation of sample		Vertical		
	Diameter	(mm)	38.00		
	Height	(mm)	76.00		
	Moisture Content	(%)	388		
	Bulk Density	(Mg/m^3)	0.98		
	Dry Density	(Mg/m^3)	0.20		
TEST DETAILS	Membrane Thickness	(mm)	0.25		
	Rate of Axial Displacement	(%/min)	1.32		
	Cell Pressure	(kPa)	100		
	Membrane Correction	(kPa)	1.52		
	Corrected Deviator Stress	(kPa)	34		
	Undrained Shear Strength	(kPa)	17		
	Strain at Failure	(%)	10.0		
	Mode of Failure		Compound		



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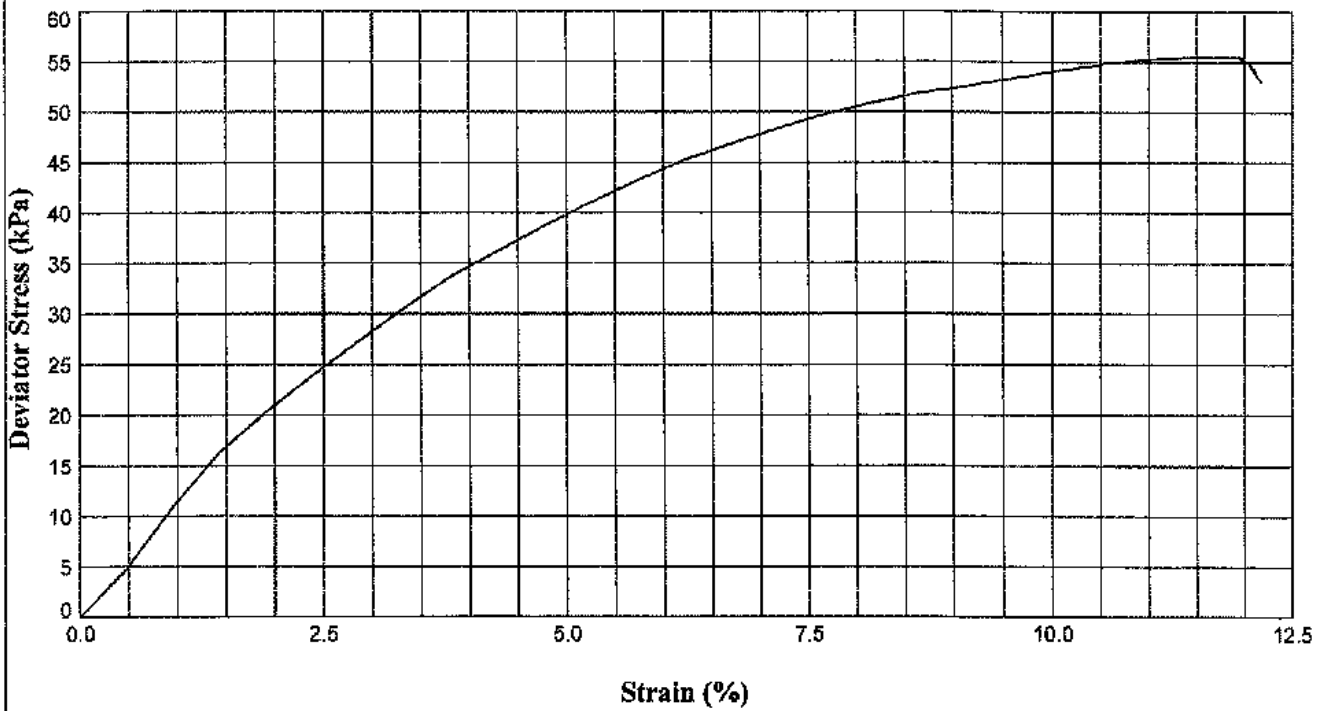
UNCONSOLIDATED QUICK UNDRAINED (SINGLE STAGE) TRIAXIAL COMPRESSION TEST

In accordance with BS1377:Part 7:1990, Clause 8

Borehole : **BH36** Sample Ref: **21** Sample Type: **P** Depth (m): **7.50**

Description : **Dark brown fibrous PEAT**

STAGE NUMBER			1	2	3
SAMPLE DETAILS	Sample Condition		Undisturbed		
	Orientation of sample		Vertical		
	Diameter	(mm)	100.35		
	Height	(mm)	209.33		
	Moisture Content	(%)	445		
	Bulk Density	(Mg/m^3)	1.09		
	Dry Density	(Mg/m^3)	0.20		
TEST DETAILS	Membrane Thickness	(mm)	0.32		
	Rate of Axial Displacement	(%/min)	1.19		
	Cell Pressure	(kPa)	125		
	Membrane Correction	(kPa)	0.81		
	Corrected Deviator Stress	(kPa)	55		
	Undrained Shear Strength	(kPa)	27		
	Strain at Failure	(%)	11.5		
	Mode of Failure		Compound		



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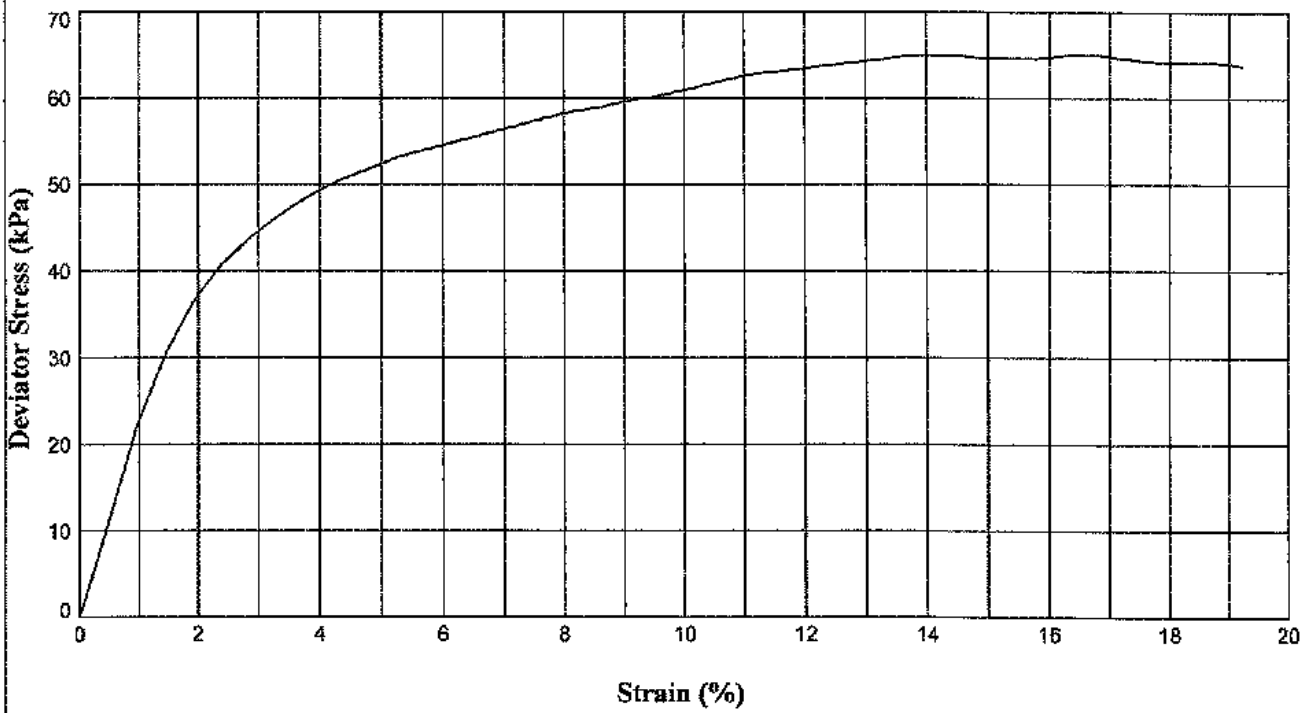
UNCONSOLIDATED QUICK UNDRAINED (SINGLE STAGE) TRIAXIAL COMPRESSION TEST

In accordance with BS1377:Part 7:1990, Clause 8

Borehole : **BH39** Sample Ref: **16** Sample Type: **P** Depth (m): **6.14**

Description : **Grey CLAY with occasional fibrous organic matter**

STAGE NUMBER			1	2	3
SAMPLE DETAILS	Sample Condition		Undisturbed		
	Orientation of sample		Vertical		
	Diameter	(mm)	101.03		
	Height	(mm)	208.00		
	Moisture Content	(%)	99		
	Bulk Density	(Mg/m^3)	1.38		
	Dry Density	(Mg/m^3)	0.69		
TEST DETAILS	Membrane Thickness	(mm)	0.32		
	Rate of Axial Displacement	(%/min)	1.20		
	Cell Pressure	(kPa)	75		
	Membrane Correction	(kPa)	0.92		
	Corrected Deviator Stress	(kPa)	64		
	Undrained Shear Strength	(kPa)	32		
	Strain at Failure	(%)	13.9		
	Mode of Failure		Plastic		



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Job No: **722201**

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STRUCTURAL_SOILS_GINT_LIBRARY.GLB\L - TRIAXIAL TEST - BS VERSION) 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_02) 13/02/09 - 12:28

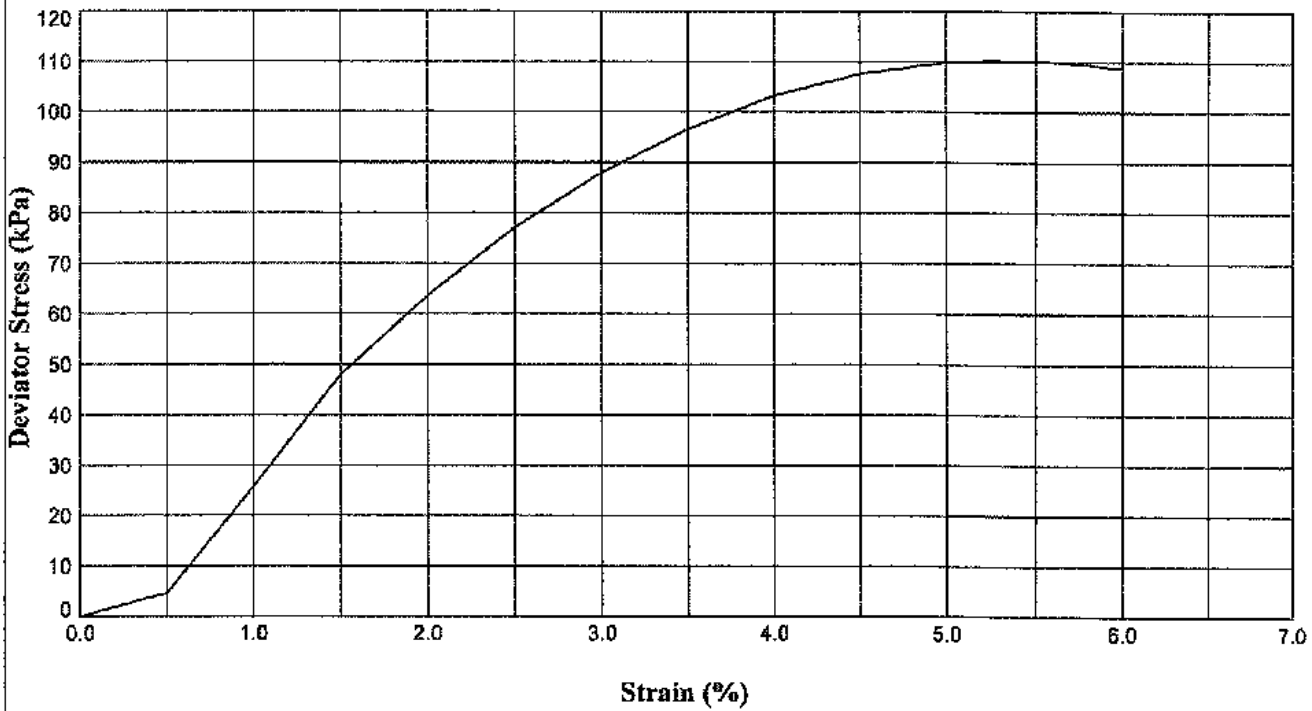
UNCONSOLIDATED QUICK UNDRAINED (SINGLE STAGE) TRIAXIAL COMPRESSION TEST

In accordance with BS1377:Part 7:1990, Clause 8

Borehole : **BH39** Sample Ref: **16** Sample Type: **P** Depth (m): **6.75**

Description : **Grey CLAY with occasional fibrous organic matter**

STAGE NUMBER			1	2	3
SAMPLE DETAILS	Sample Condition		Undisturbed		
	Orientation of sample		Vertical		
	Diameter	(mm)	100.67		
	Height	(mm)	200.00		
	Moisture Content	(%)	100		
	Bulk Density	(Mg/m^3)	1.36		
	Dry Density	(Mg/m^3)	0.68		
TEST DETAILS	Membrane Thickness	(mm)	0.34		
	Rate of Axial Displacement	(%/min)	1.25		
	Cell Pressure	(kPa)	100		
	Membrane Correction	(kPa)	0.47		
	Corrected Deviator Stress	(kPa)	110		
	Undrained Shear Strength	(kPa)	55		
	Strain at Failure	(%)	5.2		
	Mode of Failure		Compound		



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	Contract: **Sizewell C Supplementary Investigation**		Job No: **722201**	

STRUCTURAL_SOILS_GINT_LIBRARY GLB'L - TRIAXIAL TEST - BS VERSION | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION GPJ - v8_02 | 13/02/09 - 12:29

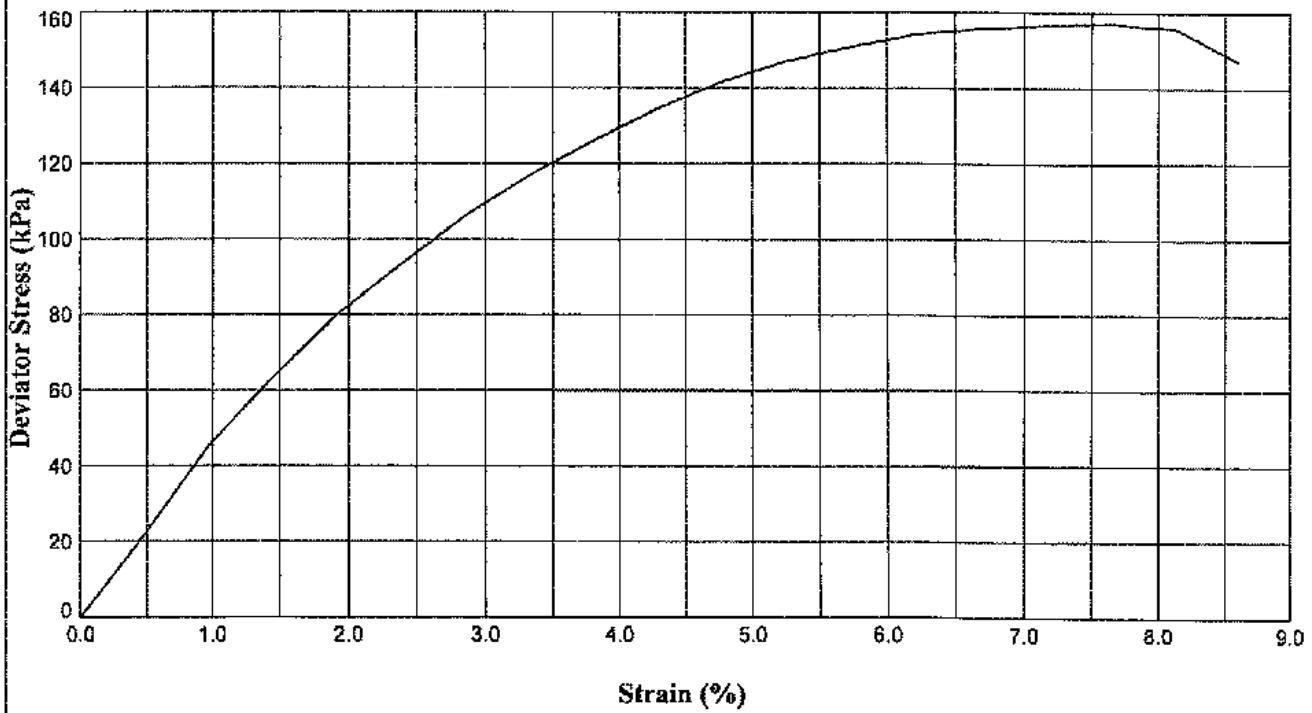
UNCONSOLIDATED QUICK UNDRAINED (SINGLE STAGE) TRIAXIAL COMPRESSION TEST

In accordance with BS1377:Part 7:1990. Clause 8

Borehole : **BH39** Sample Ref: 17 Sample Type: **P** Depth (m): **7.43**

Description : **Dark brown fibrous PEAT**

STAGE NUMBER			1	2	3
SAMPLE DETAILS	Sample Condition		Undisturbed		
	Orientation of sample		Vertical		
	Diameter	(mm)	99.53		
	Height	(mm)	209.00		
	Moisture Content	(%)	303		
	Bulk Density	(Mg/m^3)	1.10		
	Dry Density	(Mg/m^3)	0.27		
TEST DETAILS	Membrane Thickness	(mm)	0.30		
	Rate of Axial Displacement	(%/min)	1.20		
	Cell Pressure	(kPa)	100		
	Membrane Correction	(kPa)	0.56		
	Corrected Deviator Stress	(kPa)	156		
	Undrained Shear Strength	(kPa)	78		
	Strain at Failure	(%)	7.7		
	Mode of Failure		Brittle		



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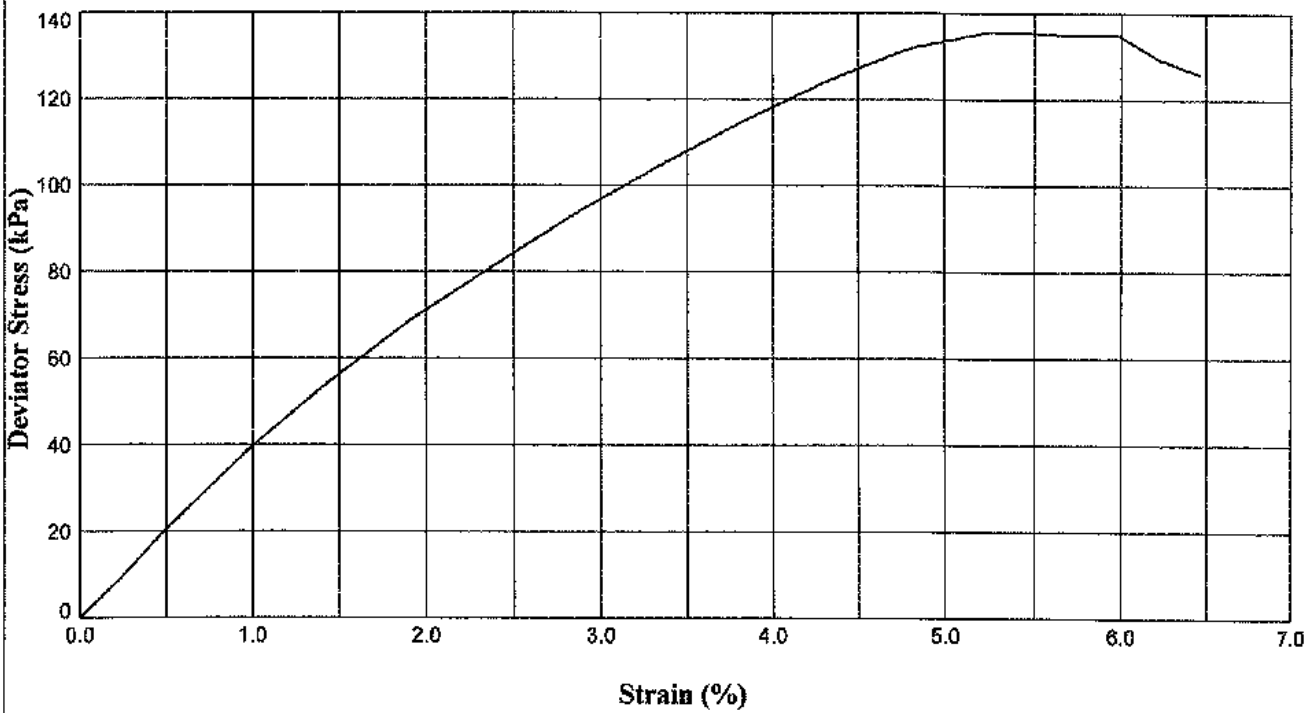
UNCONSOLIDATED QUICK UNDRAINED (SINGLE STAGE) TRIAXIAL COMPRESSION TEST

In accordance with BS1377:Part 7:1990, Clause 8

Borehole : **BH39** Sample Ref: **20** Sample Type: **P** Depth (m): **8.80**

Description : **Black amorphous PEAT**

STAGE NUMBER			1	2	3
SAMPLE DETAILS	Sample Condition		Undisturbed		
	Orientation of sample		Vertical		
	Diameter	(mm)	100.67		
	Height	(mm)	209.00		
	Moisture Content	(%)	252		
	Bulk Density	(Mg/m^3)	1.17		
	Dry Density	(Mg/m^3)	0.33		
TEST DETAILS	Membrane Thickness	(mm)	0.30		
	Rate of Axial Displacement	(%/min)	1.20		
	Cell Pressure	(kPa)	150		
	Membrane Correction	(kPa)	0.42		
	Corrected Deviator Stress	(kPa)	135		
	Undrained Shear Strength	(kPa)	68		
	Strain at Failure	(%)	5.3		
	Mode of Failure		Compound		



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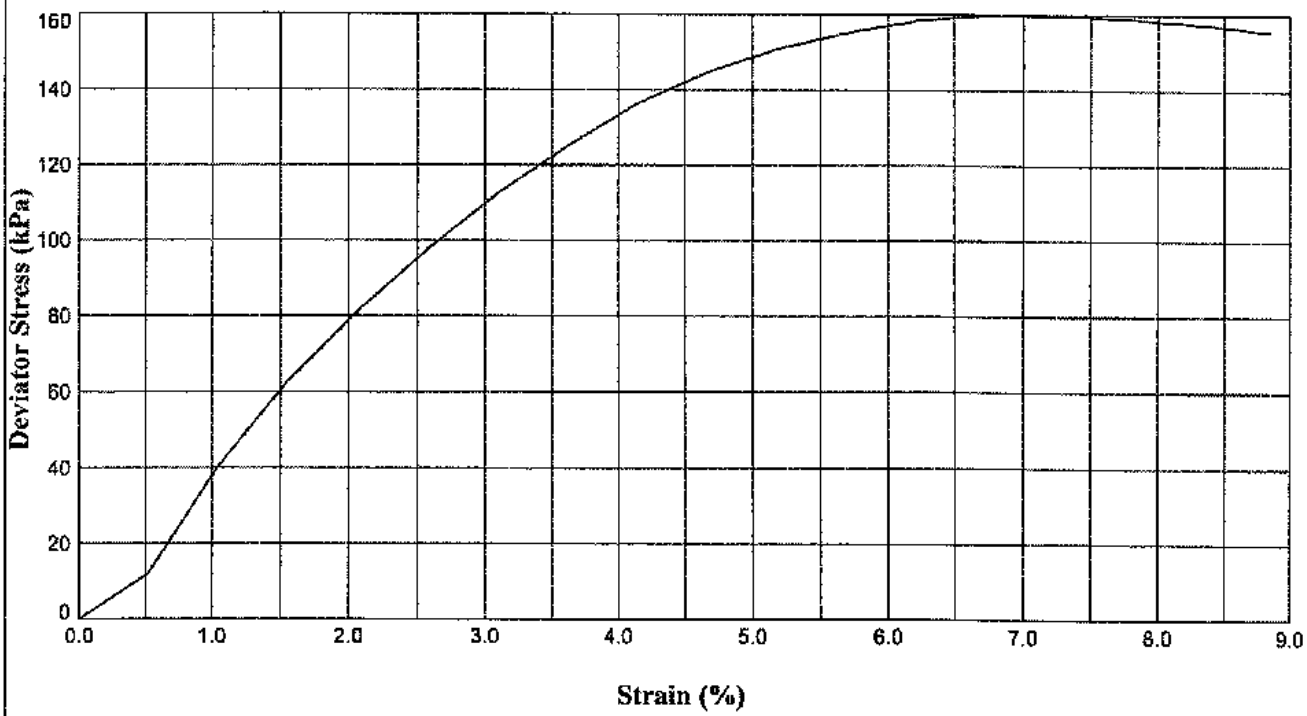
UNCONSOLIDATED QUICK UNDRAINED (SINGLE STAGE) TRIAXIAL COMPRESSION TEST

In accordance with BS1377:Part 7:1990, Clause 8

Borehole : **BH40** Sample Ref: **20** Sample Type: **P** Depth (m): **7.53**

Description : **Dark brown fibrous PEAT**

STAGE NUMBER			1	2	3
SAMPLE DETAILS	Sample Condition		Undisturbed		
	Orientation of sample		Vertical		
	Diameter	(mm)	100.63		
	Height	(mm)	192.17		
	Moisture Content	(%)	215		
	Bulk Density	(Mg/m^3)	1.12		
	Dry Density	(Mg/m^3)	0.36		
TEST DETAILS	Membrane Thickness	(mm)	0.31		
	Rate of Axial Displacement	(%/min)	1.30		
	Cell Pressure	(kPa)	125		
	Membrane Correction	(kPa)	0.52		
	Corrected Deviator Stress	(kPa)	159		
	Undrained Shear Strength	(kPa)	80		
	Strain at Failure	(%)	6.8		
	Mode of Failure		Brittle		



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Contract: **Sizewell C Supplementary Investigation**

Job No: **722201**

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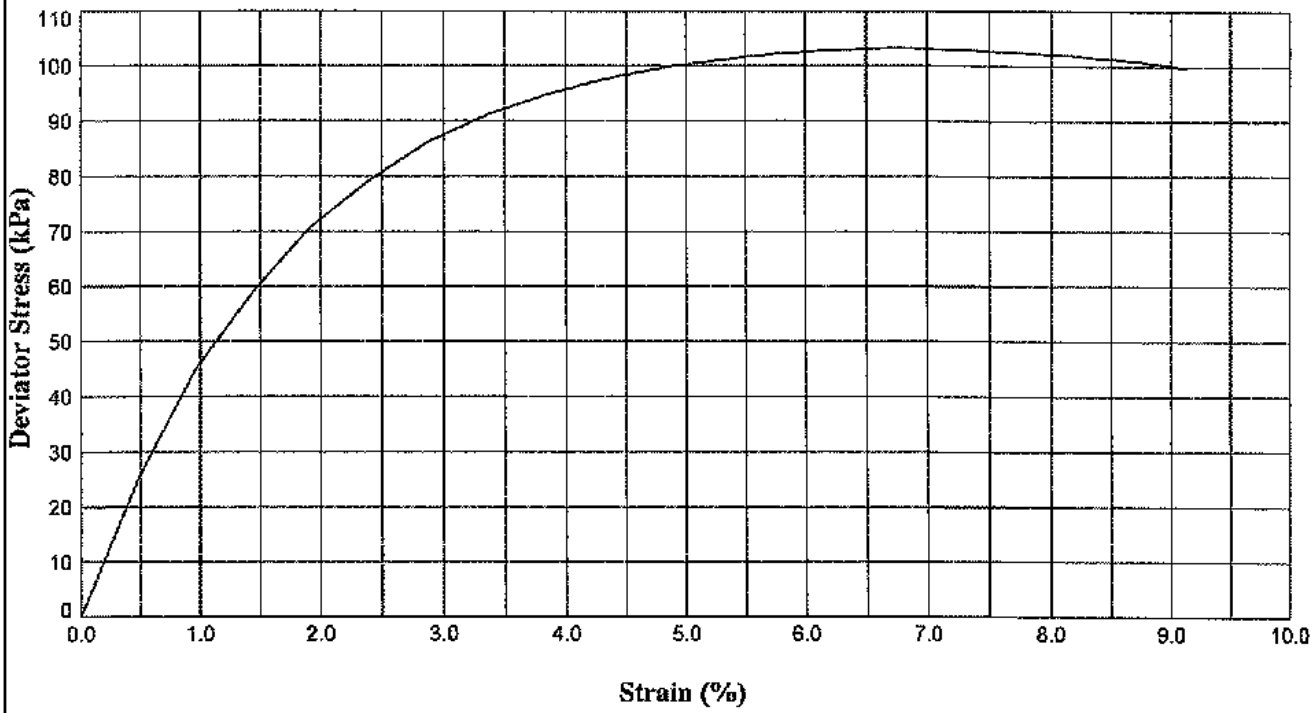
UNCONSOLIDATED QUICK UNDRAINED (SINGLE STAGE) TRIAXIAL COMPRESSION TEST

In accordance with BS1377:Part 7:1990, Clause 8

Borehole : **BH40** Sample Ref: **20** Sample Type: **P** Depth (m): **7.92**

Description : **Grey CLAY with occasional fibrous organic matter**

STAGE NUMBER			1	2	3
SAMPLE DETAILS	Sample Condition		Undisturbed		
	Orientation of sample		Vertical		
	Diameter	(mm)	100.42		
	Height	(mm)	208.00		
	Moisture Content	(%)	68		
	Bulk Density	(Mg/m^3)	1.55		
	Dry Density	(Mg/m^3)	0.92		
TEST DETAILS	Membrane Thickness	(mm)	0.30		
	Rate of Axial Displacement	(%/min)	1.20		
	Cell Pressure	(kPa)	125		
	Membrane Correction	(kPa)	0.50		
	Corrected Deviator Stress	(kPa)	103		
	Undrained Shear Strength	(kPa)	51		
	Strain at Failure	(%)	6.7		
	Mode of Failure		Compound		



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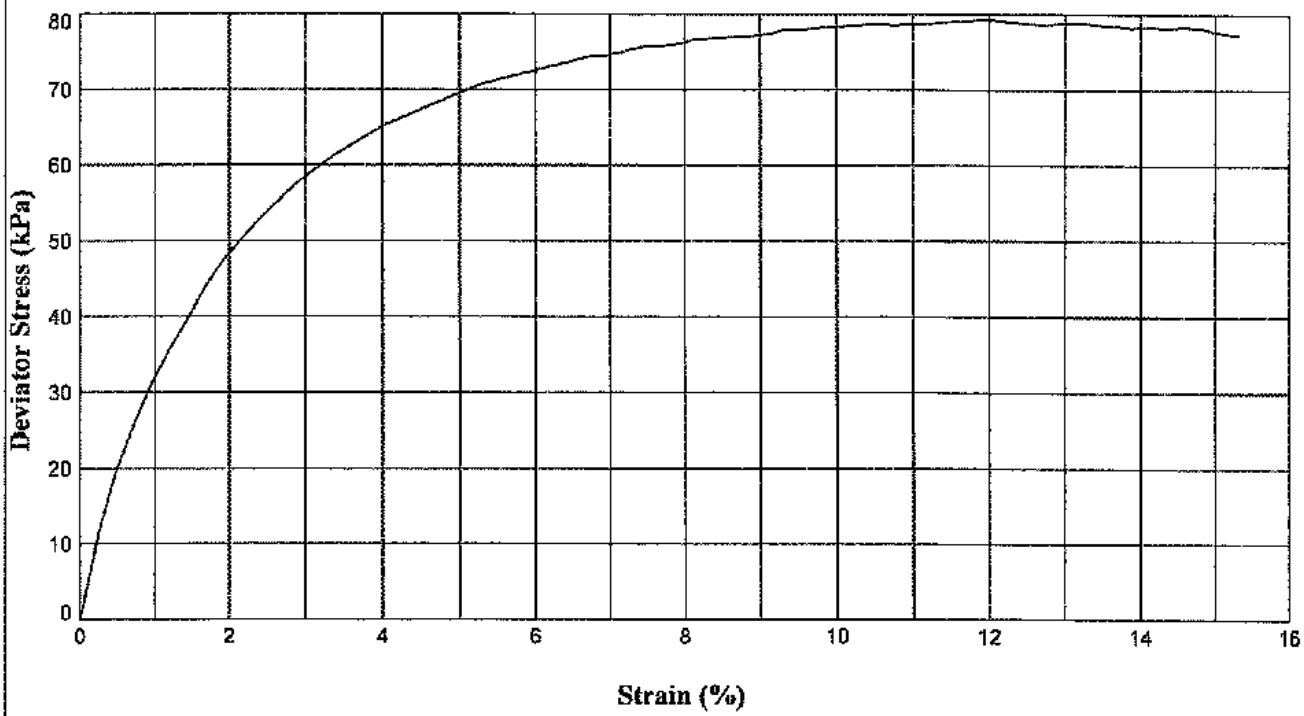
UNCONSOLIDATED QUICK UNDRAINED (SINGLE STAGE) TRIAXIAL COMPRESSION TEST

In accordance with BS1377:Part 7:1990, Clause 8

Borehole : **BH40** Sample Ref: **22** Sample Type: **P** Depth (m): **9.37**

Description : **Dark brown fibrous PEAT with pockets of grey clay**

STAGE NUMBER			1	2	3
SAMPLE DETAILS	Sample Condition		Undisturbed		
	Orientation of sample		Vertical		
	Diameter	(mm)	101.43		
	Height	(mm)	209.00		
	Moisture Content	(%)	174		
	Bulk Density	(Mg/m^3)	1.19		
	Dry Density	(Mg/m^3)	0.43		
TEST DETAILS	Membrane Thickness	(mm)	0.31		
	Rate of Axial Displacement	(%/min)	0.96		
	Cell Pressure	(kPa)	150		
	Membrane Correction	(kPa)	0.80		
	Corrected Deviator Stress	(kPa)	78		
	Undrained Shear Strength	(kPa)	39		
	Strain at Failure	(%)	12.0		
	Mode of Failure		Compound		



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Job No: **722201**

Sizewell C Supplementary Investigation

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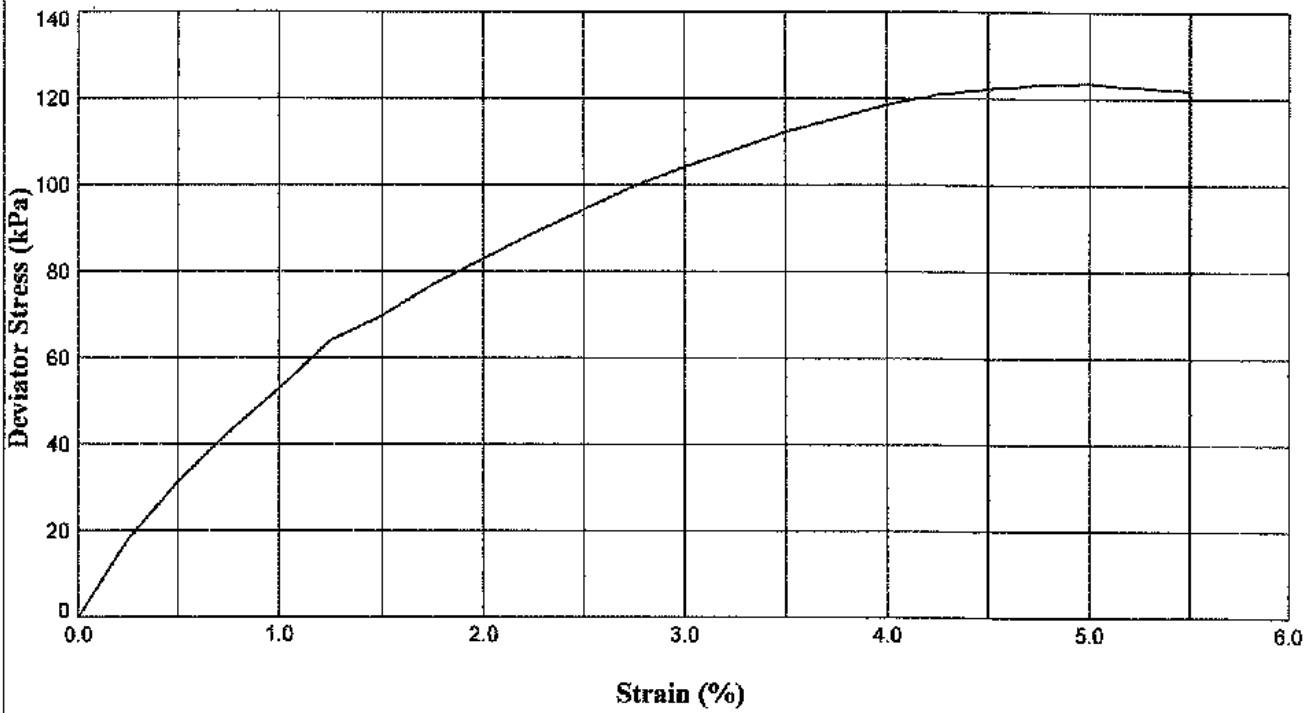
UNCONSOLIDATED QUICK UNDRAINED (SINGLE STAGE) TRIAXIAL COMPRESSION TEST

In accordance with BS1377:Part 7:1990, Clause 8

Borehole : **BH40** Sample Ref: **22** Sample Type: **P** Depth (m): **10.00**

Description : **Black amorphous PEAT**

STAGE NUMBER			1	2	3
SAMPLE DETAILS	Sample Condition		Undisturbed		
	Orientation of sample		Vertical		
	Diameter	(mm)	98.10		
	Height	(mm)	199.67		
	Moisture Content	(%)	171		
	Bulk Density	(Mg/m^3)	1.19		
	Dry Density	(Mg/m^3)	0.44		
TEST DETAILS	Membrane Thickness	(mm)	0.31		
	Rate of Axial Displacement	(%/min)	1.00		
	Cell Pressure	(kPa)	150		
	Membrane Correction	(kPa)	0.41		
	Corrected Deviator Stress	(kPa)	123		
	Undrained Shear Strength	(kPa)	61		
	Strain at Failure	(%)	4.8		
	Mode of Failure		Brittle		



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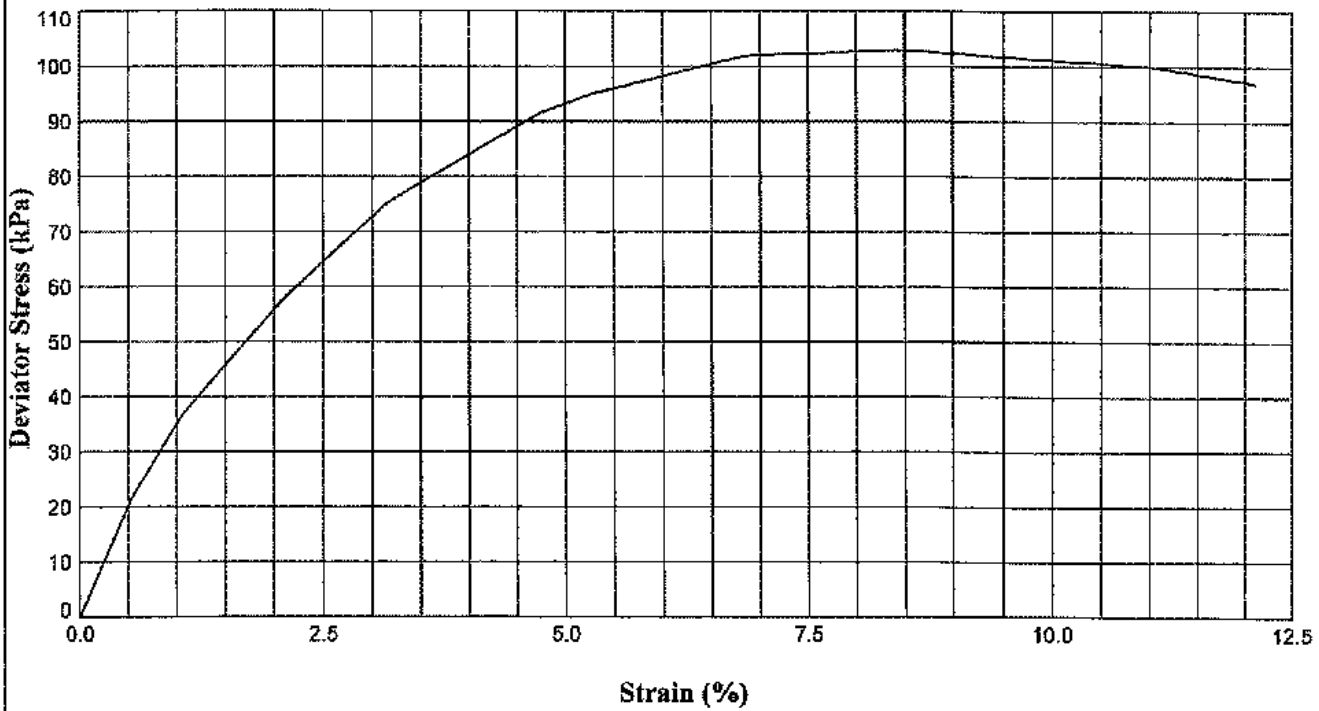
UNCONSOLIDATED QUICK UNDRAINED (SINGLE STAGE) TRIAXIAL COMPRESSION TEST

In accordance with BS1377:Part 7:1990, Clause 8

Borehole : **BH40** Sample Ref: **23** Sample Type: **P** Depth (m): **10.30**

Description : **Dark brown fibrous PEAT**

STAGE NUMBER			1	2	3
SAMPLE DETAILS	Sample Condition		Undisturbed		
	Orientation of sample		Vertical		
	Diameter	(mm)	38.00		
	Height	(mm)	76.00		
	Moisture Content	(%)	152		
	Bulk Density	(Mg/m^3)	1.13		
	Dry Density	(Mg/m^3)	0.45		
TEST DETAILS	Membrane Thickness	(mm)	0.28		
	Rate of Axial Displacement	(%/min)	1.32		
	Cell Pressure	(kPa)	150		
	Membrane Correction	(kPa)	1.48		
	Corrected Deviator Stress	(kPa)	102		
	Undrained Shear Strength	(kPa)	51		
	Strain at Failure	(%)	8.4		
	Mode of Failure		Compound		



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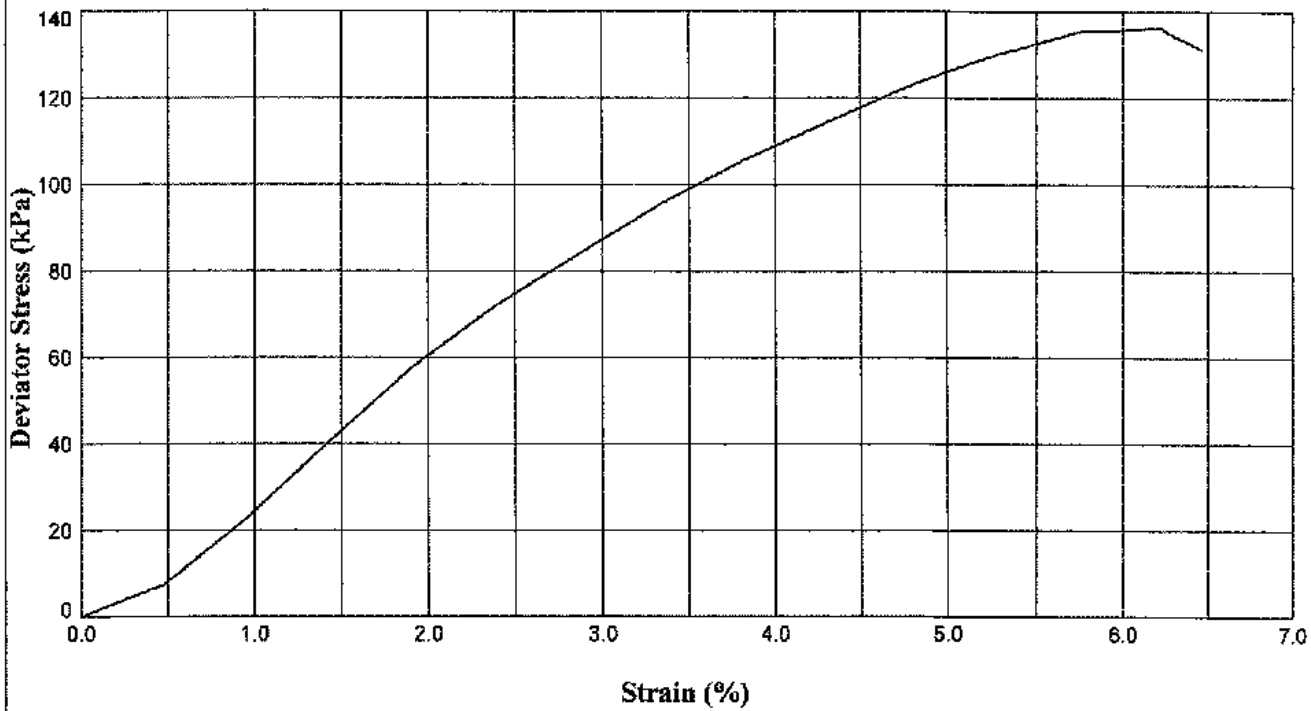
UNCONSOLIDATED QUICK UNDRAINED (SINGLE STAGE) TRIAXIAL COMPRESSION TEST

In accordance with BS1377:Part 7:1990, Clause 8

Borehole : **BH40** Sample Ref: **23** Sample Type: **P** Depth (m): **10.80**

Description : **Dark brown fibrous PEAT**

STAGE NUMBER			1	2	3
SAMPLE DETAILS	Sample Condition		Undisturbed		
	Orientation of sample		Vertical		
	Diameter	(mm)	99.35		
	Height	(mm)	209.00		
	Moisture Content	(%)	238		
	Bulk Density	(Mg/m^3)	1.13		
	Dry Density	(Mg/m^3)	0.34		
TEST DETAILS	Membrane Thickness	(mm)	0.33		
	Rate of Axial Displacement	(%/min)	1.20		
	Cell Pressure	(kPa)	175		
	Membrane Correction	(kPa)	0.53		
	Corrected Deviator Stress	(kPa)	136		
	Undrained Shear Strength	(kPa)	68		
	Strain at Failure	(%)	6.2		
	Mode of Failure		Compound		



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SUMMARY OF CHEMICAL ANALYSES

In accordance with clauses 4, 9 of BS1377:Part 3:1990 where applicable.

Exploratory Position ID	Sample Ref	Sample Type	Depth (m)	Aqueous Extract Sulphate (g/l SO_4)	pH	Loss on Ignition (%)	Organic Matter Content (%)	% passing 2mm sieve	Description
BH1	4	D	2.70	0.06	8.6			80	Grey silty gravelly SAND
BH1	6	D	4.30				2.6	80	Grey slightly gravelly CLAY
BH1	10	D	7.55				20	100	Grey CLAY with occasional fibrous organic matter
BH2	6	D	4.70	0.07	9.0			70	Grey very gravelly SAND
BH3	13	D	5.00	0.02	8.6			20	Brown silty sandy GRAVEL
BH3	21	D	7.60			65	>25	100	Dark brown fibrous PEAT
BH4	8	D	5.75				24	100	Grey slightly sandy CLAY with much fibrous organic matter
BH4	10	D	7.15			30	>25	100	Brownish grey CLAY with much fibrous organic matter

NOTES:- All chemical tests were undertaken by an external laboratory.

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Sizewell C Supplementary Investigation

SUMMARY OF CHEMICAL ANALYSES

In accordance with clauses 4, 9 of BS1377:Part 3:1990 where applicable.

Exploratory Position ID	Sample Ref	Sample Type	Depth (m)	Aqueous Extract Sulphate (g/l SO_4)	pH	Loss on Ignition (%)	Organic Matter Content (%)	% passing 2mm sieve	Description
BH4	11	D	7.85			29	>25	100	Brownish grey CLAY with much fibrous organic matter
BH4	12	D	8.55				6.2	100	Grey CLAY
BH5	12	D	7.80				25	100	Grey CLAY with some fibrous organic matter
BH6	18	D	6.00				6.5	100	Grey mottled brown CLAY with occasional fibrous organic matter
BH6	22	D	7.00			69	>25	100	Dark brown fibrous PEAT
BH7	14	P	4.80				11	100	Grey organic CLAY
BH7	15	P	5.90			62	>25	100	Dark brown fibrous PEAT
BH7	16	P	6.90			68	>25	100	Dark brown fibrous PEAT

NOTES:- All chemical tests were undertaken by an external laboratory.

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Contract: **Sizewell C Supplementary Investigation**

SUMMARY OF CHEMICAL ANALYSES

In accordance with clauses 4, 9 of BS1377:Part 3:1990 where applicable.

Exploratory Position ID	Sample Ref	Sample Type	Depth (m)	Aqueous Extract Sulphate (g/l SO_4)	pH	Loss on Ignition (%)	Organic Matter Content (%)	% passing 2mm sieve	Description
BH7	16	P	7.60			64	>25	100	Dark brown fibrous PEAT
BH7	17	P	8.22			84	>25	100	Dark brown fibrous PEAT
BH8	4	D	2.70	0.04	8.9			70	Greyish brown silty very gravelly SAND
BH9	3	D	1.70	0.39	11.1			100	Orangish brown slightly silty SAND
BH9	8	D	5.35				14	100	Grey organic CLAY
BH9	9	D	6.05				5.3	100	Grey CLAY
BH9	11	D	7.45			36	>25	100	Dark brown fibrous PEAT
BH10A	5	D	1.95	0.11	8.7			100	Orangish brown silty SAND

NOTES:- All chemical tests were undertaken by an external laboratory.

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Contract:

Sizewell C Supplementary Investigation

SUMMARY OF CHEMICAL ANALYSES

In accordance with clauses 4, 9 of BS1377:Part 3:1990 where applicable.

Exploratory Position ID	Sample Ref	Sample Type	Depth (m)	Aqueous Extract Sulphate (g/l SO_4)	pH	Loss on Ignition (%)	Organic Matter Content (%)	% passing 2mm sieve	Description
BH10A	15	D	5.00				23	100	Grey mottled brown CLAY with some fibrous organic matter
BH10A	25	D	7.50			74	>25	100	Dark brown fibrous PEAT
BH11	12	D	4.70				6.0	100	Grey CLAY
BH11	18	D	6.50			30	>25	100	Dark brown fibrous PEAT
BH11	22	D	7.70				22	100	Brownish grey CLAY with some fibrous organic matter
BH12	8	D	3.00	0.08	8.6			70	Brown mottled grey very gravelly SAND
BH12	18	D	6.70				14	100	Grey CLAY with some fibrous organic matter
BH12	20	D	7.30				21	100	Grey CLAY with some fibrous organic matter

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Contract: **Sizewell C Supplementary Investigation**

SUMMARY OF CHEMICAL ANALYSES

In accordance with clauses 4, 9 of BS1377:Part 3:1990 where applicable.

Exploratory Position ID	Sample Ref	Sample Type	Depth (m)	Aqueous Extract Sulphate (g/l SO_4)	pH	Loss on Ignition (%)	Organic Matter Content (%)	% passing 2mm sieve	Description
BH13A	3	D	2.00	0.09	9.4			94	Orangish brown mottled brown gravelly silty SAND
BH13A	12	D	5.70				11	100	Grey CLAY with occasional fibrous organic matter
BH13A	22	D	9.30			65	>25	100	Dark brown fibrous PEAT
BH14	6	D	2.00	0.04	8.6			98	Orangish brown slightly gravelly silty SAND
BH14	17	D	6.60				14	100	Grey CLAY with some fibrous organic matter
BH14	21	D	7.80			61	>25	100	Dark brown fibrous PEAT
BH14	23	D	8.40			81	>25	100	Dark brown fibrous PEAT
BH16	3	D	1.95	0.05	8.7			95	Orangish brown slightly gravelly silty SAND

NOTES:- All chemical tests were undertaken by an external laboratory.

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Bedminster
Bristol BS3 4EB

[redacted]	Date	Checked By	Date	Contract Ref:
	05.03.09	[redacted]	6/3/09	722201

Contract:

Sizewell C Supplementary Investigation

SUMMARY OF CHEMICAL ANALYSES

In accordance with clauses 4, 9 of BS1377:Part 3:1990 where applicable.

Exploratory Position ID	Sample Ref	Sample Type	Depth (m)	Aqueous Extract Sulphate (g/l SO_4)	pH	Loss on Ignition (%)	Organic Matter Content (%)	% passing 2mm sieve	Description
BH16	8	D	7.70			46	>25	100	Dark brown fibrous PEAT
BH16	10	D	9.20			74	>25	100	Dark brown fibrous PEAT
BH17	8	D	3.00	0.12	8.5			98	Orangish brown mottled grey slightly gravelly silty SAND
BH17	16	D	5.50				6.8	100	Grey CLAY
BH17	32	D	9.45			80	>25	100	Dark brown fibrous PEAT
BH19A	9	D	6.55				7.6	100	Grey CLAY with occasional fibrous organic matter
BH19A	12	D	8.65			82	>25	100	Dark brown fibrous PEAT
BH20	3	D	1.70	0.04	8.0			90	Brown mottled grey gravelly silty SAND

NOTES:- All chemical tests were undertaken by an external laboratory.

Approved Signatories: D. TROWBRIDGE A. FROST F. HAMILTON L. MARTIN

STRUCTURAL SOILS
The Old School
Stillhouse Lane
Bedminster
Bristol BS3 4EB

Compiled By	Date	Checked By	Date	Contract Ref:
[redacted]	05.03.09	[redacted]	6/3/09	722201

Contract:

Sizewell C Supplementary Investigation

SUMMARY OF CHEMICAL ANALYSES

In accordance with clauses 4, 9 of BS1377:Part 3:1990 where applicable.

Exploratory Position ID	Sample Ref	Sample Type	Depth (m)	Aqueous Extract Sulphate ($g/l\ SO_4$)	pH	Loss on Ignition (%)	Organic Matter Content (%)	% passing 2mm sieve	Description
BH20	8	D	5.15				8.9	100	Grey CLAY with occasional fibrous organic matter
BH21	8	D	5.85				7.8	100	Grey CLAY with occasional fibrous organic matter
BH21	12	D	8.65			43	>25	100	Dark brown fibrous PEAT
BH22	8	D	3.00	0.20	9.5			100	Orangish brown mottled grey silty SAND
BH22	18	D	6.60				13	100	Grey CLAY with occasional fibrous organic matter
BH23	8	D	6.40				8.1	100	Grey CLAY with occasional fibrous organic matter
BH24	12	D	8.70			71	>25	100	Dark brown fibrous PEAT
BH25	5	D	1.95	0.09	8.5			96	Orangish brown slightly gravelly silty SAND

NOTES:- All chemical tests were undertaken by an external laboratory.

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Stillhouse Lane
Bedminster
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Compiled By	Date	Checked By	Date	Contract Ref:
[redacted]	05.03.09	[redacted]	5/3/09	722201

Contract:

Sizewell C Supplementary Investigation

SUMMARY OF CHEMICAL ANALYSES

In accordance with clauses 4, 9 of BS1377:Part 3:1990 where applicable.

Exploratory Position ID	Sample Ref	Sample Type	Depth (m)	Aqueous Extract Sulphate (g/l SO_3)	pH	Loss on Ignition (%)	Organic Matter Content (%)	% passing 2mm sieve	Description
BH25	18	D	6.50				6.5	100	Grey CLAY with occasional fibrous organic matter
BH25	24	D	8.00			63	>25	100	Dark brown fibrous PEAT
BH26	3	D	1.70	0.03	8.0			100	Brown slightly clayey SAND
BH28	4	D	2.70	0.17	8.3			90	Dark grey gravelly silty SAND
BH28	7	D	4.65			63	>25	100	Dark brown fibrous PEAT
BH29A	9	D	7.10				7.4	100	Grey CLAY with occasional fibrous organic matter
BH30	3	D	1.70	0.03	8.7			85	Brown slightly clayey gravelly SAND
BH32A	4	D	2.70	0.04	7.8			70	Brown silty very gravelly SAND

NOTES:- All chemical tests were undertaken by an external laboratory.

Approved Signatories: D. TROWBRIDGE A. FROST F. HAMILTON L. MARTIN

STRUCTURAL SOILS
The Old School
Stillhouse Lane
Bedminster
Bristol BS3 4EB

Compiled By	Date	Checked By	Date
[redacted]	05.03.09	[redacted]	5/3/09

Contract: **Sizewell C Supplementary Investigation**

Contract Ref: **722201**

SUMMARY OF CHEMICAL ANALYSES

In accordance with clauses 4, 9 of BS1377:Part 3:1990 where applicable.

Exploratory Position ID	Sample Ref	Sample Type	Depth (m)	Aqueous Extract Sulphate ($g/l\ SO_4$)	pH	Loss on Ignition (%)	Organic Matter Content (%)	% passing 2mm sieve	Description
BH33	4	D	2.70	0.04	8.5			90	Orangish brown slightly silty gravelly SAND
BH36	3	D	1.00	0.22	9.8			100	Orangish brown silty SAND
BH36	7	P	2.00				6.2	100	Grey CLAY with occasional fibrous organic matter
BH36	8	P	3.00				20	100	Dark brown fibrous PEAT with pockets of grey clay
BH36	8	P	3.10			47	>25	100	Dark brown fibrous PEAT
BH36	9	P	4.00			60	>25	100	Dark brown fibrous PEAT
BH36	10	P	5.00			45	>25	100	Dark brown fibrous PEAT
BH36	10	P	5.70			72	>25	100	Dark brown fibrous PEAT

NOTES:- All chemical tests were undertaken by an external laboratory.

Approved Signatories: D. TROWBRIDGE A. FROST F. HAMILTON L. MARTIN

STRUCTURAL SOILS
The Old School
Stillhouse Lane
Bedminster
Bristol BS3 4EB

Compiled By	Date	Checked By	Date	Contract Ref:
[redacted]	05.03.09	[redacted]	5/3/09	722201

Contract: **Sizewell C Supplementary Investigation**

SUMMARY OF CHEMICAL ANALYSES

In accordance with clauses 4, 9 of BS1377:Part 3:1990 where applicable.

Exploratory Position ID	Sample Ref	Sample Type	Depth (m)	Aqueous Extract Sulphate (g/l SO_4)	pH	Loss on Ignition (%)	Organic Matter Content (%)	% passing 2mm sieve	Description
BH36	21	P	7.73			64	>25	100	Dark brown fibrous PEAT
BH38	6	D	2.00	0.04	8.9			90	Orangish brown gravelly SAND
BH38	17	U	6.00			77	>25	100	Dark brown fibrous PEAT
BH38	21	U	7.00				22	100	Black amorphous PEAT
BH38	23	U	7.50				8.8	100	Black sandy amorphous PEAT
BH39	6	D	2.00	0.05	8.3			98	Orangish brown mottled greenish grey slightly gravelly silty SAND
BH39	16	P	6.00				8.6	100	Grey CLAY with some fibrous organic matter
BH39	16	P	6.55			65	>25	100	Dark brown fibrous PEAT

NOTES:- All chemical tests were undertaken by an external laboratory.

Approved Signatories: D. TROWBRIDGE A. FROST F. HAMILTON L. MARTIN

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Stillhouse Lane
Bedminster
Bristol BS3 4EB

Compiled By	Date	Checked By	Date
[redacted]	05.03.09	[redacted]	5/3/09

Contract: **Sizewell C Supplementary Investigation**

Contract Ref: **722201**

SUMMARY OF CHEMICAL ANALYSES

In accordance with clauses 4, 9 of BS1377:Part 3:1990 where applicable.

Exploratory Position ID	Sample Ref	Sample Type	Depth (m)	Aqueous Extract Sulphate (g/l SO_3)	pH	Loss on Ignition (%)	Organic Matter Content (%)	% passing 2mm sieve	Description
BH39	16	P	6.96				10	100	Grey CLAY with occasional fibrous organic matter
BH39	17	P	7.41			80	>25	100	Black fibrous PEAT
BH39	17	P	7.70			76	>25	100	Black fibrous PEAT
BH39	20	P	8.50			71	>25	100	Black fibrous PEAT
BH40	8	D	3.00	0.02	8.6			85	Orangish brown silty gravelly SAND
BH40	20	P	7.50			43	>25	100	Dark brown fibrous PEAT
BH40	20	P	7.70			52	>25	100	Dark brown fibrous PEAT
BH40	21	P	9.35			30	>25	100	Dark brown fibrous PEAT

NOTES:- All chemical tests were undertaken by an external laboratory.

Approved Signatories: D. TROWBRIDGE A. FROST F. HAMILTON L. MARTIN

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Stillhouse Lane
Bedminster
Bristol BS3 4EB

[redacted]	Date	Checked By	Date	Contract Ref:
	05.03.09	[redacted]	6/3/09	722201

Sizewell C Supplementary Investigation

SUMMARY OF CHEMICAL ANALYSES

In accordance with clauses 4, 9 of BS1377:Part 3:1990 where applicable.

Exploratory Position ID	Sample Ref	Sample Type	Depth (m)	Aqueous Extract Sulphate (g/l SO_4)	pH	Loss on Ignition (%)	Organic Matter Content (%)	% passing 2mm sieve	Description
BH40	22	P	10.20			43	>25	100	Dark brown fibrous PEAT
BH40	23	P	10.25				14	100	Grey CLAY with occasional fibrous organic matter
BH40	23	P	10.97			71	>25	100	Dark brown fibrous PEAT
BH40	24	P	11.50				13	100	Black amorphous PEAT

NOTES:- All chemical tests were undertaken by an external laboratory.

Approved Signatories: D. TROWBRIDGE A. FROST F. HAMILTON L. MARTIN

STRUCTURAL SOILS
The Old School
Stillhouse Lane
Bedminster
Bristol BS3 4EB

Compiled By	Date	Checked By	Date	Contract Ref:
[redacted]	05.03.09	[redacted]	6/3/09	722201

Contract: **Sizewell C Supplementary Investigation**

APPENDIX D

(i) Environmental Test Results

envirolab

Date: 12 November 2008
Your Ref: 722201
Our Ref: 722201-(5281)-012
Project Manager: Steve Mackereth
Report to: John Wild

Envirolab
Units 7 & 8
Sandpits Business Park
Mottram Road
Hyde
Cheshire
SK14 3AR

Re-Issue of Final Test Report 722201-(5281)-011

Sample(s) of Soil from Sizewell C.
Received from Structural Soils Ltd
The Old School House, Stillhouse Lane, Bedminster, Bristol, BS3 4EB

Date of receipt: 15 October 2008
Date analysis commenced: 15 October 2008
Date analysis completed: 03 November 2008

Method Statement

Speciated TPH analysis is performed in accordance with procedures A-T-022 using GC-MS with Head Space & A-T-023 using GC-FID.
PCB analysis is performed in accordance with procedures A-T-004 and A-T-005.
PAH analysis is performed in accordance with procedure A-T-019.
Loss on drying analysis is performed in accordance with procedure A-T-020.
Subcontract analysis was submitted to a laboratory on Envirolab's approved vendors list.
A copy of the report is attached, UKAS/MCERTS status is detailed on the report.

Prepared by:

[redacted]

Thi McNabb
Reporting Analytical Chemist

Approved by:

[redacted]

Louise Adams
Associate Director - Operations

UKAS TESTING No. 1247

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.
Tests marked "" in this report are not included in the UKAS Accreditation Schedule for Envirolab.
Analytical results reflect the quality of the sample at the time of analysis only.

MCERTS

envirolab

Envirolab Ref.	PROCEDURE	IBC17025	MCERTS	93483	93486	93487							
Location				BH4	BH4	BH4							
Depth (m)				WC1	WC2	WC3							
Sample Ref				9.50	9.00	7.00							
Sample Type				Dx3	Dx3	Dx3							
MTBE$_R$	A-T-022	Y	N	<0.01	<0.01	<0.01							
Benzene$_R$	A-T-022	Y	N	<0.01	<0.01	<0.01							
Toluene$_R$	A-T-022	Y	N	0.01	0.01	<0.01							
Ethyl Benzene$_R$	A-T-022	Y	N	<0.01	<0.01	<0.01							
m & p Xylene$_R$	A-T-022	Y	N	<0.01	<0.01	<0.01							
o Xylene$_R$	A-T-022	Y	N	<0.01	<0.01	<0.01							
Aliphatics C5-C6$_R$	A-T-022	Y	N	<0.01	<0.01	<0.01							
Aliphatics >C6-C8$_R$	A-T-022	Y	N	<0.01	<0.01	<0.01							
Aliphatics >C8-C10$_R$	A-T-022	Y	N	<0.01	<0.01	<0.01							
Aliphatics >C10-C12$_R$	A-T-023	Y	N	<0.1	<0.1	3.2							
Aliphatics >C12-C16$_R$	A-T-023	Y	N	<0.1	<0.1	6.3							
Aliphatics >C16-C21$_R$	A-T-023	Y	N	<0.1	<0.1	14.8							
Aliphatics >C21-C35$_R$	A-T-023	Y	N	<0.1	<0.1	12.7							
Total Aliphatics		Y	N	<0.1	<0.1	37.00							
Aromatics >C5-C7$_R$	A-T-022	Y	N	<0.01	<0.01	<0.01							
Aromatics >C7-C8$_R$	A-T-022	Y	N	<0.01	<0.01	<0.01							
Aromatics >C8-C9$_R$	A-T-022	Y	N	<0.01	<0.01	<0.01							
Aromatics >C9-C10$_R$	A-T-022	Y	N	<0.01	<0.01	<0.01							
Aromatics >C10-C12$_R$	A-T-023	Y	N	<0.1	<0.1	<0.1							
Aromatics >C12-C16$_R$	A-T-023	Y	N	<0.1	<0.1	<0.1							
Aromatics >C16-C21$_R$	A-T-023	Y	N	<0.1	<0.1	<0.1							
Aromatics >C21-C35$_R$	A-T-023	Y	N	<0.1	<0.1	<0.1							
Total Aromatics		Y	N	<0.1	<0.1	<0.1							
TPH (Aliphatics & Aromatics)		Y	N	<0.1	<0.1	37.00							

Table 1 - Soil Speciated TPH Results (mg/kg)

envirolab

Envirolab Ref.	PROCEDURE	ISO17025	MCERTS	93483	93485	93487							
Location				BH4	BH4	BH4							
Depth (m)				WC1	WC2	WC3							
Sample Ref				9.50	9.00	7.00							
Sample Type				Dx3	Dx3	Dx3							
PCB BZ 28_D	A-T-004 A-T-005	Y	Y	<0.005	<0.005	<0.005							
PCB BZ 52_D	A-T-004 A-T-005	Y	Y	<0.005	<0.005	<0.005							
PCB BZ 101_D	A-T-004 A-T-005	Y	Y	<0.005	<0.005	<0.005							
PCB BZ 118_D	A-T-004 A-T-005	Y	Y	<0.005	<0.005	<0.005							
PCB BZ 138_D	A-T-004 A-T-005	Y	Y	<0.005	<0.005	<0.005							
PCB BZ 153_D	A-T-004 A-T-005	Y	Y	<0.005	<0.005	<0.005							
PCB BZ 180_D	A-T-004 A-T-005	Y	Y	<0.005	<0.005	<0.005							

Table 2 - Soil PCB Results (mg/kg, expressed on a dry weight basis)

envirolab

Envirolab Ref.	PROCEDURE	ISO17025	MCERTS	93483	93485	93487							
Location				BH4	BH4	BH4							
Depth (m)				WC1	WC2	WC3							
Sample Ref				9.50	9.00	7.00							
Sample Type				Dx3	Dx3	Dx3							
Naphthalene$_R$	A-T-019	Y	N	0.16	0.05	0.03							
Acenaphthylene$_R$	A-T-019	Y	N	<0.01	<0.01	<0.01							
Acenapthene$_R$	A-T-019	Y	N	0.03	0.01	<0.01							
Fluorene$_R$	A-T-019	Y	N	0.07	0.05	0.01							
Phenanthrene$_R$	A-T-019	Y	N	0.40	0.41	0.25							
Anthracene$_R$	A-T-019	Y	N	0.04	0.05	0.05							
Fluoranthene$_R$	A-T-019	Y	N	0.07	0.16	0.27							
Pyrene$_R$	A-T-019	Y	N	0.01	0.09	0.20							
Benz [a] anthracene$_R$	A-T-019	Y	N	<0.01	<0.01	0.16							
Chrysene$_R$	A-T-019	Y	N	0.05	0.04	0.29							
Benzo [b] fluoranthene$_R$ Benzo [k] fluoranthene #$_R$	A-T-019	Y	N	0.09	0.01	0.31							
Benzo [a] pyrene$_R$	A-T-019	Y	N	0.08	0.03	0.15							
Indeno [123-cd] pyrene$_R$	A-T-019	Y	N	<0.01	<0.01	0.01							
Dibenz [ah] anthracene$_R$	A-T-019	Y	N	<0.01	<0.01	<0.01							
Benzo [ghi] perylene$_R$	A-T-019	Y	N	<0.01	<0.01	0.01							
Total 16 PAH Reported		Y	N	1.00	0.90	1.74							

Due to coelution Benzo [b] fluoranthene and Benzo [k] fluoranthene are reported as one value.

Table 3 - Soil PAH Results (mg/kg, expressed on a dry weight basis)

envirolab

Envirolab Ref.	93483	93485	93487							
Location	BH4	BH4	BH4							
Depth (m)	WC1	WC2	WC3							
Sample Ref	9.50	9.00	7.00							
Sample Type	Dx3	Dx3	Dx3							
Type	Loam	Clay	Loam							
Colour	Black	Grey Brown	Dark Brown							
Consistency	Loose	Firm	Loose							
Some Stones	Yes	Yes	Yes							
>50 Stones	No	No	No							
Some Vegetation	Yes	No	Yes							
Very Wet	No	No	No							
Strong Odour	No	No	No							

Table 4 - Soil Matrix Table

envirolab

Appendix

Code	Description
*	Increased detection limit due to sample interference
#	Increased detection limit due to sample dilution
$	Analysis subcontracted
IS	Insufficient sample for analysis
IS-QC	Insufficient sample to retest following QC fail
NDP	No determination possible
~	Sample type outside the scope of our MCERTS accreditation since matrix not included in method validation
^	Analytes are associated with failed AQC targets for MCERTS, but passed UKAS AQC
^	Sample result is not covered under Envirolab's accreditation schedule for MCERTS as the result exceeds the validated range. See notes 1-3.
F	Analysis suffixed "$_F$" were performed on the filtered sample
D	Analysis suffixed "$_D$" were performed on the sample air dried at <30°C
O	Analysis suffixed "$_O$" were performed on the sample oven dried at 95°C
R	Analysis suffixed "$_R$" were performed on the sample as received. Where results are expressed on a dry weight basis, the samples were air dried at 95°C
Notes	
1	For MCERTS the validated range covers up to 15mg/kg for individual PAHs, 200mg/kg for totals.
2	For MCERTS the validated range covers up to 3000mg/kg for Total TPH analysis.
3	For MCERTS the validated range covers up to 0.2mg/kg for individual PCBs, and 1.5mg/kg for the total reported as aractor.
4	Natural stones and debris are excluded from analyses
5	Coarse granular material such as concrete, gravel and brick are not MCERTS accredited if they comprise the major part of the sample. Envirolab are currently accredited for MCERTS on soil types Sand, Clay and Loam only

ALcontrol Laboratories Analytical Services
Sample Descriptions

Job Number: 08/17618/02/01
Client: Envirolab
Client Ref : 722201-5281

Grain sizes	
<0.063mm	Very Fine
0.1mm - 0.063mm	Fine
0.1mm - 2mm	Medium
2mm - 10mm	Coarse
>10mm	Very Coarse

Sample Identity	Depth (m)	Colour	Grain Size	Description	Batch
93480 BH1	6.50	Black	0.1mm - 0.063mm	Clinker with some Vegetation	1

* These descriptions are only intended to act as a cross check if sample identities are questioned, and to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions.

We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials-whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample.
Other coarse granular materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.
¹ Sample Description supplied by client

Validated ✓
Preliminary

ALcontrol Laboratories Analytical Services
Table Of Results

* ISO 17025 accredited
M MCERTS accredited
* Subcontracted test
» Shown on prev. report

Job Number: 08/17618/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5281 **Client Contact:** Subcon

Sample Identity	93480 BH1									Method Code	LoD/Units
Depth (m)	6.50										
Sample Type	SOLID										
Sampled Date	10.10.08										
Sample Received Date	22.10.08										
Batch	1										
Sample Number(s)	1										
Arsenic	6									TM129$^{*}_{M}$	<3.0 mg/kg
Cadmium	<0.2									TM129	<0.2 mg/kg
Chromium	20									TM129$^{*}_{M}$	<4.5 mg/kg
Copper	16									TM129$^{*}_{M}$	<6 mg/kg
Lead	10									TM129$^{*}_{M}$	<2 mg/kg
Mercury	<0.4									TM129$^{*}_{M}$	<0.4 mg/kg
Nickel	22									TM129$^{*}_{M}$	<0.9 mg/kg
Zinc	51									TM129$^{*}_{M}$	<2.5 mg/kg
Total Alkalinity as CaCO3	400									TM043	<10 mg/kg

All results expressed on a dry weight basis.

Date 12.11.2008

ALcontrol Laboratories Analytical Services
Table Of Results - Appendix

Job Number: 08/17618/02/01
Client: Envirolab
Client Ref. No.: 722201-5281

Report Key :

Results expressed as (e.g.) 1.03E-07 is equivalent to 1.03×10^{-7}

NDP	No Determination Possible	*	Subcontracted test
NFD	No Fibres Detected	»	Result previously reported (Incremental reports only)
#	ISO 17025 accredited	M	MCERTS Accredited
PFD	Possible Fibres Detected	EC	Equivalent Carbon (Aromatics C8-C35)

Note: Method detection limits are not always achievable due to various circumstances beyond our control.

Summary of Method Codes contained within report :

Method No.	Reference	Description	ISO 17025 Accredited	MCERTS Accredited	Wet/Dry Sample [1]	Surrogate Corrected
TM043	Method 2320B, AWWA/APHA, 20th Ed., 1999 / BS 2690: Part109 1984	Determination of alkalinity in aqueous samples			WET	
TM129	Method 3120B, AWWA/APHA, 20th Ed., 1999 / Modified: US EPA Method 3050B	Determination of Metal Cations by IRIS Emission Spectrometer			DRY	
TM129	Method 3120B, AWWA/APHA, 20th Ed., 1999 / Modified: US EPA Method 3050B	Determination of Metal Cations by IRIS Emission Spectrometer	✓	✓	DRY	

[1] Applies to Solid samples only. **DRY** indicates samples have been dried at 35°C. **NA** = not applicable.

ALcontrol Laboratories Analytical Services
Sample Descriptions

Job Number: 08/17619/02/01
Client: Envirolab
Client Ref : 722201-5281

Grain sizes

<0.063mm	Very Fine
0.1mm - 0.063mm	Fine
0.1mm - 2mm	Medium
2mm - 10mm	Coarse
>10mm	Very Coarse

Sample Identity	Depth (m)	Colour	Grain Size	Description	Batch
93490 BH5	8.00	Black	<0.063mm	Clay	1
93493 BH17	10.50	Black	0.1mm - 0.063mm	Clay Loam	1
93496 BH25	8.00	Black	0.1mm - 0.063mm	Loam (topsoil) with some Vegetation	1

* These descriptions are only intended to act as a cross check if sample identities are questioned, and to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions.

We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials-whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample.
Other coarse granular materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.
[1] Sample Description supplied by client

Validated ☑
Preliminary ☐

ALcontrol Laboratories Analytical Services
Table Of Results

\# ISO 17025 accredited
M MCERTS accredited
* Subcontracted test
» Shown on prev. report

Job Number: 08/17619/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5281 **Client Contact:** Subcon

Sample Identity	93490 BH5	93493 BH17	93496 BH25							Method Code	LoD/Units
Depth (m)	8.00	10.50	8.00								
Sample Type	SOLID	SOLID	SOLID								
Sampled Date	09.10.08	08.10.08	09.10.08								
Sample Received Date	22.10.08	22.10.08	22.10.08								
Batch	1	1	1								
Sample Number(s)	1	2	3								
Arsenic	38	96	18							TM129$^{\#}_{M}$	<3.0 mg/kg
Cadmium	<0.2	0.6	<0.2							TM129	<0.2 mg/kg
Chromium	5.0	<4.5	6.6							TM129$^{\$}_{M}$	<4.5 mg/kg
Copper	<6	<6	<6							TM129$^{\#}_{M}$	<6 mg/kg
Lead	10	7	4							TM129$^{\$}_{M}$	<2 mg/kg
Mercury	<0.4	<0.4	<0.4							TM129$^{\$}_{M}$	<0.4 mg/kg
Nickel	7.6	36	7.0							TM129$^{\$}_{M}$	<0.9 mg/kg
Zinc	25	150	22							TM129$^{\$}_{M}$	<2.5 mg/kg
Total Alkalinity as CaCO3	<10	<10	61							TM043	<10 mg/kg

All results expressed on a dry weight basis.

Date 06.11.2008

ALcontrol Laboratories Analytical Services
Table Of Results - Appendix

Job Number: 08/17619/02/01
Client: Envirolab
Client Ref. No.: 722201-5281

Report Key :

			Results expressed as (e.g.) 1.03E-07 is equivalent to 1.03×10^{-7}
NDP	No Determination Possible	*	Subcontracted test
NFD	No Fibres Detected	»	Result previously reported (Incremental reports only)
#	ISO 17025 accredited	M	MCERTS Accredited
PFD	Possible Fibres Detected	EC	Equivalent Carbon (Aromatics C8-C35)

Note: Method detection limits are not always achievable due to various circumstances beyond our control.

Summary of Method Codes contained within report :

Method No.	Reference	Description	ISO 17025 Accredited	MCERTS Accredited	Wet/Dry Sample [1]	Surrogate Corrected
TM043	Method 2320B, AWWA/APHA, 20th Ed., 1999 / BS 2690: Part109 1984	Determination of alkalinity in aqueous samples			WET	
TM129	Method 3120B, AWWA/APHA, 20th Ed., 1999 / Modified: US EPA Method 3050B	Determination of Metal Cations by IRIS Emission Spectrometer			DRY	
TM129	Method 3120B, AWWA/APHA, 20th Ed., 1999 / Modified: US EPA Method 3050B	Determination of Metal Cations by IRIS Emission Spectrometer	✓	✓	DRY	

[1] Applies to Solid samples only. **DRY** indicates samples have been dried at 35°C. **NA** = not applicable.

Validated ☑
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ALcontrol Laboratories Analytical Services
Table Of Results

" ISO 17025 accredited
M MCERTS accredited
* Subcontracted test
» Shown on prev. report

Job Number: 08/17352/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5281 **Client Contact:** Envirolab Data

Sample Identity	93483 BH4 WC1	93485 BH4 WC2	93487 BH4 WC3							Method Code	LoD/Units
Depth (m)	9.5	9.00	7.0								
Sample Type	SOLID	SOLID	SOLID								
Sampled Date	10.10.08	10.10.08	10.10.08								
Sample Received Date	17.10.08	17.10.08	17.10.08								
Batch	1	1	1								
Sample Number(s)	1-5	6-10	11-15								
Total Sulphate	3400	1400	4800							TM129$^{*}_{M}$	<100 mg/kg
Boron Water Soluble	18	<3.5	45							TM129$^{*}_{M}$	<3.5 mg/kg
Arsenic	10	12	6							TM129$^{*}_{M}$	<3.0 mg/kg
Cadmium	<0.2	<0.2	<0.2							TM129	<0.2 mg/kg
Chromium	<4.5	30	17							TM129$^{*}_{M}$	<4.5 mg/kg
Copper	<6	14	10							TM129$^{*}_{M}$	<6 mg/kg
Lead	6	13	9							TM129$^{*}_{M}$	<2 mg/kg
Mercury	<0.4	<0.4	<0.4							TM129$^{*}_{M}$	<0.4 mg/kg
Nickel	2.4	27	16							TM129$^{*}_{M}$	<0.9 mg/kg
Selenium	<3	<3	<3							TM129$^{*}_{M}$	<3 mg/kg
Vanadium	3.2	56	33							TM129$^{*}_{M}$	<1.5 mg/kg
Zinc	10	72	35							TM129$^{*}_{M}$	<2.5 mg/kg
Phenols Monohydric	<0.15	<0.15	<0.15							TM062$^{*}_{M}$	<0.15 mg/kg
Total Cyanide	<1	<1	<1							TM153$^{*}_{M}$	<1 mg/kg
Asbestos Presence Screen	No Fibres Detected	No Fibres Detected	No Fibres Detected							TM001	NONE
Elemental Sulphur	380	<70	<70							TM136$^{*}_{M}$	<70 mg/kg
Fraction of Organic Carbon	0.27	0.022	0.18							TM132*	<0.002 NONE
Loss on Ignition	78	3.8	41							TM018$^{*}_{M}$	<0.3 %
pH Value	6.42	8.36	7.80							TM133$^{*}_{M}$	<1.00 pH Units

All results expressed on a dry weight basis.

Date 27.10.2008

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ALcontrol Laboratories Analytical Services
Table Of Results

ISO 17025 accredited
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* Subcontracted test
» Shown on prev. report

Job Number: 08/17352/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5281 **Client Contact:** Envirolab Data

Sample Identity	93483 BH4 WC1	93485 BH4 WC2	93487 BH4 WC3							Method Code	LoD/Units
Depth (m)	9.5	9.00	7.0								
Sample Type	SOLID	SOLID	SOLID								
Sampled Date	10.10.08	10.10.08	10.10.08								
Sample Received Date	17.10.08	17.10.08	17.10.08								
Batch	1	1	1								
Sample Number(s)	1-5	6-10	11-15								
OCP/OPP											
Dichlorvos	<5	<10	<5							TM144/145	<1 ug/kg
Mevinphos	<5	<10	<5							TM144/145	<1 ug/kg
Alpha-BHC (Lindane)	<5	<10	<5							TM144/145	<1 ug/kg
Beta-BHC (Lindane)	<5	<10	<5							TM144/145	<1 ug/kg
Gamma-BHC (Lindane)	<5	<10	<5							TM144/145	<1 ug/kg
Diazinon	<5	<10	<5							TM144/145	<1 ug/kg
Methyl Parathion	<5	<10	<5							TM144/145	<1 ug/kg
Heptachlor	<5	<10	<5							TM144/145	<1 ug/kg
Fenitrothion	<5	<10	<5							TM144/145	<1 ug/kg
Malathion	<5	<10	<5							TM144/145	<1 ug/kg
Aldrin	<5	<10	<5							TM144/145	<1 ug/kg
Parathion	<5	<10	<5							TM144/145	<1 ug/kg
Heptachlor Epoxide	<5	<10	<5							TM144/145	<1 ug/kg
Endosulphan I	<5	<10	<5							TM144/145	<1 ug/kg
p,p'-DDE	<5	<10	<5							TM144/145	<1 ug/kg
Dieldrin	<5	<10	<5							TM144/145	<1 ug/kg
Endrin	<5	<10	<5							TM144/145	<1 ug/kg
Endosulphan II	<5	<10	<5							TM144/145	<1 ug/kg
p,p'-TDE(DDD)	<5	<10	<5							TM144/145	<1 ug/kg
Ethion	<5	<10	<5							TM144/145	<1 ug/kg
p,p'-DDT	<5	<10	<5							TM144/145	<1 ug/kg
Endosulphan sulphate	<5	<10	<5							TM144/145	<1 ug/kg
p,p'-Methoxychlor	<5	<10	<5							TM144/145	<1 ug/kg
Azinphos methyl	<5	<10	<5							TM144/145	<1 ug/kg

All results expressed on a dry weight basis.

Date 27.10.2008

Validated ☑
Preliminary ☐

ALcontrol Laboratories Analytical Services
Table Of Results

ISO 17025 accredited
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* Subcontracted test
» Shown on prev. report

Job Number: 08/17352/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5281 **Client Contact:** Envirolab Data

Sample Identity	93483 BH4 WC1	93485 BH4 WC2	93487 BH4 WC3							Method Code	LoD/Units
Depth (m)	9.5	9.00	7.0								
Sample Type	SOLID	SOLID	SOLID								
Sampled Date	10.10.08	10.10.08	10.10.08								
Sample Received Date	17.10.08	17.10.08	17.10.08								
Batch	1	1	1								
Sample Number(s)	1-5	6-10	11-15								
SVOC by GCMS											
Phenols											
2-Chlorophenol	<100	<100	<100							TM157	<100 ug/kg
2-Methylphenol	<100	<100	<100							TM157	<100 ug/kg
2-Nitrophenol	<100	<100	<100							TM157	<100 ug/kg
2,4-Dichlorophenol	<100	<100	<100							TM157	<100 ug/kg
2,4-Dimethylphenol	<100	<100	<100							TM157	<100 ug/kg
2,4,5-Trichlorophenol	<100	<100	<100							TM157	<100 ug/kg
2,4,6-Trichlorophenol	<100	<100	<100							TM157	<100 ug/kg
4-Chloro-3-methylphenol	<100	<100	<100							TM157	<100 ug/kg
4-Methylphenol	<100	<100	<100							TM157	<100 ug/kg
4-Nitrophenol	<100	<100	<100							TM157	<100 ug/kg
Pentachlorophenol	<100	<100	<100							TM157	<100 ug/kg
Phenol	<100	<100	<100							TM157	<100 ug/kg

All results expressed on a dry weight basis.

Date 27.10.2008

Validated ☑
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ALcontrol Laboratories Analytical Services
Table Of Results

' ISO 17025 accredited
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* Subcontracted test
» Shown on prev. report

Job Number: 08/17352/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5281 **Client Contact:** Envirolab Data

Sample Identity	93483 BH4 WC1	93485 BH4 WC2	93487 BH4 WC3							Method Code	LoD/Units
Depth (m)	9.5	9.00	7.0								
Sample Type	SOLID	SOLID	SOLID								
Sampled Date	10.10.08	10.10.08	10.10.08								
Sample Received Date	17.10.08	17.10.08	17.10.08								
Batch	1	1	1								
Sample Number(s)	1-5	6-10	11-15								
PAHs											
2-Chloronaphthalene	<100	<100	<100							TM157	<100 ug/kg
2-Methylnaphthalene	<100	<100	<100							TM157	<100 ug/kg
Acenaphthene	<100	<100	<100							TM157	<100 ug/kg
Acenaphthylene	<100	<100	<100							TM157	<100 ug/kg
Anthracene	<100	<100	<100							TM157	<100 ug/kg
Benzo(a)anthracene	<100	<100	<100							TM157	<100 ug/kg
Benzo(a)pyrene	<100	<100	<100							TM157	<100 ug/kg
Benzo(b)fluoranthene	<100	<100	<100							TM157	<100 ug/kg
Benzo(ghi)perylene	<100	<100	<100							TM157	<100 ug/kg
Benzo(k)fluoranthene	<100	<100	<100							TM157	<100 ug/kg
Chrysene	<100	<100	<100							TM157	<100 ug/kg
Dibenzo(a,h)anthracene	<100	<100	<100							TM157	<100 ug/kg
Fluoranthene	<100	<100	<100							TM157	<100 ug/kg
Fluorene	<100	<100	<100							TM157	<100 ug/kg
Indeno(1,2,3-cd)pyrene	<100	<100	<100							TM157	<100 ug/kg
Naphthalene	<100	<100	<100							TM157	<100 ug/kg
Phenanthrene	<100	<100	<100							TM157	<100 ug/kg
Pyrene	<100	<100	<100							TM157	<100 ug/kg
Phthalates											
Bis(2-ethylhexyl) phthalate	<100	<100	<100							TM157	<100 ug/kg
Butylbenzyl phthalate	<100	<100	<100							TM157	<100 ug/kg
Di-n-butyl phthalate	<100	<100	<100							TM157	<100 ug/kg
Di-n-Octyl phthalate	<100	<100	<100							TM157	<100 ug/kg
Diethyl phthalate	<100	<100	<100							TM157	<100 ug/kg
Dimethyl phthalate	<100	<100	<100							TM157	<100 ug/kg
Other Semi-volatiles											
1,2-Dichlorobenzene	<100	<100	<100							TM157	<100 ug/kg
1,2,4-Trichlorobenzene	<100	<100	<100							TM157	<100 ug/kg

All results expressed on a dry weight basis.

Date 27.10.2008

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ALcontrol Laboratories Analytical Services
Table Of Results

ISO 17025 accredited
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* Subcontracted test
» Shown on prev. report

Job Number: 08/17352/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5281 **Client Contact:** Envirolab Data

Sample Identity	93483 BH4 WC1	93485 BH4 WC2	93487 BH4 WC3							Method Code	LoD/Units
Depth (m)	9.5	9.00	7.0								
Sample Type	SOLID	SOLID	SOLID								
Sampled Date	10.10.08	10.10.08	10.10.08								
Sample Received Date	17.10.08	17.10.08	17.10.08								
Batch	1	1	1								
Sample Number(s)	1-5	6-10	11-15								
Other Semi-volatiles (cont)											
1,3-Dichlorobenzene	<100	<100	<100							TM157	<100 ug/kg
1,4-Dichlorobenzene	<100	<100	<100							TM157	<100 ug/kg
2-Nitroaniline	<100	<100	<100							TM157	<100 ug/kg
2,4-Dinitrotoluene	<100	<100	<100							TM157	<100 ug/kg
2,6-Dinitrotoluene	<100	<100	<100							TM157	<100 ug/kg
3-Nitroaniline	<100	<100	<100							TM157	<100 ug/kg
4-Bromophenylphenylether	<100	<100	<100							TM157	<100 ug/kg
4-Chloroaniline	<100	<100	<100							TM157	<100 ug/kg
4-Chlorophenylphenylether	<100	<100	<100							TM157	<100 ug/kg
4-Nitroaniline	<100	<100	<100							TM157	<100 ug/kg
Azobenzene	<100	<100	<100							TM157	<100 ug/kg
Bis(2-chloroethoxy)methane	<100	<100	<100							TM157	<100 ug/kg
Bis(2-chloroethyl)ether	<100	<100	<100							TM157	<100 ug/kg
Carbazole	<100	<100	<100							TM157	<100 ug/kg
Dibenzofuran	<100	<100	<100							TM157	<100 ug/kg
Hexachlorobenzene	<100	<100	<100							TM157	<100 ug/kg
Hexachlorobutadiene	<100	<100	<100							TM157	<100 ug/kg
Hexachlorocyclopentadiene	<100	<100	<100							TM157	<100 ug/kg
Hexachloroethane	<100	<100	<100							TM157	<100 ug/kg
Isophorone	<100	<100	<100							TM157	<100 ug/kg
N-nitrosodi-n-propylamine	<100	<100	<100							TM157	<100 ug/kg
Nitrobenzene	<100	<100	<100							TM157	<100 ug/kg

All results expressed on a dry weight basis.

Date 27.10.2008

Validated ☑
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ALcontrol Laboratories Analytical Services
Table Of Results

ISO 17025 accredited
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* Subcontracted test
» Shown on prev. report

Job Number: 08/17352/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5281 **Client Contact:** Envirolab Data

Sample Identity	93483 BH4 WC1	93485 BH4 WC2	93487 BH4 WC3							Method Code	LoD/Units
Depth (m)	9.5	9.00	7.0								
Sample Type	SOLID	SOLID	SOLID								
Sampled Date	10.10.08	10.10.08	10.10.08								
Sample Received Date	17.10.08	17.10.08	17.10.08								
Batch	1	1	1								
Sample Number(s)	1-5	6-10	11-15								
Volatile Organic Compounds											
Dichlorodifluoromethane	<4	<4	<4							TM116#	<4 ug/kg
Chloromethane	<7	<7	<7							TM116#	<7 ug/kg
Vinyl Chloride	<10	<10	<10							TM116#M	<10 ug/kg
Bromomethane	<13	<13	<13							TM116	<13 ug/kg
Chloroethane	<14	<14	<14							TM116#	<14 ug/kg
Trichlorofluoromethane	<6	<6	<6							TM116#M	<6 ug/kg
trans-1-2-Dichloroethene	<11	<11	<11							TM116#	<11 ug/kg
Dichloromethane	<10	<10	<10							TM116#	<10 ug/kg
Carbon Disulphide	<7	<7	<7							TM116#M	<7 ug/kg
1.1-Dichloroethene	<10	<10	<10							TM116#M	<10 ug/kg
1.1-Dichloroethane	<8	<8	<8							TM116#M	<8 ug/kg
Methyl Tertiary Butyl Ether	<11	<11	<11							TM116	<11 ug/kg
cis-1-2-Dichloroethene	<5	<5	<5							TM116#M	<5 ug/kg
Bromochloromethane	<14	<14	<14							TM116#	<14 ug/kg
Chloroform	<8	<8	<8							TM116#M	<8 ug/kg
2.2-Dichloropropane	<12	<12	<12							TM116	<12 ug/kg
1.2-Dichloroethane	<5	<5	<5							TM116#	<5 ug/kg
1.1.1-Trichloroethane	<7	<7	<7							TM116#M	<7 ug/kg
1.1-Dichloropropene	<11	<11	<11							TM116#M	<11 ug/kg
Benzene	<9	<9	<9							TM116#M	<9 ug/kg
Carbontetrachloride	<14	<14	<14							TM116#M	<14 ug/kg
Dibromomethane	<9	<9	<9							TM116#	<9 ug/kg
1.2-Dichloropropane	<12	<12	<12							TM116#M	<12 ug/kg
Bromodichloromethane	<7	<7	<7							TM116#M	<7 ug/kg
Trichloroethene	<9	<9	<9							TM116#M	<9 ug/kg
cis-1-3-Dichloropropene	<14	<14	<14							TM116#M	<14 ug/kg
trans-1-3-Dichloropropene	<14	<14	<14							TM116#M	<14 ug/kg
1.1.2-Trichloroethane	<10	<10	<10							TM116#	<10 ug/kg
Toluene	<5	<5	<5							TM116#M	<5 ug/kg
1.3-Dichloropropane	<7	<7	<7							TM116#	<7 ug/kg

All results expressed on a dry weight basis.

Date 27.10.2008

Validated ☑
Preliminary ☐

ALcontrol Laboratories Analytical Services
Table Of Results

ISO 17025 accredited
M MCERTS accredited
* Subcontracted test
» Shown on prev. report

Job Number: 08/17352/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5281 **Client Contact:** Envirolab Data

Sample Identity	93483 BH4 WC1	93485 BH4 WC2	93487 BH4 WC3							Method Code	LoD/Units
Depth (m)	9.5	9.00	7.0								
Sample Type	SOLID	SOLID	SOLID								
Sampled Date	10.10.08	10.10.08	10.10.08								
Sample Received Date	17.10.08	17.10.08	17.10.08								
Batch	1	1	1								
Sample Number(s)	1-5	6-10	11-15								
Volatile Organic Compounds (cont)											
Dibromochloromethane	<13	<13	<13							TM116#	<13 ug/kg
1,2-Dibromoethane	<12	<12	<12							TM116#	<12 ug/kg
Tetrachloroethene	<5	<5	<5							TM116#	<5 ug/kg
1,1,1,2-Tetrachloroethane	<10	<10	<10							TM116#M	<10 ug/kg
Chlorobenzene	<5	<5	<5							TM116#M	<5 ug/kg
Ethylbenzene	<4	<4	<4							TM116#	<4 ug/kg
p/m-Xylene	<14	<14	<14							TM116#	<14 ug/kg
Bromoform	<10	<10	<10							TM116#	<10 ug/kg
Styrene	<10	<10	<10							TM116#	<10 ug/kg
1,1,2,2-Tetrachloroethane	<10	<10	<10							TM116#	<10 ug/kg
o-Xylene	<10	<10	<10							TM116#	<10 ug/kg
1,2,3-Trichloropropane	<17	<17	<17							TM116#	<17 ug/kg
Isopropylbenzene	<5	<5	<5							TM116#	<5 ug/kg
Bromobenzene	<10	<10	<10							TM116#M	<10 ug/kg
2-Chlorotoluene	<9	<9	<9							TM116#	<9 ug/kg
Propylbenzene	<11	<11	<11							TM116#	<11 ug/kg
4-Chlorotoluene	<12	<12	<12							TM116#	<12 ug/kg
1,2,4-Trimethylbenzene	<9	<9	<9							TM116#	<9 ug/kg
4-Isopropyltoluene	<11	<11	<11							TM116#	<11 ug/kg
1,3,5-Trimethylbenzene	<8	<8	<8							TM116#	<8 ug/kg
1,2-Dichlorobenzene	<12	<12	<12							TM116#M	<12 ug/kg
1,4-Dichlorobenzene	<5	<5	<5							TM116#M	<5 ug/kg
sec-Butylbenzene	<10	<10	<10							TM116#	<10 ug/kg
tert-Butylbenzene	<12	<12	<12							TM116#	<12 ug/kg
1,3-Dichlorobenzene	<6	<6	<6							TM116#	<6 ug/kg
n-Butylbenzene	<10	<10	<10							TM116#	<10 ug/kg
1,2-Dibromo-3-chloropropane	<14	<14	<14							TM116#	<14 ug/kg
1,2,4-Trichlorobenzene	<6	<6	<6							TM116#	<6 ug/kg
Naphthalene	<13	<13	<13							TM116#	<13 ug/kg
1,2,3-Trichlorobenzene	<11	<11	<11							TM116#	<11 ug/kg

All results expressed on a dry weight basis.

Date 27.10.2008

Validated ☑
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ALcontrol Laboratories Analytical Services
Table Of Results

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* Subcontracted test
» Shown on prev. report

Job Number: 08/17352/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5281 **Client Contact:** Envirolab Data

Sample Identity	93483 BH4 WC1	93485 BH4 WC2	93487 BH4 WC3						Method Code	LoD/Units
Depth (m)	9.5	9.00	7.0							
Sample Type	SOLID	SOLID	SOLID							
Sampled Date	10.10.08	10.10.08	10.10.08							
Sample Received Date	17.10.08	17.10.08	17.10.08							
Batch	1	1	1							
Sample Number(s)	1-5	6-10	11-15							
Volatile Organic Compounds (cont)										
Hexachlorobutadiene	<12	<12	<12						TM116ᴹ	<12 ug/kg

All results expressed on a dry weight basis.

Date 27.10.2008

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Preliminary ☐

ALcontrol Laboratories Analytical Services
Table Of Results

ISO 17025 accredited
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* Subcontracted test
» Shown on prev. report

Job Number: 08/17352/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5281 **Client Contact:** Envirolab Data

Sample Identity	93483 BH4 WC1	93485 BH4 WC2	93487 BH4 WC3							Method Code	LoD/Units
Depth (m)	9.5	9.00	7.0								
Sample Type	SOLID	SOLID	SOLID								
Sampled Date	10.10.08	10.10.08	10.10.08								
Sample Received Date	17.10.08	17.10.08	17.10.08								
Batch	1	1	1								
Sample Number(s)	1-5	6-10	11-15								
Arsenic Dissolved (NRA) (ICP-MS)	1.4	45	3.1							TM152	<0.75 ug/l
Boron Dissolved (NRA) (ICP-MS)	440	40	1500							TM152	<20 ug/l
Cadmium Dissolved (NRA) (ICP-MS)	<0.22	<0.22	<0.22							TM152	<0.22 ug/l
Chromium Dissolved (NRA) (ICP-MS)	<1	2	<1							TM152	<1 ug/l
Copper Dissolved (NRA) (ICP-MS)	<1.6	7.0	1.8							TM152	<1.6 ug/l
Lead Dissolved (NRA) (ICP-MS)	1.5	1.3	1.4							TM152	<0.4 ug/l
Nickel Dissolved (NRA) (ICP-MS)	<1.5	2.8	<1.5							TM152	<1.5 ug/l
Selenium Dissolved (NRA) (ICP-MS)	3	4	3							TM152	<1 ug/l
Vanadium Dissolved (NRA) (ICP-MS)	<1	110	17							TM152	<1 ug/l
Zinc Dissolved (NRA) (ICP-MS)	<5	6	5							TM152	<5 ug/l
Mercury Dissolved (NRA) (CVAF)	<0.01	<0.01	<0.01							TM183	<0.01 ug/l
Sulphate (NRA)	51	<3	46							TM098	<3 mg/l
Phenols Monohydric (NRA)	0.03	0.04	0.04							TM062	<0.01 mg/l
Total Cyanide (NRA)	<0.05	<0.05	<0.05							TM153	<0.05 mg/l
pH (NRA)	7.74	8.48	8.22							TM133	<1.00 pH Units

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Job Number: 08/17352/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5281 **Client Contact:** Envirolab Data

Sample Identity	93483 BH4 WC1	93485 BH4 WC2	93487 BH4 WC3							Method Code	LoD/Units
Depth (m)	9.5	9.00	7.0								
Sample Type	SOLID	SOLID	SOLID								
Sampled Date	10.10.08	10.10.08	10.10.08								
Sample Received Date	17.10.08	17.10.08	17.10.08								
Batch	1	1	1								
Sample Number(s)	1-5	6-10	11-15								
GRO (C4-C12) (NRA)	<10	<10	<10							TM089	<10 ug/l
MTBE (NRA)	<10	<10	<10							TM089	<10 ug/l
Benzene (NRA)	<10	<10	<10							TM089	<10 ug/l
Toluene (NRA)	<10	<10	<10							TM089	<10 ug/l
Ethyl benzene (NRA)	<10	<10	<10							TM089	<10 ug/l
m & p Xylene (NRA)	<10	<10	<10							TM089	<10 ug/l
o Xylene (NRA)	<10	<10	<10							TM089	<10 ug/l
Aliphatics C5-C6 (NRA)	<10	<10	<10							TM089	<10 ug/l
Aliphatics >C6-C8 (NRA)	<10	<10	<10							TM089	<10 ug/l
Aliphatics >C8-C10 (NRA)	<10	<10	<10							TM089	<10 ug/l
Aliphatics >C10-C12 (NRA)	<10	<10	<10							TM089	<10 ug/l
Aliphatics >C12-C16 (NRA)	<10	<10	<10							TM174	<10 ug/l
Aliphatics >C16-C21 (NRA)	<10	<10	<10							TM174	<10 ug/l
Aliphatics >C21-C35 (NRA)	<10	<10	<10							TM174	<10 ug/l
Total Aliphatics C5-C35 (NRA)	<10	<10	<10							TM61/89	<10 ug/l
Aromatics C6-C7 (NRA)	<10	<10	<10							TM089	<10 ug/l
Aromatics >C7-C8 (NRA)	<10	<10	<10							TM089	<10 ug/l
Aromatics >EC8-EC10 (NRA)	<10	<10	<10							TM089	<10 ug/l
Aromatics >EC10-EC12 (NRA)	<10	<10	<10							TM089	<10 ug/l
Aromatics >EC12-EC16 (NRA)	<10	<10	<10							TM174	<10 ug/l
Aromatics >EC16-EC21 (NRA)	<10	<10	<10							TM174	<10 ug/l
Aromatics >EC21-EC35 (NRA)	<10	<10	<10							TM174	<10 ug/l
Total Aromatics C6-C35 (NRA)	<10	<10	<10							TM61/89	<10 ug/l
TPH (Aliphatics and Aromatics C5-C35) (NRA)	<10	<10	<10							TM61/89	<10 ug/l

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Job Number: 08/17352/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5281 **Client Contact:** Envirolab Data

Sample Identity	93483 BH4 WC1	93485 BH4 WC2	93487 BH4 WC3							Method Code	LoD/Units
Depth (m)	9.5	9.00	7.0								
Sample Type	SOLID	SOLID	SOLID								
Sampled Date	10.10.08	10.10.08	10.10.08								
Sample Received Date	17.10.08	17.10.08	17.10.08								
Batch	1	1	1								
Sample Number(s)	1-5	6-10	11-15								
PAH by GCMS											
Naphthalene (NRA)	<100	<100	<100							TM178	<100 ng/l
Acenaphthylene (NRA)	<11	<11	<11							TM178	<11 ng/l
Acenaphthene (NRA)	<15	<15	<15							TM178	<15 ng/l
Fluorene (NRA)	<14	<14	<14							TM178	<14 ng/l
Phenanthrene (NRA)	28	<22	<22							TM178	<22 ng/l
Anthracene (NRA)	<15	<15	<15							TM178	<15 ng/l
Fluoranthene (NRA)	23	<17	33							TM178	<17 ng/l
Pyrene (NRA)	17	<15	33							TM178	<15 ng/l
Benz(a)anthracene (NRA)	<17	<17	<17							TM178	<17 ng/l
Chrysene (NRA)	<13	<13	<13							TM178	<13 ng/l
Benzo(b)fluoranthene (NRA)	<23	<23	<23							TM178	<23 ng/l
Benzo(k)fluoranthene (NRA)	<27	<27	<27							TM178	<27 ng/l
Benzo(a)pyrene (NRA)	<9	<9	<9							TM178	<9 ng/l
Indeno(123cd)pyrene (NRA)	<14	<14	<14							TM178	<14 ng/l
Dibenzo(ah)anthracene (NRA)	<16	<16	<16							TM178	<16 ng/l
Benzo(ghi)perylene (NRA)	<16	<16	<16							TM178	<16 ng/l
PAH 16 Total (NRA)	<100	<100	<100							TM178	<100 ng/l

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Job Number: 08/17352/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5281 **Client Contact:** Envirolab Data

Sample Identity	93483 BH4 WC1	93485 BH4 WC2	93487 BH4 WC3							Method Code	LoD/Units
Depth (m)	9.5	9.00	7.0								
Sample Type	SOLID	SOLID	SOLID								
Sampled Date	10.10.08	10.10.08	10.10.08								
Sample Received Date	17.10.08	17.10.08	17.10.08								
Batch	1	1	1								
Sample Number(s)	1-5	6-10	11-15								
OCP/OPP											
Dichlorvos (NRA)	<10	<10	<10							TM144/145	<10 ng/l
Mevinphos (NRA)	<10	<10	<10							TM144/145	<10 ng/l
Alpha-BHC (Lindane) (NRA)	<10	<10	<10							TM144/145	<10 ng/l
Beta-BHC (Lindane) (NRA)	<10	<10	<10							TM144/145	<10 ng/l
Gamma-BHC (Lindane) (NRA)	<10	<10	<10							TM144/145	<10 ng/l
Diazinon (NRA)	<10	<10	<10							TM144/145	<10 ng/l
Methyl Parathion (NRA)	<10	<10	<10							TM144/145	<10 ng/l
Heptachlor (NRA)	<10	<10	<10							TM144/145	<10 ng/l
Fenitrothion (NRA)	<10	<10	<10							TM144/145	<10 ng/l
Malathion (NRA)	<10	<10	<10							TM144/145	<10 ng/l
Aldrin (NRA)	<10	<10	<10							TM144/145	<10 ng/l
Parathion (NRA)	<10	<10	<10							TM144/145	<10 ng/l
Heptachlor Epoxide (NRA)	<10	<10	<10							TM144/145	<10 ng/l
Endosulphan I (NRA)	<10	<10	<10							TM144/145	<10 ng/l
p,p'-DDE (NRA)	<10	<10	<10							TM144/145	<10 ng/l
Dieldrin (NRA)	<10	<10	<10							TM144/145	<10 ng/l
Endrin (NRA)	<10	<10	<10							TM144/145	<10 ng/l
Endosulphan II (NRA)	<10	<10	<10							TM144/145	<10 ng/l
p,p'-TDE(DDD) (NRA)	<10	<10	<10							TM144/145	<10 ng/l
Ethion (NRA)	<10	<10	<10							TM144/145	<10 ng/l
p,p'-DDT (NRA)	<10	<10	<10							TM144/145	<10 ng/l
Endosulphan sulphate (NRA)	<10	<10	<10							TM144/145	<10 ng/l
p,p'-Methoxychlor (NRA)	<10	<10	<10							TM144/145	<10 ng/l
Azinphos methyl (NRA)	<10	<10	<10							TM144/145	<10 ng/l

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Job Number: 08/17352/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5281 **Client Contact:** Envirolab Data

Sample Identity	93483 BH4 WC1	93485 BH4 WC2	93487 BH4 WC3							Method Code	LoD/Units
Depth (m)	9.5	9.00	7.0								
Sample Type	SOLID	SOLID	SOLID								
Sampled Date	10.10.08	10.10.08	10.10.08								
Sample Received Date	17.10.08	17.10.08	17.10.08								
Batch	1	1	1								
Sample Number(s)	1-5	6-10	11-15								
SVOC by GCMS											
Phenols											
2-Chlorophenol (NRA)	<1	<1	<1							TM176	<1 ug/l
2-Methylphenol (NRA)	<1	<1	<1							TM176	<1 ug/l
2-Nitrophenol (NRA)	<1	<1	<1							TM176	<1 ug/l
2,4-Dichlorophenol (NRA)	<1	<1	<1							TM176	<1 ug/l
2,4-Dimethylphenol (NRA)	<1	<1	<1							TM176	<1 ug/l
2,4,5-Trichlorophenol (NRA)	<1	<1	<1							TM176	<1 ug/l
2,4,6-Trichlorophenol (NRA)	<1	<1	<1							TM176	<1 ug/l
4-Chloro-3-methylphenol (NRA)	<1	<1	<1							TM176	<1 ug/l
4-Methylphenol (NRA)	<1	<1	<1							TM176	<1 ug/l
4-Nitrophenol (NRA)	<1	<1	<1							TM176	<1 ug/l
Pentachlorophenol (NRA)	<1	<1	<1							TM176	<1 ug/l
Phenol (NRA)	<1	<1	<1							TM176	<1 ug/l

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Job Number: 08/17352/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5281 **Client Contact:** Envirolab Data

Sample Identity	93483 BH4 WC1	93485 BH4 WC2	93487 BH4 WC3							Method Code	LoD/Units
Depth (m)	9.5	9.00	7.0								
Sample Type	SOLID	SOLID	SOLID								
Sampled Date	10.10.08	10.10.08	10.10.08								
Sample Received Date	17.10.08	17.10.08	17.10.08								
Batch	1	1	1								
Sample Number(s)	1-5	6-10	11-15								
PAHs											
2-Chloronaphthalene (NRA)	<1	<1	<1							TM176	<1 ug/l
2-Methylnaphthalene (NRA)	<1	<1	<1							TM176	<1 ug/l
Phthalates											
Bis(2-ethylhexyl) phthalate (NRA	<1	<1	<1							TM176	<1 ug/l
Butylbenzyl phthalate (NRA)	<1	<1	<1							TM176	<1 ug/l
Di-n-butyl phthalate (NRA)	<2	<2	<2							TM176	<1 ug/l
Di-n-Octyl phthalate (NRA)	<1	<1	<1							TM176	<1 ug/l
Diethyl phthalate (NRA)	<2	<2	<2							TM176	<1 ug/l
Dimethyl phthalate (NRA)	<1	<1	<1							TM176	<1 ug/l
Other Semi-volatiles											
1,2-Dichlorobenzene (NRA)	<1	<1	<1							TM176	<1 ug/l
1,2,4-Trichlorobenzene (NRA)	<1	<1	<1							TM176	<1 ug/l
1,3-Dichlorobenzene (NRA)	<1	<1	<1							TM176	<1 ug/l
1,4-Dichlorobenzene (NRA)	<1	<1	<1							TM176	<1 ug/l
2-Nitroaniline (NRA)	<1	<1	<1							TM176	<1 ug/l
2,4-Dinitrotoluene (NRA)	<1	<1	<1							TM176	<1 ug/l
2,6-Dinitrotoluene (NRA)	<1	<1	<1							TM176	<1 ug/l
3-Nitroaniline (NRA)	<1	<1	<1							TM176	<1 ug/l
4-Bromophenylphenylether (NRA	<1	<1	<1							TM176	<1 ug/l
4-Chloroaniline (NRA)	<1	<1	<1							TM176	<1 ug/l
4-Chlorophenylphenylether (NRA	<1	<1	<1							TM176	<1 ug/l
4-Nitroaniline (NRA)	<1	<1	<1							TM176	<1 ug/l
Azobenzene (NRA)	<1	<1	<1							TM176	<1 ug/l
Bis(2-chloroethoxy)methane (NRA)	<1	<1	<1							TM176	<1 ug/l
Bis(2-chloroethyl)ether (NRA)	<1	<1	<1							TM176	<1 ug/l
Carbazole (NRA)	<1	<1	<1							TM176	<1 ug/l
Dibenzofuran (NRA)	<1	<1	<1							TM176	<1 ug/l
Hexachlorobenzene (NRA)	<1	<1	<1							TM176	<1 ug/l

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Job Number: 08/17352/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5281 **Client Contact:** Envirolab Data

Sample Identity	93483 BH4 WC1	93485 BH4 WC2	93487 BH4 WC3							Method Code	LoD/Units
Depth (m)	9.5	9.00	7.0								
Sample Type	SOLID	SOLID	SOLID								
Sampled Date	10.10.08	10.10.08	10.10.08								
Sample Received Date	17.10.08	17.10.08	17.10.08								
Batch	1	1	1								
Sample Number(s)	1-5	6-10	11-15								
Other Semi-volatiles (cont)											
Hexachlorobutadiene (NRA)	<1	<1	<1							TM176	<1 ug/l
Hexachlorocyclopentadiene (NRA	<1	<1	<1							TM176	<1 ug/l
Hexachloroethane (NRA)	<1	<1	<1							TM176	<1 ug/l
Isophorone (NRA)	<2	<2	<2							TM176	<1 ug/l
N-nitrosodi-n-propylamine (NRA)	<1	<1	<1							TM176	<1 ug/l
Nitrobenzene (NRA)	<1	<1	<1							TM176	<1 ug/l

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Job Number: 08/17352/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5281 **Client Contact:** Envirolab Data

Sample Identity	93483 BH4 WC1	93485 BH4 WC2	93487 BH4 WC3							Method Code	LoD/Units
Depth (m)	9.5	9.00	7.0								
Sample Type	SOLID	SOLID	SOLID								
Sampled Date	10.10.08	10.10.08	10.10.08								
Sample Received Date	17.10.08	17.10.08	17.10.08								
Batch	1	1	1								
Sample Number(s)	1-5	6-10	11-15								
Volatile Organic Compounds											
Dichlorodifluoromethane (NRA)	<1	<1	<1							TM208	<1 ug/l
Chloromethane (NRA)	<1	<1	<1							TM208	<1 ug/l
Vinyl Chloride (NRA)	<1	<1	<1							TM208	<1 ug/l
Bromomethane (NRA)	<1	<1	<1							TM208	<1 ug/l
Chloroethane (NRA)	<1	<1	<1							TM208	<1 ug/l
Trichlorofluoromethane (NRA)	<1	<1	<1							TM208	<1 ug/l
trans-1-2-Dichloroethene (NRA)	<1	<1	<1							TM208	<1 ug/l
Dichloromethane (NRA)	<1	<1	<1							TM208	<1 ug/l
Carbon Disulphide (NRA)	<1	<1	<1							TM208	<1 ug/l
1.1-Dichloroethene (NRA)	<1	<1	<1							TM208	<1 ug/l
1.1-Dichloroethane (NRA)	<1	<1	<1							TM208	<1 ug/l
Methyl Tertiary Butyl Ether (NRA)	<1	<1	<1							TM208	<1 ug/l
cis-1-2-Dichloroethene (NRA)	<1	<1	<1							TM208	<1 ug/l
Bromochloromethane (NRA)	<1	<1	<1							TM208	<1 ug/l
Chloroform (NRA)	<1	<1	<1							TM208	<1 ug/l
2.2-Dichloropropane (NRA)	<1	<1	<1							TM208	<1 ug/l
1.2-Dichloroethane (NRA)	<1	<1	<1							TM208	<1 ug/l
1.1.1-Trichloroethane (NRA)	<1	<1	<1							TM208	<1 ug/l
1.1-Dichloropropene (NRA)	<1	<1	<1							TM208	<1 ug/l
Benzene (NRA)	<1	<1	<1							TM208	<1 ug/l
Carbontetrachloride (NRA)	<1	<1	<1							TM208	<1 ug/l
Dibromomethane (NRA)	<1	<1	<1							TM208	<1 ug/l
1.2-Dichloropropane (NRA)	<1	<1	<1							TM208	<1 ug/l
Bromodichloromethane (NRA)	<1	<1	<1							TM208	<1 ug/l
Trichloroethene (NRA)	<1	<1	<1							TM208	<1 ug/l
cis-1-3-Dichloropropene (NRA)	<1	<1	<1							TM208	<1 ug/l
trans-1-3-Dichloropropene (NRA)	<1	<1	<1							TM208	<1 ug/l
1.1.2-Trichloroethane (NRA)	<1	<1	<1							TM208	<1 ug/l
Toluene (NRA)	<1	<1	<1							TM208	<1 ug/l
1.3-Dichloropropane (NRA)	<1	<1	<1							TM208	<1 ug/l

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Job Number: 08/17352/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5281 **Client Contact:** Envirolab Data

Sample Identity	93483 BH4 WC1	93485 BH4 WC2	93487 BH4 WC3							Method Code	LoD/Units
Depth (m)	9.5	9.00	7.0								
Sample Type	SOLID	SOLID	SOLID								
Sampled Date	10.10.08	10.10.08	10.10.08								
Sample Received Date	17.10.08	17.10.08	17.10.08								
Batch	1	1	1								
Sample Number(s)	1-5	6-10	11-15								
Volatile Organic Compounds (cont)											
Dibromochloromethane (NRA)	<1	<1	<1							TM208	<1 ug/l
1,2-Dibromoethane (NRA)	<1	<1	<1							TM208	<1 ug/l
Tetrachloroethene (NRA)	<1	<1	<1							TM208	<1 ug/l
1,1,1,2-Tetrachloroethane (NRA)	<1	<1	<1							TM208	<1 ug/l
Chlorobenzene (NRA)	<1	<1	<1							TM208	<1 ug/l
Ethylbenzene (NRA)	<1	<1	<1							TM208	<1 ug/l
p/m-Xylene (NRA)	<1	<1	<1							TM208	<1 ug/l
Bromoform (NRA)	<1	<1	<1							TM208	<1 ug/l
Styrene (NRA)	<1	<1	<1							TM208	<1 ug/l
1,1,2,2-Tetrachloroethane (NRA)	<1	<1	<1							TM208	<1 ug/l
o-Xylene (NRA)	<1	<1	<1							TM208	<1 ug/l
1,2,3-Trichloropropane (NRA)	<1	<1	<1							TM208	<1 ug/l
Isopropylbenzene (NRA)	<1	<1	<1							TM208	<1 ug/l
Bromobenzene (NRA)	<1	<1	<1							TM208	<1 ug/l
2-Chlorotoluene (NRA)	<1	<1	<1							TM208	<1 ug/l
Propylbenzene (NRA)	<1	<1	<1							TM208	<1 ug/l
4-Chlorotoluene (NRA)	<1	<1	<1							TM208	<1 ug/l
1,2,4-Trimethylbenzene (NRA)	<1	<1	<1							TM208	<1 ug/l
4-Isopropyltoluene (NRA)	<1	<1	<1							TM208	<1 ug/l
1,3,5-Trimethylbenzene (NRA)	<1	<1	<1							TM208	<1 ug/l
1,2-Dichlorobenzene (NRA)	<1	<1	<1							TM208	<1 ug/l
1,4-Dichlorobenzene (NRA)	<1	<1	<1							TM208	<1 ug/l
sec-Butylbenzene (NRA)	<1	<1	<1							TM208	<1 ug/l
tert-Butylbenzene (NRA)	<1	<1	<1							TM208	<1 ug/l
1,3-Dichlorobenzene (NRA)	<1	<1	<1							TM208	<1 ug/l
n-Butylbenzene (NRA)	<1	<1	<1							TM208	<1 ug/l
1,2-Dibromo-3-chloropropane (NRA)	<1	<1	<1							TM208	<1 ug/l
1,2,4-Trichlorobenzene (NRA)	<1	<1	<1							TM208	<1 ug/l
Naphthalene (NRA)	<1	<1	<1							TM208	<1 ug/l
1,2,3-Trichlorobenzene (NRA)	<1	<1	<1							TM208	<1 ug/l

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* Subcontracted test
» Shown on prev. report

Job Number: 08/17352/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5281 **Client Contact:** Envirolab Data

Sample Identity	93483 BH4 WC1	93485 BH4 WC2	93487 BH4 WC3						Method Code	LoD/Units
Depth (m)	9.5	9.00	7.0							
Sample Type	SOLID	SOLID	SOLID							
Sampled Date	10.10.08	10.10.08	10.10.08							
Sample Received Date	17.10.08	17.10.08	17.10.08							
Batch	1	1	1							
Sample Number(s)	1-5	6-10	11-15							
Volatile Organic Compounds (cont)										
Hexachlorobutadiene (NRA)	<1	<1	<1						TM208	<1 ug/l

Date 27.10.2008

envirolab

Date: 08 January 2009
Your Ref: 722201
Our Ref: 722201-(5281)-013
Project Manager: Steve Mackereth
Report to: John Wild

Envirolab
Units 7 & 8
Sandpits Business Park
Mottram Road
Hyde
Cheshire
SK14 3AR

Supplemental of Final Test Report 722201-(5281)-012

Sample(s) of Soil from Sizewell C.
Received from Structural Soils Ltd
The Old School House, Stillhouse Lane, Bedminster, Bristol, BS3 4EB

Date of receipt: 15 October 2008
Date analysis commenced: 15 October 2008
Date analysis completed: 08 January 2009

Method Statement

Speciated TPH analysis is performed in accordance with procedures A-T-022 using GC-MS with Head Space & A-T-023 using GC-FID.
PCB analysis is performed in accordance with procedures A-T-004 and A-T-005.
PAH analysis is performed in accordance with procedure A-T-019.
Loss on drying analysis is performed in accordance with procedure A-T-020.
Subcontract analysis was submitted to a laboratory on Envirolab's approved vendors list.
A copy of the report is attached, UKAS/MCERTS status is detailed on the report.

Prepared by:

[redacted]

Thi McNabb
Reporting Analytical Chemist

Approved by:

[redacted]

Louise Adams
Associate Director - Operations

UKAS TESTING No. 1247

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.
Tests marked "*" in this report are not included in the UKAS Accreditation Schedule for Envirolab.
Analytical results reflect the quality of the sample at the time of analysis only.

MCERTS

ALcontrol Laboratories Analytical Services
Sample Descriptions

Job Number: 08/20960/02/01
Client: Envirolab
Client Ref : 722201-5281

Grain sizes

<0.063mm	Very Fine
0.1mm - 0.063mm	Fine
0.1mm - 2mm	Medium
2mm - 10mm	Coarse
>10mm	Very Coarse

Sample Identity	Depth (m)	Colour	Grain Size	Description	Batch
BH1 93480	6.50	Dark Brown	0.1mm - 0.063mm	Silt Loam with some Vegetation	1
BH5 93490	8.00	Black	0.1mm - 0.063mm	Silt Loam	1

* These descriptions are only intended to act as a cross check if sample identities are questioned, and to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions.

We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials-whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample.
Other coarse granular materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.
[1] Sample Description supplied by client

Validated ☑
Preliminary ☐

ALcontrol Laboratories Analytical Services
Table Of Results

ISO 17025 accredited
M MCERTS accredited
* Subcontracted test
» Shown on prev. report

Job Number: 08/20960/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5281 **Client Contact:** Subcon

Sample Identity	BH1 93480	BH5 93490								Method Code	LoD/Units
Depth (m)	6.50	8.00									
Sample Type	SOLID	SOLID									
Sampled Date	10.10.08	09.10.08									
Sample Received Date	22.12.08	22.12.08									
Batch	1	1									
Sample Number(s)	1	2									
Conductivity (at 20 deg.C)	NDP	14								TM120#	<0.014 mS/cm
Sodium	13000	4200								TM083	<4 mg/kg
Chloride (soluble)	11000	3600								TM097#M	<2 mg/kg
Loss on Ignition	48	69								TM018#M	<0.3 %
pH Value	5.42	3.14								TM133#M	<1.00 pH Units

All results expressed on a dry weight basis.

Date 08.01.2009

ALcontrol Laboratories Analytical Services
Table Of Results - Appendix

Job Number: 08/20960/02/01
Client: Envirolab
Client Ref. No.: 722201-5281

Report Key :

			Results expressed as (e.g.) 1.03E-07 is equivalent to 1.03×10^{-7}
NDP	No Determination Possible	*	Subcontracted test
ACM	Asbestos Containing Materia	»	Result previously reported (Incremental reports only)
#	ISO 17025 accredited	M	MCERTS Accredited
		EC	Equivalent Carbon (Aromatics C8-C35)

Note: Method detection limits are not always achievable due to various circumstances beyond our control.

Summary of Method Codes contained within report :

Method No.	Reference	Description	ISO 17025 Accredited	MCERTS Accredited	Wet/Dry Sample [1]	Surrogate Corrected
TM018	BS 1377: Part 3 1990	Determination of Loss on Ignition	✓	✓	WET	
TM083	Method 3111, AWWA/APHA, 20th Ed., 1999 / Modified: US EPA Method 7610	Determination of Sodium and Potassium by Flame Photometer			DRY	
TM097	Modified: US EPA Method 325.1 & 325.2	Determination of Chloride using the Kone Analyser	✓	✓	DRY	
TM120	Method 2510B, AWWA/APHA, 20th Ed., 1999 / BS 2690: Part 9:1970	Determination of Electrical Conductivity using a Conductivity Meter	✓		DRY	
TM133	BS 1377: Part 3 1990;BS 6068-2.5	Determination of pH in Soil and Water using the GLpH pH Meter	✓	✓	WET	

[1] Applies to Solid samples only. **DRY** indicates samples have been dried at 35°C. **NA** = not applicable.

ISO 17025 Form	FORM NO:SQS 105
ALCONTROL LABORATORIES	SHEET 1 OF 1
	ISSUE NO: 2
	WRITTEN BY: DOH
Title of Form **Notification of NDPs (No determination possible).**	APPROVED BY: DP

Job Number : 20960
Client : 1
Sample Type : solid

Job No.	Sample No.	Sample ID.	Analyte(s)	Reason
20960	1	BH1 - 93480	EC	INSUFFICIENT SAMPLE

envirolab

Date: 05 November 2008
Your Ref: 722201
Our Ref: 722201-(5299)-020
Project Manager: Steve Mackereth
Report to: John Wild

Envirolab
Units 7 & 8
Sandpits Business Park
Mottram Road
Hyde
Cheshire
SK14 3AR

Final Test Report

Sample(s) of Soil from Sizewell C.
Received from Structural Soils Ltd
The Old School House, Stillhouse Lane, Bedminster, Bristol, BS3 4EB

Date of receipt: 16 October 2008
Date analysis commenced: 16 October 2008
Date analysis completed: 05 November 2008

Method Statement

Speciated TPH analysis is performed in accordance with procedures A-T-022 using GC-MS with Head Space & A-T-023 using GC-FID.
PCB analysis is performed in accordance with procedures A-T-004 and A-T-005.
PAH analysis is performed in accordance with procedure A-T-019.
Loss on drying analysis is performed in accordance with procedure A-T-020.
Subcontract analysis was submitted to a laboratory on Envirolab's approved vendors list.
A copy of the report is attached, UKAS/MCERTS status is detailed on the report.

Prepared by:

[redacted]

Thi McNabb
Reporting Analytical Chemist

Approved by:

[redacted]

Louise Adams
Associate Director - Operations

UKAS TESTING No. 1247

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.
Tests marked "*" in this report are not included in the UKAS Accreditation Schedule for Envirolab.
Analytical results reflect the quality of the sample at the time of analysis only.

MCERTS

envirolab

Envirolab Ref.	PROCEDURE	ISO17025	MCERTS	93762	93764	93768	93770	93772					
Location				BH20 WC3	BH20 WC5	BH20 WC1	BH20 WC2	BH20 WC4					
Depth (m)				7.00	10.50	4.00	4.60	8.30					
Sample Ref				-	-	-	-	-					
Sample Type				-	-	-	-	-					
MTBE$_R$	A-T-022	Y	N	<0.01	<0.01	<0.01	<0.01	<0.01					
Benzene$_R$	A-T-022	Y	N	<0.01	<0.01	<0.01	<0.01	<0.01					
Toluene$_R$	A-T-022	Y	N	<0.01	<0.01	<0.01	<0.01	0.01					
Ethyl Benzene$_R$	A-T-022	Y	N	<0.01	<0.01	<0.01	<0.01	<0.01					
m & p Xylene$_R$	A-T-022	Y	N	<0.01	0.02	0.01	0.01	0.01					
o Xylene$_R$	A-T-022	Y	N	<0.01	<0.01	0.01	<0.01	<0.01					
Aliphatics C5-C6$_R$	A-T-022	Y	N	<0.01	<0.01	<0.01	<0.01	<0.01					
Aliphatics >C6-C8$_R$	A-T-022	Y	N	<0.01	<0.01	<0.01	<0.01	<0.01					
Aliphatics >C8-C10$_R$	A-T-022	Y	N	<0.01	<0.01	<0.01	<0.01	<0.01					
Aliphatics >C10-C12$_R$	A-T-023	Y	N	<0.1	<0.1	<0.1	<0.1	<0.1					
Aliphatics >C12-C16$_R$	A-T-023	Y	N	<0.1	<0.1	<0.1	<0.1	<0.1					
Aliphatics >C16-C21$_R$	A-T-023	Y	N	<0.1	<0.1	<0.1	<0.1	<0.1					
Aliphatics >C21-C35$_R$	A-T-023	Y	N	<0.1	<0.1	<0.1	<0.1	<0.1					
Total Aliphatics		Y	N	<0.1	<0.1	<0.1	<0.1	<0.1					
Aromatics >C5-C7$_R$	A-T-022	Y	N	<0.01	<0.01	<0.01	<0.01	<0.01					
Aromatics >C7-C8$_R$	A-T-022	Y	N	<0.01	<0.01	<0.01	<0.01	0.01					
Aromatics >C8-C9$_R$	A-T-022	Y	N	<0.01	0.02	0.01	0.01	0.02					
Aromatics >C9-C10$_R$	A-T-022	Y	N	<0.01	<0.01	<0.01	<0.01	<0.01					
Aromatics >C10-C12$_R$	A-T-023	Y	N	<0.1	<0.1	<0.1	<0.1	<0.1					
Aromatics >C12-C16$_R$	A-T-023	Y	N	<0.1	<0.1	<0.1	<0.1	<0.1					
Aromatics >C16-C21$_R$	A-T-023	Y	N	<0.1	<0.1	<0.1	<0.1	<0.1					
Aromatics >C21-C35$_R$	A-T-023	Y	N	<0.1	<0.1	<0.1	<0.1	<0.1					
Total Aromatics		Y	N	<0.1	<0.1	<0.1	<0.1	<0.1					
TPH (Aliphatics & Aromatics)		Y	N	<0.1	<0.1	<0.1	<0.1	<0.1					

Table 1 - Soil Speciated TPH Results (mg/kg)

Envirolab Ref.	PROCEDURE	ISO17025	MCERTS	93762	93764	93768	93770	93772					
Location				BH20 WC3	BH20 WC5	BH20 WC1	BH20 WC2	BH20 WC4					
Depth (m)				7.00	10.50	4.00	4.60	8.30					
Sample Ref				-	-	-	-	-					
Sample Type				-	-	-	-	-					
PCB BZ 28_D	A-T-004 A-T-005	Y	Y	<0.005	<0.005	<0.005	<0.005	<0.005					
PCB BZ 52_D	A-T-004 A-T-005	Y	Y	<0.005	<0.005	<0.005	<0.005	<0.005					
PCB BZ 101_D	A-T-004 A-T-005	Y	Y	<0.005	<0.005	<0.005	<0.005	<0.005					
PCB BZ 118_D	A-T-004 A-T-005	Y	Y	<0.005	<0.005	<0.005	<0.005	<0.005					
PCB BZ 138_D	A-T-004 A-T-005	Y	Y	<0.005	<0.005	<0.005	<0.005	<0.005					
PCB BZ 153_D	A-T-004 A-T-005	Y	Y	<0.005	<0.005	<0.005	<0.005	<0.005					
PCB BZ 180_D	A-T-004 A-T-005	Y	Y	<0.005	<0.005	<0.005	<0.005	<0.005					

Table 2 - Soil PCB Results (mg/kg, expressed on a dry weight basis)

envirolab

Envirolab Ref.	PROCEDURE	ISO17025	MCERTS	93762	93764	93768	93770	93772					
Location				BH20 WC3	BH20 WC5	BH20 WC1	BH20 WC2	BH20 WC4					
Depth (m)				7.00	10.50	4.00	4.60	8.30					
Sample Ref				-	-	-	-	-					
Sample Type				-	-	-	-	-					
Naphthalene$_R$ "	A-T-019	N	N	0.01	0.08	0.02	0.05	0.06					
Acenaphthylene$_R$ "	A-T-019	N	N	<0.01	0.01	<0.01	<0.01	<0.01					
Acenaphthene$_R$ "	A-T-019	N	N	<0.01	0.01	<0.01	<0.01	<0.01					
Fluorene$_R$ "	A-T-019	N	N	<0.01	0.02	<0.01	<0.01	<0.01					
Phenanthrene$_R$ "	A-T-019	N	N	0.05	0.14	0.03	0.03	0.08					
Anthracene$_R$ "	A-T-019	Y	N	<0.01	0.02	<0.01	<0.01	<0.01					
Fluoranthene$_R$ "	A-T-019	Y	N	0.03	0.14	0.01	0.01	0.03					
Pyrene$_R$ "	A-T-019	Y	N	0.02	0.09	0.01	<0.01	0.01					
Benz [a] anthracene$_R$ "	A-T-019	N	N	<0.01	<0.01	<0.01	<0.01	<0.01					
Chrysene$_R$ "	A-T-019	Y	N	<0.01	<0.01	<0.01	<0.01	<0.01					
Benzo [b] fluoranthene$_R$ Benzo [k] fluoranthene #$_R$ "	A-T-019	Y	N	<0.01	0.12	<0.01	<0.01	<0.01					
Benzo [a] pyrene$_R$ "	A-T-019	N	N	<0.01	5.21	0.01	<0.01	<0.01					
Indeno [123-cd] pyrene$_R$ "	A-T-019	Y	N	<0.01	0.03	<0.01	<0.01	0.06					
Dibenz [ah] anthracene$_R$ "	A-T-019	Y	N	<0.01	<0.01	<0.01	<0.01	<0.01					
Benzo [ghi] perylene$_R$ "	A-T-019	Y	N	0.02	0.03	0.02	<0.01	0.01					
Total 16 PAH Reported		N	N	0.13	5.90	0.10	0.09	0.25					

Due to coelution Benzo [b] fluoranthene and Benzo [k] fluoranthene are reported as one value.

Table 3 - Soil PAH Results (mg/kg, expressed on a dry weight basis)

envirolab

Envirolab Ref.	93762	93764	93768	93770	93772					
Location	BH20 WC3	BH20 WC5	BH20 WC1	BH20 WC2	BH20 WC4					
Depth (m)	7.00	10.50	4.00	4.60	8.30					
Sample Ref	-	-	-	-	-					
Sample Type	-	-	-	-	-					
Type	Clay	Loam	Clay	Clay	Loam					
Colour	Grey	Black	Grey	Mixed	Black					
Consistency	Soft	Loose	Soft	Soft	Loose					
Some Stones	Yes	Yes	Yes	Yes	Yes					
>50 Stones	No	No	No	No	No					
Some Vegetation	Yes	Yes	No	Yes	Yes					
Very Wet	No	No	No	No	No					
Strong Odour	No	No	No	No	No					

Table 4 - Soil Matrix Table

envirolab

Appendix

Code	Description
*	Increased detection limit due to sample interference
#	Increased detection limit due to sample dilution
$	Analysis subcontracted
IS	Insufficient sample for analysis
IS-QC	Insufficient sample to retest following QC fail
NDP	No determination possible
~	Sample type outside the scope of our MCERTS accreditation since matrix not included in method validation
"	Analytes are associated with failed AQC targets for MCERTS, but passed some UKAS AQC
^	Sample result is not covered under Envirolab's accreditation schedule for MCERTS as the result exceeds the validated range. See notes 1-3.
F	Analysis suffixed "$_F$" were performed on the filtered sample
D	Analysis suffixed "$_D$" were performed on the sample air dried at <30°C
D	Analysis suffixed "$_D$" were performed on the sample oven dried at 95°C
R	Analysis suffixed "$_R$" were performed on the sample as received. Where results are expressed on a dry weight basis, the samples were air dried at 95°C
Notes	
1	For MCERTS the validated range covers up to 15mg/kg for individual PAHs, 200mg/kg for totals.
2	For MCERTS the validated range covers up to 3000mg/kg for Total TPH analysis.
3	For MCERTS the validated range covers up to 0.2mg/kg for individual PCBs, and 1.5mg/kg for the total reported as aroclor.
4	Natural stones and debris are excluded from analyses
5	Coarse granular material such as concrete, gravel and brick are not MCERTS accredited if they comprise the major part of the sample. Envirolab are currently accredited for MCERTS on soil types Sand, Clay and Loam only

ALcontrol Laboratories Analytical Services
Sample Descriptions

Job Number: 08/17617/02/01
Client: Envirolab
Client Ref : 722201-5299

Grain sizes	
<0.063mm	Very Fine
0.1mm - 0.063mm	Fine
0.1mm - 2mm	Medium
2mm - 10mm	Coarse
>10mm	Very Coarse

Sample Identity	Depth (m)	Colour	Grain Size	Description	Batch
93766 BH20	10.00	Dark Brown	0.1mm - 0.063mm	Clay Loam	1

* These descriptions are only intended to act as a cross check if sample identities are questioned, and to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions.

We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials-whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample.
Other coarse granular materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.
' Sample Description supplied by client

Validated ☑
Preliminary ☐

ALcontrol Laboratories Analytical Services
Table Of Results

* ISO 17025 accredited
M MCERTS accredited
* Subcontracted test
» Shown on prev. report

Job Number: 08/17617/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5299 **Client Contact:** Subcon

Sample Identity	93766 BH20									Method Code	LoD/Units
Depth (m)	10.00										
Sample Type	SOLID										
Sampled Date	14.10.08										
Sample Received Date	22.10.08										
Batch	1										
Sample Number(s)	1										
Arsenic	48									TM129$^{*}_{M}$	<3.0 mg/kg
Cadmium	<0.2									TM129	<0.2 mg/kg
Chromium	<4.5									TM129$^{*}_{M}$	<4.5 mg/kg
Copper	<6									TM129$^{*}_{M}$	<6 mg/kg
Lead	6									TM129$^{*}_{M}$	<2 mg/kg
Mercury	<0.4									TM129$^{*}_{M}$	<0.4 mg/kg
Nickel	2.0									TM129$^{*}_{M}$	<0.9 mg/kg
Zinc	9.7									TM129$^{*}_{M}$	<2.5 mg/kg
Total Alkalinity as CaCO3	85									TM043	<10 mg/kg

All results expressed on a dry weight basis.

Date 29.10.2008

ALcontrol Laboratories Analytical Services
Table Of Results - Appendix

Job Number: 08/17617/02/01
Client: Envirolab
Client Ref. No.: 722201-5299

Report Key :

Results expressed as (e.g.) 1.03E-07 is equivalent to 1.03×10^{-7}

NDP	No Determination Possible	*	Subcontracted test
NFD	No Fibres Detected	»	Result previously reported (Incremental reports only)
#	ISO 17025 accredited	M	MCERTS Accredited
PFD	Possible Fibres Detected	EC	Equivalent Carbon (Aromatics C8-C35)

Note: Method detection limits are not always achievable due to various circumstances beyond our control.

Summary of Method Codes contained within report :

Method No.	Reference	Description	ISO 17025 Accredited	MCERTS Accredited	Wet/Dry Sample [1]	Surrogate Corrected
TM043	Method 2320B, AWWA/APHA, 20th Ed., 1999 / BS 2690: Part109 1984	Determination of alkalinity in aqueous samples			WET	
TM129	Method 3120B, AWWA/APHA, 20th Ed., 1999 / Modified: US EPA Method 3050B	Determination of Metal Cations by IRIS Emission Spectrometer			DRY	
TM129	Method 3120B, AWWA/APHA, 20th Ed., 1999 / Modified: US EPA Method 3050B	Determination of Metal Cations by IRIS Emission Spectrometer	✓	✓	DRY	

[1] Applies to Solid samples only. **DRY** indicates samples have been dried at 35°C. **NA** = not applicable.

ALcontrol Laboratories Analytical Services
Sample Descriptions

Job Number: 08/17377/02/01
Client: Envirolab
Client Ref : 722201-5299

Grain sizes

<0.063mm	Very Fine
0.1mm - 0.063mm	Fine
0.1mm - 2mm	Medium
2mm - 10mm	Coarse
>10mm	Very Coarse

Sample Identity	Depth (m)	Colour	Grain Size	Description	Batch
93762 BH20 WC3	7.0	Brown	0.1mm - 0.063mm	Silty Clay with some Vegetation	1
93764 BH20 WC5	10.5	Dark Brown	0.1mm - 0.063mm	Silty Clay with some Vegetation	1
93768 BH20 WC1	4.0	Brown	<0.063mm	Clay with some Stones	1
93770 BH20 WC2	4.6	Dark Brown	0.1mm - 0.063mm	Silty Clay with some Vegetation	1
93772 BH20 WC4	8.3	Dark Brown	0.1mm - 0.063mm	Silty Clay with some Vegetation	1

* These descriptions are only intended to act as a cross check if sample identities are questioned, and to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions.

We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials-whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample.
Other coarse granular materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.
' Sample Description supplied by client

Validated ☑
Preliminary ☐

ALcontrol Laboratories Analytical Services
Table Of Results

" ISO 17025 accredited
M MCERTS accredited
* Subcontracted test
» Shown on prev. report

Job Number: 08/17377/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5299 **Client Contact:** Envirolab Data

Sample Identity	93762 BH20 WC3	93764 BH20 WC5	93768 BH20 WC1	93770 BH20 WC2	93772 BH20 WC4					Method Code	LoD/Units
Depth (m)	7.0	10.5	4.0	4.6	8.3						
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID						
Sampled Date	14.10.08	14.10.08	14.10.08	14.10.08	14.10.08						
Sample Received Date	18.10.08	18.10.08	18.10.08	18.10.08	18.10.08						
Batch	1	1	1	1	1						
Sample Number(s)	1-5	6-10	11-15	16-20	21-25						
Total Sulphate	680	13000	2700	3300	2900					TM129$^{\#}_{M}$	<100 mg/kg
Boron Water Soluble	4.4	16	9.7	38	26					TM129$^{\#}_{M}$	<3.5 mg/kg
Arsenic	18	39	17	9	8					TM129$^{\#}_{M}$	<3.0 mg/kg
Cadmium	<0.2	0.4	0.3	<0.2	<0.2					TM129	<0.2 mg/kg
Chromium	25	7.2	39	24	12					TM129$^{\#}_{M}$	<4.5 mg/kg
Copper	11	8	15	13	9					TM129$^{\#}_{M}$	<6 mg/kg
Lead	13	7	19	10	12					TM129$^{\#}_{M}$	<2 mg/kg
Mercury	<0.4	<0.4	<0.4	<0.4	<0.4					TM129$^{\#}_{M}$	<0.4 mg/kg
Nickel	22	11	31	22	10					TM129$^{\#}_{M}$	<0.9 mg/kg
Selenium	<3	<3	<3	<3	<3					TM129$^{\#}_{M}$	<3 mg/kg
Vanadium	51	12	72	39	22					TM129$^{\#}_{M}$	<1.5 mg/kg
Zinc	61	18	86	47	23					TM129$^{\#}_{M}$	<2.5 mg/kg
Phenols Monohydric	<0.15	<0.15	<0.15	<0.15	<0.15					TM062$^{\#}_{M}$	<0.15 mg/kg
Total Cyanide	<1	<1	<1	<1	<1					TM153$^{\#}_{M}$	<1 mg/kg
Asbestos Presence Screen	No Fibres Detected	No Fibres Detected	No Fibres Detected	No Fibres Detected	No Fibres Detected					TM001	NONE
Elemental Sulphur	130	340	<70	<70	<70					TM136$^{\#}_{M}$	<70 mg/kg
Fraction of Organic Carbon	0.013	0.26	0.026	0.14	0.24					TM132$^{\#}$	<0.002 NONE
Loss on Ignition	3.9	54	6.8	41	52					TM018$^{\#}_{M}$	<0.3 %
pH Value	8.50	6.51	8.02	7.80	7.20					TM133$^{\#}_{M}$	<1.00 pH Units

All results expressed on a dry weight basis.

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Job Number: 08/17377/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5299 **Client Contact:** Envirolab Data

Sample Identity	93762 BH20 WC3	93764 BH20 WC5	93768 BH20 WC1	93770 BH20 WC2	93772 BH20 WC4					Method Code	LoD/Units
Depth (m)	7.0	10.5	4.0	4.6	8.3						
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID						
Sampled Date	14.10.08	14.10.08	14.10.08	14.10.08	14.10.08						
Sample Received Date	18.10.08	18.10.08	18.10.08	18.10.08	18.10.08						
Batch	1	1	1	1	1						
Sample Number(s)	1-5	6-10	11-15	16-20	21-25						
OCP/OPP											
Dichlorvos	<10	<10	<10	<10	<10					TM144/145	<1 ug/kg
Mevinphos	<10	<10	<10	<10	<10					TM144/145	<1 ug/kg
Alpha-BHC (Lindane)	<10	<10	<10	<10	<10					TM144/145	<1 ug/kg
Beta-BHC (Lindane)	<10	<10	<10	<10	<10					TM144/145	<1 ug/kg
Gamma-BHC (Lindane)	<10	<10	<10	<10	<10					TM144/145	<1 ug/kg
Diazinon	<10	<10	<10	<10	<10					TM144/145	<1 ug/kg
Methyl Parathion	<10	<10	<10	<10	<10					TM144/145	<1 ug/kg
Heptachlor	<10	<10	<10	<10	<10					TM144/145	<1 ug/kg
Fenitrothion	<10	<10	<10	<10	<10					TM144/145	<1 ug/kg
Malathion	<10	<10	<10	<10	<10					TM144/145	<1 ug/kg
Aldrin	<10	<10	<10	<10	<10					TM144/145	<1 ug/kg
Parathion	<10	<10	<10	<10	<10					TM144/145	<1 ug/kg
Heptachlor Epoxide	<10	<10	<10	<10	<10					TM144/145	<1 ug/kg
Endosulphan I	<10	<10	<10	<10	<10					TM144/145	<1 ug/kg
p,p'-DDE	<10	<10	<10	<10	<10					TM144/145	<1 ug/kg
Dieldrin	<10	<10	<10	<10	<10					TM144/145	<1 ug/kg
Endrin	<10	<10	<10	<10	<10					TM144/145	<1 ug/kg
Endosulphan II	<10	<10	<10	<10	<10					TM144/145	<1 ug/kg
p,p'-TDE(DDD)	<10	<10	<10	<10	<10					TM144/145	<1 ug/kg
Ethion	<10	<10	<10	<10	<10					TM144/145	<1 ug/kg
p,p'-DDT	<10	<10	<10	<10	<10					TM144/145	<1 ug/kg
Endosulphan sulphate	<10	<10	<10	<10	<10					TM144/145	<1 ug/kg
p,p'-Methoxychlor	<10	<10	<10	<10	<10					TM144/145	<1 ug/kg
Azinphos methyl	<10	<10	<10	<10	<10					TM144/145	<1 ug/kg

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Job Number: 08/17377/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5299 **Client Contact:** Envirolab Data

Sample Identity	93762 BH20 WC3	93764 BH20 WC5	93768 BH20 WC1	93770 BH20 WC2	93772 BH20 WC4					Method Code	LoD/Units
Depth (m)	7.0	10.5	4.0	4.6	8.3						
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID						
Sampled Date	14.10.08	14.10.08	14.10.08	14.10.08	14.10.08						
Sample Received Date	18.10.08	18.10.08	18.10.08	18.10.08	18.10.08						
Batch	1	1	1	1	1						
Sample Number(s)	1-5	6-10	11-15	16-20	21-25						
SVOC by GCMS											
Phenols											
2-Chlorophenol	<100	<100	<100	<100	<100					TM157	<100 ug/kg
2-Methylphenol	<100	<100	<100	<100	<100					TM157	<100 ug/kg
2-Nitrophenol	<100	<100	<100	<100	<100					TM157	<100 ug/kg
2,4-Dichlorophenol	<100	<100	<100	<100	<100					TM157	<100 ug/kg
2,4-Dimethylphenol	<100	<100	<100	<100	<100					TM157	<100 ug/kg
2,4,5-Trichlorophenol	<100	<100	<100	<100	<100					TM157	<100 ug/kg
2,4,6-Trichlorophenol	<100	<100	<100	<100	<100					TM157	<100 ug/kg
4-Chloro-3-methylphenol	<100	<100	<100	<100	<100					TM157	<100 ug/kg
4-Methylphenol	<100	<100	<100	<100	<100					TM157	<100 ug/kg
4-Nitrophenol	<100	<100	<100	<100	<100					TM157	<100 ug/kg
Pentachlorophenol	<100	<100	<100	<100	<100					TM157	<100 ug/kg
Phenol	<100	<100	<100	<100	<100					TM157	<100 ug/kg

All results expressed on a dry weight basis.

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Job Number: 08/17377/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5299 **Client Contact:** Envirolab Data

Sample Identity	93762 BH20 WC3	93764 BH20 WC5	93768 BH20 WC1	93770 BH20 WC2	93772 BH20 WC4					Method Code	LoD/Units
Depth (m)	7.0	10.5	4.0	4.6	8.3						
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID						
Sampled Date	14.10.08	14.10.08	14.10.08	14.10.08	14.10.08						
Sample Received Date	18.10.08	18.10.08	18.10.08	18.10.08	18.10.08						
Batch	1	1	1	1	1						
Sample Number(s)	1-5	6-10	11-15	16-20	21-25						
PAHs											
2-Chloronaphthalene	<100	<100	<100	<100	<100					TM157	<100 ug/kg
2-Methylnaphthalene	<100	<100	<100	<100	<100					TM157	<100 ug/kg
Acenaphthene	<100	<100	<100	<100	<100					TM157	<100 ug/kg
Acenaphthylene	<100	<100	<100	<100	<100					TM157	<100 ug/kg
Anthracene	<100	<100	<100	<100	<100					TM157	<100 ug/kg
Benzo(a)anthracene	<100	<100	<100	<100	<100					TM157	<100 ug/kg
Benzo(a)pyrene	<100	<100	<100	<100	<100					TM157	<100 ug/kg
Benzo(b)fluoranthene	<100	<100	<100	<100	<100					TM157	<100 ug/kg
Benzo(ghi)perylene	<100	<100	<100	<100	<100					TM157	<100 ug/kg
Benzo(k)fluoranthene	<100	<100	<100	<100	<100					TM157	<100 ug/kg
Chrysene	<100	<100	<100	<100	<100					TM157	<100 ug/kg
Dibenzo(a,h)anthracene	<100	<100	<100	<100	<100					TM157	<100 ug/kg
Fluoranthene	<100	<100	<100	<100	<100					TM157	<100 ug/kg
Fluorene	<100	<100	<100	<100	<100					TM157	<100 ug/kg
Indeno(1,2,3-cd)pyrene	<100	<100	<100	<100	<100					TM157	<100 ug/kg
Naphthalene	<100	<100	<100	<100	<100					TM157	<100 ug/kg
Phenanthrene	<100	<100	<100	<100	<100					TM157	<100 ug/kg
Pyrene	<100	<100	<100	<100	<100					TM157	<100 ug/kg
Phthalates											
Bis(2-ethylhexyl) phthalate	<200	1800	<100	720	<200					TM157	<100 ug/kg
Butylbenzyl phthalate	<100	<100	<100	<100	<100					TM157	<100 ug/kg
Di-n-butyl phthalate	<100	<100	<100	<100	<100					TM157	<100 ug/kg
Di-n-Octyl phthalate	<100	<100	<100	<100	<100					TM157	<100 ug/kg
Diethyl phthalate	<100	<100	<100	<100	<100					TM157	<100 ug/kg
Dimethyl phthalate	<100	<100	<100	<100	<100					TM157	<100 ug/kg
Other Semi-volatiles											
1,2-Dichlorobenzene	<100	<100	<100	<100	<100					TM157	<100 ug/kg
1,2,4-Trichlorobenzene	<100	<100	<100	<100	<100					TM157	<100 ug/kg

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Job Number: 08/17377/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5299 **Client Contact:** Envirolab Data

Sample Identity	93762 BH20 WC3	93764 BH20 WC5	93768 BH20 WC1	93770 BH20 WC2	93772 BH20 WC4					Method Code	LoD/Units
Depth (m)	7.0	10.5	4.0	4.6	8.3						
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID						
Sampled Date	14.10.08	14.10.08	14.10.08	14.10.08	14.10.08						
Sample Received Date	18.10.08	18.10.08	18.10.08	18.10.08	18.10.08						
Batch	1	1	1	1	1						
Sample Number(s)	1-5	6-10	11-15	16-20	21-25						
Other Semi-volatiles (cont)											
1,3-Dichlorobenzene	<100	<100	<100	<100	<100					TM157	<100 ug/kg
1,4-Dichlorobenzene	<100	<100	<100	<100	<100					TM157	<100 ug/kg
2-Nitroaniline	<100	<100	<100	<100	<100					TM157	<100 ug/kg
2,4-Dinitrotoluene	<100	<100	<100	<100	<100					TM157	<100 ug/kg
2,6-Dinitrotoluene	<100	<100	<100	<100	<100					TM157	<100 ug/kg
3-Nitroaniline	<100	<100	<100	<100	<100					TM157	<100 ug/kg
4-Bromophenylphenylether	<100	<100	<100	<100	<100					TM157	<100 ug/kg
4-Chloroaniline	<100	<100	<100	<100	<100					TM157	<100 ug/kg
4-Chlorophenylphenylether	<100	<100	<100	<100	<100					TM157	<100 ug/kg
4-Nitroaniline	<100	<100	<100	<100	<100					TM157	<100 ug/kg
Azobenzene	<100	<100	<100	<100	<100					TM157	<100 ug/kg
Bis(2-chloroethoxy)methane	<100	<100	<100	<100	<100					TM157	<100 ug/kg
Bis(2-chloroethyl)ether	<100	<100	<100	<100	<100					TM157	<100 ug/kg
Carbazole	<100	<100	<100	<100	<100					TM157	<100 ug/kg
Dibenzofuran	<100	<100	<100	<100	<100					TM157	<100 ug/kg
Hexachlorobenzene	<100	<100	<100	<100	<100					TM157	<100 ug/kg
Hexachlorobutadiene	<100	<100	<100	<100	<100					TM157	<100 ug/kg
Hexachlorocyclopentadiene	<100	<100	<100	<100	<100					TM157	<100 ug/kg
Hexachloroethane	<100	<100	<100	<100	<100					TM157	<100 ug/kg
Isophorone	<100	<100	<100	<100	<100					TM157	<100 ug/kg
N-nitrosodi-n-propylamine	<100	<100	<100	<100	<100					TM157	<100 ug/kg
Nitrobenzene	<100	<100	<100	<100	<100					TM157	<100 ug/kg

All results expressed on a dry weight basis.

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Job Number: 08/17377/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5299 **Client Contact:** Envirolab Data

Sample Identity	93762 BH20 WC3	93764 BH20 WC5	93768 BH20 WC1	93770 BH20 WC2	93772 BH20 WC4					Method Code	LoD/Units
Depth (m)	7.0	10.5	4.0	4.6	8.3						
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID						
Sampled Date	14.10.08	14.10.08	14.10.08	14.10.08	14.10.08						
Sample Received Date	18.10.08	18.10.08	18.10.08	18.10.08	18.10.08						
Batch	1	1	1	1	1						
Sample Number(s)	1-5	6-10	11-15	16-20	21-25						
Volatile Organic Compounds											
Dichlorodifluoromethane	<4	<4	<4	<4	<4					TM116#	<4 ug/kg
Chloromethane	<7	<7	<7	<7	<7					TM116#	<7 ug/kg
Vinyl Chloride	<10	<10	<10	<10	<10					TM116#M	<10 ug/kg
Bromomethane	<13	<13	<13	<13	<13					TM116	<13 ug/kg
Chloroethane	<14	<14	<14	<14	<14					TM116#	<14 ug/kg
Trichlorofluoromethane	<6	<6	<6	<6	<6					TM116#M	<6 ug/kg
trans-1-2-Dichloroethene	<11	<11	<11	<11	<11					TM116#	<11 ug/kg
Dichloromethane	<10	<10	<10	<10	<10					TM116#	<10 ug/kg
Carbon Disulphide	<7	700	<7	<7	160					TM116#M	<7 ug/kg
1.1-Dichloroethene	<10	<10	<10	<10	<10					TM116#M	<10 ug/kg
1.1-Dichloroethane	<8	<8	<8	<8	<8					TM116#M	<8 ug/kg
Methyl Tertiary Butyl Ether	<11	<11	<11	<11	<11					TM116	<11 ug/kg
cis-1-2-Dichloroethene	<5	<5	<5	<5	<5					TM116#M	<5 ug/kg
Bromochloromethane	<14	<14	<14	<14	<14					TM116#	<14 ug/kg
Chloroform	<8	<8	<8	<8	<8					TM116#M	<8 ug/kg
2.2-Dichloropropane	<12	<12	<12	<12	<12					TM116	<12 ug/kg
1.2-Dichloroethane	<5	<5	<5	<5	<5					TM116#	<5 ug/kg
1.1.1-Trichloroethane	<7	<7	<7	<7	<7					TM116#M	<7 ug/kg
1.1-Dichloropropene	<11	<11	<11	<11	<11					TM116#M	<11 ug/kg
Benzene	<9	<9	<9	<9	<9					TM116#M	<9 ug/kg
Carbontetrachloride	<14	<14	<14	<14	<14					TM116#M	<14 ug/kg
Dibromomethane	<9	<9	<9	<9	<9					TM116#	<9 ug/kg
1.2-Dichloropropane	<12	<12	<12	<12	<12					TM116#M	<12 ug/kg
Bromodichloromethane	<7	<7	<7	<7	<7					TM116#M	<7 ug/kg
Trichloroethene	<9	<9	<9	<9	<9					TM116#M	<9 ug/kg
cis-1-3-Dichloropropene	<14	<14	<14	<14	<14					TM116#M	<14 ug/kg
trans-1-3-Dichloropropene	<14	<14	<14	<14	<14					TM116#M	<14 ug/kg
1.1.2-Trichloroethane	<10	<10	<10	<10	<10					TM116#	<10 ug/kg
Toluene	<5	<5	<5	<5	<5					TM116#M	<5 ug/kg
1.3-Dichloropropane	<7	<7	<7	<7	<7					TM116#	<7 ug/kg

All results expressed on a dry weight basis.

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Job Number: 08/17377/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5299 **Client Contact:** Envirolab Data

Sample Identity	93762 BH20 WC3	93764 BH20 WC5	93768 BH20 WC1	93770 BH20 WC2	93772 BH20 WC4					Method Code	LoD/Units
Depth (m)	7.0	10.5	4.0	4.6	8.3						
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID						
Sampled Date	14.10.08	14.10.08	14.10.08	14.10.08	14.10.08						
Sample Received Date	18.10.08	18.10.08	18.10.08	18.10.08	18.10.08						
Batch	1	1	1	1	1						
Sample Number(s)	1-5	6-10	11-15	16-20	21-25						
Volatile Organic Compounds (cont)											
Dibromochloromethane	<13	<13	<13	<13	<13					TM116#	<13 ug/kg
1,2-Dibromoethane	<12	<12	<12	<12	<12					TM116#	<12 ug/kg
Tetrachloroethene	<5	<5	<5	<5	<5					TM116#	<5 ug/kg
1,1,1,2-Tetrachloroethane	<10	<10	<10	<10	<10					TM116#M	<10 ug/kg
Chlorobenzene	<5	<5	<5	<5	<5					TM116#M	<5 ug/kg
Ethylbenzene	<4	<4	<4	<4	<4					TM116#	<4 ug/kg
p/m-Xylene	<14	<14	<14	<14	<14					TM116#	<14 ug/kg
Bromoform	<10	<10	<10	<10	<10					TM116#	<10 ug/kg
Styrene	<10	<10	<10	<10	<10					TM116#	<10 ug/kg
1,1,2,2-Tetrachloroethane	<10	<10	<10	<10	<10					TM116#	<10 ug/kg
o-Xylene	<10	<10	<10	<10	<10					TM116#	<10 ug/kg
1,2,3-Trichloropropane	<17	<17	<17	<17	<17					TM116#	<17 ug/kg
Isopropylbenzene	<5	<5	<5	<5	<5					TM116#	<5 ug/kg
Bromobenzene	<10	<10	<10	<10	<10					TM116#M	<10 ug/kg
2-Chlorotoluene	<9	<9	<9	<9	<9					TM116#	<9 ug/kg
Propylbenzene	<11	<11	<11	<11	<11					TM116#	<11 ug/kg
4-Chlorotoluene	<12	<12	<12	<12	<12					TM116#	<12 ug/kg
1,2,4-Trimethylbenzene	<9	<9	<9	<9	<9					TM116#	<9 ug/kg
4-Isopropyltoluene	<11	<11	<11	<11	<11					TM116#	<11 ug/kg
1,3,5-Trimethylbenzene	<8	<8	<8	<8	<8					TM116#	<8 ug/kg
1,2-Dichlorobenzene	<12	<12	<12	<12	<12					TM116#M	<12 ug/kg
1,4-Dichlorobenzene	<5	<5	<5	<5	<5					TM116#M	<5 ug/kg
sec-Butylbenzene	<10	<10	<10	<10	<10					TM116#	<10 ug/kg
tert-Butylbenzene	<12	<12	<12	<12	<12					TM116#	<12 ug/kg
1,3-Dichlorobenzene	<6	<6	<6	<6	<6					TM116#	<6 ug/kg
n-Butylbenzene	<10	<10	<10	<10	<10					TM116#	<10 ug/kg
1,2-Dibromo-3-chloropropane	<14	<14	<14	<14	<14					TM116#	<14 ug/kg
1,2,4-Trichlorobenzene	<6	<6	<6	<6	<6					TM116#	<6 ug/kg
Naphthalene	<13	<13	<13	<13	<13					TM116#	<13 ug/kg
1,2,3-Trichlorobenzene	<11	<11	<11	<11	<11					TM116#	<11 ug/kg

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Job Number: 08/17377/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5299 **Client Contact:** Envirolab Data

Sample Identity	93762 BH20 WC3	93764 BH20 WC5	93768 BH20 WC1	93770 BH20 WC2	93772 BH20 WC4					Method Code	LoD/Units
Depth (m)	7.0	10.5	4.0	4.6	8.3						
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID						
Sampled Date	14.10.08	14.10.08	14.10.08	14.10.08	14.10.08						
Sample Received Date	18.10.08	18.10.08	18.10.08	18.10.08	18.10.08						
Batch	1	1	1	1	1						
Sample Number(s)	1-5	6-10	11-15	16-20	21-25						
Volatile Organic Compounds (cont)											
Hexachlorobutadiene	<12	<12	<12	<12	<12					TM116#	<12 ug/kg

All results expressed on a dry weight basis.

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Job Number: 08/17377/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5299 **Client Contact:** Envirolab Data

Sample Identity	93762 BH20 WC3	93764 BH20 WC5	93768 BH20 WC1	93770 BH20 WC2	93772 BH20 WC4					Method Code	LoD/Units
Depth (m)	7.0	10.5	4.0	4.6	8.3						
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID						
Sampled Date	14.10.08	14.10.08	14.10.08	14.10.08	14.10.08						
Sample Received Date	18.10.08	18.10.08	18.10.08	18.10.08	18.10.08						
Batch	1	1	1	1	1						
Sample Number(s)	1-5	6-10	11-15	16-20	21-25						
Arsenic Dissolved (NRA) (ICP-MS)	20	1.4	5.5	3.9	2.6					TM152	<0.75 ug/l
Boron Dissolved (NRA) (ICP-MS)	160	210	320	1000	730					TM152	<20 ug/l
Cadmium Dissolved (NRA) (ICP-MS)	<0.22	<0.22	<0.22	<0.22	<0.22					TM152	<0.22 ug/l
Chromium Dissolved (NRA) (ICP-MS)	<1	<1	2	1	2					TM152	<1 ug/l
Copper Dissolved (NRA) (ICP-MS)	10	4.4	4.6	4.4	2.8					TM152	<1.6 ug/l
Lead Dissolved (NRA) (ICP-MS)	1.2	0.8	1.7	1.5	2.7					TM152	<0.4 ug/l
Nickel Dissolved (NRA) (ICP-MS)	3.5	<1.5	1.6	<1.5	<1.5					TM152	<1.5 ug/l
Selenium Dissolved (NRA) (ICP-MS)	5	<1	2	4	<1					TM152	<1 ug/l
Vanadium Dissolved (NRA) (ICP-MS)	110	<1	25	9	5					TM152	<1 ug/l
Zinc Dissolved (NRA) (ICP-MS)	11	<5	7	<5	5					TM152	<5 ug/l
Mercury Dissolved (NRA) (CVAF)	<0.01	<0.01	<0.01	<0.01	<0.01					TM183	<0.01 ug/l
Sulphate (NRA)	180	130	50	64	55					TM098	<3 mg/l
Phenols Monohydric (NRA)	<0.01	<0.01	<0.01	<0.01	<0.01					TM062	<0.01 mg/l
Total Cyanide (NRA)	<0.05	<0.05	<0.05	<0.05	<0.05					TM153	<0.05 mg/l
pH (NRA)	8.47	8.24	8.22	8.25	8.29					TM133	<1.00 pH Units

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Job Number: 08/17377/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5299 **Client Contact:** Envirolab Data

Sample Identity	93762 BH20 WC3	93764 BH20 WC5	93768 BH20 WC1	93770 BH20 WC2	93772 BH20 WC4					Method Code	LoD/Units
Depth (m)	7.0	10.5	4.0	4.6	8.3						
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID						
Sampled Date	14.10.08	14.10.08	14.10.08	14.10.08	14.10.08						
Sample Received Date	18.10.08	18.10.08	18.10.08	18.10.08	18.10.08						
Batch	1	1	1	1	1						
Sample Number(s)	1-5	6-10	11-15	16-20	21-25						
GRO (C4-C12) (NRA)	<10	<10	<10	<10	<10					TM089	<10 ug/l
MTBE (NRA)	<10	<10	<10	<10	<10					TM089	<10 ug/l
Benzene (NRA)	<10	<10	<10	<10	<10					TM089	<10 ug/l
Toluene (NRA)	<10	<10	<10	<10	<10					TM089	<10 ug/l
Ethyl benzene (NRA)	<10	<10	<10	<10	<10					TM089	<10 ug/l
m & p Xylene (NRA)	<10	<10	<10	<10	<10					TM089	<10 ug/l
o Xylene (NRA)	<10	<10	<10	<10	<10					TM089	<10 ug/l
Aliphatics C5-C6 (NRA)	<10	<10	<10	<10	<10					TM089	<10 ug/l
Aliphatics >C6-C8 (NRA)	<10	<10	<10	<10	<10					TM089	<10 ug/l
Aliphatics >C8-C10 (NRA)	<10	<10	<10	<10	<10					TM089	<10 ug/l
Aliphatics >C10-C12 (NRA)	<10	<10	<10	<10	<10					TM089	<10 ug/l
Aliphatics >C12-C16 (NRA)	<10	<10	<10	<10	<10					TM174	<10 ug/l
Aliphatics >C16-C21 (NRA)	<10	<10	<10	<10	<10					TM174	<10 ug/l
Aliphatics >C21-C35 (NRA)	<10	<10	<10	<10	<10					TM174	<10 ug/l
Total Aliphatics C5-C35 (NRA)	<10	<10	<10	<10	<10					TM61/89	<10 ug/l
Aromatics C6-C7 (NRA)	<10	<10	<10	<10	<10					TM089	<10 ug/l
Aromatics >C7-C8 (NRA)	<10	<10	<10	<10	<10					TM089	<10 ug/l
Aromatics >EC8-EC10 (NRA)	<10	<10	<10	<10	<10					TM089	<10 ug/l
Aromatics >EC10-EC12 (NRA)	<10	<10	<10	<10	<10					TM089	<10 ug/l
Aromatics >EC12-EC16 (NRA)	<10	<10	<10	<10	<10					TM174	<10 ug/l
Aromatics >EC16-EC21 (NRA)	<10	<10	<10	<10	<10					TM174	<10 ug/l
Aromatics >EC21-EC35 (NRA)	<10	<10	<10	<10	<10					TM174	<10 ug/l
Total Aromatics C6-C35 (NRA)	<10	<10	<10	<10	<10					TM61/89	<10 ug/l
TPH (Aliphatics and Aromatics C5-C35) (NRA)	<10	<10	<10	<10	<10					TM61/89	<10 ug/l

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Job Number: 08/17377/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5299 **Client Contact:** Envirolab Data

Sample Identity	93762 BH20 WC3	93764 BH20 WC5	93768 BH20 WC1	93770 BH20 WC2	93772 BH20 WC4					Method Code	LoD/Units
Depth (m)	7.0	10.5	4.0	4.6	8.3						
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID						
Sampled Date	14.10.08	14.10.08	14.10.08	14.10.08	14.10.08						
Sample Received Date	18.10.08	18.10.08	18.10.08	18.10.08	18.10.08						
Batch	1	1	1	1	1						
Sample Number(s)	1-5	6-10	11-15	16-20	21-25						
PAH by GCMS											
Naphthalene (NRA)	<100	<100	<100	<100	<100					TM178	<100 ng/l
Acenaphthylene (NRA)	<11	<11	12	<11	<11					TM178	<11 ng/l
Acenaphthene (NRA)	<15	<15	<15	<15	<15					TM178	<15 ng/l
Fluorene (NRA)	<14	<14	<14	<14	<14					TM178	<14 ng/l
Phenanthrene (NRA)	<22	<22	32	<22	<22					TM178	<22 ng/l
Anthracene (NRA)	<15	<15	<15	<15	<15					TM178	<15 ng/l
Fluoranthene (NRA)	<17	<17	140	<17	<17					TM178	<17 ng/l
Pyrene (NRA)	<15	<15	130	<15	<15					TM178	<15 ng/l
Benz(a)anthracene (NRA)	<17	<17	<17	<17	<17					TM178	<17 ng/l
Chrysene (NRA)	<13	<13	15	<13	<13					TM178	<13 ng/l
Benzo(b)fluoranthene (NRA)	<23	<23	<23	<23	<23					TM178	<23 ng/l
Benzo(k)fluoranthene (NRA)	<27	<27	<27	<27	<27					TM178	<27 ng/l
Benzo(a)pyrene (NRA)	<9	<9	<9	<9	<9					TM178	<9 ng/l
Indeno(123cd)pyrene (NRA)	<14	<14	<14	<14	<14					TM178	<14 ng/l
Dibenzo(ah)anthracene (NRA)	<16	<16	<16	<16	<16					TM178	<16 ng/l
Benzo(ghi)perylene (NRA)	<16	<16	<16	<16	<16					TM178	<16 ng/l
PAH 16 Total (NRA)	<100	<100	330	<100	<100					TM178	<100 ng/l

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Job Number: 08/17377/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5299 **Client Contact:** Envirolab Data

Sample Identity	93762 BH20 WC3	93764 BH20 WC5	93768 BH20 WC1	93770 BH20 WC2	93772 BH20 WC4					Method Code	LoD/Units
Depth (m)	7.0	10.5	4.0	4.6	8.3						
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID						
Sampled Date	14.10.08	14.10.08	14.10.08	14.10.08	14.10.08						
Sample Received Date	18.10.08	18.10.08	18.10.08	18.10.08	18.10.08						
Batch	1	1	1	1	1						
Sample Number(s)	1-5	6-10	11-15	16-20	21-25						
OCP/OPP											
Dichlorvos (NRA)	<10	<10	<10	<10	<10					TM144/145	<10 ng/l
Mevinphos (NRA)	<10	<10	<10	<10	<10					TM144/145	<10 ng/l
Alpha-BHC (Lindane) (NRA)	<10	<10	<10	<10	<10					TM144/145	<10 ng/l
Beta-BHC (Lindane) (NRA)	<10	<10	<10	<10	<10					TM144/145	<10 ng/l
Garama-BHC (Lindane) (NRA)	<10	<10	<10	<10	<10					TM144/145	<10 ng/l
Diazinon (NRA)	<10	<10	<10	<10	<10					TM144/145	<10 ng/l
Methyl Parathion (NRA)	<10	<10	<10	<10	<10					TM144/145	<10 ng/l
Heptachlor (NRA)	<10	<10	<10	<10	<10					TM144/145	<10 ng/l
Fenitrothion (NRA)	<10	<10	<10	<10	<10					TM144/145	<10 ng/l
Malathion (NRA)	<10	<10	<10	<10	<10					TM144/145	<10 ng/l
Aldrin (NRA)	<10	<10	<10	<10	<10					TM144/145	<10 ng/l
Parathion (NRA)	<10	<10	<10	<10	<10					TM144/145	<10 ng/l
Heptachlor Epoxide (NRA)	<10	<10	<10	<10	<10					TM144/145	<10 ng/l
Endosulphan I (NRA)	<10	<10	<10	<10	<10					TM144/145	<10 ng/l
p,p'-DDE (NRA)	<10	<10	<10	<10	<10					TM144/145	<10 ng/l
Dieldrin (NRA)	<10	<10	<10	<10	<10					TM144/145	<10 ng/l
Endrin (NRA)	<10	<10	<10	<10	<10					TM144/145	<10 ng/l
Endosulphan II (NRA)	<10	<10	<10	<10	<10					TM144/145	<10 ng/l
p,p'-TDE(DDD) (NRA)	<10	<10	<10	<10	<10					TM144/145	<10 ng/l
Ethion (NRA)	<10	<10	<10	<10	<10					TM144/145	<10 ng/l
p,p'-DDT (NRA)	<10	<10	<10	<10	<10					TM144/145	<10 ng/l
Endosulphan sulphate (NRA)	<10	<10	<10	<10	<10					TM144/145	<10 ng/l
p,p'-Methoxychlor (NRA)	<10	<10	<10	<10	<10					TM144/145	<10 ng/l
Azinphos methyl (NRA)	<10	<10	<10	<10	<10					TM144/145	<10 ng/l

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Job Number: 08/17377/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5299 **Client Contact:** Envirolab Data

Sample Identity	93762 BH20 WC3	93764 BH20 WC5	93768 BH20 WC1	93770 BH20 WC2	93772 BH20 WC4					Method Code	LoD/Units
Depth (m)	7.0	10.5	4.0	4.6	8.3						
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID						
Sampled Date	14.10.08	14.10.08	14.10.08	14.10.08	14.10.08						
Sample Received Date	18.10.08	18.10.08	18.10.08	18.10.08	18.10.08						
Batch	1	1	1	1	1						
Sample Number(s)	1-5	6-10	11-15	16-20	21-25						
SVOC by GCMS											
Phenols											
2-Chlorophenol (NRA)	<1	<1	<1	<1	<1					TM176	<1 ug/l
2-Methylphenol (NRA)	<1	<1	<1	<1	<1					TM176	<1 ug/l
2-Nitrophenol (NRA)	<1	<1	<1	<1	<1					TM176	<1 ug/l
2,4-Dichlorophenol (NRA)	<1	<1	<1	<1	<1					TM176	<1 ug/l
2,4-Dimethylphenol (NRA)	<1	<1	<1	<1	<1					TM176	<1 ug/l
2,4,5-Trichlorophenol (NRA)	<1	<1	<1	<1	<1					TM176	<1 ug/l
2,4,6-Trichlorophenol (NRA)	<1	<1	<1	<1	<1					TM176	<1 ug/l
4-Chloro-3-methylphenol (NRA)	<1	<1	<1	<1	<1					TM176	<1 ug/l
4-Methylphenol (NRA)	<1	<1	<1	<1	<1					TM176	<1 ug/l
4-Nitrophenol (NRA)	<1	<1	<1	<1	<1					TM176	<1 ug/l
Pentachlorophenol (NRA)	<2	<2	<2	<2	<2					TM176	<1 ug/l
Phenol (NRA)	<1	<1	<1	<1	<1					TM176	<1 ug/l

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Job Number: 08/17377/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5299 **Client Contact:** Envirolab Data

Sample Identity	93762 BH20 WC3	93764 BH20 WC5	93768 BH20 WC1	93770 BH20 WC2	93772 BH20 WC4					Method Code	LoD/Units
Depth (m)	7.0	10.5	4.0	4.6	8.3						
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID						
Sampled Date	14.10.08	14.10.08	14.10.08	14.10.08	14.10.08						
Sample Received Date	18.10.08	18.10.08	18.10.08	18.10.08	18.10.08						
Batch	1	1	1	1	1						
Sample Number(s)	1-5	6-10	11-15	16-20	21-25						
PAHs											
2-Chloronaphthalene (NRA)	<1	<1	<1	<1	<1					TM176	<1 ug/l
2-Methylnaphthalene (NRA)	<1	<1	<1	<1	<1					TM176	<1 ug/l
Phthalates											
Bis(2-ethylhexyl) phthalate (NRA	<1	<1	<1	<1	<1					TM176	<1 ug/l
Butylbenzyl phthalate (NRA)	<1	<2	<2	<1	<1					TM176	<1 ug/l
Di-n-butyl phthalate (NRA)	<2	<1	<1	<2	<2					TM176	<1 ug/l
Di-n-Octyl phthalate (NRA)	<1	<1	<1	<1	<1					TM176	<1 ug/l
Diethyl phthalate (NRA)	<2	<2	<2	<2	<2					TM176	<1 ug/l
Dimethyl phthalate (NRA)	<1	<1	<1	<1	<1					TM176	<1 ug/l
Other Semi-volatiles											
1,2-Dichlorobenzene (NRA)	<1	<1	<1	<1	<1					TM176	<1 ug/l
1,2,4-Trichlorobenzene (NRA)	<1	<1	<1	<1	<1					TM176	<1 ug/l
1,3-Dichlorobenzene (NRA)	<1	<1	<1	<1	<1					TM176	<1 ug/l
1,4-Dichlorobenzene (NRA)	<1	<1	<1	<1	<1					TM176	<1 ug/l
2-Nitroaniline (NRA)	<1	<1	<1	<1	<1					TM176	<1 ug/l
2,4-Dinitrotoluene (NRA)	<1	<1	<1	<1	<1					TM176	<1 ug/l
2,6-Dinitrotoluene (NRA)	<1	<1	<1	<1	<1					TM176	<1 ug/l
3-Nitroaniline (NRA)	<1	<1	<1	<1	<1					TM176	<1 ug/l
4-Bromophenylphenylether (NRA	<1	<1	<1	<1	<1					TM176	<1 ug/l
4-Chloroaniline (NRA)	<1	<1	<1	<1	<1					TM176	<1 ug/l
4-Chlorophenylphenylether (NRA	<1	<1	<1	<1	<1					TM176	<1 ug/l
4-Nitroaniline (NRA)	<1	<1	<1	<1	<1					TM176	<1 ug/l
Azobenzene (NRA)	<1	<1	<1	<1	<1					TM176	<1 ug/l
Bis(2-chloroethoxy)methane (NRA)	<1	<1	<1	<1	<1					TM176	<1 ug/l
Bis(2-chloroethyl)ether (NRA)	<1	<1	<1	<1	<1					TM176	<1 ug/l
Carbazole (NRA)	<1	<1	<1	<1	<1					TM176	<1 ug/l
Dibenzofuran (NRA)	<1	<1	<1	<1	<1					TM176	<1 ug/l
Hexachlorobenzene (NRA)	<1	<1	<1	<1	<1					TM176	<1 ug/l

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Job Number: 08/17377/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5299 **Client Contact:** Envirolab Data

Sample Identity	93762 BH20 WC3	93764 BH20 WC5	93768 BH20 WC1	93770 BH20 WC2	93772 BH20 WC4					Method Code	LoD/Units
Depth (m)	7.0	10.5	4.0	4.6	8.3						
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID						
Sampled Date	14.10.08	14.10.08	14.10.08	14.10.08	14.10.08						
Sample Received Date	18.10.08	18.10.08	18.10.08	18.10.08	18.10.08						
Batch	1	1	1	1	1						
Sample Number(s)	1-5	6-10	11-15	16-20	21-25						
Other Semi-volatiles (cont)											
Hexachlorobutadiene (NRA)	<1	<1	<1	<1	<1					TM176	<1 ug/l
Hexachlorocyclopentadiene (NRA	<2	<2	<2	<2	<2					TM176	<1 ug/l
Hexachloroethane (NRA)	<1	<1	<1	<1	<1					TM176	<1 ug/l
Isophorone (NRA)	<2	<2	<2	<2	<2					TM176	<1 ug/l
N-nitrosodi-n-propylamine (NRA)	<1	<1	<1	<1	<1					TM176	<1 ug/l
Nitrobenzene (NRA)	<1	<1	<1	<1	<1					TM176	<1 ug/l

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Job Number: 08/17377/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5299 **Client Contact:** Envirolab Data

Sample Identity	93762 BH20 WC3	93764 BH20 WC5	93768 BH20 WC1	93770 BH20 WC2	93772 BH20 WC4					Method Code	LoD/Units
Depth (m)	7.0	10.5	4.0	4.6	8.3						
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID						
Sampled Date	14.10.08	14.10.08	14.10.08	14.10.08	14.10.08						
Sample Received Date	18.10.08	18.10.08	18.10.08	18.10.08	18.10.08						
Batch	1	1	1	1	1						
Sample Number(s)	1-5	6-10	11-15	16-20	21-25						
Volatile Organic Compounds											
Dichlorodifluoromethane (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
Chloromethane (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
Vinyl Chloride (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
Bromomethane (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
Chloroethane (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
Trichlorofluoromethane (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
trans-1-2-Dichloroethene (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
Dichloromethane (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
Carbon Disulphide (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
1.1-Dichloroethene (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
1.1-Dichloroethane (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
Methyl Tertiary Butyl Ether (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
cis-1-2-Dichloroethene (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
Bromochloromethane (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
Chloroform (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
2.2-Dichloropropane (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
1.2-Dichloroethane (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
1.1.1-Trichloroethane (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
1.1-Dichloropropene (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
Benzene (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
Carbontetrachloride (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
Dibromomethane (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
1.2-Dichloropropane (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
Bromodichloromethane (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
Trichloroethene (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
cis-1-3-Dichloropropene (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
trans-1-3-Dichloropropene (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
1.1.2-Trichloroethane (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
Toluene (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
1.3-Dichloropropane (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l

Date 31.10.2008

Validated ☑
Preliminary ☐

ALcontrol Laboratories Analytical Services
Table Of Results

" ISO 17025 accredited
M MCERTS accredited
* Subcontracted test
» Shown on prev. report

Job Number: 08/17377/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5299 **Client Contact:** Envirolab Data

Sample Identity	93762 BH20 WC3	93764 BH20 WC5	93768 BH20 WC1	93770 BH20 WC2	93772 BH20 WC4					Method Code	LoD/Units
Depth (m)	7.0	10.5	4.0	4.6	8.3						
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID						
Sampled Date	14.10.08	14.10.08	14.10.08	14.10.08	14.10.08						
Sample Received Date	18.10.08	18.10.08	18.10.08	18.10.08	18.10.08						
Batch	1	1	1	1	1						
Sample Number(s)	1-5	6-10	11-15	16-20	21-25						
Volatile Organic Compounds (cont)											
Dibromochloromethane (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
1,2-Dibromoethane (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
Tetrachloroethene (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
1,1,1,2-Tetrachloroethane (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
Chlorobenzene (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
Ethylbenzene (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
p/m-Xylene (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
Bromoform (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
Styrene (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
1,1,2,2-Tetrachloroethane (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
o-Xylene (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
1,2,3-Trichloropropane (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
Isopropylbenzene (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
Bromobenzene (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
2-Chlorotoluene (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
Propylbenzene (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
4-Chlorotoluene (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
1,2,4-Trimethylbenzene (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
4-Isopropyltoluene (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
1,3,5-Trimethylbenzene (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
1,2-Dichlorobenzene (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
1,4-Dichlorobenzene (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
sec-Butylbenzene (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
tert-Butylbenzene (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
1,3-Dichlorobenzene (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
n-Butylbenzene (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
1,2-Dibromo-3-chloropropane (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
1,2,4-Trichlorobenzene (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
Naphthalene (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l
1,2,3-Trichlorobenzene (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l

Date 31.10.2008

Validated [✓]
Preliminary [ ]

ALcontrol Laboratories Analytical Services
Table Of Results

ISO 17025 accredited
M MCERTS accredited
* Subcontracted test
» Shown on prev. report

Job Number: 08/17377/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5299 **Client Contact:** Envirolab Data

Sample Identity	93762 BH20 WC3	93764 BH20 WC5	93768 BH20 WC1	93770 BH20 WC2	93772 BH20 WC4					Method Code	LoD/Units
Depth (m)	7.0	10.5	4.0	4.6	8.3						
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID						
Sampled Date	14.10.08	14.10.08	14.10.08	14.10.08	14.10.08						
Sample Received Date	18.10.08	18.10.08	18.10.08	18.10.08	18.10.08						
Batch	1	1	1	1	1						
Sample Number(s)	1-5	6-10	11-15	16-20	21-25						
Volatile Organic Compounds (cont)											
Hexachlorobutadiene (NRA)	<1	<1	<1	<1	<1					TM208	<1 ug/l

Date 31.10.2008

ALcontrol Laboratories Analytical Services
Table Of Results - Appendix

Job Number: 08/17377/02/01
Client: Envirolab
Client Ref. No.: 722201-5299

Report Key :

Results expressed as (e.g.) 1.03E-07 is equivalent to 1.03×10^{-7}

NDP	No Determination Possible	*	Subcontracted test
NFD	No Fibres Detected	»	Result previously reported (Incremental reports only)
#	ISO 17025 accredited	M	MCERTS Accredited
PFD	Possible Fibres Detected	EC	Equivalent Carbon (Aromatics C8-C35)

Note: Method detection limits are not always achievable due to various circumstances beyond our control.

Summary of Method Codes contained within report :

Method No.	Reference	Description	ISO 17025 Accredited	MCERTS Accredited	Wet/Dry Sample [1]	Surrogate Corrected
TM001	In - house Method	Screening of Soils for Fibres			WET	
TM018	BS 1377: Part 3 1990	Determination of Loss on Ignition	✓	✓	WET	
TM062	MEWAM BOOK 124 1988.HMSO/ Method 17.7, Second Site property, March 2003	Determination of Phenolic compounds by HPLC with electro-chemical detection			NA	
TM062	MEWAM BOOK 124 1988.HMSO/ Method 17.7, Second Site property, March 2003	Determination of Phenolic compounds by HPLC with electro-chemical detection	✓	✓	WET	
TM089	Modified: US EPA Methods 8020 & 602	Determination of Gasoline Range Hydrocarbons (GRO) and BTEX (MTBE) compounds by Headspace GC-FID (C4-C12)			NA	
TM098	Method 4500E, AWWA/APHA, 20th Ed., 1999	Determination of Sulphate using the Kone Analyser			NA	
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS			WET	
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS	✓		WET	
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS	✓	✓	WET	
TM129	Method 3120B, AWWA/APHA, 20th Ed., 1999 / Modified: US EPA Method 3050B	Determination of Metal Cations by IRIS Emission Spectrometer			DRY	
TM129	Method 3120B, AWWA/APHA, 20th Ed., 1999 / Modified: US EPA Method 3050B	Determination of Metal Cations by IRIS Emission Spectrometer	✓	✓	DRY	
TM132	In - house Method	ELTRA CS800 Operators Guide	✓		DRY	
TM133	BS 1377: Part 3 1990;BS 6068-2.5	Determination of pH in Soil and Water using the GLpH pH Meter			NA	
TM133	BS 1377: Part 3 1990;BS 6068-2.5	Determination of pH in Soil and Water using the GLpH pH Meter	✓	✓	WET	

[1] Applies to Solid samples only. **DRY** indicates samples have been dried at 35°C. **NA** = not applicable.

ALcontrol Laboratories Analytical Services
Table Of Results - Appendix

Job Number: 08/17377/02/01
Client: Envirolab
Client Ref. No.: 722201-5299

Report Key :

Results expressed as (e.g.) 1.03E-07 is equivalent to 1.03×10^{-7}

NDP	No Determination Possible	*	Subcontracted test
NFD	No Fibres Detected	»	Result previously reported (Incremental reports only)
#	ISO 17025 accredited	M	MCERTS Accredited
PFD	Possible Fibres Detected	EC	Equivalent Carbon (Aromatics C8-C35)

Note: Method detection limits are not always achievable due to various circumstances beyond our control.

Summary of Method Codes contained within report :

Method No.	Reference	Description	ISO 17025 Accredited	MCERTS Accredited	Wet/Dry Sample [1]	Surrogate Corrected
TM136	Method 17.10, Second Site property, March 2003	Determination of Sulphur by HPLC	✓	✓	DRY	
TM144/145		Organochlorine and Organophosphorus pesticides by GC-MS			DRY	
TM152	Method 3125B, AWWA/APHA, 20th Ed., 1999	Analysis of Aqueous Samples by ICP-MS			NA	
TM153	Method 4500A,B,C, I, M AWWA/APHA, 20th Ed., 1999	Determination of Total Cyanide, Free (Easily Liberatable) Cyanide and Thiocyanate using the "Skalar SANS+ System" Segmented Flow Analyser			NA	
TM153	Method 4500A,B,C, I, M AWWA/APHA, 20th Ed., 1999	Determination of Total Cyanide, Free (Easily Liberatable) Cyanide and Thiocyanate using the "Skalar SANS+ System" Segmented Flow Analyser	✓	✓	WET	
TM157		Determination of SVOC in Soils by GC-MS extracted by sonication in DCM/Acetone			WET	
TM174		Determination of Speciated Extractable Petroleum Hydrocarbons in Waters by GC-FID			NA	
TM176		Determination of SVOCs in Water by GCMS			NA	
TM178	Modified: US EPA Method 8100	Determination of Polynuclear Aromatic Hydrocarbons (PAH) by GC-MS in Waters			NA	
TM183	BS EN 23506:2002, (BS 6068-2.74:2002) ISBN 0 580 38924 3	Determination of Trace Level Mercury in Waters and Leachates by PSA Cold Vapour Atomic Fluorescence Spectrometry			NA	
TM208	Modified: US EPA Method 8260b & 624	Determination of Volatile Organic Compounds by Headspace / GC-MS in Waters			NA	
TM61/89		see TM061 and TM089 for details			NA	

[1] Applies to Solid samples only. **DRY** indicates samples have been dried at 35°C. **NA** = not applicable.

envirolab

Date: 08 January 2009
Your Ref: 722201
Our Ref: 722201-(5299)-021
Project Manager: Steve Mackereth
Report to: John Wild

Envirolab
Units 7 & 8
Sandpits Business Park
Mottram Road
Hyde
Cheshire
SK14 3AR

Supplemental to Final Test Report 722201-(5299)-020

Sample(s) of Soil from Sizewell C.
Received from Structural Soils Ltd
The Old School House, Stillhouse Lane, Bedminster, Bristol, BS3 4EB

Date of receipt: 16 October 2008
Date analysis commenced: 16 October 2008
Date analysis completed: 08 January 2009

Method Statement

Speciated TPH analysis is performed in accordance with procedures A-T-022 using GC-MS with Head Space & A-T-023 using GC-FID.
PCB analysis is performed in accordance with procedures A-T-004 and A-T-005.
PAH analysis is performed in accordance with procedure A-T-019.
Loss on drying analysis is performed in accordance with procedure A-T-020.
Subcontract analysis was submitted to a laboratory on Envirolab's approved vendors list.
A copy of the report is attached, UKAS/MCERTS status is detailed on the report.

Prepared by:

[redacted]

Thi McNabb
Reporting Analytical Chemist

Approved by:

[redacted]

Louise Adams
Associate Director - Operations

UKAS TESTING No. 1247

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.
Tests marked "*" in this report are not included in the UKAS Accreditation Schedule for Envirolab.
Analytical results reflect the quality of the sample at the time of analysis only.

MCERTS

ALcontrol Laboratories Analytical Services
Sample Descriptions

Job Number: 08/20959/02/01
Client: Envirolab
Client Ref : 722201-5299

Grain sizes

<0.063mm	Very Fine
0.1mm - 0.063mm	Fine
0.1mm - 2mm	Medium
2mm - 10mm	Coarse
>10mm	Very Coarse

Sample Identity	Depth (m)	Colour	Grain Size	Description	Batch
BH20 93766	10.00	Black	0.1mm - 0.063mm	Silt Loam	1

* These descriptions are only intended to act as a cross check if sample identities are questioned, and to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions.

We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials-whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample.
Other coarse granular materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.
[1] Sample Description supplied by client

Validated ☑
Preliminary ☐

ALcontrol Laboratories Analytical Services
Table Of Results

' ISO 17025 accredited
M MCERTS accredited
* Subcontracted test
» Shown on prev. report

Job Number: 08/20959/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5299 **Client Contact:** Subcon

Sample Identity	BH20 93766									Method Code	LoD/Units
Depth (m)	10.00										
Sample Type	SOLID										
Sampled Date	14.10.08										
Sample Received Date	22.12.08										
Batch	1										
Sample Number(s)	1										
Conductivity (at 20 deg.C)	10									TM120'	<0.014 mS/cm
Sodium	8900									TM083	<4 mg/kg
Chloride (soluble)	6000									TM097'$_M$	<2 mg/kg
Loss on Ignition	76									TM018'$_M$	<0.3 %
pH Value	4.08									TM133'$_M$	<1.00 pH Units

All results expressed on a dry weight basis.

Date 08.01.2009

ALcontrol Laboratories Analytical Services
Table Of Results - Appendix

Job Number: 08/20959/02/01
Client: Envirolab
Client Ref. No.: 722201-5299

Report Key :

Results expressed as (e.g.) 1.03E-07 is equivalent to 1.03×10^{-7}

NDP	No Determination Possible	*	Subcontracted test
ACM	Asbestos Containing Materia	»	Result previously reported (Incremental reports only)
#	ISO 17025 accredited	M	MCERTS Accredited
		EC	Equivalent Carbon (Aromatics C8-C35)

Note: Method detection limits are not always achievable due to various circumstances beyond our control.

Summary of Method Codes contained within report :

Method No.	Reference	Description	ISO 17025 Accredited	MCERTS Accredited	Wet/Dry Sample [1]	Surrogate Corrected
TM018	BS 1377: Part 3 1990	Determination of Loss on Ignition	✓	✓	WET	
TM083	Method 3111, AWWA/APHA, 20th Ed., 1999 / Modified: US EPA Method 7610	Determination of Sodium and Potassium by Flame Photometer			DRY	
TM097	Modified: US EPA Method 325.1 & 325.2	Determination of Chloride using the Kone Analyser	✓	✓	DRY	
TM120	Method 2510B, AWWA/APHA, 20th Ed., 1999 / BS 2690: Part 9:1970	Determination of Electrical Conductivity using a Conductivity Meter	✓		DRY	
TM133	BS 1377: Part 3 1990;BS 6068-2.5	Determination of pH in Soil and Water using the GLpH pH Meter	✓	✓	WET	

[1] Applies to Solid samples only. **DRY** indicates samples have been dried at 35°C. **NA** = not applicable.

envirolab

Date: 06 November 2008
Your Ref: 722201 - PO. 6812
Our Ref: 722201-(5309)-030
Project Manager: Steve Mackereth
Report to: John Wild

Envirolab
Units 7 & 8
Sandpits Business Park
Mottram Road
Hyde
Cheshire
SK14 3AR

Final Test Report

Sample(s) of Soil from Sizewell C.
Received from Structural Soils Ltd
The Old School House, Stillhouse Lane, Bedminster, Bristol, BS3 4EB

Date of receipt: 17 October 2008
Date analysis commenced: 17 October 2008
Date analysis completed: 06 November 2008

Method Statement

Speciated TPH analysis is performed in accordance with procedures A-T-022 using GC-MS with Head Space & A-T-023 using GC-FID.
PCB analysis is performed in accordance with procedures A-T-004 and A-T-005.
PAH analysis is performed in accordance with procedure A-T-019.
Loss on drying analysis is performed in accordance with procedure A-T-020.
Subcontract analysis was submitted to a laboratory on Envirolab's approved vendors list.
A copy of the report is attached, UKAS/MCERTS status is detailed on the report.

Prepared by:

[redacted]

Thi McNabb
Reporting Analytical Chemist

Approved by:

[redacted]

Louise Adams
Associate Director - Operations

UKAS TESTING No. 1247

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.
Tests marked "*" in this report are not included in the UKAS Accreditation Schedule for Envirolab.
Analytical results reflect the quality of the sample at the time of analysis only.

MCERTS

envirolab

Envirolab Ref.	PROCEDURE	ISO17025	MCERTS	93851	93853	93855	93857	93859	93861	93863	93865	93867	
Location				BH23 WC1	BH23 WC2	BH23 WC3	BH23 WC4	BH10A WC3	BH10A WC4	BH10A WC5	BH10A WC1	BH10A WC2	
Depth (m)				5.90	7.00	8.00	8.90	5.20	6.00	7.50	4.25	4.60	
Sample Ref				-	-	-	-	-	-	-	-	-	
Sample Type				-	-	-	-	-	-	-	-	-	
MTBE$_R$	A-T-022	Y	N	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Benzene$_R$	A-T-022	Y	N	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Toluene$_R$	A-T-022	Y	N	0.01	<0.01	0.01	0.01	<0.01	0.01	0.01	<0.01	0.01	
Ethyl Benzene$_R$	A-T-022	Y	N	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	
m & p Xylene$_R$	A-T-022	Y	N	<0.01	<0.01	0.01	0.01	0.01	0.03	0.01	0.01	0.02	
o Xylene$_R$	A-T-022	Y	N	0.01	<0.01	0.01	0.01	<0.01	0.01	0.01	<0.01	0.01	
Aliphatics C5-C6$_R$	A-T-022	Y	N	0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	
Aliphatics >C6-C8$_R$	A-T-022	Y	N	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Aliphatics >C8-C10$_R$	A-T-022	Y	N	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Aliphatics >C10-C12$_R$	A-T-023	Y	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Aliphatics >C12-C16$_R$	A-T-023	Y	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Aliphatics >C16-C21$_R$	A-T-023	Y	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Aliphatics >C21-C35$_R$	A-T-023	Y	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Total Aliphatics		Y	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Aromatics >C5-C7$_R$	A-T-022	Y	N	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Aromatics >C7-C8$_R$	A-T-022	Y	N	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	0.01	
Aromatics >C8-C9$_R$	A-T-022	Y	N	0.02	<0.01	0.02	0.03	0.01	0.05	0.03	0.01	0.04	
Aromatics >C9-C10$_R$	A-T-022	Y	N	0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	0.01	
Aromatics >C10-C12$_R$	A-T-023	Y	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Aromatics >C12-C16$_R$	A-T-023	Y	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Aromatics >C16-C21$_R$	A-T-023	Y	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Aromatics >C21-C35$_R$	A-T-023	Y	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Total Aromatics		Y	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
TPH (Aliphatics & Aromatics)		Y	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	

Table 1 - Soil Speciated TPH Results (mg/kg)

envirolab

Envirolab Ref.	PROCEDURE	ISO17025	MCERTS	93851	93853	93855	93857	93859	93861	93863	93865	93867	
Location				BH23 WC1	BH23 WC2	BH23 WC3	BH23 WC4	BH10A WC3	BH10A WC4	BH10A WC5	BH10A WC1	BH10A WC2	
Depth (m)				5.90	7.00	8.00	8.90	5.20	6.00	7.50	4.25	4.80	
Sample Ref				-	-	-	-	-	-	-	-	-	
Sample Type				-	-	-	-	-	-	-	-	-	
PCB BZ 28_D	A-T-004 A-T-005	Y	Y	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
PCB BZ 52_D	A-T-004 A-T-005	Y	Y	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
PCB BZ 101_D	A-T-004 A-T-005	Y	Y	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
PCB BZ 118_D	A-T-004 A-T-005	Y	Y	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
PCB BZ 138_D	A-T-004 A-T-005	Y	Y	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
PCB BZ 153_D	A-T-004 A-T-005	Y	Y	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
PCB BZ 180_D	A-T-004 A-T-005	Y	Y	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	

Table 2 - Soil PCB Results (mg/kg, expressed on a dry weight basis)

Envirolab Ref.	PROCEDURE	ISO17025	MCERTS	93851	93853	93855	93857	93859	93861	93863	93865	93867	
Location				BH23 WC1	BH23 WC2	BH23 WC3	BH23 WC4	BH10A WC3	BH10A WC4	BH10A WC5	BH10A WC1	BH10A WC2	
Depth (m)				5.90	7.00	8.00	8.90	5.20	6.00	7.50	4.25	4.60	
Sample Ref				-	-	-	-	-	-	-	-	-	
Sample Type				-	-	-	-	-	-	-	-	-	
Naphthalene$_R$ "	A-T-019	N	N	0.04	0.02	0.07	0.32	0.04	0.16	0.01	0.03	0.05	
Acenaphthylene$_R$ "	A-T-019	N	N	<0.01	<0.01	<0.01	0.03	<0.01	<0.01	<0.01	<0.01	<0.01	
Acenaphene$_R$ "	A-T-019	N	N	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	
Fluorene$_R$ "	A-T-019	N	N	<0.01	<0.01	<0.01	0.06	<0.01	<0.01	<0.01	<0.01	<0.01	
Phenanthrene$_R$ "	A-T-019	N	N	0.06	0.02	0.04	0.18	0.04	0.02	0.02	0.03	0.03	
Anthracene$_R$ "	A-T-019	Y	N	<0.01	<0.01	<0.01	0.04	<0.01	<0.01	<0.01	<0.01	<0.01	
Fluoranthene$_R$ "	A-T-019	Y	N	0.05	0.02	0.07	0.16	0.03	0.07	0.07	0.02	0.02	
Pyrene$_R$ "	A-T-019	Y	N	0.04	0.01	0.04	0.13	0.02	0.04	0.03	0.01	<0.01	
Benz [a] anthracene$_R$ "	A-T-019	N	N	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Chrysene$_R$ "	A-T-019	Y	N	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Benzo [b] fluoranthene$_R$ Benzo [k] fluoranthene #$_R$ "	A-T-019	Y	N	0.11	0.05	0.20	1.20	0.13	0.03	0.02	<0.01	<0.01	
Benzo [a] pyrene$_R$ "	A-T-019	N	N	<0.01	<0.01	0.40	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Indeno [123-cd] pyrene$_R$ "	A-T-019	Y	N	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Dibenz [ah] anthracene$_R$ "	A-T-019	Y	N	<0.01	<0.01	0.07	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Benzo [ghi] perylene$_R$ "	A-T-019	Y	N	0.03	0.02	<0.01	<0.01	0.01	<0.01	0.02	<0.01	0.01	
Total 16 PAH Reported		N	N	0.33	0.14	0.89	2.12	0.27	0.32	0.17	0.09	0.12	

Due to coelution Benzo [b] fluoranthene and Benzo [k] fluoranthene are reported as one value.

Table 3 - Soil PAH Results (mg/kg, expressed on a dry weight basis)

envirolab

Envirolab Ref.	93851	93853	93855	93857	93859	93861	93863	93865	93867	
Location	BH23 WC1	BH23 WC2	BH23 WC3	BH23 WC4	BH10A WC3	BH10A WC4	BH10A WC5	BH10A WC1	BH10A WC2	
Depth (m)	5.90	7.00	8.00	8.90	5.20	6.00	7.50	4.25	4.50	
Sample Ref	-	-	-	-	-	-	-	-	-	
Sample Type	-	-	-	-	-	-	-	-	-	
Type	Clay	Clay	Clay	Loam	Clay	Loam	Loam	Clay	Clay	
Colour	Grey Brown	Grey	Brown	Brown	Mixed	Black	Black	Grey	Brown	
Consistency	Firm	Soft	Soft	Loose	Soft	Loose	Loose	Soft	Soft	
Some Stones	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
>50 Stones	No	No	No	No	No	No	No	No	No	
Some Vegetation	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	
Very Wet	No	No	No	No	No	No	No	No	No	
Strong Odour	No	No	No	No	No	No	No	No	No	

Table 4 - Soil Matrix Table

envirolab

Appendix

Code	Description
+	Increased detection limit due to sample interference
#	Increased detection limit due to sample dilution
$	Analysis subcontracted
IS	Insufficient sample for analysis
IS-QC	Insufficient sample to retest following QC fail
NDP	No determination possible
-	Sample type outside the scope of our MCERTS accreditation since matrix not included in method validation
"	Analytes are associated with failed AQC targets for MCERTS, but passed UKAS AQC
A	Sample result is not covered under Envirolab's accreditation schedule for MCERTS as the result exceeds the validated range. See notes 1-3.
F	Analysis suffixed "$_F$" were performed on the filtered sample
D	Analysis suffixed "$_D$" were performed on the sample air dried at <30°C
O	Analysis suffixed "$_O$" were performed on the sample oven dried at 95°C
R	Analysis suffixed "$_R$" were performed on the sample as received. Where results are expressed on a dry weight basis, the samples were air dried at 95°C
Notes	
1	For MCERTS the validated range covers up to 15mg/kg for individual PAHs, 200mg/kg for totals.
2	For MCERTS the validated range covers up to 3000mg/kg for Total TPH analysis.
3	For MCERTS the validated range covers up to 0.2mg/kg for individual PCBs, and 1.5mg/kg for the total reported as araclor.
4	Natural stones and debris are excluded from analyses
5	Coarse granular material such as concrete, gravel and brick are not MCERTS accredited if they comprise the major part of the sample. Envirolab are currently accredited for MCERTS on soil types Sand, Clay and Loam only

ALcontrol Laboratories Analytical Services
Sample Descriptions

Job Number: 08/17619/02/01
Client: Envirolab
Client Ref : 722201-5309

Grain sizes

<0.063mm	Very Fine
0.1mm - 0.063mm	Fine
0.1mm - 2mm	Medium
2mm - 10mm	Coarse
>10mm	Very Coarse

Sample Identity	Depth (m)	Colour	Grain Size	Description	Batch
93880 BH6	5.40	Dark Brown	<0.063mm	Clay with some Vegetation	1

* These descriptions are only intended to act as a cross check if sample identities are questioned, and to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions.

We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials-whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample.
Other coarse granular materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.
' Sample Description supplied by client

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Preliminary ☐

ALcontrol Laboratories Analytical Services
Table Of Results

ISO 17025 accredited
M MCERTS accredited
* Subcontracted test
» Shown on prev. report

Job Number: 08/17619/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5309 **Client Contact:** Subcon

Sample Identity	93880 BH6									Method Code	LoD/Units
Depth (m)	5.40										
Sample Type	SOLID										
Sampled Date	13.10.08										
Sample Received Date	22.10.08										
Batch	1										
Sample Number(s)	4										
Arsenic	22									TM129#M	<3.0 mg/kg
Cadmium	0.2									TM129	<0.2 mg/kg
Chromium	30									TM129#M	<4.5 mg/kg
Copper	15									TM129#M	<6 mg/kg
Lead	14									TM129#M	<2 mg/kg
Mercury	<0.4									TM129#M	<0.4 mg/kg
Nickel	30									TM129#M	<0.9 mg/kg
Zinc	64									TM129#M	<2.5 mg/kg
Total Alkalinity as CaCO3	<10									TM043	<10 mg/kg

All results expressed on a dry weight basis.

Date 06.11.2008

ALcontrol Laboratories Analytical Services
Table Of Results - Appendix

Job Number: 08/17619/02/01
Client: Envirolab
Client Ref. No.: 722201-5309

Report Key :

Results expressed as (e.g.) 1.03E-07 is equivalent to 1.03×10^{-7}

NDP	No Determination Possible	*	Subcontracted test
NFD	No Fibres Detected	»	Result previously reported (Incremental reports only)
#	ISO 17025 accredited	M	MCERTS Accredited
PFD	Possible Fibres Detected	EC	Equivalent Carbon (Aromatics C8-C35)

Note: Method detection limits are not always achievable due to various circumstances beyond our control.

Summary of Method Codes contained within report :

Method No.	Reference	Description	ISO 17025 Accredited	MCERTS Accredited	Wet/Dry Sample [1]	Surrogate Corrected
TM043	Method 2320B, AWWA/APHA, 20th Ed., 1999 / BS 2690: Part109 1984	Determination of alkalinity in aqueous samples			WET	
TM129	Method 3120B, AWWA/APHA, 20th Ed., 1999 / Modified: US EPA Method 3050B	Determination of Metal Cations by IRIS Emission Spectrometer			DRY	
TM129	Method 3120B, AWWA/APHA, 20th Ed., 1999 / Modified: US EPA Method 3050B	Determination of Metal Cations by IRIS Emission Spectrometer	✓	✓	DRY	

[1] Applies to Solid samples only. **DRY** indicates samples have been dried at 35°C. **NA** = not applicable.

ALcontrol Laboratories Analytical Services
Sample Descriptions

Job Number: 08/17457/02/01
Client: Envirolab
Client Ref : 722201-5309

Grain sizes

<0.063mm	Very Fine
0.1mm - 0.063mm	Fine
0.1mm - 2mm	Medium
2mm - 10mm	Coarse
>10mm	Very Coarse

Sample Identity	Depth (m)	Colour	Grain Size	Description	Batch
93851 BH23 WC1	5.9	Grey	<0.063mm	Clay	1
93853 BH23 WC2	7.0	Grey	<0.063mm	Clay	1
93855 BH23 WC3	8.0	Dark Brown	0.1mm - 0.063mm	Loam (topsoil) with some Stones	1
93857 BH23 WC4	8.9	Dark Brown	0.1mm - 0.063mm	Clay Loam with some Vegetation	1
93859 BH10A WC3	5.2	Grey	<0.063mm	Clay	1
93861 BH10A WC4	6.0	Dark Brown	0.1mm - 0.063mm	Clay Loam with some Vegetation	1
93863 BH10A WC5	7.5	Dark Brown	0.1mm - 0.063mm	Clay Loam with some Stones	1
93865 BH10A WC1	4.25	Grey	<0.063mm	Clay	1
93867 BH10A WC2	4.6	Brown	0.1mm - 0.063mm	Sandy Clay Loam with some Stones	1

* These descriptions are only intended to act as a cross check if sample identities are questioned, and to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions.

We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials-whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample.
Other coarse granular materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.
[1] Sample Description supplied by client

Validated ☑
Preliminary ☐

ALcontrol Laboratories Analytical Services
Table Of Results

ISO 17025 accredited
M MCERTS accredited
* Subcontracted test
» Shown on prev. report

Job Number: 08/17457/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5309 **Client Contact:** Envirolab Data

Sample Identity	93851 BH23 WC1	93853 BH23 WC2	93855 BH23 WC3	93857 BH23 WC4	93859 BH10A WC3	93861 BH10A WC4	93863 BH10A WC5	93865 BH10A WC1	93867 BH10A WC2	Method Code	LoD/Units
Depth (m)	5.9	7.0	8.0	8.9	5.2	6.0	7.5	4.25	4.6		
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID		
Sampled Date	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08		
Sample Received Date	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08		
Batch	1	1	1	1	1	1	1	1	1		
Sample Number(s)	1-4	5-8	9-12	13-15,21	16,22-23,34	17-20	25,28,31,33	26,29-30,32	24,27,35-36		
Total Sulphate	1700	1600	4200	3400	2300	7000	3200	1400	2900	TM129#M	<100 mg/kg
Boron Water Soluble	9.8	6.7	14	11	6.3	17	12	6.1	8.2	TM129#M	<3.5 mg/kg
Arsenic	8	17	19	14	30	9	<3	14	4	TM129#M	<3.0 mg/kg
Cadmium	<0.2	<0.2	0.2	0.2	0.2	<0.2	<0.2	<0.2	<0.2	TM129	<0.2 mg/kg
Chromium	26	41	36	24	47	11	<4.5	43	15	TM129#M	<4.5 mg/kg
Copper	10	17	17	12	16	6	<6	13	6	TM129#M	<6 mg/kg
Lead	10	16	16	11	18	5	5	19	7	TM129#M	<2 mg/kg
Mercury	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	TM129#M	<0.4 mg/kg
Nickel	21	33	31	23	41	11	1.8	33	12	TM129#M	<0.9 mg/kg
Selenium	<3	<3	<3	<3	<3	<3	<3	<3	<3	TM129#M	<3 mg/kg
Vanadium	48	78	62	51	97	28	3.0	81	32	TM129#M	<1.5 mg/kg
Zinc	60	92	85	57	93	25	11	82	28	TM129#M	<2.5 mg/kg
Phenols Monohydric	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	TM062#M	<0.15 mg/kg
Total Cyanide	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM153#M	<1 mg/kg
Asbestos Presence Screen	No Fibres Detected	No Fibres Detected	No Fibres Detected	No Fibres Detected	No Fibres Detected	No Fibres Detected	No Fibres Detected	No Fibres Detected	No Fibres Detected	TM001	NONE
Elemental Sulphur	<70	82	<70	<70	710	<70	97	<70	<70	TM136#M	<70 mg/kg
Fraction of Organic Carbon	0.033	0.019	0.11	0.20	0.044	0.29	0.24	0.036	0.16	TM132#	<0.002 NONE
Loss on Ignition	10	4.8	24	70	8.2	65	72	18	75	TM018#M	<0.3 %
pH Value	8.17	8.43	7.54	6.99	7.66	6.55	6.20	7.76	6.87	TM133#M	<1.00 pH Units

All results expressed on a dry weight basis.

Date 30.10.2008

Validated ☑
Preliminary ☐

ALcontrol Laboratories Analytical Services
Table Of Results

* ISO 17025 accredited
M MCERTS accredited
\# Subcontracted test
» Shown on prev. report

Job Number: 08/17457/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5309 **Client Contact:** Envirolab Data

Sample Identity	93851 BH23 WC1	93853 BH23 WC2	93855 BH23 WC3	93857 BH23 WC4	93859 BH10A WC3	93861 BH10A WC4	93863 BH10A WC5	93865 BH10A WC1	93867 BH10A WC2	Method Code	LoD/Units
Depth (m)	5.9	7.0	8.0	8.9	5.2	6.0	7.5	4.25	4.6		
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID		
Sampled Date	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08		
Sample Received Date	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08		
Batch	1	1	1	1	1	1	1	1	1		
Sample Number(s)	1-4	5-8	9-12	13-15,21	16,22-23,34	17-20	25,28,31,33	26,29-30,32	24,27,35-36		
OCP/OPP											
Dichlorvos	<10	<10	<10	<10	<1	<10	<1	<1	<1	TM144/145	<1 ug/kg
Mevinphos	<10	<10	<10	<10	<1	<10	<1	<1	<1	TM144/145	<1 ug/kg
Alpha-BHC (Lindane)	<10	<10	<10	<10	<1	<10	<1	<1	<1	TM144/145	<1 ug/kg
Beta-BHC (Lindane)	<10	<10	<10	<10	<1	<10	<1	<1	<1	TM144/145	<1 ug/kg
Gamma-BHC (Lindane)	<10	<10	<10	<10	<1	<10	<1	<1	<1	TM144/145	<1 ug/kg
Diazinon	<10	<10	<10	<10	<1	<10	<1	<1	<1	TM144/145	<1 ug/kg
Methyl Parathion	<10	<10	<10	<10	<1	<10	<1	<1	<1	TM144/145	<1 ug/kg
Heptachlor	<10	<10	<10	<10	<1	<10	<1	<1	<1	TM144/145	<1 ug/kg
Fenitrothion	<10	<10	<10	<10	<1	<10	<1	<1	<1	TM144/145	<1 ug/kg
Malathion	<10	<10	<10	<10	<1	<10	<1	<1	<1	TM144/145	<1 ug/kg
Aldrin	<10	<10	<10	<10	<1	<10	<1	<1	<1	TM144/145	<1 ug/kg
Parathion	<10	<10	<10	<10	<1	<10	<1	<1	<1	TM144/145	<1 ug/kg
Heptachlor Epoxide	<10	<10	<10	<10	<1	<10	<1	<1	<1	TM144/145	<1 ug/kg
Endosulphan I	<10	<10	<10	<10	<1	<10	<1	<1	<1	TM144/145	<1 ug/kg
p,p'-DDE	<10	<10	<10	<10	<1	<10	<1	<1	<1	TM144/145	<1 ug/kg
Dieldrin	<10	<10	<10	<10	<1	<10	<1	<1	<1	TM144/145	<1 ug/kg
Endrin	<10	<10	<10	<10	<1	<10	<1	<1	<1	TM144/145	<1 ug/kg
Endosulphan II	<10	<10	<10	<10	<1	<10	<1	<1	<1	TM144/145	<1 ug/kg
p,p'-TDE(DDD)	<10	<10	<10	<10	<1	<10	<1	<1	<1	TM144/145	<1 ug/kg
Ethion	<10	<10	<10	<10	<1	<10	<1	<1	<1	TM144/145	<1 ug/kg
p,p'-DDT	<10	<10	<10	<10	<4	<10	<4	<4	<4	TM144/145	<1 ug/kg
Endosulphan sulphate	<10	<10	<10	<10	<1	<10	<1	<1	<1	TM144/145	<1 ug/kg
p,p'-Methoxychlor	<10	<10	<10	<10	<3	<10	<3	<3	<3	TM144/145	<1 ug/kg
Azinphos methyl	<10	<10	<10	<10	<1	<10	<1	<1	<1	TM144/145	<1 ug/kg

All results expressed on a dry weight basis.

Date 30.10.2008

Validated ☑
Preliminary ☐

ALcontrol Laboratories Analytical Services
Table Of Results

* ISO 17025 accredited
M MCERTS accredited
\# Subcontracted test
» Shown on prev. report

Job Number: 08/17457/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5309 **Client Contact:** Envirolab Data

Sample Identity	93851 BH23 WC1	93853 BH23 WC2	93855 BH23 WC3	93857 BH23 WC4	93859 BH10A WC3	93861 BH10A WC4	93863 BH10A WC5	93865 BH10A WC1	93867 BH10A WC2	Method Code	LoD/Units
Depth (m)	5.9	7.0	8.0	8.9	5.2	6.0	7.5	4.25	4.6		
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID		
Sampled Date	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08		
Sample Received Date	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08		
Batch	1	1	1	1	1	1	1	1	1		
Sample Number(s)	1-4	5-8	9-12	13-15,21	16,22-23,34	17-20	25,28,31,33	26,29-30,32	24,27,35-36		
SVOC by GCMS											
Phenols											
2-Chlorophenol	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
2-Methylphenol	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
2-Nitrophenol	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
2,4-Dichlorophenol	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
2,4-Dimethylphenol	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
2,4,5-Trichlorophenol	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
2,4,6-Trichlorophenol	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
4-Chloro-3-methylphenol	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
4-Methylphenol	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
4-Nitrophenol	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
Pentachlorophenol	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
Phenol	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg

All results expressed on a dry weight basis.

Date 30.10.2008

Validated ☑
Preliminary ☐

ALcontrol Laboratories Analytical Services
Table Of Results

[F] ISO 17025 accredited
[M] MCERTS accredited
* Subcontracted test
» Shown on prev. report

Job Number: 08/17457/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5309 **Client Contact:** Envirolab Data

Sample Identity	93851 BH23 WC1	93853 BH23 WC2	93855 BH23 WC3	93857 BH23 WC4	93859 BH10A WC3	93861 BH10A WC4	93863 BH10A WC5	93865 BH10A WC1	93867 BH10A WC2	Method Code	LoD/Units
Depth (m)	5.9	7.0	8.0	8.9	5.2	6.0	7.5	4.25	4.6		
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID		
Sampled Date	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08		
Sample Received Date	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08		
Batch	1	1	1	1	1	1	1	1	1		
Sample Number(s)	1-4	5-8	9-12	13-15,21	16,22-23,34	17-20	25,28,31,33	26,29-30,32	24,27,35-36		
PAHs											
2-Chloronaphthalene	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
2-Methylnaphthalene	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
Acenaphthene	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
Acenaphthylene	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
Anthracene	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
Benzo(a)anthracene	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
Benzo(a)pyrene	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
Benzo(b)fluoranthene	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
Benzo(ghi)perylene	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
Benzo(k)fluoranthene	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
Chrysene	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
Dibenzo(a,h)anthracene	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
Fluoranthene	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
Fluorene	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
Indeno(1,2,3-cd)pyrene	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
Naphthalene	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
Phenanthrene	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
Pyrene	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
Phthalates											
Bis(2-ethylhexyl) phthalate	<200	<100	<100	<200	<200	<200	<200	<200	<200	TM157	<100 ug/kg
Butylbenzyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
Di-n-butyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
Di-n-Octyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
Diethyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
Dimethyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
Other Semi-volatiles											
1,2-Dichlorobenzene	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
1,2,4-Trichlorobenzene	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg

All results expressed on a dry weight basis.

Date 30.10.2008

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ALcontrol Laboratories Analytical Services
Table Of Results

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Job Number: 08/17457/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5309 **Client Contact:** Envirolab Data

Sample Identity	93851 BH23 WC1	93853 BH23 WC2	93855 BH23 WC3	93857 BH23 WC4	93859 BH10A WC3	93861 BH10A WC4	93863 BH10A WC5	93865 BH10A WC1	93867 BH10A WC2	Method Code	LoD/Units
Depth (m)	5.9	7.0	8.0	8.9	5.2	6.0	7.5	4.25	4.6		
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID		
Sampled Date	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08		
Sample Received Date	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08		
Batch	1	1	1	1	1	1	1	1	1		
Sample Number(s)	1-4	5-8	9-12	13-15,21	16,22-23,34	17-20	25,28,31,33	26,29-30,32	24,27,35-36		
Other Semi-volatiles (cont)											
1,3-Dichlorobenzene	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
1,4-Dichlorobenzene	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
2-Nitroaniline	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
2,4-Dinitrotoluene	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
2,6-Dinitrotoluene	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
3-Nitroaniline	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
4-Bromophenylphenylether	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
4-Chloroaniline	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
4-Chlorophenylphenylether	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
4-Nitroaniline	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
Azobenzene	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
Bis(2-chloroethoxy)methane	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
Bis(2-chloroethyl)ether	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
Carbazole	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
Dibenzofuran	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
Hexachlorobenzene	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
Hexachlorobutadiene	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
Hexachlorocyclopentadiene	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
Hexachloroethane	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
Isophorone	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
N-nitrosodi-n-propylamine	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg
Nitrobenzene	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM157	<100 ug/kg

All results expressed on a dry weight basis.

Date 30.10.2008

Validated ☑
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ALcontrol Laboratories Analytical Services
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Job Number: 08/17457/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5309 **Client Contact:** Envirolab Data

Sample Identity	93851 BH23 WC1	93853 BH23 WC2	93855 BH23 WC3	93857 BH23 WC4	93859 BH10A WC3	93861 BH10A WC4	93863 BH10A WC5	93865 BH10A WC1	93867 BH10A WC2	Method Code	LoD/Units
Depth (m)	5.9	7.0	8.0	8.9	5.2	6.0	7.5	4.25	4.6		
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID		
Sampled Date	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08		
Sample Received Date	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08		
Batch	1	1	1	1	1	1	1	1	1		
Sample Number(s)	1-4	5-8	9-12	13-15,21	16,22-23,34	17-20	25,28,31,33	26,29-30,32	24,27,35-36		
Volatile Organic Compounds											
Dichlorodifluoromethane	<4	<4	<4	<4	<4	<4	<4	<4	<4	TM116#	<4 ug/kg
Chloromethane	<7	<7	<7	<7	<7	<7	<7	<7	<7	TM116#	<7 ug/kg
Vinyl Chloride	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM116#M	<10 ug/kg
Bromomethane	<13	<13	<13	<13	<13	<13	<13	<13	<13	TM116	<13 ug/kg
Chloroethane	<14	<14	<14	<14	<14	<14	<14	<14	<14	TM116#	<14 ug/kg
Trichlorofluoromethane	<6	<6	<6	<6	<6	<6	<6	<6	<6	TM116#M	<6 ug/kg
trans-1-2-Dichloroethene	<11	<11	<11	<11	<11	<11	<11	<11	<11	TM116#	<11 ug/kg
Dichloromethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM116#	<10 ug/kg
Carbon Disulphide	<7	<7	<7	<7	<7	<7	<7	<7	<7	TM116#M	<7 ug/kg
1.1-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM116#M	<10 ug/kg
1.1-Dichloroethane	<8	<8	<8	<8	<8	<8	<8	<8	<8	TM116#M	<8 ug/kg
Methyl Tertiary Butyl Ether	<11	<11	<11	<11	<11	<11	<11	<11	<11	TM116	<11 ug/kg
cis-1-2-Dichloroethene	<5	<5	<5	<5	<5	<5	<5	<5	<5	TM116#M	<5 ug/kg
Bromochloromethane	<14	<14	<14	<14	<14	<14	<14	<14	<14	TM116#	<14 ug/kg
Chloroform	<8	<8	<8	<8	<8	<8	<8	<8	<8	TM116#M	<8 ug/kg
2.2-Dichloropropane	<12	<12	<12	<12	<12	<12	<12	<12	<12	TM116	<12 ug/kg
1.2-Dichloroethane	<5	<5	<5	<5	<5	<5	<5	<5	<5	TM116#	<5 ug/kg
1.1.1-Trichloroethane	<7	<7	<7	<7	<7	<7	<7	<7	<7	TM116#M	<7 ug/kg
1.1-Dichloropropene	<11	<11	<11	<11	<11	<11	<11	<11	<11	TM116#M	<11 ug/kg
Benzene	<9	<9	<9	<9	<9	<9	<9	<9	<9	TM116#M	<9 ug/kg
Carbontetrachloride	<14	<14	<14	<14	<14	<14	<14	<14	<14	TM116#M	<14 ug/kg
Dibromomethane	<9	<9	<9	<9	<9	<9	<9	<9	<9	TM116*	<9 ug/kg
1.2-Dichloropropane	<12	<12	<12	<12	<12	<12	<12	<12	<12	TM116#M	<12 ug/kg
Bromodichloromethane	<7	<7	<7	<7	<7	<7	<7	<7	<7	TM116#M	<7 ug/kg
Trichloroethene	<9	<9	<9	<9	<9	<9	<9	<9	<9	TM116#M	<9 ug/kg
cis-1-3-Dichloropropene	<14	<14	<14	<14	<14	<14	<14	<14	<14	TM116#M	<14 ug/kg
trans-1-3-Dichloropropene	<14	<14	<14	<14	<14	<14	<14	<14	<14	TM116#M	<14 ug/kg
1.1.2-Trichloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM116#	<10 ug/kg
Toluene	<5	<5	<5	<5	<5	<5	<5	<5	<5	TM116#M	<5 ug/kg
1.3-Dichloropropane	<7	<7	<7	<7	<7	<7	<7	<7	<7	TM116*	<7 ug/kg

All results expressed on a dry weight basis.

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Job Number: 08/17457/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5309 **Client Contact:** Envirolab Data

Sample Identity	93851 BH23 WC1	93853 BH23 WC2	93855 BH23 WC3	93857 BH23 WC4	93859 BH10A WC3	93861 BH10A WC4	93863 BH10A WC5	93865 BH10A WC1	93867 BH10A WC2	Method Code	LoD/Units
Depth (m)	5.9	7.0	8.0	8.9	5.2	6.0	7.5	4.25	4.6		
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID		
Sampled Date	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08		
Sample Received Date	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08		
Batch	1	1	1	1	1	1	1	1	1		
Sample Number(s)	1-4	5-8	9-12	13-15,21	16,22-23,34	17-20	25,28,31,33	26,29-30,32	24,27,35-36		
Volatile Organic Compounds (cont)											
Dibromochloromethane	<13	<13	<13	<13	<13	<13	<13	<13	<13	TM116#	<13 ug/kg
1,2-Dibromoethane	<12	<12	<12	<12	<12	<12	<12	<12	<12	TM116#	<12 ug/kg
Tetrachloroethene	<5	<5	<5	<5	<5	<5	<5	<5	<5	TM116#	<5 ug/kg
1,1,1,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM116#M	<10 ug/kg
Chlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5	TM116#M	<5 ug/kg
Ethylbenzene	<4	<4	<4	<4	<4	<4	<4	<4	<4	TM116#	<4 ug/kg
p/m-Xylene	<14	<14	<14	<14	<14	<14	<14	<14	<14	TM116#	<14 ug/kg
Bromoform	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM116#	<10 ug/kg
Styrene	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM116#	<10 ug/kg
1,1,2,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM116#	<10 ug/kg
o-Xylene	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM116#	<10 ug/kg
1,2,3-Trichloropropane	<17	<17	<17	<17	<17	<17	<17	<17	<17	TM116#	<17 ug/kg
Isopropylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5	TM116#	<5 ug/kg
Bromobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM116#M	<10 ug/kg
2-Chlorotoluene	<9	<9	<9	<9	<9	<9	<9	<9	<9	TM116#	<9 ug/kg
Propylbenzene	<11	<11	<11	<11	<11	<11	<11	<11	<11	TM116#	<11 ug/kg
4-Chlorotoluene	<12	<12	<12	<12	<12	<12	<12	<12	<12	TM116#	<12 ug/kg
1,2,4-Trimethylbenzene	<9	<9	<9	<9	<9	<9	<9	<9	<9	TM116#	<9 ug/kg
4-Isopropyltoluene	<11	<11	<11	<11	<11	<11	<11	<11	<11	TM116#	<11 ug/kg
1,3,5-Trimethylbenzene	<8	<8	<8	<8	<8	<8	<8	<8	<8	TM116#	<8 ug/kg
1,2-Dichlorobenzene	<12	<12	<12	<12	<12	<12	<12	<12	<12	TM116#M	<12 ug/kg
1,4-Dichlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5	TM116#M	<5 ug/kg
sec-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM116#	<10 ug/kg
tert-Butylbenzene	<12	<12	<12	<12	<12	<12	<12	<12	<12	TM116#	<12 ug/kg
1,3-Dichlorobenzene	<6	<6	<6	<6	<6	<6	<6	<6	<6	TM116#	<6 ug/kg
n-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM116#	<10 ug/kg
1,2-Dibromo-3-chloropropane	<14	<14	<14	<14	<14	<14	<14	<14	<14	TM116#	<14 ug/kg
1,2,4-Trichlorobenzene	<6	<6	<6	<6	<6	<6	<6	<6	<6	TM116#	<6 ug/kg
Naphthalene	<13	<13	<13	<13	<13	<13	<13	<13	<13	TM116#	<13 ug/kg
1,2,3-Trichlorobenzene	<11	<11	<11	<11	<11	<11	<11	<11	<11	TM116#	<11 ug/kg

All results expressed on a dry weight basis.

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Job Number: 08/17457/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5309 **Client Contact:** Envirolab Data

Sample Identity	93851 BH23 WC1	93853 BH23 WC2	93855 BH23 WC3	93857 BH23 WC4	93859 BH10A WC3	93861 BH10A WC4	93863 BH10A WC5	93865 BH10A WC1	93867 BH10A WC2	Method Code	LoD/Units
Depth (m)	5.9	7.0	8.0	8.9	5.2	6.0	7.5	4.25	4.6		
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID		
Sampled Date	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08		
Sample Received Date	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08		
Batch	1	1	1	1	1	1	1	1	1		
Sample Number(s)	1-4	5-8	9-12	13-15,21	16,22-23,34	17-20	25,28,31,33	26,29-30,32	24,27,35-36		
Volatile Organic Compounds (cont)											
Hexachlorobutadiene	<12	<12	<12	<12	<12	<12	<12	<12	<12	TM116#	<12 ug/kg

All results expressed on a dry weight basis.

Date 30.10.2008

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Job Number: 08/17457/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5309 **Client Contact:** Envirolab Data

Sample Identity	93851 BH23 WC1	93853 BH23 WC2	93855 BH23 WC3	93857 BH23 WC4	93859 BH10A WC3	93861 BH10A WC4	93863 BH10A WC5	93865 BH10A WC1	93867 BH10A WC2	Method Code	LoD/Units
Depth (m)	5.9	7.0	8.0	8.9	5.2	6.0	7.5	4.25	4.6		
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID		
Sampled Date	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08		
Sample Received Date	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08		
Batch	1	1	1	1	1	1	1	1	1		
Sample Number(s)	1-4	5-8	9-12	13-15,21	16,22-23,34	17-20	25,28,31,33	26,29-30,32	24,27,35-36		
Arsenic Dissolved (NRA) (ICP-MS)	22	9.7	16	5.2	2.9	<0.75	1.5	6.4	<0.75	TM152	<0.75 ug/l
Boron Dissolved (NRA) (ICP-MS)	700	200	260	320	67	230	310	170	260	TM152	<20 ug/l
Cadmium Dissolved (NRA) (ICP-MS)	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	TM152	<0.22 ug/l
Chromium Dissolved (NRA) (ICP-MS)	5	6	3	<1	3	<1	<1	3	<1	TM152	<1 ug/l
Copper Dissolved (NRA) (ICP-MS)	5.7	7.7	6.3	2.9	4.7	2.5	3.6	11	5.1	TM152	<1.6 ug/l
Lead Dissolved (NRA) (ICP-MS)	1.4	3.4	2.7	1.1	3.4	0.8	0.5	3.9	1.0	TM152	<0.4 ug/l
Nickel Dissolved (NRA) (ICP-MS)	3.3	5.3	2.7	<1.5	<1.5	<1.5	<1.5	2.5	<1.5	TM152	<1.5 ug/l
Selenium Dissolved (NRA) (ICP-MS)	5	3	3	2	<1	<1	1	2	<1	TM152	<1 ug/l
Vanadium Dissolved (NRA) (ICP-MS)	76	38	58	2	11	4	<1	16	<1	TM152	<1 ug/l
Zinc Dissolved (NRA) (ICP-MS)	69	39	100	82	55	68	85	84	77	TM152	<5 ug/l
Mercury Dissolved (NRA) (CVAF)	0.02	0.02	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	TM183	<0.01 ug/l
Sulphate (NRA)	44	11	41	11	45	65	85	27	59	TM098	<3 mg/l
Phenols Monohydric (NRA)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	TM062	<0.01 mg/l
Total Cyanide (NRA)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	TM153	<0.05 mg/l
pH (NRA)	8.15	8.38	7.54	7.39	7.22	6.99	6.31	7.93	6.86	TM133	<1.00 pH Units

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Job Number: 08/17457/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5309 **Client Contact:** Envirolab Data

Sample Identity	93851 BH23 WC1	93853 BH23 WC2	93855 BH23 WC3	93857 BH23 WC4	93859 BH10A WC3	93861 BH10A WC4	93863 BH10A WC5	93865 BH10A WC1	93867 BH10A WC2	Method Code	LoD/Units
Depth (m)	5.9	7.0	8.0	8.9	5.2	6.0	7.5	4.25	4.6		
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID		
Sampled Date	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08		
Sample Received Date	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08		
Batch	1	1	1	1	1	1	1	1	1		
Sample Number(s)	1-4	5-8	9-12	13-15,21	16,22-23,34	17-20	25,28,31,33	26,29-30,32	24,27,35-36		
GRO (C4-C12) (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM089	<10 ug/l
MTBE (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM089	<10 ug/l
Benzene (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM089	<10 ug/l
Toluene (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM089	<10 ug/l
Ethyl benzene (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM089	<10 ug/l
m & p Xylene (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM089	<10 ug/l
o Xylene (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM089	<10 ug/l
Aliphatics C5-C6 (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM089	<10 ug/l
Aliphatics >C6-C8 (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM089	<10 ug/l
Aliphatics >C8-C10 (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM089	<10 ug/l
Aliphatics >C10-C12 (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM089	<10 ug/l
Aliphatics >C12-C16 (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM174	<10 ug/l
Aliphatics >C16-C21 (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM174	<10 ug/l
Aliphatics >C21-C35 (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM174	<10 ug/l
Total Aliphatics C5-C35 (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM61/89	<10 ug/l
Aromatics C6-C7 (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM089	<10 ug/l
Aromatics >C7-C8 (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM089	<10 ug/l
Aromatics >EC8-EC10 (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM089	<10 ug/l
Aromatics >EC10-EC12 (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM089	<10 ug/l
Aromatics >EC12-EC16 (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM174	<10 ug/l
Aromatics >EC16-EC21 (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM174	<10 ug/l
Aromatics >EC21-EC35 (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM174	<10 ug/l
Total Aromatics C6-C35 (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM61/89	<10 ug/l
TPH (Aliphatics and Aromatics C5-C35) (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM61/89	<10 ug/l

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Job Number: 08/17457/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5309 **Client Contact:** Envirolab Data

Sample Identity	93851 BH23 WC1	93853 BH23 WC2	93855 BH23 WC3	93857 BH23 WC4	93859 BH10A WC3	93861 BH10A WC4	93863 BH10A WC5	93865 BH10A WC1	93867 BH10A WC2	Method Code	LoD/Units
Depth (m)	5.9	7.0	8.0	8.9	5.2	6.0	7.5	4.25	4.6		
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID		
Sampled Date	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08		
Sample Received Date	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08		
Batch	1	1	1	1	1	1	1	1	1		
Sample Number(s)	1-4	5-8	9-12	13-15,21	16,22-23,34	17-20	25,28,31,33	26,29-30,32	24,27,35-36		
PAH by GCMS											
Naphthalene (NRA)	<100	<100	<100	<100	<100	<100	<100	<100	<100	TM178	<100 ng/l
Acenaphthylene (NRA)	<11	<11	<11	<11	<11	<11	<11	<11	<11	TM178	<11 ng/l
Acenaphthene (NRA)	<15	<15	<15	<15	<15	<15	<15	<15	<15	TM178	<15 ng/l
Fluorene (NRA)	<14	<14	<14	<14	<14	<14	<14	<14	<14	TM178	<14 ng/l
Phenanthrene (NRA)	<22	<22	<22	57	48	<22	<22	<22	<22	TM178	<22 ng/l
Anthracene (NRA)	<15	<15	<15	<15	<15	<15	<15	<15	<15	TM178	<15 ng/l
Fluoranthene (NRA)	<17	<17	26	53	83	<17	<17	25	19	TM178	<17 ng/l
Pyrene (NRA)	<15	<15	20	45	72	<15	<15	20	16	TM178	<15 ng/l
Benz(a)anthracene (NRA)	<17	<17	<17	19	<17	<17	<17	<17	<17	TM178	<17 ng/l
Chrysene (NRA)	<13	<13	<13	21	<13	<13	<13	<13	<13	TM178	<13 ng/l
Benzo(b)fluoranthene (NRA)	<23	<23	<23	28	<23	<23	<23	<23	<23	TM178	<23 ng/l
Benzo(k)fluoranthene (NRA)	<27	<27	<27	<27	<27	<27	<27	<27	<27	TM178	<27 ng/l
Benzo(a)pyrene (NRA)	<9	<9	<9	20	<9	<9	<9	<9	<9	TM178	<9 ng/l
Indeno(123cd)pyrene (NRA)	<14	<14	<14	<14	<14	<14	<14	<14	<14	TM178	<14 ng/l
Dibenzo(ah)anthracene (NRA)	<16	<16	<16	<16	<16	<16	<16	<16	<16	TM178	<16 ng/l
Benzo(ghi)perylene (NRA)	<16	<16	<16	<16	<16	<16	<16	<16	<16	TM178	<16 ng/l
PAH 16 Total (NRA)	<100	<100	<100	240	200	<100	<100	<100	<100	TM178	<100 ng/l

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Job Number: 08/17457/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5309 **Client Contact:** Envirolab Data

Sample Identity	93851 BH23 WC1	93853 BH23 WC2	93855 BH23 WC3	93857 BH23 WC4	93859 BH10A WC3	93861 BH10A WC4	93863 BH10A WC5	93865 BH10A WC1	93867 BH10A WC2	Method Code	LoD/Units
Depth (m)	5.9	7.0	8.0	8.9	5.2	6.0	7.5	4.25	4.6		
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID		
Sampled Date	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08		
Sample Received Date	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08		
Batch	1	1	1	1	1	1	1	1	1		
Sample Number(s)	1-4	5-8	9-12	13-15,21	16,22-23,34	17-20	25,28,31,33	26,29-30,32	24,27,35-36		
OCP/OPP											
Dichlorvos (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM144/145	<10 ng/l
Mevinphos (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM144/145	<10 ng/l
Alpha-BHC (Lindane) (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM144/145	<10 ng/l
Beta-BHC (Lindane) (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM144/145	<10 ng/l
Gamma-BHC (Lindane) (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM144/145	<10 ng/l
Diazinon (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM144/145	<10 ng/l
Methyl Parathion (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM144/145	<10 ng/l
Heptachlor (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM144/145	<10 ng/l
Fenitrothion (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM144/145	<10 ng/l
Malathion (NRA)	<25	<25	40	<25	<25	<25	<25	<25	<25	TM144/145	<10 ng/l
Aldrin (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM144/145	<10 ng/l
Parathion (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM144/145	<10 ng/l
Heptachlor Epoxide (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM144/145	<10 ng/l
Endosulphan I (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM144/145	<10 ng/l
p,p'-DDE (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM144/145	<10 ng/l
Dieldrin (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM144/145	<10 ng/l
Endrin (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM144/145	<10 ng/l
Endosulphan II (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM144/145	<10 ng/l
p,p'-TDE(DDD) (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM144/145	<10 ng/l
Ethion (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM144/145	<10 ng/l
p,p'-DDT (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM144/145	<10 ng/l
Endosulphan sulphate (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM144/145	<10 ng/l
p,p'-Methoxychlor (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM144/145	<10 ng/l
Azinphos methyl (NRA)	<10	<10	<10	<10	<10	<10	<10	<10	<10	TM144/145	<10 ng/l

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Job Number: 08/17457/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5309 **Client Contact:** Envirolab Data

Sample Identity	93851 BH23 WC1	93853 BH23 WC2	93855 BH23 WC3	93857 BH23 WC4	93859 BH10A WC3	93861 BH10A WC4	93863 BH10A WC5	93865 BH10A WC1	93867 BH10A WC2	Method Code	LoD/Units
Depth (m)	5.9	7.0	8.0	8.9	5.2	6.0	7.5	4.25	4.6		
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID		
Sampled Date	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08		
Sample Received Date	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08		
Batch	1	1	1	1	1	1	1	1	1		
Sample Number(s)	1-4	5-8	9-12	13-15,21	16,22-23,34	17-20	25,28,31,33	26,29-30,32	24,27,35-36		
SVOC by GCMS											
Phenols											
2-Chlorophenol (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM176	<1 ug/l
2-Methylphenol (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM176	<1 ug/l
2-Nitrophenol (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM176	<1 ug/l
2,4-Dichlorophenol (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM176	<1 ug/l
2,4-Dimethylphenol (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM176	<1 ug/l
2,4,5-Trichlorophenol (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM176	<1 ug/l
2,4,6-Trichlorophenol (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM176	<1 ug/l
4-Chloro-3-methylphenol (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM176	<1 ug/l
4-Methylphenol (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM176	<1 ug/l
4-Nitrophenol (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM176	<1 ug/l
Pentachlorophenol (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM176	<1 ug/l
Phenol (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM176	<1 ug/l

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Job Number: 08/17457/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5309 **Client Contact:** Envirolab Data

Sample Identity	93851 BH23 WC1	93853 BH23 WC2	93855 BH23 WC3	93857 BH23 WC4	93859 BH10A WC3	93861 BH10A WC4	93863 BH10A WC5	93865 BH10A WC1	93867 BH10A WC2	Method Code	LoD/Units
Depth (m)	5.9	7.0	8.0	8.9	5.2	6.0	7.5	4.25	4.6		
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID		
Sampled Date	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08		
Sample Received Date	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08		
Batch	1	1	1	1	1	1	1	1	1		
Sample Number(s)	1-4	5-8	9-12	13-15,21	16,22-23,34	17-20	25,28,31,33	26,29-30,32	24,27,35-36		
PAHs											
2-Chloronaphthalene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM176	<1 ug/l
2-Methylnaphthalene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM176	<1 ug/l
Phthalates											
Bis(2-ethylhexyl) phthalate (NRA	<4	<4	6	<4	3	<4	<2	5	<2	TM176	<1 ug/l
Butylbenzyl phthalate (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM176	<1 ug/l
Di-n-butyl phthalate (NRA)	2	<2	2	2	2	<2	3	<2	2	TM176	<1 ug/l
Di-n-Octyl phthalate (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM176	<1 ug/l
Diethyl phthalate (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM176	<1 ug/l
Dimethyl phthalate (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM176	<1 ug/l
Other Semi-volatiles											
1,2-Dichlorobenzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM176	<1 ug/l
1,2,4-Trichlorobenzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM176	<1 ug/l
1,3-Dichlorobenzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM176	<1 ug/l
1,4-Dichlorobenzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM176	<1 ug/l
2-Nitroaniline (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM176	<1 ug/l
2,4-Dinitrotoluene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM176	<1 ug/l
2,6-Dinitrotoluene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM176	<1 ug/l
3-Nitroaniline (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM176	<1 ug/l
4-Bromophenylphenylether (NRA	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM176	<1 ug/l
4-Chloroaniline (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM176	<1 ug/l
4-Chlorophenylphenylether (NRA	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM176	<1 ug/l
4-Nitroaniline (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM176	<1 ug/l
Azobenzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM176	<1 ug/l
Bis(2-chloroethoxy)methane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM176	<1 ug/l
Bis(2-chloroethyl)ether (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM176	<1 ug/l
Carbazole (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM176	<1 ug/l
Dibenzofuran (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM176	<1 ug/l
Hexachlorobenzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM176	<1 ug/l

Date 30.10.2008

Validated ✓
Preliminary

ALcontrol Laboratories Analytical Services
Table Of Results

[#] ISO 17025 accredited
[M] MCERTS accredited
[*] Subcontracted test
[»] Shown on prev. report

Job Number: 08/17457/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5309 **Client Contact:** Envirolab Data

Sample Identity	93851 BH23 WC1	93853 BH23 WC2	93855 BH23 WC3	93857 BH23 WC4	93859 BH10A WC3	93861 BH10A WC4	93863 BH10A WC5	93865 BH10A WC1	93867 BH10A WC2	Method Code	LoD/Units
Depth (m)	5.9	7.0	8.0	8.9	5.2	6.0	7.5	4.25	4.6		
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID		
Sampled Date	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08		
Sample Received Date	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08		
Batch	1	1	1	1	1	1	1	1	1		
Sample Number(s)	1-4	5-8	9-12	13-15,21	16,22-23,34	17-20	25,28,31,33	26,29-30,32	24,27,35-36		
Other Semi-volatiles (cont)											
Hexachlorobutadiene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM176	<1 ug/l
Hexachlorocyclopentadiene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM176	<1 ug/l
Hexachloroethane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM176	<1 ug/l
Isophorone (NRA)	<2	<2	<2	<2	<2	<2	<2	<2	<2	TM176	<1 ug/l
N-nitrosodi-n-propylamine (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM176	<1 ug/l
Nitrobenzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM176	<1 ug/l

Date 30.10.2008

Validated ☑
Preliminary ☐

ALcontrol Laboratories Analytical Services
Table Of Results

* ISO 17025 accredited
M MCERTS accredited
\# Subcontracted test
» Shown on prev. report

Job Number: 08/17457/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5309 **Client Contact:** Envirolab Data

Sample Identity	93851 BH23 WC1	93853 BH23 WC2	93855 BH23 WC3	93857 BH23 WC4	93859 BH10A WC3	93861 BH10A WC4	93863 BH10A WC5	93865 BH10A WC1	93867 BH10A WC2	Method Code	LoD/Units
Depth (m)	5.9	7.0	8.0	8.9	5.2	6.0	7.5	4.25	4.6		
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID		
Sampled Date	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08		
Sample Received Date	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08		
Batch	1	1	1	1	1	1	1	1	1		
Sample Number(s)	1-4	5-8	9-12	13-15,21	16,22-23,34	17-20	25,28,31,33	26,29-30,32	24,27,35-36		
Volatile Organic Compounds											
Dichlorodifluoromethane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
Chloromethane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
Vinyl Chloride (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
Bromomethane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
Chloroethane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
Trichlorofluoromethane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
trans-1-2-Dichloroethene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
Dichloromethane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
Carbon Disulphide (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
1.1-Dichloroethene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
1.1-Dichloroethane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
Methyl Tertiary Butyl Ether (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
cis-1-2-Dichloroethene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
Bromochloromethane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
Chloroform (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
2.2-Dichloropropane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
1.2-Dichloroethane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
1.1.1-Trichloroethane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
1.1-Dichloropropene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
Benzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
Carbontetrachloride (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
Dibromomethane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
1.2-Dichloropropane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
Bromodichloromethane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
Trichloroethene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
cis-1-3-Dichloropropene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
trans-1-3-Dichloropropene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
1.1.2-Trichloroethane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
Toluene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
1.3-Dichloropropane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l

Date 30.10.2008

Validated ✓
Preliminary

ALcontrol Laboratories Analytical Services
Table Of Results

* ISO 17025 accredited
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* Subcontracted test
» Shown on prev. report

Job Number: 08/17457/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5309 **Client Contact:** Envirolab Data

Sample Identity	93851 BH23 WC1	93853 BH23 WC2	93855 BH23 WC3	93857 BH23 WC4	93859 BH10A WC3	93861 BH10A WC4	93863 BH10A WC5	93865 BH10A WC1	93867 BH10A WC2	Method Code	LoD/Units
Depth (m)	5.9	7.0	8.0	8.9	5.2	6.0	7.5	4.25	4.6		
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID		
Sampled Date	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08		
Sample Received Date	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08		
Batch	1	1	1	1	1	1	1	1	1		
Sample Number(s)	1-4	5-8	9-12	13-15,21	16,22-23,34	17-20	25,28,31,33	26,29-30,32	24,27,35-36		
Volatile Organic Compounds (cont)											
Dibromochloromethane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
1,2-Dibromoethane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
Tetrachloroethene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
1,1,1,2-Tetrachloroethane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
Chlorobenzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
Ethylbenzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
p/m-Xylene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
Bromoform (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
Styrene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
1,1,2,2-Tetrachloroethane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
o-Xylene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
1,2,3-Trichloropropane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
Isopropylbenzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
Bromobenzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
2-Chlorotoluene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
Propylbenzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
4-Chlorotoluene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
1,2,4-Trimethylbenzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
4-Isopropyltoluene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
1,3,5-Trimethylbenzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
1,2-Dichlorobenzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
1,4-Dichlorobenzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
sec-Butylbenzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
tert-Butylbenzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
1,3-Dichlorobenzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
n-Butylbenzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
1,2-Dibromo-3-chloropropane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
1,2,4-Trichlorobenzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
Naphthalene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l
1,2,3-Trichlorobenzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l

Date 30.10.2008

Validated ☑
Preliminary ☐

ALcontrol Laboratories Analytical Services
Table Of Results

* ISO 17025 accredited
M MCERTS accredited
\# Subcontracted test
» Shown on prev. report

Job Number: 08/17457/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5309 **Client Contact:** Envirolab Data

Sample Identity	93851 BH23 WC1	93853 BH23 WC2	93855 BH23 WC3	93857 BH23 WC4	93859 BH10A WC3	93861 BH10A WC4	93863 BH10A WC5	93865 BH10A WC1	93867 BH10A WC2	Method Code	LoD/Units
Depth (m)	5.9	7.0	8.0	8.9	5.2	6.0	7.5	4.25	4.6		
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID		
Sampled Date	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08	16.10.08		
Sample Received Date	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08	20.10.08		
Batch	1	1	1	1	1	1	1	1	1		
Sample Number(s)	1-4	5-8	9-12	13-15,21	16,22-23,34	17-20	25,28,31,33	26,29-30,32	24,27,35-36		
Volatile Organic Compounds (cont)											
Hexachlorobutadiene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1	<1	TM208	<1 ug/l

Date 30.10.2008

ALcontrol Laboratories Analytical Services
Table Of Results - Appendix

Job Number: 08/17457/02/01
Client: Envirolab
Client Ref. No.: 722201-5309

Report Key :

Results expressed as (e.g.) 1.03E-07 is equivalent to 1.03×10^{-7}

NDP	No Determination Possible	*	Subcontracted test
NFD	No Fibres Detected	»	Result previously reported (Incremental reports only)
#	ISO 17025 accredited	M	MCERTS Accredited
PFD	Possible Fibres Detected	EC	Equivalent Carbon (Aromatics C8-C35)

Note: Method detection limits are not always achievable due to various circumstances beyond our control.

Summary of Method Codes contained within report :

Method No.	Reference	Description	ISO 17025 Accredited	MCERTS Accredited	Wet/Dry Sample [1]	Surrogate Corrected
TM001	In - house Method	Screening of Soils for Fibres			WET	
TM018	BS 1377: Part 3 1990	Determination of Loss on Ignition	✓	✓	WET	
TM062	MEWAM BOOK 124 1988.HMSO/ Method 17.7, Second Site property, March 2003	Determination of Phenolic compounds by HPLC with electro-chemical detection			NA	
TM062	MEWAM BOOK 124 1988.HMSO/ Method 17.7, Second Site property, March 2003	Determination of Phenolic compounds by HPLC with electro-chemical detection	✓	✓	WET	
TM089	Modified: US EPA Methods 8020 & 602	Determination of Gasoline Range Hydrocarbons (GRO) and BTEX (MTBE) compounds by Headspace GC-FID (C4-C12)			NA	
TM098	Method 4500E, AWWA/APHA, 20th Ed., 1999	Determination of Sulphate using the Kone Analyser			NA	
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS			WET	
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS	✓		WET	
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS	✓	✓	WET	
TM129	Method 3120B, AWWA/APHA, 20th Ed., 1999 / Modified: US EPA Method 3050B	Determination of Metal Cations by IRIS Emission Spectrometer			DRY	
TM129	Method 3120B, AWWA/APHA, 20th Ed., 1999 / Modified: US EPA Method 3050B	Determination of Metal Cations by IRIS Emission Spectrometer	✓	✓	DRY	
TM132	In - house Method	ELTRA CS800 Operators Guide	✓		DRY	
TM133	BS 1377: Part 3 1990;BS 6068-2.5	Determination of pH in Soil and Water using the GLpH pH Meter			NA	
TM133	BS 1377: Part 3 1990;BS 6068-2.5	Determination of pH in Soil and Water using the GLpH pH Meter	✓	✓	WET	

[1] Applies to Solid samples only. **DRY** indicates samples have been dried at 35°C. NA = not applicable.

ALcontrol Laboratories Analytical Services
Table Of Results - Appendix

Job Number: 08/17457/02/01
Client: Envirolab
Client Ref. No.: 722201-5309

Report Key :

Results expressed as (e.g.) 1.03E-07 is equivalent to 1.03×10^{-7}

NDP	No Determination Possible	*	Subcontracted test
NFD	No Fibres Detected	»	Result previously reported (Incremental reports only)
#	ISO 17025 accredited	M	MCERTS Accredited
PFD	Possible Fibres Detected	EC	Equivalent Carbon (Aromatics C8-C35)

Note: Method detection limits are not always achievable due to various circumstances beyond our control.

Summary of Method Codes contained within report :

Method No.	Reference	Description	ISO 17025 Accredited	MCERTS Accredited	Wet/Dry Sample [1]	Surrogate Corrected
TM136	Method 17.10, Second Site property, March 2003	Determination of Sulphur by HPLC	✓	✓	DRY	
TM144/145		Organochlorine and Organophosphorus pesticides by GC-MS			DRY	
TM152	Method 3125B, AWWA/APHA, 20th Ed., 1999	Analysis of Aqueous Samples by ICP-MS			NA	
TM153	Method 4500A,B,C, I, M AWWA/APHA, 20th Ed., 1999	Determination of Total Cyanide, Free (Easily Liberatable) Cyanide and Thiocyanate using the "Skalar SANS+ System" Segmented Flow Analyser			NA	
TM153	Method 4500A,B,C, I, M AWWA/APHA, 20th Ed., 1999	Determination of Total Cyanide, Free (Easily Liberatable) Cyanide and Thiocyanate using the "Skalar SANS+ System" Segmented Flow Analyser	✓	✓	WET	
TM157		Determination of SVOC in Soils by GC-MS extracted by sonication in DCM/Acetone			WET	
TM174		Determination of Speciated Extractable Petroleum Hydrocarbons in Waters by GC-FID			NA	
TM176		Determination of SVOCs in Water by GCMS			NA	
TM178	Modified: US EPA Method 8100	Determination of Polynuclear Aromatic Hydrocarbons (PAH) by GC-MS in Waters			NA	
TM183	BS EN 23506:2002, (BS 6068-2.74:2002) ISBN 0 580 38924 3	Determination of Trace Level Mercury in Waters and Leachates by PSA Cold Vapour Atomic Fluorescence Spectrometry			NA	
TM208	Modified: US EPA Method 8260b & 624	Determination of Volatile Organic Compounds by Headspace / GC-MS in Waters			NA	
TM61/89		see TM061 and TM089 for details			NA	

[1] Applies to Solid samples only. DRY indicates samples have been dried at 35°C. NA = not applicable.

ALcontrol Laboratories Analytical Services
Sample Descriptions

Job Number: 08/17618/02/01
Client: Envirolab
Client Ref : 722201-5309

Grain sizes

<0.063mm	Very Fine
0.1mm - 0.063mm	Fine
0.1mm - 2mm	Medium
2mm - 10mm	Coarse
>10mm	Very Coarse

Sample Identity	Depth (m)	Colour	Grain Size	Description	Batch
93848 BH19A	8.90	Black	0.1mm - 0.063mm	Silt Loam with some Vegetation	1
93869 BH10A	7.00	Black	0.1mm - 0.063mm	Clay Loam	1
93870 BH03	6.90	Brown	0.1mm - 0.063mm	Clay Loam with some Vegetation	1
93873 BH16	7.20	Dark Brown	<0.063mm	Clay Loam with some Vegetation	1
93876 BH8	5.80	Black	0.1mm - 0.063mm	Clay Loam with some Vegetation	1

* These descriptions are only intended to act as a cross check if sample identities are questioned, and to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions.

We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials-whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample.
Other coarse granular materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.
[1] Sample Description supplied by client

Validated ☑
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ALcontrol Laboratories Analytical Services
Table Of Results

* ISO 17025 accredited
M MCERTS accredited
* Subcontracted test
» Shown on prev. report

Job Number: 08/17618/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5309 **Client Contact:** Subcon

Sample Identity	93848 BH19A	93869 BH10A	93870 BH03	93873 BH16	93876 BH8					Method Code	LoD/Units
Depth (m)	8.90	7.00	6.90	7.20	5.80						
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID						
Sampled Date	15.10.08	15.10.08	14.10.08	14.10.08	13.10.08						
Sample Received Date	22.10.08	22.10.08	22.10.08	22.10.08	22.10.08						
Batch	1	1	1	1	1						
Sample Number(s)	2	3	4	5	6						
Arsenic	10	<3	<3	5	10					TM129$^{\#}_{M}$	<3.0 mg/kg
Cadmium	<0.2	<0.2	<0.2	<0.2	<0.2					TM129	<0.2 mg/kg
Chromium	8.1	4.7	5.8	17	22					TM129$^{\#}_{M}$	<4.5 mg/kg
Copper	<6	<6	<6	11	9					TM129$^{\#}_{M}$	<6 mg/kg
Lead	4	6	2	10	12					TM129$^{\#}_{M}$	<2 mg/kg
Mercury	<0.4	<0.4	<0.4	<0.4	<0.4					TM129$^{\#}_{M}$	<0.4 mg/kg
Nickel	7.9	5.9	6.5	16	21					TM129$^{\#}_{M}$	<0.9 mg/kg
Zinc	21	19	7.8	42	45					TM129$^{\#}_{M}$	<2.5 mg/kg
Total Alkalinity as CaCO3	210	55	75	750	63					TM043	<10 mg/kg

All results expressed on a dry weight basis.

Date 06.11.2008

ALcontrol Laboratories Analytical Services
Table Of Results - Appendix

Job Number: 08/17618/02/01
Client: Envirolab
Client Ref. No.: 722201-5309

Report Key :

Results expressed as (e.g.) 1.03E-07 is equivalent to 1.03×10^{-7}

NDP	No Determination Possible	*	Subcontracted test
NFD	No Fibres Detected	»	Result previously reported (Incremental reports only)
#	ISO 17025 accredited	M	MCERTS Accredited
PFD	Possible Fibres Detected	EC	Equivalent Carbon (Aromatics C8-C35)

Note: Method detection limits are not always achievable due to various circumstances beyond our control.

Summary of Method Codes contained within report :

Method No.	Reference	Description	ISO 17025 Accredited	MCERTS Accredited	Wet/Dry Sample [1]	Surrogate Corrected
TM043	Method 2320B, AWWA/APHA, 20th Ed., 1999 / BS 2690: Part109 1984	Determination of alkalinity in aqueous samples			WET	
TM129	Method 3120B, AWWA/APHA, 20th Ed., 1999 / Modified: US EPA Method 3050B	Determination of Metal Cations by IRIS Emission Spectrometer			DRY	
TM129	Method 3120B, AWWA/APHA, 20th Ed., 1999 / Modified: US EPA Method 3050B	Determination of Metal Cations by IRIS Emission Spectrometer	✓	✓	DRY	

[1] Applies to Solid samples only. **DRY** indicates samples have been dried at 35°C. **NA** = not applicable.

envirolab

Date: 14 January 2009
Your Ref: 722201 - PO. 6812
Our Ref: 722201-(5309)-031
Project Manager: Steve Mackereth
Report to: John Wild

Envirolab
Units 7 & 8
Sandpits Business Park
Mottram Road
Hyde
Cheshire
SK14 3AR

Supplemental to Final Test Report 722201-(5309)-030

Sample(s) of Soil from Sizewell C.
Received from Structural Soils Ltd
The Old School House, Stillhouse Lane, Bedminster, Bristol, BS3 4EB

Date of receipt: 17 October 2008
Date analysis commenced: 17 October 2008
Date analysis completed: 08 January 2009

Method Statement

Speciated TPH analysis is performed in accordance with procedures A-T-022 using GC-MS with Head Space & A-T-023 using GC-FID.
PCB analysis is performed in accordance with procedures A-T-004 and A-T-005.
PAH analysis is performed in accordance with procedure A-T-019.
Loss on drying analysis is performed in accordance with procedure A-T-020.
Subcontract analysis was submitted to a laboratory on Envirolab's approved vendors list.
A copy of the report is attached, UKAS/MCERTS status is detailed on the report.

Prepared by:

[redacted]

Thi McNabb
Reporting Analytical Chemist

Approved by:

[redacted]

Gill Scott
Laboratory Manager

UKAS TESTING No. 1247

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.
Tests marked "*" in this report are not included in the UKAS Accreditation Schedule for Envirolab.
Analytical results reflect the quality of the sample at the time of analysis only.

MCERTS

ALcontrol Laboratories Analytical Services
Sample Descriptions

Job Number: 08/17618/02/01
Client: Envirolab
Client Ref : 722201-5309

Grain sizes

<0.063mm	Very Fine
0.1mm - 0.063mm	Fine
0.1mm - 2mm	Medium
2mm - 10mm	Coarse
>10mm	Very Coarse

Sample Identity	Depth (m)	Colour	Grain Size	Description	Batch
93880 BH6	5.4	Dark Brown	0.1mm - 0.063mm	Clay Loam with some Vegetation	2

* These descriptions are only intended to act as a cross check if sample identities are questioned, and to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions.

We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials-whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample.
Other coarse granular materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.
[1] Sample Description supplied by client

Validated ☑
Preliminary ☐

ALcontrol Laboratories Analytical Services
Table Of Results

F ISO 17025 accredited
M MCERTS accredited
* Subcontracted test
» Shown on prev. report

Job Number: 08/17618/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5309 **Client Contact:** Subcon

Sample Identity	93880 BH6										Method Code	LoD/Units
Depth (m)	5.4											
Sample Type	SOLID											
Sampled Date	13.10.08											
Sample Received Date	06.11.08											
Batch	2											
Sample Number(s)	7											
Conductivity (at 20 deg.C)	3.0										TM120^{F}	<0.014 mS/cm
Sodium	490										TM083	<4 mg/kg
Chloride (soluble)	230										TM097$^{F}_{M}$	<2 mg/kg
Loss on Ignition	25										TM018$^{F}_{M}$	<0.3 %
pH Value	4.00										TM133$^{F}_{M}$	<1.00 pH Units

All results expressed on a dry weight basis.

Date 08.01.2009

ALcontrol Laboratories Analytical Services
Table Of Results - Appendix

Job Number: 08/17618/02/01
Client: Envirolab
Client Ref. No.: 722201-5309

Report Key :

Results expressed as (e.g.) 1.03E-07 is equivalent to 1.03×10^{-7}

NDP	No Determination Possible	*	Subcontracted test
ACM	Asbestos Containing Materia	»	Result previously reported (Incremental reports only)
#	ISO 17025 accredited	M	MCERTS Accredited
		EC	Equivalent Carbon (Aromatics C8-C35)

Note: Method detection limits are not always achievable due to various circumstances beyond our control.

Summary of Method Codes contained within report :

Method No.	Reference	Description	ISO 17025 Accredited	MCERTS Accredited	Wet/Dry Sample [1]	Surrogate Corrected
TM018	BS 1377: Part 3 1990	Determination of Loss on Ignition	✓	✓	WET	
TM083	Method 3111, AWWA/APHA, 20th Ed., 1999 / Modified: US EPA Method 7610	Determination of Sodium and Potassium by Flame Photometer			DRY	
TM097	Modified: US EPA Method 325.1 & 325.2	Determination of Chloride using the Kone Analyser	✓	✓	DRY	
TM120	Method 2510B, AWWA/APHA, 20th Ed., 1999 / BS 2690: Part 9:1970	Determination of Electrical Conductivity using a Conductivity Meter	✓		DRY	
TM133	BS 1377: Part 3 1990:BS 6068-2.5	Determination of pH in Soil and Water using the GLpH pH Meter	✓	✓	WET	

[1] Applies to Solid samples only. **DRY** indicates samples have been dried at 35°C. **NA** = not applicable.

ALcontrol Laboratories Analytical Services
Sample Descriptions

Job Number: 08/20962/02/01
Client: Envirolab
Client Ref : 722201-5309

Grain sizes

<0.063mm	Very Fine
0.1mm - 0.063mm	Fine
0.1mm - 2mm	Medium
2mm - 10mm	Coarse
>10mm	Very Coarse

Sample Identity	Depth (m)	Colour	Grain Size	Description	Batch
BH03 93870	6.90	Dark Brown	0.1mm - 0.063mm	Silt Loam with some Vegetation	1
BH10A 93869	7.00	Black	0.1mm - 0.063mm	Silt Loam	1
BH19A 93848	8.90	Dark Brown	0.1mm - 0.063mm	Silt Loam with some Vegetation	1

* These descriptions are only intended to act as a cross check if sample identities are questioned, and to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions.

We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials-whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample.
Other coarse granular materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.
[1] Sample Description supplied by client

Validated ☑
Preliminary ☐

ALcontrol Laboratories Analytical Services
Table Of Results

ᴬ ISO 17025 accredited
ᴹ MCERTS accredited
* Subcontracted test
» Shown on prev. report

Job Number: 08/20962/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5309 **Client Contact:** Subcon

Sample Identity	BH03 93870	BH10A 93869	BH19A 93848							Method Code	LoD/Units
Depth (m)	6.90	7.00	8.90								
Sample Type	SOLID	SOLID	SOLID								
Sampled Date	14.10.08	15.10.08	15.10.08								
Sample Received Date	22.12.08	22.12.08	22.12.08								
Batch	1	1	1								
Sample Number(s)	1	2	3								
Conductivity (at 20 deg.C)	ndp	2.8	7.1							TM120ᴬ	<0.014 mS/cm
Sodium	660	510	2700							TM083	<4 mg/kg
Chloride (soluble)	NDP	NDP	4600							TM097ᴬᴹ	<2 mg/kg
Loss on Ignition	81	70	40							TM018ᴬᴹ	<0.3 %
pH Value	5.67	5.35	7.68							TM133ᴬᴹ	<1.00 pH Units

All results expressed on a dry weight basis.

Date 08.01.2009

ALcontrol Laboratories Analytical Services
Table Of Results - Appendix

Job Number: 08/20962/02/01
Client: Envirolab
Client Ref. No.: 722201-5309

Report Key :

			Results expressed as (e.g.) 1.03E-07 is equivalent to 1.03×10^{-7}
NDP	No Determination Possible	*	Subcontracted test
ACM	Asbestos Containing Materia	»	Result previously reported (Incremental reports only)
#	ISO 17025 accredited	M	MCERTS Accredited
		EC	Equivalent Carbon (Aromatics C8-C35)

Note: Method detection limits are not always achievable due to various circumstances beyond our control.

Summary of Method Codes contained within report :

Method No.	Reference	Description	ISO 17025 Accredited	MCERTS Accredited	Wet/Dry Sample [1]	Surrogate Corrected
TM018	BS 1377: Part 3 1990	Determination of Loss on Ignition	✓	✓	WET	
TM083	Method 3111, AWWA/APHA, 20th Ed., 1999 / Modified: US EPA Method 7610	Determination of Sodium and Potassium by Flame Photometer			DRY	
TM097	Modified: US EPA Method 325.1 & 325.2	Determination of Chloride using the Kone Analyser	✓	✓	DRY	
TM120	Method 2510B, AWWA/APHA, 20th Ed., 1999 / BS 2690: Part 9:1970	Determination of Electrical Conductivity using a Conductivity Meter	✓		DRY	
TM133	BS 1377: Part 3 1990;BS 6068-2.5	Determination of pH in Soil and Water using the GLpH pH Meter	✓	✓	WET	

[1] Applies to Solid samples only. **DRY** indicates samples have been dried at 35°C. NA = not applicable.

ISO 17025 Form	FORM NO:SQS 105
ALCONTROL LABORATORIES	SHEET 1 OF 1
	ISSUE NO: 2
	WRITTEN BY: DOH
Title of Form	ISSUE DATE: 27/01/05
Notification of NDP's (No determination possible).	APPROVED BY: DP

Job Number : 20962
Client :
Sample Type : soil

Job No.	Sample No.	Sample ID.	Analyte(s)	Reason
20962	1,2	BH03 93870 BH10A 93869	Cl S	absorbed all the water

envirolab

Date: 11 November 2008
Your Ref: 722201 - PO. 6812
Our Ref: 722201-(5367)-040
Project Manager: Steve Mackereth
Report to: John Wild

Envirolab
Units 7 & 8
Sandpits Business Park
Mottram Road
Hyde
Cheshire
SK14 3AR

Final Test Report

Sample(s) of Soil from Sizewell C.
Received from Structural Soils Ltd
The Old School House, Stillhouse Lane, Bedminster, Bristol, BS3 4EB

Date of receipt: 23 October 2008
Date analysis commenced: 23 October 2008
Date analysis completed: 11 November 2008

Method Statement

Speciated TPH analysis is performed in accordance with procedures A-T-022 using GC-MS with Head Space & A-T-023 using GC-FID.
PCB analysis is performed in accordance with procedures A-T-004 and A-T-005.
PAH analysis is performed in accordance with procedure A-T-019.
Loss on drying analysis is performed in accordance with procedure A-T-020.
Subcontract analysis was submitted to a laboratory on Envirolab's approved vendors list.
A copy of the report is attached, UKAS/MCERTS status is detailed on the report.

Prepared by:

[redacted]

Thi McNabb
Reporting Analytical Chemist

Approved by:

[redacted]

Louise Adams
Associate Director - Operations

UKAS No. 1247

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.
Tests marked "*" in this report are not included in the UKAS Accreditation Schedule for Envirolab.
Analytical results reflect the quality of the sample at the time of analysis only.

MCERTS

envirolab

Envirolab Ref.	PROCEDURE	ISO17025	MCERTS	94263	94265								
Location				BH28 WC1	BH28 WC2								
Depth (m)				4.20	5.40								
Sample Ref				-	-								
Sample Type				-	-								
MTBE$_R$	A-T-022	Y	N	<0.01	<0.01								
Benzene$_R$	A-T-022	Y	N	<0.01	<0.01								
Toluene$_R$	A-T-022	Y	N	<0.01	<0.01								
Ethyl Benzene$_R$	A-T-022	Y	N	<0.01	0.01								
m & p Xylene$_R$	A-T-022	Y	N	0.01	0.01								
o Xylene$_R$	A-T-022	Y	N	0.01	0.01								
Aliphatics C5-C6$_R$	A-T-022	Y	N	0.01	0.01								
Aliphatics >C6-C8$_R$	A-T-022	Y	N	<0.01	<0.01								
Aliphatics >C8-C10$_R$	A-T-022	Y	N	<0.01	<0.01								
Aliphatics >C10-C12$_R$	A-T-023	Y	N	<0.1	<0.1								
Aliphatics >C12-C16$_R$	A-T-023	Y	N	<0.1	<0.1								
Aliphatics >C16-C21$_R$	A-T-023	Y	N	<0.1	<0.1								
Aliphatics >C21-C35$_R$	A-T-023	Y	N	<0.1	<0.1								
Total Aliphatics		Y	N	<0.1	<0.1								
Aromatics >C5-C7$_R$	A-T-022	Y	N	<0.01	<0.01								
Aromatics >C7-C8$_R$	A-T-022	Y	N	<0.01	<0.01								
Aromatics >C8-C9$_R$	A-T-022	Y	N	0.02	0.03								
Aromatics >C9-C10$_R$	A-T-022	Y	N	<0.01	<0.01								
Aromatics >C10-C12$_R$	A-T-023	Y	N	<0.1	<0.1								
Aromatics >C12-C16$_R$	A-T-023	Y	N	<0.1	<0.1								
Aromatics >C16-C21$_R$	A-T-023	Y	N	<0.1	<0.1								
Aromatics >C21-C35$_R$	A-T-023	Y	N	2.2	<0.1								
Total Aromatics		Y	N	2.22	<0.1								
TPH (Aliphatics & Aromatics)		Y	N	2.23	<0.1								

Table 1 - Soil Speciated TPH Results (mg/kg)

envirolab

Envirolab Ref.	PROCEDURE	ISO17025	MCERTS	94263	94265								
Location				BH28 WC1	BH28 WC2								
Depth (m)				4.20	5.40								
Sample Ref				-	-								
Sample Type				-	-								
PCB BZ 28_D	A-T-004 A-T-005	Y	Y	<0.005	<0.005								
PCB BZ 52_D	A-T-004 A-T-005	Y	Y	<0.005	<0.005								
PCB BZ 101_D	A-T-004 A-T-005	Y	Y	<0.005	<0.005								
PCB BZ 118_D	A-T-004 A-T-005	Y	Y	<0.005	<0.005								
PCB BZ 138_D	A-T-004 A-T-005	Y	Y	<0.005	<0.005								
PCB BZ 153_D	A-T-004 A-T-005	Y	Y	<0.005	<0.005								
PCB BZ 180_D	A-T-004 A-T-005	Y	Y	<0.005	<0.005								

Table 2 - Soil PCB Results (mg/kg, expressed on a dry weight basis)

envirolab

Envirolab Ref.	PROCEDURE	ISO17025	MCERTS	94263	94265								
Location				BH28 WC1	BH28 WC2								
Depth (m)				4.20	5.40								
Sample Ref				-	-								
Sample Type				-	-								
Naphthalene$_R$ "	A-T-019	N	N	0.01	<0.01								
Acenaphthylene$_R$ "	A-T-019	N	N	<0.01	<0.01								
Acenapthene$_R$ "	A-T-019	N	N	<0.01	<0.01								
Fluorene$_R$ "	A-T-019	N	N	<0.01	<0.01								
Phenanthrene$_R$ "	A-T-019	N	N	<0.01	<0.01								
Anthracene$_R$ "	A-T-019	Y	N	<0.01	<0.01								
Fluoranthene$_R$ "	A-T-019	Y	N	<0.01	<0.01								
Pyrene$_R$ "	A-T-019	Y	N	0.01	<0.01								
Benz [a] anthracene$_R$ "	A-T-019	N	N	<0.01	<0.01								
Chrysene$_R$ "	A-T-019	N	N	<0.01	<0.01								
Benzo [b] fluoranthene$_R$ Benzo [k] fluoranthene #$_R$ "	A-T-019	Y	N	<0.01	<0.01								
Benzo [a] pyrene$_R$ "	A-T-019	N	N	0.02	0.03								
Indeno [123-cd] pyrene$_R$ "	A-T-019	Y	N	<0.01	<0.01								
Dibenz [ah] anthracene$_R$ "	A-T-019	Y	N	<0.01	<0.01								
Benzo [ghi] perylene$_R$ "	A-T-019	Y	N	<0.01	<0.01								
Total 16 PAH Reported		N	N	0.04	0.03								

Due to coelution Benzo [b] fluoranthene and Benzo [k] fluoranthene are reported as one value.

Table 3 - Soil PAH Results (mg/kg, expressed on a dry weight basis)

envirolab

Envirolab Ref.	94263	94265								
Location	BH28 WC1	BH28 WC2								
Depth (m)	4.20	5.40								
Sample Ref	-	-								
Sample Type	-	-								
Type	Clay	Loam								
Colour	Mixed	Black								
Consistency	Soft	Loose								
Some Stones	Yes	Yes								
>50 Stones	No	No								
Some Vegetation	Yes	Yes								
Very Wet	No	No								
Strong Odour	No	No								

Table 4 - Soil Matrix Table

envirolab

Appendix

Code	Description
+	Increased detection limit due to sample interference
#	Increased detection limit due to sample dilution
$	Analysis subcontracted
IS	Insufficient sample for analysis
IS-QC	Insufficient sample to retest following QC fail
NDP	No determination possible
~	Sample type outside the scope of our MCERTS accreditation since matrix not included in method validation
^	Analytes are associated with failed AQC targets for MCERTS and/or UKAS.
A	Sample result is not covered under Envirolab's accreditation schedule for MCERTS as the result exceeds the validated range. See notes 1-3.
F	Analysis suffixed "$_F$" were performed on the filtered sample
D	Analysis suffixed "$_D$" were performed on the sample air dried at <30°C
O	Analysis suffixed "$_O$" were performed on the sample oven dried at 95°C
R	Analysis suffixed "$_R$" were performed on the sample as received. Where results are expressed on a dry weight basis, the samples were air dried at 95°C
Notes	
1	For MCERTS the validated range covers up to 15mg/kg for individual PAHs, 200mg/kg for totals.
2	For MCERTS the validated range covers up to 3000mg/kg for Total TPH analysis.
3	For MCERTS the validated range covers up to 0.2mg/kg for individual PCBs, and 1.5mg/kg for the total reported as aradior.
4	Natural stones and debris are excluded from analyses
5	Coarse granular material such as concrete, gravel and brick are not MCERTS accredited if they comprise the major part of the sample. Envirolab are currently accredited for MCERTS on soil types Sand, Clay and Loam only

ALcontrol Laboratories Analytical Services
Sample Descriptions

Job Number: 08/17772/02/01
Client: Envirolab
Client Ref : 722201-5367

Grain sizes

<0.063mm	Very Fine
0.1mm - 0.063mm	Fine
0.1mm - 2mm	Medium
2mm - 10mm	Coarse
>10mm	Very Coarse

Sample Identity	Depth (m)	Colour	Grain Size	Description	Batch
94261 BH24	7.0	Dark Brown	0.1mm - 0.063mm	Silt Loam with some Vegetation	1
94263 BH28 WC1	4.2	Grey	<0.063mm	Silty Clay Loam with some Vegetation	1
94265 BH28 WC2	5.4	Dark Brown	0.1mm - 0.063mm	Loam (topsoil)	1

* These descriptions are only intended to act as a cross check if sample identities are questioned, and to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions.

We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials-whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample.
Other coarse granular materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.
[1] Sample Description supplied by client

Validated ☑
Preliminary ☐

ALcontrol Laboratories Analytical Services
Table Of Results

F ISO 17025 accredited
M MCERTS accredited
* Subcontracted test
» Shown on prev. report

Job Number: 08/17772/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5367 **Client Contact:** Envirolab Data

Sample Identity	94261 BH24	94263 BH28 WC1	94265 BH28 WC2							Method Code	LoD/Units
Depth (m)	7.0	4.2	5.4								
Sample Type	SOLID	SOLID	SOLID								
Sampled Date	21.10.08	21.10.08	21.10.08								
Sample Received Date	24.10.08	24.10.08	24.10.08								
Batch	1	1	1								
Sample Number(s)	1-3	4-6	7-9								
Total Sulphate	-	2700	2800							TM129$^{F}_{M}$	<100 mg/kg
Boron Water Soluble	-	4.0	<3.5							TM129$^{F}_{M}$	<3.5 mg/kg
Arsenic	12	30	210							TM129$^{F}_{M}$	<3.0 mg/kg
Cadmium	<0.2	<0.2	0.6							TM129	<0.2 mg/kg
Chromium	5.5	44	<4.5							TM129$^{F}_{M}$	<4.5 mg/kg
Copper	<6	17	9							TM129$^{F}_{M}$	<6 mg/kg
Lead	3	21	6							TM129$^{F}_{M}$	<2 mg/kg
Mercury	<0.4	<0.4	<0.4							TM129$^{F}_{M}$	<0.4 mg/kg
Nickel	5.6	36	7.6							TM129$^{F}_{M}$	<0.9 mg/kg
Selenium	-	<3	25							TM129$^{F}_{M}$	<3 mg/kg
Vanadium	-	82	69							TM129$^{F}_{M}$	<1.5 mg/kg
Zinc	19	93	98							TM129$^{F}_{M}$	<2.5 mg/kg
Total Alkalinity as CaCO3	<10	-	-							TM043	<10 mg/kg
Phenols Monohydric	-	<0.15	<0.15							TM062$^{F}_{M}$	<0.15 mg/kg
Total Cyanide	-	<1	<1							TM153$^{F}_{M}$	<1 mg/kg
Asbestos Presence Screen	-	No Fibres Detected	No Fibres Detected							TM001	NONE
Elemental Sulphur	-	270	120							TM136$^{F}_{M}$	<70 mg/kg
Fraction of Organic Carbon	-	0.047	0.35							TM132^{F}	<0.002 NONE
Loss on Ignition	-	9.1	70							TM018$^{F}_{M}$	<0.3 %
pH Value	-	7.46	6.53							TM133$^{F}_{M}$	<1.00 pH Units

All results expressed on a dry weight basis.

Date 05.11.2008

Validated ✓
Preliminary

ALcontrol Laboratories Analytical Services
Table Of Results

* ISO 17025 accredited
M MCERTS accredited
* Subcontracted test
» Shown on prev. report

Job Number: 08/17772/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5367 **Client Contact:** Envirolab Data

Sample Identity	94261 BH24	94263 BH28 WC1	94265 BH28 WC2							Method Code	LoD/Units
Depth (m)	7.0	4.2	5.4								
Sample Type	SOLID	SOLID	SOLID								
Sampled Date	21.10.08	21.10.08	21.10.08								
Sample Received Date	24.10.08	24.10.08	24.10.08								
Batch	1	1	1								
Sample Number(s)	1-3	4-6	7-9								
OCP/OPP											
Dichlorvos	-	<1	<1							TM144/145	<1 ug/kg
Mevinphos	-	<1	<1							TM144/145	<1 ug/kg
Alpha-BHC (Lindane)	-	<1	<1							TM144/145	<1 ug/kg
Beta-BHC (Lindane)	-	<1	<1							TM144/145	<1 ug/kg
Gamma-BHC (Lindane)	-	<1	<1							TM144/145	<1 ug/kg
Diazinon	-	<1	<1							TM144/145	<1 ug/kg
Methyl Parathion	-	<1	<1							TM144/145	<1 ug/kg
Heptachlor	-	<1	<1							TM144/145	<1 ug/kg
Fenitrothion	-	<1	<1							TM144/145	<1 ug/kg
Malathion	-	<1	<1							TM144/145	<1 ug/kg
Aldrin	-	<1	<1							TM144/145	<1 ug/kg
Parathion	-	<1	<1							TM144/145	<1 ug/kg
Heptachlor Epoxide	-	<1	<1							TM144/145	<1 ug/kg
Endosulphan I	-	<1	<1							TM144/145	<1 ug/kg
p,p'-DDE	-	<1	<1							TM144/145	<1 ug/kg
Dieldrin	-	<1	<1							TM144/145	<1 ug/kg
Endrin	-	<1	<1							TM144/145	<1 ug/kg
Endosulphan II	-	<1	<1							TM144/145	<1 ug/kg
p,p'-TDE(DDD)	-	<1	<1							TM144/145	<1 ug/kg
Ethion	-	<1	<1							TM144/145	<1 ug/kg
p,p'-DDT	-	<2	<2							TM144/145	<1 ug/kg
Endosulphan sulphate	-	<1	<1							TM144/145	<1 ug/kg
p,p'-Methoxychlor	-	<2	<2							TM144/145	<1 ug/kg
Azinphos methyl	-	<1	<1							TM144/145	<1 ug/kg

All results expressed on a dry weight basis.

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Job Number: 08/17772/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5367 **Client Contact:** Envirolab Data

Sample Identity	94261 BH24	94263 BH28 WC1	94265 BH28 WC2							Method Code	LoD/Units
Depth (m)	7.0	4.2	5.4								
Sample Type	SOLID	SOLID	SOLID								
Sampled Date	21.10.08	21.10.08	21.10.08								
Sample Received Date	24.10.08	24.10.08	24.10.08								
Batch	1	1	1								
Sample Number(s)	1-3	4-6	7-9								
SVOC by GCMS											
Phenols											
2-Chlorophenol	-	<100	<100							TM157	<100 ug/kg
2-Methylphenol	-	<100	<100							TM157	<100 ug/kg
2-Nitrophenol	-	<100	<100							TM157	<100 ug/kg
2,4-Dichlorophenol	-	<100	<100							TM157	<100 ug/kg
2,4-Dimethylphenol	-	<100	<100							TM157	<100 ug/kg
2,4,5-Trichlorophenol	-	<100	<100							TM157	<100 ug/kg
2,4,6-Trichlorophenol	-	<100	<100							TM157	<100 ug/kg
4-Chloro-3-methylphenol	-	<100	<100							TM157	<100 ug/kg
4-Methylphenol	-	<100	<100							TM157	<100 ug/kg
4-Nitrophenol	-	<100	<100							TM157	<100 ug/kg
Pentachlorophenol	-	<100	<100							TM157	<100 ug/kg
Phenol	-	<100	<100							TM157	<100 ug/kg

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Job Number: 08/17772/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5367 **Client Contact:** Envirolab Data

Sample Identity	94261 BH24	94263 BH28 WC1	94265 BH28 WC2							Method Code	LoD/Units
Depth (m)	7.0	4.2	5.4								
Sample Type	SOLID	SOLID	SOLID								
Sampled Date	21.10.08	21.10.08	21.10.08								
Sample Received Date	24.10.08	24.10.08	24.10.08								
Batch	1	1	1								
Sample Number(s)	1-3	4-6	7-9								
PAHs											
2-Chloronaphthalene	-	<100	<100							TM157	<100 ug/kg
2-Methylnaphthalene	-	<100	<100							TM157	<100 ug/kg
Acenaphthene	-	<100	<100							TM157	<100 ug/kg
Acenaphthylene	-	<100	<100							TM157	<100 ug/kg
Anthracene	-	<100	<100							TM157	<100 ug/kg
Benzo(a)anthracene	-	<100	<100							TM157	<100 ug/kg
Benzo(a)pyrene	-	<100	<100							TM157	<100 ug/kg
Benzo(b)fluoranthene	-	<100	<100							TM157	<100 ug/kg
Benzo(ghi)perylene	-	<100	<100							TM157	<100 ug/kg
Benzo(k)fluoranthene	-	<100	<100							TM157	<100 ug/kg
Chrysene	-	<100	<100							TM157	<100 ug/kg
Dibenzo(a,h)anthracene	-	<100	<100							TM157	<100 ug/kg
Fluoranthene	-	<100	<100							TM157	<100 ug/kg
Fluorene	-	<100	<100							TM157	<100 ug/kg
Indeno(1,2,3-cd)pyrene	-	<100	<100							TM157	<100 ug/kg
Naphthalene	-	<100	<100							TM157	<100 ug/kg
Phenanthrene	-	<100	<100							TM157	<100 ug/kg
Pyrene	-	<100	<100							TM157	<100 ug/kg
Phthalates											
Bis(2-ethylhexyl) phthalate	-	<100	<100							TM157	<100 ug/kg
Butylbenzyl phthalate	-	<100	<100							TM157	<100 ug/kg
Di-n-butyl phthalate	-	<100	<100							TM157	<100 ug/kg
Di-n-Octyl phthalate	-	<100	<100							TM157	<100 ug/kg
Diethyl phthalate	-	<100	<100							TM157	<100 ug/kg
Dimethyl phthalate	-	<100	<100							TM157	<100 ug/kg
Other Semi-volatiles											
1,2-Dichlorobenzene	-	<100	<100							TM157	<100 ug/kg
1,2,4-Trichlorobenzene	-	<100	<100							TM157	<100 ug/kg

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Job Number: 08/17772/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5367 **Client Contact:** Envirolab Data

Sample Identity	94261 BH24	94263 BH28 WC1	94265 BH28 WC2							Method Code	LoD/Units
Depth (m)	7.0	4.2	5.4								
Sample Type	SOLID	SOLID	SOLID								
Sampled Date	21.10.08	21.10.08	21.10.08								
Sample Received Date	24.10.08	24.10.08	24.10.08								
Batch	1	1	1								
Sample Number(s)	1-3	4-6	7-9								
Other Semi-volatiles (cont)											
1,3-Dichlorobenzene	-	<100	<100							TM157	<100 ug/kg
1,4-Dichlorobenzene	-	<100	<100							TM157	<100 ug/kg
2-Nitroaniline	-	<100	<100							TM157	<100 ug/kg
2,4-Dinitrotoluene	-	<100	<100							TM157	<100 ug/kg
2,6-Dinitrotoluene	-	<100	<100							TM157	<100 ug/kg
3-Nitroaniline	-	<100	<100							TM157	<100 ug/kg
4-Bromophenylphenylether	-	<100	<100							TM157	<100 ug/kg
4-Chloroaniline	-	<100	<100							TM157	<100 ug/kg
4-Chlorophenylphenylether	-	<100	<100							TM157	<100 ug/kg
4-Nitroaniline	-	<100	<100							TM157	<100 ug/kg
Azobenzene	-	<100	<100							TM157	<100 ug/kg
Bis(2-chloroethoxy)methane	-	<100	<100							TM157	<100 ug/kg
Bis(2-chloroethyl)ether	-	<100	<100							TM157	<100 ug/kg
Carbazole	-	<100	<100							TM157	<100 ug/kg
Dibenzofuran	-	<100	<100							TM157	<100 ug/kg
Hexachlorobenzene	-	<100	<100							TM157	<100 ug/kg
Hexachlorobutadiene	-	<100	<100							TM157	<100 ug/kg
Hexachlorocyclopentadiene	-	<100	<100							TM157	<100 ug/kg
Hexachloroethane	-	<100	<100							TM157	<100 ug/kg
Isophorone	-	<100	<100							TM157	<100 ug/kg
N-nitrosodi-n-propylamine	-	<100	<100							TM157	<100 ug/kg
Nitrobenzene	-	<100	<100							TM157	<100 ug/kg

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Job Number: 08/17772/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5367 **Client Contact:** Envirolab Data

Sample Identity	94261 BH24	94263 BH28 WC1	94265 BH28 WC2							Method Code	LoD/Units
Depth (m)	7.0	4.2	5.4								
Sample Type	SOLID	SOLID	SOLID								
Sampled Date	21.10.08	21.10.08	21.10.08								
Sample Received Date	24.10.08	24.10.08	24.10.08								
Batch	1	1	1								
Sample Number(s)	1-3	4-6	7-9								
Volatile Organic Compounds											
Dichlorodifluoromethane	-	<4	<4							TM116[#]	<4 ug/kg
Chloromethane	-	<7	<7							TM116[#]	<7 ug/kg
Vinyl Chloride	-	<10	<10							TM116[#M]	<10 ug/kg
Bromomethane	-	<13	<13							TM116	<13 ug/kg
Chloroethane	-	<14	<14							TM116[#]	<14 ug/kg
Trichlorofluoromethane	-	<6	<6							TM116[#M]	<6 ug/kg
trans-1-2-Dichloroethene	-	<11	<11							TM116[#]	<11 ug/kg
Dichloromethane	-	<10	<10							TM116[#]	<10 ug/kg
Carbon Disulphide	-	150	300							TM116[#M]	<7 ug/kg
1.1-Dichloroethene	-	<10	<10							TM116[#M]	<10 ug/kg
1.1-Dichloroethane	-	<8	<8							TM116[#M]	<8 ug/kg
Methyl Tertiary Butyl Ether	-	<11	<11							TM116	<11 ug/kg
cis-1-2-Dichloroethene	-	<5	<5							TM116[#M]	<5 ug/kg
Bromochloromethane	-	<14	<14							TM116[#]	<14 ug/kg
Chloroform	-	<8	<8							TM116[#M]	<8 ug/kg
2.2-Dichloropropane	-	<12	<12							TM116	<12 ug/kg
1.2-Dichloroethane	-	<5	<5							TM116[#]	<5 ug/kg
1.1.1-Trichloroethane	-	<7	<7							TM116[#M]	<7 ug/kg
1.1-Dichloropropene	-	<11	<11							TM116[#M]	<11 ug/kg
Benzene	-	<9	<9							TM116[#M]	<9 ug/kg
Carbontetrachloride	-	<14	<14							TM116[#M]	<14 ug/kg
Dibromomethane	-	<9	<9							TM116[#]	<9 ug/kg
1.2-Dichloropropane	-	<12	<12							TM116[#M]	<12 ug/kg
Bromodichloromethane	-	<7	<7							TM116[#M]	<7 ug/kg
Trichloroethene	-	<9	<9							TM116[#M]	<9 ug/kg
cis-1-3-Dichloropropene	-	<14	<14							TM116[#M]	<14 ug/kg
trans-1-3-Dichloropropene	-	<14	<14							TM116[#M]	<14 ug/kg
1.1.2-Trichloroethane	-	<10	<10							TM116[#]	<10 ug/kg
Toluene	-	<5	23							TM116[#M]	<5 ug/kg
1.3-Dichloropropane	-	<7	<7							TM116[#]	<7 ug/kg

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Job Number: 08/17772/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5367 **Client Contact:** Envirolab Data

Sample Identity	94261 BH24	94263 BH28 WC1	94265 BH28 WC2							Method Code	LoD/Units
Depth (m)	7.0	4.2	5.4								
Sample Type	SOLID	SOLID	SOLID								
Sampled Date	21.10.08	21.10.08	21.10.08								
Sample Received Date	24.10.08	24.10.08	24.10.08								
Batch	1	1	1								
Sample Number(s)	1-3	4-6	7-9								
Volatile Organic Compounds (cont)											
Dibromochloromethane	-	<13	<13							TM116#	<13 ug/kg
1,2-Dibromoethane	-	<12	<12							TM116#	<12 ug/kg
Tetrachloroethene	-	<5	<5							TM116#	<5 ug/kg
1,1,1,2-Tetrachloroethane	-	<10	<10							TM116#M	<10 ug/kg
Chlorobenzene	-	<5	<5							TM116#M	<5 ug/kg
Ethylbenzene	-	<4	<4							TM116#	<4 ug/kg
p/m-Xylene	-	<14	<14							TM116#	<14 ug/kg
Bromoform	-	<10	<10							TM116#	<10 ug/kg
Styrene	-	<10	<10							TM116#	<10 ug/kg
1,1,2,2-Tetrachloroethane	-	<10	<10							TM116#	<10 ug/kg
o-Xylene	-	<10	<10							TM116#	<10 ug/kg
1,2,3-Trichloropropane	-	<17	<17							TM116#	<17 ug/kg
Isopropylbenzene	-	<5	<5							TM116#	<5 ug/kg
Bromobenzene	-	<10	<10							TM116#M	<10 ug/kg
2-Chlorotoluene	-	<9	<9							TM116#	<9 ug/kg
Propylbenzene	-	<11	<11							TM116#	<11 ug/kg
4-Chlorotoluene	-	<12	<12							TM116#	<12 ug/kg
1,2,4-Trimethylbenzene	-	<9	<9							TM116#	<9 ug/kg
4-Isopropyltoluene	-	<11	<11							TM116#	<11 ug/kg
1,3,5-Trimethylbenzene	-	<8	<8							TM116#	<8 ug/kg
1,2-Dichlorobenzene	-	<12	<12							TM116#M	<12 ug/kg
1,4-Dichlorobenzene	-	<5	<5							TM116#M	<5 ug/kg
sec-Butylbenzene	-	<10	<10							TM116#	<10 ug/kg
tert-Butylbenzene	-	<12	<12							TM116#	<12 ug/kg
1,3-Dichlorobenzene	-	<6	<6							TM116#	<6 ug/kg
n-Butylbenzene	-	<10	<10							TM116#	<10 ug/kg
1,2-Dibromo-3-chloropropane	-	<14	<14							TM116#	<14 ug/kg
1,2,4-Trichlorobenzene	-	<6	<6							TM116#	<6 ug/kg
Naphthalene	-	<13	<13							TM116#	<13 ug/kg
1,2,3-Trichlorobenzene	-	<11	<11							TM116#	<11 ug/kg

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Job Number: 08/17772/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5367 **Client Contact:** Envirolab Data

Sample Identity	94261 BH24	94263 BH28 WC1	94265 BH28 WC2							Method Code	LoD/Units
Depth (m)	7.0	4.2	5.4								
Sample Type	SOLID	SOLID	SOLID								
Sampled Date	21.10.08	21.10.08	21.10.08								
Sample Received Date	24.10.08	24.10.08	24.10.08								
Batch	1	1	1								
Sample Number(s)	1-3	4-6	7-9								
Volatile Organic Compounds (cont)											
Hexachlorobutadiene	-	<12	<12							TM116#	<12 ug/kg

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Job Number: 08/17772/02/01
Client: Envirolab
Client Ref. No.: 722201-5367
Matrix: LEACHATE
Location: SIZEWELL C
Client Contact: Envirolab Data

Sample Identity	94263 BH28 WC1	94265 BH28 WC2								Method Code	LoD/Units
Depth (m)	4.2	5.4									
Sample Type	SOLID	SOLID									
Sampled Date	21.10.08	21.10.08									
Sample Received Date	24.10.08	24.10.08									
Batch	1	1									
Sample Number(s)	4-6	7-9									
Arsenic Dissolved (NRA) (ICP-MS)	3.3	11								TM152	<0.75 ug/l
Boron Dissolved (NRA) (ICP-MS)	<20	290								TM152	<20 ug/l
Cadmium Dissolved (NRA) (ICP-MS)	<0.22	<0.22								TM152	<0.22 ug/l
Chromium Dissolved (NRA) (ICP-MS)	3	<1								TM152	<1 ug/l
Copper Dissolved (NRA) (ICP-MS)	3.8	2.5								TM152	<1.6 ug/l
Lead Dissolved (NRA) (ICP-MS)	0.7	0.6								TM152	<0.4 ug/l
Nickel Dissolved (NRA) (ICP-MS)	120	<1.5								TM152	<1.5 ug/l
Selenium Dissolved (NRA) (ICP-MS)	2	2								TM152	<1 ug/l
Vanadium Dissolved (NRA) (ICP-MS)	51	1								TM152	<1 ug/l
Zinc Dissolved (NRA) (ICP-MS)	6	<5								TM152	<5 ug/l
Mercury Dissolved (NRA) (CVAF)	<0.01	<0.01								TM183	<0.01 ug/l
Sulphate (NRA)	33	56								TM098	<3 mg/l
Phenols Monohydric (NRA)	<0.01	<0.01								TM062	<0.01 mg/l
Total Cyanide (NRA)	<0.05	<0.05								TM153	<0.05 mg/l
pH (NRA)	7.48	7.07								TM133	<1.00 pH Units

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Job Number: 08/17772/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5367 **Client Contact:** Envirolab Data

Sample Identity	94263 BH28 WC1	94265 BH28 WC2								Method Code	LoD/Units
Depth (m)	4.2	5.4									
Sample Type	SOLID	SOLID									
Sampled Date	21.10.08	21.10.08									
Sample Received Date	24.10.08	24.10.08									
Batch	1	1									
Sample Number(s)	4-6	7-9									
GRO (C4-C12) (NRA)	<10	<10								TM089	<10 ug/l
MTBE (NRA)	<10	<10								TM089	<10 ug/l
Benzene (NRA)	<10	<10								TM089	<10 ug/l
Toluene (NRA)	<10	<10								TM089	<10 ug/l
Ethyl benzene (NRA)	<10	<10								TM089	<10 ug/l
m & p Xylene (NRA)	<10	<10								TM089	<10 ug/l
o Xylene (NRA)	<10	<10								TM089	<10 ug/l
Aliphatics C5-C6 (NRA)	<10	<10								TM089	<10 ug/l
Aliphatics >C6-C8 (NRA)	<10	<10								TM089	<10 ug/l
Aliphatics >C8-C10 (NRA)	<10	<10								TM089	<10 ug/l
Aliphatics >C10-C12 (NRA)	<10	<10								TM089	<10 ug/l
Aliphatics >C12-C16 (NRA)	<10	11								TM174	<10 ug/l
Aliphatics >C16-C21 (NRA)	<10	119								TM174	<10 ug/l
Aliphatics >C21-C35 (NRA)	<10	220								TM174	<10 ug/l
Total Aliphatics C5-C35 (NRA)	<10	340								TM61/89	<10 ug/l
Aromatics C6-C7 (NRA)	<10	<10								TM089	<10 ug/l
Aromatics >C7-C8 (NRA)	<10	<10								TM089	<10 ug/l
Aromatics >EC8-EC10 (NRA)	<10	<10								TM089	<10 ug/l
Aromatics >EC10-EC12 (NRA)	<10	<10								TM089	<10 ug/l
Aromatics >EC12-EC16 (NRA)	<10	<10								TM174	<10 ug/l
Aromatics >EC16-EC21 (NRA)	<10	<10								TM174	<10 ug/l
Aromatics >EC21-EC35 (NRA)	<10	<10								TM174	<10 ug/l
Total Aromatics C6-C35 (NRA)	<10	<10								TM61/89	<10 ug/l
TPH (Aliphatics and Aromatics C5-C35) (NRA)	<10	340								TM61/89	<10 ug/l

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Job Number: 08/17772/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5367 **Client Contact:** Envirolab Data

Sample Identity	94263 BH28 WC1	94265 BH28 WC2								Method Code	LoD/Units
Depth (m)	4.2	5.4									
Sample Type	SOLID	SOLID									
Sampled Date	21.10.08	21.10.08									
Sample Received Date	24.10.08	24.10.08									
Batch	1	1									
Sample Number(s)	4-6	7-9									
PAH by GCMS											
Naphthalene (NRA)	<100	<100								TM178	<100 ng/l
Acenaphthylene (NRA)	<11	<11								TM178	<11 ng/l
Acenaphthene (NRA)	<15	<15								TM178	<15 ng/l
Fluorene (NRA)	<14	29								TM178	<14 ng/l
Phenanthrene (NRA)	<22	230								TM178	<22 ng/l
Anthracene (NRA)	<15	79								TM178	<15 ng/l
Fluoranthene (NRA)	<17	43								TM178	<17 ng/l
Pyrene (NRA)	<15	81								TM178	<15 ng/l
Benz(a)anthracene (NRA)	<17	<17								TM178	<17 ng/l
Chrysene (NRA)	<13	13								TM178	<13 ng/l
Benzo(b)fluoranthene (NRA)	<23	<23								TM178	<23 ng/l
Benzo(k)fluoranthene (NRA)	<27	<27								TM178	<27 ng/l
Benzo(a)pyrene (NRA)	<9	<9								TM178	<9 ng/l
Indeno(123cd)pyrene (NRA)	<14	<14								TM178	<14 ng/l
Dibenzo(ah)anthracene (NRA)	<16	<16								TM178	<16 ng/l
Benzo(ghi)perylene (NRA)	<16	<16								TM178	<16 ng/l
PAH 16 Total (NRA)	<100	470								TM178	<100 ng/l

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Job Number: 08/17772/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5367 **Client Contact:** Envirolab Data

Sample Identity	94263 BH28 WC1	94265 BH28 WC2								Method Code	LoD/Units
Depth (m)	4.2	5.4									
Sample Type	SOLID	SOLID									
Sampled Date	21.10.08	21.10.08									
Sample Received Date	24.10.08	24.10.08									
Batch	1	1									
Sample Number(s)	4-6	7-9									
OCP/OPP											
Dichlorvos (NRA)	<10	<10								TM144/145	<10 ng/l
Mevinphos (NRA)	<10	<10								TM144/145	<10 ng/l
Alpha-BHC (Lindane) (NRA)	<10	<10								TM144/145	<10 ng/l
Beta-BHC (Lindane) (NRA)	<10	<10								TM144/145	<10 ng/l
Gamma-BHC (Lindane) (NRA)	<10	<10								TM144/145	<10 ng/l
Diazinon (NRA)	<10	<10								TM144/145	<10 ng/l
Methyl Parathion (NRA)	<10	<10								TM144/145	<10 ng/l
Heptachlor (NRA)	<10	<10								TM144/145	<10 ng/l
Fenitrothion (NRA)	<10	<10								TM144/145	<10 ng/l
Malathion (NRA)	<20	<20								TM144/145	<10 ng/l
Aldrin (NRA)	<10	<10								TM144/145	<10 ng/l
Parathion (NRA)	<10	<10								TM144/145	<10 ng/l
Heptachlor Epoxide (NRA)	<10	<10								TM144/145	<10 ng/l
Endosulphan I (NRA)	<10	<10								TM144/145	<10 ng/l
p,p'-DDE (NRA)	<10	<10								TM144/145	<10 ng/l
Dieldrin (NRA)	<10	<10								TM144/145	<10 ng/l
Endrin (NRA)	<10	<10								TM144/145	<10 ng/l
Endosulphan II (NRA)	<10	<10								TM144/145	<10 ng/l
p,p'-TDE(DDD) (NRA)	<10	<10								TM144/145	<10 ng/l
Ethion (NRA)	<10	<10								TM144/145	<10 ng/l
p,p'-DDT (NRA)	<10	<10								TM144/145	<10 ng/l
Endosulphan sulphate (NRA)	<10	<10								TM144/145	<10 ng/l
p,p'-Methoxychlor (NRA)	<10	<10								TM144/145	<10 ng/l
Azinphos methyl (NRA)	<10	<10								TM144/145	<10 ng/l

Date 05.11.2008

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Table Of Results

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Job Number: 08/17772/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5367 **Client Contact:** Envirolab Data

Sample Identity	94263 BH28 WC1	94265 BH28 WC2								Method Code	LoD/Units
Depth (m)	4.2	5.4									
Sample Type	SOLID	SOLID									
Sampled Date	21.10.08	21.10.08									
Sample Received Date	24.10.08	24.10.08									
Batch	1	1									
Sample Number(s)	4-6	7-9									
SVOC by GCMS											
Phenols											
2-Chlorophenol (NRA)	<1	<1								TM176	<1 ug/l
2-Methylphenol (NRA)	<1	<1								TM176	<1 ug/l
2-Nitrophenol (NRA)	<1	<1								TM176	<1 ug/l
2,4-Dichlorophenol (NRA)	<1	<1								TM176	<1 ug/l
2,4-Dimethylphenol (NRA)	<1	<1								TM176	<1 ug/l
2,4,5-Trichlorophenol (NRA)	<1	<1								TM176	<1 ug/l
2,4,6-Trichlorophenol (NRA)	<1	<1								TM176	<1 ug/l
4-Chloro-3-methylphenol (NRA)	<1	<1								TM176	<1 ug/l
4-Methylphenol (NRA)	<1	<1								TM176	<1 ug/l
4-Nitrophenol (NRA)	<1	<1								TM176	<1 ug/l
Pentachlorophenol (NRA)	<1	<1								TM176	<1 ug/l
Phenol (NRA)	<1	<1								TM176	<1 ug/l

Date 05.11.2008

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ALcontrol Laboratories Analytical Services
Table Of Results

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Job Number: 08/17772/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5367 **Client Contact:** Envirolab Data

Sample Identity	94263 BH28 WC1	94265 BH28 WC2								Method Code	LoD/Units
Depth (m)	4.2	5.4									
Sample Type	SOLID	SOLID									
Sampled Date	21.10.08	21.10.08									
Sample Received Date	24.10.08	24.10.08									
Batch	1	1									
Sample Number(s)	4-6	7-9									
PAHs											
2-Chloronaphthalene (NRA)	<1	<1								TM176	<1 ug/l
2-Methylnaphthalene (NRA)	<1	<1								TM176	<1 ug/l
Phthalates											
Bis(2-ethylhexyl) phthalate (NRA)	<5	<1								TM176	<1 ug/l
Butylbenzyl phthalate (NRA)	<4	<1								TM176	<1 ug/l
Di-n-butyl phthalate (NRA)	<2	<1								TM176	<1 ug/l
Di-n-Octyl phthalate (NRA)	<1	<1								TM176	<1 ug/l
Diethyl phthalate (NRA)	<2	<1								TM176	<1 ug/l
Dimethyl phthalate (NRA)	<1	<1								TM176	<1 ug/l
Other Semi-volatiles											
1,2-Dichlorobenzene (NRA)	<1	<1								TM176	<1 ug/l
1,2,4-Trichlorobenzene (NRA)	<1	<1								TM176	<1 ug/l
1,3-Dichlorobenzene (NRA)	<1	<1								TM176	<1 ug/l
1,4-Dichlorobenzene (NRA)	<1	<1								TM176	<1 ug/l
2-Nitroaniline (NRA)	<1	<1								TM176	<1 ug/l
2,4-Dinitrotoluene (NRA)	<1	<1								TM176	<1 ug/l
2,6-Dinitrotoluene (NRA)	<1	<1								TM176	<1 ug/l
3-Nitroaniline (NRA)	<1	<1								TM176	<1 ug/l
4-Bromophenylphenylether (NRA)	<1	<1								TM176	<1 ug/l
4-Chloroaniline (NRA)	<1	<1								TM176	<1 ug/l
4-Chlorophenylphenylether (NRA)	<1	<1								TM176	<1 ug/l
4-Nitroaniline (NRA)	<1	<1								TM176	<1 ug/l
Azobenzene (NRA)	<1	<1								TM176	<1 ug/l
Bis(2-chloroethoxy)methane (NRA)	<1	<1								TM176	<1 ug/l
Bis(2-chloroethyl)ether (NRA)	<1	<1								TM176	<1 ug/l
Carbazole (NRA)	<1	<1								TM176	<1 ug/l
Dibenzofuran (NRA)	<1	<1								TM176	<1 ug/l
Hexachlorobenzene (NRA)	<1	<1								TM176	<1 ug/l

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Table Of Results

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Job Number: 08/17772/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5367 **Client Contact:** Envirolab Data

Sample Identity	94263 BH28 WC1	94265 BH28 WC2								Method Code	LoD/Units
Depth (m)	4.2	5.4									
Sample Type	SOLID	SOLID									
Sampled Date	21.10.08	21.10.08									
Sample Received Date	24.10.08	24.10.08									
Batch	1	1									
Sample Number(s)	4-6	7-9									
Other Semi-volatiles (cont)											
Hexachlorobutadiene (NRA)	<1	<1								TM176	<1 ug/l
Hexachlorocyclopentadiene (NRA)	<2	<1								TM176	<1 ug/l
Hexachloroethane (NRA)	<1	<1								TM176	<1 ug/l
Isophorone (NRA)	<2	<1								TM176	<1 ug/l
N-nitrosodi-n-propylamine (NRA)	<1	<1								TM176	<1 ug/l
Nitrobenzene (NRA)	<1	<1								TM176	<1 ug/l

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Table Of Results

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Job Number: 08/17772/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5367 **Client Contact:** Envirolab Data

Sample Identity	94263 BH28 WC1	94265 BH28 WC2								Method Code	LoD/Units
Depth (m)	4.2	5.4									
Sample Type	SOLID	SOLID									
Sampled Date	21.10.08	21.10.08									
Sample Received Date	24.10.08	24.10.08									
Batch	1	1									
Sample Number(s)	4-6	7-9									
Volatile Organic Compounds											
Dichlorodifluoromethane (NRA)	<1	<1								TM208	<1 ug/l
Chloromethane (NRA)	<1	<1								TM208	<1 ug/l
Vinyl Chloride (NRA)	<1	<1								TM208	<1 ug/l
Bromomethane (NRA)	<1	<1								TM208	<1 ug/l
Chloroethane (NRA)	<1	<1								TM208	<1 ug/l
Trichlorofluoromethane (NRA)	<1	<1								TM208	<1 ug/l
trans-1-2-Dichloroethene (NRA)	<1	<1								TM208	<1 ug/l
Dichloromethane (NRA)	<1	<1								TM208	<1 ug/l
Carbon Disulphide (NRA)	<1	<1								TM208	<1 ug/l
1.1-Dichloroethene (NRA)	<1	<1								TM208	<1 ug/l
1.1-Dichloroethane (NRA)	<1	<1								TM208	<1 ug/l
Methyl Tertiary Butyl Ether (NRA)	<1	<1								TM208	<1 ug/l
cis-1-2-Dichloroethene (NRA)	<1	<1								TM208	<1 ug/l
Bromochloromethane (NRA)	<1	<1								TM208	<1 ug/l
Chloroform (NRA)	<1	<1								TM208	<1 ug/l
2.2-Dichloropropane (NRA)	<1	<1								TM208	<1 ug/l
1.2-Dichloroethane (NRA)	<1	<1								TM208	<1 ug/l
1.1.1-Trichloroethane (NRA)	<1	<1								TM208	<1 ug/l
1.1-Dichloropropene (NRA)	<1	<1								TM208	<1 ug/l
Benzene (NRA)	<1	<1								TM208	<1 ug/l
Carbontetrachloride (NRA)	<1	<1								TM208	<1 ug/l
Dibromomethane (NRA)	<1	<1								TM208	<1 ug/l
1.2-Dichloropropane (NRA)	<1	<1								TM208	<1 ug/l
Bromodichloromethane (NRA)	<1	<1								TM208	<1 ug/l
Trichloroethene (NRA)	<1	<1								TM208	<1 ug/l
cis-1-3-Dichloropropene (NRA)	<1	<1								TM208	<1 ug/l
trans-1-3-Dichloropropene (NRA)	<1	<1								TM208	<1 ug/l
1.1.2-Trichloroethane (NRA)	<1	<1								TM208	<1 ug/l
Toluene (NRA)	<1	<1								TM208	<1 ug/l
1.3-Dichloropropane (NRA)	<1	<1								TM208	<1 ug/l

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Table Of Results

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Job Number: 08/17772/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5367 **Client Contact:** Envirolab Data

Sample Identity	94263 BH28 WC1	94265 BH28 WC2								Method Code	LoD/Units
Depth (m)	4.2	5.4									
Sample Type	SOLID	SOLID									
Sampled Date	21.10.08	21.10.08									
Sample Received Date	24.10.08	24.10.08									
Batch	1	1									
Sample Number(s)	4-6	7-9									
Volatile Organic Compounds (cont)											
Dibromochloromethane (NRA)	<1	<1								TM208	<1 ug/l
1,2-Dibromoethane (NRA)	<1	<1								TM208	<1 ug/l
Tetrachloroethene (NRA)	<1	<1								TM208	<1 ug/l
1,1,1,2-Tetrachloroethane (NRA)	<1	<1								TM208	<1 ug/l
Chlorobenzene (NRA)	<1	<1								TM208	<1 ug/l
Ethylbenzene (NRA)	<1	<1								TM208	<1 ug/l
p/m-Xylene (NRA)	<1	<1								TM208	<1 ug/l
Bromoform (NRA)	<1	<1								TM208	<1 ug/l
Styrene (NRA)	<1	<1								TM208	<1 ug/l
1,1,2,2-Tetrachloroethane (NRA)	<1	<1								TM208	<1 ug/l
o-Xylene (NRA)	<1	<1								TM208	<1 ug/l
1,2,3-Trichloropropane (NRA)	<1	<1								TM208	<1 ug/l
Isopropylbenzene (NRA)	<1	<1								TM208	<1 ug/l
Bromobenzene (NRA)	<1	<1								TM208	<1 ug/l
2-Chlorotoluene (NRA)	<1	<1								TM208	<1 ug/l
Propylbenzene (NRA)	<1	<1								TM208	<1 ug/l
4-Chlorotoluene (NRA)	<1	<1								TM208	<1 ug/l
1,2,4-Trimethylbenzene (NRA)	<1	<1								TM208	<1 ug/l
4-Isopropyltoluene (NRA)	<1	<1								TM208	<1 ug/l
1,3,5-Trimethylbenzene (NRA)	<1	<1								TM208	<1 ug/l
1,2-Dichlorobenzene (NRA)	<1	<1								TM208	<1 ug/l
1,4-Dichlorobenzene (NRA)	<1	<1								TM208	<1 ug/l
sec-Butylbenzene (NRA)	<1	<1								TM208	<1 ug/l
tert-Butylbenzene (NRA)	<1	<1								TM208	<1 ug/l
1,3-Dichlorobenzene (NRA)	<1	<1								TM208	<1 ug/l
n-Butylbenzene (NRA)	<1	<1								TM208	<1 ug/l
1,2-Dibromo-3-chloropropane (NRA)	<1	<1								TM208	<1 ug/l
1,2,4-Trichlorobenzene (NRA)	<1	<1								TM208	<1 ug/l
Naphthalene (NRA)	<1	<1								TM208	<1 ug/l
1,2,3-Trichlorobenzene (NRA)	<1	<1								TM208	<1 ug/l

Date 05.11.2008

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ALcontrol Laboratories Analytical Services
Table Of Results

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Job Number: 08/17772/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5367 **Client Contact:** Envirolab Data

Sample Identity	94263 BH28 WC1	94265 BH28 WC2								Method Code	LoD/Units
Depth (m)	4.2	5.4									
Sample Type	SOLID	SOLID									
Sampled Date	21.10.08	21.10.08									
Sample Received Date	24.10.08	24.10.08									
Batch	1	1									
Sample Number(s)	4-6	7-9									
Volatile Organic Compounds (cont)											
Hexachlorobutadiene (NRA)	<1	<1								TM208	<1 ug/l

Date 05.11.2008

ALcontrol Laboratories Analytical Services
Table Of Results - Appendix

Job Number: 08/17772/02/01
Client: Envirolab
Client Ref. No.: 722201-5367

Report Key :

Results expressed as (e.g.) 1.03E-07 is equivalent to 1.03×10^{-7}

NDP	No Determination Possible	*	Subcontracted test
NFD	No Fibres Detected	»	Result previously reported (Incremental reports only)
#	ISO 17025 accredited	M	MCERTS Accredited
PFD	Possible Fibres Detected	EC	Equivalent Carbon (Aromatics C8-C35)

Note: Method detection limits are not always achievable due to various circumstances beyond our control.

Summary of Method Codes contained within report :

Method No.	Reference	Description	ISO 17025 Accredited	MCERTS Accredited	Wet/Dry Sample [1]	Surrogate Corrected
TM001	In - house Method	Screening of Soils for Fibres			WET	
TM018	BS 1377: Part 3 1990	Determination of Loss on Ignition	✓	✓	WET	
TM043	Method 2320B, AWWA/APHA, 20th Ed., 1999 / BS 2690: Part109 1984	Determination of alkalinity in aqueous samples			WET	
TM062	MEWAM BOOK 124 1988.HMSO/ Method 17.7, Second Site property, March 2003	Determination of Phenolic compounds by HPLC with electro-chemical detection			NA	
TM062	MEWAM BOOK 124 1988.HMSO/ Method 17.7, Second Site property, March 2003	Determination of Phenolic compounds by HPLC with electro-chemical detection	✓	✓	WET	
TM089	Modified: US EPA Methods 8020 & 602	Determination of Gasoline Range Hydrocarbons (GRO) and BTEX (MTBE) compounds by Headspace GC-FID (C4-C12)			NA	
TM098	Method 4500E, AWWA/APHA, 20th Ed., 1999	Determination of Sulphate using the Kone Analyser			NA	
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS			WET	
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS	✓		WET	
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS	✓	✓	WET	
TM129	Method 3120B, AWWA/APHA, 20th Ed., 1999 / Modified: US EPA Method 3050B	Determination of Metal Cations by IRIS Emission Spectrometer			DRY	
TM129	Method 3120B, AWWA/APHA, 20th Ed., 1999 / Modified: US EPA Method 3050B	Determination of Metal Cations by IRIS Emission Spectrometer	✓	✓	DRY	
TM132	In - house Method	ELTRA CS800 Operators Guide	✓		DRY	
TM133	BS 1377: Part 3 1990.BS 6068-2.5	Determination of pH in Soil and Water using the GLpH pH Meter			NA	

[1] Applies to Solid samples only. **DRY** indicates samples have been dried at 35°C. **NA** = not applicable.

ALcontrol Laboratories Analytical Services
Table Of Results - Appendix

Job Number: 08/17772/02/01
Client: Envirolab
Client Ref. No.: 722201-5367

Report Key :

Results expressed as (e.g.) 1.03E-07 is equivalent to 1.03×10^{-7}

NDP	No Determination Possible	*	Subcontracted test
NFD	No Fibres Detected	»	Result previously reported (Incremental reports only)
#	ISO 17025 accredited	M	MCERTS Accredited
PFD	Possible Fibres Detected	EC	Equivalent Carbon (Aromatics C8-C35)

Note: Method detection limits are not always achievable due to various circumstances beyond our control.

Summary of Method Codes contained within report :

Method No.	Reference	Description	ISO 17025 Accredited	MCERTS Accredited	Wet/Dry Sample [1]	Surrogate Corrected
TM133	BS 1377: Part 3 1990:BS 6068-2.5	Determination of pH in Soil and Water using the GLpH pH Meter	✓	✓	WET	
TM136	Method 17.10, Second Site property, March 2003	Determination of Sulphur by HPLC	✓	✓	DRY	
TM144/145		Organochlorine and Organophosphorus pesticides by GC-MS			DRY	
TM152	Method 3125B, AWWA/APHA, 20th Ed., 1999	Analysis of Aqueous Samples by ICP-MS			NA	
TM153	Method 4500A,B,C, I, M AWWA/APHA, 20th Ed., 1999	Determination of Total Cyanide, Free (Easily Liberatable) Cyanide and Thiocyanate using the "Skalar SANS+ System" Segmented Flow Analyser			NA	
TM153	Method 4500A,B,C, I, M AWWA/APHA, 20th Ed., 1999	Determination of Total Cyanide, Free (Easily Liberatable) Cyanide and Thiocyanate using the "Skalar SANS+ System" Segmented Flow Analyser	✓	✓	WET	
TM157		Determination of SVOC in Soils by GC-MS extracted by sonication in DCM/Acetone			WET	
TM174		Determination of Speciated Extractable Petroleum Hydrocarbons in Waters by GC-FID			NA	
TM176		Determination of SVOCs in Water by GCMS			NA	
TM178	Modified: US EPA Method 8100	Determination of Polynuclear Aromatic Hydrocarbons (PAH) by GC-MS in Waters			NA	
TM183	BS EN 23506:2002, (BS 6068-2.74:2002) ISBN 0 580 38924 3	Determination of Trace Level Mercury in Waters and Leachates by PSA Cold Vapour Atomic Fluorescence Spectrometry			NA	
TM208	Modified: US EPA Method 8260b & 624	Determination of Volatile Organic Compounds by Headspace / GC-MS in Waters			NA	
TM61/89		see TM061 and TM089 for details			NA	

[1] Applies to Solid samples only. **DRY** indicates samples have been dried at 35°C. **NA** = not applicable.

envirolab

Date: 10 November 2008
Your Ref: 722201 - PO. 6812
Our Ref: 722201-(5376)-050
Project Manager: Steve Mackereth
Report to: John Wild

Envirolab
Units 7 & 8
Sandpits Business Park
Mottram Road
Hyde
Cheshire
SK14 3AR

Final Test Report

Sample(s) of: Soil from Sizewell C.
Received from: Structural Soils Ltd
The Old School House, Stillhouse Lane, Bedminster, Bristol, BS3 4EB

Date of receipt: 24 October 2008
Date analysis commenced: 24 October 2008
Date analysis completed: 10 November 2008

Method Statement

Speciated TPH analysis is performed in accordance with procedures A-T-022 using GC-MS with Head Space & A-T-023 using GC-FID.
PCB analysis is performed in accordance with procedures A-T-004 and A-T-005.
PAH analysis is performed in accordance with procedure A-T-019.
Loss on drying analysis is performed in accordance with procedure A-T-020.
Subcontract analysis was submitted to a laboratory on Envirolab's approved vendors list.
A copy of the report is attached, UKAS/MCERTS status is detailed on the report.

Prepared by:

[redacted]

Thi McNabb
Reporting Analytical Chemist

Approved by:

[redacted]

Louise Adams
Associate Director - Operations

UKAS TESTING No. 1247

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.
Tests marked "*" in this report are not included in the UKAS Accreditation Schedule for Envirolab.
Analytical results reflect the quality of the sample at the time of analysis only.

MCERTS

envirolab

Envirolab Ref.	PROCEDURE	ISO17025	MCERTS	94341	94343	94345	94347	94349	94351	94353	94355		
Location				BH29A WC1	BH29A WC2	BH29A WC3	BH11 WC1	BH11 WC2	BH11 WC3	BH11 WC4	BH11 WC5		
Depth (m)				5.80	6.50	8.00	5.00	6.00	7.50	8.50	10.00		
Sample Ref				-	-	-	-	-	-	-	-		
Sample Type				-	-	-	-	-	-	-	-		
MTBE$_R$	A-T-022	Y	N	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
Benzene$_R$	A-T-022	Y	N	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
Toluene$_R$	A-T-022	Y	N	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
Ethyl Benzene$_R$	A-T-022	Y	N	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
m & p Xylene$_R$	A-T-022	Y	N	0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
o Xylene$_R$	A-T-022	Y	N	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
Aliphatics C5-C6$_R$	A-T-022	Y	N	0.04	0.03	0.04	0.03	0.04	0.04	0.04	0.04		
Aliphatics >C6-C8$_R$	A-T-022	Y	N	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
Aliphatics >C8-C10$_R$	A-T-022	Y	N	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
Aliphatics >C10-C12$_R$	A-T-023	Y	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Aliphatics >C12-C16$_R$	A-T-023	Y	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Aliphatics >C16-C21$_R$	A-T-023	Y	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Aliphatics >C21-C35$_R$	A-T-023	Y	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Total Aliphatics		Y	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Aromatics >C5-C7$_R$	A-T-022	Y	N	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
Aromatics >C7-C8$_R$	A-T-022	Y	N	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
Aromatics >C8-C9$_R$	A-T-022	Y	N	0.01	<0.01	0.01	0.01	<0.01	0.01	0.01	0.01		
Aromatics >C9-C10$_R$	A-T-022	Y	N	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
Aromatics >C10-C12$_R$	A-T-023	Y	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Aromatics >C12-C16$_R$	A-T-023	Y	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Aromatics >C16-C21$_R$	A-T-023	Y	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Aromatics >C21-C35$_R$	A-T-023	Y	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Total Aromatics		Y	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
TPH (Aliphatics & Aromatics)		Y	N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		

Table 1 - Soil Speciated TPH Results (mg/kg)

envirolab

Envirolab Ref.	PROCEDURE	ISO17025	MCERTS	94341	94343	94345	94347	94349	94351	94353	94355		
Location				BH29A WC1	BH29A WC2	BH29A WC3	BH11 WC1	BH11 WC2	BH11 WC3	BH11 WC4	BH11 WC5		
Depth (m)				5.80	6.50	8.00	5.00	6.00	7.50	8.50	10.00		
Sample Ref				-	-	-	-	-	-	-	-		
Sample Type				-	-	-	-	-	-	-	-		
PCB BZ 28_D	A-T-004 A-T-005	Y	Y	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		
PCB BZ 52_D	A-T-004 A-T-005	Y	Y	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		
PCB BZ 101_D	A-T-004 A-T-005	Y	Y	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		
PCB BZ 118_D	A-T-004 A-T-005	Y	Y	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		
PCB BZ 138_D	A-T-004 A-T-005	Y	Y	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		
PCB BZ 153_D	A-T-004 A-T-005	Y	Y	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		
PCB BZ 180_D	A-T-004 A-T-005	Y	Y	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		

Table 2 - Soil PCB Results (mg/kg, expressed on a dry weight basis)

envirolab

Envirolab Ref.	PROCEDURE	ISO17025	MCERTS	94341	94343	94345	94347	94349	94351	94353	94355		
Location				BH29A WC1	BH29A WC2	BH29A WC3	BH11 WC1	BH11 WC2	BH11 WC3	BH11 WC4	BH11 WC5		
Depth (m)				5.80	6.50	8.00	5.00	6.00	7.50	8.50	10.00		
Sample Ref				-	-	-	-	-	-	-	-		
Sample Type				-	-	-	-	-	-	-	-		
Naphthalene$_R$ "	A-T-019	N	N	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
Acenaphthylene$_R$ "	A-T-019	N	N	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
Acenapthene$_R$ "	A-T-019	N	N	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
Fluorene$_R$ "	A-T-019	N	N	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01		
Phenanthrene$_R$ "	A-T-019	N	N	0.12	<0.01	0.06	<0.01	0.06	0.01	<0.01	<0.01		
Anthracene$_R$ "	A-T-019	N	N	0.13	0.02	0.19	0.05	0.11	0.09	0.03	0.06		
Fluoranthene$_R$ "	A-T-019	N	N	0.25	0.06	0.16	0.02	0.08	0.09	0.11	0.06		
Pyrene$_R$ "	A-T-019	N	N	0.13	0.05	0.09	0.02	0.08	0.07	0.09	0.08		
Benz [a] anthracene$_R$ "	A-T-019	Y	N	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
Chrysene$_R$ "	A-T-019	N	N	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
Benzo [b] fluoranthene$_R$ Benzo [k] fluoranthene #$_R$ "	A-T-019	N	N	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
Benzo [a] pyrene$_R$ "	A-T-019	N	N	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
Indeno [123-cd] pyrene$_R$ "	A-T-019	N	N	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
Dibenz [ah] anthracene$_R$ "	A-T-019	N	N	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
Benzo [ghi] perylene$_R$ "	A-T-019	N	N	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
Total 16 PAH Reported		N	N	0.63	0.13	0.50	0.09	0.33	0.26	0.23	0.21		

Due to coelution Benzo [b] fluoranthene and Benzo [k] fluoranthene are reported as one value.

Table 3 - Soil PAH Results (mg/kg, expressed on a dry weight basis)

envirolab

Envirolab Ref.	94341	94343	94345	94347	94349	94351	94353	94355		
Location	BH29A WC1	BH29A WC2	BH29A WC3	BH11 WC1	BH11 WC2	BH11 WC3	BH11 WC4	BH11 WC5		
Depth (m)	5.80	6.50	8.00	5.00	6.00	7.50	8.50	10.00		
Sample Ref	-	-	-	-	-	-	-	-		
Sample Type	-	-	-	-	-	-	-	-		
Type	Loam	Clay	Loam	Clay	Loam	Clay	Clay	Clay		
Colour	Black	Grey	Black	Mixed	Black	Dark Brown	Dark Brown	Black		
Consistency	Loose	Soft	Loose	Soft	Loose	Soft	Soft	Soft		
Some Stones	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
>50 Stones	No	No	No	No	No	No	No	No		
Some Vegetation	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes		
Very Wet	No	No	No	No	No	No	No	No		
Strong Odour	No	No	No	No	No	No	No	No		

Table 4 - Soil Matrix Table

envirolab

Appendix

Code	Description
+	Increased detection limit due to sample interference
#	Increased detection limit due to sample dilution
$	Analysis subcontracted
IS	Insufficient sample for analysis
IS-QC	Insufficient sample to retest following QC fail
NDP	No determination possible
~	Sample type outside the scope of our MCERTS accreditation since matrix not included in method validation
*	Analytes are associated with failed AQC targets for MCERTS/UKAS
^	Sample result is not covered under Envirolab's accreditation schedule for MCERTS as the result exceeds the validated range. See notes 1-3.
F	Analysis suffixed "$_F$" were performed on the filtered sample
D	Analysis suffixed "$_D$" were performed on the sample air dried at <30°C
O	Analysis suffixed "$_O$" were performed on the sample oven dried at 95°C
R	Analysis suffixed "$_R$" were performed on the sample as received. Where results are expressed on a dry weight basis, the samples were air dried at 95°C
Notes	
1	For MCERTS the validated range covers up to 15mg/kg for individual PAHs, 200mg/kg for totals.
2	For MCERTS the validated range covers up to 3000mg/kg for Total TPH analysis.
3	For MCERTS the validated range covers up to 0.2mg/kg for individual PCBs, and 1.5mg/kg for the total reported as aractor.
4	Natural stones and debris are excluded from analyses
5	Coarse granular material such as concrete, gravel and brick are not MCERTS accredited if they comprise the major part of the sample. Envirolab are currently accredited for MCERTS on soil types Sand, Clay and Loam only

ALcontrol Laboratories Analytical Services
Sample Descriptions

Job Number: 08/17891/02/01
Client: Envirolab
Client Ref : 722201-5376

Grain sizes

<0.063mm	Very Fine
0.1mm - 0.063mm	Fine
0.1mm - 2mm	Medium
2mm - 10mm	Coarse
>10mm	Very Coarse

Sample Identity	Depth (m)	Colour	Grain Size	Description	Batch
94341 BH29A WC1	5.8	Dark Brown	<0.063mm	Peat with some Vegetation	1
94343 BH29A WC2	6.5	Dark Grey	<0.063mm	Clay with some Vegetation	1
94345 BH29A WC3	8.0	Dark Brown	0.1mm - 0.063mm	Silty Clay	1
94347 BH11 WC1	5.0	Dark Grey	<0.063mm	Silty Clay with some Vegetation	1
94349 BH11 WC2	6.0	Black	0.1mm - 0.063mm	Sandy Clay with some Stones	1
94351 BH11 WC3	7.5	Black	0.1mm - 0.063mm	Sandy Clay	1
94353 BH11 WC4	8.5	Brown	n/a	Silty Clay	1
94355 BH11 WC5	10.0	Black	n/a	Silty Clay	1

* These descriptions are only intended to act as a cross check if sample identities are questioned, and to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions.

We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials-whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample.
Other coarse granular materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.
[1] Sample Description supplied by client

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ALcontrol Laboratories Analytical Services
Table Of Results

* ISO 17025 accredited
M MCERTS accredited
\# Subcontracted test
» Shown on prev. report

Job Number: 08/17891/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5376 **Client Contact:** Subcon

Sample Identity	94341 BH29A WC1	94343 BH29A WC2	94345 BH29A WC3	94347 BH11 WC1	94349 BH11 WC2	94351 BH11 WC3	94353 BH11 WC4	94355 BH11 WC5		Method Code	LoD/Units
Depth (m)	5.8	6.5	8.0	5.0	6.0	7.5	8.5	10.0			
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID			
Sampled Date	23.10.08	23.10.08	23.10.08	22.10.08	22.10.08	22.10.08	23.10.08	23.10.08			
Sample Received Date	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08			
Batch	1	1	1	1	1	1	1	1			
Sample Number(s)	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40			
Total Sulphate	5400	1400	6300	1500	3200	2200	1200	1400		TM129#M	<100 mg/kg
Boron Water Soluble	15	<3.5	17	12	26	21	4.8	7.8		TM129#M	<3.5 mg/kg
Arsenic	4	22	17	9	35	22	18	17		TM129#M	<3.0 mg/kg
Cadmium	<0.2	0.2	<0.2	<0.2	0.3	0.2	0.2	<0.2		TM129	<0.2 mg/kg
Chromium	14	40	<4.5	27	28	37	32	30		TM129#M	<4.5 mg/kg
Copper	10	16	<6	11	13	16	15	13		TM129#M	<6 mg/kg
Lead	10	18	7	15	15	17	17	15		TM129#M	<2 mg/kg
Mercury	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4		TM129#M	<0.4 mg/kg
Nickel	14	34	3.8	22	28	33	30	28		TM129#M	<0.9 mg/kg
Selenium	<3	<3	<3	<3	<3	<3	<3	<3		TM129#M	<3 mg/kg
Vanadium	30	76	7.8	51	56	73	62	59		TM129#M	<1.5 mg/kg
Zinc	34	88	17	57	66	82	81	74		TM129#M	<2.5 mg/kg
Phenols Monohydric	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15		TM062#M	<0.15 mg/kg
Total Cyanide	<1	<1	<1	<1	<1	<1	<1	<1		TM153#M	<1 mg/kg
Asbestos Presence Screen	No Fibres Detected	No Fibres Detected	No Fibres Detected	No Fibres Detected	No Fibres Detected	No Fibres Detected	No Fibres Detected	No Fibres Detected		TM001	NONE
Fraction of Organic Carbon	0.31	0.024	0.42	0.030	0.083	0.085	0.027	0.073		TM132#	<0.002 NONE
Loss on Ignition	71	6.7	53	7.8	8.8	17	7.6	14		TM018#M	<0.3 %
pH Value	6.54	8.09	6.91	8.83	8.48	8.45	8.22	7.71		TM133#M	<1.00 pH Units
Total Sulphur	4.1	2.5	3.3	1.3	3.4	3.4	2.2	2.4		TM068#	<0.01 %

All results expressed on a dry weight basis.

Date 06.11.2008

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Preliminary ☐

ALcontrol Laboratories Analytical Services
Table Of Results

ISO 17025 accredited
M MCERTS accredited
* Subcontracted test
» Shown on prev. report

Job Number: 08/17891/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5376 **Client Contact:** Subcon

Sample Identity	94341 BH29A WC1	94343 BH29A WC2	94345 BH29A WC3	94347 BH11 WC1	94349 BH11 WC2	94351 BH11 WC3	94353 BH11 WC4	94355 BH11 WC5		Method Code	LoD/Units
Depth (m)	5.8	6.5	8.0	5.0	6.0	7.5	8.5	10.0			
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID			
Sampled Date	23.10.08	23.10.08	23.10.08	22.10.08	22.10.08	22.10.08	23.10.08	23.10.08			
Sample Received Date	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08			
Batch	1	1	1	1	1	1	1	1			
Sample Number(s)	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40			
OCP/OPP											
Dichlorvos	<10	<10	<1	<10	<10	<1	<20	<20		TM144/145	<1 ug/kg
Mevinphos	<10	<10	<1	<10	<10	<1	<20	<20		TM144/145	<1 ug/kg
Alpha-BHC (Lindane)	<10	<10	<1	<10	<10	<1	<20	<20		TM144/145	<1 ug/kg
Beta-BHC (Lindane)	<10	<10	<1	<10	<10	<1	<20	<20		TM144/145	<1 ug/kg
Gamma-BHC (Lindane)	<10	<10	<1	<10	<10	<1	<20	<20		TM144/145	<1 ug/kg
Diazinon	<10	<10	<1	<10	<10	<1	<20	<20		TM144/145	<1 ug/kg
Methyl Parathion	<10	<10	<1	<10	<10	<1	<20	<20		TM144/145	<1 ug/kg
Heptachlor	<10	<10	<2	<10	<10	<1	<20	<20		TM144/145	<1 ug/kg
Fenitrothion	<10	<10	<1	<10	<10	<1	<20	<20		TM144/145	<1 ug/kg
Malathion	<10	<10	<1	<10	<10	<1	<20	<20		TM144/145	<1 ug/kg
Aldrin	<10	<10	<1	<10	<10	<1	<20	<20		TM144/145	<1 ug/kg
Parathion	<10	<10	<1	<10	<10	<1	<20	<20		TM144/145	<1 ug/kg
Heptachlor Epoxide	<10	<10	<1	<10	<10	<1	<20	<20		TM144/145	<1 ug/kg
Endosulphan I	<10	<10	<1	<10	<10	<1	<20	<20		TM144/145	<1 ug/kg
p,p'-DDE	<10	<10	<1	<10	<10	<1	<20	<20		TM144/145	<1 ug/kg
Dieldrin	<10	<10	<1	<10	<10	<1	<20	<20		TM144/145	<1 ug/kg
Endrin	<10	<10	<1	<10	<10	<1	<20	<20		TM144/145	<1 ug/kg
Endosulphan II	<10	<10	<1	<10	<10	<1	<20	<20		TM144/145	<1 ug/kg
p,p'-TDE(DDD)	<10	<10	<1	<10	<10	<1	<20	<20		TM144/145	<1 ug/kg
Ethion	<10	<10	<1	<10	<10	<1	<20	<20		TM144/145	<1 ug/kg
p,p'-DDT	<10	<10	<10	<10	<10	<2	<20	<20		TM144/145	<1 ug/kg
Endosulphan sulphate	<10	<10	<1	<10	<10	<1	<20	<20		TM144/145	<1 ug/kg
p,p'-Methoxychlor	<10	<10	<6	<10	<10	<2	<20	<20		TM144/145	<1 ug/kg
Azinphos methyl	<10	<10	<1	<10	<10	<1	<20	<20		TM144/145	<1 ug/kg

All results expressed on a dry weight basis.

Date 06.11.2008

Validated ☑
Preliminary ☐

ALcontrol Laboratories Analytical Services
Table Of Results

' ISO 17025 accredited
M MCERTS accredited
* Subcontracted test
» Shown on prev. report

Job Number: 08/17891/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5376 **Client Contact:** Subcon

Sample Identity	94341 BH29A WC1	94343 BH29A WC2	94345 BH29A WC3	94347 BH11 WC1	94349 BH11 WC2	94351 BH11 WC3	94353 BH11 WC4	94355 BH11 WC5		Method Code	LoD/Units
Depth (m)	5.8	6.5	8.0	5.0	6.0	7.5	8.5	10.0			
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID			
Sampled Date	23.10.08	23.10.08	23.10.08	22.10.08	22.10.08	22.10.08	23.10.08	23.10.08			
Sample Received Date	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08			
Batch	1	1	1	1	1	1	1	1			
Sample Number(s)	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40			
SVOC by GCMS											
Phenols											
2-Chlorophenol	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
2-Methylphenol	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
2-Nitrophenol	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
2,4-Dichlorophenol	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
2,4-Dimethylphenol	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
2,4,5-Trichlorophenol	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
2,4,6-Trichlorophenol	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
4-Chloro-3-methylphenol	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
4-Methylphenol	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
4-Nitrophenol	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
Pentachlorophenol	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
Phenol	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg

All results expressed on a dry weight basis.

Date 06.11.2008

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ALcontrol Laboratories Analytical Services
Table Of Results

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Job Number: 08/17891/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5376 **Client Contact:** Subcon

Sample Identity	94341 BH29A WC1	94343 BH29A WC2	94345 BH29A WC3	94347 BH11 WC1	94349 BH11 WC2	94351 BH11 WC3	94353 BH11 WC4	94355 BH11 WC5		Method Code	LoD/Units
Depth (m)	5.8	6.5	8.0	5.0	6.0	7.5	8.5	10.0			
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID			
Sampled Date	23.10.08	23.10.08	23.10.08	22.10.08	22.10.08	22.10.08	23.10.08	23.10.08			
Sample Received Date	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08			
Batch	1	1	1	1	1	1	1	1			
Sample Number(s)	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40			
PAHs											
2-Chloronaphthalene	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
2-Methylnaphthalene	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
Acenaphthene	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
Acenaphthylene	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
Anthracene	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
Benzo(a)anthracene	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
Benzo(a)pyrene	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
Benzo(b)fluoranthene	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
Benzo(ghi)perylene	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
Benzo(k)fluoranthene	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
Chrysene	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
Dibenzo(a,h)anthracene	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
Fluoranthene	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
Fluorene	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
Indeno(1,2,3-cd)pyrene	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
Naphthalene	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
Phenanthrene	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
Pyrene	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
Phthalates											
Bis(2-ethylhexyl) phthalate	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
Butylbenzyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
Di-n-butyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
Di-n-Octyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
Diethyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
Dimethyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
Other Semi-volatiles											
1,2-Dichlorobenzene	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
1,2,4-Trichlorobenzene	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg

All results expressed on a dry weight basis.

Date 06.11.2008

Validated ☑
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ALcontrol Laboratories Analytical Services
Table Of Results

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Job Number: 08/17891/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5376 **Client Contact:** Subcon

Sample Identity	94341 BH29A WC1	94343 BH29A WC2	94345 BH29A WC3	94347 BH11 WC1	94349 BH11 WC2	94351 BH11 WC3	94353 BH11 WC4	94355 BH11 WC5		Method Code	LoD/Units
Depth (m)	5.8	6.5	8.0	5.0	6.0	7.5	8.5	10.0			
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID			
Sampled Date	23.10.08	23.10.08	23.10.08	22.10.08	22.10.08	22.10.08	23.10.08	23.10.08			
Sample Received Date	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08			
Batch	1	1	1	1	1	1	1	1			
Sample Number(s)	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40			
Other Semi-volatiles (cont)											
1,3-Dichlorobenzene	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
1,4-Dichlorobenzene	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
2-Nitroaniline	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
2,4-Dinitrotoluene	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
2,6-Dinitrotoluene	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
3-Nitroaniline	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
4-Bromophenylphenylether	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
4-Chloroaniline	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
4-Chlorophenylphenylether	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
4-Nitroaniline	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
Azobenzene	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
Bis(2-chloroethoxy)methane	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
Bis(2-chloroethyl)ether	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
Carbazole	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
Dibenzofuran	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
Hexachlorobenzene	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
Hexachlorobutadiene	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
Hexachlorocyclopentadiene	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
Hexachloroethane	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
Isophorone	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
N-nitrosodi-n-propylamine	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg
Nitrobenzene	<100	<100	<100	<100	<100	<100	<100	<100		TM157	<100 ug/kg

All results expressed on a dry weight basis.

Date 06.11.2008

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ALcontrol Laboratories Analytical Services
Table Of Results

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Job Number: 08/17891/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5376 **Client Contact:** Subcon

Sample Identity	94341 BH29A WC1	94343 BH29A WC2	94345 BH29A WC3	94347 BH11 WC1	94349 BH11 WC2	94351 BH11 WC3	94353 BH11 WC4	94355 BH11 WC5		Method Code	LoD/Units
Depth (m)	5.8	6.5	8.0	5.0	6.0	7.5	8.5	10.0			
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID			
Sampled Date	23.10.08	23.10.08	23.10.08	22.10.08	22.10.08	22.10.08	23.10.08	23.10.08			
Sample Received Date	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08			
Batch	1	1	1	1	1	1	1	1			
Sample Number(s)	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40			
Volatile Organic Compounds											
Dichlorodifluoromethane	<4	<4	<4	<4	<4	<4	<4	<4		TM116[#]	<4 ug/kg
Chloromethane	<7	<7	<7	<7	<7	<7	<7	<7		TM116[#]	<7 ug/kg
Vinyl Chloride	<10	<10	<10	<10	<10	<10	<10	<10		TM116[#]M	<10 ug/kg
Bromomethane	<13	<13	<13	<13	<13	<13	<13	<13		TM116	<13 ug/kg
Chloroethane	<14	<14	<14	<14	<14	<14	<14	<14		TM116[#]	<14 ug/kg
Trichlorofluoromethane	<6	<6	<6	<6	<6	<6	<6	<6		TM116[#]M	<6 ug/kg
trans-1-2-Dichloroethene	<11	<11	<11	<11	<11	<11	<11	<11		TM116[#]	<11 ug/kg
Dichloromethane	<10	<10	<10	<10	<10	<10	<10	<10		TM116[#]	<10 ug/kg
Carbon Disulphide	<7	<7	<7	<7	<7	<7	<7	<7		TM116[#]M	<7 ug/kg
1.1-Dichloroethene	<10	<10	<10	<10	<10	<10	<10	<10		TM116[#]M	<10 ug/kg
1.1-Dichloroethane	<8	<8	<8	<8	<8	<8	<8	<8		TM116[#]M	<8 ug/kg
Methyl Tertiary Butyl Ether	<11	<11	<11	<11	<11	<11	<11	<11		TM116	<11 ug/kg
cis-1-2-Dichloroethene	<5	<5	<5	<5	<5	<5	<5	<5		TM116[#]M	<5 ug/kg
Bromochloromethane	<14	<14	<14	<14	<14	<14	<14	<14		TM116[#]	<14 ug/kg
Chloroform	<8	<8	<8	<8	<8	<8	<8	<8		TM116[#]M	<8 ug/kg
2.2-Dichloropropane	<12	<12	<12	<12	<12	<12	<12	<12		TM116	<12 ug/kg
1.2-Dichloroethane	<5	<5	<5	<5	<5	<5	<5	<5		TM116[#]	<5 ug/kg
1.1.1-Trichloroethane	<7	<7	<7	<7	<7	<7	<7	<7		TM116[#]M	<7 ug/kg
1.1-Dichloropropene	<11	<11	<11	<11	<11	<11	<11	<11		TM116[#]M	<11 ug/kg
Benzene	<9	<9	<9	<9	<9	<9	<9	<9		TM116[#]M	<9 ug/kg
Carbontetrachloride	<14	<14	<14	<14	<14	<14	<14	<14		TM116[#]M	<14 ug/kg
Dibromomethane	<9	<9	<9	<9	<9	<9	<9	<9		TM116[#]	<9 ug/kg
1.2-Dichloropropane	<12	<12	<12	<12	<12	<12	<12	<12		TM116[#]M	<12 ug/kg
Bromodichloromethane	<7	<7	<7	<7	<7	<7	<7	<7		TM116[#]M	<7 ug/kg
Trichloroethene	<9	<9	<9	<9	<9	<9	<9	<9		TM116[#]M	<9 ug/kg
cis-1-3-Dichloropropene	<14	<14	<14	<14	<14	<14	<14	<14		TM116[#]M	<14 ug/kg
trans-1-3-Dichloropropene	<14	<14	<14	<14	<14	<14	<14	<14		TM116[#]M	<14 ug/kg
1.1.2-Trichloroethane	<10	<10	<10	<10	<10	<10	<10	<10		TM116[#]	<10 ug/kg
Toluene	<5	<5	<5	<5	<5	20	<5	<5		TM116[#]M	<5 ug/kg
1.3-Dichloropropane	<7	<7	<7	<7	<7	<7	<7	<7		TM116[#]	<7 ug/kg

All results expressed on a dry weight basis.

Date 06.11.2008

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ALcontrol Laboratories Analytical Services
Table Of Results

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Job Number: 08/17891/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5376 **Client Contact:** Subcon

Sample Identity	94341 BH29A WC1	94343 BH29A WC2	94345 BH29A WC3	94347 BH11 WC1	94349 BH11 WC2	94351 BH11 WC3	94353 BH11 WC4	94355 BH11 WC5		Method Code	LoD/Units
Depth (m)	5.8	6.5	8.0	5.0	6.0	7.5	8.5	10.0			
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID			
Sampled Date	23.10.08	23.10.08	23.10.08	22.10.08	22.10.08	22.10.08	23.10.08	23.10.08			
Sample Received Date	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08			
Batch	1	1	1	1	1	1	1	1			
Sample Number(s)	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40			
Volatile Organic Compounds (cont)											
Dibromochloromethane	<13	<13	<13	<13	<13	<13	<13	<13		TM116#	<13 ug/kg
1,2-Dibromoethane	<12	<12	<12	<12	<12	<12	<12	<12		TM116#	<12 ug/kg
Tetrachloroethene	<5	<5	<5	<5	<5	<5	<5	<5		TM116#	<5 ug/kg
1,1,1,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10	<10	<10		TM116#M	<10 ug/kg
Chlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5		TM116#M	<5 ug/kg
Ethylbenzene	<4	<4	<4	<4	<4	<4	<4	<4		TM116#	<4 ug/kg
p/m-Xylene	<14	<14	<14	<14	<14	<14	<14	<14		TM116#	<14 ug/kg
Bromoform	<10	<10	<10	<10	<10	<10	<10	<10		TM116#	<10 ug/kg
Styrene	<10	<10	<10	<10	<10	<10	<10	<10		TM116#	<10 ug/kg
1,1,2,2-Tetrachloroethane	<10	<10	<10	<10	<10	<10	<10	<10		TM116#	<10 ug/kg
o-Xylene	<10	<10	<10	<10	<10	<10	<10	<10		TM116#	<10 ug/kg
1,2,3-Trichloropropane	<17	<17	<17	<17	<17	<17	<17	<17		TM116#	<17 ug/kg
Isopropylbenzene	<5	<5	<5	<5	<5	<5	<5	<5		TM116#	<5 ug/kg
Bromobenzene	<10	<10	<10	<10	<10	<10	<10	<10		TM116#M	<10 ug/kg
2-Chlorotoluene	<9	<9	<9	<9	<9	<9	<9	<9		TM116#	<9 ug/kg
Propylbenzene	<11	<11	<11	<11	<11	<11	<11	<11		TM116#	<11 ug/kg
4-Chlorotoluene	<12	<12	<12	<12	<12	<12	<12	<12		TM116#	<12 ug/kg
1,2,4-Trimethylbenzene	<9	<9	<9	<9	<9	<9	<9	<9		TM116#	<9 ug/kg
4-Isopropyltoluene	<11	<11	<11	<11	<11	<11	<11	<11		TM116#	<11 ug/kg
1,3,5-Trimethylbenzene	<8	<8	<8	<8	<8	<8	<8	<8		TM116#	<8 ug/kg
1,2-Dichlorobenzene	<12	<12	<12	<12	<12	<12	<12	<12		TM116#M	<12 ug/kg
1,4-Dichlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5		TM116#M	<5 ug/kg
sec-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	<10		TM116#	<10 ug/kg
tert-Butylbenzene	<12	<12	<12	<12	<12	<12	<12	<12		TM116#	<12 ug/kg
1,3-Dichlorobenzene	<6	<6	<6	<6	<6	<6	<6	<6		TM116#	<6 ug/kg
n-Butylbenzene	<10	<10	<10	<10	<10	<10	<10	<10		TM116#	<10 ug/kg
1,2-Dibromo-3-chloropropane	<14	<14	<14	<14	<14	<14	<14	<14		TM116#	<14 ug/kg
1,2,4-Trichlorobenzene	<6	<6	<6	<6	<6	<6	<6	<6		TM116#	<6 ug/kg
Naphthalene	<13	<13	<13	<13	<13	<13	<13	<13		TM116#	<13 ug/kg
1,2,3-Trichlorobenzene	<11	<11	<11	<11	<11	<11	<11	<11		TM116#	<11 ug/kg

All results expressed on a dry weight basis.

Date 06.11.2008

Validated ☑
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ALcontrol Laboratories Analytical Services
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Job Number: 08/17891/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5376 **Client Contact:** Subcon

Sample Identity	94341 BH29A WC1	94343 BH29A WC2	94345 BH29A WC3	94347 BH11 WC1	94349 BH11 WC2	94351 BH11 WC3	94353 BH11 WC4	94355 BH11 WC5		Method Code	LoD/Units
Depth (m)	5.8	6.5	8.0	5.0	6.0	7.5	8.5	10.0			
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID			
Sampled Date	23.10.08	23.10.08	23.10.08	22.10.08	22.10.08	22.10.08	23.10.08	23.10.08			
Sample Received Date	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08			
Batch	1	1	1	1	1	1	1	1			
Sample Number(s)	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40			
Volatile Organic Compounds (cont)											
Hexachlorobutadiene	<12	<12	<12	<12	<12	<12	<12	<12		TM116'	<12 ug/kg

All results expressed on a dry weight basis.

Date 06.11.2008

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ALcontrol Laboratories Analytical Services
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Job Number: 08/17891/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5376 **Client Contact:** Subcon

Sample Identity	94341 BH29A WC1	94343 BH29A WC2	94345 BH29A WC3	94347 BH11 WC1	94349 BH11 WC2	94351 BH11 WC3	94353 BH11 WC4	94355 BH11 WC5		Method Code	LoD/Units
Depth (m)	5.8	6.5	8.0	5.0	6.0	7.5	8.5	10.0			
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID			
Sampled Date	23.10.08	23.10.08	23.10.08	22.10.08	22.10.08	22.10.08	23.10.08	23.10.08			
Sample Received Date	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08			
Batch	1	1	1	1	1	1	1	1			
Sample Number(s)	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40			
Arsenic Dissolved (NRA) (ICP-MS)	1.0	3.7	2.5	46	22	15	46	14		TM152	<0.75 ug/l
Boron Dissolved (NRA) (ICP-MS)	190	<20	120	160	740	550	100	130		TM152	<20 ug/l
Cadmium Dissolved (NRA) (ICP-MS)	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22		TM152	<0.22 ug/l
Chromium Dissolved (NRA) (ICP-MS)	1	<1	1	4	4	3	2	<1		TM152	<1 ug/l
Copper Dissolved (NRA) (ICP-MS)	3.5	<1.6	<1.6	4.0	3.2	1.9	<1.6	<1.6		TM152	<1.6 ug/l
Lead Dissolved (NRA) (ICP-MS)	0.7	<0.4	0.5	58	4.0	1.8	1.4	4.8		TM152	<0.4 ug/l
Nickel Dissolved (NRA) (ICP-MS)	<1.5	1.9	<1.5	5.8	2.2	3.1	2.7	1.6		TM152	<1.5 ug/l
Selenium Dissolved (NRA) (ICP-MS)	<1	<1	<1	<1	1	3	3	<1		TM152	<1 ug/l
Vanadium Dissolved (NRA) (ICP-MS)	3	14	3	130	53	69	140	16		TM152	<1 ug/l
Zinc Dissolved (NRA) (ICP-MS)	7	7	16	8	8	8	13	6		TM152	<5 ug/l
Mercury Dissolved (NRA) (CVAF)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		TM183	<0.01 ug/l
Sulphate (NRA)	50	<3	59	31	97	20	25	6		TM098	<3 mg/l
Phenols Monohydric (NRA)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		TM062	<0.01 mg/l
Total Cyanide (NRA)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		TM153	<0.05 mg/l
pH (NRA)	7.07	7.99	7.67	8.69	8.56	8.52	8.44	8.51		TM133	<1.00 pH Units

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Job Number: 08/17891/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5376 **Client Contact:** Subcon

Sample Identity	94341 BH29A WC1	94343 BH29A WC2	94345 BH29A WC3	94347 BH11 WC1	94349 BH11 WC2	94351 BH11 WC3	94353 BH11 WC4	94355 BH11 WC5		Method Code	LoD/Units
Depth (m)	5.8	6.5	8.0	5.0	6.0	7.5	8.5	10.0			
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID			
Sampled Date	23.10.08	23.10.08	23.10.08	22.10.08	22.10.08	22.10.08	23.10.08	23.10.08			
Sample Received Date	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08			
Batch	1	1	1	1	1	1	1	1			
Sample Number(s)	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40			
GRO (C4-C12) (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM089	<10 ug/l
MTBE (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM089	<10 ug/l
Benzene (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM089	<10 ug/l
Toluene (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM089	<10 ug/l
Ethyl benzene (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM089	<10 ug/l
m & p Xylene (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM089	<10 ug/l
o Xylene (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM089	<10 ug/l
Aliphatics C5-C6 (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM089	<10 ug/l
Aliphatics >C6-C8 (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM089	<10 ug/l
Aliphatics >C8-C10 (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM089	<10 ug/l
Aliphatics >C10-C12 (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM089	<10 ug/l
Aliphatics >C12-C16 (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM174	<10 ug/l
Aliphatics >C16-C21 (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM174	<10 ug/l
Aliphatics >C21-C35 (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM174	<10 ug/l
Total Aliphatics C5-C35 (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM61/89	<10 ug/l
Aromatics C6-C7 (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM089	<10 ug/l
Aromatics >C7-C8 (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM089	<10 ug/l
Aromatics >EC8-EC10 (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM089	<10 ug/l
Aromatics >EC10-EC12 (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM089	<10 ug/l
Aromatics >EC12-EC16 (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM174	<10 ug/l
Aromatics >EC16-EC21 (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM174	<10 ug/l
Aromatics >EC21-EC35 (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM174	<10 ug/l
Total Aromatics C6-C35 (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM61/89	<10 ug/l
TPH (Aliphatics and Aromatics C5-C35) (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM61/89	<10 ug/l

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Job Number: 08/17891/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5376 **Client Contact:** Subcon

Sample Identity	94341 BH29A WC1	94343 BH29A WC2	94345 BH29A WC3	94347 BH11 WC1	94349 BH11 WC2	94351 BH11 WC3	94353 BH11 WC4	94355 BH11 WC5		Method Code	LoD/Units
Depth (m)	5.8	6.5	8.0	5.0	6.0	7.5	8.5	10.0			
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID			
Sampled Date	23.10.08	23.10.08	23.10.08	22.10.08	22.10.08	22.10.08	23.10.08	23.10.08			
Sample Received Date	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08			
Batch	1	1	1	1	1	1	1	1			
Sample Number(s)	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40			
PAH by GCMS											
Naphthalene (NRA)	<100	<100	<100	<100	<100	<100	<100	<100		TM178	<100 ng/l
Acenaphthylene (NRA)	<11	<11	<11	<11	<11	<11	<11	<11		TM178	<11 ng/l
Acenaphthene (NRA)	<15	<15	<15	<15	<15	<15	<15	<15		TM178	<15 ng/l
Fluorene (NRA)	<14	<14	<14	<14	<14	<14	<14	<14		TM178	<14 ng/l
Phenanthrene (NRA)	<22	<22	64	29	<22	<22	<22	<22		TM178	<22 ng/l
Anthracene (NRA)	<15	<15	<15	22	<15	<15	<15	<15		TM178	<15 ng/l
Fluoranthene (NRA)	<17	<17	89	64	<17	18	<17	<17		TM178	<17 ng/l
Pyrene (NRA)	<15	<15	78	170	<15	17	<15	<15		TM178	<15 ng/l
Benz(a)anthracene (NRA)	<17	<17	37	<17	<17	<17	<17	<17		TM178	<17 ng/l
Chrysene (NRA)	<13	<13	36	14	<13	<13	<13	<13		TM178	<13 ng/l
Benzo(b)fluoranthene (NRA)	<23	<23	59	<23	<23	<23	<23	<23		TM178	<23 ng/l
Benzo(k)fluoranthene (NRA)	<27	<27	34	<27	<27	<27	<27	<27		TM178	<27 ng/l
Benzo(a)pyrene (NRA)	<9	<9	51	<9	<9	<9	<9	<9		TM178	<9 ng/l
Indeno(123cd)pyrene (NRA)	<14	<14	24	<14	<14	<14	<14	<14		TM178	<14 ng/l
Dibenzo(ah)anthracene (NRA)	<16	<16	<16	<16	<16	<16	<16	<16		TM178	<16 ng/l
Benzo(ghi)perylene (NRA)	<16	<16	34	<16	<16	<16	<16	<16		TM178	<16 ng/l
PAH 16 Total (NRA)	<100	<100	510	300	<100	<100	<100	<100		TM178	<100 ng/l

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Job Number: 08/17891/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5376 **Client Contact:** Subcon

Sample Identity	94341 BH29A WC1	94343 BH29A WC2	94345 BH29A WC3	94347 BH11 WC1	94349 BH11 WC2	94351 BH11 WC3	94353 BH11 WC4	94355 BH11 WC5		Method Code	LoD/Units
Depth (m)	5.8	6.5	8.0	5.0	6.0	7.5	8.5	10.0			
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID			
Sampled Date	23.10.08	23.10.08	23.10.08	22.10.08	22.10.08	22.10.08	23.10.08	23.10.08			
Sample Received Date	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08			
Batch	1	1	1	1	1	1	1	1			
Sample Number(s)	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40			
OCP/OPP											
Dichlorvos (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM144/145	<10 ng/l
Mevinphos (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM144/145	<10 ng/l
Alpha-BHC (Lindane) (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM144/145	<10 ng/l
Beta-BHC (Lindane) (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM144/145	<10 ng/l
Gamma-BHC (Lindane) (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM144/145	<10 ng/l
Diazinon (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM144/145	<10 ng/l
Methyl Parathion (NRA)	<100	<100	<100	<100	<100	<100	<100	<100		TM144/145	<10 ng/l
Heptachlor (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM144/145	<10 ng/l
Fenitrothion (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM144/145	<10 ng/l
Malathion (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM144/145	<10 ng/l
Aldrin (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM144/145	<10 ng/l
Parathion (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM144/145	<10 ng/l
Heptachlor Epoxide (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM144/145	<10 ng/l
Endosulphan I (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM144/145	<10 ng/l
p,p'-DDE (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM144/145	<10 ng/l
Dieldrin (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM144/145	<10 ng/l
Endrin (NRA)	<100	<100	<100	<100	<100	<100	<100	<100		TM144/145	<10 ng/l
Endosulphan II (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM144/145	<10 ng/l
p,p'-TDE(DDD) (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM144/145	<10 ng/l
Ethion (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM144/145	<10 ng/l
p,p'-DDT (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM144/145	<10 ng/l
Endosulphan sulphate (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM144/145	<10 ng/l
p,p'-Methoxychlor (NRA)	<10	<10	<10	<10	<10	<10	<10	<10		TM144/145	<10 ng/l
Azinphos methyl (NRA)	<100	<100	<100	<100	<100	<100	<100	<100		TM144/145	<10 ng/l

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Job Number: 08/17891/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5376 **Client Contact:** Subcon

Sample Identity	94341 BH29A WC1	94343 BH29A WC2	94345 BH29A WC3	94347 BH11 WC1	94349 BH11 WC2	94351 BH11 WC3	94353 BH11 WC4	94355 BH11 WC5		Method Code	LoD/Units
Depth (m)	5.8	6.5	8.0	5.0	6.0	7.5	8.5	10.0			
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID			
Sampled Date	23.10.08	23.10.08	23.10.08	22.10.08	22.10.08	22.10.08	23.10.08	23.10.08			
Sample Received Date	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08			
Batch	1	1	1	1	1	1	1	1			
Sample Number(s)	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40			
SVOC by GCMS											
Phenols											
2-Chlorophenol (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM176	<1 ug/l
2-Methylphenol (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM176	<1 ug/l
2-Nitrophenol (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM176	<1 ug/l
2,4-Dichlorophenol (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM176	<1 ug/l
2,4-Dimethylphenol (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM176	<1 ug/l
2,4,5-Trichlorophenol (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM176	<1 ug/l
2,4,6-Trichlorophenol (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM176	<1 ug/l
4-Chloro-3-methylphenol (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM176	<1 ug/l
4-Methylphenol (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM176	<1 ug/l
4-Nitrophenol (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM176	<1 ug/l
Pentachlorophenol (NRA)	<1	<1	<1	<1	<1	<1	<1	<2		TM176	<1 ug/l
Phenol (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM176	<1 ug/l

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Job Number: 08/17891/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5376 **Client Contact:** Subcon

Sample Identity	94341 BH29A WC1	94343 BH29A WC2	94345 BH29A WC3	94347 BH11 WC1	94349 BH11 WC2	94351 BH11 WC3	94353 BH11 WC4	94355 BH11 WC5		Method Code	LoD/Units
Depth (m)	5.8	6.5	8.0	5.0	6.0	7.5	8.5	10.0			
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID			
Sampled Date	23.10.08	23.10.08	23.10.08	22.10.08	22.10.08	22.10.08	23.10.08	23.10.08			
Sample Received Date	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08			
Batch	1	1	1	1	1	1	1	1			
Sample Number(s)	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40			
PAHs											
2-Chloronaphthalene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM176	<1 ug/l
2-Methylnaphthalene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM176	<1 ug/l
Phthalates											
Bis(2-ethylhexyl) phthalate (NRA	<10	<10	<10	<10	<10	<10	<10	<2		TM176	<1 ug/l
Butylbenzyl phthalate (NRA)	<6	<6	<6	<6	<6	<6	<6	<2		TM176	<1 ug/l
Di-n-butyl phthalate (NRA)	<4	<4	<4	<4	<4	<4	<4	<2		TM176	<1 ug/l
Di-n-Octyl phthalate (NRA)	<1	<1	<1	<1	<1	<1	<1	<2		TM176	<1 ug/l
Diethyl phthalate (NRA)	<2	<2	<2	<2	<2	<2	<2	<2		TM176	<1 ug/l
Dimethyl phthalate (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM176	<1 ug/l
Other Semi-volatiles											
1,2-Dichlorobenzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM176	<1 ug/l
1,2,4-Trichlorobenzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM176	<1 ug/l
1,3-Dichlorobenzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM176	<1 ug/l
1,4-Dichlorobenzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM176	<1 ug/l
2-Nitroaniline (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM176	<1 ug/l
2,4-Dinitrotoluene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM176	<1 ug/l
2,6-Dinitrotoluene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM176	<1 ug/l
3-Nitroaniline (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM176	<1 ug/l
4-Bromophenylphenylether (NRA	<1	<1	<1	<1	<1	<1	<1	<1		TM176	<1 ug/l
4-Chloroaniline (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM176	<1 ug/l
4-Chlorophenylphenylether (NRA	<1	<1	<1	<1	<1	<1	<1	<1		TM176	<1 ug/l
4-Nitroaniline (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM176	<1 ug/l
Azobenzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM176	<1 ug/l
Bis(2-chloroethoxy)methane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM176	<1 ug/l
Bis(2-chloroethyl)ether (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM176	<1 ug/l
Carbazole (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM176	<1 ug/l
Dibenzofuran (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM176	<1 ug/l
Hexachlorobenzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM176	<1 ug/l

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Job Number: 08/17891/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5376 **Client Contact:** Subcon

Sample Identity	94341 BH29A WC1	94343 BH29A WC2	94345 BH29A WC3	94347 BH11 WC1	94349 BH11 WC2	94351 BH11 WC3	94353 BH11 WC4	94355 BH11 WC5		Method Code	LoD/Units
Depth (m)	5.8	6.5	8.0	5.0	6.0	7.5	8.5	10.0			
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID			
Sampled Date	23.10.08	23.10.08	23.10.08	22.10.08	22.10.08	22.10.08	23.10.08	23.10.08			
Sample Received Date	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08			
Batch	1	1	1	1	1	1	1	1			
Sample Number(s)	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40			
Other Semi-volatiles (cont)											
Hexachlorobutadiene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM176	<1 ug/l
Hexachlorocyclopentadiene (NRA)	<2	<2	<2	<2	<2	<2	<2	<2		TM176	<1 ug/l
Hexachloroethane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM176	<1 ug/l
Isophorone (NRA)	<2	<2	<2	<2	<2	<2	<2	<2		TM176	<1 ug/l
N-nitrosodi-n-propylamine (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM176	<1 ug/l
Nitrobenzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM176	<1 ug/l

Date 06.11.2008

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Preliminary ☐

ALcontrol Laboratories Analytical Services
Table Of Results

\# ISO 17025 accredited
M MCERTS accredited
* Subcontracted test
» Shown on prev. report

Job Number: 08/17891/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5376 **Client Contact:** Subcon

Sample Identity	94341 BH29A WC1	94343 BH29A WC2	94345 BH29A WC3	94347 BH11 WC1	94349 BH11 WC2	94351 BH11 WC3	94353 BH11 WC4	94355 BH11 WC5		Method Code	LoD/Units
Depth (m)	5.8	6.5	8.0	5.0	6.0	7.5	8.5	10.0			
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID			
Sampled Date	23.10.08	23.10.08	23.10.08	22.10.08	22.10.08	22.10.08	23.10.08	23.10.08			
Sample Received Date	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08			
Batch	1	1	1	1	1	1	1	1			
Sample Number(s)	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40			
Volatile Organic Compounds											
Dichlorodifluoromethane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
Chloromethane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
Vinyl Chloride (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
Bromomethane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
Chloroethane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
Trichlorofluoromethane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
trans-1-2-Dichloroethene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
Dichloromethane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
Carbon Disulphide (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
1.1-Dichloroethene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
1.1-Dichloroethane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
Methyl Tertiary Butyl Ether (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
cis-1-2-Dichloroethene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
Bromochloromethane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
Chloroform (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
2.2-Dichloropropane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
1.2-Dichloroethane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
1.1.1-Trichloroethane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
1.1-Dichloropropene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
Benzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
Carbontetrachloride (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
Dibromomethane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
1.2-Dichloropropane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
Bromodichloromethane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
Trichloroethene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
cis-1-3-Dichloropropene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
trans-1-3-Dichloropropene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
1.1.2-Trichloroethane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
Toluene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
1.3-Dichloropropane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l

Date 06.11.2008

Validated ☑
Preliminary ☐

ALcontrol Laboratories Analytical Services
Table Of Results

ISO 17025 accredited
M MCERTS accredited
* Subcontracted test
» Shown on prev. report

Job Number: 08/17891/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5376 **Client Contact:** Subcon

Sample Identity	94341 BH29A WC1	94343 BH29A WC2	94345 BH29A WC3	94347 BH11 WC1	94349 BH11 WC2	94351 BH11 WC3	94353 BH11 WC4	94355 BH11 WC5		Method Code	LoD/Units
Depth (m)	5.8	6.5	8.0	5.0	6.0	7.5	8.5	10.0			
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID			
Sampled Date	23.10.08	23.10.08	23.10.08	22.10.08	22.10.08	22.10.08	23.10.08	23.10.08			
Sample Received Date	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08			
Batch	1	1	1	1	1	1	1	1			
Sample Number(s)	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40			
Volatile Organic Compounds (cont)											
Dibromochloromethane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
1,2-Dibromoethane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
Tetrachloroethene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
1,1,1,2-Tetrachloroethane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
Chlorobenzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
Ethylbenzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
p/m-Xylene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
Bromoform (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
Styrene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
1,1,2,2-Tetrachloroethane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
o-Xylene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
1,2,3-Trichloropropane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
Isopropylbenzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
Bromobenzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
2-Chlorotoluene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
Propylbenzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
4-Chlorotoluene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
1,2,4-Trimethylbenzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
4-Isopropyltoluene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
1,3,5-Trimethylbenzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
1,2-Dichlorobenzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
1,4-Dichlorobenzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
sec-Butylbenzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
tert-Butylbenzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
1,3-Dichlorobenzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
n-Butylbenzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
1,2-Dibromo-3-chloropropane (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
1,2,4-Trichlorobenzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
Naphthalene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l
1,2,3-Trichlorobenzene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l

Date 06.11.2008

Validated ☑
Preliminary ☐

ALcontrol Laboratories Analytical Services
Table Of Results

" ISO 17025 accredited
M MCERTS accredited
* Subcontracted test
» Shown on prev. report

Job Number: 08/17891/02/01 **Matrix:** LEACHATE
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5376 **Client Contact:** Subcon

Sample Identity	94341 BH29A WC1	94343 BH29A WC2	94345 BH29A WC3	94347 BH11 WC1	94349 BH11 WC2	94351 BH11 WC3	94353 BH11 WC4	94355 BH11 WC5		Method Code	LoD/Units
Depth (m)	5.8	6.5	8.0	5.0	6.0	7.5	8.5	10.0			
Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID			
Sampled Date	23.10.08	23.10.08	23.10.08	22.10.08	22.10.08	22.10.08	23.10.08	23.10.08			
Sample Received Date	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08	27.10.08			
Batch	1	1	1	1	1	1	1	1			
Sample Number(s)	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40			
Volatile Organic Compounds (cont)											
Hexachlorobutadiene (NRA)	<1	<1	<1	<1	<1	<1	<1	<1		TM208	<1 ug/l

Date 06.11.2008

ALcontrol Laboratories Analytical Services
Table Of Results - Appendix

Job Number: 08/17891/02/01
Client: Envirolab
Client Ref. No.: 722201-5376

Report Key :

Results expressed as (e.g.) 1.03E-07 is equivalent to 1.03×10^{-7}

NDP	No Determination Possible	*	Subcontracted test
NFD	No Fibres Detected	»	Result previously reported (Incremental reports only)
#	ISO 17025 accredited	M	MCERTS Accredited
PFD	Possible Fibres Detected	EC	Equivalent Carbon (Aromatics C8-C35)

Note: Method detection limits are not always achievable due to various circumstances beyond our control.

Summary of Method Codes contained within report :

Method No.	Reference	Description	ISO 17025 Accredited	MCERTS Accredited	Wet/Dry Sample [1]	Surrogate Corrected
TM001	In - house Method	Screening of Soils for Fibres			WET	
TM018	BS 1377: Part 3 1990	Determination of Loss on Ignition	✓	✓	WET	
TM062	MEWAM BOOK 124 1988.HMSO/ Method 17.7, Second Site property, March 2003	Determination of Phenolic compounds by HPLC with electro-chemical detection			NA	
TM062	MEWAM BOOK 124 1988.HMSO/ Method 17.7, Second Site property, March 2003	Determination of Phenolic compounds by HPLC with electro-chemical detection	✓	✓	WET	
TM068	ASTM D-1552	Total sulphur determination by combustion method	✓		DRY	
TM089	Modified: US EPA Methods 8020 & 602	Determination of Gasoline Range Hydrocarbons (GRO) and BTEX (MTBE) compounds by Headspace GC-FID (C4-C12)			NA	
TM098	Method 4500E, AWWA/APHA, 20th Ed., 1999	Determination of Sulphate using the Kone Analyser			NA	
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS			WET	
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS	✓		WET	
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS	✓	✓	WET	
TM129	Method 3120B, AWWA/APHA, 20th Ed., 1999 / Modified: US EPA Method 3050B	Determination of Metal Cations by IRIS Emission Spectrometer			DRY	
TM129	Method 3120B, AWWA/APHA, 20th Ed., 1999 / Modified: US EPA Method 3050B	Determination of Metal Cations by IRIS Emission Spectrometer	✓	✓	DRY	
TM132	In - house Method	ELTRA CS800 Operators Guide	✓		DRY	
TM133	BS 1377: Part 3 1990;BS 6068-2.5	Determination of pH in Soil and Water using the GLpH pH Meter			NA	

[1] Applies to Solid samples only. **DRY** indicates samples have been dried at 35°C. **NA** = not applicable.

ALcontrol Laboratories Analytical Services
Table Of Results - Appendix

Job Number: 08/17891/02/01
Client: Envirolab
Client Ref. No.: 722201-5376

Report Key :

Results expressed as (e.g.) 1.03E-07 is equivalent to 1.03×10^{-7}

NDP	No Determination Possible	*	Subcontracted test
NFD	No Fibres Detected	»	Result previously reported (Incremental reports only)
#	ISO 17025 accredited	M	MCERTS Accredited
PFD	Possible Fibres Detected	EC	Equivalent Carbon (Aromatics C8-C35)

Note: Method detection limits are not always achievable due to various circumstances beyond our control.

Summary of Method Codes contained within report :

Method No.	Reference	Description	ISO 17025 Accredited	MCERTS Accredited	Wet/Dry Sample[1]	Surrogate Corrected
TM133	BS 1377: Part 3 1990;BS 6068-2.5	Determination of pH in Soil and Water using the GLpH pH Meter	✓	✓	WET	
TM144/145		Organochlorine and Organophosphorus pesticides by GC-MS			DRY	
TM152	Method 3125B, AWWA/APHA, 20th Ed., 1999	Analysis of Aqueous Samples by ICP-MS			NA	
TM153	Method 4500A,B,C, I, M AWWA/APHA, 20th Ed., 1999	Determination of Total Cyanide, Free (Easily Liberatable) Cyanide and Thiocyanate using the "Skalar SANS+ System" Segmented Flow Analyser			NA	
TM153	Method 4500A,B,C, I, M AWWA/APHA, 20th Ed., 1999	Determination of Total Cyanide, Free (Easily Liberatable) Cyanide and Thiocyanate using the "Skalar SANS+ System" Segmented Flow Analyser	✓	✓	WET	
TM157		Determination of SVOC in Soils by GC-MS extracted by sonication in DCM/Acetone			WET	
TM174		Determination of Speciated Extractable Petroleum Hydrocarbons in Waters by GC-FID			NA	
TM176		Determination of SVOCs in Water by GCMS			NA	
TM178	Modified: US EPA Method 8100	Determination of Polynuclear Aromatic Hydrocarbons (PAH) by GC-MS in Waters			NA	
TM183	BS EN 23506:2002, (BS 6068-2.74:2002) ISBN 0 580 38924 3	Determination of Trace Level Mercury in Waters and Leachates by PSA Cold Vapour Atomic Fluorescence Spectrometry			NA	
TM208	Modified: US EPA Method 8260b & 624	Determination of Volatile Organic Compounds by Headspace / GC-MS in Waters			NA	
TM61/89		see TM061 and TM089 for details			NA	

[1] Applies to Solid samples only. **DRY** indicates samples have been dried at 35°C. **NA** = not applicable.

envirolab

Date: 10 November 2008
Your Ref: 722201
Our Ref: 722201-(5390)-060
Project Manager: Stephen Mackereth
Report to: John Wild

Envirolab
Units 7 & 8
Sandpits Business Park
Mottram Road
Hyde
Cheshire
SK14 3AR

Final Test Report

Sample(s) of Soil from Sizewell C
Received from Structural Soils Ltd
The Old School, Stillhouse Lane, Bristol, BS3 4EB

Date of receipt: 29 October 2008
Date analysis commenced: 29 October 2008
Date analysis completed: 06 November 2008

Method Statement

Subcontract analysis was submitted to a laboratory on Envirolab's approved vendors list.
A copy of the report is attached, accreditation status is detailed on the report.

Prepared by:

[redacted]

Melanie Marshall
Laboratory Co-ordinator

Approved by:

[redacted]

Gill Scott
Laboratory Manager

Analytical results reflect the quality of the sample at the time of analysis only.

Validated ☑
Preliminary ☐

ALcontrol Laboratories Analytical Services
Table Of Results

* ISO 17025 accredited
M MCERTS accredited
* Subcontracted test
» Shown on prev. report

Job Number: 08/18121/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5390 **Client Contact:** Subcon

Sample Identity	94877 BH12	94880 BH13A	Method Code	LoD/Units
Depth (m)	7.0	9.5		
Sample Type	SOLID	SOLID		
Sampled Date	28.10.08	28.10.08		
Sample Received Date	30.10.08	30.10.08		
Batch	1	1		
Sample Number(s)	1-2	3-4		
Arsenic	6	22	TM129 M	<3.0 mg/kg
Cadmium	<0.2	0.2	TM129	<0.2 mg/kg
Chromium	30	18	TM129 M	<4.5 mg/kg
Copper	13	14	TM129 M	<6 mg/kg
Lead	20	26	TM129 M	<2 mg/kg
Mercury	0.6	0.6	TM129 M	<0.4 mg/kg
Nickel	23	17	TM129 M	<0.9 mg/kg
Zinc	58	55	TM129 M	<2.5 mg/kg
Total Alkalinity as CaCO3	670	730	TM043	<10 mg/kg

All results expressed on a dry weight basis.

Date 06.11.2008

envirolab

Date: 07 January 2009
Your Ref: 722201
Our Ref: 722201-(5390)-061
Project Manager: Stephen Mackereth
Report to: John Wild

Envirolab
Units 7 & 8
Sandpits Business Park
Mottram Road
Hyde
Cheshire
SK14 3AR

Supplemental to Final Test Report 722201-(5390)-060

Sample(s) of Soil from Sizewell C.
Received from Structural Soils Ltd
The Old School, Stillhouse Lane, Bristol, BS3 4EB

Date of receipt: 29 October 2008
Date analysis commenced: 29 October 2008
Date analysis completed: 07 January 2009

Method Statement

Subcontract analysis was submitted to a laboratory on Envirolab's approved vendors list.
A copy of the report is attached, accreditation status is detailed on the report.

Supplemental report issued to include additional subcontract results.

Prepared by:

[redacted]

Thi McNabb
Reporting Analytical Chemist

Approved by:

[redacted]

Louise Adams
Associate Director - Operations

Analytical results reflect the quality of the sample at the time of analysis only.

ALcontrol Laboratories Analytical Services
Sample Descriptions

Job Number: 08/18121/02/01
Client: Envirolab
Client Ref : 722201-5390

Grain sizes

<0.063mm	Very Fine
0.1mm - 0.063mm	Fine
0.1mm - 2mm	Medium
2mm - 10mm	Coarse
>10mm	Very Coarse

Sample Identity	Depth (m)	Colour	Grain Size	Description	Batch
94877 BH12	7.0	Brown	0.1mm - 0.063mm	Silty Clay with some Stones	1
94880 BH13A	9.5	Brown	0.1mm - 0.063mm	Silty Clay with some Stones	1

* These descriptions are only intended to act as a cross check if sample identities are questioned, and to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions.

We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials-whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample.
Other coarse granular materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.
' Sample Description supplied by client

Validated ☑
Preliminary ☐

ALcontrol Laboratories Analytical Services
Table Of Results

' ISO 17025 accredited
M MCERTS accredited
* Subcontracted test
» Shown on prev. report

Job Number: 08/18121/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5390 **Client Contact:** Subcon

Sample Identity	94877 BH12	94880 BH13A								Method Code	LoD/Units
Depth (m)	7.0	9.5									
Sample Type	SOLID	SOLID									
Sampled Date	28.10.08	23.10.08									
Sample Received Date	30.10.08	30.10.08									
Batch	1	1									
Sample Number(s)	1-2	3-4									
Arsenic	6	22								TM129'M	<3.0 mg/kg
Cadmium	<0.2	0.2								TM129	<0.2 mg/kg
Chromium	30	18								TM129'M	<4.5 mg/kg
Copper	13	14								TM129'M	<6 mg/kg
Lead	20	26								TM129'M	<2 mg/kg
Mercury	0.6	0.6								TM129'M	<0.4 mg/kg
Nickel	23	17								TM129'M	<0.9 mg/kg
Zinc	58	55								TM129'M	<2.5 mg/kg
Total Alkalinity as CaCO3	710	780								TM043	<10 mg/kg
Conductivity (at 20 deg.C)	16	12								TM120'	<0.014 mS/cm
Sodium	14000	13000								TM083	<4 mg/kg
Chloride (soluble)	13000	11000								TM097'M	<2 mg/kg
Loss on Ignition	39	57								TM018'M	<0.3 %
pH Value	5.59	5.33								TM133'M	<1.00 pH Units

All results expressed on a dry weight basis.

Date 07.01.2009

ALcontrol Laboratories Analytical Services
Table Of Results - Appendix

Job Number: 08/18121/02/01
Client: Envirolab
Client Ref. No.: 722201-5390

Report Key :

Results expressed as (e.g.) 1.03E-07 is equivalent to 1.03×10^{-7}

NDP	No Determination Possible	*	Subcontracted test
NFD	No Fibres Detected	»	Result previously reported (Incremental reports only)
#	ISO 17025 accredited	M	MCERTS Accredited
PFD	Possible Fibres Detected	EC	Equivalent Carbon (Aromatics C8-C35)

Note: Method detection limits are not always achievable due to various circumstances beyond our control.

Summary of Method Codes contained within report :

Method No.	Reference	Description	ISO 17025 Accredited	MCERTS Accredited	Wet/Dry Sample [1]	Surrogate Corrected
TM018	BS 1377: Part 3 1990	Determination of Loss on Ignition	✓	✓	WET	
TM043	Method 2320B, AWWA/APHA, 20th Ed., 1999 / BS 2690: Part109 1984	Determination of alkalinity in aqueous samples			WET	
TM083	Method 3111, AWWA/APHA, 20th Ed., 1999 / Modified: US EPA Method 7610	Determination of Sodium and Potassium by Flame Photometer			DRY	
TM097	Modified: US EPA Method 325.1 & 325.2	Determination of Chloride using the Kone Analyser	✓	✓	DRY	
TM120	Method 2510B, AWWA/APHA, 20th Ed., 1999 / BS 2690: Part 9:1970	Determination of Electrical Conductivity using a Conductivity Meter	✓		DRY	
TM129	Method 3120B, AWWA/APHA, 20th Ed., 1999 / Modified: US EPA Method 3050B	Determination of Metal Cations by IRIS Emission Spectrometer			DRY	
TM129	Method 3120B, AWWA/APHA, 20th Ed., 1999 / Modified: US EPA Method 3050B	Determination of Metal Cations by IRIS Emission Spectrometer	✓	✓	DRY	
TM133	BS 1377: Part 3 1990;BS 6068-2.5	Determination of pH in Soil and Water using the GLpH pH Meter	✓	✓	WET	

[1] Applies to Solid samples only. **DRY** indicates samples have been dried at 35°C. **NA** = not applicable.

envirolab

Date: 14 November 2008
Your Ref: 722201 - PO: 6812
Our Ref: 722201-(5419)-070
Project Manager: Steve Mackereth
Report to: John Wild

Envirolab
Units 7 & 8
Sandpits Business Park
Mottram Road
Hyde
Cheshire
SK14 3AR

Final Test Report

Sample(s) of Soil from Sizewell C.
Received from Structural Soils Ltd
The Old School, Stillhouse Lane, Bristol, BS3 4EB

Date of receipt: 06 November 2008
Date analysis commenced: 06 November 2008
Date analysis completed: 13 November 2008

Method Statement

Subcontract analysis was submitted to a laboratory on Envirolab's approved vendors list.
A copy of the report is attached, accreditation status is detailed on the report.

Prepared by:

[redacted]

Melanie Marshall
Laboratory Co-ordinator

Approved by:

[redacted]

Louise Adams
Associate Director - Operations

Analytical results reflect the quality of the sample at the time of analysis only.

ALcontrol Laboratories Analytical Services
Sample Descriptions

Job Number: 08/18466/02/01
Client: Envirolab
Client Ref : 722201-5419

Grain sizes	
<0.063mm	Very Fine
0.1mm - 0.063mm	Fine
0.1mm - 2mm	Medium
2mm - 10mm	Coarse
>10mm	Very Coarse

Sample Identity	Depth (m)	Colour	Grain Size	Description	Batch
95281 BH9 D	5.0	Dark Brown	<0.063mm	Clay Loam	1
95284 BH14 D	8.0	Dark Brown	0.1mm - 0.063mm	Clay	1
95286 BH21 D	5.0	Dark Brown	<0.063mm	Clay Loam	1
95290 BH22 D	10.0	Dark Brown	<0.063mm	Clay	1

* These descriptions are only intended to act as a cross check if sample identities are questioned, and to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions.

We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials-whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample.
Other coarse granular materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.
[1] Sample Description supplied by client

Validated ☑
Preliminary ☐

ALcontrol Laboratories Analytical Services
Table Of Results

ISO 17025 accredited
M MCERTS accredited
* Subcontracted test
» Shown on prev. report

Job Number: 08/18466/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5419 **Client Contact:** Envirolab Data

Sample Identity	95281 BH9 D	95284 BH14 D	95286 BH21 D	95290 BH22 D						Method Code	LoD/Units
Depth (m)	5.0	8.0	5.0	10.0							
Sample Type	SOLID	SOLID	SOLID	SOLID							
Sampled Date	31.10.08	31.10.08	31.10.08	31.10.08							
Sample Received Date	06.11.08	06.11.08	06.11.08	06.11.08							
Batch	1	1	1	1							
Sample Number(s)	1-2	3-4	5-6	7-8							
Arsenic	<3	9	4	43						TM129#M	<3.0 mg/kg
Cadmium	0.6	<0.2	<0.2	<0.2						TM129	<0.2 mg/kg
Chromium	9.1	11	13	<4.5						TM129#M	<4.5 mg/kg
Copper	9	6	8	<6						TM129#M	<6 mg/kg
Lead	7	6	7	13						TM129#M	<2 mg/kg
Mercury	<0.4	<0.4	<0.4	<0.4						TM129#M	<0.4 mg/kg
Nickel	7.8	11	13	5.2						TM129#M	<0.9 mg/kg
Zinc	120	23	36	22						TM129#M	<2.5 mg/kg
Carbonate Alkalinity as CaCO3	<10	<10	<10	<10						TM043	<10 mg/kg

All results expressed on a dry weight basis.

Date 13.11.2008

ALcontrol Laboratories Analytical Services
Table Of Results - Appendix

Job Number: 08/18466/02/01
Client: Envirolab
Client Ref. No.: 722201-5419

Report Key :

Results expressed as (e.g.) 1.03E-07 is equivalent to 1.03×10^{-7}

NDP	No Determination Possible	*	Subcontracted test
NFD	No Fibres Detected	»	Result previously reported (Incremental reports only)
#	ISO 17025 accredited	M	MCERTS Accredited
PFD	Possible Fibres Detected	EC	Equivalent Carbon (Aromatics C8-C35)

Note: Method detection limits are not always achievable due to various circumstances beyond our control.

Summary of Method Codes contained within report :

Method No.	Reference	Description	ISO 17025 Accredited	MCERTS Accredited	Wet/Dry Sample [1]	Surrogate Corrected
TM043	Method 2320B, AWWA/APHA, 20th Ed., 1999 / BS 2690: Part109 1984	Determination of alkalinity in aqueous samples			WET	
TM129	Method 3120B, AWWA/APHA, 20th Ed., 1999 / Modified: US EPA Method 3050B	Determination of Metal Cations by IRIS Emission Spectrometer			DRY	
TM129	Method 3120B, AWWA/APHA, 20th Ed., 1999 / Modified: US EPA Method 3050B	Determination of Metal Cations by IRIS Emission Spectrometer	✓	✓	DRY	

[1] Applies to Solid samples only. **DRY** indicates samples have been dried at 35°C. **NA** = not applicable.

envirolab

Date: 07 January 2009
Your Ref: 722201 - PO. 6812
Our Ref: 722201-(5419)-071
Project Manager: Steve Mackereth
Report to: John Wild

Envirolab
Units 7 & 8
Sandpits Business Park
Mottram Road
Hyde
Cheshire
SK14 3AR

Supplemental to Final Test Report 722201-(5419)-070

Sample(s) of Soil from Sizewell C.
Received from Structural Soils Ltd
The Old School, Stillhouse Lane, Bristol, BS3 4EB

Date of receipt: 06 November 2008
Date analysis commenced: 06 November 2008
Date analysis completed: 07 January 2009

Method Statement

Subcontract analysis was submitted to a laboratory on Envirolab's approved vendors list.
A copy of the report is attached, accreditation status is detailed on the report.

Supplemental report issued to include additional subcontract results.

Prepared by:

[redacted]

Thi McNabb
Reporting Analytical Chemist

Approved by:

[redacted]

Louise Adams
Associate Director - Operations

Analytical results reflect the quality of the sample at the time of analysis only.

ALcontrol Laboratories Analytical Services
Sample Descriptions

Job Number: 08/18466/02/01
Client: Envirolab
Client Ref : 722201-5419

Grain sizes

<0.063mm	Very Fine
0.1mm - 0.063mm	Fine
0.1mm - 2mm	Medium
2mm - 10mm	Coarse
>10mm	Very Coarse

Sample Identity	Depth (m)	Colour	Grain Size	Description	Batch
95281 BH9 D	5.0	Dark Brown	<0.063mm	Clay Loam	1
95284 BH14 D	8.0	Dark Brown	0.1mm - 0.063mm	Clay	1
95286 BH21 D	5.0	Dark Brown	<0.063mm	Clay Loam	1
95290 BH22 D	10.0	Dark Brown	<0.063mm	Clay	1

* These descriptions are only intended to act as a cross check if sample identities are questioned, and to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions.

We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials-whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample.
Other coarse granular materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.
[1] Sample Description supplied by client

Validated ☑
Preliminary ☐

ALcontrol Laboratories Analytical Services
Table Of Results

ISO 17025 accredited
M MCERTS accredited
* Subcontracted test
» Shown on prev. report

Job Number: 08/18466/02/01 **Matrix:** SOLID
Client: Envirolab **Location:** SIZEWELL C
Client Ref. No.: 722201-5419 **Client Contact:** Envirolab Data

Sample Identity	95281 BH9 D	95284 BH14 D	95286 BH21 D	95290 BH22 D						Method Code	LoD/Units
Depth (m)	5.0	8.0	5.0	10.0							
Sample Type	SOLID	SOLID	SOLID	SOLID							
Sampled Date	31.10.08	31.10.08	31.10.08	31.10.08							
Sample Received Date	06.11.08	06.11.08	06.11.08	06.11.08							
Batch	1	1	1	1							
Sample Number(s)	1-2	3-4	5-6	7-8							
Arsenic	<3	9	4	43						TM129#M	<3.0 mg/kg
Cadmium	0.6	<0.2	<0.2	<0.2						TM129	<0.2 mg/kg
Chromium	9.1	11	13	<4.5						TM129#M	<4.5 mg/kg
Copper	9	6	8	<6						TM129#M	<6 mg/kg
Lead	7	6	7	13						TM129#M	<2 mg/kg
Mercury	<0.4	<0.4	<0.4	<0.4						TM129#M	<0.4 mg/kg
Nickel	7.8	11	13	5.2						TM129#M	<0.9 mg/kg
Zinc	120	23	36	22						TM129#M	<2.5 mg/kg
Carbonate Alkalinity as CaCO3	<10	<10	<10	<10						TM043	<10 mg/kg
Conductivity (at 20 deg.C)	NDP	4.1	17	7.6						TM120#	<0.014 mS/cm
Sodium	13000	2100	13000	5500						TM083	<4 mg/kg
Chloride (soluble)	NDP	850	11000	4800						TM097#M	<2 mg/kg
Loss on Ignition	65	60	62	60						TM018#M	<0.3 %
pH Value	5.49	5.78	7.54	5.10						TM133#M	<1.00 pH Units

All results expressed on a dry weight basis.

Date 07.01.2009

ALcontrol Laboratories Analytical Services
Table Of Results - Appendix

Job Number: 08/18466/02/01
Client: Envirolab
Client Ref. No.: 722201-5419

Report Key :

Results expressed as (e.g.) 1.03E-07 is equivalent to 1.03×10^{-7}

NDP	No Determination Possible	*	Subcontracted test
NFD	No Fibres Detected	»	Result previously reported (Incremental reports only)
#	ISO 17025 accredited	M	MCERTS Accredited
PFD	Possible Fibres Detected	EC	Equivalent Carbon (Aromatics C8-C35)

Note: Method detection limits are not always achievable due to various circumstances beyond our control.

Summary of Method Codes contained within report :

Method No.	Reference	Description	ISO 17025 Accredited	MCERTS Accredited	Wet/Dry Sample[1]	Surrogate Corrected
TM018	BS 1377: Part 3 1990	Determination of Loss on Ignition	✓	✓	WET	
TM043	Method 2320B, AWWA/APHA, 20th Ed., 1999 / BS 2690: Part109 1984	Determination of alkalinity in aqueous samples			WET	
TM083	Method 3111, AWWA/APHA, 20th Ed., 1999 / Modified: US EPA Method 7610	Determination of Sodium and Potassium by Flame Photometer			DRY	
TM097	Modified: US EPA Method 325.1 & 325.2	Determination of Chloride using the Kone Analyser	✓	✓	DRY	
TM120	Method 2510B, AWWA/APHA, 20th Ed., 1999 / BS 2690: Part 9:1970	Determination of Electrical Conductivity using a Conductivity Meter	✓		DRY	
TM129	Method 3120B, AWWA/APHA, 20th Ed., 1999 / Modified: US EPA Method 3050B	Determination of Metal Cations by IRIS Emission Spectrometer			DRY	
TM129	Method 3120B, AWWA/APHA, 20th Ed., 1999 / Modified: US EPA Method 3050B	Determination of Metal Cations by IRIS Emission Spectrometer	✓	✓	DRY	
TM133	BS 1377: Part 3 1990;BS 6068-2.5	Determination of pH in Soil and Water using the GLpH pH Meter	✓	✓	WET	

[1] Applies to Solid samples only. **DRY** indicates samples have been dried at 35°C. **NA** = not applicable.

ISO 17025 Form	FORM NO:SQS 105
ALCONTROL LABORATORIES	SHEET 1 OF 1
	ISSUE NO: 2
	WRITTEN BY: DOH
Title of Form	ISSUE DATE: 27/01/05
Notification of NDP's (No determination possible).	APPROVED BY: DP

Job Number : 18466
Client : Envirolab
Sample Type : solid

Job No.	Sample No.	Sample ID.	Analyte(s)	Reason
18466	1	95281 BH 9D	EC	Sample solid - unable to perform analysis

Chemtest

Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070

Structural Soils Limited
The Old School
Stillhouse Lane
Bedminster, Bristol
BS3 4EB

FAO John Wild
10 November 2008

Dear John Wild

Test Report Number **56190**
Your Project Reference **Sizewell SI**

Please find enclosed the results of analysis for the samples received 31 October 2008.

All soil samples will be retained for a period of one month and all water samples will be retained for 7 days following the date of the test report. Should you require an extended retention period then please detail your requirements in an email to customerservices@chemtest.co.uk. Please be aware that charges may be applicable for extended sample storage.

If you require any further assistance, please do not hesitate to contact the Customer Services team.

Yours sincerely

[redacted]

Authorised Signatory

◻ Darrell Hall	Laboratory Manager
p/Phil Hellier	Operations Director
◻ Keith Jones	Technical Development Manager
◻ John Crawford	Quality Manager
◻ Malcolm Avis	Technical Director

Notes to accompany report:

- *The sign < means 'less than'*
- *Tests marked N do not currently hold accreditation*
- *Test marked S were subcontracted to an approved laboratory*
- *ns means 'not evaluated'*
- *i/s means 'insufficient sample'*
- *u/s means 'unsuitable sample'*
- *The results relate only to the items tested*

Newmarket • Tamworth • Glasgow
Registered in England & Wales - Registration Number 6511735 - Registered Office: 11 Depot Road Newmarket Suffolk CB8 0AL

Structural Soils Limited
The Old School
Stillhouse Lane
Bedminster, Bristol
BS3 4EB

FAO John Wild

LABORATORY TEST REPORT

Results of analysis of 27 samples
received 31 October 2008

Sizewell SI

Chemtest
Report Date
10 November 2008

Login Batch No					56190							
Chemtest LIMS ID					AD60000	AD60001	AD60002	AD60003	AD60004	AD60005	AD60006	AD60007
Sample ID					94876	94878	94879	94262	93846	93847	93849	93765
Sample No					BH12	BH12	BH13A	BH24	BH19A	BH19A	BH19A	BH20
Depth					5.3	11	8	8	5.5	7.5	9.4	8.5
Matrix					*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*
SOP↓	Determinand↓	CAS No↓	Units↓	*								
	Miscellaneous subcontracted analysis				See Attached	See Attached	See Attached	See Attached	See Attached	See Attached	See Attached	See Attached

All tests undertaken between 10-Nov-2008 and 10-Nov-2008

* Accreditation status

This report should be interpreted in conjunction with the notes on the accompanying cover page

Structural Soils Limited
The Old School
Stillhouse Lane
Bedminster, Bristol
BS3 4EB

FAO John Wild

LABORATORY TEST REPORT

Results of analysis of 27 samples
received 31 October 2008

Sizewell SI

Chemtest

Report Date
10 November 2008

Login Batch No				56190							
Chemtest LIMS ID				AD60008	AD60009	AD60010	AD60011	AD60012	AD60013	AD60014	AD60015
Sample ID				93868	93871	93872	93874	93875	93877	93878	93879
Sample No				BH10A	BH03	BH03	BH16	BH16	BH8	BH8	BH6
Depth				5.5	7.8	8.3	8	9.5	6.2	9.5	4.8
Matrix				*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*
SOP↓	Determinand↓	CAS No↓	Units↓								
	Miscellaneous subcontracted analysis			See Attached	See Attached	See Attached	See Attached	See Attached	See Attached	See Attached	See Attached

All tests undertaken between 10-Nov-2008 and 10-Nov-2008

* Accreditation status

This report should be interpreted in conjunction with the notes on the accompanying cover page

Structural Soils Limited
The Old School
Stillhouse Lane
Bedminster, Bristol
BS3 4EB

FAO · John Wild

LABORATORY TEST REPORT

Results of analysis of 27 samples
received 31 October 2008

Sizewell SI

Chemtest

Report Date
10 November 2008

Login Batch No **56190**

Chemtest ID/S ID				AD60016	AD60017	AD60018	AD60019	AD60020	AD60021	AD60022	AD60023
Sample ID				93881	93882	93479	93481	93488	93489	93491	93492
Sample No				BH6	BH6	BH1	BH1	BH5	BH5	BH17	BH17
Depth				6	7.2	5.2	8	6.45	6	8.5	9.5
Matrix				*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*
SOP↓	Determinand↓	CAS No↓	Units↓	*							
	Miscellaneous subcontracted analysis			See Attached	See Attached	See Attached	See Attached	See Attached	See Attached	See Attached	See Attached

All tests undertaken between 10-Nov-2008 and 10-Nov-2008

* Accreditation status

This report should be interpreted in conjunction with the notes on the accompanying cover page

Structural Soils Limited
The Old School
Stillhouse Lane
Bedminster, Bristol
BS3 4EB

FAO John Wild

LABORATORY TEST REPORT

Results of analysis of 27 samples
received 31 October 2008

Sizewell SI

Chemtest

Report Date
10 November 2008

Login Batch No				56190		
Chemtest LIMS ID				AD60024	AD60025	AD60026
Sample ID				93494	93495	93497
Sample No				BH25	BH25	BH25
Depth				7	7.5	8.15
Matrix				*SOIL*	*SOIL*	*SOIL*
SOP↓	Determinand↓	CAS No↓	Units↓			
	Miscellaneous subcontracted analysis			See Attached	See Attached	See Attached

All tests undertaken between 10-Nov-2008 and 10-Nov-2008

* Accreditation status

This report should be interpreted in conjunction with the notes on the accompanying cover page

Contact : ALEXANDRA JEPSEN
CHEMTEST
DEPOT ROAD
NEWMARKET
SUFFOLK
CB8 0AP
Tel. : 01638 606070

F446

Please quote the above code for all enquiries

Client : AD60000 TO AD60009

Sample Matrix : Agricultural Soil

Laboratory Reference
Card Number 22168/08

Date Received 04-Nov-08
Date Reported 07-Nov-08

SOIL ANALYSIS REPORT

Laboratory Sample Reference	Field Details		Soil pH	Index			mg/l (Available)		
	No.	Name or O.S. Reference with Cropping Details		P	K	Mg	P	K	Mg
94133/08	1	AD60000 *No cropping details given*	7.5	0	2+	7	7.6	202	713
94134/08	2	AD60001 *No cropping details given*	5.6	0	0	4	4.6	54	248
94135/08	3	AD60002 *No cropping details given*	7.5	0	4	7	7.6	523	801
94136/08	4	AD60003 *No cropping details given*	6.3	0	0	6	4.0	31	498
94137/08	5	AD60004 *No cropping details given*	7.4	0	2+	6	4.4	210	593
94138/08	6	AD60005 *No cropping details given*	7.2	0	1	6	4.0	109	364

If general fertiliser and lime recommendations have been requested, these are given on the following sheets.
The analytical methods used are as described in DEFRA Reference Book 427
The index values are determined from the DEFRA Fertiliser Recommendations RB209 7th Edition (Appendix 4).

Released by ..... [redacted] On behalf of NRM Ltd Date 07/11/08

Contact : ALEXANDRA JEPSEN
CHEMTEST
DEPOT ROAD
NEWMARKET
SUFFOLK
CB8 0AP
Tel. : 01638 606070

F446

Please quote the above code for all enquiries

Client : AD60000 TO AD60009

Sample Matrix : Agricultural Soil

Laboratory Reference
Card Number 22168/08

Date Received 04-Nov-08
Date Reported 07-Nov-08

Samples will be stored until 04-DEC-2008

SOIL ANALYSIS REPORT

Laboratory Sample Reference	Field Details			Index			mg/l (Available)		
	No.	Name or O.S. Reference with Cropping Details	Soil pH	P	K	Mg	P	K	Mg
94139/08	7	AD60006 *No cropping details given*	5.7	0	0	3	4.4	45	138
94140/08	8	AD60007 *No cropping details given*	7.5	0	2-	5	5.0	149	321
94141/08	9	AD60008 *No cropping details given*	6.6	0	0	3	4.2	30	139
94142/08	10	AD60009 *No cropping details given*	6.5	0	0	3	4.2	17	154

If general fertiliser and lime recommendations have been requested, these are given on the following sheets.
The analytical methods used are as described in DEFRA Reference Book 427
The index values are determined from the DEFRA Fertiliser Recommendations RB209 7th Edition (Appendix 4).

Released by ..... [redacted] On behalf of NRM Ltd Date 07/11/08

MICRO NUTRIENT REPORT

DATE 7th November 2008

SAMPLES FROM AD60000 TO AD60009

ALEXANDRA JEPSEN
CHEMTEST
DEPOT ROAD
NEWMARKET
SUFFOLK
CB8 0AP
Tel: 01638 606070
Fax: 01638 606071

Reference: 22168/94133/08-1 Field Name: AD60000	Result
Electrical Conductivity (Sat. CaSO4) uS/cm	4512

Reference: 22168/94134/08-1 Field Name: AD60001	Result
Electrical Conductivity (Sat. CaSO4) uS/cm	3258

Reference: 22168/94135/08-1 Field Name: AD60002	Result
Electrical Conductivity (Sat. CaSO4) uS/cm	7925

Reference: 22168/94136/08-1 Field Name: AD60003	Result
Electrical Conductivity (Sat. CaSO4) uS/cm	2116

Reference: 22168/94137/08-1 Field Name: AD60004	Result
Electrical Conductivity (Sat. CaSO4) uS/cm	4311

Reference: 22168/94138/08-1 Field Name: AD60005	Result
Electrical Conductivity (Sat. CaSO4) uS/cm	3441

Reference: 22168/94139/08-1 Field Name: AD60006	Result
Electrical Conductivity (Sat. CaSO4) uS/cm	2978

Reference: 22168/94140/08-1 Field Name: AD60007	Result
Electrical Conductivity (Sat. CaSO4) uS/cm	3579

Reference: 22168/94141/08-1 Field Name: AD60008	Result
Electrical Conductivity (Sat. CaSO4) uS/cm	2296

Reference: 22168/94142/08-1 Field Name: AD60009	Result
Electrical Conductivity (Sat. CaSO4) uS/cm	2410

Contact : ALEXANDRA JEPSEN
CHEMTEST
DEPOT ROAD
NEWMARKET
SUFFOLK
CB8 0AP
Tel. : 01638 606070

F446

Please quote the above code for all enquiries

Client : AD60010 TO AD60019

Sample Matrix : Agricultural Soil

Laboratory Reference
Card Number 22169/08

Date Received 04-Nov-08
Date Reported 10-Nov-08

SOIL ANALYSIS REPORT

Laboratory Sample Reference	Field Details			Index			mg/l (Available)		
	No.	Name or O.S. Reference with Cropping Details	Soil pH	P	K	Mg	P	K	Mg
94143/08	1	AD60010 *No cropping details given*	5.6	0	0	3	4.4	10	132
94144/08	2	AD60011 *No cropping details given*	6.9	0	3	6	5.4	350	581
94145/08	3	AD60012 *No cropping details given*	5.8	0	1	5	5.4	69	295
94146/08	4	AD60013 *No cropping details given*	7.6	0	4	7	6.6	597	753
94147/08	5	AD60014 *No cropping details given*	6.0	0	1	6	5.2	95	455
94148/08	6	AD60015 *No cropping details given*	5.0	0	2-	6	5.0	147	506

If general fertiliser and lime recommendations have been requested, these are given on the following sheets.
The analytical methods used are as described in DEFRA Reference Book 427
The index values are determined from the DEFRA Fertiliser Recommendations RB209 7th Edition (Appendix 4).

Released by [redacted] On behalf of NRM Ltd Date 10/11/08

Contact : ALEXANDRA JEPSEN
CHEMTEST
DEPOT ROAD
NEWMARKET
SUFFOLK
CB8 0AP
Tel. : 01638 606070

F446

Please quote the above code for all enquiries

Client : AD60010 TO AD60019

Sample Matrix : Agricultural Soil

Laboratory Reference
Card Number 22169/08

Date Received 04-Nov-08
Date Reported 10-Nov-08

Samples will be stored until 04-DEC-2008

SOIL ANALYSIS REPORT

Laboratory Sample Reference	Field Details		Soil pH	Index			mg/l (Available)		
	No.	Name or O.S. Reference with Cropping Details		P	K	Mg	P	K	Mg
94149/08	7	AD60016 *No cropping details given*	6.8	0	0	4	4.0	35	197
94150/08	8	AD60017 *No cropping details given*	6.4	0	0	3	4.6	20	135
94151/08	9	AD60018 *No cropping details given*	7.1	0	2+	7	4.4	211	734
94152/08	10	AD60019 *No cropping details given*	6.2	0	1	6	4.2	88	550

If general fertiliser and lime recommendations have been requested, these are given on the following sheets.
The analytical methods used are as described in DEFRA Reference Book 427
The index values are determined from the DEFRA Fertiliser Recommendations RB209 7th Edition (Appendix 4).

Released by [redacted] On behalf of NRM Ltd Date 10/11/08

MICRO NUTRIENT REPORT

DATE 10th November 2008

SAMPLES FROM AD60010 TO AD60019

ALEXANDRA JEPSEN
CHEMTEST
DEPOT ROAD
NEWMARKET
SUFFOLK
CB8 0AP
Tel: 01638 606070
Fax: 01638 606071

Reference: 22169/94143/08-1 Field Name: AD60010	Result
Electrical Conductivity (Sat. CaSO4) uS/cm	2576

Reference: 22169/94144/08-1 Field Name: AD60011	Result
Electrical Conductivity (Sat. CaSO4) uS/cm	5906

Reference: 22169/94145/08-1 Field Name: AD60012	Result
Electrical Conductivity (Sat. CaSO4) uS/cm	3958

Reference: 22169/94146/08-1 Field Name: AD60013	Result
Electrical Conductivity (Sat. CaSO4) uS/cm	6167

Reference: 22169/94147/08-1 Field Name: AD60014	Result
Electrical Conductivity (Sat. CaSO4) uS/cm	4324

Reference: 22169/94148/08-1 Field Name: AD60015	Result
Electrical Conductivity (Sat. CaSO4) uS/cm	3000

Reference: 22169/94149/08-1 Field Name: AD60016	Result
Electrical Conductivity (Sat. CaSO4) uS/cm	2334

Reference: 22169/94150/08-1 Field Name: AD60017	Result
Electrical Conductivity (Sat. CaSO4) uS/cm	2506

Reference: 22169/94151/08-1 Field Name: AD60018	Result
Electrical Conductivity (Sat. CaSO4) uS/cm	4387

Reference: 22169/94152/08-1 Field Name: AD60019	Result
Electrical Conductivity (Sat. CaSO4) uS/cm	4006

DATE 10th November 2008
SAMPLES FROM AD60010 TO AD60019

SAMPLED BY

Report reference 22169/08-1

ALEXANDRA JEPSEN
CHEMTEST
DEPOT ROAD
NEWMARKET
SUFFOLK
CB8 0AP
Tel: 01638 606070
Fax: 01638 606071

Field Name / Field Size / Lab No. / Soil Type	Last Crop	Next Crop	Recommendations Units/acre P_2O_5	K_2O	MgO	Additional Notes
AD60010 094143						Phosphate and Potash deficiencies may limit crop performance. Apply fertiliser to seedbed to help establishment. Arable rotation assumed for lime recommendation. Needs Lime at 3 T/Ac.
AD60011 094144						Phosphate deficiency may limit crop performance. Apply fertiliser to seedbed to help establishment.
AD60012 094145						Phosphate deficiency may limit crop performance. Potassium status low - additional nutrient required. Apply fertiliser to seedbed to help establishment. Arable rotation assumed for lime recommendation. Needs Lime at 2.5 T/Ac.
AD60013 094146						Phosphate deficiency may limit crop performance. Apply fertiliser to seedbed to help establishment.
AD60014 094147						Phosphate deficiency may limit crop performance. Potassium status low - additional nutrient required. Apply fertiliser to seedbed to help establishment. Arable rotation assumed for lime recommendation. Needs Lime at 3 T/Ac.
AD60015 094148						Phosphate deficiency may limit crop performance. Apply fertiliser to seedbed to help establishment. Arable rotation assumed for lime recommendation. Needs Lime at 5 T/Ac. This heavy dressing of lime is best split in two, before and after ploughing.
AD60016 094149						Phosphate and Potash deficiencies may limit crop performance. Apply fertiliser to seedbed to help establishment.
AD60017 094150						Phosphate and Potash deficiencies may limit crop performance. Apply fertiliser to seedbed to help establishment. Arable rotation assumed for lime recommendation. Needs Lime at 1 T/Ac.
AD60018 094151						Phosphate deficiency may limit crop performance. Apply fertiliser to seedbed to help establishment.
AD60019 094152						Phosphate deficiency may limit crop performance. Potassium status low - additional nutrient required. Apply fertiliser to seedbed to help establishment. Arable rotation assumed for lime recommendation. Needs Lime at 1.5 T/Ac.

Fertiliser recommendations are based on DEFRA RB209 (Seventh Edition - 2000). If a nutrient is deficient and no recommendation is given, either no recommendation is given in RB209 or we have insufficient data to give a recommendation.

Contact : ALEXANDRA JEPSEN
CHEMTEST
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CB8 0AP
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F446

Please quote the above code for all enquiries

Client : AD60020 TO AD60026

Sample Matrix : Agricultural Soil

Laboratory Reference
Card Number 22170/08

Date Received 04-Nov-08
Date Reported 07-Nov-08

SOIL ANALYSIS REPORT

Laboratory Sample Reference	Field Details			Index			mg/l (Available)		
	No.	Name or O.S. Reference with Cropping Details	Soil pH	P	K	Mg	P	K	Mg
94153/08	1	AD60020 *No cropping details given*	7.8	0	2-	6	4.4	134	514
94154/08	2	AD60021 *No cropping details given*	7.7	0	1	6	4.0	93	518
94155/08	3	AD60022 *No cropping details given*	5.4	0	0	5	5.6	56	342
94156/08	4	AD60023 *No cropping details given*	7.4	0	2-	6	5.2	162	358
94157/08	5	AD60024 *No cropping details given*	6.9	0	0	4	4.0	30	244
94158/08	6	AD60025 *No cropping details given*	6.4	0	0	4	4.0	32	231

If general fertiliser and lime recommendations have been requested, these are given on the following sheets.
The analytical methods used are as described in DEFRA Reference Book 427
The index values are determined from the DEFRA Fertiliser Recommendations RB209 7th Edition (Appendix 4).

Released by ..... [redacted] On behalf of NRM Ltd Date 07/11/08

Contact : ALEXANDRA JEPSEN
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Tel. : 01638 606070

F446

Please quote the above code for all enquiries

Client : AD60020 TO AD60026

Sample Matrix : Agricultural Soil

Laboratory Reference
Card Number 22170/08

Date Received 04-Nov-08
Date Reported 07-Nov-08

Samples will be stored until 04-DEC-2008

SOIL ANALYSIS REPORT

Laboratory Sample Reference	Field Details		Soil pH	Index			mg/l (Available)		
	No.	Name or O.S. Reference with Cropping Details		P	K	Mg	P	K	Mg
94159/08	7	AD60026 *No cropping details given*	7.4	1	0	3	13.0	7	103

If general fertiliser and lime recommendations have been requested, these are given on the following sheets.
The analytical methods used are as described in DEFRA Reference Book 427
The index values are determined from the DEFRA Fertiliser Recommendations RB209 7th Edition (Appendix 4).

Released by [redacted] On behalf of NRM Ltd Date 07/11/08

MICRO NUTRIENT REPORT

DATE 7th November 2008

SAMPLES FROM AD60020 TO AD60026

ALEXANDRA JEPSEN
CHEMTEST
DEPOT ROAD
NEWMARKET
SUFFOLK
CB8 0AP
Tel: 01638 606070
Fax: 01638 606071

Reference: 22170/94153/08-1 Field Name: AD60020	Result
Electrical Conductivity (Sat. CaSO4) uS/cm	3642

Reference: 22170/94154/08-1 Field Name: AD60021	Result
Electrical Conductivity (Sat. CaSO4) uS/cm	3203

Reference: 22170/94155/08-1 Field Name: AD60022	Result
Electrical Conductivity (Sat. CaSO4) uS/cm	3555

Reference: 22170/94156/08-1 Field Name: AD60023	Result
Electrical Conductivity (Sat. CaSO4) uS/cm	3975

Reference: 22170/94157/08-1 Field Name: AD60024	Result
Electrical Conductivity (Sat. CaSO4) uS/cm	2283

Reference: 22170/94158/08-1 Field Name: AD60025	Result
Electrical Conductivity (Sat. CaSO4) uS/cm	2208

Reference: 22170/94159/08-1 Field Name: AD60026	Result
Electrical Conductivity (Sat. CaSO4) uS/cm	2154

Chemtest

Depot Road
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Tel: 01638 606070

Structural Soils Limited
The Old School
Stillhouse Lane
Bedminster, Bristol
BS3 4EB

FAO John Wild
19 November 2008

Dear John Wild

Test Report Number **56225**
Your Project Reference **Sizewell C - 722201**

Please find enclosed the results of analysis for the samples received 10 November 2008.

All soil samples will be retained for a period of one month and all water samples will be retained for 7 days following the date of the test report. Should you require an extended retention period then please detail your requirements in an email to customerservices@chemtest.co.uk. Please be aware that charges may be applicable for extended sample storage.

If you require any further assistance, please do not hesitate to contact the Customer Services team.

Yours sincerely

[redacted]

Authorised Signatory

☑ Darrell Hall	Laboratory Manager
☐ Phil Hellier	Operations Director
☐ Keith Jones	Technical Development Manager
☐ John Crawford	Quality Manager
☐ Malcolm Avis	Technical Director

Notes to accompany report:

- *The sign < means 'less than'*
- *Tests marked N do not currently hold accreditation*
- *Test marked S were subcontracted to an approved laboratory*
- *ns means 'not evaluated'*
- *i/s means 'insufficient sample'*
- *u/s means 'unsuitable sample'*
- *The results relate only to the items tested*

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FAO John Wild

LABORATORY TEST REPORT

Results of analysis of 1 sample received 10 November 2008

Sizewell C - 722201

Chemtest

Report Date
19 November 2008

Login Batch No					**56225**
Chemtest LIMS ID					AD62124
Sample ID					BH24
Sample No					94261
Depth					8
Matrix					*SOIL*
SOP↓	Determinand↓	CAS No↓	Units↓	*	
	Miscellaneous subcontracted analysis				See attached

All tests undertaken between 19-Nov-2008 and 19-Nov-2008

* Accreditation status

This report should be interpreted in conjunction with the notes on the accompanying cover page

Contact : ALEXANDRA JEPSEN
CHEMTEST
DEPOT ROAD
NEWMARKET
SUFFOLK
CB8 0AP
Tel. : 01638 606070

F446

Please quote the above code for all enquiries

Client : JOB 56225
ON 9536
JASON KEELEY

Sample Matrix : Agricultural Soil

Laboratory Reference
Card Number 22597/08

Date Received 11-Nov-08
Date Reported 17-Nov-08

Samples will be stored until 11-DEC-2008

SOIL ANALYSIS REPORT

Laboratory Sample Reference	Field Details		Soil pH	Index			mg/l (Available)		
	No.	Name or O.S. Reference with Cropping Details		P	K	Mg	P	K	Mg
96165/08	1	AD62124 *No cropping details given*	6.1	0	0	7	2.4	42	699

If general fertiliser and lime recommendations have been requested, these are given on the following sheets.
The analytical methods used are as described in DEFRA Reference Book 427
The index values are determined from the DEFRA Fertiliser Recommendations RB209 7th Edition (Appendix 4).

Released by [redacted] On behalf of NRM Ltd Date 17/11/08

MICRO NUTRIENT REPORT

DATE **17th November 2008**

SAMPLES FROM **JOB 56225, ON 9536, JASON KEELEY**

ALEXANDRA JEPSEN
CHEMTEST
DEPOT ROAD
NEWMARKET
SUFFOLK
CB8 0AP
Tel: 01638 606070
Fax: 01638 606071

Reference: 22597/96165/08-1	Field Name: AD62124	Result
Electrical Conductivity (Sat. CaSO4) uS/cm		2302

Chemtest

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Tel: 01638 606070

Structural Soils Limited
The Old School
Stillhouse Lane
Bedminster, Bristol
BS3 4EB

FAO John Wild
24 November 2008

Dear John Wild

Test Report Number **56246**
Your Project Reference **Sizewell C - 722201**

Please find enclosed the results of analysis for the samples received 12 November 2008.

All soil samples will be retained for a period of one month and all water samples will be retained for 7 days following the date of the test report. Should you require an extended retention period then please detail your requirements in an email to customerservices@chemtest.co.uk. Please be aware that charges may be applicable for extended sample storage.

If you require any further assistance, please do not hesitate to contact the Customer Services team.

Yours sincerely

[redacted]

Authorised Signatory

☐ Darrell Hall	Laboratory Manager
☐ Phil Hellier	Operations Director
☑ Keith Jones	Technical Development Manager
☐ John Crawford	Quality Manager
☐ Malcolm Avis	Technical Director

Notes to accompany report:

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- *i/s means 'insufficient sample'*
- *u/s means 'unsuitable sample'*
- *The results relate only to the items tested*

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Structural Soils Limited
The Old School
Stillhouse Lane
Bedminster, Bristol
BS3 4EB

FAO John Wild

LABORATORY TEST REPORT

Results of analysis of 1 sample
received 12 November 2008

Sizewell C - 722201

Chemtest

Report Date
24 November 2008

Login Batch No				**56246**
Chemtest LIMS ID				AD62956
Sample ID				BH16
Sample No				93875
Depth				9.5m
Matrix				*SOIL*
SOP↓	Determinand↓	CAS No↓	Units↓	*
	Miscellaneous subcontracted analysis			See attached

All tests undertaken between 24-Nov-2008 and 24-Nov-2008

* Accreditation status

This report should be interpreted in conjunction with the notes on the accompanying cover page

Contact : ALEXANDRA JEPSEN
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F446

Please quote the above code for all enquiries

Client : ON 9555
JOB 56246

Sample Matrix : Agricultural Soil

Laboratory Reference
Card Number 22695/08

Date Received 14-Nov-08
Date Reported 24-Nov-08

Samples will be stored until 14-DEC-2008

SOIL ANALYSIS REPORT

Laboratory Sample Reference	Field Details		Soil pH	Index			mg/l (Available)		
	No.	Name or O.S. Reference with Cropping Details		P	K	Mg	P	K	Mg
96658/08	1	AD62956 *No cropping details given*	6.3	0	2+	6	6.8	194	570

If general fertiliser and lime recommendations have been requested, these are given on the following sheets.
The analytical methods used are as described in DEFRA Reference Book 427
The index values are determined from the DEFRA Fertiliser Recommendations RB209 7th Edition (Appendix 4).

Released by [redacted] On behalf of NRM Ltd Date 24/11/08

MICRO NUTRIENT REPORT

DATE 24th November 2008

SAMPLES FROM ON 9555, JOB 56246

ALEXANDRA JEPSEN
CHEMTEST
DEPOT ROAD
NEWMARKET
SUFFOLK
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Tel: 01638 606070
Fax: 01638 606071

Reference: 22695/96658/08-1	Field Name: AD62956	Result
Electrical Conductivity (Sat. CaSO4) uS/cm		6256

DATE 24th November 2008
SAMPLES FROM ON 9555, JOB 56246

SAMPLED BY

Report reference 22695/08-1

ALEXANDRA JEPSEN
CHEMTEST
DEPOT ROAD
NEWMARKET
SUFFOLK
CB8 0AP
Tel: 01638 606070
Fax: 01638 606071

Field Name / Field Size / Lab No. / Soil Type	Last Crop	Next Crop	Recommendations Units/acre P_2O_5	K_2O	MgO	Additional Notes
AD62956 096658						Phosphate deficiency may limit crop performance. Apply fertiliser to seedbed to help establishment. Arable rotation assumed for lime recommendation. Needs Lime at 1 T/Ac.

Fertiliser recommendations are based on DEFRA RB209 (Seventh Edition - 2000). If a nutrient is deficient and no recommendation is given, either no recommendation is given in RB209 or we have insufficient data to give a recommendation.

Chemtest

Depot Road
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Tel: 01638 606070

Structural Soils Limited
The Old School
Stillhouse Lane
Bedminster, Bristol
BS3 4EB

FAO John Wild
19 November 2008

Dear John Wild

Test Report Number **56226**
Your Project Reference **Sizewell C - 722201**

Please find enclosed the results of analysis for the samples received 10 November 2008.

All soil samples will be retained for a period of one month and all water samples will be retained for 7 days following the date of the test report. Should you require an extended retention period then please detail your requirements in an email to customerservices@chemtest.co.uk. Please be aware that charges may be applicable for extended sample storage.

If you require any further assistance, please do not hesitate to contact the Customer Services team.

Yours sincerely

[redacted]
Authorised Signatory

Darrell Hall	Laboratory Manager
Phil Heller	Operations Director
Keith Jones	Technical Development Manager
John Crawford	Quality Manager
Malcolm Avis	Technical Director

Notes to accompany report:

- *The sign < means 'less than'*
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- *Test marked S were subcontracted to an approved laboratory*
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- *i/s means 'insufficient sample'*
- *u/s means 'unsuitable sample'*
- *The results relate only to the items tested*

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Bedminster, Bristol
BS3 4EB

FAO John Wild

LABORATORY TEST REPORT

Results of analysis of 6 samples received 10 November 2008

Sizewell C - 722201

Chemtest

Report Date
19 November 2008

Login Batch No 56226

Chemtest - MS ID					AD62125	AD62126	AD62127	AD62128	AD62129	AD62130
Sample ID					BH9	BH9	BH14	BH21	BH21	BH22
Sample No					95282	95283	95285	95287	95288	95289
Depth					6.5	6.5	8.5	8.5	10	5.5
Matrix					*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*
SOP↓	Determinand↓	CAS No↓	Units↓	*						
	Miscellaneous subcontracted analysis				See attached	See attached	See attached	See attached	See attached	See attached

All tests undertaken between 19-Nov-2008 and 19-Nov-2008

* Accreditation status

This report should be interpreted in conjunction with the notes on the accompanying cover page

Contact : ALEXANDRA JEPSEN
CHEMTEST
DEPOT ROAD
NEWMARKET
SUFFOLK
CB8 0AP
Tel. : 01638 606070

F446

Please quote the above code for all enquiries

Client : JOB 56226
ON 9537
JASON KEELEY

Sample Matrix : Agricultural Soil

Laboratory Reference
Card Number 22596/08

Date Received 11-Nov-08
Date Reported 17-Nov-08

Samples will be stored until 11-DEC-2008

SOIL ANALYSIS REPORT

Laboratory Sample Reference	Field Details			Index			mg/l (Available)		
	No.	Name or O.S. Reference with Cropping Details	Soil pH	P	K	Mg	P	K	Mg
96159/08	1	AD62125 *No cropping details given*	6.9	0	2+	7	4.8	219	779
96160/08	2	AD62126 *No cropping details given*	6.4	0	1	6	3.2	114	476
96161/08	3	AD62127 *No cropping details given*	6.3	0	0	4	2.4	28	191
96162/08	4	AD62128 *No cropping details given*	6.9	0	2-	6	4.2	159	447
96163/08	5	AD62129 *No cropping details given*	5.0	0	0	4	3.2	58	177
96164/08	6	AD62130 *No cropping details given*	7.0	0	3	7	4.2	288	772

If general fertiliser and lime recommendations have been requested, these are given on the following sheets.
The analytical methods used are as described in DEFRA Reference Book 427
The index values are determined from the DEFRA Fertiliser Recommendations RB209 7th Edition (Appendix 4).

Released by [redacted] On behalf of NRM Ltd Date 17/11/08

MICRO NUTRIENT REPORT

DATE 17th November 2008

SAMPLES FROM JOB 56226, ON 9537, JASON KEELEY

ALEXANDRA JEPSEN
CHEMTEST
DEPOT ROAD
NEWMARKET
SUFFOLK
CB8 0AP
Tel: 01638 606070
Fax: 01638 606071

Reference: 22596/96159/08-1	Field Name: AD62125	Result
Electrical Conductivity (Sat. CaSO4) uS/cm		4579

Reference: 22596/96160/08-1	Field Name: AD62126	Result
Electrical Conductivity (Sat. CaSO4) uS/cm		4441

Reference: 22596/96161/08-1	Field Name: AD62127	Result
Electrical Conductivity (Sat. CaSO4) uS/cm		2286

Reference: 22596/96162/08-1	Field Name: AD62128	Result
Electrical Conductivity (Sat. CaSO4) uS/cm		3697

Reference: 22596/96163/08-1	Field Name: AD62129	Result
Electrical Conductivity (Sat. CaSO4) uS/cm		3341

Reference: 22596/96164/08-1	Field Name: AD62130	Result
Electrical Conductivity (Sat. CaSO4) uS/cm		4979

Chemtest

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Tel: 01638 606070

Structural Soils Limited
The Old School
Stillhouse Lane
Bedminster, Bristol
BS3 4EB

FAO John Wild
18 November 2008

Dear John Wild

Test Report Number **56237**
Your Project Reference **Sizewell C - 722201**

Please find enclosed the results of analysis for the samples received 11 November 2008.

All soil samples will be retained for a period of one month and all water samples will be retained for 7 days following the date of the test report. Should you require an extended retention period then please detail your requirements in an email to customerservices@chemtest.co.uk. Please be aware that charges may be applicable for extended sample storage.

If you require any further assistance, please do not hesitate to contact the Customer Services team.

Yours sincerely

[redacted]

Authorised Signatory

☐ Darrell Hall	Laboratory Manager
☐ Phil Hellier	Operations Director
☑ Keith Jones	Technical Development Manager
☐ John Crawford	Quality Manager
☐ Malcolm Avis	Technical Director

UKAS TESTING
2183

Notes to accompany report:

- *The sign < means 'less than'*
- *Tests marked 'U' hold UKAS accreditation*
- *Tests marked 'M' hold MCertS (and UKAS) accreditation*
- *Tests marked 'N' do not currently hold UKAS accreditation*
- *Tests marked 'S' were subcontracted to an approved laboratory*
- *n/e means 'not evaluated'*
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Structural Soils Limited
The Old School
Stillhouse Lane
Bedminster, Bristol
BS3 4EB

FAO John Wild

LABORATORY TEST REPORT

Results of analysis of 6 samples
received 11 November 2008

Sizewell C - 722201

Chemtest

Report Date
18 November 2008

Login Batch No					56237					
Chemtest LIMS ID					AD62445	AD62446	AD62447	AD62448	AD62449	AD62450
Sample ID					BH9	BH9	BH14	BH21	BH21	BH22
Sample No					95282	95283	95285	95287	95288	95289
Depth					6.5	8.5	8.5	8.5	10	5.5
Matrix					*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*
SOP↓	Determinand↓	CAS No↓	Units↓	*						
2220	Chloride (extractable)	16887006	g l^{-1}	M	2.9	0.94	0.063	1.9	2.1	0.69
2410	Sodium (extractable)	7440235	mg kg^{-1}	N	1400	1500	1200	920	730	650
2430	Sulfate (total)	14808798	mg kg^{-1}	M	4900	7200	3900	4400	13000	4200
	Calcium (extractable)	7440702	mg kg^{-1}	N	4600	2500	5400	1900	2000	1200
	Iron	7439896	mg kg^{-1}	N	13000	21000	10000	11000	30000	13000
	Magnesium (total)	7439954	mg kg^{-1}	N	4500	1300	325	2300	<2500	4000
	Sulfur (total TRL report 447)		%	N	1.3	1.2	0.99	0.75	2.3	0.59
2010	pH		-	M	7.4	6.9	6.9	6.7	5.6	7.5
2610	Loss on ignition		%	N	42.1	69	73.8	64.9	56.3	47

All tests undertaken between 13-Nov-2008 and 18-Nov-2008

* Accreditation status

This report should be interpreted in conjunction with the notes on the accompanying cover page

Chemtest

Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070

Structural Soils Limited
The Old School
Stillhouse Lane
Bedminster, Bristol
BS3 4EB

FAO John Wild
07 November 2008

Dear John Wild

Test Report Number **74725**
Your Project Reference **Sizewell SI**

Please find enclosed the results of analysis for the samples received 31 October 2008.

All soil samples will be retained for a period of one month and all water samples will be retained for 7 days following the date of the test report. Should you require an extended retention period then please detail your requirements in an email to customerservices@chemtest.co.uk. Please be aware that charges may be applicable for extended sample storage.

If you require any further assistance, please do not hesitate to contact the Customer Services team.

Yours sincerely

[redacted]

Authorised Signatory

- Darrell Hall — Laboratory Manager
- Phil Hellier — Operations Director
- Keith Jones — Technical Development Manager
- John Crawford — Quality Manager
- Malcolm Avis — Technical Director

2183

Notes to accompany report:

- *The sign < means 'less than'*
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- *Tests marked 'M' hold MCertS (and UKAS) accreditation*
- *Tests marked 'N' do not currently hold UKAS accreditation*
- *Tests marked 'S' were subcontracted to an approved laboratory*
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- *I/s means 'insufficient sample'*
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- *The results relate only to the items tested*

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Stillhouse Lane
Bedminster, Bristol
BS3 4EB

FAO John Wild
13 November 2008

Dear John Wild

Test Report Number **92698a Amended Test Report**
Your Project Reference **Sizewell C - 722201**

Please find enclosed the results of analysis for the samples received 7 November 2008.

Please find Pyritic iron results included. Disregard all previous reports.

All soil samples will be retained for a period of one month and all water samples will be retained for 7 days following the date of the test report. Should you require an extended retention period then please detail your requirements in an email to customerservices@chemtest.co.uk. Please be aware that charges may be applicable for extended sample storage.

If you require any further assistance, please do not hesitate to contact the Customer Services team.

Yours sincerely

[redacted]

Authorised Signatory

☐ Darrell Hall	Laboratory Manager
☐ Phil Hellier	Operations Director
☑ Keith Jones	Technical Development Manager
☐ John Crawford	Quality Manager
☐ Malcolm Avis	Technical Director

Notes to accompany report:

- *The sign < means 'less than'*
- *Tests marked N do not currently hold accreditation*
- *Test marked S were subcontracted to an approved laboratory*
- *ne means 'not evaluated'*
- *I/s means 'insufficient sample'*
- *u/s means 'unsuitable sample'*
- *The results relate only to the items tested*

Structural Soils Limited
The Old School
Stillhouse Lane
Bedminster, Bristol
BS3 4EB

FAO John Wild

AMENDED LABORATORY TEST REPORT

Results of analysis of 13 samples
received 07 November 2008

Sizewell C - 722201

Chemtest

Report Date
13 November 2008

Login Batch No 92698

Chemtest LIMS ID					AD61737	AD61738	AD61739	AD61740	AD61741	AD61742	AD61743	AD61744
Sample ID					BH1	BH3	BH5	BH6	BH8	BH10	BH12	BH13
Sample No												
Depth					6.5	6.9	8	5.4	5.8	7	7	9.5
Matrix					*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*
SOP↓	Determinand↓	CAS No↓	Units↓	*								
2430	Iron	7439896	mg kg^{-1}	N	17000	3900	25000	15000	16000	22000	20000	22000
	Iron Pyritic	7439896	mg kg^{-1}	N	5000	1500	7000	2000	9300	7000	8000	10000

All tests undertaken between 10-Nov-2008 and 13-Nov-2008

* Accreditation status

This report should be interpreted in conjunction with the notes on the accompanying cover page

Structural Soils Limited
The Old School
Stillhouse Lane
Bedminster, Bristol
BS3 4EB

FAO John Wild

AMENDED LABORATORY TEST REPORT

Results of analysis of 13 samples
received 07 November 2008

Sizewell C - 722201

Chemtest

Report Date
13 November 2008

Login Batch No					92698				
Chemtest LIMS ID					AD61745	AD61746	AD61747	AD61748	AD61749
Sample ID					BH16	BH17	BH19	BH20	BH25
Sample No									
Depth					7.2	10.5	8.9	10	8
Matrix					*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*
SOP↓	Determinand↓	CAS No↓	Units↓						
2430	Iron	7439896	mg kg-1	N	13000	24000	9200	25000	11000
	Iron Pyritic	7439896	mg kg-1	N	6100	6000	1800	7000	4000

All tests undertaken between 10-Nov-2008 and 13-Nov-2008

This report should be interpreted in conjunction with the notes on the accompanying cover page

Chemtest

Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070

Structural Soils Limited
The Old School
Stillhouse Lane
Bedminster, Bristol
BS3 4EB

FAO John Wild
08 January 2009

Dear John Wild

Test Report Number **92698a Amended Test Report**
Your Project Reference **Sizewell C - 722201**

Please find enclosed the results of analysis for the samples received 7 November 2008.

Please find results for additional testing as requested. Disregard all previous reports.

All soil samples will be retained for a period of one month and all water samples will be retained for 7 days following the date of the test report. Should you require an extended retention period then please detail your requirements in an email to customerservices@chemtest.co.uk. Please be aware that charges may be applicable for extended sample storage.

If you require any further assistance, please do not hesitate to contact the Customer Services team.

Yours sincerely

[redacted]

Authorised Signatory

- ☐ Darrell Hall — Laboratory Manager
- ☐ Phil Hellier — Operations Director
- ☒ Keith Jones — Technical Development Manager
- ☐ John Crawford — Quality Manager
- ☐ Malcolm Avis — Technical Director

UKAS TESTING
2183

Notes to accompany report:

- *The sign < means 'less than'*
- *Tests marked 'U' hold UKAS accreditation*
- *Tests marked 'M' hold MCertS (and UKAS) accreditation*
- *Tests marked 'N' do not currently hold UKAS accreditation*
- *Tests marked 'S' were subcontracted to an approved laboratory*
- *n/e means 'not evaluated'*
- *i/s means 'insufficient sample'*
- *u/s means 'unsuitable sample'*
- *Comments or interpretations are beyond the scope of UKAS accreditation*
- *The results relate only to the items tested*

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Bedminster, Bristol
BS3 4EB

FAO John Wild

AMENDED LABORATORY TEST REPORT

Results of analysis of 13 samples
received 07 November 2008

Sizewell C - 722201

Chemtest

Report Date
08 January 2009

Login Batch No 92698

Chemtest LIMS ID					AD61737	AD61738	AD61739	AD61740	AD61741	AD61742	AD61743	AD61744
Sample ID					BH1	BH3	BH5	BH6	BH8	BH10	BH12	BH13
Sample No												
Depth					6.5	6.9	8	5.4	5.8	7	7	9.5
Matrix					*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*
SOP↓	Determinand↓	CAS No↓	Units↓	*								
2020	Electrical Conductivity (2:1)	EC	µS cm⁻¹	U					7500			
2220	Chloride (extractable)	16887006	g l⁻¹	M					2.5			
2410	Sodium (extractable)	7440235	mg kg⁻¹	N					1900			
2430	Iron	7439896	mg kg⁻¹	N	17000	3900	25000	15000	16000	22000	20000	22000
	Iron Pyritic	7439896	mg kg⁻¹	N	5000	1500	7000	2000	9300	7000	8000	10000
2010	pH		-	M					6.8			
2610	Loss on ignition		%	N					54.4			

All tests undertaken between 10-Nov-2008 and 6-Jan-2009

* Accreditation status

This report should be interpreted in conjunction with the notes on the accompanying cover page

Structural Soils Limited
The Old School
Stillhouse Lane
Bedminster, Bristol
BS3 4EB

FAO John Wild

AMENDED LABORATORY TEST REPORT

Results of analysis of 13 samples
received 07 November 2008

Sizewell C - 722201

Chemtest

Report Date
08 January 2009

Login Batch No					92698				
Chemtest LIMS ID					AD61745	AD61746	AD61747	AD61748	AD61749
Sample ID					BH16	BH17	BH19	BH20	BH25
Sample No									
Depth					7.2	10.5	8.9	10	8
Matrix					*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*
SOP↓	Determinand↓	CAS No↓	Units↓						
2020	Electrical Conductivity (2:1)	EC	µS cm⁻¹	U	9800	5700			2600
2220	Chloride (extractable)	16887006	g l⁻¹	M	7.5	2.8			0.11
2410	Sodium (extractable)	7440235	mg kg⁻¹	N	2800	520			83
2430	Iron	7439896	mg kg⁻¹	N	13000	24000	9200	25000	11000
	Iron Pyritic	7439896	mg kg⁻¹	N	6100	6000	1800	7000	4000
2010	pH		-	M	8.9	4.3			5.5
2610	Loss on ignition		%	N	58.8	54.3			74.8

All tests undertaken between 10-Nov-2008 and 6-Jan-2009

This report should be interpreted in conjunction with the notes on the accompanying cover page

Chemtest

Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070

Structural Soils Limited
The Old School
Stillhouse Lane
Bedminster, Bristol
BS3 4EB

FAO John Wild
24 November 2008

Dear John Wild

Test Report Number **92716a Amended Test Report**
Your Project Reference **Sizewell C - 722201**

Please find enclosed the results of analysis for the samples received 10 November 2008.

Please find results for pyritic iron included. Disregard all previous reports.

All soil samples will be retained for a period of one month and all water samples will be retained for 7 days following the date of the test report. Should you require an extended retention period then please detail your requirements in an email to customerservices@chemtest.co.uk. Please be aware that charges may be applicable for extended sample storage.

If you require any further assistance, please do not hesitate to contact the Customer Services team.

Yours sincerely

[redacted]

Authorised Signatory

☑ Darrell Hall	Laboratory Manager
☐ Phil Hellier	Operations Director
☐ Keith Jones	Technical Development Manager
☐ John Crawford	Quality Manager
☐ Malcolm Avis	Technical Director

Notes to accompany report:

- *The sign < means 'less than'*
- *Tests marked N do not currently hold accreditation*
- *Test marked S were subcontracted to an approved laboratory*
- *ne means 'not evaluated'*
- *i/s means 'insufficient sample'*
- *u/s means 'unsuitable sample'*
- *The results relate only to the items tested*

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The Old School
Stillhouse Lane
Bedminster, Bristol
BS3 4EB

FAO John Wild

AMENDED LABORATORY TEST REPORT

Results of analysis of 4 samples received 10 November 2008

Sizewell C - 722201

Chemtest

Report Date
24 November 2008

Login Batch No					92716			
Chemtest LIMS ID					AD62132	AD62133	AD62134	AD62135
Sample ID					BH9	BH14	BH21	BH22
Sample No					95281	95284	95286	95290
Depth					5	8	5	10
Matrix					*SOIL*	*SOIL*	*SOIL*	*SOIL*
SOP↓	Determinand↓	CAS No↓	Units↓	*				
2430	Iron	7439896	mg kg-1	N	20000	12000	11000	25000
	Iron Pyritic	7439896	mg kg-1	N	10000	9000	8100	15000

All tests undertaken between 10-Nov-2008 and 24-Nov-2008

* Accreditation status

This report should be interpreted in conjunction with the notes on the accompanying cover page

Chemtest

Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070

Structural Soils Limited
The Old School
Stillhouse Lane
Bedminster, Bristol
BS3 4EB

FAO John Wild
04 December 2008

Dear John Wild

Test Report Number **92941**
Your Project Reference **Sizewell C - 722201**

Please find enclosed the results of analysis for the samples received 28 November 2008.

All soil samples will be retained for a period of one month and all water samples will be retained for 7 days following the date of the test report. Should you require an extended retention period then please detail your requirements in an email to customerservices@chemtest.co.uk. Please be aware that charges may be applicable for extended sample storage.

If you require any further assistance, please do not hesitate to contact the Customer Services team.

Yours sincerely

[redacted]

Authorised Signatory

☐ Darrell Hall	Laboratory Manager
☐ Phil Hellier	Operations Director
☑ Keith Jones	Technical Development Manager
☐ John Crawford	Quality Manager
☐ Malcolm Avis	Technical Director

Notes to accompany report:

- *The sign < means 'less than'*
- *Tests marked N do not currently hold accreditation*
- *Test marked S were subcontracted to an approved laboratory*
- *ne means 'not evaluated'*
- *i/s means 'insufficient sample'*
- *u/s means 'unsuitable sample'*
- *The results relate only to the items tested*

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Structural Soils Limited
The Old School
Stillhouse Lane
Bedminster, Bristol
BS3 4EB

FAO John Wild

LABORATORY TEST REPORT

Results of analysis of 1 sample
received 28 November 2008

Sizewell C - 722201

Chemtest

Report Date
04 December 2008

Login Batch No					**92941**
Chemtest LIMS ID					AD67278
Sample ID					BH24
Sample No					
Depth					7m
Matrix					*SOIL*
SOP↓	Determinand↓	CAS No↓	Units↓	*	
2430	Iron	7439896	mg kg-1	N	15000
	Iron Pyritic	7439896	mg kg-1	N	9200

All tests undertaken between 28-Nov-2008 and 4-Dec-2008

* Accreditation status

This report should be interpreted in conjunction with the notes on the accompanying cover page

Chemtest

Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070

Structural Soils Limited
The Old School
Stillhouse Lane
Bedminster, Bristol
BS3 4EB

FAO John Wild
24 February 2009

Dear John Wild

Test Report Number **93507**
Your Project Reference **Sizewell C - 722201**

Please find enclosed the results of analysis for the samples received 16 February 2009.

All soil samples will be retained for a period of one month and all water samples will be retained for 7 days following the date of the test report. Should you require an extended retention period then please detail your requirements in an email to customerservices@chemtest.co.uk. Please be aware that charges may be applicable for extended sample storage.

If you require any further assistance, please do not hesitate to contact the Customer Services team.

Yours sincerely

[redacted]

Authorised Signatory

◻ Darrell Hall	Laboratory Manager
◻ Phil Hellier	Operations Director
◻ Keith Jones	Technical Development Manager
◻ John Crawford	Quality Manager
◻ Malcolm Avis	Technical Director

Notes to accompany report:

- *The sign < means 'less than'*
- *Tests marked N do not currently hold accreditation*
- *Test marked S were subcontracted to an approved laboratory*
- *ne means 'not evaluated'*
- *i/s means 'insufficient sample'*
- *u/s means 'unsuitable sample'*
- *The results relate only to the items tested*

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Structural Soils Limited
The Old School
Stillhouse Lane
Bedminster, Bristol
BS3 4EB

FAO John Wild

LABORATORY TEST REPORT

Results of analysis of 12 samples
received 16 February 2009

Sizewell C - 722201

Chemtest

Report Date
24 February 2009

Login Batch No					93507							
Chemtest LIMS ID					AD81392	AD81393	AD81394	AD81395	AD81396	AD81397	AD81398	AD81399
Sample ID					BH1	BH3	BH5	BH9	10A	12	13A	14
Sample No												
Depth					6.5m	6.9m	8m	5m	7m	7m	6.5m	8m
Matrix					*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*
SOP↓	Determinand↓	CAS No↓	Units↓	*								
2420	Electrical Conductivity (topsoil)	7439954	µS cm^{-1}		10100	2800	18000	8000	2600	10500	8090	2600

All tests undertaken between 17-Feb-2009 and 17-Feb-2009

* Accreditation status

This report should be interpreted in conjunction with the notes on the accompanying cover page

Structural Soils Limited
The Old School
Stillhouse Lane
Bedminster, Bristol
BS3 4EB

FAO John Wild

LABORATORY TEST REPORT

Results of analysis of 12 samples
received 16 February 2009

Sizewell C - 722201

Chemtest

Report Date
24 February 2009

Login Batch No				93507			
Chemtest LIMS ID				AD81400	AD81401	AD81402	AD81403
Sample ID				19A	20	21	22
Sample No							
Depth				8.9m	10m	5m	10m
Matrix				*SOIL*	*SOIL*	*SOIL*	*SOIL*
SOP↓	Determinand↓	CAS No↓	Units↓				
2420	Electrical Conductivity (topsoil)	7439954	µS cm-1	6800	7040	8300	5000

All tests undertaken between 17-Feb-2009 and 17-Feb-2009

* Accreditation status

This report should be interpreted in conjunction with the notes on the accompanying cover page

Structural Soils Limited
The Old School
Stillhouse Lane
Bedminster, Bristol
BS3 4EB

FAO John Wild

LABORATORY TEST REPORT

Results of analysis of 27 samples
received 31 October 2008

Sizewell S|

Chemtest

Report Date
10 November 2008

Login Batch No 74725

Chemtest DMS ID					AD59915	AD59916	AD59917	AD59918	AD59919	AD59920	AD59921	AD59922
Sample ID					94876	94876	94879	94262	93846	93847	93849	93765
Sample No					BH12	BH12	BH13A	BH24	BH19A	BH19A	BH19A	BH20
Depth					5.3	11	8	8	5.5	7.5	9.4	8.5
Matrix					*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*
SOP↓	Determinand↓	CAS No↓	Units↓	*								
2220	Chloride (extractable)	16887006	g l-1	M	4.1	1.7	2.8	0.079	3.4	2.8	2.8	2.7
2410	Sodium (extractable)	7440235	mg kg-1	N	3300	3700	680	1100	980	620	2500	680
2430	Sulfate (total)	14808798	%	U	7.8	15	16	3.8	3.9	6.2	16	7.5
	Calcium (extractable)	7440702	mg kg-1	N	5500	8700	6400	9200	4700	11000	8500	13000
	Iron	7439896	mg kg-1	N	11000	21000	17000	6700	3300	6900	19000	13000
	Magnesium (total)	7439954	mg kg-1	N	15000	5000	6000	4300	3800	2500	16000	9800
	Sulfur (total TRL report 447)		%	N	4.3	9.1	3.6	2.6	2.1	4.5	12	4.2
2010	pH		-	M	7.2	5.8	6.2	6.4	6.9	6.6	5.2	6.2
2610	Loss on ignition		%	N	66.4	65.3	40.5	71.8	69.1	63.7	46.5	45.7

All tests undertaken between 04-Nov-2008 and 7-Nov-2008

* Accreditation status

This report should be interpreted in conjunction with the notes on the accompanying cover page

Structural Soils Limited
The Old School
Stillhouse Lane
Bedminster, Bristol
BS3 4EB

FAO John Wild

LABORATORY TEST REPORT

Chemtest

Results of analysis of 27 samples
received 31 October 2008

Report Date
10 November 2008

Sizewell SI

Login Batch No 74725

Chemtest LIMS ID					AD59923	AD59924	AD59925	AD59926	AD59927	AD59928	AD59929	AD59930
Sample ID					93868	93871	93872	93874	93875	93877	93878	93879
Sample No					BH10A	BH03	BH03	BH16	BH16	BH8	BH8	BH6
Depth					5.5	7.8	8.3	8	9.5	6.2	9.5	4.8
Matrix					SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
SOP↓	Determinand↓	CAS No↓	Units↓	*								
2220	Chloride (extractable)	16887006	g l-1	M	0.2	0.68	1.1	2.9	1.5	2.9	2.4	0.21
2410	Sodium (extractable)	7440235	mg kg-1	N	530	5800	700	3500	2100	490	2700	480
2430	Sulfate (total)	14808798	%	U	4.6	3.6	10	7.1	14	10	3.4	5.6
	Calcium (extractable)	7440702	mg kg-1	N	4900	1300	16000	12000	18000	8200	11000	5000
	Iron	7439896	mg kg-1	N	4900	1300	16000	12000	18000	8200	11000	5000
	Magnesium (total)	7439954	mg kg-1	N	11000	33000	12000	6500	7300	5300	7800	9000
	Sulfur (total TRL report 447)		%	N	3.7	7.0	2.2	4.7	3.9	0.55	8.7	5.6
2010	pH		-	M	6.0	6.2	5.6	6.6	6.1	7.1	6.2	5.6
2610	Loss on ignition		%	N	64	64.8	64.6	35.7	62.4	26	70	63.6

All tests undertaken between 04-Nov-2008 and 7-Nov-2008

* Accreditation status

This report should be interpreted in conjunction with the notes on the accompanying cover page

Structural Soils Limited
The Old School
Stillhouse Lane
Bedminster, Bristol
BS3 4EB

FAO John Wild

LABORATORY TEST REPORT

Results of analysis of 27 samples received 31 October 2008

Sizewell SI

Chemtest

Report Date
10 November 2008

Login Batch No 74726

Chemtest LIMS ID					AD59931	AD59932	AD59933	AD59934	AD59935	AD59936	AD59937	AD59938
Sample ID					93881	93882	93479	93481	93488	93489	93491	93492
Sample No					BH6	BH6	BH1	BH1	BH5	BH5	BH17	BH17
Depth					6	7.2	5.2	8	6.45	6	8.5	9.5
Matrix					*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*	*SOIL*
SOP↓	Determinand↓	CAS No↓	Units↓	*								
2220	Chloride (extractable)	16887006	g l-1	M	0.21	0.69	2.8	1.9	2.3	2.2	2.1	1.4
2410	Sodium (extractable)	7440235	mg kg-1	N	350	460	600	380	440	500	530	18000
2430	Sulfate (total)	14808798	%	U	15	8.3	11	7.9	6.8	6.5	18	4.5
	Calcium (extractable)	7440702	mg kg-1	N	7000	19000	12000	15000	8700	2800	3000	6400
	Iron	7439896	mg kg-1	N	7000	19000	12000	15000	8700	2800	3000	18000
	Magnesium (total)	7439954	mg kg-1	N	8500	9300	9000	8000	6500	6300	7300	31000
	Sulfur (total TRL report 447)		%	N	2.7	2.2	5.3	3.1	5.9	4.1	3.7	2.3
2010	pH		-	M	6.7	5.5	5.4	5.8	6.0	7.0	5.5	6.6
2610	Loss on ignition		%	N	49.3	68.7	41.3	64.7	51.7	82.1	37.2	43.5

All tests undertaken between 04-Nov-2008 and 7-Nov-2008

* Accreditation status

This report should be interpreted in conjunction with the notes on the accompanying cover page

Structural Soils Limited
The Old School
Stillhouse Lane
Bedminster, Bristol
BS3 4EB

LABORATORY TEST REPORT

Results of analysis of 27 samples
received 31 October 2008

Chemtest

Report Date
10 November 2008

FAO John Wild

Sizewell SI

Login Batch No 74725

Chemtest LIMS ID				AD59939	AD59940	AD59941
Sample ID				93494	93495	93497
Sample No				BH25	BH25	BH25
Depth				7	7.5	8.15
Matrix				*SOIL*	*SOIL*	*SOIL*
SOP↓	Determinand↓	CAS No↓	Units↓	*		
2220	Chloride (extractable)	16887006	g l-1	M	0.062	0.091	0.03
2410	Sodium (extractable)	7440235	mg kg-1	N	300	1800	7000
2430	Sulfate (total)	14808798	%	U	4.8	3.0	3.2
	Calcium (extractable)	7440702	mg kg-1	N	5200	4900	24000
	Iron	7439896	mg kg-1	N	5300	4900	20000
	Magnesium (total)	7439954	mg kg-1	N	2800	1700	14000
	Sulfur (total TRL report 447)		%	N	1.7	2.7	2.5
2010	pH		-	M	6.9	6.3	6.9
2610	Loss on ignition		%	N	57.1	52.5	32.8

All tests undertaken between 04-Nov-2008 and 7-Nov-2008

* Accreditation status

This report should be interpreted in conjunction with the notes on the accompanying cover page

APPENDIX E

(i) Monitoring Results

GAS MONITORING RESULTS

Contract No: 722201
Contract Name: SIZEWELL C

Contract Engineer: JOHN WILD
Date: 13/10/2008

STRUCTURAL SOILS LTD

Weather Conditions: BRIGHT,CLOUDY Atmospheric Wind Conditions: Light ALM Pressure: Rising/Constant/Falling	Equipment used: LMSxi	Data Collected By: IAN WARNE	Input Checked by (sign): [redacted]
Ground Conditions (eg dry, flooded, frost, snow etc):			

Location	Flow (l/hr) (peak and residual) [ ] = time period	Atmospheric Pressure (mb)	BH Pressure (mb)	Time		% by volume in air			LEL (%)	(ppm)			Depth range to water (m bgl) (for a period of time (specify) following cap removal)	Well depth (mbgl) Current and (as installed)	Top of Response zone (m bgl)	Notes (eg, samples taken, dual installation, odours, sheens, broken headworks).
				hours mins	secs	Methane	Carbon Dioxide	Oxygen		H2S	CO	PID				
BH6	2.4 (Approx 3 secs)	1014	1022		0 (initial)	<0.1	<0.1	20.6					-	6.25		Water came up tube.
	0.1	1014	1014		15	77.0	2.0	1.4								
					30	76.0	2.0	1.4								
					60	72.0	1.9	2.1								
					90	69.0	1.8	2.8								
					120	65.0	1.7	3.8								
					165	62.0	1.7	3.8								
					240	-	-	-								

GAS MONITORING RESULTS

Contract No: 722201
Contract Name: SIZEWELL C

Contract Engineer: JOHN WILD
Date: 14/10/2008

STRUCTURAL SOILS LTD

Weather Conditions: BRIGHT,CLOUDY Atmospheric Wind Conditions: Light ALM Pressure: Rising/Constant/Falling	Equipment used: LMSxl	Data Collected By: IAN WARNE	Input Checked by (sign): [redacted]
Ground Conditions (eg dry, flooded, frost, snow etc):			

Location	Flow (l/hr) (peak and residual) [ ] = time period	Atmospheric Pressure (mb)	BH Pressure (mb)	Time		% by volume in air			LEL (%)	(ppm)			Depth range to water (m bgl) (for a period of time (specify) following bp removal)	Well depth (mbgl) Current and (as installed)	Top of Response zone (m bgl)	Notes (eg. samples taken, dual installation, odours, sheens, broken headworks).
				hours mins	secs	Methane	Carbon Dioxide	Oxygen		H2S	CO	PID				
BH5	2.8 (9 secs)	1019	1027		0 (initial)	<0.1	<0.1	20.8					0.74	6.15		Water came up tubs.
	0.1	1019	1019		15	42.5	1.2	9.3								
					30	42.0	1.2	9.2								
					60	41.0	1.2	9.5								
					90	39.0	1.1	9.8								
					120	36.5	0.8	11.0								
					145	35.0	0.8	11.1								
					240	-	-	-								
					0 (initial)											
					15											
					30											
					60											
					90											
					120											
					145											
					240											
					0 (initial)											
					15											
					30											
					60											
					90											
					120											
					180											
					240											
					0 (initial)											
					15											
					30											
					60											
					90											
					120											
					180											
					240											
					300											
					360											

GAS MONITORING RESULTS

Contract No: 722201
Contract Name: SIZEWELL C

Contract Engineer: JOHN WILD
Data: 15/10/2008

STRUCTURAL SOILS LTD

Weather Conditions: BRIGHT,CLOUDY Atmospheric Wind Conditions: Light ALM Pressure: Rising/Constant/Falling	Equipment used: LMSxi	Data Collected By: IAN WARNE	Input Checked by (sign): [redacted]
Ground Conditions (eg dry, flooded, frost, snow etc):			

Location	Flow (l/hr) (peak and residual) [ ] = time period	Atmospheric Pressure (mb)	BH Pressure (mb)	Time		% by volume in air			LEL (%)	(ppm)			Depth range to water (m bgl) (for a period of time (specify) following tap removal)	Well depth (mbgl) Current and [as installed]	Top of Response zone (m bgl)	Notes (eg, samples taken, dual installation, odours, sheens, broken headworks).
				hours mins	secs	Methane	Carbon Dioxide	Oxygen		H2S	CO	PID				
BH5	3.4 (8 secs)	1009	1020		0 (initial)	<0.1	<0.1	20.8					0.72	8.09		Water came up tube.
	0.1	1009	1009		15	44.5	1.2	8.6								
					30	44.5	1.2	8.3								
					60	43.0	1.1	8.6								
					90	42.0	1.1	8.9								
					120	39.5	1.0	9.5								
					160	35.0	0.8	10.7								
					240	-	-	-								
BH19	-0.9 (1 sec)	1009	1008		0 (initial)	<0.1	<0.1	20.8					0.82	8.38		
	0.1	1009	1009		15	7.6	0.8	19.4								
					30	8.7	0.8	19.0								
					60	8.2	0.7	19.1								
					90	8.0	0.7	19.1								
					120	9.1	0.9	18.9								
					145	10.6	1.0	18.4								
					240	8.2	0.7	19.0								
					300	7.4	0.5	19.2								
					360	7.4	0.5	19.3								

GAS MONITORING RESULTS

Contract No: 722201
Contract Name: SIZEWELL C

Contract Engineer: JOHN WILD
Date: 16/10/2008

STRUCTURAL SOILS LTD

Weather Conditions: BRIGHT,SUNNY,CLEAR
Atmospheric Wind Conditions: Light
ALM Pressure: Rising/Constant/Falling

Equipment used: LMSxi

Data Collected By: IAN WARNE

Input Checked by (sign): [redacted]

Ground Conditions (eg dry, flooded, frost, snow etc): DAMP

Location	Flow (l/hr) (peak and residual) [ ] = time period	Atmospheric Pressure (mb)	BH Pressure (mb)	Time		% by volume in air			LEL (%)	(ppm)			Depth range to water (m bgl) (for a period of time (specify) following tap removal)	Well depth (mbgl) Current and [as installed]	Top of Response zone (m bgl)	Notes (eg, samples taken, dust installation, odours, sheens, broken headworks).
				hours mins	secs	Methane	Carbon Dioxide	Oxygen		H2S	CO	PID				
BH5	18.5 (19 secs)	1014	1036		0 (initial)	<0.1	<0.1	20.8					0.75	6.07		Water came up tube.
	0.1	1014	1014		15	41.0	0.9	9.6								
					30	40.0	0.9	9.4								
					60	39.0	0.9	9.7								
					90	38.5	0.8	9.8								
					120	39.5	0.8	9.5								
					163	39.0	0.8	9.4								
					240	-	-	-								
BH19	-0.3	1014	1013		0 (initial)	<0.1	<0.1	20.8					0.81	6.37		
	0.1	1014	1014		15	25.0	3.4	14.8								
					30	22.0	3.1	15.0								
					60	19.0	2.4	16.1								
					90	17.5	2.1	16.6								
					120	16.0	2.0	17.0								
					180	14.0	1.7	17.6								
					240	11.5	1.4	18.1								
					300	11.0	1.3	18.3								
					360	9.8	1.1	18.6								
					420	11.0	1.3	18.3								

GAS MONITORING RESULTS

Contract No: 722201
Contract Name: SIZEWELL C

Contract Engineer: JOHN WILD
Date: 17/10/2008

STRUCTURAL SOILS LTD

Weather Conditions: BRIGHT,SUNNY,CLEAR
Atmospheric Wind Conditions: Light
ALM Pressure: Rising/Constant/Falling

Equipment used: LMSxi

Data Collected By: IAN WARNE

Input Checked by (sign): [redacted]

Ground Conditions (eg dry, flooded, frost, snow etc): DAMP

Location	Flow (l/hr) (peak and residual) [ ] = time period	Atmospheric Pressure (mb)	BH Pressure (mb)	Time		% by volume in air			LEL (%)	(ppm)			Depth range to water (m bgl) (for a period of time (specify) following tap removal)	Well depth (mbgl) Current and [as installed]	Top of Response zone (m bgl)	Notes (eg, samples taken, dual installation, odours, sheens, broken headworks).
				hours mins	secs	Methane	Carbon Dioxide	Oxygen		H2S	CO	PID				
BH5	>28.0 (20 secs)	1020	-3000		0 (initial)	<0.1	<0.1	20.8					0.77	6.08		Water came up tube.
	0.1	1020	1020		15	32.5	0.6	12.3								
					30	33.0	0.6	12.0								
					60	32.5	0.5	12.1								
					90	32.0	0.5	12.3								
					120	31.5	0.5	12.6								
					165	31.5	0.5	12.8								
					240	-	-	-								
BH19	0.3 (1 sec)	1020	1021		0 (initial)	<0.1	<0.1	20.8					0.83	8.32		
	0.1	1020	1020		15	16.5	1.9	17.2								
					30	15.0	1.8	17.3								
					60	12.0	1.4	18.1								
					90	12.5	1.2	18.4								
					120	15.0	1.1	18.6								
					180	17.5	0.7	18.8								
					240	16.5	0.5	19.0								
					300	17.0	0.5	19.1								

GAS MONITORING RESULTS

Contract No: 722201
Contract Name: SIZEWELL C

Contract Engineer: JOHN WILD
Date: 20/10/2008

STRUCTURAL SOILS LTD

Weather Conditions: CLOUDY, OVERCAST Atmospheric Wind Conditions: Light/Medium ALM Pressure: Rising/Constant/Falling				Equipment used: LMSxi/Firstcheck (PID)						Data Collected By: IAN WARNE				Input Checked by (sign): [redacted]		
Ground Conditions (eg dry, flooded, frost, snow etc):																
Location	Flow (l/hr) (peak and residual) [ ] = time period	Atmospheric Pressure (mb)	BH Pressure (mb)	Time		% by volume in air			LEL (%)	(ppm)			Depth range to water (m bgl) (for a period of time (specify) following tap removal)	Well depth (mbgl) Current and [as installed]	Top of Response zone (m bgl)	Notes (eg, samples taken, dual installation, odours, sheens, broken headworks).
				hours mins	secs	Methane	Carbon Dioxide	Oxygen		H2S	CO	PID				
BH6	>30 (13 secs)	1006	-3000		0 (initial)	<0.1	<0.1	20.8		<0.1	<0.1		0.76	6.04		Water came up tube
	0.1	1006	1006		15	62.0	1.1	4.4		<0.1	<0.1					
					30	61.0	1.1	4.1		<0.1	<0.1					
					60	59.0	1.0	4.4		<0.1	<0.1					
					90	58.0	1.0	4.8		<0.1	<0.1					
					120	56.0	0.9	5.2		<0.1	<0.1					
					171	53.5	0.8	5.6		-	-					
					240	-	-	-		-	-					
BH19	0.1	1006	1006		0 (initial)	<0.1	<0.1	20.8		<0.1	<0.1		0.78	8.31		
	0.1	1006	1006		15	23.0	2.9	15.4		<0.1	<0.1					
					30	21.5	2.8	15.9		<0.1	<0.1					
					60	17.0	2.0	17.1		<0.1	<0.1					
					90	16.5	1.8	17.6		<0.1	<0.1					
					120	19.5	1.6	18.0		<0.1	<0.1					
					180	24.0	1.1	18.6		<0.1	<0.1					
					240	22.5	0.5	19.1		<0.1	<0.1					
					300	19.5	0.5	19.2		<0.1	<0.1					
					360	20.5	0.5	19.2		<0.1	<0.1					

GAS MONITORING RESULTS

Contract No: 722201
Contract Name: SIZEWELL C

Contract Engineer: JOHN WILD
Date: 21/10/2008

STRUCTURAL SOILS LTD

Weather Conditions: BRIGHT, CLOUDY
Atmospheric Wind Conditions: Light
ALM Pressure: Rising/Constant/Falling

Equipment used: LMSxi/Firstcheck (PID)

Data Collected By: IAN WARNE

Input Checked by (sign): [redacted]

Ground Conditions (eg dry, flooded, frost, snow etc): Damp

Location	Flow (l/hr) (peak and residual) [ ] = time period	Atmospheric Pressure (mb)	BH Pressure (mb)	Time		% by volume in air			LEL (%)	(ppm)			Depth range to water (m bgl) (for a period of time (specify) following tap removal)	Well depth (mbgl) Current and (as installed)	Top of Response zone (m bgl)	Notes (eg, samples taken, dual installation, odours, sheens, broken headworks).
				hours mins	secs	Methane	Carbon Dioxide	Oxygen		H2S	CO	PID				
BH5	>30.0 (9 secs)	1008	-3000		0 (initial)	<0.1	<0.1	20.8		<0.1	<0.1		0.75	6.03		Water came up tube.
	0.1	1008	1006		15	36.0	0.5	11.0		<0.1	<0.1					
					30	35.0	0.5	10.7		<0.1	<0.1					
					60	34.0	0.5	10.9		<0.1	<0.1					
					90	32.5	0.5	11.3		<0.1	<0.1					
					120	32.0	0.5	11.6		<0.1	<0.1					
					152	31.5	0.5	11.8		<0.1	<0.1					
					240	-	-	-		-	-					
BH19	-0.3	1008	1007		0 (initial)	<0.1	<0.1	20.8		<0.1	<0.1		0.61	8.32		
	0.1	1008	1008		15	18.0	2.3	16.8		<0.1	<0.1					
					30	16.0	2.1	17.1		<0.1	<0.1					
					60	13.0	1.7	17.7		<0.1	<0.1					
					90	11.0	1.4	18.3		<0.1	<0.1					
					120	10.5	1.3	18.5		<0.1	<0.1					
					180	9.3	1.1	18.8		<0.1	<0.1					
					240	8.2	0.8	19.2		<0.1	<0.1					
					300	7.3	0.6	19.4		<0.1	<0.1					
					360	6.7	0.5	19.6		<0.1	<0.1					
					420	6.7	0.5	19.6		<0.1	<0.1					

GAS MONITORING RESULTS

Contract No: 722201
Contract Name: SIZEWELL C

Contract Engineer: JOHN WILD
Date: 22/10/2008

STRUCTURAL SOILS LTD

Weather Conditions: BRIGHT, CLEAR, SUNNY
Atmospheric Wind Conditions: Light
ALM Pressure: Rising/Constant/Falling

Equipment used: LMSxi/Firstcheck (PID)

Data Collected By: IAN WARNE

Input Checked by (sign): [redacted]

Ground Conditions (eg dry, flooded, frost, snow etc): Damp

Location	Flow (l/hr) (peak and residual) [ ] = time period	Atmospheric Pressure (mb)	BH Pressure (mb)	Time		% by volume in air			LEL (%)	(ppm)			Depth range to water (m bgl) (for a period of time (specify) following tap removal)	Well depth (mbgl) Current and [as installed]	Top of Response zone (m bgl)	Notes (eg, samples taken, dual installation, odours, sheens, broken headworks).
				hours mins	secs	Methane	Carbon Dioxide	Oxygen		H2S	CO	PID				
BH5	>30.0 (11 secs)	1021	-3000		0 (initial)	<0.1	<0.1	20.8		<0.1	<0.1		0.78	6.03		Water came up tube.
	0.1	1021	1021		15	28.5	0.5	12.7		<0.1	<0.1					
					30	28.0	0.5	12.6		<0.1	<0.1					
					60	26.5	0.4	12.8		<0.1	<0.1					
					90	25.5	0.4	13.2		<0.1	<0.1					
					120	24.0	0.4	13.6		<0.1	<0.1					
					135	23.5	0.4	13.8		<0.1	<0.1					
					240	-	-	-		-	-					
BH19	0.1	1021	1021		0 (initial)	<0.1	<0.1	20.8		<0.1	<0.1		0.83	8.31		
	0.1	1021	1021		15	11.0	1.3	18.5		<0.1	<0.1					
					30	10.0	1.2	18.5		<0.1	<0.1					
					60	9.6	1.1	18.7		<0.1	<0.1					
					90	8.8	0.9	19.0		<0.1	<0.1					
					120	8.1	0.6	19.4		<0.1	<0.1					
					180	7.4	0.5	19.5		<0.1	<0.1					
					240	7.4	0.4	19.8		<0.1	<0.1					
					300	7.4	0.4	19.9		<0.1	<0.1					

GAS MONITORING RESULTS

Contract No: 722201
Contract Name: SIZEWELL C

Contract Engineer: JOHN WILD
Date: 23/10/2008

STRUCTURAL SOILS LTD

Weather Conditions: BRIGHT, CLOUDY Atmospheric Wind Conditions: Medium ALM Pressure: Rising/Constant/Falling	Equipment used: LMSxi/Firstcheck (PID)	Data Collected By: IAN WARNE	Input Checked by (sign): [redacted]
Ground Conditions (eg dry, flooded, frost, snow etc): Damp			

Location	Flow (l/hr) (peak and residual) [ ] = time period	Atmospheric Pressure (mb)	BH Pressure (mb)	Time		% by volume in air			LEL (%)	(ppm)			Depth range to water (m bgl) (for a period of time (specify) following tap removal)	Well depth (mbgl) Current and [as installed]	Top of Response zone (m bgl)	Notes (eg. samples taken, dual installation, odours, sheens, broken headworks).
				hours mins	secs	Methane	Carbon Dioxide	Oxygen		H2S	CO	PID				
BH5	>26.0 (8 secs)	1019	-3000		0 (initial)	<0.1	<0.1	20.8		<0.1	<0.1		0.78	6.03		Water came up tube.
	0.1	1019	1019		15	15.5	0.3	15.9		<0.1	<0.1					
					30	15.0	0.3	15.8		<0.1	<0.1					
					60	14.5	0.3	15.9		<0.1	<0.1					
					90	14.0	0.3	16.1		<0.1	<0.1					
					120	14.0	0.3	16.2		<0.1	<0.1					
					135	14.0	0.3	16.3		<0.1	<0.1					
					240	-	-	-		-	-					
BH19	0.2 (2 secs)	1018	1018		0 (initial)	<0.1	<0.1	20.8		<0.1	<0.1		0.83	8.32		
	0.1	1018	1018		15	31.0	3.4	13.5		<0.1	<0.1					
					30	30.5	3.4	13.3		<0.1	<0.1					
					60	27.0	2.9	14.2		<0.1	<0.1					
					90	25.5	2.6	14.5		<0.1	<0.1					
					120	23.5	2.2	14.9		<0.1	<0.1					
					180	20.5	1.8	15.9		<0.1	<0.1					
					240	21.5	1.9	15.7		<0.1	<0.1					
					300	21.0	1.8	15.8		<0.1	<0.1					
					360	18.0	1.5	16.5		<0.1	<0.1					
					420	18.0	1.2	17.0		<0.1	<0.1					
					480	15.0	1.0	17.2		<0.1	<0.1					
					540	14.5	1.0	17.3		<0.1	<0.1					

GAS MONITORING RESULTS

Contract No: 722201
Contract Name: SIZEWELL C

Contract Engineer: JOHN WILD
Date: 24/10/2008

STRUCTURAL SOILS LTD

Weather Conditions: Cloudy/overcast Atmospheric Wind Conditions: Light ATM Pressure: Rising/Constant/Falling	Equipment used: LMSx/Firstcheck 5000	Data Collected By: IAN WARNE	Input Checked by (sign): [redacted]
Ground Conditions (eg dry, flooded, frost, snow etc): Wet			

Location	Flow (l/hr) (peak and residual) [ ] = time period	Atmospheric Pressure (mb)	BH Pressure (mb)	Time		% by volume in air			LEL (%)	(ppm)			Depth range to water (m bgl) (for a period of time (specify) following dip removal)	Well depth (mbgl) Current and [as installed]	Top of Response zone (m bgl)	Notes (eg, samples taken, dual installation, odours, sheens, broken headworks).
				hours mins	secs	Methane	Carbon Dioxide	Oxygen		H2S	CO	PID				
BH5	1.2 (30 secs)	1021	1022		0 (initial)	<0.1	<0.1	20.8		<0.1	<0.1		0.77	6.02		
	0.1	1021	1021		15	15.5	0.3	15.9		<0.1	<0.1					
					30	15.5	0.3	15.8		<0.1	<0.1					
					60	15.0	0.3	15.9		<0.1	<0.1					
					90	15.0	0.3	16.0		<0.1	<0.1					
					120	-	-	-								
					165	-	-	-								
					240	-	-	-		-	-					
BH7	1.3 (4 secs)	1021	1025		0 (initial)	<0.1	<0.1	<0.1		<0.1	<0.1		0.97	12.12		
	0.1	1021	1021		15	<0.1	<0.1	21.2		<0.1	<0.1					
					30	<0.1	<0.1	21.2		<0.1	<0.1					
					60	<0.1	<0.1	21.2		<0.1	<0.1					
					90	<0.1	<0.1	21.2		<0.1	<0.1					
					120	-	-	-								
					145	-	-	-								
					240	-	-	-								
BH19	0.2	1021	1021		0 (initial)	<0.1	<0.1	20.8		<0.1	<0.1		0.84	8.32		
	0.1	1021	1021		15	28.0	2.9	14.0		<0.1	<0.1					
					30	27.5	2.8	13.9		<0.1	<0.1					
					60	25.5	2.5	14.2		<0.1	<0.1					
					90	25.0	2.4	14.4		<0.1	<0.1					
					120	24.0	2.1	14.8		<0.1	<0.1					
					180	22.0	2.0	15.2		<0.1	<0.1					
					240	21.5	1.9	15.4		<0.1	<0.1					
BH21	-0.5	1021	1020		0 (initial)	<0.1	<0.1	20.6		<0.1	<0.1		0.43	8.94		
	0.1	1021	1021		15	80.0	5.8	2.9		<0.1	<0.1					
					30	59.0	4.7	7.0		<0.1	<0.1					
					60	33.5	2.8	12.2		<0.1	<0.1					
					90	20.0	1.8	16.0		<0.1	<0.1					
					120	12.0	0.7	18.1		<0.1	<0.1					
					180	5.0	0.3	20.3		<0.1	<0.1					
					240	4.2	0.1	20.6		<0.1	<0.1					
					300	-	-	-								
					360	-	-	-								

GAS MONITORING RESULTS

Contract No: 722201
Contract Name: SIZEWELL C

Contract Engineer: JOHN WILD
Date: 27/10/2008

STRUCTURAL SOILS LTD

Weather Conditions: BRIGHT, CLEAR Atmospheric Wind Conditions: Light ATM Pressure: Rising/Constant/Falling	Equipment used: LMSxl/Firstcheck 5000	Data Collected By: IAN WARNE	Input Checked by (sign [redacted]
Ground Conditions (eg dry, flooded, frost, snow etc): DAMP			

Location	Flow (l/hr) (peak and residual) [ ] = time period	Atmospheric Pressure (mb)	BH Pressure (mb)	Time		% by volume in air			LEL (%)	(ppm)			Depth range to water (m bgl) (for a period of time (specify) following tap removal)	Well depth (mbgl) Current and [as installed]	Top of Response zone (m bgl)	Notes (eg, samples taken, dual installation, odours, sheens, broken headworks).
				hours mins	secs	Methane	Carbon Dioxide	Oxygen		H2S	CO	PID				
BH8	0.3 (2 secs)	1008	1009		0 (initial)	<0.1	<0.1	20.6		<0.1	<0.1		0.74	5.02		Water came up tube.
	0.1	1008	1008		15	43.0	0.5	7.3		<0.1	<0.1					
					30	42.0	0.5	7.1		<0.1	<0.1					
					60	39.5	0.4	7.9		<0.1	<0.1					
					90	32.5	0.4	10.1		<0.1	<0.1					
					120	26.0	0.3	10.6		<0.1	<0.1					
					135	24.5	0.3	10.9		<0.1	<0.1					
					240	-	-	-								
BH7	-0.1	1008	1008		0 (initial)	<0.1	<0.1	20.8		<0.1	<0.1		0.93	12.12		
	0.1	1008	1008		15	<0.1	<0.1	21.3		<0.1	<0.1					
					30	<0.1	<0.1	21.2		<0.1	<0.1					
					60	<0.1	<0.1	21.2		<0.1	<0.1					
					90	<0.1	<0.1	21.2		<0.1	<0.1					
					120	-	-	-								
					145	-	-	-								
					240	-	-	-								
BH19	-0.2 (1 sec)	1008	1007		0 (initial)	<0.1	<0.1	20.8		<0.1	<0.1		0.79	8.32		
	0.1	1008	1008		15	55.0	4.2	7.5		<0.1	<0.1					
					30	54.0	4.2	7.3		<0.1	<0.1					
					60	46.5	3.6	8.9		<0.1	<0.1					
					90	40.0	3.3	10.4		<0.1	<0.1					
					120	35.0	2.8	11.6		<0.1	<0.1					
					150	27.5	2.1	13.4		<0.1	<0.1					
					240	23.0	1.9	14.5		<0.1	<0.1					
					300	23.0	1.9	14.5		<0.1	<0.1					
					360	22.5	1.8	14.6		<0.1	<0.1					
					420	22.5	1.8	14.6		<0.1	<0.1					
BH21	-0.1	1008	1008		0 (initial)	<0.1	<0.1	20.8		<0.1	<0.1		0.29	8.92		
	0.1	1008	1008		15	70.0	6.4	4.1		<0.1	<0.1					
					30	48.0	4.0	10.0		<0.1	<0.1					
					60	11.5	1.0	18.2		<0.1	<0.1					
					90	4.0	0.3	20.6		<0.1	<0.1					
					120	1.5	<0.1	21.2		<0.1	<0.1					
					180	0.4	<0.1	21.2		<0.1	<0.1					
					240	<0.1	<0.1	21.2		<0.1	<0.1					

GAS MONITORING RESULTS

Contract No: 722201
Contract Name: SIZEWELL C

Contract Engineer: JOHN WILD
Date: 28/10/2008

STRUCTURAL SOILS LTD

Weather Conditions: BRIGHT, CLEAR
Atmospheric Wind Conditions: Light
ALM Pressure: Rising/Constant/Falling

Equipment used: LMSxi/Firstcheck 5009

Data Collected By: IAN WARNE

Input Checked by (sign): [redacted]

Ground Conditions (eg dry, flooded, frost, snow etc): DAMP

Location	Flow (l/hr) (peak and residual) [ ] = time period	Atmospheric Pressure (mb)	BH Pressure (mb)	Time		% by volume in air			LEL (%)	(ppm)			Depth range to water (m bgl) (for a period of time (specify) following tap removal)	Well depth (mbgl) Current and (as installed)	Top of Response zone (m bgl)	Notes (eg, samples taken, dual installation, odours, sheens, broken headworks).
				hours mins	secs	Methane	Carbon Dioxide	Oxygen		H2S	CO	PID				
BH6	1.3 (5 secs)	1010	1014		0 (initial)	<0.1	<0.1	20.8		<0.1	<0.1		0.71	6.03		
	0.1	1010	1010		15	19.5	0.3	14.5		<0.1	<0.1					
					30	19.0	0.3	14.4		<0.1	<0.1					
					60	19.0	0.3	14.5		<0.1	<0.1					
					90	19.0	0.3	14.6		<0.1	<0.1					
					135	-	-	-								
					180	-	-	-								
					240	-	-	-								
BH7	-0.6 (1 sec)	1010	1008		0 (initial)	<0.1	<0.1	20.8		<0.1	<0.1		0.82	12.11		
	0.1	1010	1010		15	<0.1	<0.1	21.3		<0.1	<0.1					
					30	<0.1	<0.1	21.2		<0.1	<0.1					
					60	<0.1	<0.1	21.2		<0.1	<0.1					
					90	<0.1	<0.1	21.2		<0.1	<0.1					
					120	-	-	-								
					165	-	-	-								
					240	-	-	-								
BH19	0.7 (5 secs)	1010	1012		0 (initial)	<0.1	<0.1	20.8		<0.1	<0.1		0.79	8.32		
	0.1	1010	1010		15	56.0	3.8	8.0		<0.1	<0.1					
					30	56.0	3.6	7.9		<0.1	<0.1					
					60	48.5	3.2	9.2		<0.1	<0.1					
					90	42.0	2.7	10.6		<0.1	<0.1					
					120	38.0	2.2	12.0		<0.1	<0.1					
					150	35.0	1.8	13.6		<0.1	<0.1					
					240	35.0	1.7	13.9		<0.1	<0.1					
					300	29.0	1.5	14.5		<0.1	<0.1					
					360	22	1.3	15.3		<0.1	<0.1					
					420	22	1.3	15.4		<0.1	<0.1					
BH21	-0.1 (1 sec)	1010	1010		0 (initial)	<0.1	<0.1	20.8		<0.1	<0.1		0.34	8.92		
	0.1	1010	1010		15	71.0	5.9	3.9		<0.1	<0.1					
					30	41.5	4.0	10.0		<0.1	<0.1					
					60	17.0	1.4	16.9		<0.1	<0.1					
					90	7.3	0.4	19.8		<0.1	<0.1					
					120	3.6	0.2	20.8		<0.1	<0.1					
					180	1.3	<0.1	21.2		<0.1	<0.1					
					240	1.0	<0.1	21.2		<0.1	<0.1					
					300	1.0	<0.1	21.2		<0.1	<0.1					

GAS MONITORING RESULTS

Contract No: 722201
Contract Name: SIZEWELL C

Contract Engineer: JOHN WILD
Date: 28/10/2008

STRUCTURAL SOILS LTD

Weather Conditions: BRIGHT, CLEAR Atmospheric Wind Conditions: Light ALM Pressure: Rising/Constant/Falling	Equipment used: LMSx#Firstcheck 5000	Data Collected By: IAN WARNE	Input Checked by (sign): [redacted]
Ground Conditions (eg dry, flooded, frost, snow etc): DAMP			

Location	Flow (l/hr) (peak and residual) [ ] = time period	Atmospheric Pressure (mb)	BH Pressure (mb)	Time		% by volume in air			LEL (%)	(ppm)			Depth range to water (m bgl) (for a period of time (specify) following tap removal)	Well depth (mbgl) Current and [as installed]	Top of Response zone (m bgl)	Notes (eg, samples taken, dual installation, odours, sheens, broken headworks).
				hours mins	secs	Methane	Carbon Dioxide	Oxygen		H2S	CO	PID				
BH6	7.4 (5 secs)	1010	1035		0 (initial)	<0.1	<0.1	20.9		<0.1	<0.1		0.71	6.02		
	0.1	1010	1010		15	22.0	0.3	14.3		<0.1	<0.1					
					30	21.5	0.3	13.9		<0.1	<0.1					
					60	21.0	0.3	14.0		<0.1	<0.1					
					90	20.5	0.3	14.2		<0.1	<0.1					
					120	20.5	0.3	14.3		<0.1	<0.1					
					165	-	-	-								
					240	-	-	-								
BH7	-0.4 (1 sec)	1010	1008		0 (initial)	<0.1	<0.1	20.8		<0.1	<0.1		0.80	12.12		
	0.1	1010	1010		15	<0.1	<0.1	21.3		<0.1	<0.1					
					30	<0.1	<0.1	21.3		<0.1	<0.1					
					60	<0.1	<0.1	21.3		<0.1	<0.1					
					90	<0.1	<0.1	21.3		<0.1	<0.1					
					120	-	-	-								
					145	-	-	-								
					240	-	-	-								
BH19	0.2 (1 sec)	1010	1011		0 (initial)	<0.1	<0.1	20.8		<0.1	<0.1		0.78	9.31		
	0.1	1010	1010		15	56.0	4.8	7.5		<0.1	<0.1					
					30	53.0	4.4	7.6		<0.1	<0.1					
					60	44.5	3.9	9.5		<0.1	<0.1					
					90	40.0	3.6	10.6		<0.1	<0.1					
					120	35.0	3.2	12.0		<0.1	<0.1					
					180	28.5	2.4	13.7		<0.1	<0.1					
					240	24.5	2.0	14.9		<0.1	<0.1					
					300	24.0	1.6	16.1		<0.1	<0.1					
					360	24.0	1.6	15.2		<0.1	<0.1					
BH21	0.1 (1 sec)	1010	1010		0 (initial)	<0.1	<0.1	20.8		<0.1	<0.1		0.34	8.94		
	0.1	1010	1010		15	80.0	6.1	2.9		<0.1	<0.1					
					30	61.0	4.4	9.1		<0.1	<0.1					
					60	23.0	1.8	15.8		<0.1	<0.1					
					90	11.0	0.5	19.4		<0.1	<0.1					
					120	6.0	0.2	20.6		<0.1	<0.1					
					180	4.7	<0.1	21.3		<0.1	<0.1					
					240	4.7	<0.1	21.3		<0.1	<0.1					
					300	4.7	<0.1	21.3		<0.1	<0.1					

RESULTS OF IN-SITU MEASUREMENTS

Location: SIZEWELL C	**Engineer: JOHN WILD**	**Contract Number: 722201**
Operator: IW **Instrument: 3**	**Barometric Pressure (mb)**	**Previous Day: Rising/Constant/Falling**
Date & Time: 16/10/08	**Start: 1014 Finish: 1014**	**Next Day: Rising/Constant/Falling**
Weather: BRIGHT,CLOUDY	**Ground Conditions: Damp**	

Location Number	Peak Gas Flow (l/h)	Residual Gas Flow (l/h)	Methane (% Vol)	Carbon Dioxide (% Vol)	Oxygen (%Vol)	Water Depth # (m)	Borehole Depth # (m)	Borehole Pressure (mb)	Atm. Pressure (mb)	Samples Taken?
BH6	-	-	-	-	-	5.61	6.86	-	-	-
BH8	-	-	-	-	-	1.40	5.77	-	-	-
BH15	-	-	-	-	-	1.35	4.21	-	-	-
BH23	-	-	-	-	-	2.21	6.87	-	-	-
BH25	-	-	-	-	-	5.37	7.26	-	-	-

Instrument: 1 – GA90 IR Gas Analyser and GF60 Flow Meter
2 – GA94 IR Gas Analyser and GF60 Flow Meter
3 – LMSxi Gas Analyser

- From existing ground levels

Gas flow measured over 1 minute period(s)

Checked by/date: [redacted]

RESULTS OF IN-SITU MEASUREMENTS

Location: SIZEWELL C		**Engineer: JOHN WILD**	**Contract Number: 722201**
Operator: IW	**Instrument: 3**	**Barometric Pressure (mb)**	**Previous Day: Rising/Constant/Falling**
Date & Time: 17/10/08		**Start: 1020 Finish: 1020**	**Next Day: Rising/Constant/Falling**
Weather: CLEAR, BRIGHT,SUNNY		**Ground Conditions: Damp**	

Location Number	Peak Gas Flow (l/h)	Residual Gas Flow (l/h)	Methane (% Vol)	Carbon Dioxide (% Vol)	Oxygen (%Vol)	Water Depth # (m)	Borehole Depth # (m)	Borehole Pressure (mb)	Atm. Pressure (mb)	Samples Taken?
BH6	-	-	-	-	-	5.28	6.84	-	-	-
BH8	-	-	-	-	-	1.43	5.75	-	-	-
BH15	-	-	-	-	-	1.33	4.43	-	-	-
BH23	-	-	-	-	-	2.23	6.96	-	-	-
BH25	-	-	-	-	-	5.23	7.26	-	-	-
BH36	-	-	-	-	-	0.37	7.62	-	-	-

Instrument: 1 – GA90 IR Gas Analyser and GF60 Flow Meter
2 – GA94 IR Gas Analyser and GF60 Flow Meter
3 – LMSxi Gas Analyser

- From existing ground levels

Gas flow measured over 1 minute period(s)

Checked by/date: [redacted]

RESULTS OF IN-SITU MEASUREMENTS

Location: SIZEWELL C		**Engineer: JOHN WILD**	**Contract Number: 722201**
Operator: IW	**Instrument: 3**	**Barometric Pressure (mb)**	**Previous Day: Rising/Constant/Falling**
Date & Time: 20/10/08		**Start: 1006 Finish: 1006**	**Next Day: Rising/Constant/Falling**
Weather: CLOUDY, OVERCAST		**Ground Conditions: Damp**	

Location Number	Peak Gas Flow (l/h)	Residual Gas Flow (l/h)	Methane (% Vol)	Carbon Dioxide (% Vol)	Oxygen (%Vol)	Water Depth # (m)	Borehole Depth # (m)	Borehole Pressure (mb)	Atm. Pressure (mb)	Samples Taken?
BH6	-	-	-	-	-	2.27	6.85	-	-	-
BH8	-	-	-	-	-	1.44	5.75	-	-	-
BH15	-	-	-	-	-	1.31	4.21	-	-	-
BH23	-	-	-	-	-	2.06	6.93	-	-	-
BH25	-	-	-	-	-	4.69	7.25	-	-	-
BH36	-	-	-	-	-	0.41	7.87	-	-	-
BH38	-	-	-	-	-	1.38	7.86	-	-	-

Instrument: 1 – GA90 IR Gas Analyser and GF60 Flow Meter
2 – GA94 IR Gas Analyser and GF60 Flow Meter
3 – LMSxi Gas Analyser

- From existing ground levels

Gas flow measured over 1 minute period(s)

Checked by/date: [redacted]

RESULTS OF IN-SITU MEASUREMENTS

Location: SIZEWELL C	**Engineer: JOHN WILD**	**Contract Number: 722201**
Operator: IW **Instrument: 3**	**Barometric Pressure (mb)**	**Previous Day: Rising/Constant/Falling**
Date & Time: 21/10/08	**Start: 1008 Finish: 1008**	**Next Day: Rising/Constant/Falling**
Weather: BRIGHT,CLOUDY	**Ground Conditions: Damp**	

Location Number	Peak Gas Flow (l/h)	Residual Gas Flow (l/h)	Methane (% Vol)	Carbon Dioxide (% Vol)	Oxygen (%Vol)	Water Depth # (m)	Borehole Depth # (m)	Borehole Pressure (mb)	Atm. Pressure (mb)	Samples Taken?
BH6	-	-	-	-	-	1.94	6.81	-	-	-
BH8	-	-	-	-	-	1.39	5.75	-	-	-
BH15	-	-	-	-	-	1.32	4.21	-	-	-
BH23	-	-	-	-	-	2.04	6.94	-	-	-
BH25	-	-	-	-	-	4.56	7.26	-	-	-
BH30	-	-	-	-	-	DRY	3.02	-	-	-
BH36	-	-	-	-	-	0.36	7.55	-	-	-
BH37	-	-	-	-	-	1.37	7.29	-	-	-
BH38	-	-	-	-	-	1.35	7.87	-	-	-

Instrument: 1 – GA90 IR Gas Analyser and GF60 Flow Meter
2 – GA94 IR Gas Analyser and GF60 Flow Meter
3 – LMSxi Gas Analyser

- From existing ground levels

Gas flow measured over [redacted]
Checked by/date: [redacted]

RESULTS OF IN-SITU MEASUREMENTS

Location: SIZEWELL C	**Engineer: JOHN WILD**	**Contract Number: 722201**
Operator: IW **Instrument: 3**	**Barometric Pressure (mb)**	**Previous Day: Rising/Constant/Falling**
Date & Time: 22/10/08	**Start: 1021 Finish: 1021**	**Next Day: Rising/Constant/Falling**
Weather: CLEAR, BRIGHT,SUNNY	**Ground Conditions: Damp**	

Location Number	Peak Gas Flow (l/h)	Residual Gas Flow (l/h)	Methane (% Vol)	Carbon Dioxide (% Vol)	Oxygen (%Vol)	Water Depth # (m)	Borehole Depth # (m)	Borehole Pressure (mb)	Atm. Pressure (mb)	Samples Taken?
BH6	-	-	-	-	-	1.65	7.12	-	-	-
BH8	-	-	-	-	-	1.40	5.74	-	-	-
BH15	-	-	-	-	-	1.32	4.45	-	-	-
BH23	-	-	-	-	-	1.97	6.91	-	-	-
BH25	-	-	-	-	-	4.41	7.54	-	-	-
BH30	-	-	-	-	-	DRY	3.01	-	-	-
BH34	-	-	-	-	-	DRY	3.03	-	-	-
BH36	-	-	-	-	-	0.40	7.58	-	-	-
BH37	-	-	-	-	-	1.39	7.29	-	-	-
BH38	-	-	-	-	-	1.37	7.87	-	-	-

Instrument: 1 – GA90 IR Gas Analyser and GF60 Flow Meter
2 – GA94 IR Gas Analyser and GF60 Flow Meter
3 – LMSxi Gas Analyser

- From existing ground levels

Gas flow measured over 1 minute period(s)

Checked by/date: [redacted]

RESULTS OF IN-SITU MEASUREMENTS

Location: SIZEWELL C	**Engineer: JOHN WILD**	**Contract Number: 722201**
Operator: IW **Instrument: 3**	**Barometric Pressure (mb)**	**Previous Day: Rising/Constant/Falling**
Date & Time: 23/10/08	**Start: 1019 Finish: 1018**	**Next Day: Rising/Constant/Falling**
Weather: CLOUDY/OVERCAST	**Ground Conditions: Damp**	

Location Number	Peak Gas Flow (l/h)	Residual Gas Flow (l/h)	Methane (% Vol)	Carbon Dioxide (% Vol)	Oxygen (%Vol)	Water Depth # (m)	Borehole Depth # (m)	Borehole Pressure (mb)	Atm. Pressure (mb)	Samples Taken?
BH6	-	-	-	-	-	1.53	7.12	-	-	-
BH8	-	-	-	-	-	1.35	5.68	-	-	-
BH15	-	-	-	-	-	1.32	4.48	-	-	-
BH23	-	-	-	-	-	1.92	6.89	-	-	-
BH25	-	-	-	-	-	4.27	7.26	-	-	-
BH30	-	-	-	-	-	DRY	2.96	-	-	-
BH34	-	-	-	-	-	DRY	2.97	-	-	-
BH36	-	-	-	-	-	0.49	7.59	-	-	-
BH37	-	-	-	-	-	1.43	7.30	-	-	-
BH38	-	-	-	-	-	1.41	7.87	-	-	-
BH39	-	-	-	-	-	1.02	8.35	-	-	-

Instrument: 1 – GA90 IR Gas Analyser and GF60 Flow Meter
2 – GA94 IR Gas Analyser and GF60 Flow Meter
3 – LMSxi Gas Analyser

- From existing ground levels

Gas flow measured over 1 minute period(s)

Checked by/date: [redacted]

RESULTS OF IN-SITU MEASUREMENTS

Location: SIZEWELL C	**Engineer: JOHN WILD**	**Contract Number: 722201**
Operator: IW **Instrument: 3**	**Barometric Pressure (mb)**	**Previous Day: Rising/Constant/Falling**
Date & Time: 24/10/08	**Start: 1021 Finish: 1021**	**Next Day: Rising/Constant/Falling**
Weather: CLOUDY/OVERCAST	**Ground Conditions: Wet**	

Location Number	Peak Gas Flow (l/h)	Residual Gas Flow (l/h)	Methane (% Vol)	Carbon Dioxide (% Vol)	Oxygen (%Vol)	Water Depth # (m)	Borehole Depth # (m)	Borehole Pressure (mb)	Atm. Pressure (mb)	Samples Taken?
BH6	-	-	-	-	-	1.27	6.88	-	-	-
BH8	-	-	-	-	-	1.35	5.68	-	-	-
BH13	-	-	-	-	-	4.07	9.08	-	-	-
BH15	-	-	-	-	-	1.34	4.48	-	-	-
BH23	-	-	-	-	-	1.84	6.89	-	-	-
BH25	-	-	-	-	-	4.19	7.26	-	-	-
BH30	-	-	-	-	-	DRY	2.96	-	-	-
BH34	-	-	-	-	-	DRY	2.97	-	-	-
BH36	-	-	-	-	-	0.37	7.86	-	-	-
BH37	-	-	-	-	-	1.13	7.12	-	-	-
BH38	-	-	-	-	-	1.03	7.31	-	-	-
BH39	-	-	-	-	-	1.05	8.38	-	-	-

Instrument: 1 – GA90 IR Gas Analyser and GF60 Flow Meter
2 – GA94 IR Gas Analyser and GF60 Flow Meter
3 – LMSxi Gas Analyser

- From existing ground levels

Gas flow measured over 1 minute period(s)
Checked by/date: [redacted]

RESULTS OF IN-SITU MEASUREMENTS

Location: SIZEWELL C	**Engineer: JOHN WILD**	**Contract Number: 722201**
Operator: IW **Instrument: 3**	**Barometric Pressure (mb)**	**Previous Day: Rising/Constant/Falling**
Date & Time: 27/10/08	**Start: 1008 Finish: 1008**	**Next Day: Rising/Constant/Falling**
Weather: BRIGHT, CLEAR	**Ground Conditions: Damp**	

Location Number	Peak Gas Flow (l/h)	Residual Gas Flow (l/h)	Methane (% Vol)	Carbon Dioxide (% Vol)	Oxygen (%Vol)	Water Depth # (m)	Borehole Depth # (m)	Borehole Pressure (mb)	Atm. Pressure (mb)	Samples Taken?
BH6	-	-	-	-	-	0.57	6.86	-	-	-
BH8	-	-	-	-	-	1.34	5.69	-	-	-
BH13	-	-	-	-	-	0.97	9.08	-	-	-
BH15	-	-	-	-	-	1.32	4.49	-	-	-
BH23	-	-	-	-	-	1.56	6.89	-	-	-
BH25	-	-	-	-	-	3.82	7.28	-	-	-
BH30	-	-	-	-	-	DRY	2.95	-	-	-
BH34	-	-	-	-	-	DRY	2.97	-	-	-
BH36	-	-	-	-	-	0.38	7.59	-	-	-
BH37	-	-	-	-	-	1.16	7.15	-	-	-
BH38	-	-	-	-	-	1.06	7.59	-	-	-
BH39	-	-	-	-	-	1.03	8.39	-	-	-
BH40	-	-	-	-	-	3.27	16.17	-	-	-

Instrument: 1 – GA90 IR Gas Analyser and GF60 Flow Meter
2 – GA94 IR Gas Analyser and GF60 Flow Meter
3 – LMSxi Gas Analyser

- From existing ground levels

Gas flow measured over 1 minute period(s)

Checked by/date: [redacted]

RESULTS OF IN-SITU MEASUREMENTS

Location: SIZEWELL C	**Engineer: JOHN WILD**	**Contract Number: 722201**
Operator: IW **Instrument: 3**	**Barometric Pressure (mb)** **Start: 1010** **Finish: 1010**	**Previous Day: Rising/Constant/Falling** **Next Day: Rising/Constant/Falling**
Date & Time: 28/10/08		
Weather: BRIGHT, CLEAR	**Ground Conditions: Damp**	

Location Number	Peak Gas Flow (l/h)	Residual Gas Flow (l/h)	Methane (% Vol)	Carbon Dioxide (% Vol)	Oxygen (%Vol)	Water Depth # (m)	Borehole Depth # (m)	Borehole Pressure (mb)	Atm. Pressure (mb)	Samples Taken?
BH6	-	-	-	-	-	0.51	6.87	-	-	-
BH8	-	-	-	-	-	1.36	5.69	-	-	-
BH13	-	-	-	-	-	0.73	9.10	-	-	-
BH15	-	-	-	-	-	1.29	4.49	-	-	-
BH23	-	-	-	-	-	1.53	6.89	-	-	-
BH25	-	-	-	-	-	3.74	7.27	-	-	-
BH30	-	-	-	-	-	DRY	2.96	-	-	-
BH34	-	-	-	-	-	DRY	2.97	-	-	-
BH36	-	-	-	-	-	0.31	7.59	-	-	-
BH37	-	-	-	-	-	1.05	7.14	-	-	-
BH38	-	-	-	-	-	0.97	7.58	-	-	-
BH39	-	-	-	-	-	0.98	8.38	-	-	-
BH40	-	-	-	-	-	3.27	16.14	-	-	-

Instrument: 1 – GA90 IR Gas Analyser and GF60 Flow Meter
2 – GA94 IR Gas Analyser and GF60 Flow Meter
3 – LMSxi Gas Analyser

- From existing ground levels

Gas flow measured over 1 minute period(s)

Checked by/date: [redacted]

RESULTS OF IN-SITU MEASUREMENTS

Location: SIZEWELL C	**Engineer: JOHN WILD**	**Contract Number: 722201**
Operator: IW **Instrument: 3**	**Barometric Pressure (mb)**	**Previous Day: Rising/Constant/Falling**
Date & Time: 29/10/08	**Start: 1010 Finish: 1010**	**Next Day: Rising/Constant/Falling**
Weather: BRIGHT, CLEAR	**Ground Conditions: Damp**	

Location Number	Peak Gas Flow (l/h)	Residual Gas Flow (l/h)	Methane (% Vol)	Carbon Dioxide (% Vol)	Oxygen (%Vol)	Water Depth # (m)	Borehole Depth # (m)	Borehole Pressure (mb)	Atm. Pressure (mb)	Samples Taken?
BH6	-	-	-	-	-	0.55	6.86	-	-	-
BH8	-	-	-	-	-	1.41	5.69	-	-	-
BH12	-	-	-	-	-	1.03	10.57	-	-	-
BH13	-	-	-	-	-	0.73	9.09	-	-	-
BH14	-	-	-	-	-	0.94	8.30	-	-	-
BH15	-	-	-	-	-	1.29	4.21	-	-	-
BH23	-	-	-	-	-	1.46	6.88	-	-	-
BH25	-	-	-	-	-	3.65	7.27	-	-	-
BH30	-	-	-	-	-	DRY	2.96	-	-	-
BH34	-	-	-	-	-	DRY	2.96	-	-	-
BH36	-	-	-	-	-	0.36	7.85	-	-	-
BH37	-	-	-	-	-	1.07	7.14	-	-	-
BH38	-	-	-	-	-	0.98	7.57	-	-	-
BH39	-	-	-	-	-	1.04	8.41	-	-	-
BH40	-	-	-	-	-	3.27	16.11	-	-	-

Instrument: 1 – GA90 IR Gas Analyser and GF60 Flow Meter
2 – GA94 IR Gas Analyser and GF60 Flow Meter
3 – LMSxi Gas Analyser

- From existing ground levels

Gas flow measured over 1 minute period(s)
Checked by/date: [redacted]

APPENDIX F

(ii)□ Permeability Test Results

(iii)□ Soakaway Test Results

IN-SITU PERMEABILITY TEST - FALLING HEAD
In accordance with BS 5930:1999

Borehole : **BH6** Depth (m below GL): **6.20-7.20** Test Number: **1**

Test Date: **26/11/2008** Test Supervisor: **SHandcock**

Ground Level (m AOD): **1.40** National Grid Co-ordinates: **E:647320.8 N:264235.4**

TEST SETUP DETAILS

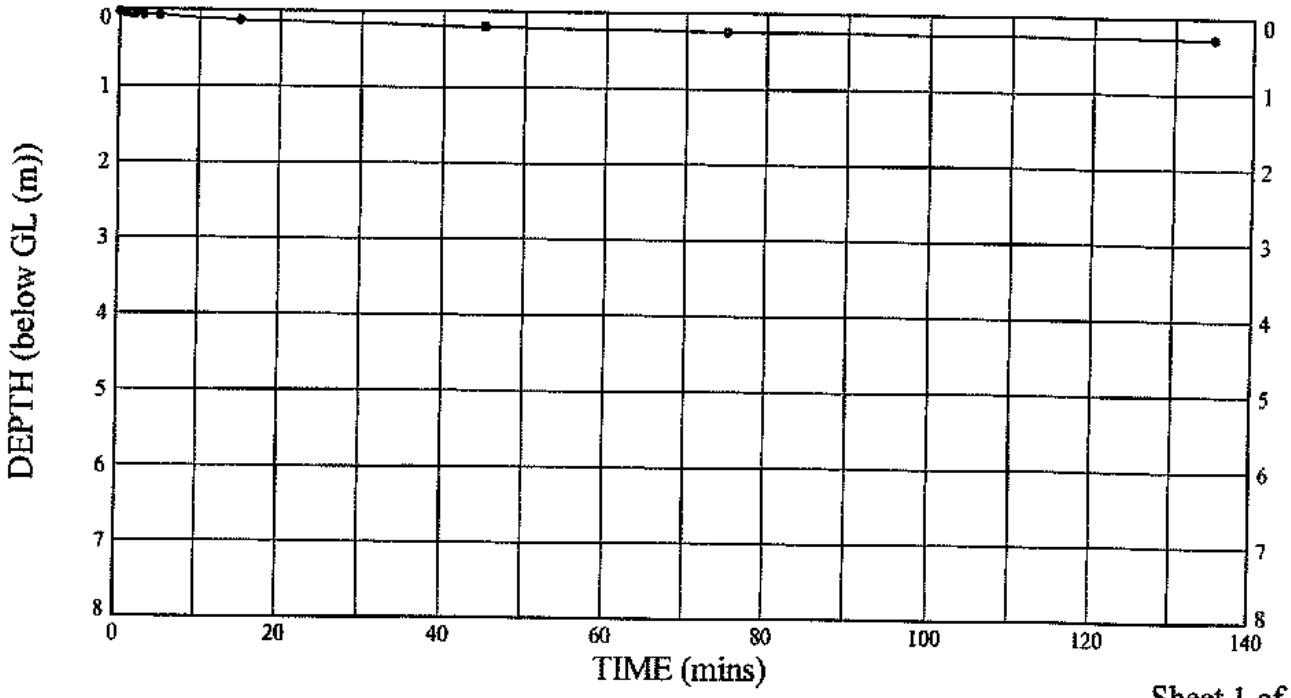
Depth measurements recorded from ground level.

Depth to top of response zone:	**6.20** m	Type of piezometer:	**Casagrande piezo**
Depth to base of response zone:	**7.20** m	Slotted pipe section:	**- m**
Length of response zone:	**1.00** m	Type of piezometer fill:	**Gravel**
Initial groundwater level prior to test:	**1.27** m	Weather:	**Overcast**
Borehole diameter:	**200** mm		
Monitoring well diameter:	**19** mm		

TEST MEASUREMENTS

Time (mins)	Water depth (m)	Head (m)	H/Ho	Time (mins)	Water depth (m)	Head (m)	H/Ho	Time (mins)	Water depth (m)	Head (m)	H/Ho
00:00:00	0.02	1.25	1.00	00:45:00	0.20	1.07	0.86				
00:00:15	0.03	1.24	0.99	01:15:00	0.24	1.03	0.82				
00:00:30	0.03	1.24	0.99	02:15:00	0.27	1.00	0.80				
00:00:45	0.04	1.23	0.98								
00:01:00	0.04	1.23	0.98								
00:01:30	0.05	1.22	0.98								
00:02:00	0.05	1.22	0.98								
00:03:00	0.06	1.21	0.97								
00:05:00	0.07	1.20	0.96								
00:15:00	0.13	1.14	0.91								

PLOT OF WATER DEPTH AGAINST TIME



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[redacted]	24/03/09	[redacted]	24/3/09

Contract: **Sizewell C Supplementary Investigation**

Job No: **722201**

AGS

STRUCTURAL_SOILS_GINT_LIBRARY.GLB!! - PERM - 1 OF 2 - WELL - FALL OR RISE | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_02 | 24/03/09 - 14:42.

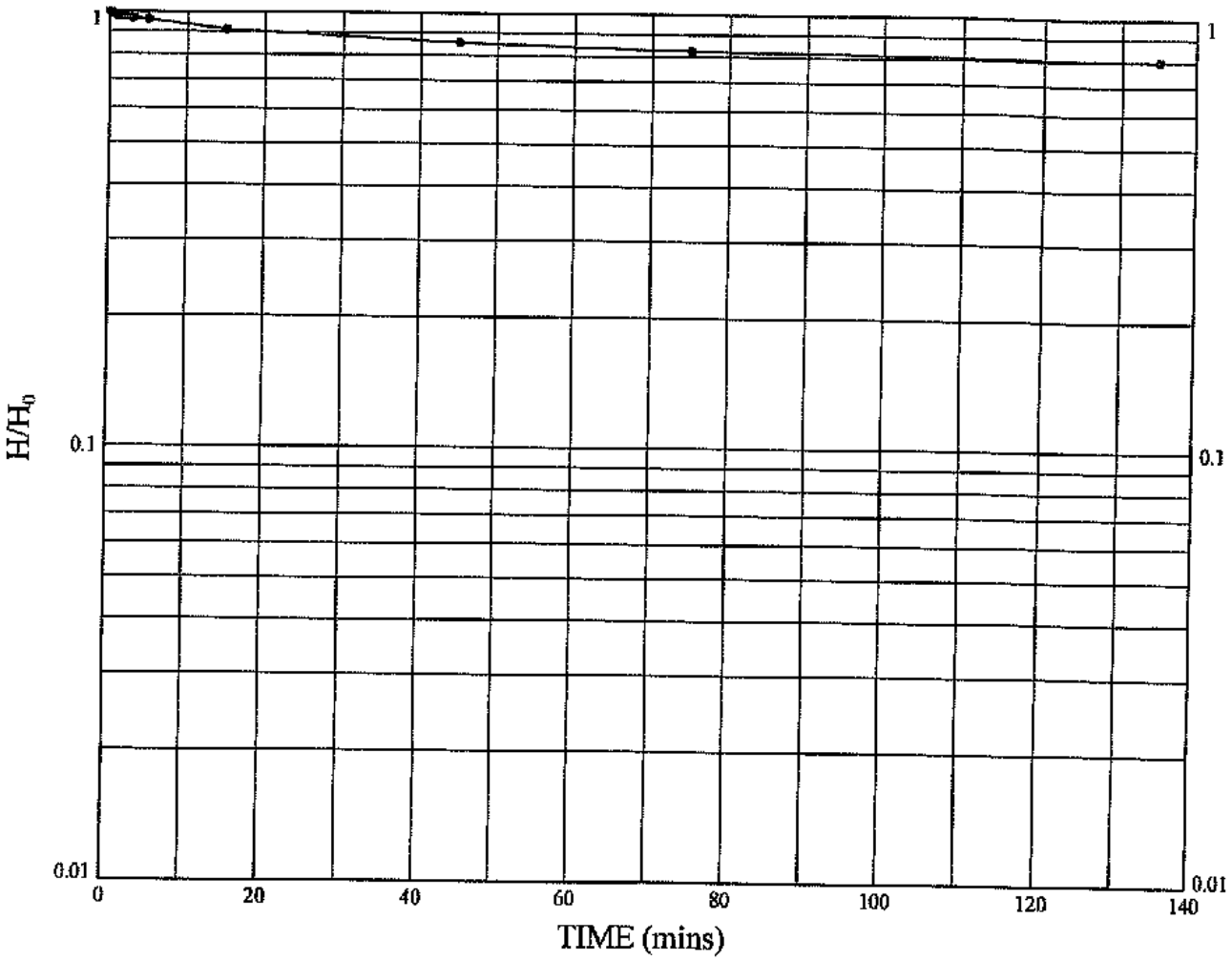
IN-SITU PERMEABILITY TEST - FALLING HEAD
In accordance with BS 5930:1999

Borehole : **BH6** Depth (m below GL): **6.20-7.20** Test Number: **1**

Test Date: **26/11/2008** Test Supervisor: **SHandcock**

Ground Level (m AOD): **1.40** National Grid Co-ordinates: **E:647320.8 N:264235.4**

PLOT OF H/Ho AGAINST TIME



Cross Sectional Area, A	=	**0.00028**	m^2
Intake Factor, F/D	=	**15.29**	m
Basic Time Lag, T (from plot)	=	**102014**	sec
In-situ Permeability, $k = \frac{A}{F \times T}$	=	**1.82×10^{-7}**	m/sec

Notes : **Intake Factor equation from Fig 7 BS5930:1999 section 25.4.6 has been used to calculate permeability. To enable calculation of permeability a measured standing water level of 1.27m prior to the test was used to determine head, H. Permeability has been calculated using the Graphical method in accordance with BS5930:1999 25.4.6.1 b.**

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Contract: **Sizewell C Supplementary Investigation**

Job No: **722201**

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IN-SITU PERMEABILITY TEST - FALLING HEAD
In accordance with BS 5930:1999

Borehole : **BH8** Depth (m below GL): **5.25-6.25** Test Number: **1**

Test Date: **26/11/2008** Test Supervisor: **SHandcock**

Ground Level (m AOD): **2.12** National Grid Co-ordinates: **E:647467.3 N:264183.5**

TEST SETUP DETAILS

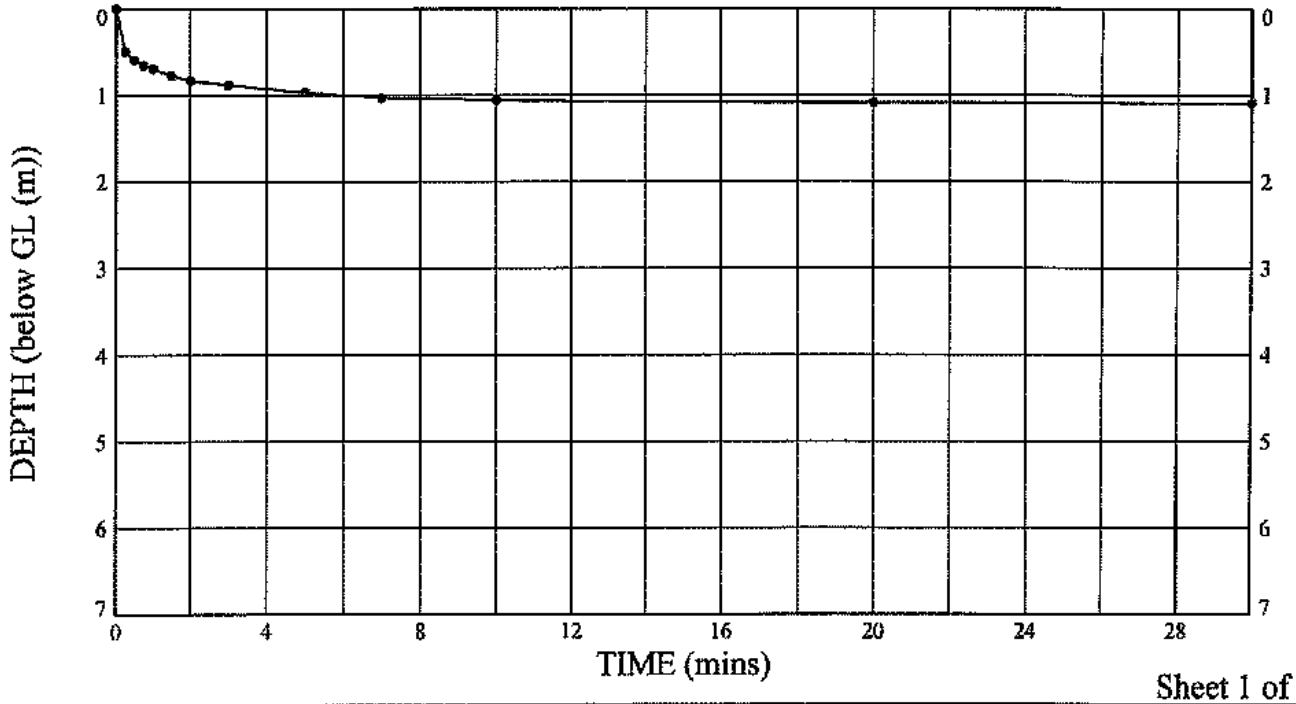
Depth measurements recorded from ground level.

Depth to top of response zone:	**5.25** m	Type of piezometer:	**Casagrande piezo**
Depth to base of response zone:	**6.25** m	Slotted pipe section:	**- m**
Length of response zone:	**1.00** m	Type of piezometer fill:	**Gravel**
Initial groundwater level prior to test:	**1.13** m	Weather:	**Fine**
Borehole diameter:	**200** mm		
Monitoring well diameter:	**19** mm		

TEST MEASUREMENTS

Time (mins)	Water depth (m)	Head (m)	H/Ho	Time (mins)	Water depth (m)	Head (m)	H/Ho	Time (mins)	Water depth (m)	Head (m)	H/Ho
00:00:00	0.00	1.13	1.00	00:10:00	1.06	0.07	0.06				
00:00:15	0.49	0.64	0.57	00:20:00	1.09	0.04	0.04				
00:00:30	0.59	0.54	0.48	00:30:00	1.09	0.04	0.04				
00:00:45	0.65	0.48	0.43								
00:01:00	0.69	0.44	0.39								
00:01:30	0.77	0.36	0.32								
00:02:00	0.83	0.30	0.27								
00:03:00	0.88	0.25	0.22								
00:05:00	0.97	0.16	0.14								
00:07:00	1.03	0.10	0.09								

PLOT OF WATER DEPTH AGAINST TIME



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STRUCTURAL SOILS The Old School Stillhouse Lane Bedminster Bristol BS3 4EB	[redacted]	24/03/09	[redacted]	24/3/9

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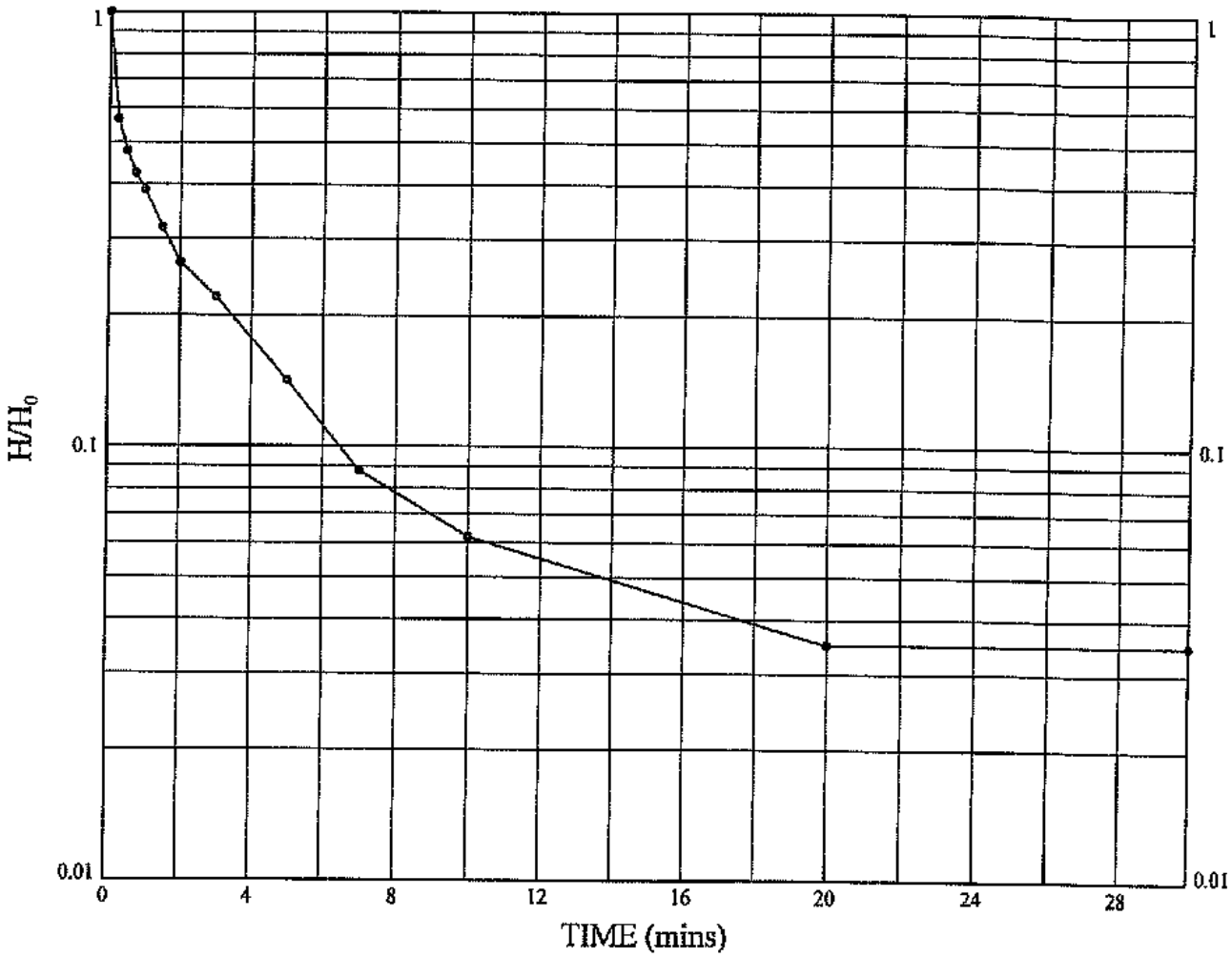
IN-SITU PERMEABILITY TEST - FALLING HEAD
In accordance with BS 5930:1999

Borehole : **BH8** Depth (m below GL): **5.25-6.25** Test Number: 1

Test Date: **26/11/2008** Test Supervisor: **SHandcock**

Ground Level (m AOD): **2.12** National Grid Co-ordinates: **E:647467.3 N:264183.5**

PLOT OF H/Ho AGAINST TIME



Cross Sectional Area, A	=	**0.00028**	m^2
Intake Factor, F/D	=	**15.29**	m
Basic Time Lag, T (from plot)	=	**68**	sec
In-situ Permeability, $k = \frac{A}{F \times T}$	=	**2.73×10^{-4}**	m/sec

Notes : **Intake Factor equation from Fig 7 BS5930:1999 section 25.4.6 has been used to calculate permeability. To enable calculation of permeability a measured standing water level of 1.13m prior to the test was used to determine head, H. Permeability has been calculated using the Graphical method in accordance with BS5930:1999 25.4.6.1 b.**

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IN-SITU PERMEABILITY TEST - FALLING HEAD
In accordance with BS 5930:1999

Borehole : **BH8** Depth (m below GL): **5.25-6.25** Test Number: **2**

Test Date: **26/11/2008** Test Supervisor: **SHandcock**

Ground Level (m AOD): **2.12** National Grid Co-ordinates: **E:647467.3 N:264183.5**

TEST SETUP DETAILS

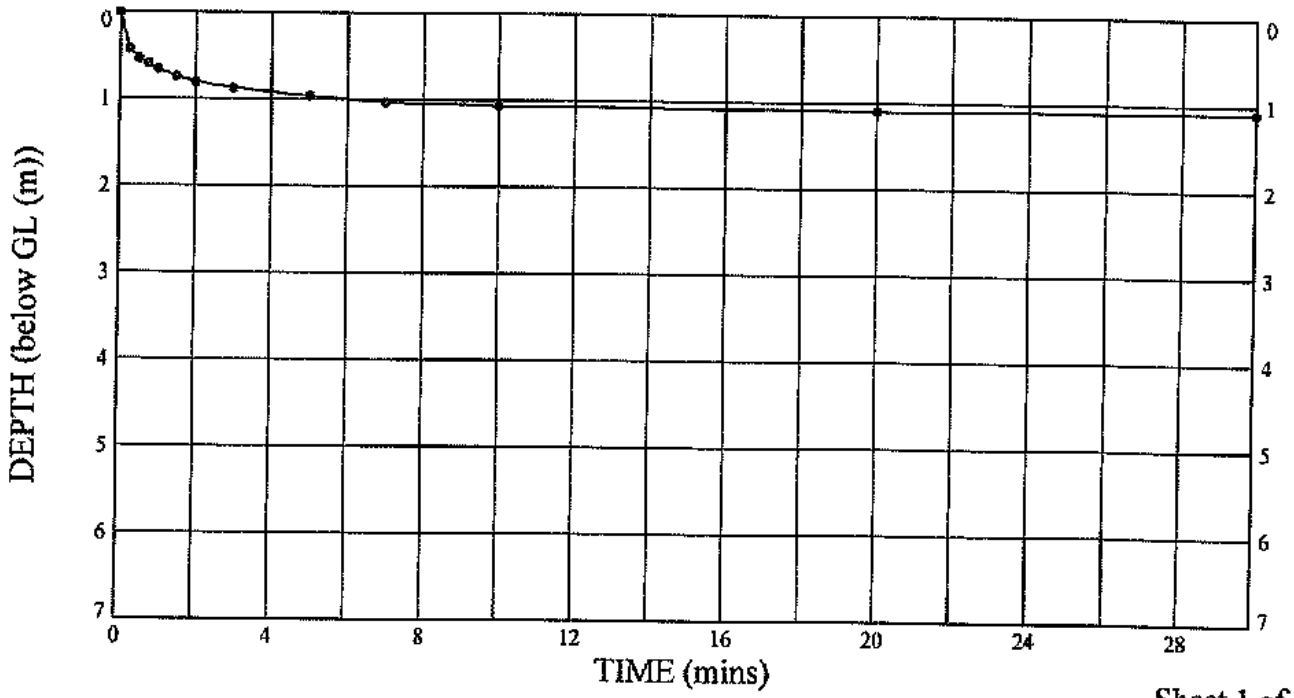
Depth measurements recorded from ground level.

Depth to top of response zone:	**5.25** m	Type of piezometer:	**Casagrande piezo**
Depth to base of response zone:	**6.25** m	Slotted pipe section:	**- m**
Length of response zone:	**1.00** m	Type of piezometer fill:	**Gravel**
Initial groundwater level prior to test:	**1.13** m	Weather:	**Fine**
Borehole diameter:	**200** mm		
Monitoring well diameter:	**19** mm		

TEST MEASUREMENTS

Time (mins)	Water depth (m)	Head (m)	H/Ho	Time (mins)	Water depth (m)	Head (m)	H/Ho	Time (mins)	Water depth (m)	Head (m)	H/Ho
00:00:00	0.00	1.13	1.00	00:10:00	1.06	0.07	0.06				
00:00:15	0.42	0.71	0.63	00:20:00	1.09	0.04	0.04				
00:00:30	0.53	0.60	0.53	00:30:00	1.09	0.04	0.04				
00:00:45	0.59	0.54	0.48								
00:01:00	0.65	0.48	0.43								
00:01:30	0.74	0.39	0.35								
00:02:00	0.80	0.33	0.29								
00:03:00	0.87	0.26	0.23								
00:05:00	0.96	0.17	0.15								
00:07:00	1.03	0.10	0.09								

PLOT OF WATER DEPTH AGAINST TIME



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Contract: **Sizewell C Supplementary Investigation**

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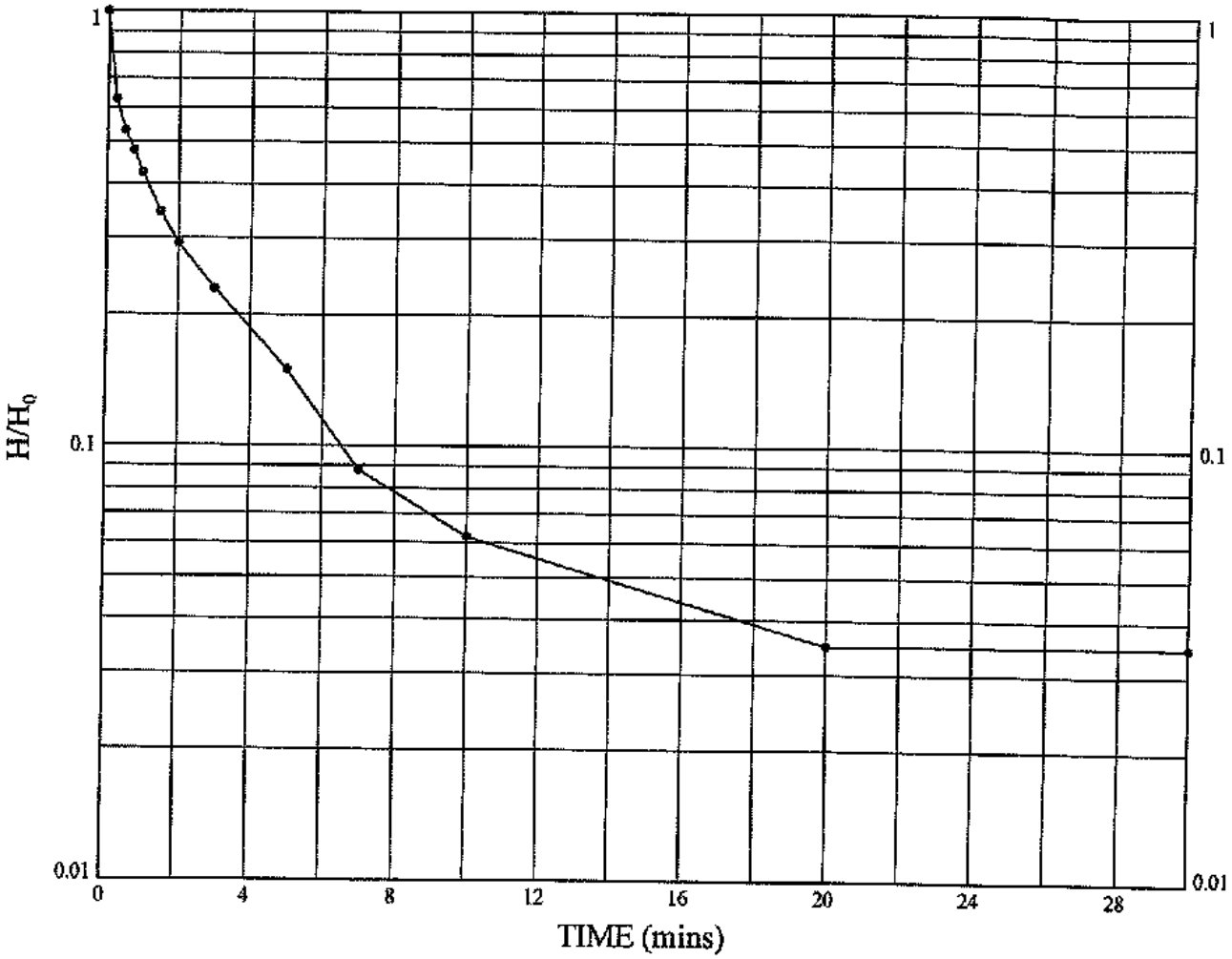
IN-SITU PERMEABILITY TEST - FALLING HEAD
In accordance with BS 5930:1999

Borehole : **BH8** Depth (m below GL): **5.25-6.25** Test Number: **2**

Test Date: **26/11/2008** Test Supervisor: **SHandcock**

Ground Level (m AOD): **2.12** National Grid Co-ordinates: **E:647467.3 N:264183.5**

PLOT OF H/Ho AGAINST TIME



Cross Sectional Area, A	=	**0.00028**	m^2
Intake Factor, F/D	=	**15.29**	m
Basic Time Lag, T (from plot)	=	**80**	sec
In-situ Permeability, $k = \frac{A}{F \times T}$	=	**2.32×10^{-4}**	m/sec

Notes : **Intake Factor equation from Fig 7 BS5930:1999 section 25.4.6 has been used to calculate permeability. To enable calculation of permeability a measured standing water level of 1.13m prior to the test was used to determine head, H. Permeability has been calculated using the Graphical method in accordance with BS5930:1999 25.4.6.1 b.**

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Contract: **Sizewell C Supplementary Investigation**

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STRUCTURAL_SOILS_GINT_LIBRARY.GLB! - PERM - 2 OF 2 - WELL - FALL OR RISE | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_02 | 24/03/09 - 14:45.

IN-SITU PERMEABILITY TEST - FALLING HEAD
In accordance with BS 5930:1999

Borehole : **BH12** Depth (m below GL): **8.50-16.50** Test Number: **1**

Test Date: **25/11/2008** Test Supervisor: **SHandcock**

Ground Level (m AOD): **1.83** National Grid Co-ordinates: **E:647460.9 N:264099.3**

TEST SETUP DETAILS

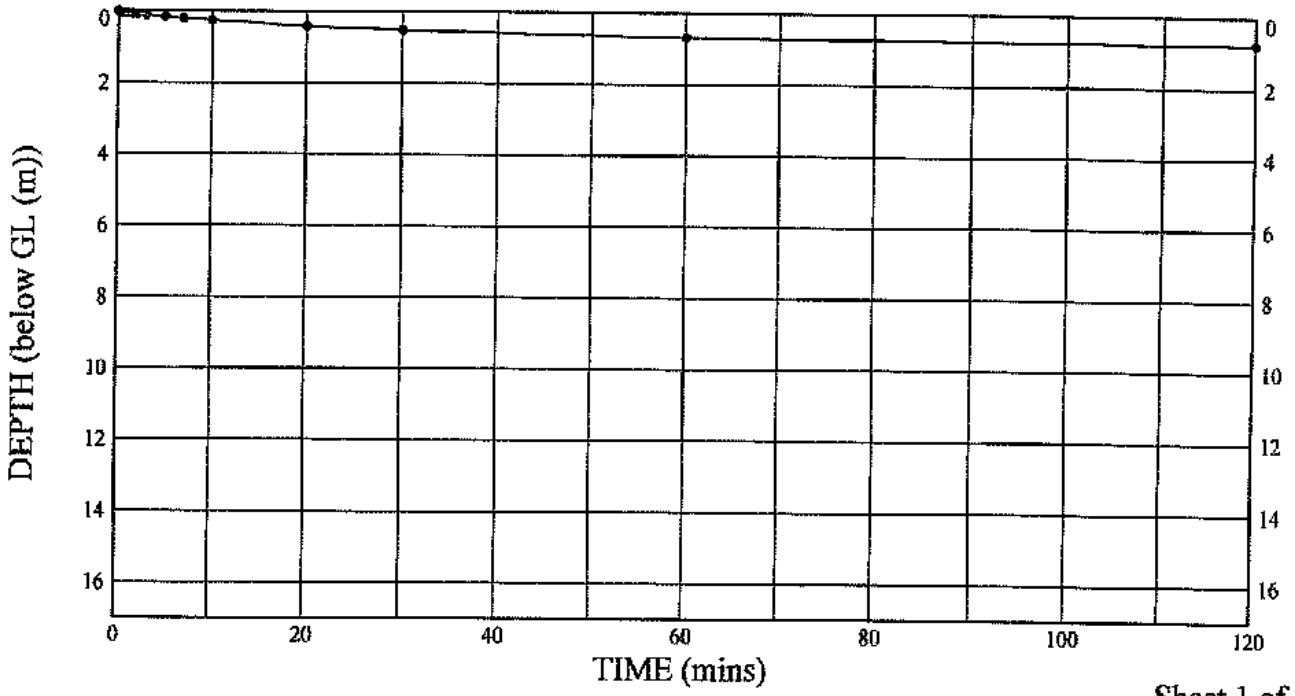
Depth measurements recorded from ground level.

Depth to top of response zone:	**8.50** m	Type of piezometer:	**Slotted standpipe**
Depth to base of response zone:	**16.50** m	Slotted pipe section:	**9.00-1.00 m (Fitted with Geotextile)**
Length of response zone:	**8.00** m	Type of piezometer fill:	
Initial groundwater level prior to test:	**0.94** m	Weather:	**Overcast**
Borehole diameter:	**200** mm		
Monitoring well diameter:	**50** mm		

TEST MEASUREMENTS

Time (mins)	Water depth (m)	Head (m)	H/Ho	Time (mins)	Water depth (m)	Head (m)	H/Ho	Time (mins)	Water depth (m)	Head (m)	H/Ho
00:00:00	0.01	0.93	1.00	00:10:00	0.26	0.68	0.73				
00:00:15	0.03	0.91	0.98	00:20:00	0.41	0.53	0.57				
00:00:30	0.04	0.90	0.97	00:30:00	0.51	0.43	0.46				
00:00:45	0.05	0.89	0.96	01:00:00	0.69	0.25	0.27				
00:01:00	0.06	0.88	0.95	02:00:00	0.78	0.16	0.17				
00:01:30	0.08	0.86	0.93								
00:02:00	0.09	0.85	0.91								
00:03:00	0.11	0.83	0.89								
00:05:00	0.16	0.78	0.84								
00:07:00	0.20	0.74	0.80								

PLOT OF WATER DEPTH AGAINST TIME



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Contract: **Sizewell C Supplementary Investigation**

Job No: **722201**

STRUCTURAL_SOILS_GINT_LIBRARY.GLB!! - PERM - 1 OF 2 - WELL - FALL OR RISE | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_02 | 24/03/09 - 14:42.

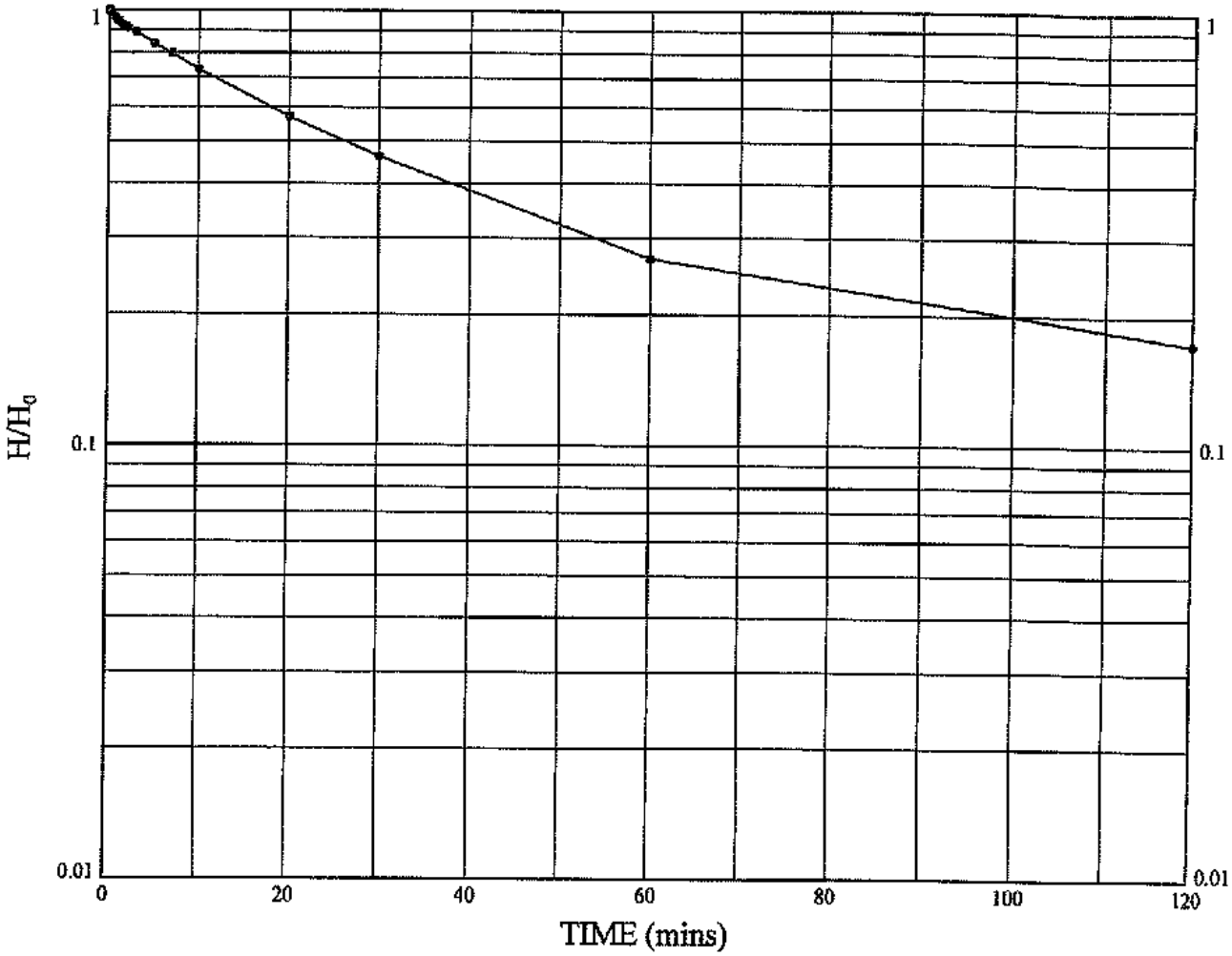
IN-SITU PERMEABILITY TEST - FALLING HEAD
In accordance with BS 5930:1999

Borehole : **BH12** Depth (m below GL): **8.50-16.50** Test Number: **1**

Test Date: **25/11/2008** Test Supervisor: **SHandcock**

Ground Level (m AOD): **1.83** National Grid Co-ordinates: **E:647460.9 N:264099.3**

PLOT OF H/Ho AGAINST TIME



Cross Sectional Area, A	=	**0.00196**	m^2
Intake Factor, F	=	**11.47**	m
Basic Time Lag, T (from plot)	=	**2539**	sec
In-situ Permeability, $k = \frac{A}{F \times T}$	=	**6.74×10^{-8}**	m/sec

Notes : **Intake Factor equation D from Fig 6 BS5930:1999 section 25.4.6 has been used to calculate permeability. To enable calculation of permeability a measured standing water level of 0.94m prior to the test was used to determine head, H. Permeability has been calculated using the Graphical method in accordance with BS5930:1999 25.4.6.1 b.**

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Compiled By	Date	Checked By	Date
[redacted]	24/03/09	[redacted]	24/7/9

Contract: **Sizewell C Supplementary Investigation**

Job No: **722201**

STRUCTURAL_SOILS_GINT_LIBRARY.GLB! - PERM - 2 OF 2 - WELL - FALL OR RISE | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_02 | 24/03/09 - 14:45.

IN-SITU PERMEABILITY TEST - FALLING HEAD
In accordance with BS 5930:1999

Borehole : **BH13** Depth (m below GL): **8.50-9.50** Test Number: **1**

Test Date: **25/11/2008** Test Supervisor: **SHandcock**

Ground Level (m AOD): **1.31** National Grid Co-ordinates: **E:647315.9 N:264128.2**

TEST SETUP DETAILS

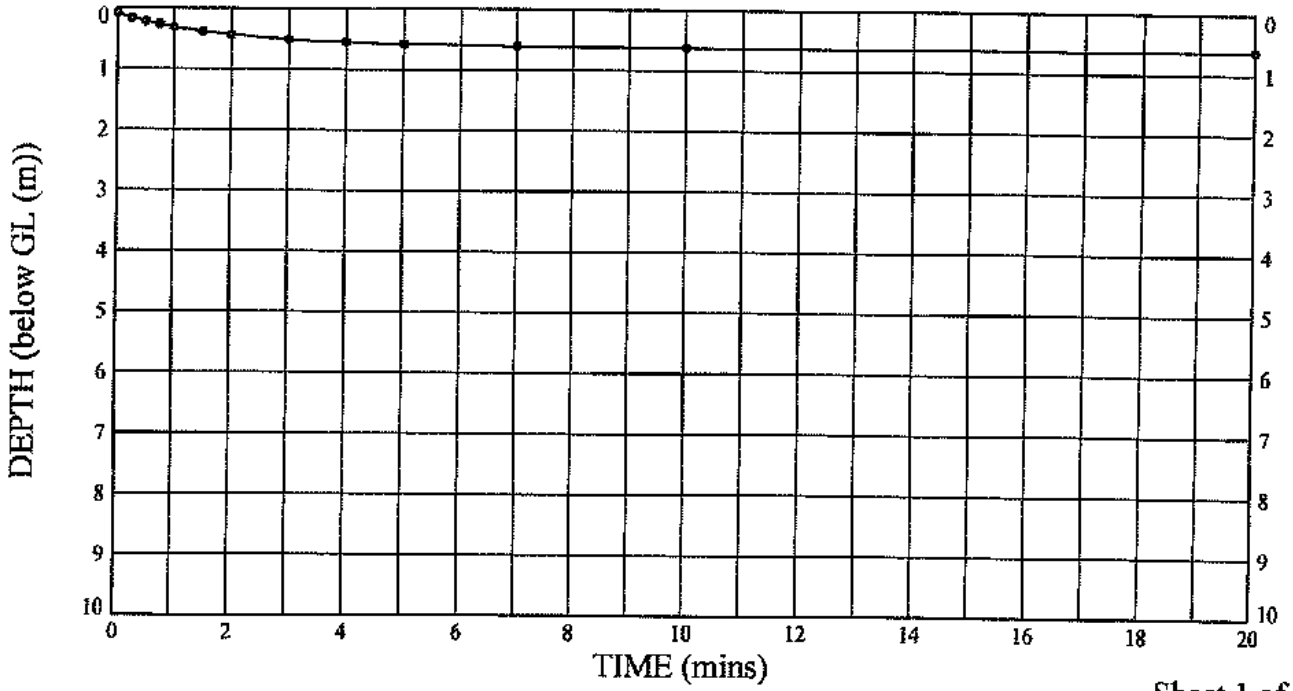
Depth measurements recorded from ground level.

Depth to top of response zone:	**8.50** m	Type of piezometer:	**Casagrande piezo**
Depth to base of response zone:	**9.50** m	Slotted pipe section:	**- m**
Length of response zone:	**1.00** m	Type of piezometer fill:	**Gravel**
Initial groundwater level prior to test:	**0.62** m	Weather:	**Fine**
Borehole diameter:	150 mm		
Monitoring well diameter:	**19** mm		

TEST MEASUREMENTS

Time (mins)	Water depth (m)	Head (m)	H/Ho	Time (mins)	Water depth (m)	Head (m)	H/Ho	Time (mins)	Water depth (m)	Head (m)	H/Ho
00:00:00	0.08	0.54	1.00	00:07:00	0.60	0.02	0.04				
00:00:15	0.16	0.46	0.85	00:10:00	0.62	0.00	0.00				
00:00:30	0.21	0.41	0.76	00:20:00	0.62	0.00	0.00				
00:00:45	0.26	0.36	0.67								
00:01:00	0.31	0.31	0.57								
00:01:30	0.38	0.24	0.44								
00:02:00	0.43	0.19	0.35								
00:03:00	0.51	0.11	0.20								
00:04:00	0.55	0.07	0.13								
00:05:00	0.58	0.04	0.07								

PLOT OF WATER DEPTH AGAINST TIME



STRUCTURAL SOILS
The Old School
Stillhouse Lane
Bedminster
Bristol BS3 4EB

Compiled By	Date	Checked By	Date
[redacted]	24/03/09	[redacted]	24/3/09

Contract: **Sizewell C Supplementary Investigation**

Job No: **722201**

AGS

STRUCTURAL_SOILS_GINT_LIBRARY.GLB!! - PERM - 1 OF 2 - WELL - FALL OR RISE | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_02 | 24/03/09 - 14:42.

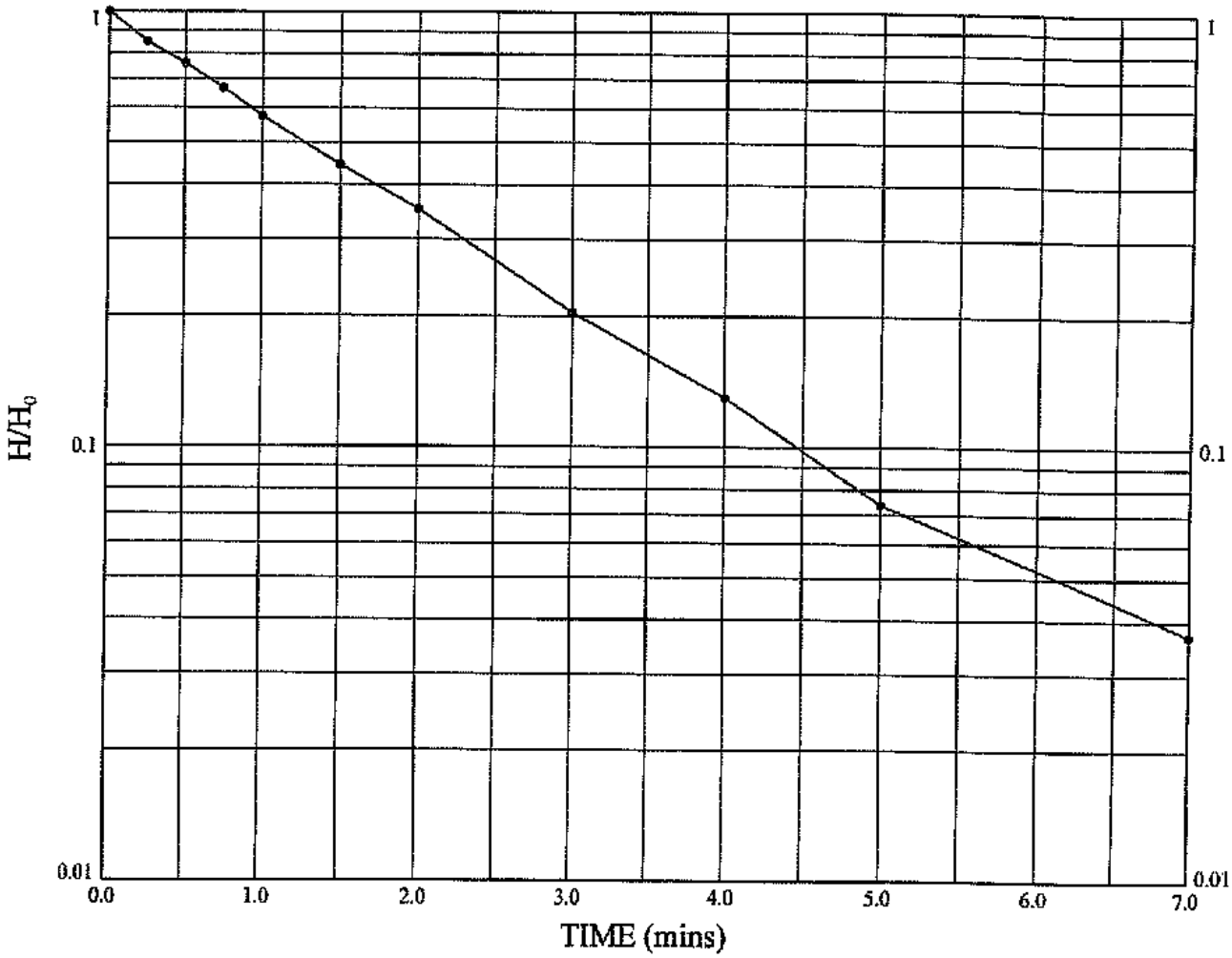
IN-SITU PERMEABILITY TEST - FALLING HEAD
In accordance with BS 5930:1999

Borehole : **BH13** Depth (m below GL): **8.50-9.50** Test Number: **1**

Test Date: **25/11/2008** Test Supervisor: **SHandcock**

Ground Level (m AOD): **1.31** National Grid Co-ordinates: **E:647315.9 N:264128.2**

PLOT OF H/Ho AGAINST TIME



Cross Sectional Area, A	=	**0.00028**	m^2
Intake Factor, F/D	=	**18.22**	m
Basic Time Lag, T (from plot)	=	**114**	sec
In-situ Permeability, $k = \frac{A}{F \times T}$	=	**1.37×10^{-4}**	m/sec

Notes : **Intake Factor equation from Fig 7 BS5930:1999 section 25.4.6 has been used to calculate permeability. To enable calculation of permeability a measured standing water level of 0.62m prior to the test was used to determine head, H. Permeability has been calculated using the Graphical method in accordance with BS5930:1999 25.4.6.1 b.**

STRUCTURAL SOILS
The Old School
Stillhouse Lane
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Compiled By	Date	Checked By	Date
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Contract: **Sizewell C Supplementary Investigation**

Job No: **722201**

AGS

STRUCTURAL_SOILS_GINT_LIBRARY.GLB!! - PERM - 2 OF 2 - WELL - FALL OR RISE | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_02 | 24/03/09 - 14:45.

IN-SITU PERMEABILITY TEST - FALLING HEAD
In accordance with BS 5930:1999

Borehole : **BH13** Depth (m below GL): **8.50-9.50** Test Number: **2**

Test Date: **25/11/2008** Test Supervisor: **SHandcock**

Ground Level (m AOD): **1.31** National Grid Co-ordinates: **E:647315.9 N:264128.2**

TEST SETUP DETAILS

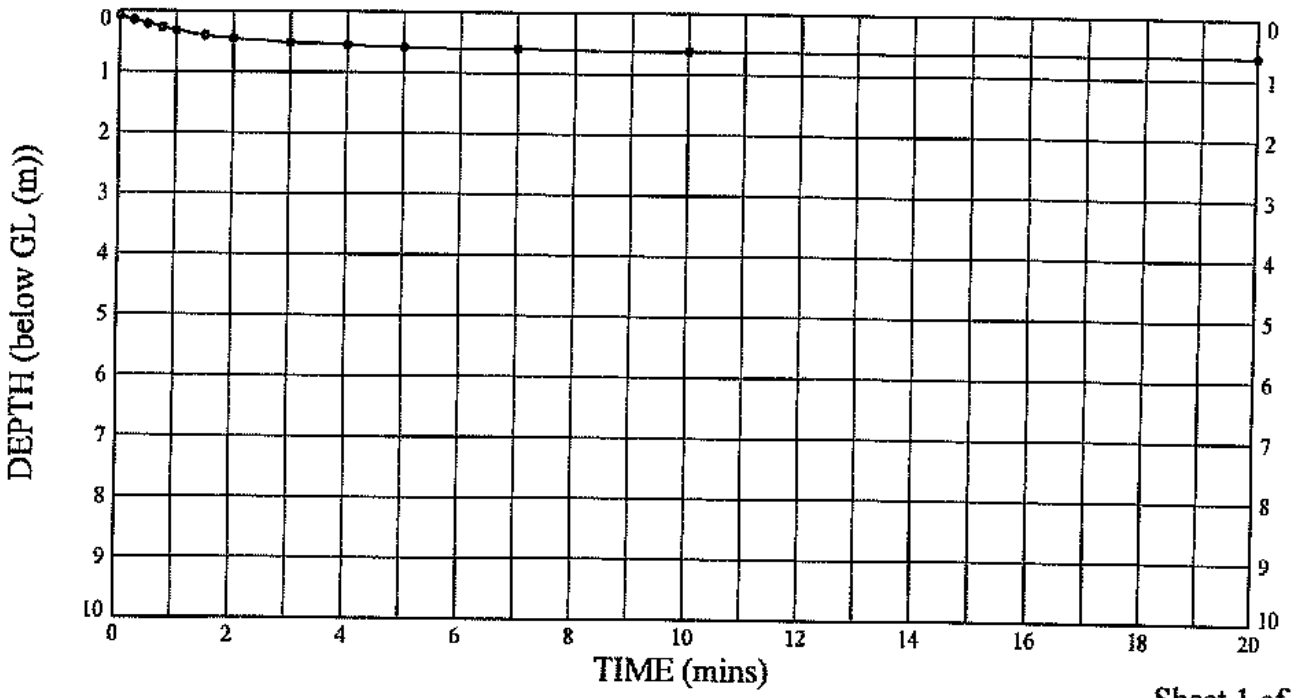
Depth measurements recorded from ground level.

Depth to top of response zone:	**8.50** m	Type of piezometer:	**Casagrande piezo**
Depth to base of response zone:	**9.50** m	Slotted pipe section:	**- m**
Length of response zone:	**1.00** m	Type of piezometer fill:	**Gravel**
Initial groundwater level prior to test:	**0.62** m	Weather:	**Fine**
Borehole diameter:	**150** mm		
Monitoring well diameter:	**19** mm		

TEST MEASUREMENTS

Time (mins)	Water depth (m)	Head (m)	H/Ho	Time (mins)	Water depth (m)	Head (m)	H/Ho	Time (mins)	Water depth (m)	Head (m)	H/Ho
00:00:00	0.08	0.54	1.00	00:07:00	0.60	0.02	0.04				
00:00:15	0.15	0.47	0.87	00:10:00	0.62	0.00	0.00				
00:00:30	0.21	0.41	0.76	00:20:00	0.62	0.00	0.00				
00:00:45	0.27	0.35	0.65								
00:01:00	0.32	0.30	0.56								
00:01:30	0.40	0.22	0.41								
00:02:00	0.45	0.17	0.32								
00:03:00	0.51	0.11	0.20								
00:04:00	0.54	0.08	0.15								
00:05:00	0.58	0.04	0.07								

PLOT OF WATER DEPTH AGAINST TIME



	Compiled By	Date	Checked By	Date
STRUCTURAL SOILS The Old School Stillhouse Lane Bedminster Bristol BS3 4EB	[redacted]	24/03/09	[redacted]	24/3/9
	Contract: **Sizewell C Supplementary Investigation**		Job No: **722201**	

STRUCTURAL_SOILS_GINT_LIBRARY.GLB!! - PERM - 1 OF 2 - WELL - FALL OR RISE | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_02 | 24/03/09 - 14:42.

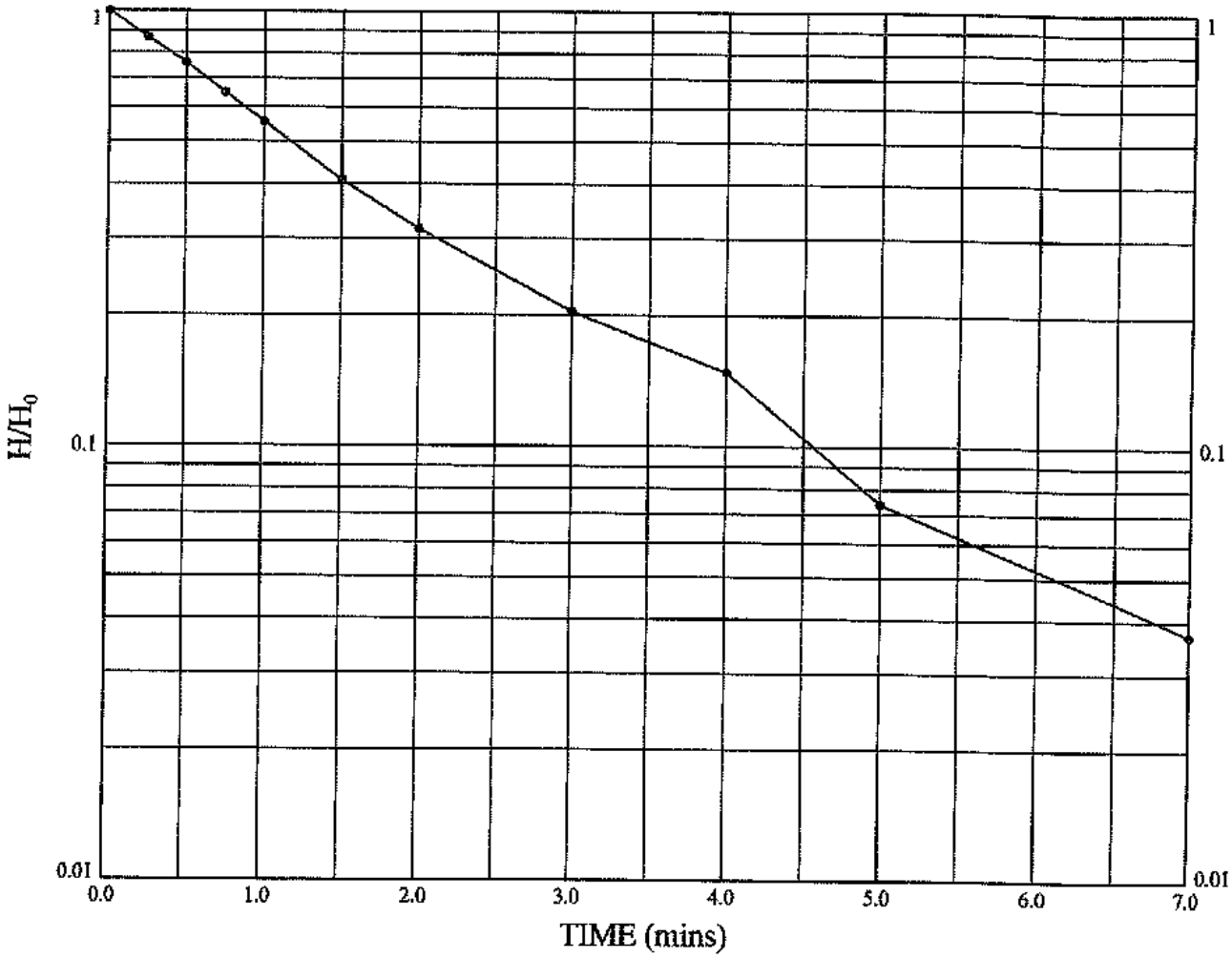
IN-SITU PERMEABILITY TEST - FALLING HEAD
In accordance with BS 5930:1999

Borehole : **BH13** Depth (m below GL): **8.50-9.50** Test Number: **2**

Test Date: **25/11/2008** Test Supervisor: **SHandcock**

Ground Level (m AOD): **1.31** National Grid Co-ordinates: **E:647315.9 N:264128.2**

PLOT OF H/Ho AGAINST TIME



Cross Sectional Area, A	=	**0.00028**	m^2
Intake Factor, F/D	=	**18.22**	m
Basic Time Lag, T (from plot)	=	**101**	sec
In-situ Permeability, $k = \frac{A}{F \times T}$	=	**1.54×10^{-4}**	m/sec

Notes : **Intake Factor equation from Fig 7 BS5930:1999 section 25.4.6 has been used to calculate permeability. To enable calculation of permeability a measured standing water level of 0.62m prior to the test was used to determine head, H. Permeability has been calculated using the Graphical method in accordance with BS5930:1999 25.4.6.1 b.**

STRUCTURAL SOILS
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Contract: **Sizewell C Supplementary Investigation**

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STRUCTURAL_SOILS_GINT_LIBRARY.GLB!! - PERM - 2 OF 2 - WELL - FALL OR RISE | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_02 | 24/03/09 - 14:45

IN-SITU PERMEABILITY TEST - FALLING HEAD
In accordance with BS 5930:1999

Borehole : **BH14** Depth (m below GL): **8.00-9.00** Test Number: **1**

Test Date: **26/11/2008** Test Supervisor: **SHandcock**

Ground Level (m AOD): **1.56** National Grid Co-ordinates: **E:647214.9 N:264133.5**

TEST SETUP DETAILS

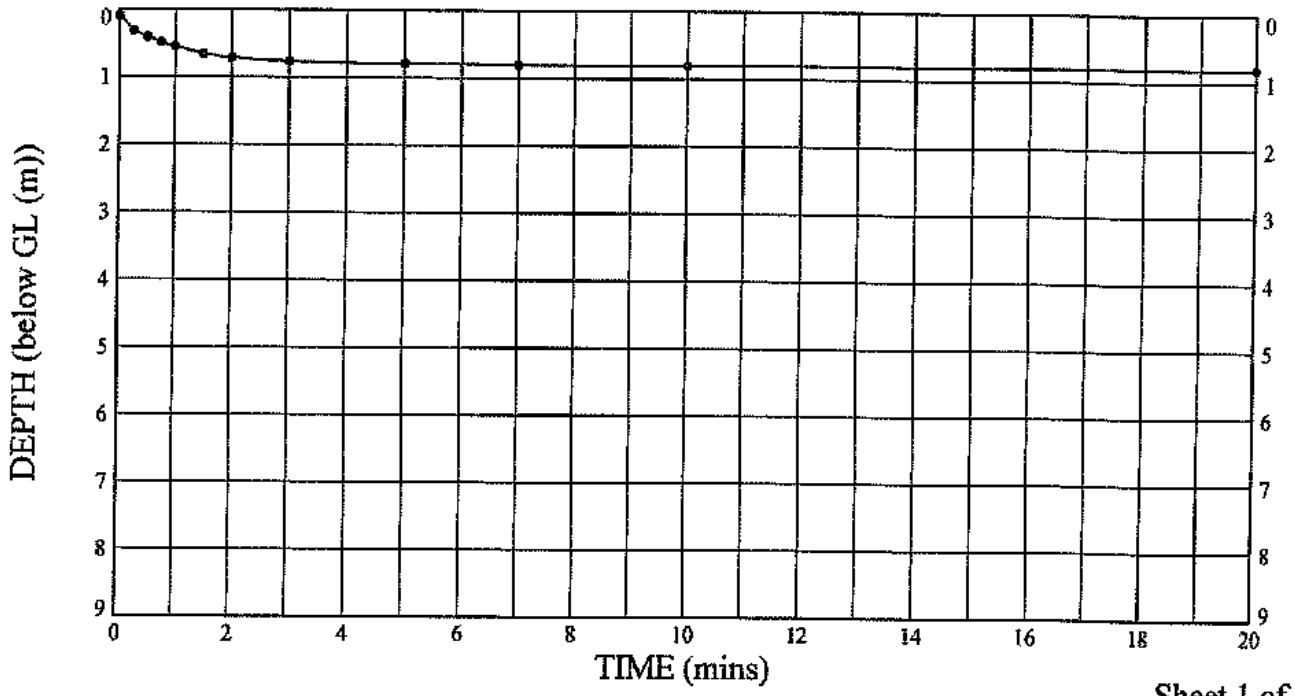
Depth measurements recorded from ground level.

Depth to top of response zone:	**8.00** m	Type of piezometer:	**Casagrande piezo**
Depth to base of response zone:	**9.00** m	Slotted pipe section:	**- m**
Length of response zone:	**1.00** m	Type of piezometer fill:	**Gravel**
Initial groundwater level prior to test:	**0.80** m	Weather:	**Rain**
Borehole diameter:	**150** mm		
Monitoring well diameter:	19 mm		

TEST MEASUREMENTS

Time (mins)	Water depth (m)	Head (m)	H/Ho	Time (mins)	Water depth (m)	Head (m)	H/Ho	Time (mins)	Water depth (m)	Head (m)	H/Ho
00:00:00	0.09	0.71	1.00	00:10:00	0.80	0.00	0.00				
00:00:15	0.31	0.49	0.69	00:20:00	0.80	0.00	0.00				
00:00:30	0.40	0.40	0.56								
00:00:45	0.48	0.32	0.45								
00:01:00	0.54	0.26	0.37								
00:01:30	0.65	0.15	0.21								
00:02:00	0.71	0.09	0.13								
00:03:00	0.76	0.04	0.06								
00:05:00	0.79	0.01	0.01								
00:07:00	0.80	0.00	0.00								

PLOT OF WATER DEPTH AGAINST TIME



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The Old School
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Compiled By	Date	Checked By	Date
[redacted]	24/03/09	[redacted]	24/3/09

Contract: **Sizewell C Supplementary Investigation**

Job No: **722201**

STRUCTURAL_SOILS_GINT_LIBRARY.GLB!! - PERM - 1 OF 2 - WELL - FALL OR RISE | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_02 | 24/03/09 - 14:42

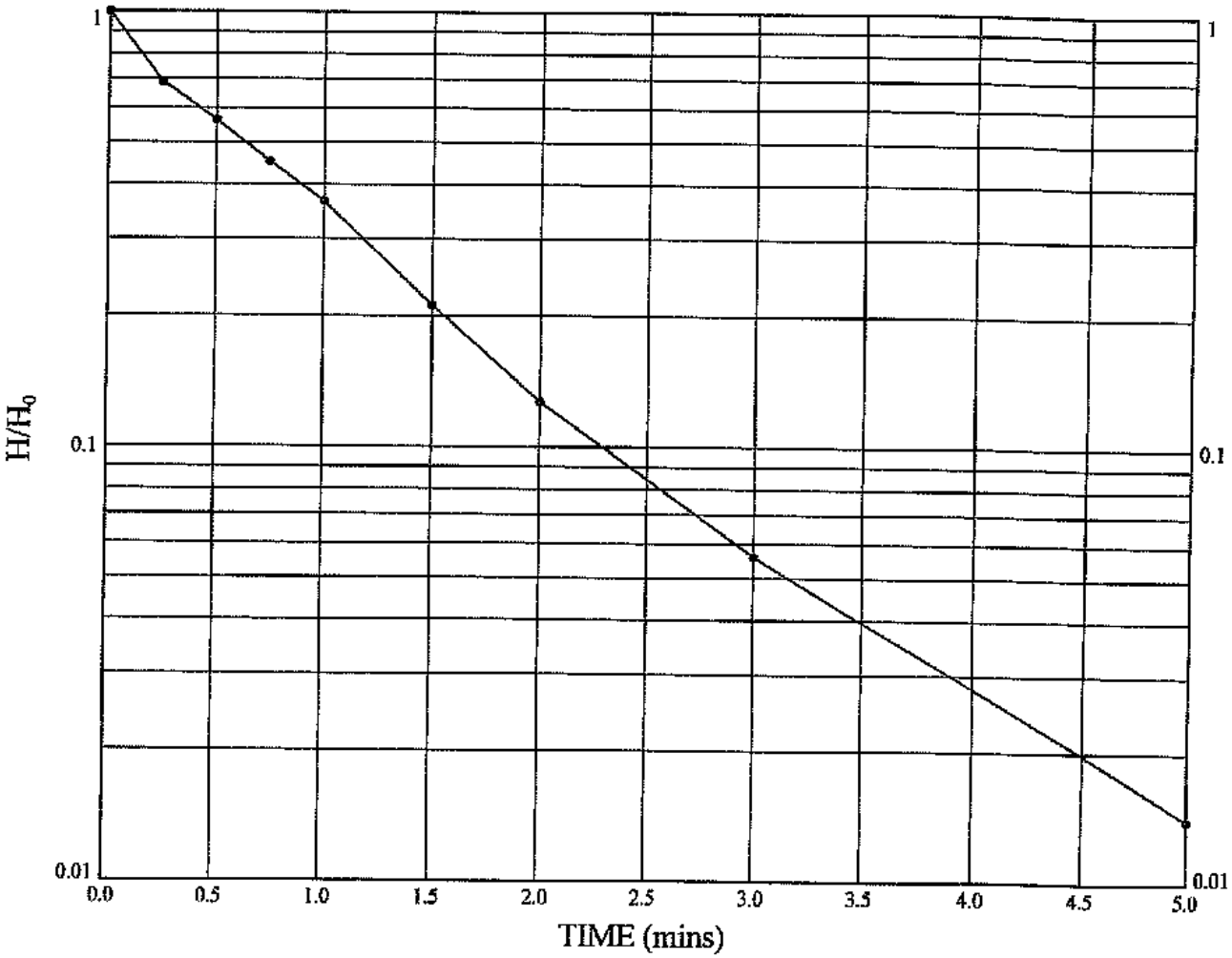
IN-SITU PERMEABILITY TEST - FALLING HEAD
In accordance with BS 5930:1999

Borehole : **BH14** Depth (m below GL): **8.00-9.00** Test Number: **1**

Test Date: **26/11/2008** Test Supervisor: **SHandcock**

Ground Level (m AOD): **1.56** National Grid Co-ordinates: **E:647214.9 N:264133.5**

PLOT OF H/Ho AGAINST TIME



Cross Sectional Area, A	=	**0.00028**	m^2
Intake Factor, F/D	=	**18.22**	m
Basic Time Lag, T (from plot)	=	**59**	sec
In-situ Permeability, $k = \frac{A}{F \times T}$	=	**2.64×10^{-4}**	m/sec

Notes : **Intake Factor equation from Fig 7 BS5930:1999 section 25.4.6 has been used to calculate permeability. To enable calculation of permeability a measured standing water level of 0.8m prior to the test was used to determine head, H. Permeability has been calculated using the Graphical method in accordance with BS5930:1999 25.4.6.1 b.**

STRUCTURAL SOILS
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Contract: **Sizewell C Supplementary Investigation**

Job No: **722201**

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STRUCTURAL_SOILS_GINT_LIBRARY.GLB|! - PERM - 2 OF 2 - WELL - FALL OR RISE | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_08 | 24/03/09 - 14:45

IN-SITU PERMEABILITY TEST - FALLING HEAD
In accordance with BS 5930:1999

Borehole : **BH14** Depth (m below GL): **8.00-9.00** Test Number: **2**

Test Date: **26/11/2008** Test Supervisor: **SHandcock**

Ground Level (m AOD): **1.56** National Grid Co-ordinates: **E:647214.9 N:264133.5**

TEST SETUP DETAILS

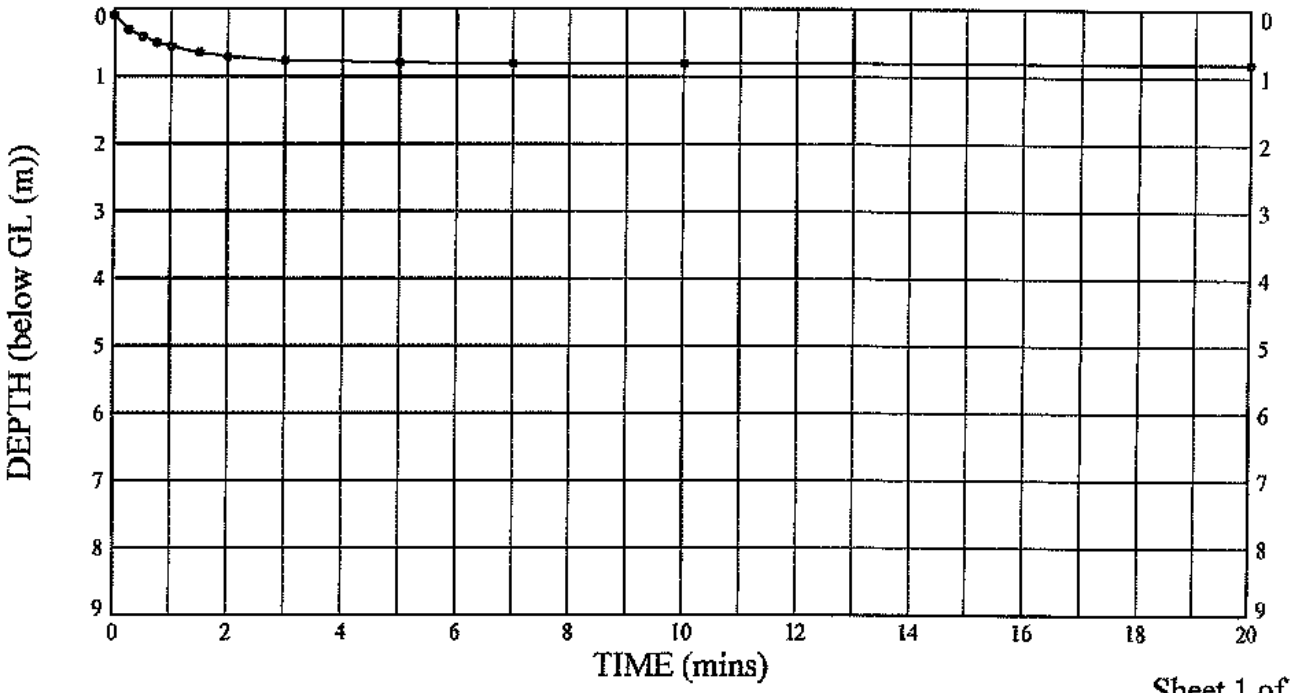
Depth measurements recorded from ground level.

Depth to top of response zone:	**8.00** m	Type of piezometer:	**Casagrande piezo**
Depth to base of response zone:	**9.00** m	Slotted pipe section:	**- m**
Length of response zone:	**1.00** m	Type of piezometer fill:	**Gravel**
Initial groundwater level prior to test:	**0.80** m	Weather:	**Rain**
Borehole diameter:	**150** mm		
Monitoring well diameter:	**19** mm		

TEST MEASUREMENTS

Time (mins)	Water depth (m)	Head (m)	H/Ho	Time (mins)	Water depth (m)	Head (m)	H/Ho	Time (mins)	Water depth (m)	Head (m)	H/Ho
00:00:00	0.09	0.71	1.00	00:10:00	0.80	0.00	0.00				
00:00:15	0.31	0.49	0.69	00:20:00	0.80	0.00	0.00				
00:00:30	0.41	0.39	0.55								
00:00:45	0.50	0.30	0.42								
00:01:00	0.56	0.24	0.34								
00:01:30	0.64	0.16	0.23								
00:02:00	0.71	0.09	0.13								
00:03:00	0.76	0.04	0.06								
00:05:00	0.79	0.01	0.01								
00:07:00	0.80	0.00	0.00								

PLOT OF WATER DEPTH AGAINST TIME



	Compiled By	Date	Checked By	Date
STRUCTURAL SOILS The Old School Stillhouse Lane Bedminster Bristol BS3 4EB	[redacted]	24/03/09	[redacted]	24/3/9

Contract: **Sizewell C Supplementary Investigation**

Job No: **722201**

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STRUCTURAL_SOILS_GINT_LIBRARY.GLB!! - PERM - 1 OF 2 - WELL - FALL OR RISE | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_02 | 24/03/09 - 14:42.

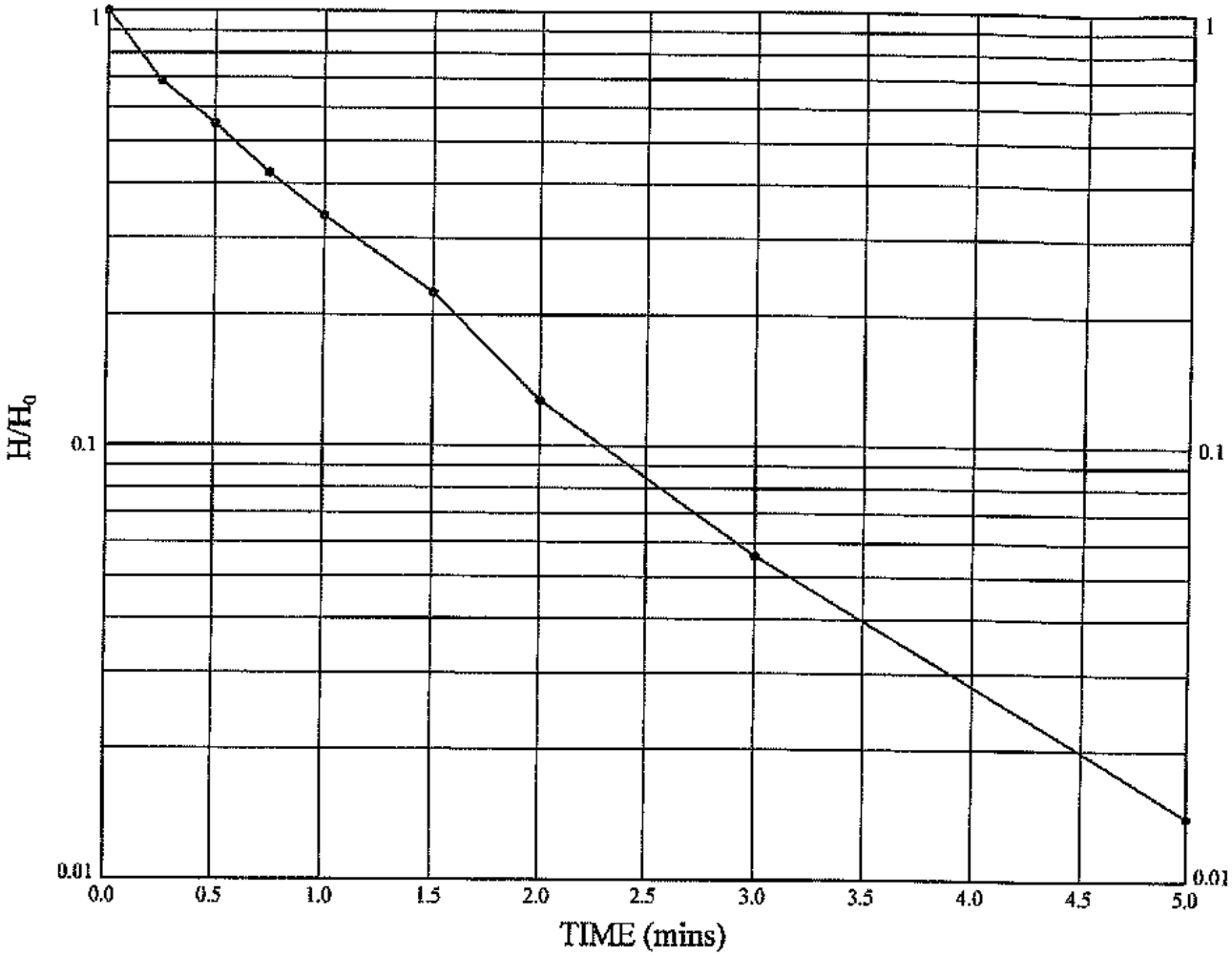
IN-SITU PERMEABILITY TEST - FALLING HEAD
In accordance with BS 5930:1999

Borehole : **BH14** Depth (m below GL): **8.00-9.00** Test Number: **2**

Test Date: **26/11/2008** Test Supervisor: **SHandcock**

Ground Level (m AOD): **1.56** National Grid Co-ordinates: **E:647214.9 N:264133.5**

PLOT OF H/Ho AGAINST TIME



Cross Sectional Area, A	=	**0.00028**	m^2
Intake Factor, F/D	=	**18.22**	m
Basic Time Lag, T (from plot)	=	**54**	sec
In-situ Permeability, $k = \frac{A}{F \times T}$	=	**2.88×10^{-4}**	m/sec

Notes : **Intake Factor equation from Fig 7 BS5930:1999 section 25.4.6 has been used to calculate permeability. To enable calculation of permeability a measured standing water level of 0.8m prior to the test was used to determine head, H. Permeability has been calculated using the Graphical method in accordance with BS5930:1999 25.4.6.1 b.**

STRUCTURAL SOILS
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Stillhouse Lane
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Contract: **Sizewell C Supplementary Investigation**

Job No: **722201**

STRUCTURAL_SOILS_GINT_LIBRARY.GLB!! - PERM - 2 OF 2 - WELL - FALL OR RISE | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_02 [24/03/09 - 14:45

IN-SITU PERMEABILITY TEST - FALLING HEAD
In accordance with BS 5930:1999

Borehole : **BH15** Depth (m below GL): **3.60-4.60** Test Number: **1**

Test Date: **25/11/2008** Test Supervisor: **SHandcock**

Ground Level (m AOD): **2.03** National Grid Co-ordinates: **E:647475.3 N:264069.0**

TEST SETUP DETAILS

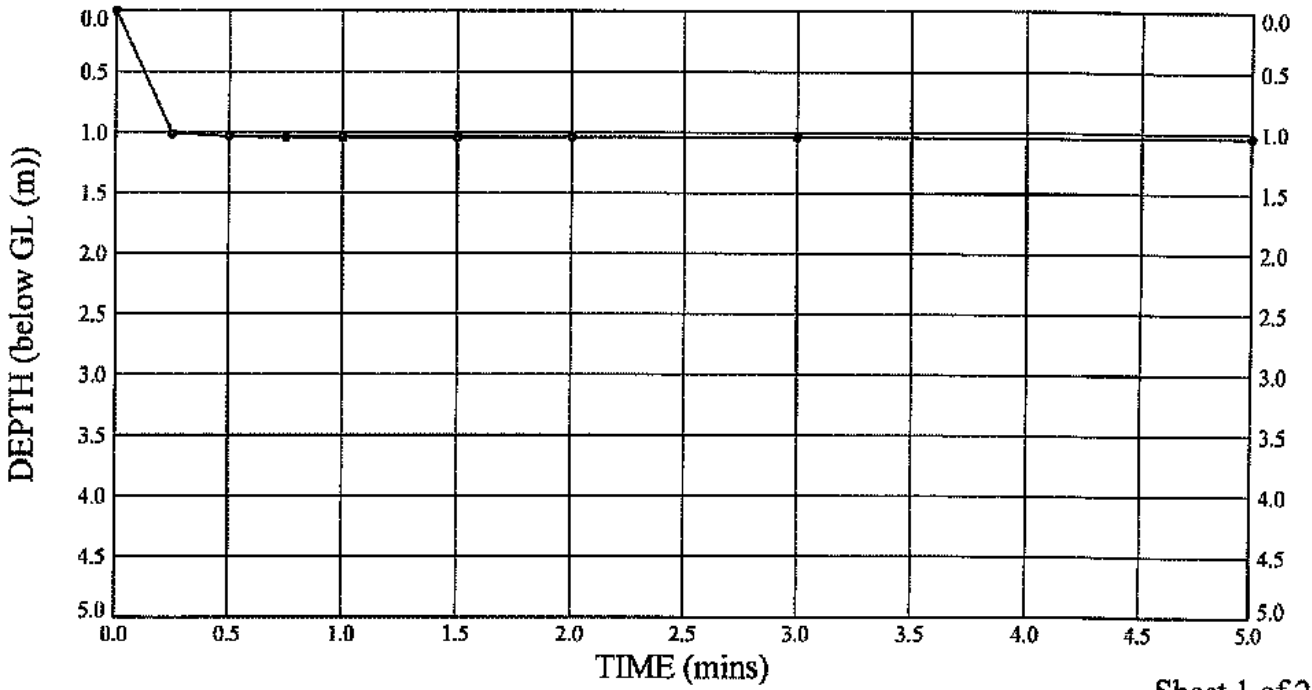
Depth measurements recorded from ground level.

Depth to top of response zone:	**3.60** m	Type of piezometer:	**Casagrande piezo**
Depth to base of response zone:	**4.60** m	Slotted pipe section:	**- m**
Length of response zone:	**1.00** m	Type of piezometer fill:	**Gravel**
Initial groundwater level prior to test:	**1.04** m	Weather:	**Rain**
Borehole diameter:	**200** mm		
Monitoring well diameter:	**19** mm		

TEST MEASUREMENTS

Time (mins)	Water depth (m)	Head (m)	H/Ho	Time (mins)	Water depth (m)	Head (m)	H/Ho	Time (mins)	Water depth (m)	Head (m)	H/Ho
00:00:00	0.00	1.04	1.00								
00:00:15	1.01	0.03	0.03								
00:00:30	1.03	0.01	0.01								
00:00:45	1.04	0.00	0.00								
00:01:00	1.04	0.00	0.00								
00:01:30	1.04	0.00	0.00								
00:02:00	1.04	0.00	0.00								
00:03:00	1.04	0.00	0.00								
00:05:00	1.04	0.00	0.00								

PLOT OF WATER DEPTH AGAINST TIME



STRUCTURAL SOILS The Old School Stillhouse Lane Bedminster Bristol BS3 4EB	Compiled By	Date	Checked By	Date
	[redacted]	24/03/09	[redacted]	24/3/09
	Contract: **Sizewell C Supplementary Investigation**		Job No: **722201**	

STRUCTURAL_SOILS_GINT_LIBRARY.GLB II - PERM - 1 OF 2 - WELL - FALL OR RISE | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_02 | 24/03/09 - 14:42

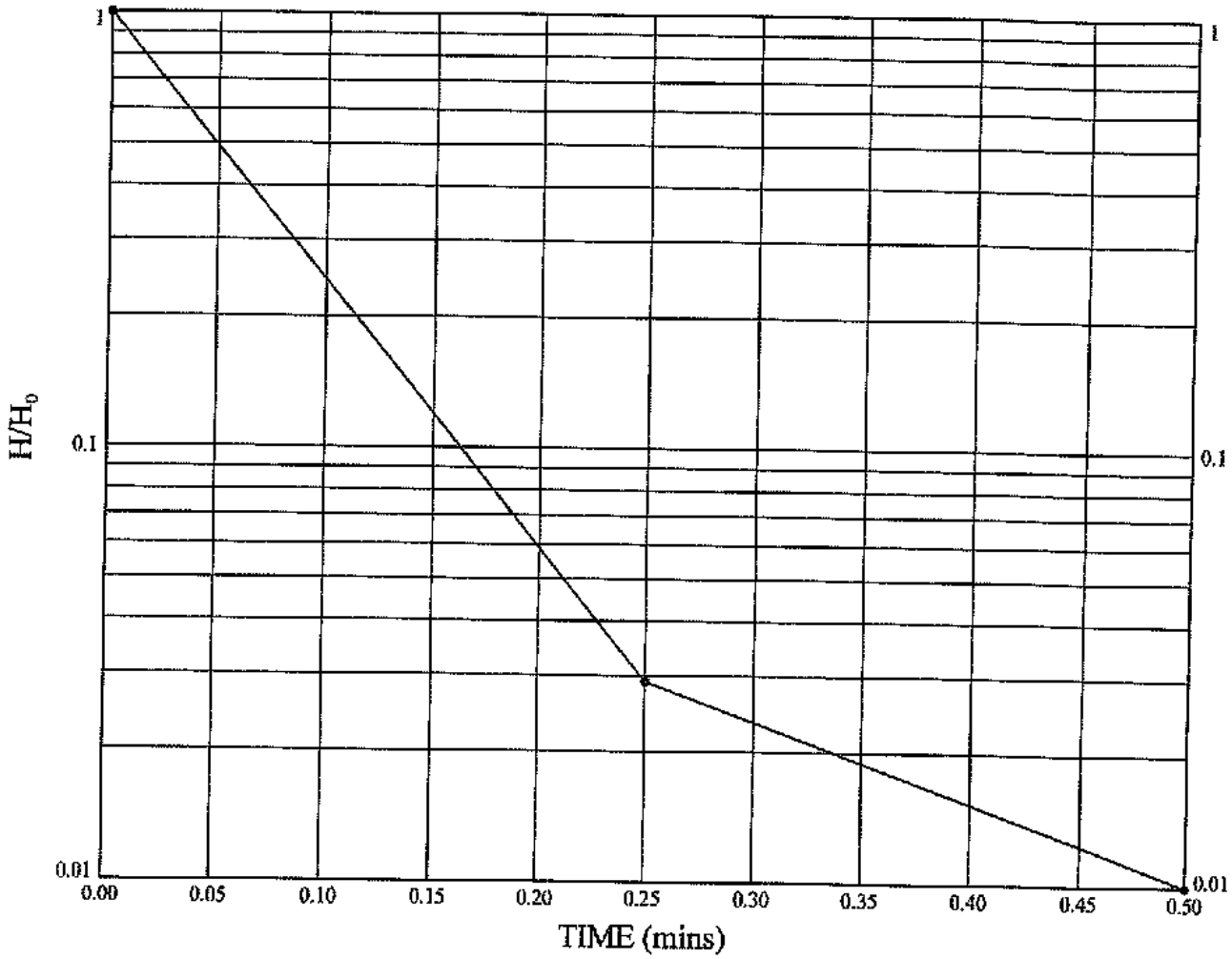
IN-SITU PERMEABILITY TEST - FALLING HEAD
In accordance with BS 5930:1999

Borehole : **BH15** Depth (m below GL): **3.60-4.60** Test Number: 1

Test Date: **25/11/2008** Test Supervisor: **SHandcock**

Ground Level (m AOD): **2.03** National Grid Co-ordinates: **E:647475.3 N:264069.0**

PLOT OF H/Ho AGAINST TIME



Cross Sectional Area, A	=	**0.00028**	m^2
Intake Factor, F/D	=	**15.29**	m
Basic Time Lag, T (from plot)	=	**4**	sec
In-situ Permeability, $k = \frac{A}{F \times T}$	=	**4.64×10^{-3}**	m/sec

Notes : **Intake Factor equation from Fig 7 BS5930:1999 section 25.4.6 has been used to calculate permeability. To enable calculation of permeability a measured standing water level of 1.04m prior to the test was used to determine head, H. Permeability has been calculated using the Graphical method in accordance with BS5930:1999 25.4.6.1 b. A lot of water in monitroing well at start of test.**

STRUCTURAL SOILS
The Old School
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[redacted]	24/03/09	[redacted]	24/3/09

Contract: **Sizewell C Supplementary Investigation**

Job No: **722201**

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STRUCTURAL_SOILS_GINT_LIBRARY.GLB!! - PERM - 2 OF 2 - WELL - FALL OR RISE | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_02 | 24/03/09 - 14:45.

IN-SITU PERMEABILITY TEST - FALLING HEAD
In accordance with BS 5930:1999

Borehole : **BH15** Depth (m below GL): **3.60-4.60** Test Number: **2**

Test Date: **25/11/2008** Test Supervisor: **SHandcock**

Ground Level (m AOD): **2.03** National Grid Co-ordinates: **E:647475.3 N:264069.0**

TEST SETUP DETAILS

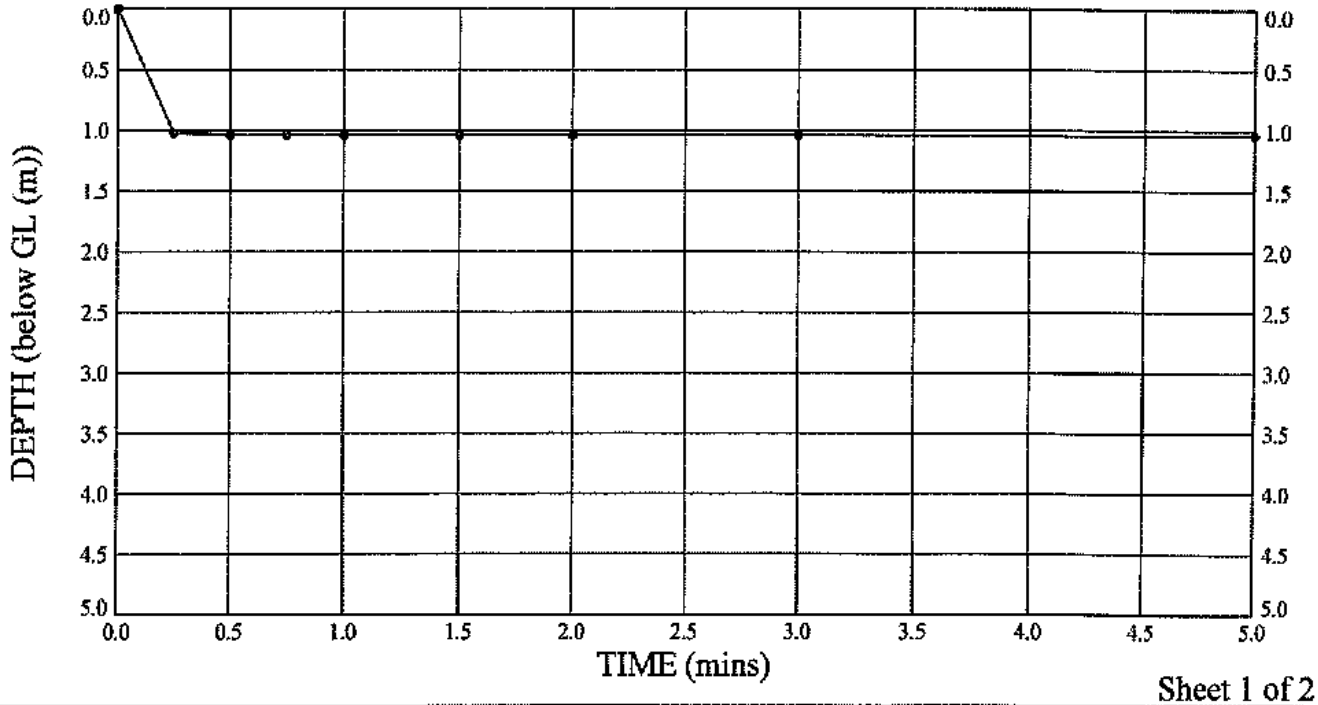
Depth measurements recorded from ground level.

Depth to top of response zone:	**3.60** m	Type of piezometer:	**Casagrande piezo**
Depth to base of response zone:	**4.60** m	Slotted pipe section:	**- m**
Length of response zone:	**1.00** m	Type of piezometer fill:	**Grael**
Initial groundwater level prior to test:	**1.04** m	Weather:	**Rain**
Borehole diameter:	**200** mm		
Monitoring well diameter:	**19** mm		

TEST MEASUREMENTS

Time (mins)	Water depth (m)	Head (m)	H/Ho	Time (mins)	Water depth (m)	Head (m)	H/Ho	Time (mins)	Water depth (m)	Head (m)	H/Ho
00:00:00	0.00	1.04	1.00								
00:00:15	1.02	0.02	0.02								
00:00:30	1.04	0.00	0.00								
00:00:45	1.04	0.00	0.00								
00:01:00	1.04	0.00	0.00								
00:01:30	1.04	0.00	0.00								
00:02:00	1.04	0.00	0.00								
00:03:00	1.04	0.00	0.00								
00:05:00	1.04	0.00	0.00								

PLOT OF WATER DEPTH AGAINST TIME



	Compiled By	Date	Checked By	Date
STRUCTURAL SOILS The Old School Stillhouse Lane Bedminster Bristol BS3 4EB	[redacted]	24/03/09	[redacted]	24/3/9
	Contract: **Sizewell C Supplementary Investigation**		Job No: **722201**	

STRUCTURAL_SOILS_GINT_LIBRARY.GLB!! - PERM - 1 OF 2 - WELL - FALL OR RISE | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_02 | 24/03/09 - 14:42.

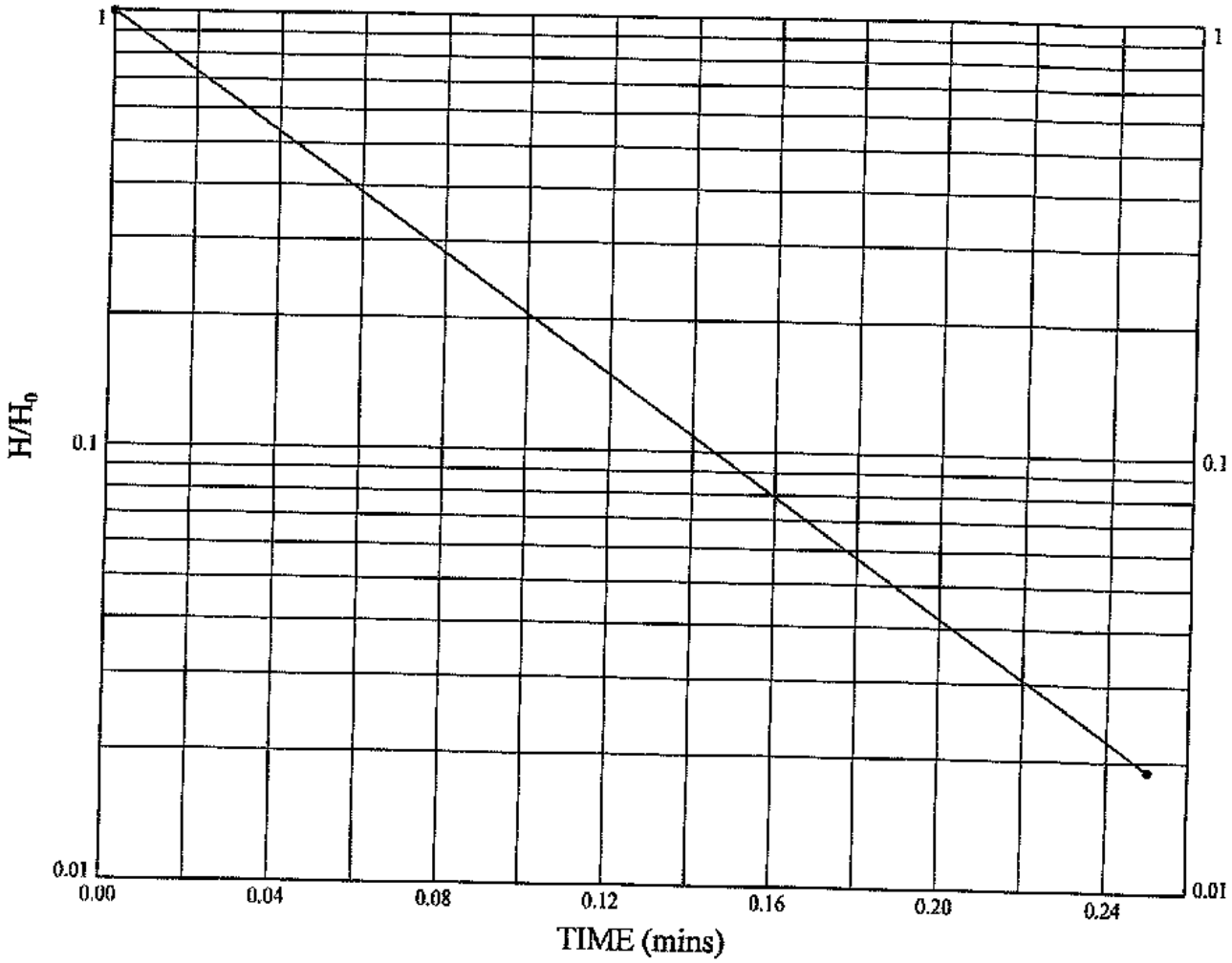
IN-SITU PERMEABILITY TEST - FALLING HEAD
In accordance with BS 5930:1999

Borehole : **BH15** Depth (m below GL): **3.60-4.60** Test Number: **2**

Test Date: **25/11/2008** Test Supervisor: **SHandcock**

Ground Level (m AOD): **2.03** National Grid Co-ordinates: **E:647475.3 N:264069.0**

PLOT OF H/Ho AGAINST TIME



Cross Sectional Area, A	=	**0.00028**	m^2
Intake Factor, F/D	=	**15.29**	m
Basic Time Lag, T (from plot)	=	**4**	sec
In-situ Permeability, $k = \frac{A}{F \times T}$	=	**4.64×10^{-3}**	m/sec

Notes : **Intake Factor equation from Fig 7 BS5930:1999 section 25.4.6 has been used to calculate permeability. To enable calculation of permeability a measured standing water level of 1.04m prior to the test was used to determine head, H. Permeability has been calculated using the Graphical method in accordance with BS5930:1999 25.4.6.1 b. A lot of water in monitroing well at start of test.**

STRUCTURAL SOILS
The Old School
Stillhouse Lane
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Bristol BS3 4EB

Compiled By	Date	Checked By	Date
[redacted]	24/03/09	[redacted]	24/3/9

Contract: **Sizewell C Supplementary Investigation**

Job No: **722201**

STRUCTURAL_SOILS_GINT_LIBRARY.GLB!! - PERM - 2 OF 2 - WELL - FALL OR RISE | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_02 | 24/03/09 - 14:45

IN-SITU PERMEABILITY TEST - FALLING HEAD
In accordance with BS 5930:1999

Borehole : **BH23** Depth (m below GL): **6.40-7.40** Test Number: **1**

Test Date: **25/11/2008** Test Supervisor: **SHandcock**

Ground Level (m AOD): **2.20** National Grid Co-ordinates: **E:647484.6 N:264046.9**

TEST SETUP DETAILS

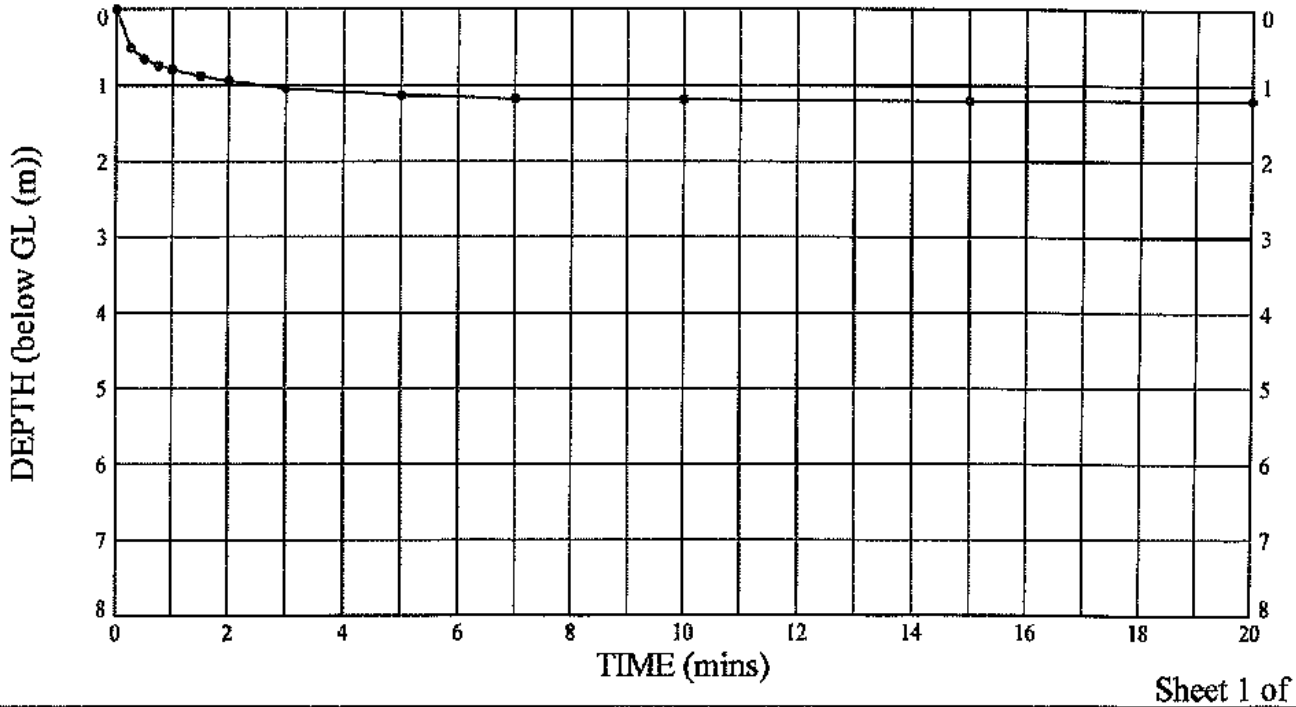
Depth measurements recorded from ground level.

Depth to top of response zone:	**6.40** m	Type of piezometer:	**Casagrande piezo**
Depth to base of response zone:	**7.40** m	Slotted pipe section:	**- m**
Length of response zone:	**1.00** m	Type of piezometer fill:	**Gravel**
Initial groundwater level prior to test:	**1.20** m	Weather:	**Fine**
Borehole diameter:	**200** mm		
Monitoring well diameter:	**19** mm		

TEST MEASUREMENTS

Time (mins)	Water depth (m)	Head (m)	H/Ho	Time (mins)	Water depth (m)	Head (m)	H/Ho	Time (mins)	Water depth (m)	Head (m)	H/Ho
00:00:00	0.00	1.20	1.00	00:10:00	1.19	0.01	0.01				
00:00:15	0.51	0.69	0.58	00:15:00	1.20	0.00	0.00				
00:00:30	0.65	0.55	0.46	00:20:00	1.20	0.00	0.00				
00:00:45	0.74	0.46	0.38								
00:01:00	0.79	0.41	0.34								
00:01:30	0.88	0.32	0.27								
00:02:00	0.94	0.26	0.22								
00:03:00	1.04	0.16	0.13								
00:05:00	1.13	0.07	0.06								
00:07:00	1.17	0.03	0.03								

PLOT OF WATER DEPTH AGAINST TIME



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Contract: **Sizewell C Supplementary Investigation**

Job No: **722201**

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STRUCTURAL_SOILS_GINT_LIBRARY.GLB!! - PERM - 1 OF 2 - WELL - FALL OR RISE | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_02 | 24/03/09 - 14:42.

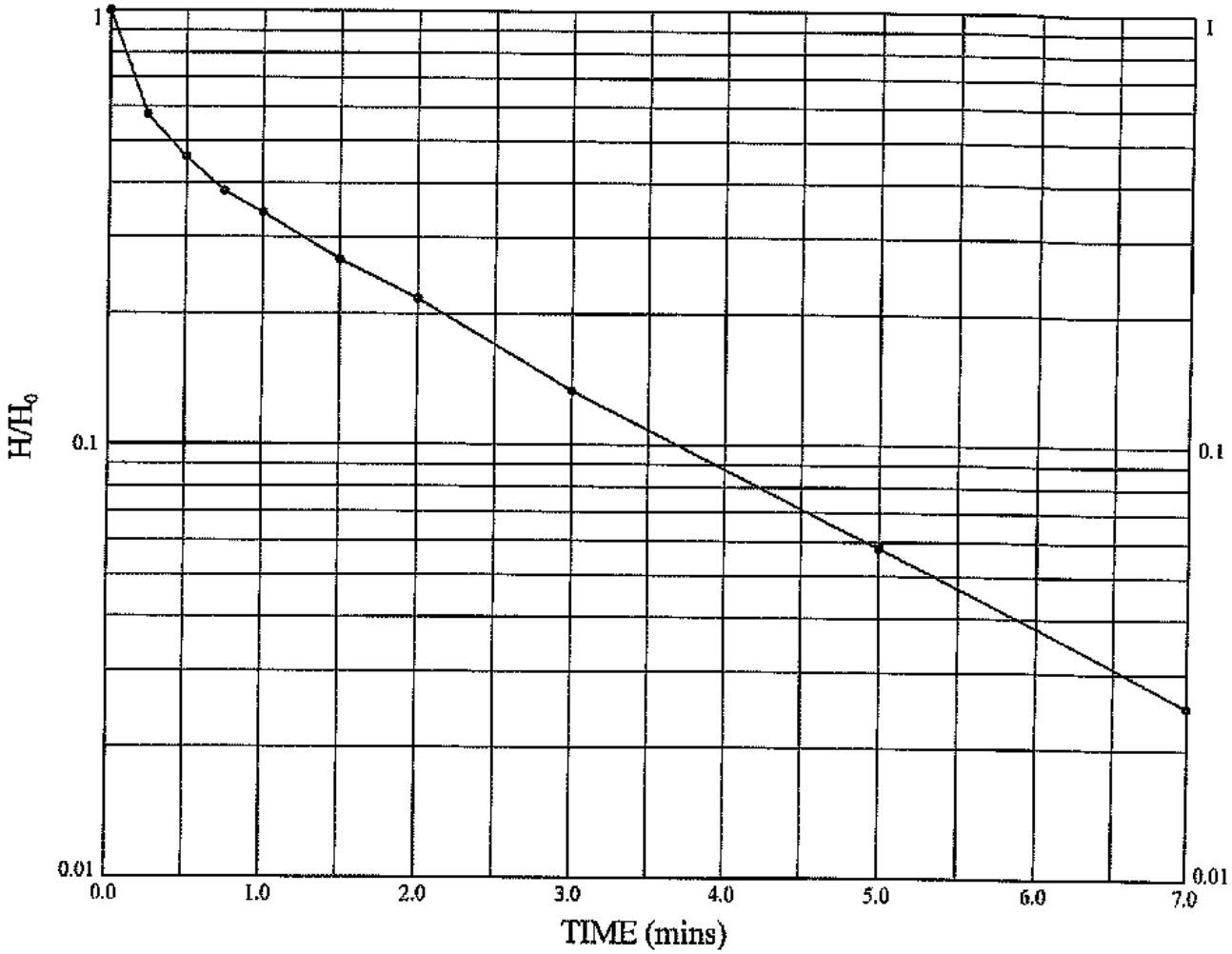
IN-SITU PERMEABILITY TEST - FALLING HEAD
In accordance with BS 5930:1999

Borehole : **BH23** Depth (m below GL): **6.40-7.40** Test Number: **1**

Test Date: **25/11/2008** Test Supervisor: **SHandcock**

Ground Level (m AOD): **2.20** National Grid Co-ordinates: **E:647484.6 N:264046.9**

PLOT OF H/Ho AGAINST TIME



Cross Sectional Area, A	=	**0.00028**	m^2
Intake Factor, F/D	=	**15.29**	m
Basic Time Lag, T (from plot)	=	**50**	sec
In-situ Permeability, $k = \frac{A}{F \times T}$	=	**3.71×10^{-4}**	m/sec

Notes : **Intake Factor equation from Fig 7 BS5930:1999 section 25.4.6 has been used to calculate permeability. To enable calculation of permeability a measured standing water level of 1.2m prior to the test was used to determine head, H. Permeability has been calculated using the Graphical method in accordance with BS5930:1999 25.4.6.1 b.**

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STRUCTURAL_SOILS_GINT_LIBRARY.GLB!! - PERM - 2 OF 2 - WELL - FALL OR RISE | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_02 | 24/03/09 - 14:45.

IN-SITU PERMEABILITY TEST - FALLING HEAD
In accordance with BS 5930:1999

Borehole : **BH23** Depth (m below GL): **6.40-7.40** Test Number: **2**

Test Date: **25/11/2008** Test Supervisor: **SHandcock**

Ground Level (m AOD): **2.20** National Grid Co-ordinates: **E:647484.6 N:264046.9**

TEST SETUP DETAILS

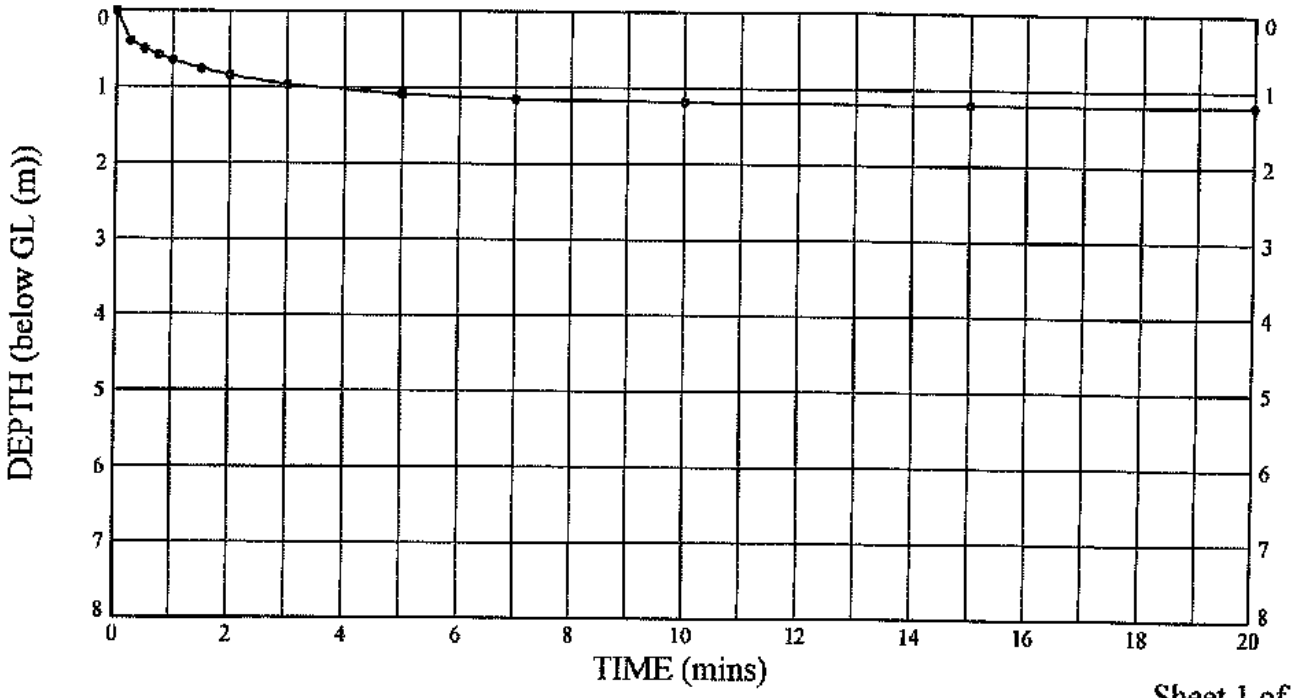
Depth measurements recorded from ground level.

Depth to top of response zone:	6.40 m	Type of piezometer:	Casagrande piezo
Depth to base of response zone:	7.40 m	Slotted pipe section:	- m
Length of response zone:	1.00 m	Type of piezometer fill:	Gravel
Initial groundwater level prior to test:	1.20 m	Weather:	Fine
Borehole diameter:	200 mm		
Monitoring well diameter:	19 mm		

TEST MEASUREMENTS

Time (mins)	Water depth (m)	Head (m)	H/Ho	Time (mins)	Water depth (m)	Head (m)	H/Ho	Time (mins)	Water depth (m)	Head (m)	H/Ho
00:00:00	0.00	1.20	1.00	00:10:00	1.18	0.02	0.02				
00:00:15	0.40	0.80	0.67	00:15:00	1.20	0.00	0.00				
00:00:30	0.50	0.70	0.58	00:20:00	1.20	0.00	0.00				
00:00:45	0.58	0.62	0.52								
00:01:00	0.65	0.55	0.46								
00:01:30	0.76	0.44	0.37								
00:02:00	0.85	0.35	0.29								
00:03:00	0.97	0.23	0.19								
00:05:00	1.09	0.11	0.09								
00:07:00	1.15	0.05	0.04								

PLOT OF WATER DEPTH AGAINST TIME



	Compiled By	Date	Checked By	Date
STRUCTURAL SOILS The Old School Stillhouse Lane Bedminster Bristol BS3 4EB	[redacted]	24/03/09	[redacted]	24/3/09

Contract: **Sizewell C Supplementary Investigation**

Job No: **722201**

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STRUCTURAL_SOILS_GINT_LIBRARY.GLB! - PERM - 1 OF 2 - WELL - FALL OR RISE | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_02 | 24/03/09 - 14:42

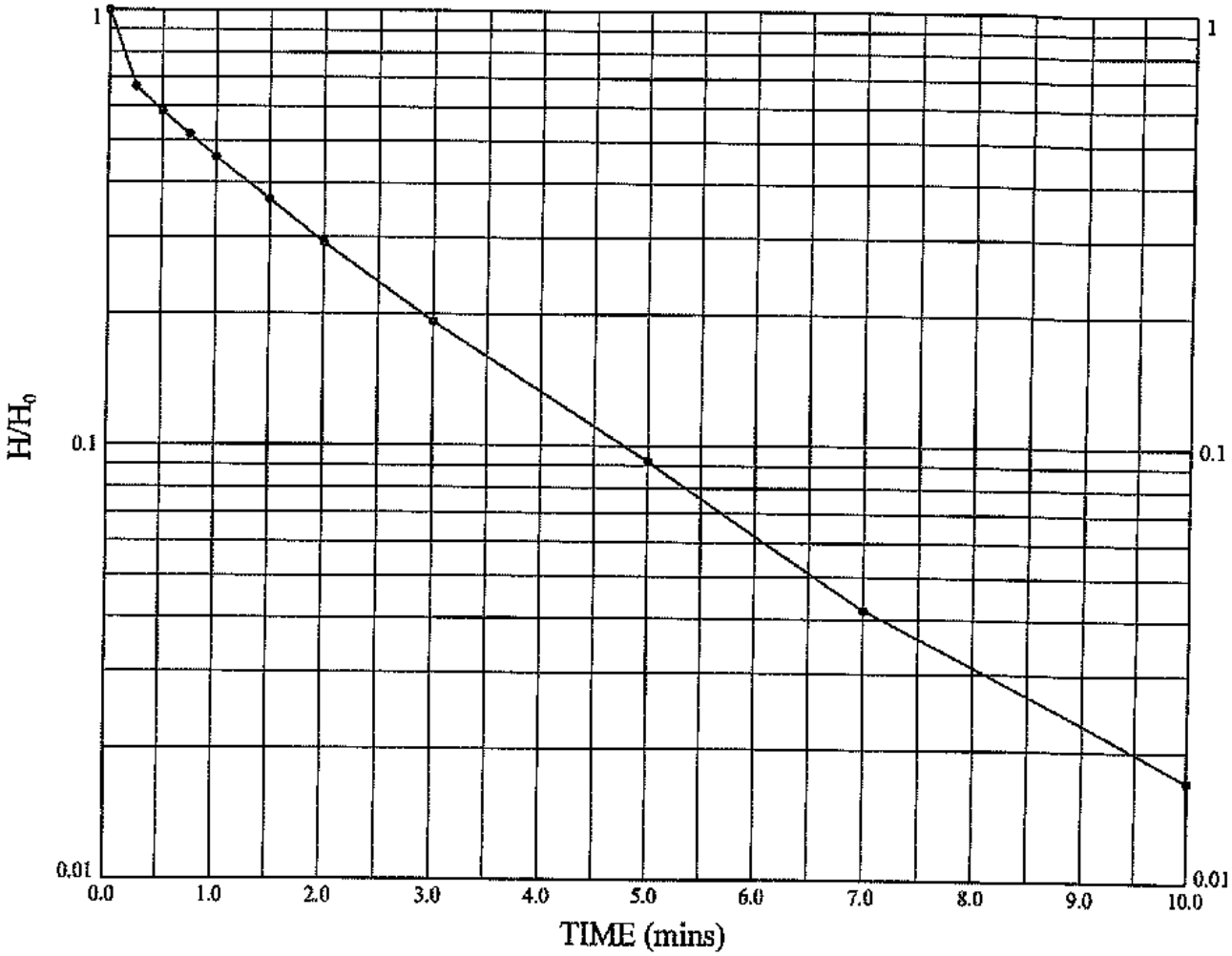
IN-SITU PERMEABILITY TEST - FALLING HEAD
In accordance with BS 5930:1999

Borehole : **BH23** Depth (m below GL): **6.40-7.40** Test Number: **2**

Test Date: **25/11/2008** Test Supervisor: **SHandcock**

Ground Level (m AOD): **2.20** National Grid Co-ordinates: **E:647484.6 N:264046.9**

PLOT OF H/Ho AGAINST TIME



Cross Sectional Area, A	=	**0.00028**	m^2
Intake Factor, F/D	=	**15.29**	m
Basic Time Lag, T (from plot)	=	**89**	sec
In-situ Permeability, $k = \frac{A}{F \times T}$	=	**2.08×10^{-4}**	m/sec

Notes : **Intake Factor equation from Fig 7 BS5930:1999 section 25.4.6 has been used to calculate permeability. To enable calculation of permeability a measured standing water level of 1.2m prior to the test was used to determine head, H. Permeability has been calculated using the Graphical method in accordance with BS5930:1999 25.4.6.1 b.**

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STRUCTURAL_SOILS_GINT_LIBRARY.GLB!! - PERM - 2 OF 2 - WELL - FALL OR RISE | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_02 | 24/03/09 - 14:45.

IN-SITU PERMEABILITY TEST - FALLING HEAD
In accordance with BS 5930:1999

Borehole : **BH36** Depth (m below GL): **6.50-7.80** Test Number: **1**

Test Date: **24/11/2008** Test Supervisor: **SHandcock**

Ground Level (m AOD): **0.94** National Grid Co-ordinates: **E:647279.3 N:264380.6**

TEST SETUP DETAILS

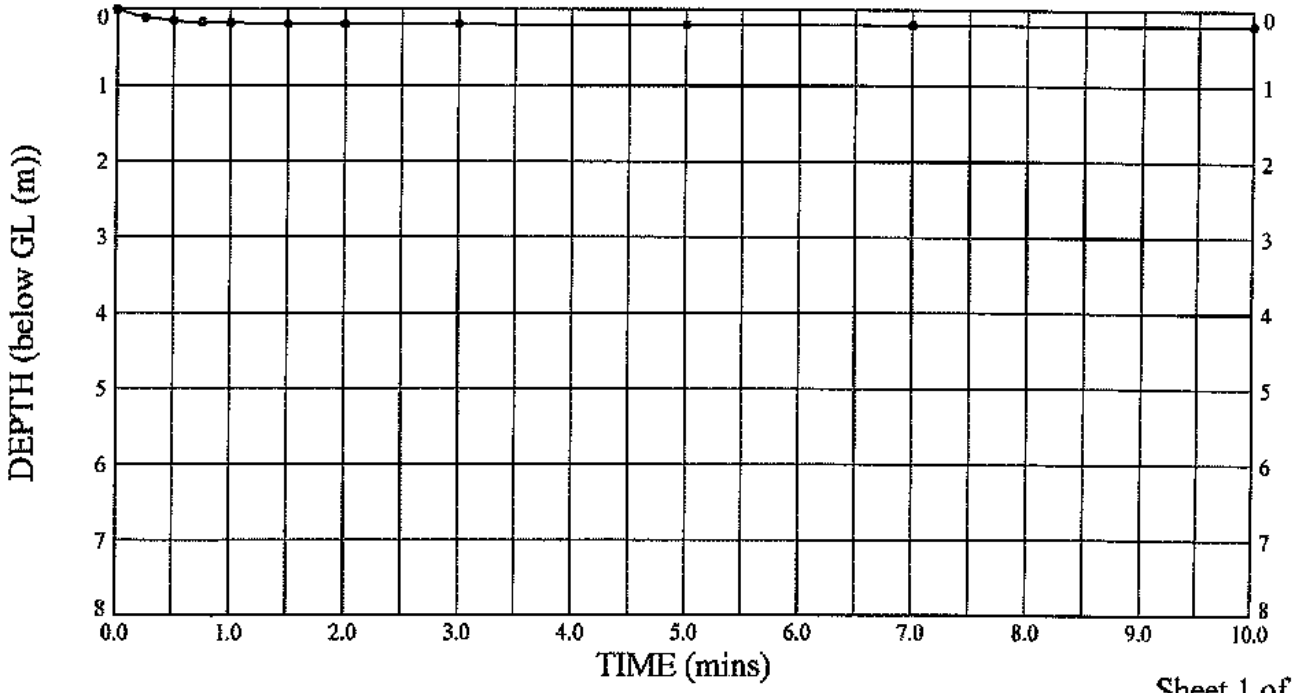
Depth measurements recorded from ground level.

Depth to top of response zone:	**6.50** m	Type of piezometer:	**Casagrande piezo**
Depth to base of response zone:	**7.80** m	Slotted pipe section:	**- m**
Length of response zone:	**1.30** m	Type of piezometer fill:	**Gravel**
Initial groundwater level prior to test:	**0.20** m	Weather:	**Overcast**
Borehole diameter:	**200** mm		
Monitoring well diameter:	**19** mm		

TEST MEASUREMENTS

Time (mins)	Water depth (m)	Head (m)	H/Ho	Time (mins)	Water depth (m)	Head (m)	H/Ho	Time (mins)	Water depth (m)	Head (m)	H/Ho
00:00:00	0.00	0.20	1.00	00:10:00	0.20	0.00	0.00				
00:00:15	0.11	0.09	0.45								
00:00:30	0.15	0.05	0.25								
00:00:45	0.17	0.03	0.15								
00:01:00	0.18	0.02	0.10								
00:01:30	0.19	0.01	0.05								
00:02:00	0.19	0.01	0.05								
00:03:00	0.19	0.01	0.05								
00:05:00	0.20	0.00	0.00								
00:07:00	0.20	0.00	0.00								

PLOT OF WATER DEPTH AGAINST TIME



STRUCTURAL SOILS The Old School Stillhouse Lane Bedminster Bristol BS3 4EB	Compiled By: [redacted]	Date: 24/03/09	Checked By: [redacted] Date: 24/3/09
	Contract: **Sizewell C Supplementary Investigation**		Job No: **722201**

STRUCTURAL_SOILS_GINT_LIBRARY.GLB!! - PERM - 1 OF 2 - WELL - FALL OR RISE | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v6_02 | 24/03/09 - 14:42.

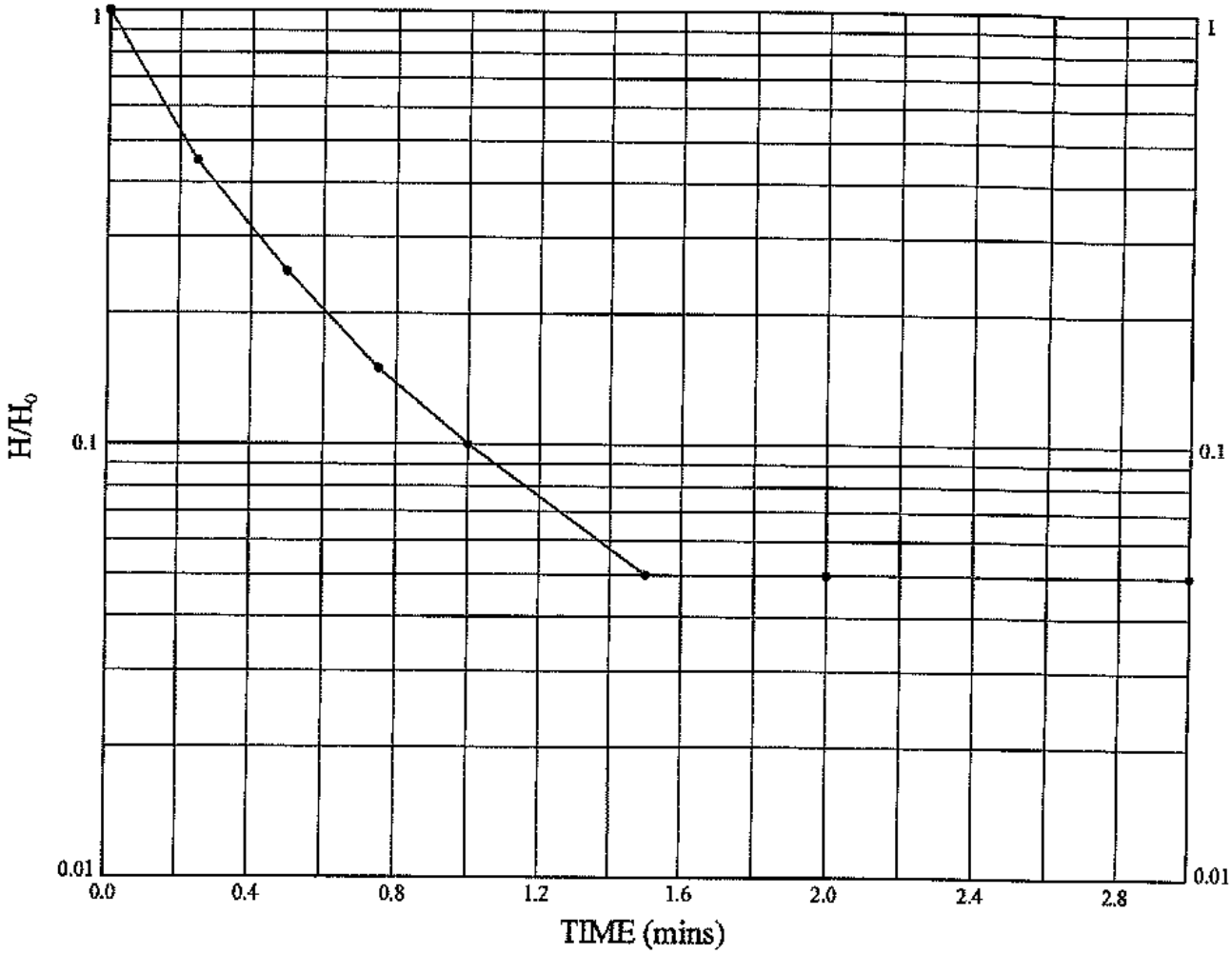
IN-SITU PERMEABILITY TEST - FALLING HEAD
In accordance with BS 5930:1999

Borehole : **BH36** Depth (m below GL): **6.50-7.80** Test Number: 1

Test Date: **24/11/2008** Test Supervisor: **SHandcock**

Ground Level (m AOD): **0.94** National Grid Co-ordinates: **E:647279.3 N:264380.6**

PLOT OF H/Ho AGAINST TIME



Cross Sectional Area, A	=	**0.00028**	m^2
Intake Factor, F/D	=	**17.93**	m
Basic Time Lag, T (from plot)	=	**20**	sec
In-situ Permeability, $k = \frac{A}{F \times T}$	=	**7.91×10^{-4}**	m/sec

Notes : **Intake Factor equation from Fig 7 BS5930:1999 section 25.4.6 has been used to calculate permeability. To enable calculation of permeability a measured standing water level of 0.2m prior to the test was used to determine head, H. Permeability has been calculated using the Graphical method in accordance with BS5930:1999 25.4.6.1 b.**

STRUCTURAL SOILS
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[redacted]	24/03/09	[redacted]	24/3/09

Contract: **Sizewell C Supplementary Investigation**

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STRUCTURAL_SOILS_GINT_LIBRARY.GLB!! - PERM - 2 OF 2 - WELL - FALL OR RISE | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_02 | 24/03/09 - 14:45

IN-SITU PERMEABILITY TEST - FALLING HEAD
In accordance with BS 5930:1999

Borehole : **BH36** Depth (m below GL): **6.50-7.80** Test Number: **2**

Test Date: **24/11/2008** Test Supervisor: **SHandcock**

Ground Level (m AOD): **0.94** National Grid Co-ordinates: **E:647279.3 N:264380.6**

TEST SETUP DETAILS

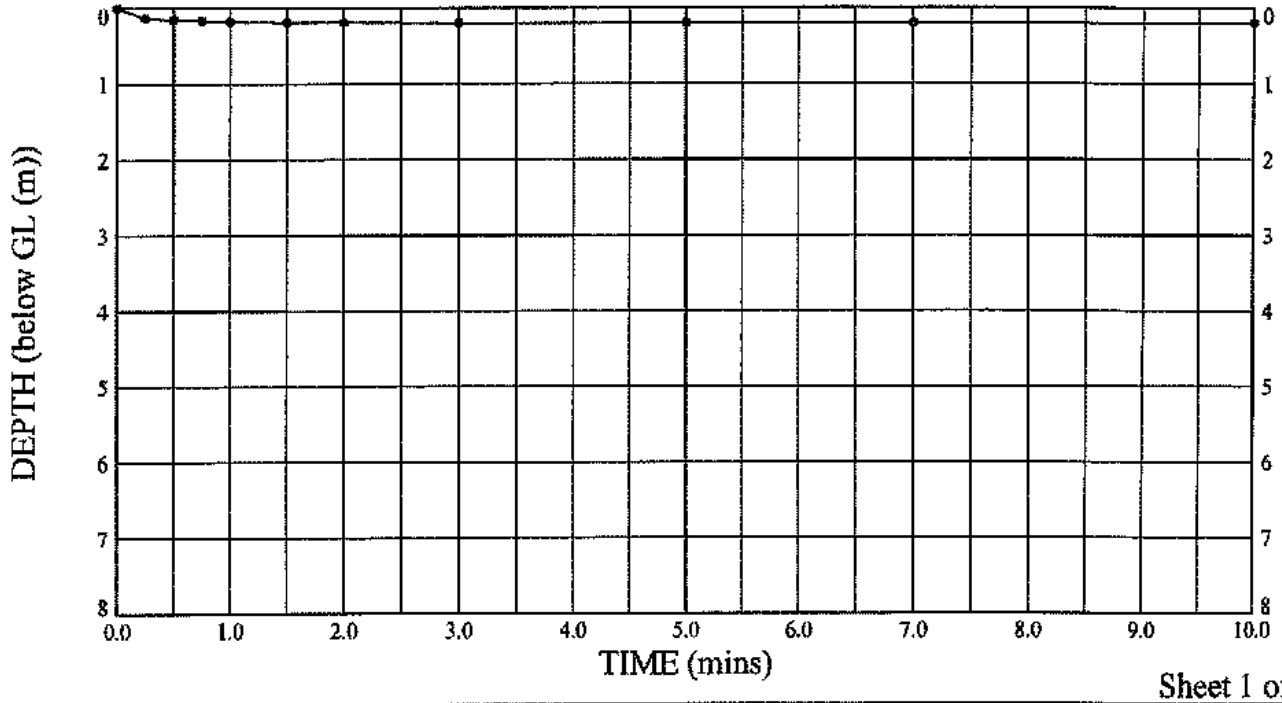
Depth measurements recorded from ground level.

Depth to top of response zone:	**6.50** m	Type of piezometer:	**Casagrande piezo**
Depth to base of response zone:	**7.80** m	Slotted pipe section:	**- m**
Length of response zone:	**1.30** m	Type of piezometer fill:	**Gravel**
Initial groundwater level prior to test:	**0.20** m	Weather:	**Overcast**
Borehole diameter:	**200** mm		
Monitoring well diameter:	**19** mm		

TEST MEASUREMENTS

Time (mins)	Water depth (m)	Head (m)	H/Ho	Time (mins)	Water depth (m)	Head (m)	H/Ho	Time (mins)	Water depth (m)	Head (m)	H/Ho
00:00:00	0.00	0.20	1.00	00:10:00	0.20	0.00	0.00				
00:00:15	0.13	0.07	0.35								
00:00:30	0.15	0.05	0.25								
00:00:45	0.17	0.03	0.15								
00:01:00	0.18	0.02	0.10								
00:01:30	0.19	0.01	0.05								
00:02:00	0.19	0.01	0.05								
00:03:00	0.20	0.00	0.00								
00:05:00	0.20	0.00	0.00								
00:07:00	0.20	0.00	0.00								

PLOT OF WATER DEPTH AGAINST TIME



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STRUCTURAL_SOILS_GINT_LIBRARY.GLB!! - PERM - 1 OF 2 - WELL - FALL OR RISE || 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v9_02 | 24/03/09 - 14:42.

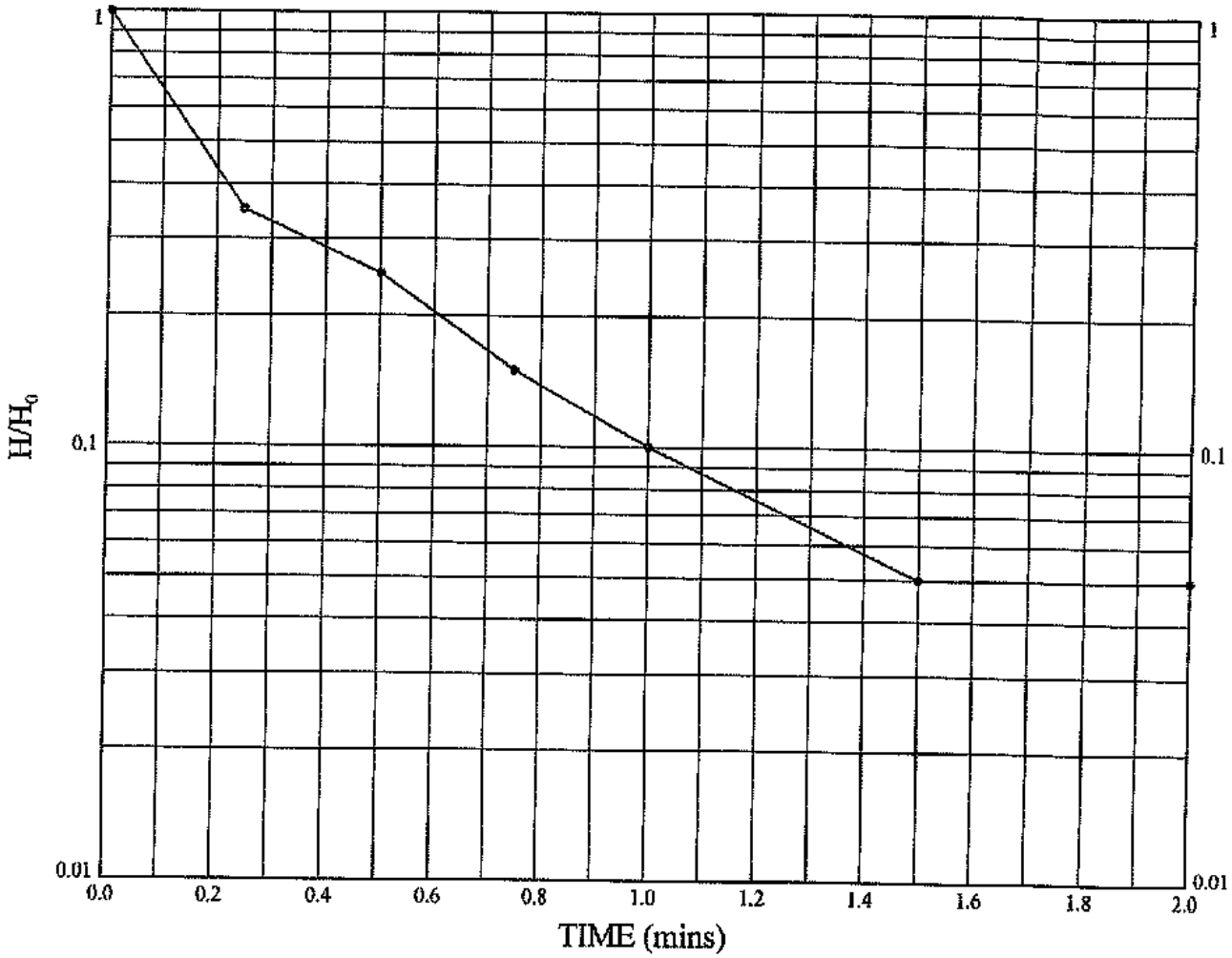
IN-SITU PERMEABILITY TEST - FALLING HEAD
In accordance with BS 5930:1999

Borehole : **BH36** Depth (m below GL): **6.50-7.80** Test Number: **2**

Test Date: **24/11/2008** Test Supervisor: **SHandcock**

Ground Level (m AOD): **0.94** National Grid Co-ordinates: **E:647279.3 N:264380.6**

PLOT OF H/Ho AGAINST TIME



Cross Sectional Area, A	=	**0.00028**	m^2
Intake Factor, F/D	=	**17.93**	m
Basic Time Lag, T (from plot)	=	**14**	sec
In-situ Permeability, $k = \frac{A}{F \times T}$	=	**1.13×10^{-3}**	m/sec

Notes : **Intake Factor equation from Fig 7 BS5930:1999 section 25.4.6 has been used to calculate permeability. To enable calculation of permeability a measured standing water level of 0.2m prior to the test was used to determine head, H. Permeability has been calculated using the Graphical method in accordance with BS5930:1999 25.4.6.1 b.**

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Contract: **Sizewell C Supplementary Investigation**

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STRUCTURAL_SOILS_GINT_LIBRARY.GLB! - PERM - 2 OF 2 - WELL - FALL OR RISE | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_02 | 24/03/09 - 14:45

IN-SITU PERMEABILITY TEST - FALLING HEAD
In accordance with BS 5930:1999

Borehole : **BH37** Depth (m below GL): **6.00-7.10** Test Number: **1**

Test Date: **24/11/2008** Test Supervisor: **SHandcock**

Ground Level (m AOD): **1.72** National Grid Co-ordinates: **E:647208.4 N:264296.1**

TEST SETUP DETAILS

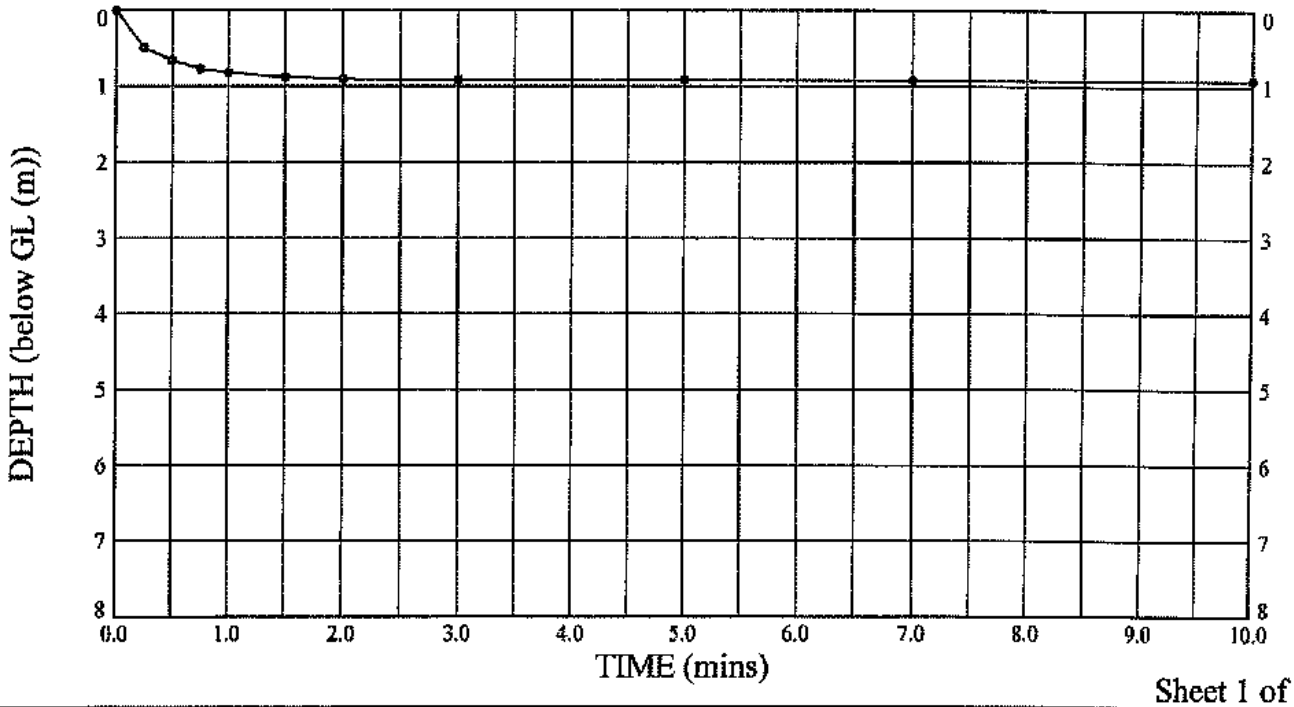
Depth measurements recorded from ground level.

Depth to top of response zone:	**6.00** m	Type of piezometer:	**Casagrande piezo**
Depth to base of response zone:	**7.10** m	Slotted pipe section:	**- m**
Length of response zone:	**1.10** m	Type of piezometer fill:	**Gravel**
Initial groundwater level prior to test:	**0.93** m	Weather:	**Overcast**
Borehole diameter:	**200** mm		
Monitoring well diameter:	**19** mm		

TEST MEASUREMENTS

Time (mins)	Water depth (m)	Head (m)	H/Ho	Time (mins)	Water depth (m)	Head (m)	H/Ho	Time (mins)	Water depth (m)	Head (m)	H/Ho
00:00:00	0.00	0.93	1.00	00:10:00	0.92	0.01	0.01				
00:00:15	0.49	0.44	0.47								
00:00:30	0.66	0.27	0.29								
00:00:45	0.77	0.16	0.17								
00:01:00	0.82	0.11	0.12								
00:01:30	0.88	0.05	0.05								
00:02:00	0.90	0.03	0.03								
00:03:00	0.92	0.01	0.01								
00:05:00	0.92	0.01	0.01								
00:07:00	0.92	0.01	0.01								

PLOT OF WATER DEPTH AGAINST TIME



	Compiled By	Date	Checked By	Date
STRUCTURAL SOILS The Old School Stillhouse Lane Bedminster Bristol BS3 4EB	[redacted]	24/03/09	[redacted]	24/3/9
	Contract: **Sizewell C Supplementary Investigation**		Job No: **722201**	

STRUCTURAL_SOILS_GINT_LIBRARY.GLBII - PERM - 1 OF 2 - WELL - FALL OR RISE | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_02 | 24/03/09 - 14:42

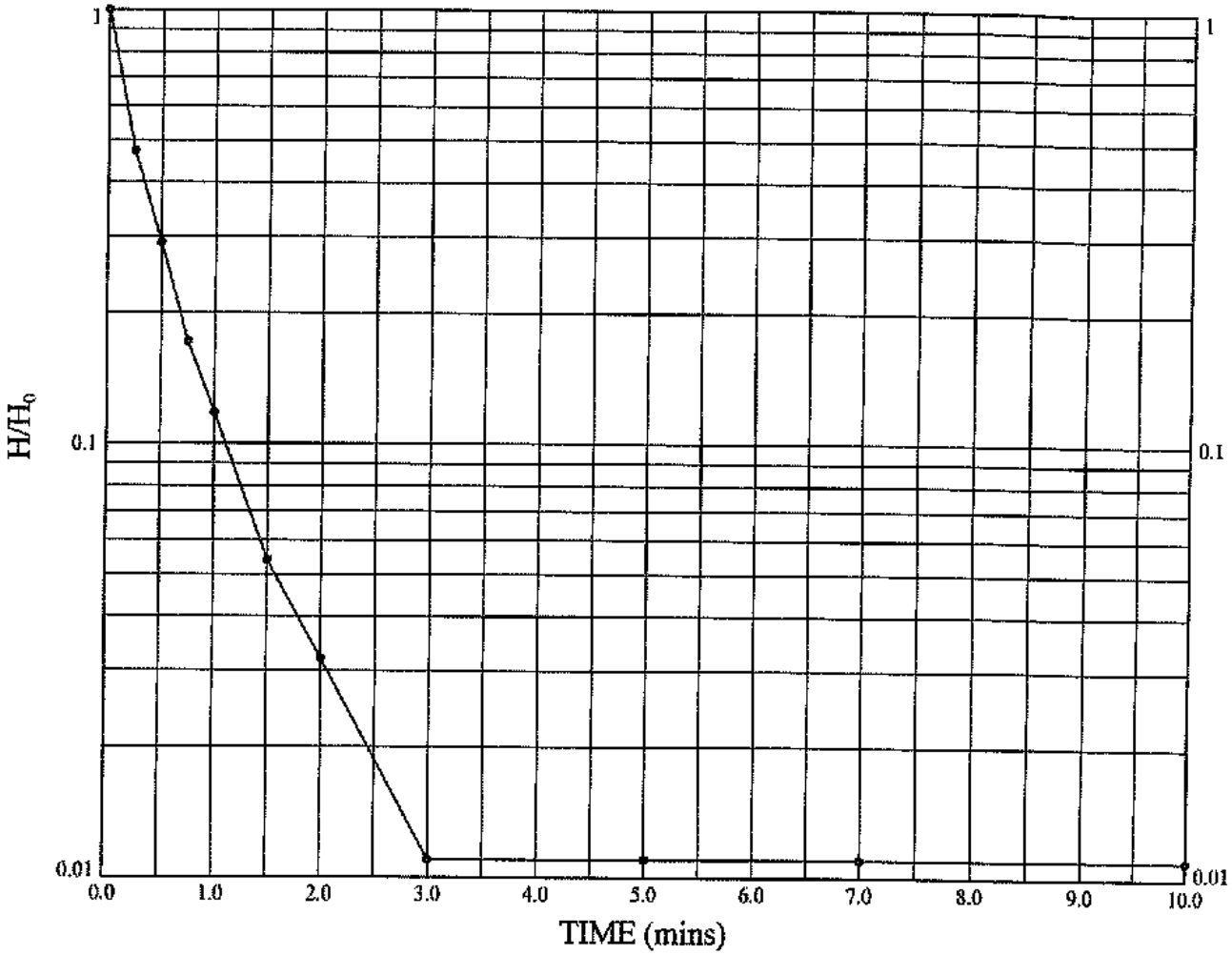
IN-SITU PERMEABILITY TEST - FALLING HEAD
In accordance with BS 5930:1999

Borehole : **BH37** Depth (m below GL): **6.00-7.10** Test Number: 1

Test Date: **24/11/2008** Test Supervisor: **SHandcock**

Ground Level (m AOD): **1.72** National Grid Co-ordinates: **E:647208.4 N:264296.1**

PLOT OF H/Ho AGAINST TIME



Cross Sectional Area, A	=	**0.00028**	m^2
Intake Factor, F/D	=	**16.18**	m
Basic Time Lag, T (from plot)	=	**23**	sec
In-situ Permeability, $k = \frac{A}{F \times T}$	=	**7.62×10^{-4}**	m/sec

Notes : **Intake Factor equation from Fig 7 BS5930:1999 section 25.4.6 has been used to calculate permeability. To enable calculation of permeability a measured standing water level of 0.93m prior to the test was used to determine head, H. Permeability has been calculated using the Graphical method in accordance with BS5930:1999 25.4.6.1 b.**

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STRUCTURAL_SOILS_GINT_LIBRARY.GLB!! - PERM - 2 OF 2 - WELL - FALL OR RISE | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_02 | 24/03/09 - 14:45

IN-SITU PERMEABILITY TEST - FALLING HEAD
In accordance with BS 5930:1999

Borehole : **BH37** Depth (m below GL): **6.00-7.10** Test Number: **2**

Test Date: **24/11/2008** Test Supervisor: **SHandcock**

Ground Level (m AOD): **1.72** National Grid Co-ordinates: **E:647208.4 N:264296.1**

TEST SETUP DETAILS

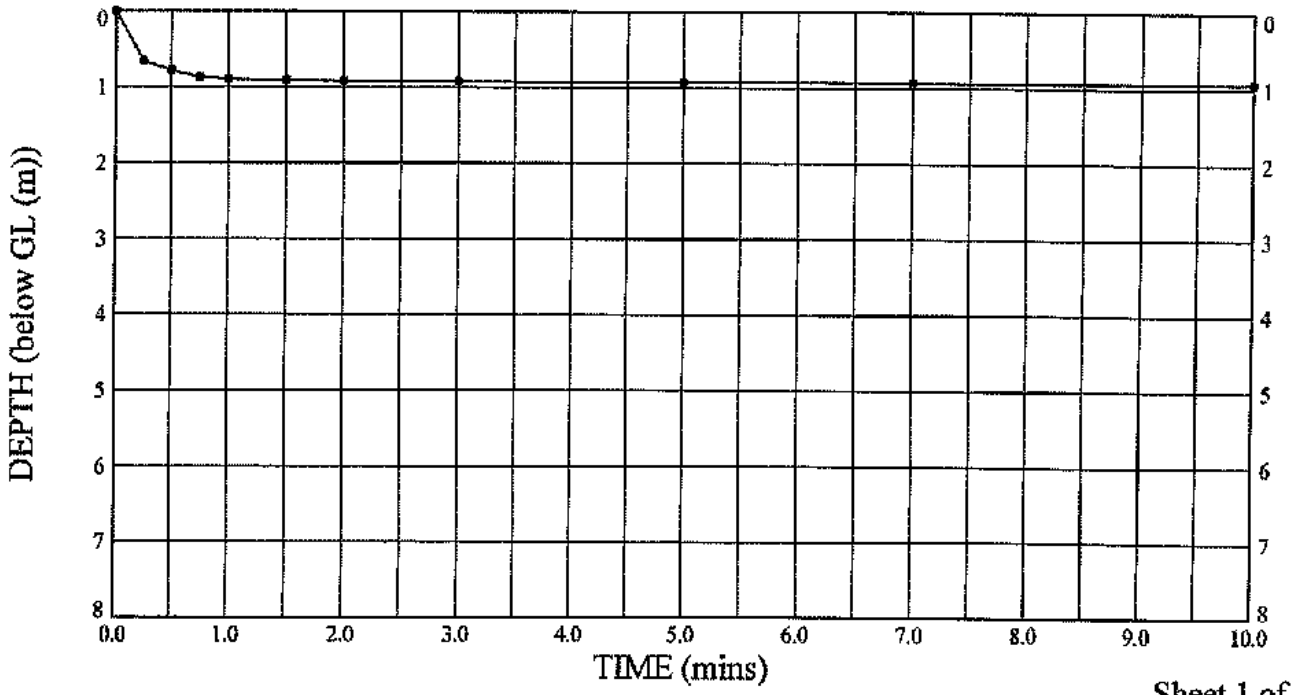
Depth measurements recorded from ground level.

Depth to top of response zone:	**6.00** m	Type of piezometer:	**Casagrande piezo**
Depth to base of response zone:	**7.10** m	Slotted pipe section:	**- m**
Length of response zone:	**1.10** m	Type of piezometer fill:	**Gravel**
Initial groundwater level prior to test:	**0.93** m	Weather:	**Overcast**
Borehole diameter:	**200** mm		
Monitoring well diameter:	**19** mm		

TEST MEASUREMENTS

Time (mins)	Water depth (m)	Head (m)	H/Ho	Time (mins)	Water depth (m)	Head (m)	H/Ho	Time (mins)	Water depth (m)	Head (m)	H/Ho
00:00:00	0.00	0.93	1.00	00:10:00	0.93	0.00	0.00				
00:00:15	0.66	0.27	0.29								
00:00:30	0.78	0.15	0.16								
00:00:45	0.87	0.06	0.07								
00:01:00	0.89	0.04	0.04								
00:01:30	0.91	0.02	0.02								
00:02:00	0.92	0.01	0.01								
00:03:00	0.92	0.01	0.01								
00:05:00	0.93	0.00	0.00								
00:07:00	0.93	0.00	0.00								

PLOT OF WATER DEPTH AGAINST TIME



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STRUCTURAL SOILS The Old School Stillhouse Lane Bedminster Bristol BS3 4EB	[redacted]	24/03/09	[redacted]	24/3/09
	Contract: **Sizewell C Supplementary Investigation**		Job No: **722201**	

STRUCTURAL_SOILS_GINT_LIBRARY.GLB!! - PERM - 1 OF 2 - WELL - FALL OR RISE | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_02 | 24/03/09 - 14:42

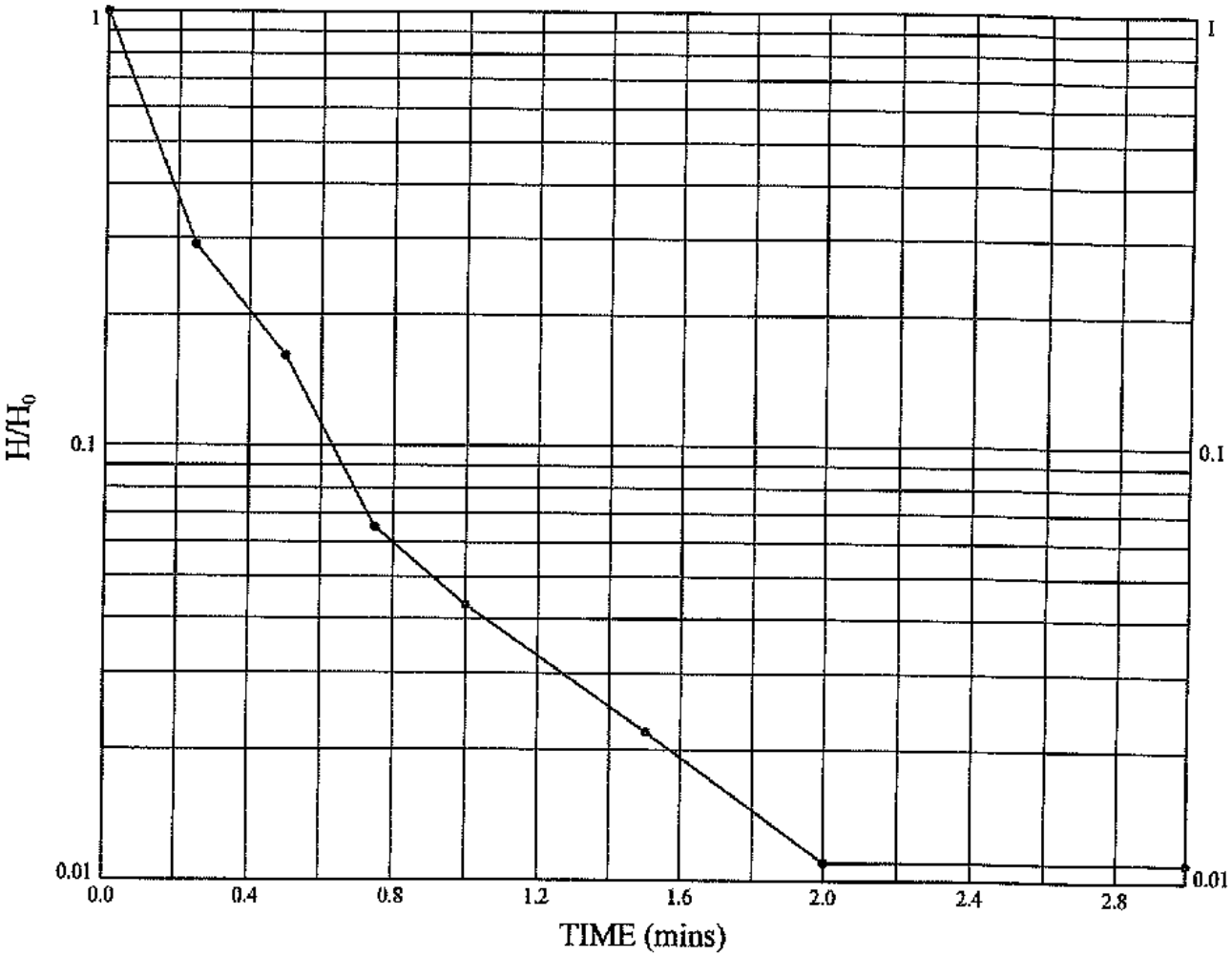
IN-SITU PERMEABILITY TEST - FALLING HEAD
In accordance with BS 5930:1999

Borehole : **BH37** Depth (m below GL): **6.00-7.10** Test Number: **2**

Test Date: **24/11/2008** Test Supervisor: **SHandcock**

Ground Level (m AOD): **1.72** National Grid Co-ordinates: **E:647208.4 N:264296.1**

PLOT OF H/Ho AGAINST TIME



Cross Sectional Area, A	=	**0.00028**	m^2
Intake Factor, F/D	=	**16.18**	m
Basic Time Lag, T (from plot)	=	**12**	sec
In-situ Permeability, $k = \frac{A}{F \times T}$	=	**1.46×10^{-3}**	m/sec

Notes : **Intake Factor equation from Fig 7 BS5930:1999 section 25.4.6 has been used to calculate permeability. To enable calculation of permeability a measured standing water level of 0.93m prior to the test was used to determine head, H. Permeability has been calculated using the Graphical method in accordance with BS5930:1999 25.4.6.1 b.**

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STRUCTURAL_SOILS_GINT_LIBRARY.GLB!1 - PERM - 2 OF 2 - WELL - FALL OR RISE | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_02 | 24/03/09 - 14:45

IN-SITU PERMEABILITY TEST - FALLING HEAD
In accordance with BS 5930:1999

Borehole : **BH38** Depth (m below GL): **6.50-7.80** Test Number: **1**

Test Date: **24/11/2008** Test Supervisor: **SHandcock**

Ground Level (m AOD): **1.65** National Grid Co-ordinates: **E:647134.3 N:264215.0**

TEST SETUP DETAILS

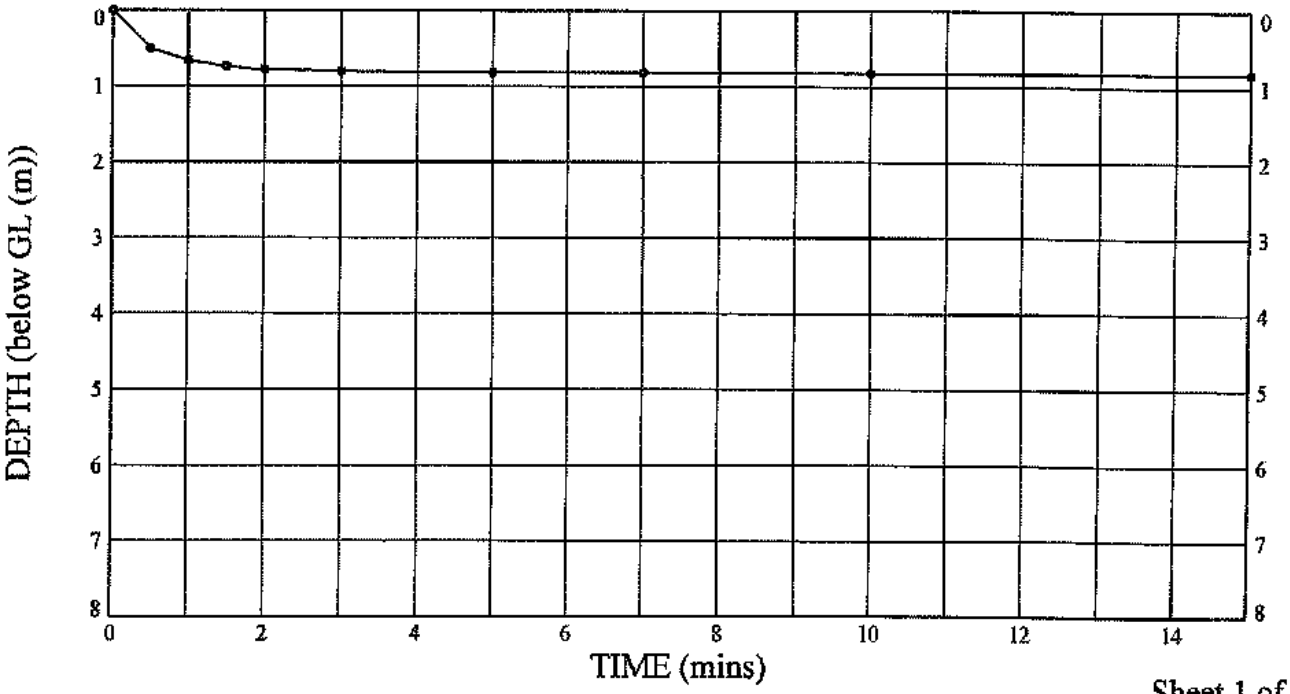
Depth measurements recorded from ground level.

Depth to top of response zone:	**6.50** m	Type of piezometer:	**Casagrande piezo**
Depth to base of response zone:	**7.80** m	Slotted pipe section:	**- m**
Length of response zone:	**1.30** m	Type of piezometer fill:	**Gravel**
Initial groundwater level prior to test:	**0.82** m	Weather:	**Overcast**
Borehole diameter:	**200** mm		
Monitoring well diameter:	**19** mm		

TEST MEASUREMENTS

Time (mins)	Water depth (m)	Head (m)	H/Ho	Time (mins)	Water depth (m)	Head (m)	H/Ho	Time (mins)	Water depth (m)	Head (m)	H/Ho
00:00:00	0.90	0.82	1.00								
00:00:30	0.50	0.32	0.39								
00:01:00	0.66	0.16	0.20								
00:01:30	0.74	0.08	0.10								
00:02:00	0.78	0.04	0.05								
00:03:00	0.80	0.02	0.02								
00:05:00	0.82	0.00	0.00								
00:07:00	0.82	0.00	0.00								
00:10:00	0.82	0.00	0.00								
00:15:00	0.82	0.00	0.00								

PLOT OF WATER DEPTH AGAINST TIME



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Contract: **Sizewell C Supplementary Investigation**

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STRUCTURAL_SOILS_GINT_LIBRARY GLBII - PERM - 1 OF 2 - WELL - FALL OR RISE | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_02 | 24/03/09 - 14:42.

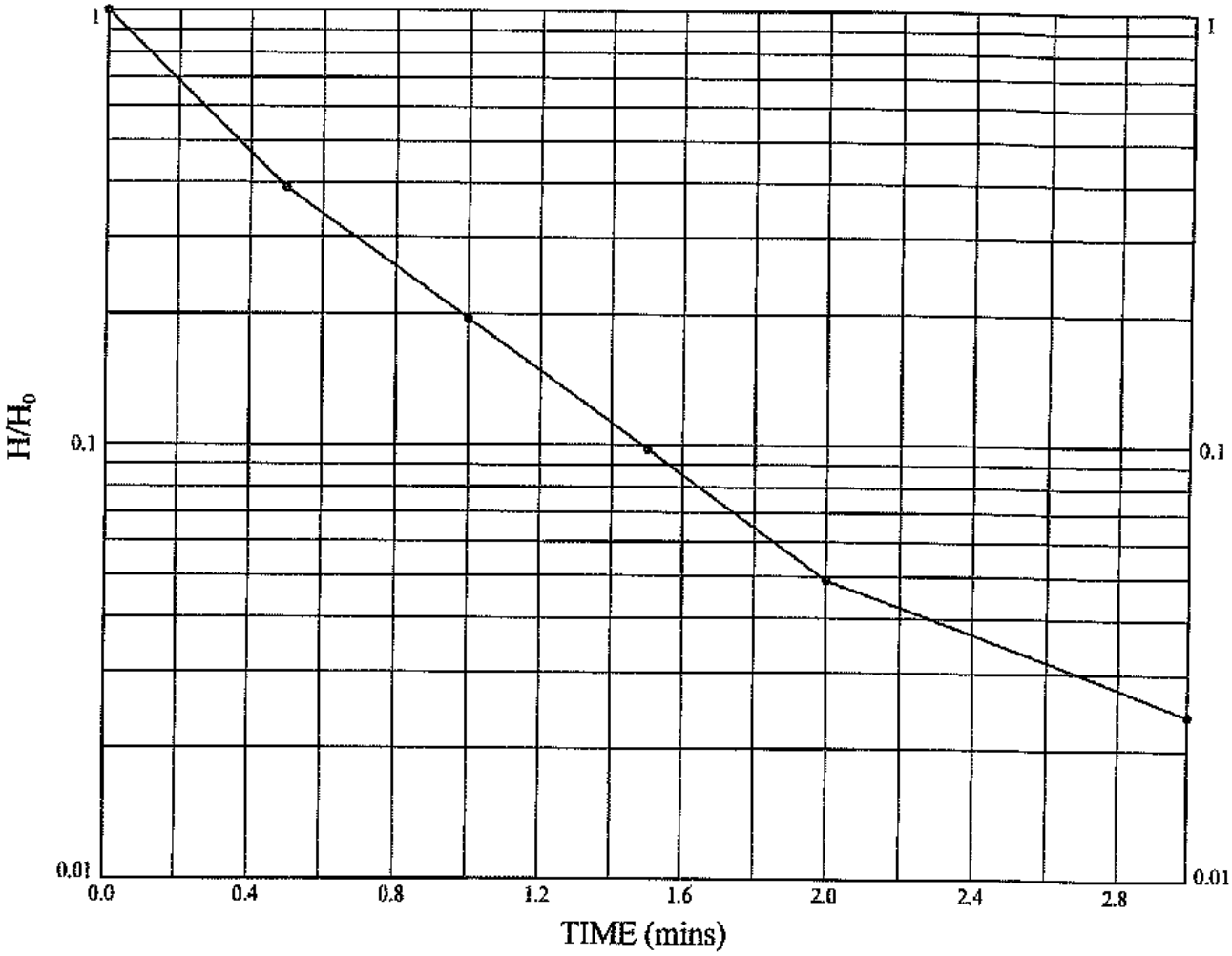
IN-SITU PERMEABILITY TEST - FALLING HEAD
In accordance with BS 5930:1999

Borehole : **BH38** Depth (m below GL): **6.50-7.80** Test Number: **1**

Test Date: **24/11/2008** Test Supervisor: **SHandcock**

Ground Level (m AOD): **1.65** National Grid Co-ordinates: **E:647134.3 N:264215.0**

PLOT OF H/Ho AGAINST TIME



Cross Sectional Area, A	=	**0.00028**	m^2
Intake Factor, F/D	=	**17.93**	m
Basic Time Lag, T (from plot)	=	**32**	sec
In-situ Permeability, $k = \frac{A}{F \times T}$	=	**4.94×10^{-4}**	m/sec

Notes : **Intake Factor equation from Fig 7 BS5930:1999 section 25.4.6 has been used to calculate permeability. To enable calculation of permeability a measured standing water level of 0.82m prior to the test was used to determine head, H. Permeability has been calculated using the Graphical method in accordance with BS5930:1999 25.4.6.1 b.**

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STRUCTURAL_SOILS_GINT_LIBRARY.GLB!! - PERM - 2 OF 2 - WELL - FALL OR RISE | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_02 | 24/03/09 - 14:46.

IN-SITU PERMEABILITY TEST - FALLING HEAD
In accordance with BS 5930:1999

Borehole : **BH38** Depth (m below GL): **6.50-7.80** Test Number: **2**

Test Date: **24/11/2008** Test Supervisor: **SHandcock**

Ground Level (m AOD): **1.65** National Grid Co-ordinates: **E:647134.3 N:264215.0**

TEST SETUP DETAILS

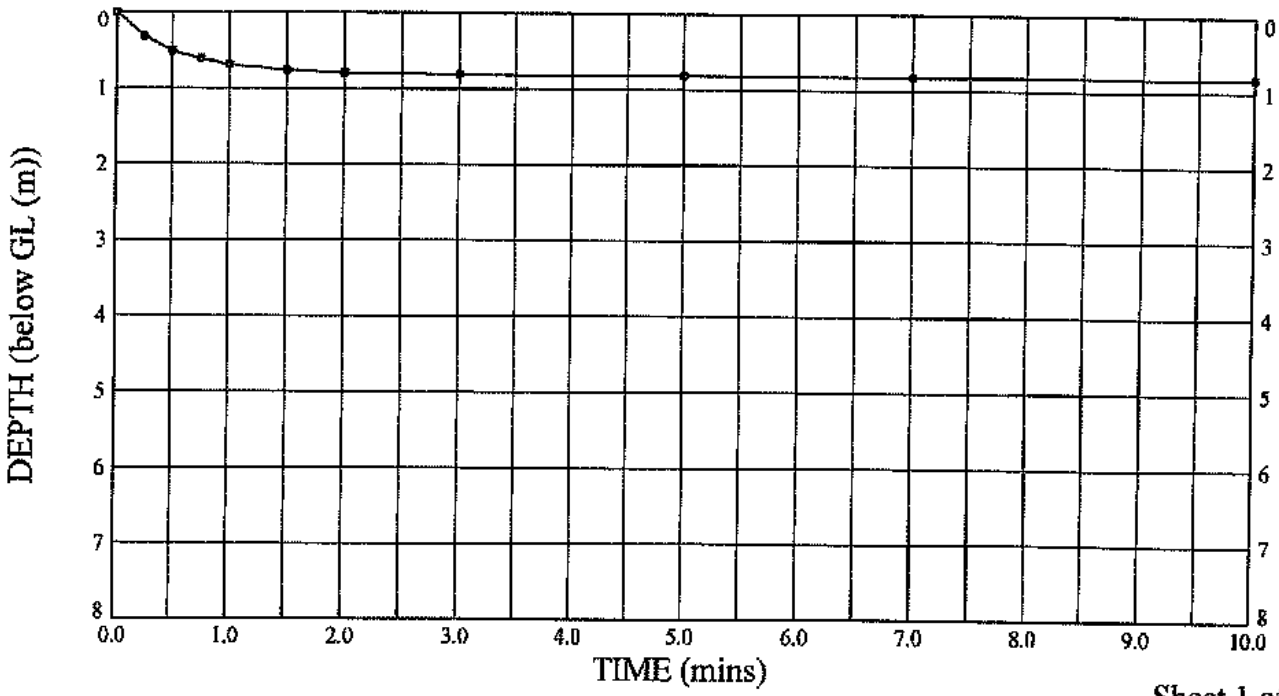
Depth measurements recorded from ground level.

Depth to top of response zone:	**6.50** m	Type of piezometer:	**Casagrande piezo**
Depth to base of response zone:	**7.80** m	Slotted pipe section:	**- m**
Length of response zone:	**1.30** m	Type of piezometer fill:	**Gravel**
Initial groundwater level prior to test:	**0.82** m	Weather:	**Overcast**
Borehole diameter:	**200** mm		
Monitoring well diameter:	**19** mm		

TEST MEASUREMENTS

Time (mins)	Water depth (m)	Head (m)	H/Ho	Time (mins)	Water depth (m)	Head (m)	H/Ho	Time (mins)	Water depth (m)	Head (m)	H/Ho
00:00:00	0.00	0.82	1.00	00:10:00	0.82	0.00	0.00				
00:00:15	0.32	0.50	0.61								
00:00:30	0.51	0.31	0.38								
00:00:45	0.61	0.21	0.26								
00:01:00	0.69	0.13	0.16								
00:01:30	0.76	0.06	0.07								
00:02:00	0.79	0.03	0.04								
00:03:00	0.81	0.01	0.01								
00:05:00	0.82	0.00	0.00								
00:07:00	0.82	0.00	0.00								

PLOT OF WATER DEPTH AGAINST TIME



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STRUCTURAL_SOILS_GINT_LIBRARY.GLB!! - PERM - 1 OF 2 - WELL - FALL OR RISE | 722201_SIZEWELL_C_SUPPLEMENTARY_INVESTIGATION.GPJ - v8_02 | 24/03/09 - 14:42

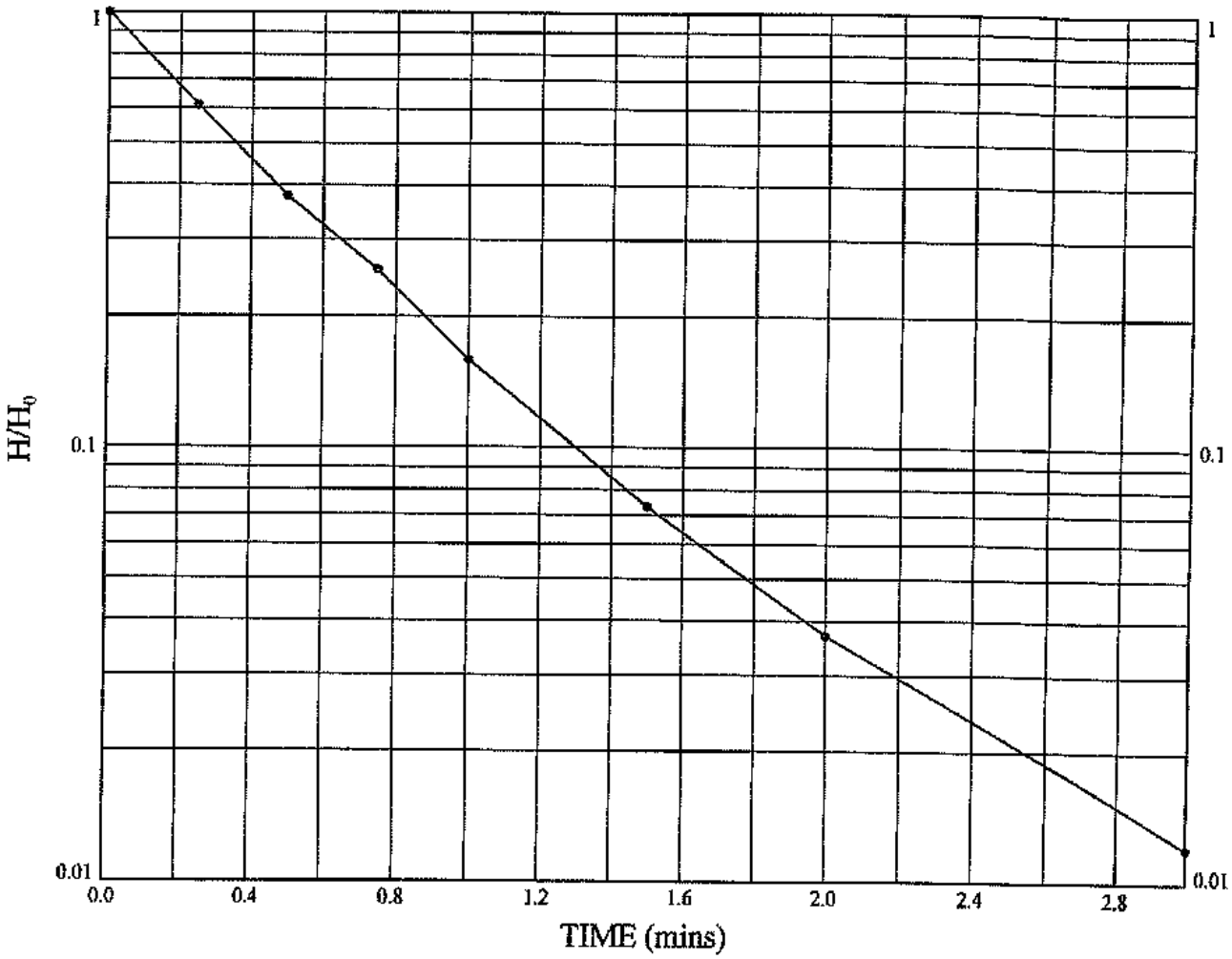
IN-SITU PERMEABILITY TEST - FALLING HEAD
In accordance with BS 5930:1999

Borehole : **BH38** Depth (m below GL): **6.50-7.80** Test Number: **2**

Test Date: **24/11/2008** Test Supervisor: **SHandcock**

Ground Level (m AOD): **1.65** National Grid Co-ordinates: **E:647134.3 N:264215.0**

PLOT OF H/Ho AGAINST TIME



Cross Sectional Area, A	=	**0.00028**	m^2
Intake Factor, F/D	=	**17.93**	m
Basic Time Lag, T (from plot)	=	**31**	sec
In-situ Permeability, $k = \frac{A}{F \times T}$	=	**5.10×10^{-4}**	m/sec

Notes : **Intake Factor equation from Fig 7 BS5930:1999 section 25.4.6 has been used to calculate permeability. To enable calculation of permeability a measured standing water level of 0.82m prior to the test was used to determine head, H. Permeability has been calculated using the Graphical method in accordance with BS5930:1999 25.4.6.1 b.**

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STRUCTURAL_SOILS_GINT_LIBRARY.GLB!! - PERM - 2 OF 2 - WELL - FALL OR RISE | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_02 | 24/03/09 - 14:45.

IN-SITU PERMEABILITY TEST - FALLING HEAD
In accordance with BS 5930:1999

Borehole : **BH39** Depth (m below GL): **7.50-8.80** Test Number: **1**

Test Date: **24/11/2008** Test Supervisor: **SHandcock**

Ground Level (m AOD): **1.63** National Grid Co-ordinates: **E:647057.1 N:264123.0**

TEST SETUP DETAILS

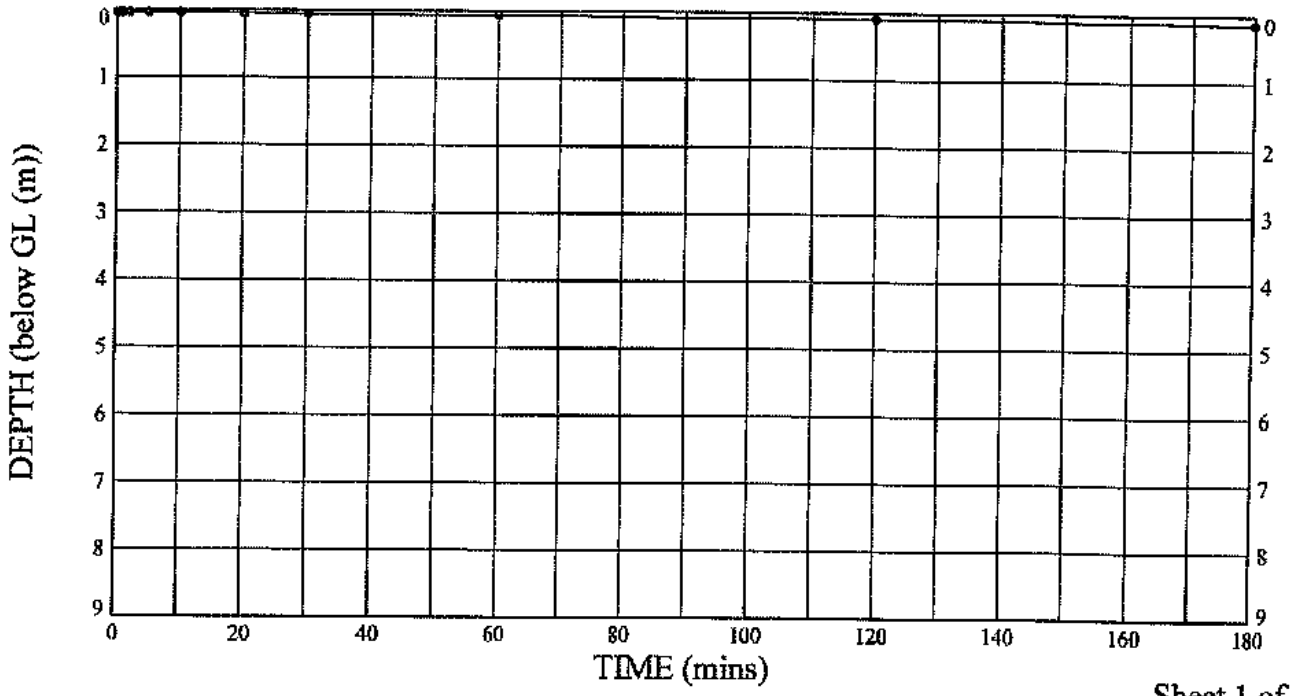
Depth measurements recorded from ground level.

Depth to top of response zone:	**7.50** m	Type of piezometer:	**Casagrande piezo**
Depth to base of response zone:	**8.80** m	Slotted pipe section:	**- m**
Length of response zone:	**1.30** m	Type of piezometer fill:	**Gravel**
Initial groundwater level prior to test:	**0.88** m	Weather:	**Drizzle**
Borehole diameter:	**200** mm		
Monitoring well diameter:	**19** mm		

TEST MEASUREMENTS

Time (mins)	Water depth (m)	Head (m)	H/Ho	Time (mins)	Water depth (m)	Head (m)	H/Ho	Time (mins)	Water depth (m)	Head (m)	H/Ho
00:00:00	0.03	0.85	1.00	03:00:00	0.12	0.76	0.89				
00:00:30	0.03	0.85	1.00								
00:01:00	0.03	0.85	1.00								
00:02:00	0.03	0.85	1.00								
00:05:00	0.03	0.85	1.00								
00:10:00	0.03	0.85	1.00								
00:20:00	0.04	0.84	0.99								
00:30:00	0.05	0.83	0.98								
01:00:00	0.06	0.82	0.97								
02:00:00	0.09	0.79	0.93								

PLOT OF WATER DEPTH AGAINST TIME



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STRUCTURAL_SOILS_GINT_LIBRARY.GLB!! - PERM - 1 OF 2 - WELL - FALL OR RISE | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_02 | 24/03/09 - 14:42

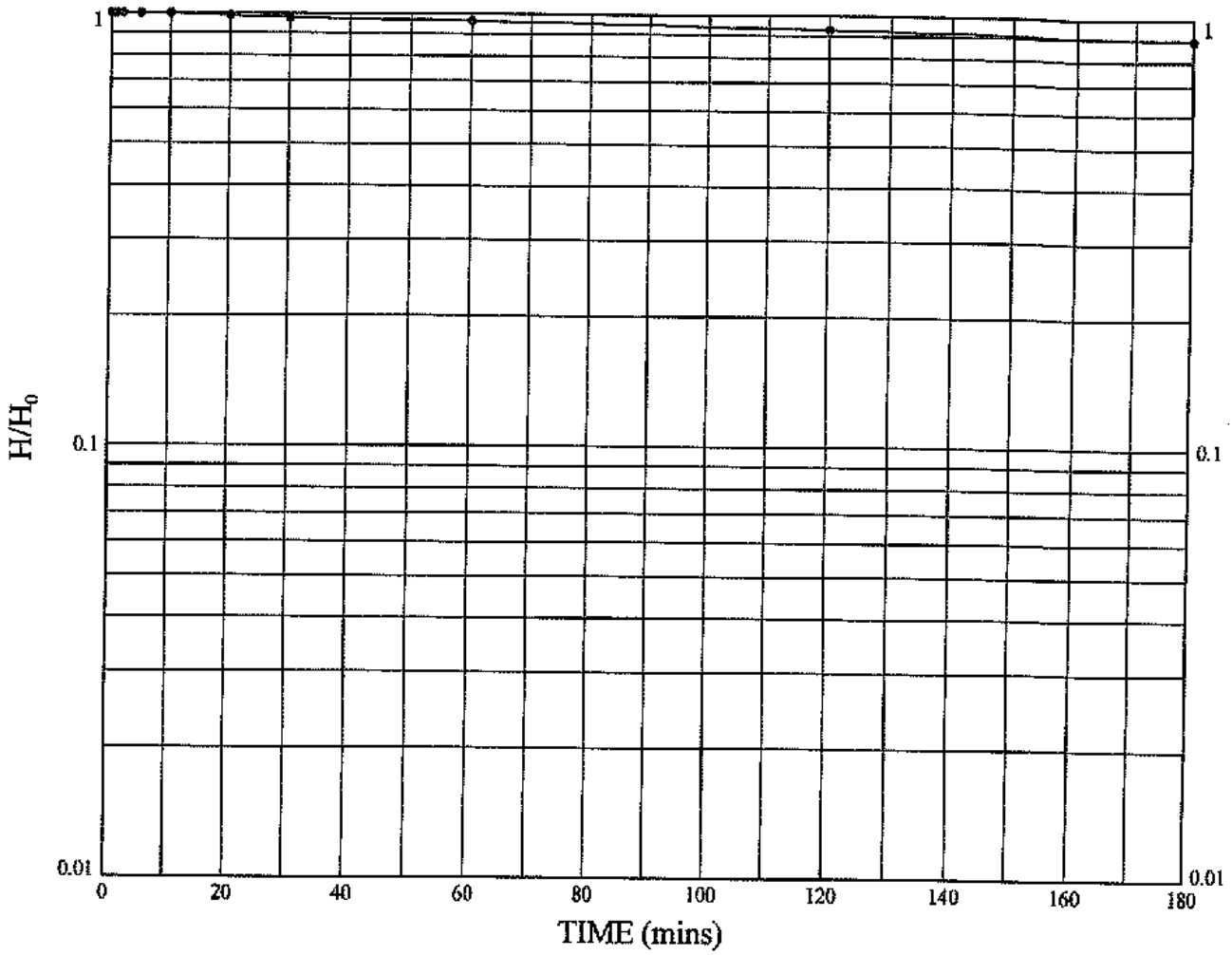
IN-SITU PERMEABILITY TEST - FALLING HEAD
In accordance with BS 5930:1999

Borehole : **BH39** Depth (m below GL): **7.50-8.80** Test Number: **1**

Test Date: **24/11/2008** Test Supervisor: **SHandcock**

Ground Level (m AOD): **1.63** National Grid Co-ordinates: **E:647057.1 N:264123.0**

PLOT OF H/Ho AGAINST TIME



Cross Sectional Area, A	=	**0.00028**	m^2
Intake Factor, F/D	=	**17.93**	m
Basic Time Lag, T (from plot)	=	**155837**	sec
In-situ Permeability, $k = \frac{A}{F \times T}$	=	**1.01×10^{-7}**	m/sec

Notes : **Intake Factor equation from Fig 7 BS5930:1999 section 25.4.6 has been used to calculate permeability. To enable calculation of permeability a measured standing water level of 0.88m prior to the test was used to determine head, H. Permeability has been calculated using the Graphical method in accordance with BS5930:1999 25.4.6.1 b.**

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STRUCTURAL_SOILS_GINT_LIBRARY.GLB || - PERM - 2 OF 2 - WELL - FALL OR RISE || 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v6_02 | 24/03/09 - 14:45

IN-SITU PERMEABILITY TEST - FALLING HEAD
In accordance with BS 5930:1999

Borehole : **BH40** Depth (m below GL): **12.00-17.00** Test Number: **1**

Test Date: **24/11/2008** Test Supervisor: **SHandcock**

Ground Level (m AOD): **3.96** National Grid Co-ordinates: **E:647047.7 N:264016.0**

TEST SETUP DETAILS

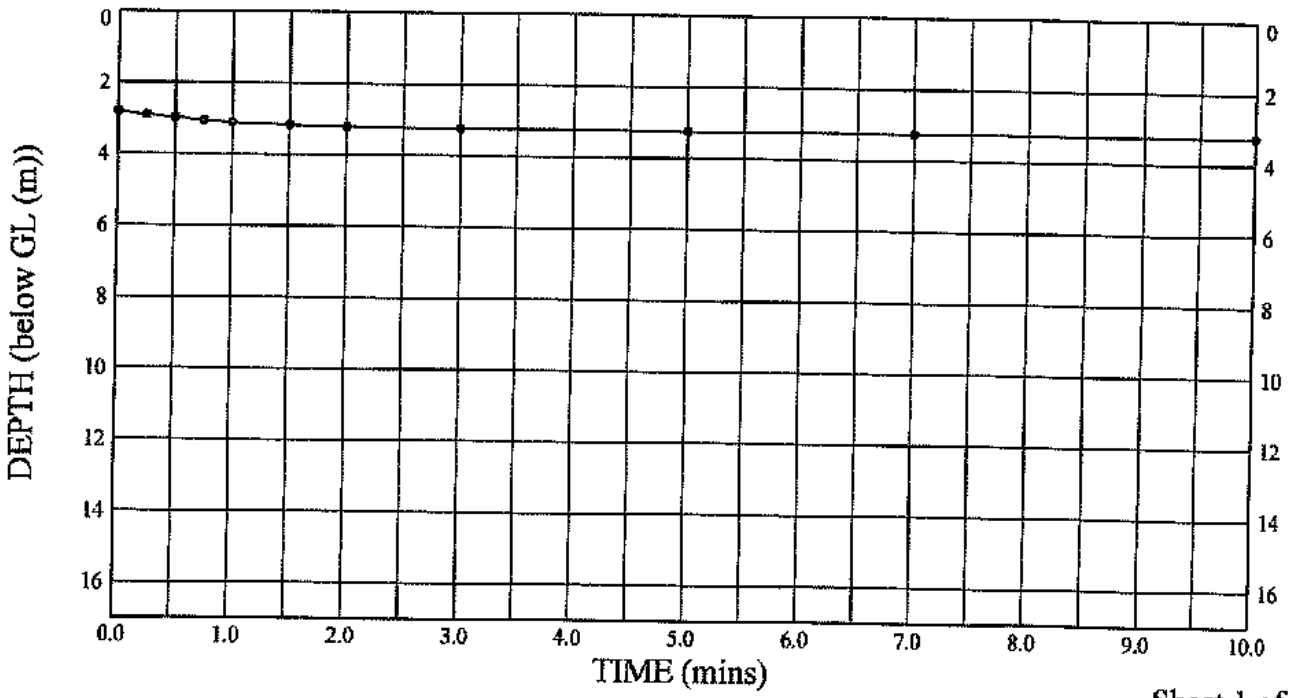
Depth measurements recorded from ground level.

Depth to top of response zone:	**12.00** m	Type of piezometer:	**Slotted standpipe**
Depth to base of response zone:	**17.00** m	Slotted pipe section:	**13.00-16.00 m (Fitted with Geotextile)**
Length of response zone:	**5.00** m	Type of piezometer fill:	
Initial groundwater level prior to test:	**3.24** m	Weather:	**Overcast**
Borehole diameter:	**200** mm		
Monitoring well diameter:	**50** mm		

TEST MEASUREMENTS

Time (mins)	Water depth (m)	Head (m)	H/Ho	Time (mins)	Water depth (m)	Head (m)	H/Ho	Time (mins)	Water depth (m)	Head (m)	H/Ho
00:00:00	2.81	0.43	1.00	00:10:00	3.24	0.00	0.00				
00:00:15	2.91	0.33	0.77								
00:00:30	2.97	0.27	0.63								
00:00:45	3.06	0.18	0.42								
00:01:00	3.11	0.13	0.30								
00:01:30	3.17	0.07	0.16								
00:02:00	3.22	0.02	0.05								
00:03:00	3.23	0.01	0.02								
00:05:00	3.24	0.00	0.00								
00:07:00	3.24	0.00	0.00								

PLOT OF WATER DEPTH AGAINST TIME



	Compiled By	Date	Checked By	Date
STRUCTURAL SOILS The Old School Stillhouse Lane Bedminster Bristol BS3 4EB	[redacted]	24/03/09	[redacted]	24/3/9
	Contract: **Sizewell C Supplementary Investigation**		Job No: **722201**	

STRUCTURAL_SOILS_GINT_LIBRARY.GLB!! - PERM - 1 OF 2 - WELL - FALL OR RISE | 722201_SIZEWELL_C_SUPPLUMENTARY_INVESTIGATION.GPJ - v8_02 | 24/03/09 - 14:42.

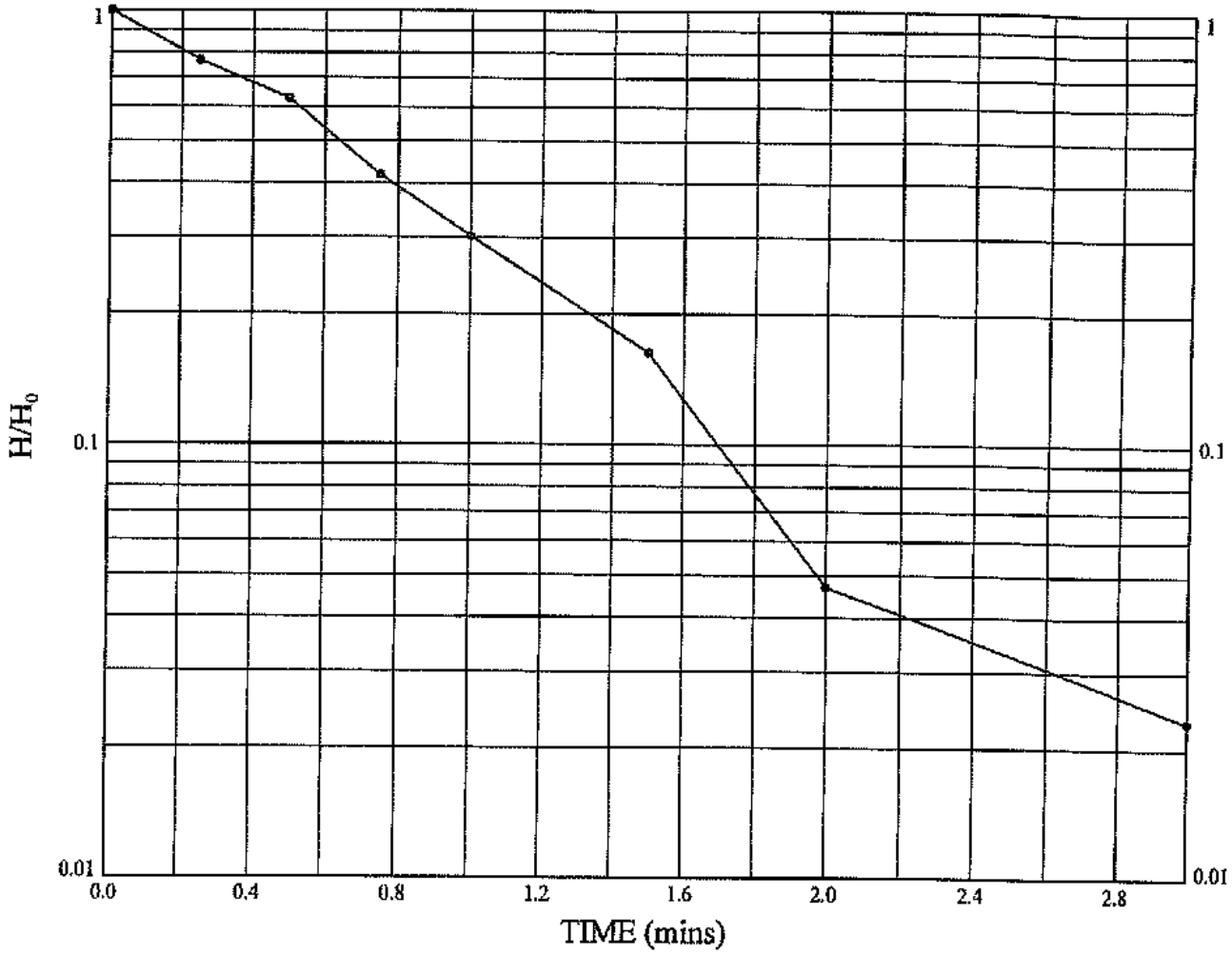
IN-SITU PERMEABILITY TEST - FALLING HEAD
In accordance with BS 5930:1999

Borehole : **BH40** Depth (m below GL): **12.00-17.00** Test Number: **1**

Test Date: **24/11/2008** Test Supervisor: **SHandcock**

Ground Level (m AOD): **3.96** National Grid Co-ordinates: **E:647047.7 N:264016.0**

PLOT OF H/Ho AGAINST TIME



Cross Sectional Area, A	=	**0.00196**	m^2
Intake Factor, F	=	**8.03**	m
Basic Time Lag, T (from plot)	=	**51**	sec
In-situ Permeability, $k = \frac{A}{F \times T}$	=	**4.79×10^{-6}**	m/sec

Notes : **Intake Factor equation D from Fig 6 BS5930:1999 section 25.4.6 has been used to calculate permeability. To enable calculation of permeability a measured standing water level of 3.24m prior to the test was used to determine head, H. Permeability has been calculated using the Graphical method in accordance with BS5930:1999 25.4.6.1 b. No seal at base of hole.**

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STRUCTURAL_SOILS_GINT_LIBRARY.GLB!! - PERM - 2 OF 2 - WELL - FALL OR RISE | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_02 | 24/03/09 - 14:45.

IN-SITU PERMEABILITY TEST - FALLING HEAD
In accordance with BS 5930:1999

Borehole : **BH40** Depth (m below GL): **12.00-17.00** Test Number: **2**

Test Date: **24/11/2008** Test Supervisor: **SHandcock**

Ground Level (m AOD): **3.96** National Grid Co-ordinates: **E:647047.7 N:264016.0**

TEST SETUP DETAILS

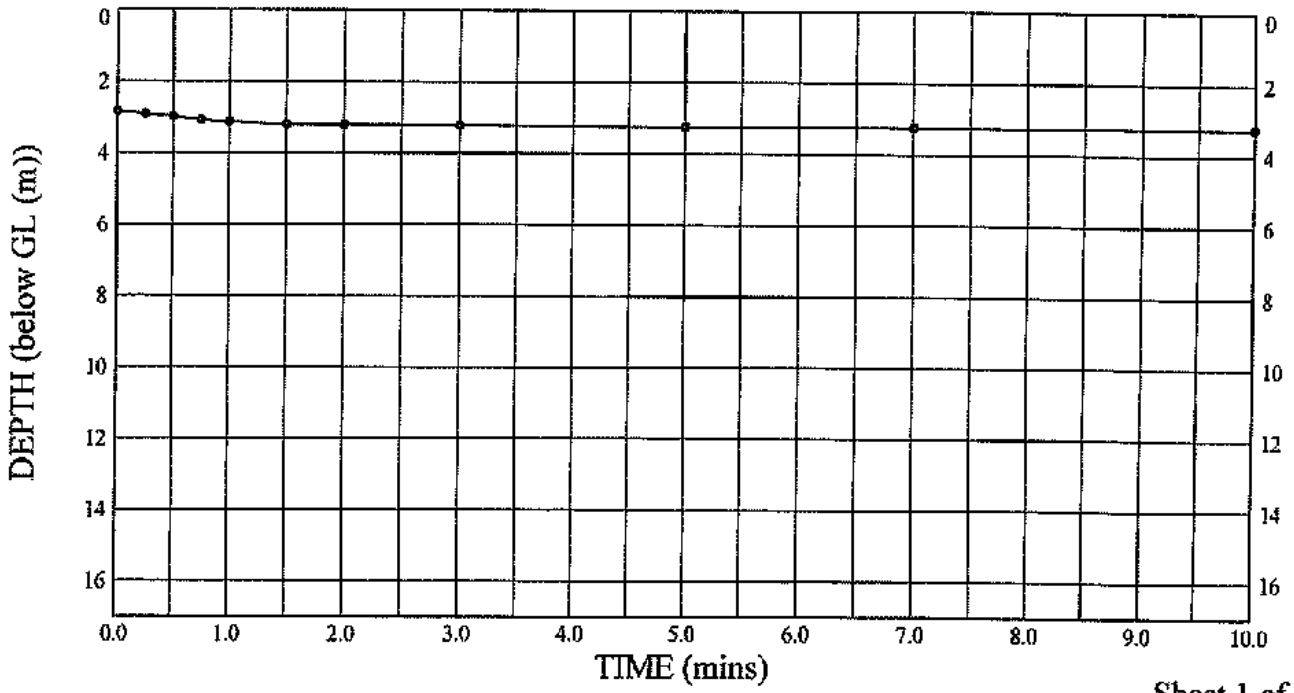
Depth measurements recorded from ground level.

Depth to top of response zone:	**12.00** m	Type of piezometer:	**Slotted standpipe**
Depth to base of response zone:	**17.00** m	Slotted pipe section:	**13.00-16.00** m **(Fitted with Geotextile)**
Length of response zone:	**5.00** m	Type of piezometer fill:	
Initial groundwater level prior to test:	**3.24** m	Weather:	**Overcast**
Borehole diameter:	**200** mm		
Monitoring well diameter:	**50** mm		

TEST MEASUREMENTS

Time (mins)	Water depth (m)	Head (m)	H/Ho	Time (mins)	Water depth (m)	Head (m)	H/Ho	Time (mins)	Water depth (m)	Head (m)	H/Ho
00:00:00	2.83	0.41	1.00	00:10:00	3.24	0.00	0.00				
00:00:15	2.91	0.33	0.81								
00:00:30	2.98	0.26	0.63								
00:00:45	3.07	0.17	0.42								
00:01:00	3.14	0.10	0.24								
00:01:30	3.20	0.04	0.10								
00:02:00	3.21	0.03	0.07								
00:03:00	3.22	0.02	0.05								
00:05:00	3.24	0.00	0.00								
00:07:00	3.24	0.00	0.00								

PLOT OF WATER DEPTH AGAINST TIME



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[redacted]	24/03/09	[redacted]	24/3/9

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STRUCTURAL_SOILS_GINT_LIBRARY.GLB!! - PERM - 1 OF 2 - WELL - FALL OR RISE | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_02 | 24/03/09 - 14:42

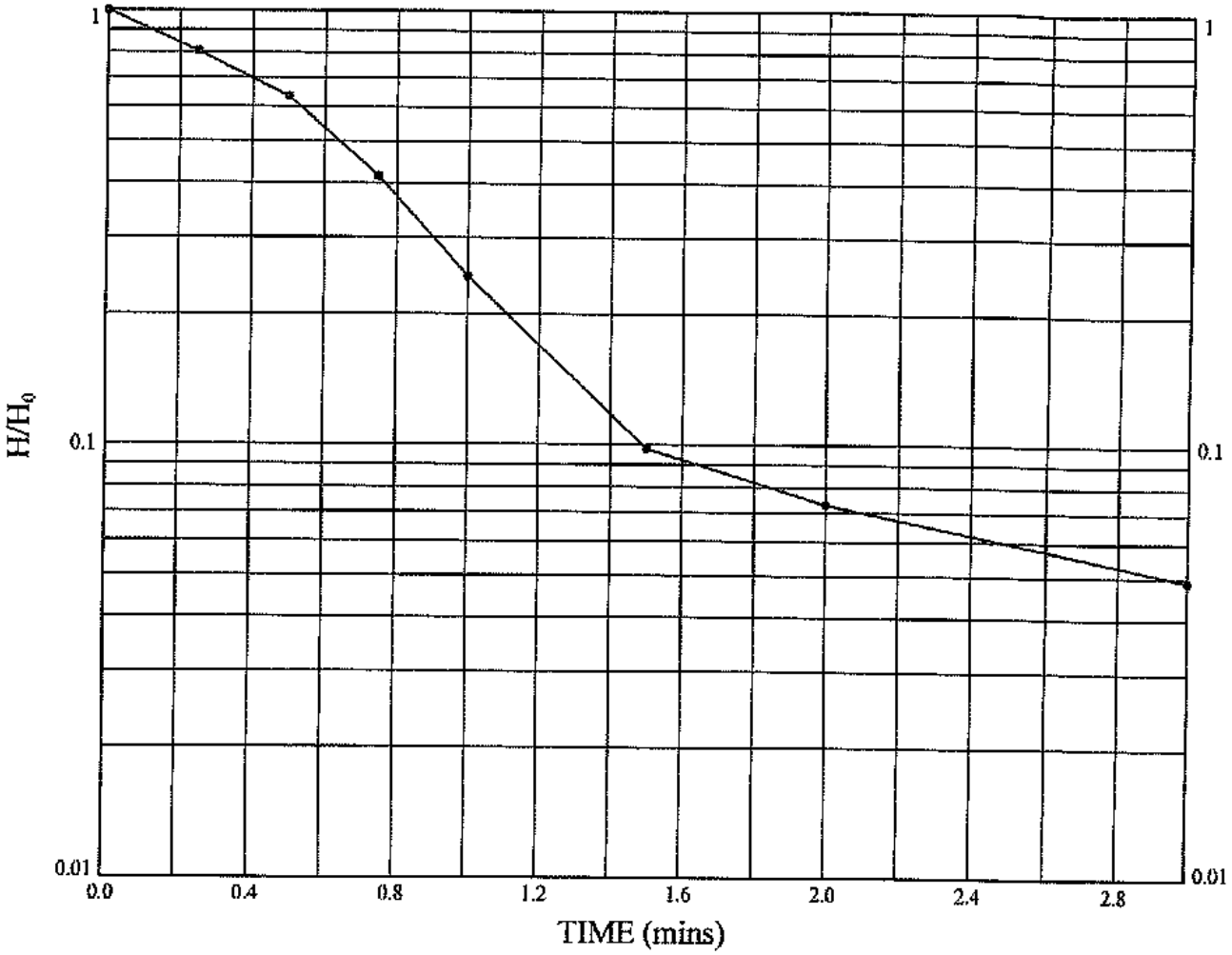
IN-SITU PERMEABILITY TEST - FALLING HEAD
In accordance with BS 5930:1999

Borehole : **BH40** Depth (m below GL): **12.00-17.00** Test Number: **2**

Test Date: **24/11/2008** Test Supervisor: **SHandcock**

Ground Level (m AOD): **3.96** National Grid Co-ordinates: **E:647047.7 N:264016.0**

PLOT OF H/Ho AGAINST TIME



Cross Sectional Area, A	=	**0.00196**	m^2
Intake Factor, F	=	**8.03**	m
Basic Time Lag, T (from plot)	=	**48**	sec
In-situ Permeability, $k = \frac{A}{F \times T}$	=	**5.09×10^{-6}**	m/sec

Notes : **Intake Factor equation D from Fig 6 BS5930:1999 section 25.4.6 has been used to calculate permeability. To enable calculation of permeability a measured standing water level of 3.24m prior to the test was used to determine head, H. Permeability has been calculated using the Graphical method in accordance with BS5930:1999 25.4.6.1 b. No seal at base of hole.**

STRUCTURAL SOILS
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Stillhouse Lane
Bedminster
Bristol BS3 4EB

Compiled By	Date	Checked By	Date
[redacted]	24/03/09	[redacted]	24/3/9

Contract: **Sizewell C Supplementary Investigation**

Job No: **722201**

AGS

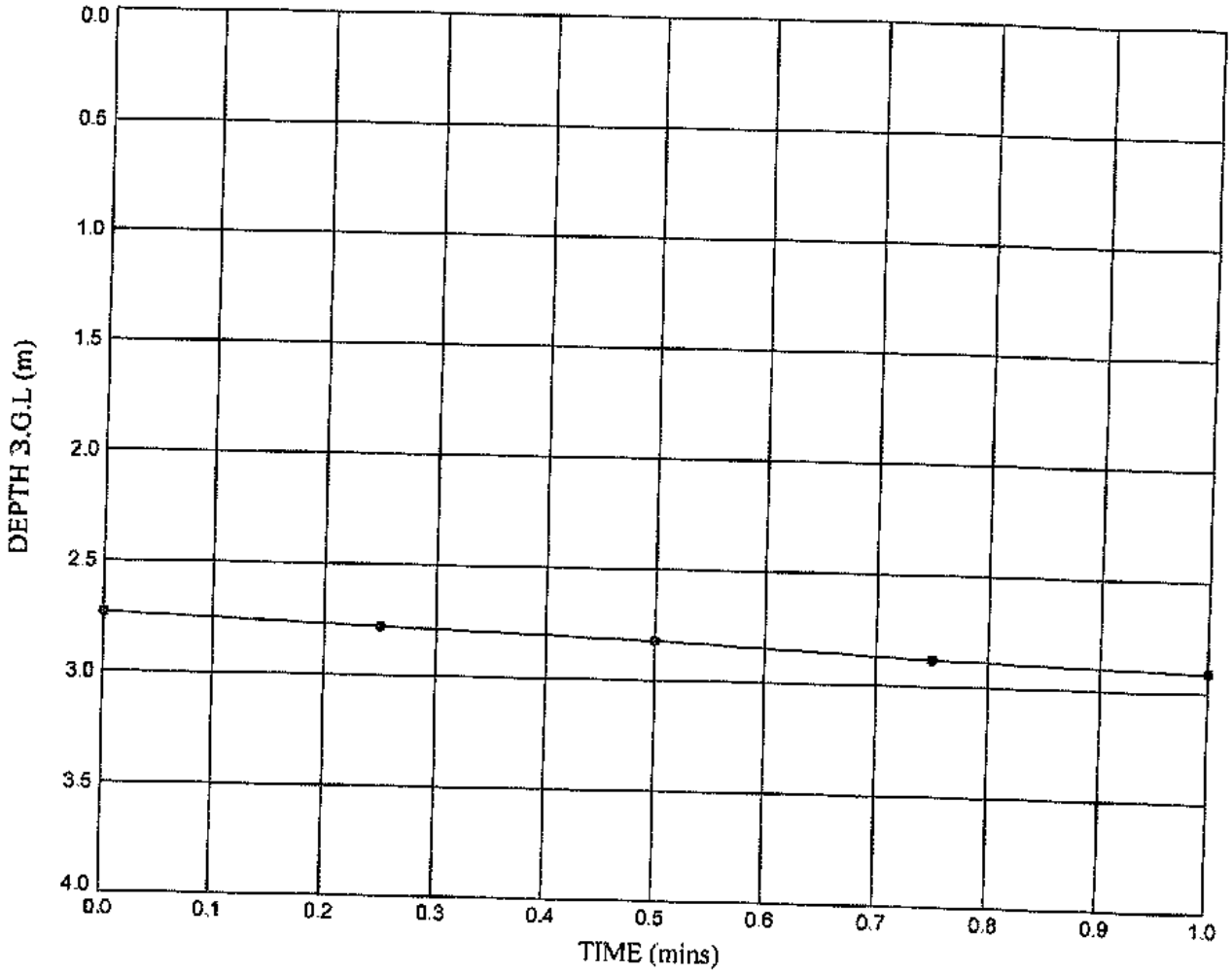
STRUCTURAL_SOILS_GINT_LIBRARY.GLB!1 - PERM - 2 OF 2 - WELL - FALL OR RISE | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_02 | 24/06/09 - 14:45

BOREHOLE SOAKAWAY TEST

Test position: BH30

Ground Level (m AOD): **6.49** National Grid Co-ordinates: **E:647479.7 N:263787.7**

PLOT OF DEPTH OF WATER BELOW GROUND LEVEL AGAINST TIME



Effective depth, De	=	**0.47**	m
Effective storage volume, V_{p75-25}	=	**0.004153**	m^3
Surface area, a_{p50}	=	**0.128413**	m^2
Time, t_{p75-25}	=	**59**	secs
Infiltration coefficient, f	=	**5.48×10^{-4}**	m/s

Notes : Calculation does not account for volume of standpipe or gravel pack.
Borehole has bentonite seal from GL to 2.20m depth.

Test hole details:

Hole depth at start of test: **3.20m**

Borehole diameter: **150mm**

Legend:

Test 1 (25/11/2008)

	Compiled By	Date	Checked By	Date
STRUCTURAL SOILS The Old School Stillhouse Lane Bedminster Bristol BS3 4EB	[redacted]	19/03/09	[redacted]	24/3/9
	Contract: **Sizewell C Supplementary Investigation**		Job No: **722201**	

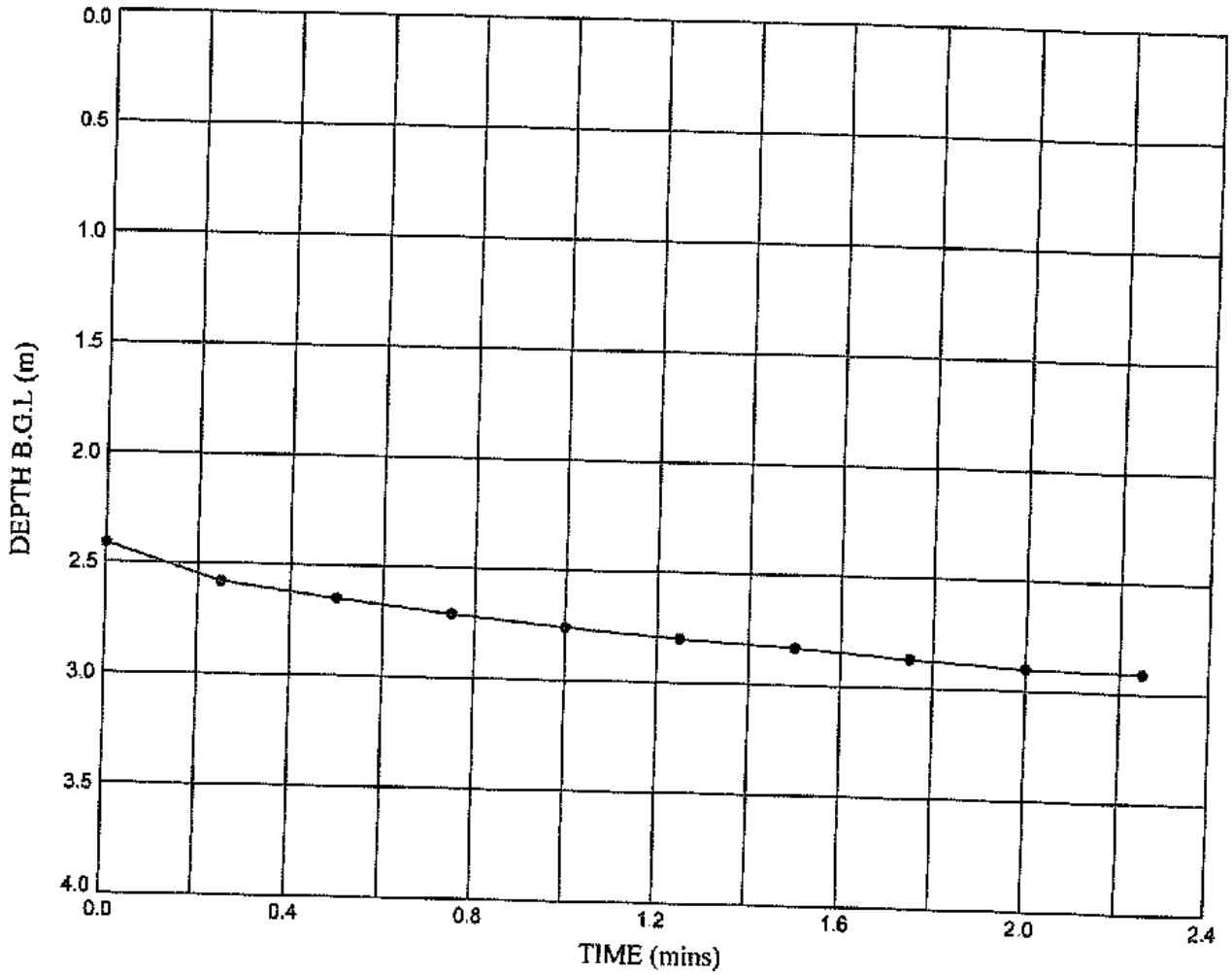
STRUCTURAL_SOILS_GINT_LIBRARY.GLBII - BH SOAKAWAY | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_02 | 19/03/09 - 15:51

BOREHOLE SOAKAWAY TEST

Test position: BH30

Ground Level (m AOD): **6.49** National Grid Co-ordinates: **E:647479.7 N:263787.7**

PLOT OF DEPTH OF WATER BELOW GROUND LEVEL AGAINST TIME



Effective depth, De	=	**0.79**	m
Effective storage volume, V_{p75-25}	=	**0.006980**	m^3
Surface area, a_{p50}	=	**0.203811**	m^2
Time, t_{p75-25}	=	**150**	secs
Infiltration coefficient, f	=	**2.28×10^{-4}**	m/s

Notes : Calculation does not account for volume of standpipe or gravel pack. Borehole has bentonite seal from GL to 2.20m depth.

Test hole details:

Hole depth at start of test: 3.20m

Borehole diameter: 150mm

Legend:

Test 2 (25/11/2008)

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Bedminster
Bristol BS3 4EB

Compiled By	Date	Checked By	Date
[redacted]	19/03/09	[redacted]	24/03/09

Contract: **Sizewell C Supplementary Investigation**

Job No: **722201**

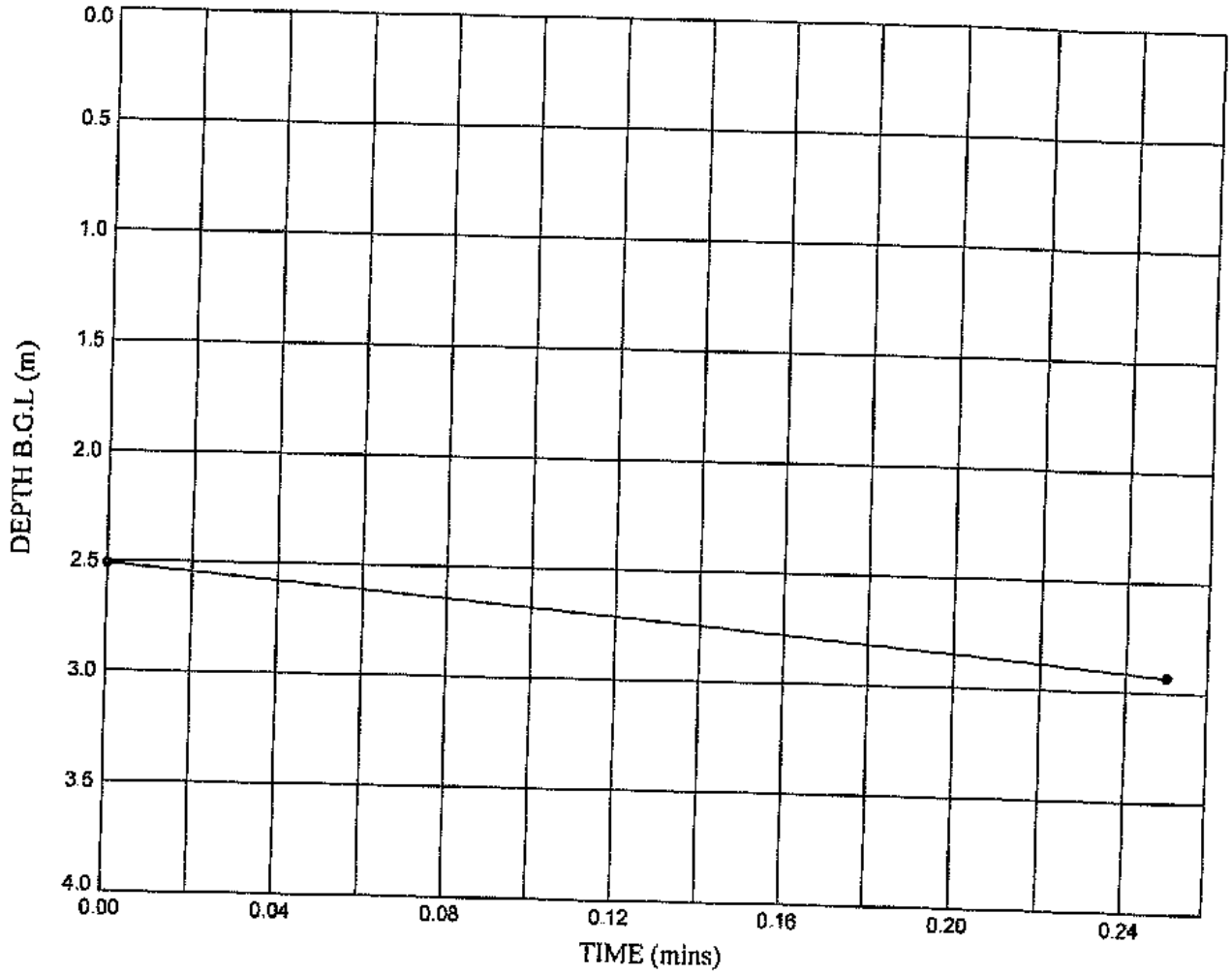
STRUCTURAL_SOILS_GINT_LIBRARY.GLB!! - BH SOAKAWAY | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_02 | 19/03/09 - 15:51

BOREHOLE SOAKAWAY TEST

Test position: BH34

Ground Level (m AOD): **6.51** National Grid Co-ordinates: **E:647418.9 N:263833.6**

PLOT OF DEPTH OF WATER BELOW GROUND LEVEL AGAINST TIME



Effective depth, De	=	**0.69**	m
Effective storage volume, V_{p75-25}	=	**0.006097**	m^3
Surface area, a_{p50}	=	**0.180249**	m^2
Time, t_{p75-25}	=	**12**	secs
Infiltration coefficient, f	=	**2.82×10^{-3}**	m/s

Notes : Calculation does not account for volume of standpipe or gravel pack. Borehole has bentonite seal from GL to 2.20m depth.

Test hole details:

Hole depth at start of test: **3.20m**

Borehole diameter: **150mm**

Legend:

Test 1 (25/11/2008)

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The Old School
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Bristol BS3 4EB

Compiled By	Date	Checked By	Date
[redacted]	19/03/09	[redacted]	24/3/9

Contract: **Sizewell C Supplementary Investigation**

Job No: **722201**

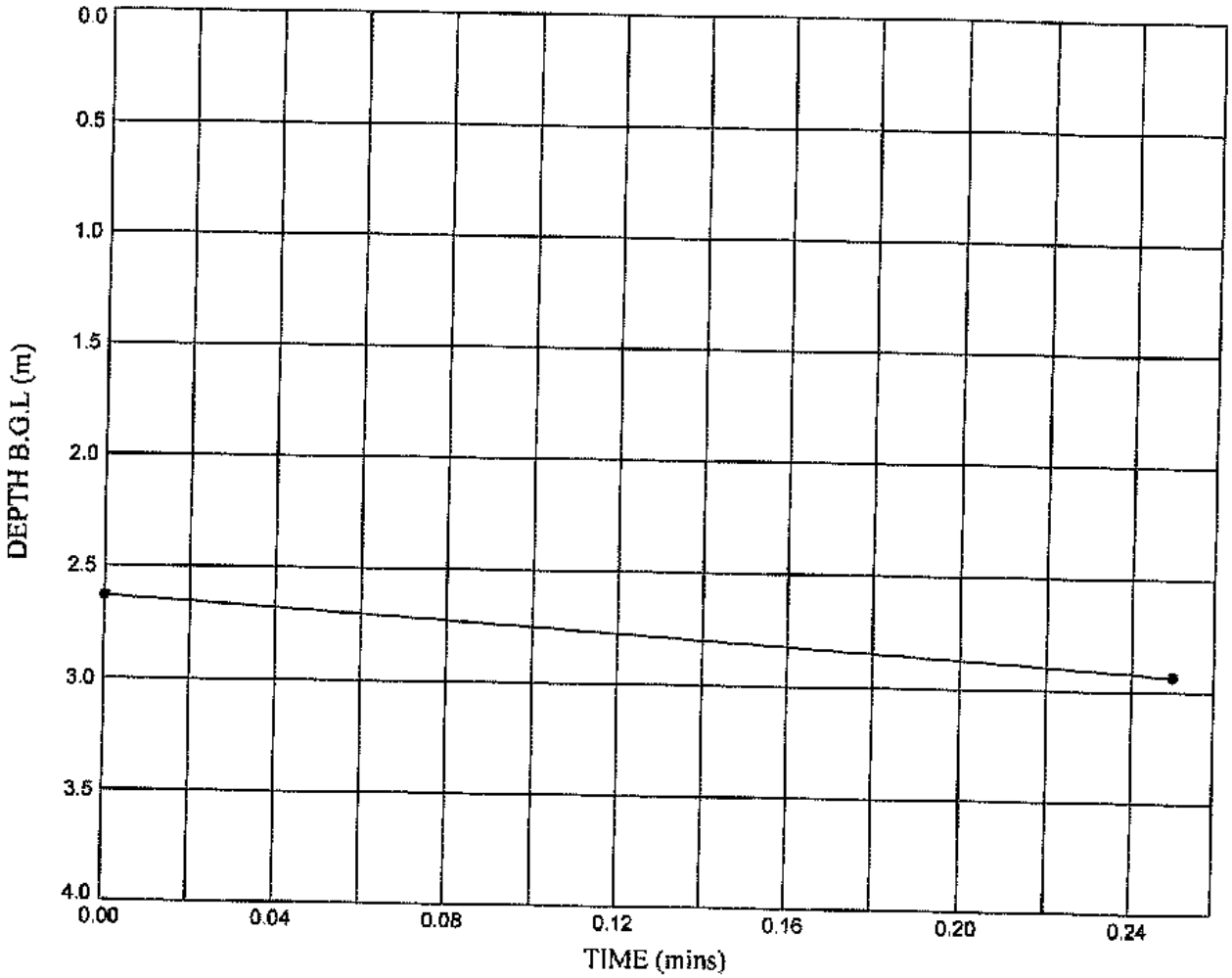
STRUCTURAL_SOILS_GINT_LIBRARY.GLB!! - BH SOAKAWAY | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v8_02 | 19/03/09 - 15:52

BOREHOLE SOAKAWAY TEST

Test position: BH34

Ground Level (m AOD): **6.51** National Grid Co-ordinates: **E:647418.9 N:263833.6**

PLOT OF DEPTH OF WATER BELOW GROUND LEVEL AGAINST TIME



Effective depth, De	=	**0.57**	m
Effective storage volume, V_{p75-25}	=	**0.005036**	m^3
Surface area, a_{p50}	=	**0.151975**	m^2
Time, t_{p75-25}	=	**14**	secs
Infiltration coefficient, f	=	**2.37×10^{-3}**	m/s

Notes : Calculation does not account for volume of standpipe or gravel pack. Borehole has bentonite seal from GL to 2.20m depth.

Test hole details:

Hole depth at start of test: **3.20m**

Borehole diameter: **150mm**

Legend:

Test 2 (25/11/2008)

	Compiled By	Date	Checked By	Date
STRUCTURAL SOILS The Old School Stillhouse Lane Bedminster Bristol BS3 4EB	[redacted]	19/03/09	[redacted]	24/3/09
	Contract: **Sizewell C Supplementary Investigation**		Job No: **722201**	

STRUCTURAL_SOILS_GINT_LIBRARY.GLB!! - BH SOAKAWAY | 722201_SIZEWELL_C_SUPPLIMENTARY_INVESTIGATION.GPJ - v9_02 | 19/03/09 - 15:52

Appendix F – Ground Investigation Factual Reports

Structural Soils 2015

STRUCTURAL SOILS LTD

NNB GENERATION COMPANY

FACTUAL REPORT

on

GROUND INVESTIGATION

For the

2015 ONSHORE GROUND INVESTIGATION CAMPAIGN ON THE SZC CONSTRUCTION SITE AREA

OCTOBER 2015

REPORT NO: 763468

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DOCUMENT ISSUE RECORD

STRUCTURAL SOILS LTD

Contract No:	763468
Client:	NNB Generation Company
Contract:	2015 Onshore Ground Investigation Campaign on the SZC Construction Site Area
Document:	Factual Report on Ground Investigation

Prepared by: S. Haynes BSc (Hons)

Approved by: C. Hustler BSc (Hons)

Date:

REVISION RECORD

Revision	Date	Description	Prepared by
0	17/09/2015	Interim draft report	SH
1	21/10/2015	Draft report	SH
2	30/10/2015	Draft report	SH

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1 INTRODUCTION

This investigation was carried out by Structural Soils Ltd on the instructions of NNB Generation Company (NNB Genco) on behalf of EDF Energy. It is proposed to construct Sizewell C, a Nuclear Power Station adjacent to the current Sizewell B Power Station. The proposed construction of the Power Station requires the construction of a onsite accommodation campus facility, a water management zone and a borrow pit area for construction materials.

The purpose of the work was to investigate ground conditions and provide information for the design of foundations and to provide information for preliminary contamination assessment purposes.

The work included an intrusive investigation, laboratory testing and the preparation of this report, which contains a description of the site and the works carried out, the exploratory hole logs, in-situ and laboratory testing results.

The ground investigation has been carried out using intrusive ground investigation techniques in general accordance with the recommendations of BS5930: 1999 *Code of Practice for Site Investigations* (including Amendment A2, 2010). Whilst every attempt is made to record full details of the strata encountered in the exploratory holes, techniques of hole formation and sampling will inevitably lead to disturbance, mixing or loss of material in some soils and rocks.

All information given in this report is based on the ground conditions encountered during the site work, and on the results of laboratory and field tests performed during the investigation. However, there may be conditions at the site that have not been taken into account, such as unpredictable soil strata, contaminant concentrations, and water conditions between or below exploratory holes. It should be noted that groundwater levels usually vary due to seasonal, atmospheric and/or other effects and may at times differ to those measured during the investigation.

This report was prepared by Structural Soils Limited for the sole and exclusive use of NNB GenCo in response to particular instructions. Any other parties using the information contained in this report do so at their own risk and any duty of care to those parties is excluded. No liability will be accepted after a period of 6 years from the date of the report.

2 SITE DESCRIPTION

2.1 Location and Topography

The first phase of the ground investigation is located directly north east of the village Leiston approximately 40km north east of Ipswich. (see Site Location Map in Appendix A). The British National Grid Reference for the central point of the site is 645714,265313. It is situated on the south east coast of the North Sea with predominantly arable land in various stages of crop and preparation, the area of investigation is of an irregular shape and covers an extensive area of approximately 0.18km^2 (approximately 18 hectares). The site lies approximately 1.20km north east of the B1122 road at the point of Leiston Abbey, and approximately 1.30km north of Lovers Lane that adjoins Sizewell Gap. Directly to the south of the site is a small woodland area named Ashwood otherwise is boundered by cropped farmland. The topographic elevations of the site range from 11.95m and 17.79m above Ordnance Datum.

Areas selected for the water management zones include scrubland directly north of the main site, marsh land approximately 1.50km east of the main site, and approximately 1.50m south of the main site opposite the District Survey Lab on land associated with the Habitat Creation Scheme. The topographic elevations of the water management zones vary between 2.29m and 12.22m above Ordnance Datum.

The site is historically linked to World War II (WWII) with coastal defences, historical airbases and military training ground bounded with the site works area with military artefacts occasionally unearthed. Prior to mobilisation a desk based Threat Assessment was undertaken to identify the likelihood of risk from unexploded munitions and also a utility search was undertaken to identify known underground and above ground services. Following the findings of the Threat Assessment each exploratory hole location was cleared through non-intrusive Unexploded Ordnance (UXO) surveys and ground penetrating radar prior to excavation. The key findings of the Threat Assessment are detailed in the following paragraphs:

Due to the historical land use around the Sizewell area, the Threat Assessment identified that the majority of the land associated with the Phase 1 works should be categorised as ‘High Risk’ due to this area forming part of the WWII-era Battle Training Ground with the area of the Campus and Security Entrance as ‘Medium Risk’ due to its proximity to WWII-era military bases/fortifications and the aforementioned training ground.

Based upon the expected geology of the area, a calculated maximum bomb penetration depth (based on a 500kg bomb) of 6m below WWII ground level. To mitigate the risks, it was

proposed that prior to works commencing on site all personnel undergo an Explosive Ordnance Safety and Awareness Briefing and each exploratory position undergoes a non-intrusive Magnetometer Survey by an EOD Engineer.

2.2 Geology

The Saxmundham British Geological Survey map (Sheet 191, Scale 1:50,000 published 1996) and the British Geological Survey digital map show the site to be underlain by strata from the Norwich Crag Formation of the Pliocene and Pleistocene epoch of the early Quaternary and late Neogene eras. The Lowerstoft Formation of the Mid to Late Quaternary superficial deposits of glacial outwash sands and gravels and glacial till

The site is shown to be underlain by the following descending sequence of strata; however these strata may only be partially present or omitted entirely from the sequence:

TABLE 1: SUMMARY OF SITE GEOLOGY

Geological Unit Name	Description
Lowestoft Formation	Chalky glacial till with outwash sands, gravels, silts and clays. Characterised by chalk and flint content. Variable thickness.
Norwich Crag Formation	Shallow water marine and estuarine deposits of sands, gravels, silts and clays. Sands are dark green from glauconite but weather bright orange with haematite iron pans. Gravels in the lower part of the group are almost entirely composed of flint. Gravels higher in the group include up to 10% quartzite. Up to 70m thick on shore.

Note: Information obtained from BGS digital records © NERC.

3 FIELDWORK

3.1 Scope of Work

The following works were completed between 10/06/2015 and 14/07/2015 at locations shown on the Exploratory Hole Location Plan in Appendix A:

TABLE 2: SCOPE OF INTRUSIVE WORKS AND IN-SITU TESTING		
Number	**Exploratory Hole or In-Situ Test Type**	**Hole / Test Numbers**
5	Sonic Boreholes	SD 3, 5, 6, 7 and 8.
7	Cable Percussion Boreholes.	CPB BP 7, 9, 10, 11, 12, 13, 14.
10	Machine Dug Trial Pits.	TP BP 1, 2, 3, 5, 6, 7 and 8. WMZ 18, 19 and 20.
3	Soak Away Tests.	TP WMZ 18, 19 and 20.
3	Permeability Tests.	CPB BP 11, 13 and 14.

The exploratory locations typically encountered topsoil of gravelly (sandy) clays or sand. The topsoil is occasionally underlain by the Lowestoft Formation of stiff gravelly and chalky clay. The Lowestoft Formation un-conformably overlies the upper sequence of the Norwich Crag formation of dense orange, buff or brown sands with thin gravel beds of flint and quartzite, descending into the lower sequence characterised by thin bands of clay, mudstone and gravels of fragmented shell.

The scope of investigation and choice of investigation equipment was decided by NNB Gen Co. Sampling and in-situ testing details were specified by NNB Gen Co.

The exploratory holes were logged by an engineer in accordance with the recommendations of BS5930: 1999 (Amendment A2, 2010, which incorporates the requirements of BS EN ISO 14688-1, 14688-2 and 14689-1). Detailed descriptions, together with relevant comments, are given in the logs included in Appendix B.

Prior to the commencement of any exploratory hole or intrusive test all positions were checked for buried services by a specialist utility surveyor using a cable avoidance tool (CAT), and ground penetrating radar (GPR).

All hole locations and the immediate vicinity were scanned by a specialist UXO (Unexploded Ordnance) officer using a magnetometer to check for buried ferrous objects that could possibly be UXO.

A survey of the exploratory hole locations was undertaken using specialist Global Positioning System (GPS) equipment. The coordinates of each exploratory hole were measured relative to British National Grid, and the level relative to Ordnance Datum. These are shown on the exploratory hole logs contained in Appendix B which have been printed with a reduced level column.

Inspection pits were hand dug at exploratory locations where noted on the relevant exploratory hole logs or in-situ test results.

3.2 Sonic Boreholes

The boreholes were drilled using a Boart Longyear DB320 Sonic tracked drilling rig. The boreholes were drilled using resonant high frequency vibrations applied to a rotating rod to penetrate the core barrel and casing into the ground. Frequencies used are between 50 and 150 hertz which are isolated from the drill rig using an internal spring and damper system. 140mm steel casing was used with rigid P.V.C. liner inserted to maximise core recovery.

3.3 Cable Percussion Boreholes

The boreholes were drilled using a Dando 2000 cable tool percussion drilling rig and were 250mm in diameter. The depths of the boreholes were 20m each. Small and bulk disturbed soil samples were taken from the boreholes at regular intervals.

100mm diameter undisturbed samples were recovered from suitable strata in accordance with BS EN ISO 22475-1 using a thick walled U100 sampler.

Standard Penetration Tests (SPT) were carried out at regular intervals (see In-Situ Testing, below).

3.4 Mechanically Excavated Trial Pits

The machine dug trial pits were excavated using a JCB 3CX wheeled mechanical excavator and were approximately 3.00m-4.00m x 0.60m in plan and were up to 3.50m deep.

Small and bulk disturbed soil samples were taken from the trial pits at regular intervals.

Soak away tests were performed in Trial pits WMZ18, 19, 20.

3.5 Backfill, Installation and Monitoring Wells

On completion 50mm diameter groundwater monitoring wells were installed in selected exploratory holes the design having been decided by NNB Gen Co. The installation details are shown on the exploratory hole logs in Appendix B.

The well details are also summarised below:

Location	Well Diameter (mm)	Well Depth (m bgl)	Well Response Zone (m bgl)	Type of Protective Cover
CPB BP 11	50mm	20m	8.00m – 20.00m	Raised
CPB BP 13	50mm	20m	8.00m – 20.00m	Raised
CPB BP 14	50mm	20m	8.00m – 20.00m	Raised
SD BP 3	50mm	45m	35.00m – 45.00m	Raised
SD BP 5	50mm	25m	8.00m - 25.00m	Raised
SD BP 6	50mm	25m	8.00m – 25.00m	Raised
SD BP 7	50mm	25m	8.00m – 25.00m	Raised
SD BP 8	50mm	25m	8.00m – 25.00m	Raised

On completion the remaining boreholes were backfilled with bentonite pellets. The trial pits were backfilled with arisings, compacted in layers by the excavator bucket.

The Client or site owner should ensure that the monitoring wells and their protective covers are not damaged or covered until such time as information is no longer required from them. Extra costs would be incurred if it were necessary to reinstate damaged wells.

3.6 Insitu Testing

Soakaway tests in trial pits

The Soakaway tests were undertaken in trial pits WMZ 18, 19 and 20 in general accordance with recommended practice given in BRE Digest 365. Three fillings of the pits were not undertaken due to slow infiltration rates in Trial Pit WMZ 20 and the instability of the pits in WMZ 18 and 19. The results are contained in Appendix C.

Permeability tests

Variable head permeability tests were carried out in the standpipes installed in boreholes CPB BP11, CPB BP13 and CP BP14. The permeability tests were carried out in general accordance with BS5930 (1999). The results of the tests are presented in table 4 and in graphic format within appendix C.

Rising head permeability tests were carried out in boreholes CPB BP11, CPB BP13 and CPB BP14; the water level in the borehole was reduced using portable pumping equipment, pumping for 20mins at a rate of 27 litres per min. The recovering water level was then recorded with time until a stable water level was reached.

The water levels in the standpipes were monitored during the tests using a "diver", a digital pressure transducer with data logger, installed in the standpipe below the water level. The barometric pressure was also recorded.

TABLE 4: SUMMARY OF PERMEABILITY TESTS

Location	Screen Depth (m)	Initial Water Level (m)	Pumping Rate (ltr/min)	Pumping Duration (mins)	Final Water Level (m)	Recovery Time (mins)
CPB BP 11	8.00 - 20.00	15.66	27	20	15.66	3.00
CPB BP 13	8.00 - 20.00	12.705	27	20	12.705	3.00
CPB BP 14	8.00 - 20.00	10.80	27	20	10.80	2.50

4 LABORATORY TESTING

Samples for potential geotechnical testing were returned to one of the Company's UKAS accredited laboratories, a UKAS accredited testing laboratory. Laboratory tests were scheduled by Structural Soils under the instruction of NNB Gen Co.

4.1 Geotechnical Laboratory Testing

Geotechnical laboratory testing was generally carried out in accordance with BS1377: 1990, *Methods of Test for Soils for Civil Engineering Purposes*, Parts 1 to 8. The number of tests completed and the test methods used are summarised below. The results are reported in tabular and/or graphical form and included as Appendix D of this report.

TABLE 5: SUMMARY OF GEOTECHNICAL LABORATORY TESTING

Number of tests	Test	Test Method	Notes
Classification Tests			
2	Moisture content.	BS1377: Part 2.	
6	Liquid and plastic (Atterberg) limits.	BS1377: Part 2.	
160	Particle size distribution by sedimentation.	BS1377: Part 2.	
Chemical Tests: Soil			
7	Water soluble sulphate content and pH value.	BRE SD1*.	

Note:
* Test(s) carried out to method approved in BRE Special Digest 1.

4.2 Contamination

The contamination testing carried out is summarised in the following table. The results are included as Appendix E of this report, and include details of the test method.

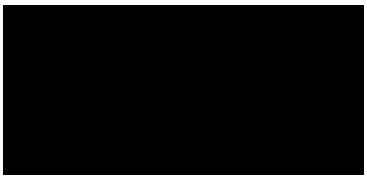
TABLE 6: SUMMARY OF CONTAMINATION LABORATORY TESTING*

Numbers of tests	Description	Notes
SOIL		
4	Fraction Organic Content	
25	Calcium carbonate	
3	Chloride	
LEACHATE (simulated leachates derived from soil samples)		
8	AMEC Leachate suite	Leachate Prep (BS EN 12457-2) 10:1, Dissolved Metals (ICP-MS/OES), Water Soluable SO4, pH, Chloride, PAH- 16MS (USEPA 16 speciated)

Note: Tests carried out in accordance with MCERTS/UKAS standards where noted on the results sheets.

STRUCTURAL SOILS LIMITED

S. Haynes BSc (Hons)



C. Hustler BSc (Hons) FGS

5 REFERENCES

5.1 BS 5930:1999 *Code of Practice for Site Investigation*, including amendment A2 (2010)

5.2 British Geological Survey sheet 191 scale 1:50,000, published 1996

5.3 British Geological Survey online digital geological map, www.bgs.ac.uk/data

5.4 British Geological Survey Lexicon of Named Rock Units, www.bgs.ac.uk/lexicon

5.5 BS EN ISO 14688-1:2002 *Geotechnical investigation and testing – Identification and classification of soil: Part 1: Identification and description*, including Amendment A1 (2013)

5.6 BS EN ISO 14688-2:2004 *Geotechnical investigation and testing – Identification and classification of soil: Part 2: Principles for a classification* , including Amendment A1 (2013)

5.7 BS EN ISO 14689-1:2003 *Geotechnical investigation and testing – Identification and classification of rock: Part 1: Identification and description*

5.8 BS EN ISO 22475-1:2006 *Geotechnical Investigation and Testing - Sampling and Groundwater Measurements - Technical Principles*

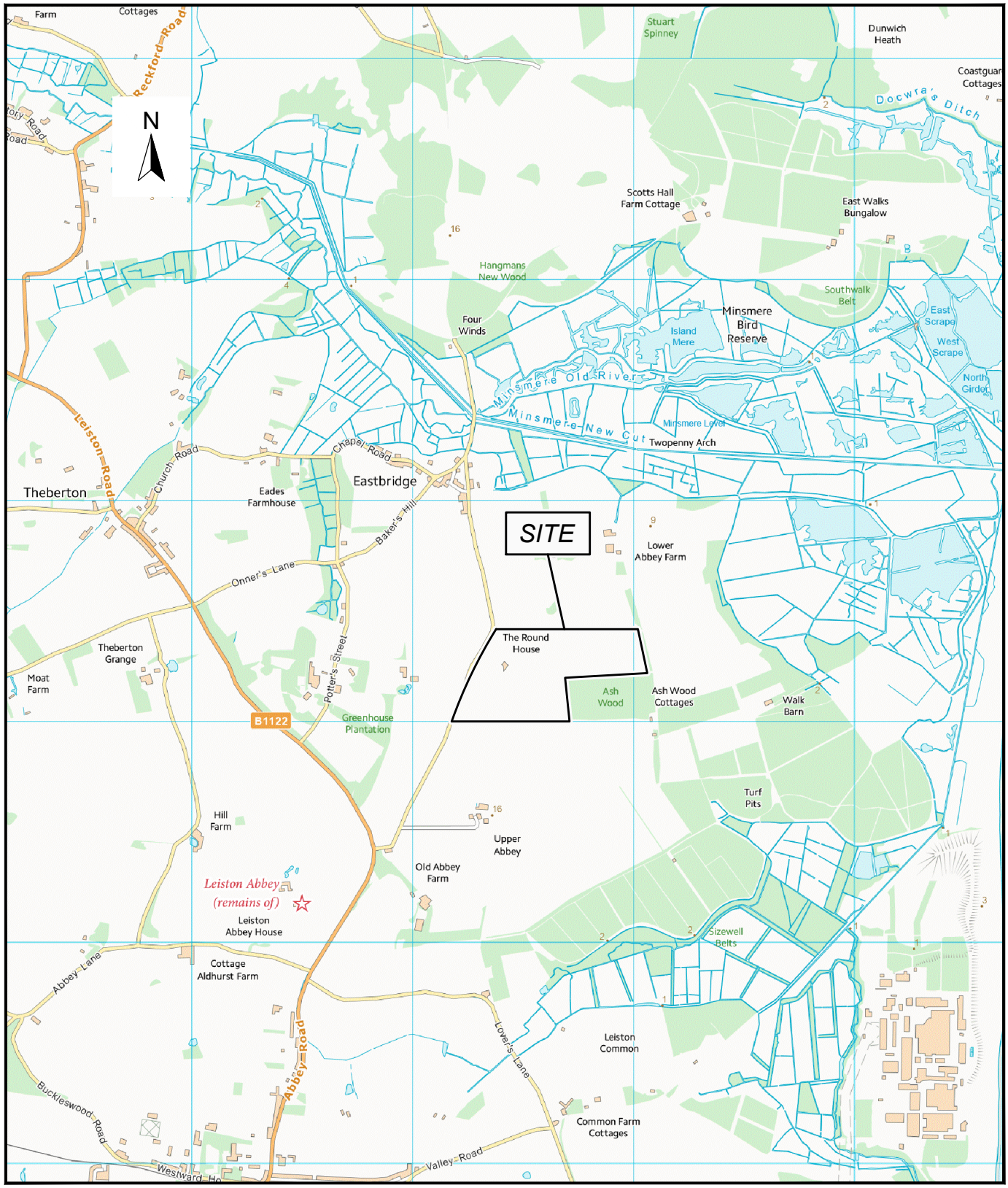
5.9 BS EN ISO 22476-3:2005 (updated February 2007) *Geotechnical Investigation and Testing – Field Testing Part 3: Standard Penetration Test*, including Amendment A1 (2011)

APPENDIX A

(i) Site Location Plan

(ii) Exploratory Hole Location Plan

(iii) Proposed Development Layout Plan



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REV.	DATE	DESCRIPTION	BY	CHD.	APR.
00	28.08.2015	-	JH	SH	-

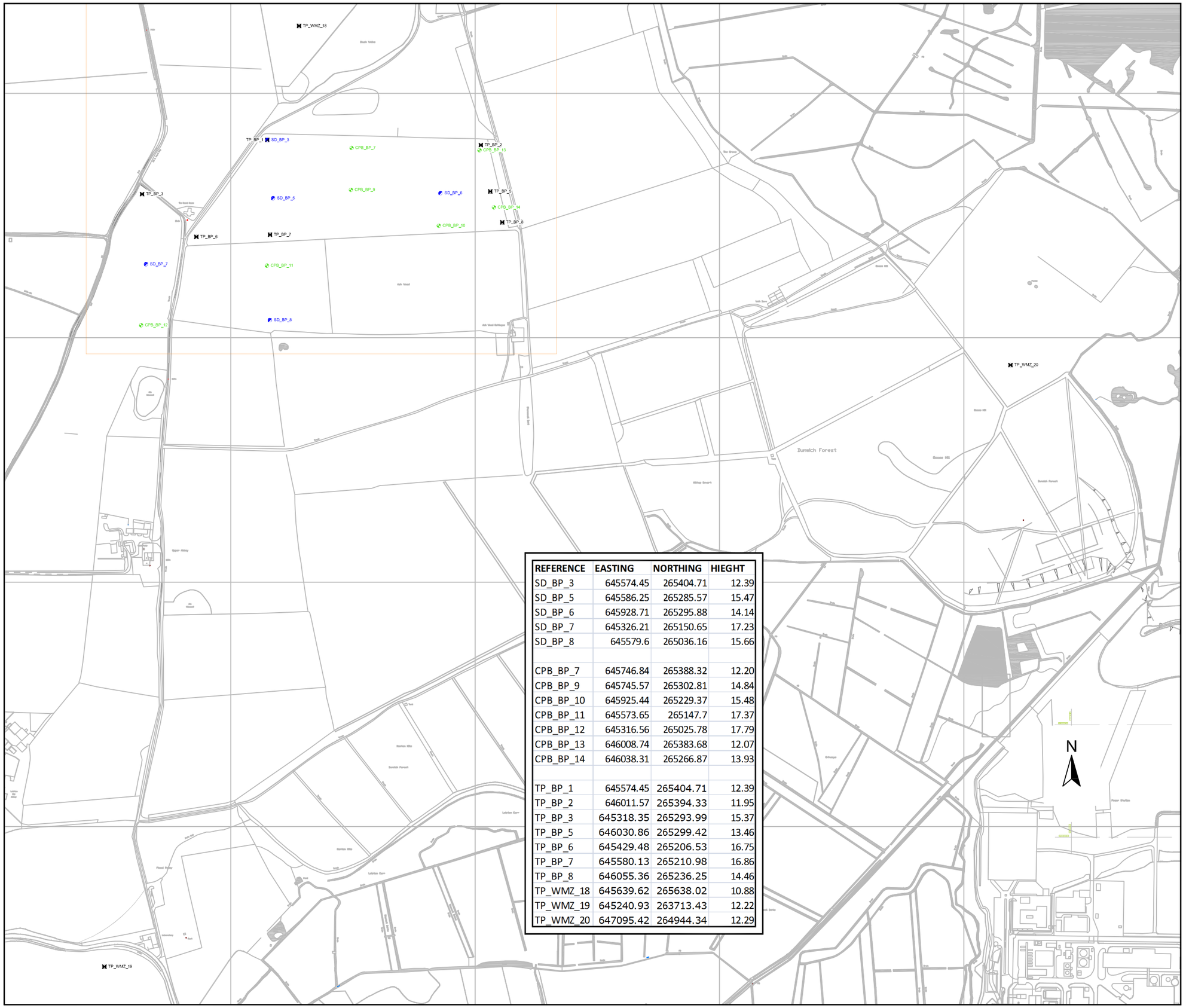
DIMENSION	SCALE	DRAWING STATUS
m	1:25000	-

CLIENT: NNB Generation Company Limited

PROJECT: Sizewell C Onshore GI

TITLE: SITE LOCATION MAP

JOB NO	GRID REF	SCALE BAR	ORIGIN SIZE	FIGURE
763468	TM 455 651	0 250 500 750 1,000m	A4	1



REFERENCE	EASTING	NORTHING	HIEGHT
SD_BP_3	645574.45	265404.71	12.39
SD_BP_5	645586.25	265285.57	15.47
SD_BP_6	645928.71	265295.88	14.14
SD_BP_7	645326.21	265150.65	17.23
SD_BP_8	645579.6	265036.16	15.66
CPB_BP_7	645746.84	265388.32	12.20
CPB_BP_9	645745.57	265302.81	14.84
CPB_BP_10	645925.44	265229.37	15.48
CPB_BP_11	645573.65	265147.7	17.37
CPB_BP_12	645316.56	265025.78	17.79
CPB_BP_13	646008.74	265383.68	12.07
CPB_BP_14	646038.31	265266.87	13.93
TP_BP_1	645574.45	265404.71	12.39
TP_BP_2	646011.57	265394.33	11.95
TP_BP_3	645318.35	265293.99	15.37
TP_BP_5	646030.86	265299.42	13.46
TP_BP_6	645429.48	265206.53	16.75
TP_BP_7	645580.13	265210.98	16.86
TP_BP_8	646055.36	265236.25	14.46
TP_WMZ_18	645639.62	265638.02	10.88
TP_WMZ_19	645240.93	263713.43	12.22
TP_WMZ_20	647095.42	264944.34	12.29

LEGEND

- Trial Pit Location
- Cable Percussion Borehole Location
- Sonic Test Location
- Shown on sheet 2b

REV.	DATE	DESCRIPTION	BY	CHD.	APR.
00	07.09.2015	-	MW	CH	-

DIMENSION	SCALE	ORIGIN SIZE
m	1:7500	A3

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CLIENT
NNB Generation Company Ltd

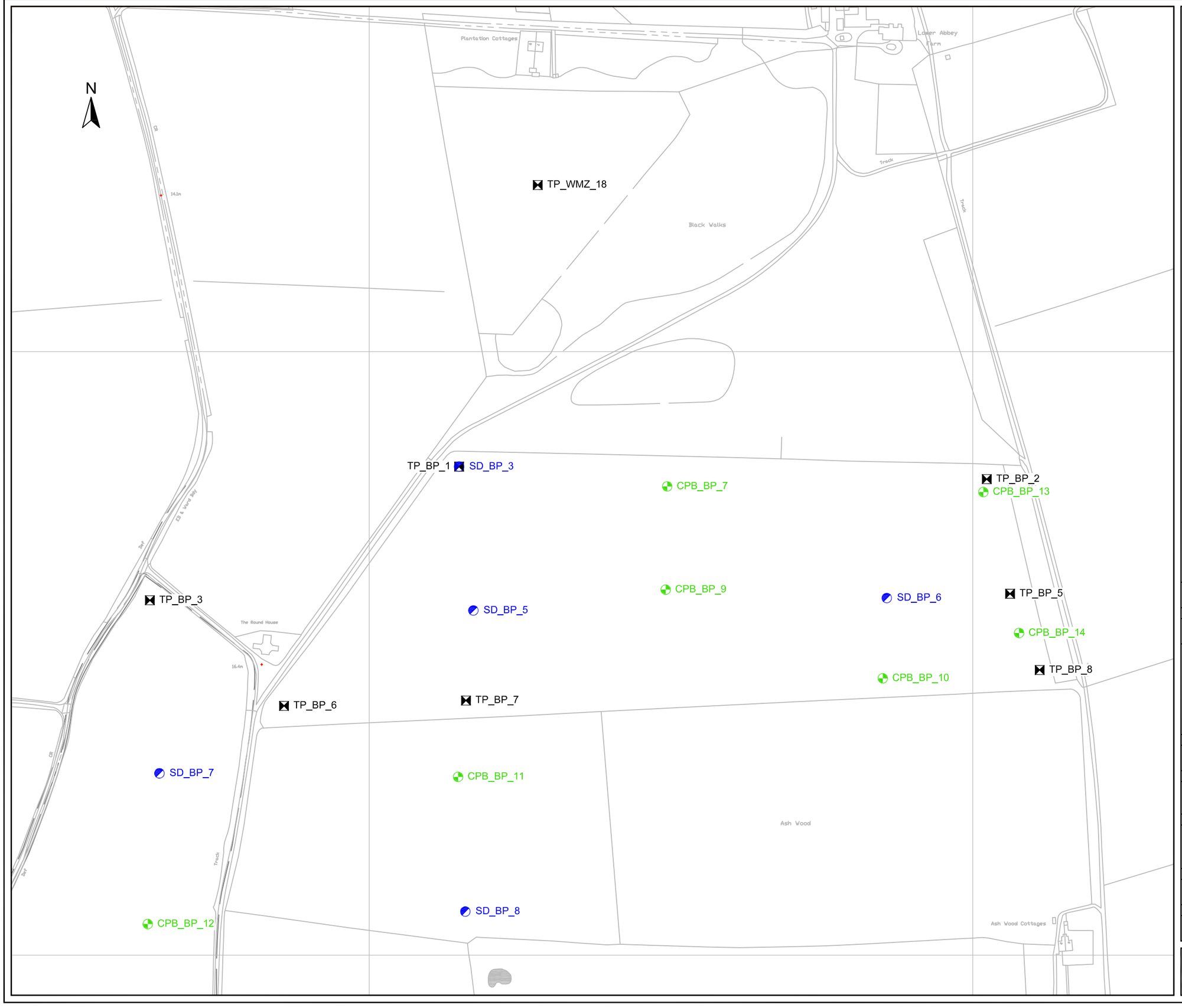
PROJECT
Sizewell C Onshore GI

TITLE
EXPLORATORY HOLE LOCATION PLAN

JOB NO.	FIGURE
763468	2a

DRAWING STATUS	REV.
-	00

0 100 200 300 400m



LEGEND

- Trial Pit Location
- Cable Percussion Borehole Location
- Sonic Test Location

REV.	DATE	DESCRIPTION	BY	CHD.	APR.
00	07.09.2015	-	MW	CH	-

DIMENSION	SCALE	ORIGIN SIZE
m	1:3000	A3

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CLIENT

NNB Generation Company Ltd

PROJECT

Sizewell C Onshore GI

TITLE

EXPLORATORY HOLE LOCATION PLAN

JOB NO.	FIGURE
763468	2b

DRAWING STATUS	REV.
-	00

APPENDIX B

(i) Key to Exploratory Hole Logs

(ii) Borehole Logs

(iii) Trial Pit Logs

(iv) Sonic Logs

KEY TO EXPLORATORY HOLE LOGS - SUMMARY OF ABBREVIATIONS

SAMPLING

Sample type codes

B = Bulk disturbed sample.
D = Small disturbed sample.

ROTARY DRILLING INFORMATION

W = Water flush returns (%)
TCR = Total core recovery (%)
SCR = Solid core recovery (%)
RQD = Rock quality designations (%)
If = Fracture spacing (mm).
In the fracture column (i) denotes discontinuity is infilled (refer to Fracture Table for details).
Where variable the minimum - average - maximum spacing may be quoted.
'NI' denotes non-intact core. 'NA' denotes not applicable.

All lengths used to determine rock core mechanical properties taken along the centre line of the core.
Obvious induced fractures have been ignored.
The assessment of solid core is based on lengths that show a full diameter and not necessarily a full circumference.
AZCL = Assessed zone of core loss.

ADDITIONAL NOTES

1. All soil and rock descriptions and legends in general accordance with BS EN ISO 14688-1, 14688-2, 14689-1, and BS5930:1999 including Amendment 2 (2010).
2. Material types divided by a broken line (- - -) indicates an unclear boundary.
3. The data on any sheet within the report showing the AGS icon is available in the AGS format.

GINT_LIBRARY_V8_05.GLB|GrfcText G - LEGEND - 1 OF 2 | 763468 - SZC 2015 ONSHORE GI.GPJ - v8_05 | 17/09/15 - 12:02 | CH.
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STRUCTURAL SOILS

Contract Reference: **763468**

KEY TO EXPLORATORY HOLE LOGS - SUMMARY OF GRAPHIC SYMBOLS

WATER COLUMN SYMBOLS

First water strike, second water strike etc.

Standing water level following first strike, standing water level following second strike etc.

Seepage.

Standing water level recorded at documented date.

MATERIAL GRAPHIC LEGENDS

	CLAY		Clayey gravelly SAND		Gravelly clayey SAND		Clayey SAND
	Gravelly SAND		SAND		Sandy CLAY		Sandy silty CLAY
	Silty sandy CLAY		Gravelly sandy CLAY		Sandy gravelly CLAY		Topsoil
	Silty gravelly SAND		Silty gravelly SAND with COBBLES		Silty SAND		

INSTRUMENTATION SYMBOLS

	Backfill		Bentonite seal		Gravel filter		Upstanding cover
	Plain pipe		Slotted pipe				

GINT_LIBRARY_V8_05.GLB|GrfcText G - LEGEND - 2 OF 2 | 763468 - SZC 2015 ONSHORE GI.GPJ - v8_05 | 17/09/15 - 12:01 | CH.
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STRUCTURAL SOILS

DRAFT BOREHOLE LOG

Contract:	Client:	Borehole:
SZC 2015 Onshore GI	**NNB GenCo**	**CPB BP7**

Contract Ref:	Start:	Ground Level (m):	National Grid Co-ordinate:	Sheet:
763468	**30.06.15** End: **01.07.15**	**12.20**	**E:645746.8 N:265388.3**	**1** of **3**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.00-0.40	1	B				TOPSOIL. Light brown slightly clayey slightly gravelly fine to medium SAND. Gravel is angular medium to coarse of flint and quartzite.	0.40	
0.50-1.00	2	B				Orangish buff slightly clayey gravelly medium SAND. Gravel is rounded to angular medium to coarse of flint and quartzite.		
1.30	3	D						
1.50-2.00	4	B				. . . below 1.50m, sand is medium to coarse and becomes slightly gravelly.	(3.10)	
2.30	5	D				. . . below 2.30m, occasional pockets of soft grey clay.	3.50	
3.50-4.00	6	B				Orange fine to medium SAND.	(0.60)	
							4.10	
4.10-4.50	9	B				Yellowish buff slightly clayey gravelly medium to coarse SAND. Gravel is subangular to rounded medium to coarse of flint and quartzite.		
4.80	10	D						
5.00-5.50	11	B					(2.80)	
5.80	12	D						
6.00-6.50	13	B				. . . below 6.00m, becomes slightly gravelly and whitish buff in colour.		
6.80	14	D					6.90	
7.00-7.50	15	B				Orange slightly clayey slightly gravelly medium to coarse SAND. Gravel is angular fine to medium of flint and quartzite and rounded medium iron coated mudstone.		
7.80	16	D						
8.00-8.50	17	B					(2.40)	
8.80	18	D						

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth
01/07/15	06:15	7.00	8.50		6.90
01/07/15		12.70	12.50		12.70
01/07/15	13:00	20.00	20.00		12.50

Chiselling / Slow Progress		
From	To	Duration (hh:mm)
5.00	7.00	04:00
7.00	8.00	02:00

General Remarks

1. Location GPR and UXO cleared.
2. Hand dug inspection pit to 1.20m.
3. Groundwater encountered at 12.70m rising to 11.70m after 20 minutes.
4. Water added to assist drilling.
5. Borehole backfilled with bentonite on completion.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**DJ**	**SHaynes**	

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STRUCTURAL SOILS

DRAFT BOREHOLE LOG

Contract:	Client:	Borehole:
SZC 2015 Onshore GI	**NNB GenCo**	**CPB BP7**

Contract Ref:	Start:	Ground Level (m):	National Grid Co-ordinate:	Sheet:
763468	End: **01.07.15**	**12.20**	**E:645746.8 N:265388.3**	**2** of **3**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
9.00-9.50	19	D					9.30	
						Orange slightly clayey slightly gravelly medium to coarse SAND. Gravel is angular fine to medium of shell fragments and occasional subangular to subrounded fine to medium flint and tabular iron coated mudstone.		
9.80	20	D						
10.00-10.50	21	B				. . . at 10.00m, iron coated mudstone lamination 10mm.		
10.80	22	D						
11.00-11.50	23	B				. . . at 11.00m, iron coated mudstone lamination 10mm.		
				2				
11.80	24	D						
12.00-12.50	25	B				. . . below 12.00m, becomes slightly gravelly and sand is medium.		
				2				
12.80	26	D						
13.00-13.50	27	B						
13.80	28	D						
14.00-14.50	29	B					(10.70)	
14.80	30	D						
15.00-15.50	31	B						
15.80	32	D						
16.00-16.50	33	B						
16.80	34	D						
17.00-17.50	35	B						
17.80	36	D						

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth

Chiselling / Slow Progress		
From	To	Duration (hh:mm)

General Remarks

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**DJ**	**SHaynes**	AGS

GINT_LIBRARY_V8_05.GLB LibVersion: v8_05 - Lib0004 PrjVersion: v8_05 - Core+Logs+Geotech Lab-Bristol - 0003 | Log CABLE PERCUSSION LOG | 763468 - SZC 2015 ONSHORE GI.GPJ - v8_05 | 30/10/15 - 13:44 | SH.
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STRUCTURAL SOILS

DRAFT BOREHOLE LOG

Contract:	Client:	Borehole:
SZC 2015 Onshore GI	**NNB GenCo**	**CPB BP7**

Contract Ref:	Start:	Ground Level (m):	National Grid Co-ordinate:	Sheet:
763468	End: **01.07.15**	**12.20**	**E:645746.8 N:265388.3**	**3** of **3**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
18.00-18.50	37	B				Orange slightly clayey slightly gravelly medium to coarse SAND. Gravel is angular fine to medium of shell fragments and occasional subangular to subrounded fine to medium flint and tabular iron coated mudstone. *(stratum copied from 9.30m from previous sheet)*		
18.80	38	D						
19.00-19.50	39	B				. . . below 19.00m, sand is medium to coarse.		
19.80	40	D					20.00	
						Cable percussion borehole terminated at 20.00m depth.		

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth

Chiselling / Slow Progress		
From	To	Duration (hh:mm)

General Remarks

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**DJ**	**SHaynes**	

GINT_LIBRARY_V8_05.GLB LibVersion: v8_05 - Lib0004 PrjVersion: v8_05 - Core+Logs+Geotech Lab-Bristol - 0003 | Log CABLE PERCUSSION LOG | 763468 - SZC 2015 ONSHORE GI.GPJ - v8_05 | 30/10/15 - 13:44 | SH.
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STRUCTURAL SOILS

DRAFT BOREHOLE LOG

Contract:	Client:	Borehole:
SZC 2015 Onshore GI	**NNB GenCo**	**CPB BP9**

Contract Ref:	Start:	Ground Level (m):	National Grid Co-ordinate:	Sheet:
763468	End: **08.07.15**	**14.84**	**E:645745.6 N:265302.8**	**1** of **3**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.00-0.50	1	B				TOPSOIL. Brown slightly clayey slightly gravelly medium SAND. Gravel is angular fine to medium of flint and quartzite.	(0.50) 0.50	
0.60-1.00	2	B				Orange slightly gravelly clayey fine to medium SAND. Gravel is angular medium to coarse of flint and quartzite.	(0.70) 1.20	
1.30-1.50	3	B				Brownish buff slightly gravelly fine to medium SAND. Gravel is angular fine of shell and occasional angular fine flint.		
1.80	4	D						
2.00-2.50	5	B				. . . below 2.00m, sand is medium.	(1.80)	
2.80	6	D					3.00	
3.00-3.50	7	B				Buff slightly clayey gravelly medium to coarse SAND. Gravel is angular to rounded fine to coarse of flint and quartzite.		
3.80	8	D					(1.70)	
4.00-4.50	9	B				. . . below 4.00m, sand is coarse.		
4.80	10	D				Orangish buff locally clayey slightly gravelly medium to coarse SAND. Gravel is angular to rounded of fine to coarse flint and quartzite.	4.70	
5.00-5.50	11	B				. . . between 4.70m and 5.90m, lenses of soft grey and brown clay.		
5.80	12	D					(2.30)	
6.00-6.50	13	B						
6.80	14	D					7.00	
7.00-7.50	15	B				Buff gravelly coarse SAND. Gravel is angular to rounded fine to coarse of flint and quartzite.		
7.80	16	D						
8.00-8.50	17	B				. . . below 8.00m, becomes slightly gravelly and sand is medium to coarse.		
8.80	18	D					(3.70)	

Boring Progress and Water Observations

Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth
07/07/15		5.00	4.80		5.00
08/07/15		15.70	15.50		15.70

Chiselling / Slow Progress

From	To	Duration (hh:mm)

General Remarks

1. Location GPR and UXO cleared.
2. Hand dug inspection pit to 1.20m.
3. Water added to assist drilling.
4. Groundwater encountered at 6.00m rising to 4.80m after 20 minutes, and 15.70m rising to 14.20m after 20 minutes.
5. Borehole backfilled with bentonite on

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**DJ**	**SHaynes**	

GINT_LIBRARY_V8_05.GLB LibVersion: v8_05 - Lib0004 PrjVersion: v8_05 - Core+Logs+Geotech Lab-Bristol - 0003 | Log CABLE PERCUSSION LOG | 763468 - SZC 2015 ONSHORE GI.GPJ - v8_05 | 30/10/15 - 13:44 | SH.
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STRUCTURAL SOILS

DRAFT BOREHOLE LOG

Contract:	Client:	Borehole:
SZC 2015 Onshore GI	**NNB GenCo**	**CPB BP9**

Contract Ref:	Start:	Ground Level (m):	National Grid Co-ordinate:	Sheet:
763468	End: **08.07.15**	**14.84**	**E:645745.6 N:265302.8**	**2** of **3**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
9.00-9.50	19	B				Buff gravelly coarse SAND. Gravel is angular to rounded fine to coarse of flint and quartzite. *(stratum copied from 7.00m from previous sheet)*		
9.80	20	D						
10.00-10.50	21	B				. . . below 10.00m, sand is medium with occasional gravel.	10.70	
10.80	22	D				Orange slightly gravelly medium SAND. Gravel is angular fine of flint and rounded medium iron coated mudstone.		
11.00-11.50	23	B					(1.20)	
11.80	24	D					11.90	
12.00-12.50	25	B				Orangish buff slightly clayey slightly gravelly medium SAND. Gravel is angular fine of shell fragments and angular rounded fine to coarse flint and quartzite.		
12.80	26	D						
13.00-13.50	27	B					(3.10)	
13.80	28	D						
14.00-14.50	29	B		▽ 2		. . . below 14.00m, colour is brownish orange.		
14.80	30	D					15.00	
15.00-15.50	31	B		▼ 2		Orangish brown slightly clayey gravelly coarse SAND with pockets and lenses of soft brown and red sandy clay. Gravel is rounded to subangular fine to medium of flint and quartzite.		
15.80	32	D					(2.00)	
16.00-16.50	33	B				. . . below 16.00m, slightly gravelly.		
16.80	34	D					17.00	
17.00-17.50	35	B				Orangish brown slightly gravelly slightly clayey medium SAND. Gravel is angular fine shell and angular to rounded fine to medium of flint and quartzite and red iron coated sandstone.		
17.80	36	D						

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth

Chiselling / Slow Progress		
From	To	Duration (hh:mm)

General Remarks

completion.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**DJ**	**SHaynes**	

GINT_LIBRARY_V8_05.GLB LibVersion: v8_05 - Lib0004 PrjVersion: v8_05 - Core+Logs+Geotech Lab-Bristol - 0003 | Log CABLE PERCUSSION LOG | 763468 - SZC 2015 ONSHORE GI.GPJ - v8_05 | 30/10/15 - 13:44 | SH.
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STRUCTURAL SOILS

DRAFT BOREHOLE LOG

Contract:	Client:	Borehole:
SZC 2015 Onshore GI	**NNB GenCo**	**CPB BP9**

Contract Ref:	Start:	Ground Level (m):	National Grid Co-ordinate:	Sheet:
763468	End: **08.07.15**	**14.84**	**E:645745.6 N:265302.8**	**3** of **3**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
18.00-18.50	37	B				Orangish brown slightly gravelly slightly clayey medium SAND. Gravel is angular fine shell and angular to rounded fine to medium of flint and quartzite and red iron coated sandstone. *(stratum copied from 17.00m from previous sheet)* . . . below 18.00m, colour is orange.	(3.00)	
18.80	38	D						
19.00-19.50	39	B						
19.80	40	D					20.00	
						Cable percussion borehole terminated at 20.00m depth.		

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth

Chiselling / Slow Progress		
From	To	Duration (hh:mm)

General Remarks

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**DJ**	**SHaynes**	AGS

GINT_LIBRARY_V8_05.GLB LibVersion: v8_05 - Lib0004 PrjVersion: v8_05 - Core+Logs+Geotech Lab-Bristol - 0003 | Log CABLE PERCUSSION LOG | 763468 - SZC 2015 ONSHORE GI.GPJ - v8_05 | 30/10/15 - 13:44 | SH.
Structural Soils Ltd, Branch Office - Castleford: The Potteries, Pottery Street, Castleford, West Yorkshire, WF10 1NJ. Tel: 01977-552255, Fax: 01977-552299, Web: www.soils.co.uk, Email: ask@soils.co.uk.

STRUCTURAL SOILS

DRAFT BOREHOLE LOG

Contract:	Client:	Borehole:
SZC 2015 Onshore GI	**NNB GenCo**	**CPB BP10**

Contract Ref:	Start:	Ground Level (m):	National Grid Co-ordinate:	Sheet:
763468	**02.07.15** End: **06.07.15**	**15.48**	**E:645925.4 N:265229.4**	**1** of **3**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.00-0.40	1	B				TOPSOIL. Light brown slightly clayey slightly gravelly fine to medium SAND. Gravel is angular to subrounded fine to coarse of flint anf quartzite.	0.40	
0.50-1.00	2	B				Soft light brownish orange slightly gravelly sandy CLAY. Gravel is angular to subrounded fine to coarse of flint and quartzite.	(0.60) 1.00	
1.00-1.50	3	B				Orange slightly clayey fine to medium SAND with pockets of orange sandy clay.		
1.80-2.00	4	B					(1.80)	
2.30	5	D					2.80	
2.90	6	D				Buff slightly clayey medium SAND.		
3.00-3.50	7	B					(1.20)	
3.80	8	D					4.00	
4.00-4.50	9	B				Buff slightly gravelly medium to coarse SAND. Gravel is angular to rounded fine to coarse of flint and quartzite.		
4.80	10	D						
5.00-5.50	11	B				. . . below 5.00m, sand is coarse.	(2.60)	
5.80	12	D						
6.00-6.50	13	B					6.60	
6.80	14	D				Buff slightly clayey slightly gravelly coarse SAND. Gravel is angular fine of shell fragments and occasional rounded to subangular fine to medum flint.		
7.00-7.50	15	B						
7.80	16	D						
8.00-8.50	17	B				. . . below 8.00m, colour is orangish buff. 8.00m-11.00m, occasional gravel of angular tabular medium iron coated mudstone.	(4.40)	
8.80	18	D						

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth
03/07/15	06:15	7.50	8.50		7.40
06/07/15	08:30	17.00	17.00		15.50

Chiselling / Slow Progress		
From	To	Duration (hh:mm)
5.00	5.60	03:40

General Remarks

1. Location GPR and UXO cleared.
2. Hand dug inspection pit to 1.20m.
3. No groundwater encountered whilst drilling.
4. Water added to assist drilling.
5. Borehole backfilled with bentonite on completion.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**DJ**	**SHaynes**	

GINT_LIBRARY_V8_05.GLB LibVersion: v8_05 - Lib0004 PrjVersion: v8_05 - Core+Logs+Geotech Lab-Bristol - 0003 | Log CABLE PERCUSSION LOG | 763468 - SZC 2015 ONSHORE GI.GPJ - v8_05 | 30/10/15 - 13:44 | SH.
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STRUCTURAL SOILS

DRAFT BOREHOLE LOG

Contract:	Client:	Borehole:
SZC 2015 Onshore GI	**NNB GenCo**	**CPB BP10**

Contract Ref:	Start:	Ground Level (m):	National Grid Co-ordinate:	Sheet:
763468	**02.07.15** End: **06.07.15**	**15.48**	**E:645925.4 N:265229.4**	**2** of **3**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
9.00-9.50	19	B				Buff slightly clayey slightly gravelly coarse SAND. Gravel is angular fine of shell fragments and occasional rounded to subangular fine to medum flint. *(stratum copied from 6.60m from previous sheet)* . . . below 9.00m, sand is coarse.		
9.80	20	D						
10.00-10.50	21	B						
10.80	22	D					11.00	
11.00-11.50	23	B				Orange slightly clayey gravelly medium to coarse SAND. Gravel is angular fine to medium of flint and quartzite and occasional shell fragments.		
11.80	24	D						
12.00-12.50	25	B				. . . below 12.00m, sand is coarse.		
12.80	26	D						
13.00-13.50	27	B				. . . below 13.00m, sand is buff coloured.		
13.80	28	D						
14.00-14.50	29	B				. . . below 14.00m, becomes gravelly of angular fine to medium shell fragments and occasional rounded to angular fine to medium flint and quartzite.		
14.80	30	D						
15.00-15.50	31	B					(9.00)	
15.80	32	D						
16.00-16.50	33	B						
16.80	34	D						
17.00-17.50	35	B				. . . below 17.00m, sand is orangish buff.		
17.80	36	D						

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth

Chiselling / Slow Progress		
From	To	Duration (hh:mm)

General Remarks

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**DJ**	**SHaynes**	

GINT_LIBRARY_V8_05.GLB LibVersion: v8_05 - Lib0004 PrjVersion: v8_05 - Core+Logs+Geotech Lab-Bristol - 0003 | Log CABLE PERCUSSION LOG | 763468 - SZC 2015 ONSHORE GI.GPJ - v8_05 | 30/10/15 - 13:44 | SH.
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STRUCTURAL SOILS

DRAFT BOREHOLE LOG

Contract:	Client:	Borehole:
SZC 2015 Onshore GI	**NNB GenCo**	**CPB BP10**

Contract Ref:	Start:	Ground Level (m):	National Grid Co-ordinate:	Sheet:
763468	End: **06.07.15**	**15.48**	**E:645925.4 N:265229.4**	**3** of **3**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
18.00-18.50	37	B				Orange slightly clayey gravelly medium to coarse SAND. Gravel is angular fine to medium of flint and quartzite and occasional shell fragments. *(stratum copied from 11.00m from previous sheet)*		
18.80	38	D						
19.00-19.50	39	B						
19.80	40	D					20.00	
						Cable percussion borehole terminated at 20.00m depth.		

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth

Chiselling / Slow Progress		
From	To	Duration (hh:mm)

General Remarks

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**DJ**	**SHaynes**	

GINT_LIBRARY_V8_05.GLB LibVersion: v8_05 - Lib0004 PrjVersion: v8_05 - Core+Logs+Geotech Lab-Bristol - 0003 | Log CABLE PERCUSSION LOG | 763468 - SZC 2015 ONSHORE GI.GPJ - v8_05 | 30/10/15 - 13:44 | SH.
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STRUCTURAL SOILS

DRAFT BOREHOLE LOG

Contract:	Client:	Borehole:
SZC 2015 Onshore GI	**NNB GenCo**	**CPB BP11**

Contract Ref:	Start:	Ground Level (m):	National Grid Co-ordinate:	Sheet:
763468	**15.06.15** End: **18.06.15**	**17.37**	**E:645573.7 N:265147.7**	**1** of **3**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
0.00-0.50	1	B				TOPSOIL: Brown slightly clayey slightly gravelly medium SAND. Gravel is angular to rounded fine to medium of flint and quartzite.	(0.50) 0.50	
0.60-1.00	2	B				Stiff brown slightly gravelly sandy CLAY. Gravel is angular to rounded fine to coarse of flint and quartzite.		
1.30	3	D				. . . 1.20m, becomes soft to firm very sandy and orange in colour.	(2.10)	
1.50-2.00	4	B						
2.20	5	D					2.60	
2.70-3.00	6	B				Orange silty fine SAND.	(0.50) 3.10	
3.20-3.50	7	B				Orangish buff slightly clayey locally clayey fine to medium SAND.		
3.80	8	D						
4.00-4.50	9	B					(2.40)	
4.80	10	D				. . . from 4.80m, occasional gravel of angular to rounded fine to medium flint.		
5.00-5.50	11	B					5.50	
5.80	12	D				Buff clayey slightly gravelly medium to coarse SAND with pockets and lenses of soft brown and grey clay. Gravel is rounded to angular medium to coarse of flint and quartzite.		
6.00-6.50	13	B					(1.50)	
7.00-7.50	15	B				Yellow gravelly coarse SAND. Gravel is angular to subrounded medium to coarse of flint, quartzite and mudstone.	7.00	
7.60-8.00	16	B						
8.20	17	D					(3.10)	
8.50-9.00	18	B						

Boring Progress and Water Observations

Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth
17/06/15	08:30	9.00	10.00	250	Dry
17/06/15	15:30	20.00	20.00	250	18.00
18/06/15	08:30	18.50	20.00	250	16.00

Chiselling / Slow Progress

From	To	Duration (hh:mm)
7.50	9.40	04:00
9.50	12.00	04:00

General Remarks

1. Location GPR and UXO cleared.
2. Hand dug inspection pit to 1.20m.
3. Water added to assist drilling.
4. No groundwater encountered.
5. Standpipe intalled on completion.

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**DJ**	**SHaynes**	

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STRUCTURAL SOILS

DRAFT BOREHOLE LOG

Contract:	Client:	Borehole:
SZC 2015 Onshore GI	**NNB GenCo**	**CPB BP11**

Contract Ref:	Start:	Ground Level (m):	National Grid Co-ordinate:	Sheet:
763468	**15.06.15** End: **18.06.15**	**17.37**	**E:645573.7 N:265147.7**	**2** of **3**

Samples and In-situ Tests				Water	Backfill	Description of Strata	Depth (Thickness)	Material Graphic Legend
Depth	No	Type	Results					
9.20	19	D				Yellow gravelly coarse SAND. Gravel is angular to subrounded medium to coarse of flint, quartzite and mudstone. *(stratum copied from 7.00m from previous sheet)*	10.10	
9.50-10.00	21	B						
10.20-10.50	22	B				Orange medium to coarse SAND with occasional gravel of subangular fine to medium flint.		
10.80	22	D						
11.00-11.50	23	B						
11.80	24	D				. . . between 11.80m and 13.00m, slightly gravelly of tabular medium iron coated mudstone gravel.	(4.90)	
12.00-12.50	25	B						
12.00-12.50	26	D						
13.00-13.50	27	B						
13.80	28	D						
14.00-14.50	29	B						
14.80	30	D					15.00	
15.00-15.50	31	B				Orangish brown slightly clayey slightly gravelly to gravelly coarse SAND. Gravel is angular fine to medium of shell fragments and occasional rounded to angular fine to medium flint, quartzite and iron coated mudstone and sandstone. Occasional whole shell.		
15.80	32	D						
16.00-16.50	33	B						
16.80	34	D						
17.00-17.50	35	B					(5.00)	
17.80	36	D						

Boring Progress and Water Observations					
Date	Time	Borehole Depth	Casing Depth	Borehole Diameter (mm)	Water Depth

Chiselling / Slow Progress		
From	To	Duration (hh:mm)

General Remarks

All dimensions in metres | Scale: **1:50**

Method Used:	Plant Used:	Drilled By:	Logged By:	Checked By:
Cable percussion	**Dando 2000**	**DJ**	**SHaynes**	

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