Rosefield Solar Farm

Environmental Statement

Volume 4
Appendix 11.3: Ground Investigation Report

EN010158/APP/6.4
September 2025
Rosefield Energyfarm Limited

APFP Regulation 5(2)(q)
Planning Act 2008
Infrastructure Planning
(Applications: Prescribed Forms
and Procedure) Regulations 2009

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1. Introduction

1.1. Purpose of this document

1.1.1. This ground investigation factual report has been prepared on behalf of Rosefield Energyfarm Limited ('the Applicant') to obtain geological data across the site, to establish geotechnical properties and identify environmental risks associated with the Proposed Development.

1.2. The Order Limits

1.2.1. The extent of the Order Limits is shown in Location, **Order Limits and Grid Coordinate Plans [EN010158/APP/2.1]** and the Proposed Development is described in full in **ES Volume 1, Chapter 3: Proposed Development Description [EN010158/APP/6.1]** and shown spatially on the **Works Plans [EN010158/APP/2.3].**

1.2.2. The geotechnical surveys described by this document could not be carried out for the whole extent of the Order Limits due to access constraints. The Applicant intends to carry out further intrusive investigations and produce an interpretative report following the DCO Application, as outlined by the **Outline Construction Environmental Management Plan [EN010158/APP/7.2].**

1.3. The Proposed Development

1.3.1. The Proposed Development comprises the construction, operation (including maintenance), and decommissioning of solar photovoltaic ('PV') development and energy storage, together with associated infrastructure and an underground cable connection to the National Grid East Claydon Substation.

1.3.2. The Proposed Development would include a generating station with a total exporting capacity exceeding 50 megawatts ('MW'). The agreed grid connection for the Proposed Development would allow the export and import of up to 500 MW of electricity to the grid.

1.3.3. The location of the Proposed Development is shown on **ES Volume 3, Figure 1.1: Location Plan [EN010158/APP/6.3]**. The Proposed Development would be located within the Order Limits (the land shown on the **Works Plans [EN010158/APP/2.3]** within which the Proposed Development can be carried out). The Order Limits plan is provided as **ES Volume 3, Figure 1.2: Order Limits [EN010158/APP/6.3]**. Land within the Order Limits is known as the 'Site'.

2. Ground Investigation Report

Rosefield Solar Farm

Ground Investigation Factual Report

2372536 FINAL

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

CENTRAL ALLIANCE CONTROL SHEET

Project No.: 2372536

Title: Rosefield Solar Farm Preliminary Ground Investigation

Client: EDF

Issue Date: January 25

Office: Central Alliance Pre-Construction Services Limited, (Part of RSK Environment Limited), Alliance House, South Park Way, Wakefield 41 Business Park, Wakefield, WF2 0XJ

Version: 2372536-FAC-02

[redacted]
Graduate Geoenvironmental Engineer

[redacted]
Senior Geo-Environmental Engineer

[redacted]

VERSION CONTROL SHEET

Reference	Date	Status	Amended by	Approved by
FAC-02	17/01/2025	Final	[redacted]	[redacted]

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1 INTRODUCTION

1.1 Commissioning

Central Alliance Pre-Construction Services Limited (Central Alliance) was instructed by EDF to undertake intrusive ground investigation at their site across the the Claydon Estate and the surrounding land in Buckinghamshire. Central Alliance was commissioned to provide the following for the project:

- A factual description of the work undertaken
- Exploratory hole logs
- Dynamic Probing logs
- Dynamic Cone Penetration (DCP) logs
- Soakaway Test Results
- Thermal resistivity testing results
- Laboratory testing results

1.2 Objectives

The objective of the ground investigation was to obtain geological data across the site, to establish geotechnical properties and identify environmental risks to inform Engineering Procurement Construction (EPC) tender designs for the proposed development.

1.3 Scope of works

The scope of the investigation was designed by WSP as provided within the received specification document '*Rosefield Solar Project - Preliminary GI Specification_Issue 3a'*.

The scope included:

- 4No. Machine Excavated Trial Pits to a target depth of 3.0m bgl.
- 55No. Window Sample boreholes/Machine Excavated Trial Pits to a target depth of either 5.00m or 3.00m bgl or refusal respectively.
- 9No. Hand Excavated trial pits & DCP (solar array areas) to a target depth of 1.50m bgl.
- 24No. Hand Excavated Trial Pits & DCP to a target depth of 1.50m bgl.
- In-situ geotechnical testing to include SPT's & Dynamic Probe Super Heavy (DPSH) in all Window Sample holes.
- Dynamic Cone Penetration Test (DCP) in conjunction with all hand excavated trial pits at 24 selected locations.
- 4No. Soakaway tests.
- Thermal Conductivity tests at all Machine Excavated Trial Pits.

Final exploratory hole locations were agreed on site between the Client and Central Alliance, following consideration of the existing site conditions and site access

restrictions. Details of the works completed, including any deviation from the scope of work, is identified in **Section 3.**

1.4 Limitations

This report presents a description of the site at the time of the fieldwork, results of the fieldwork, in-situ testing undertaken, strata encountered and geotechnical and/or chemical test results.

There may be other conditions prevailing at the site which have not been disclosed by this investigation and which have not been considered by this report. Responsibility cannot be accepted for conditions at the site not revealed by the investigation and confirmation of intermediate ground conditions between exploratory holes should be considered if deemed necessary.

Unless instructed by the Client, Central Alliance is not obliged to and disclaims any obligation to update the report for events taking place after the date on which this investigation was undertaken.

2 SITE DETAILS

2.1 Site location

The site is located 10km South of Buckingham around and within the Claydon estate in Botolph Claydon. The site generally consists of open fields divided by a network of minor roads, farm access tracks, farm properties, and small wooded copses and hedgerows.

Site location details are presented in **Table 1** and satellite imagery of the area is presented in **Figure 1**.

Table 1 - Site Location

Site name	Rosefield Solar Farm
Full site address and postcode	Peartree Grain Store, Queen Catherine Road, Steeple Claydon
National Grid reference	SP709264

Figure 1: Site location (Google Earth©, 2024)

2.2 Site Description

The site in Phase 1 was bound to 3No. areas:

Area 1 is a series of agricultural fields surrounding Pond Farm to the West, and Three Points Lane to the East. It extends to within 400m East of the town of Calvert, in

between which is the High Speed 2 (HS2) rail line. Access is gained from Three Points Lane and from the farm access track for Pond Farm.

Area 2 is the largest area and is bound by Clayton Lane to the East. It consists of a series of fields directly South of the village of Botolph Claydon, extending to the South of Runt's wood. Access is gained using a farm track from Orchard Way on the Northern boundary of the site. Access is controlled via the use of a Claydon Estate-owned padlocked gate.

Area 3 is a single field to the NE of the other two areas located adjacent to the East of East Claydon National Grid Sub-station. This field is privately owned and not a part of the Claydon Estate. Access is granted from East Claydon Road and by the private farmyard directly adjacent to the field to the North.

Between the areas, the area for phase 1 spans roughly 335ha. The greater area is made up of farmland used by different tenant-farmers on behalf of the Claydon estate or privately farmed land. Pockets of ancient woodlands are also preserved throughout the area.

2.3 Site Geology

2.3.1 Made Ground

Made Ground is indicated to be present at the location due to the nature of the site, deposits associated with farming are likely to be encountered.

2.3.2 Anticipated geological sequence

Published records (British Geological Survey, BGS) for the area indicate the geology of the site to be characterised by the strata recorded in **Tables 2** and **3**, seen below

Table 2 - Site Geology (Superficial)

Strata	Description
Glaciofluvial Deposits, Mid Pleistocene	Sand and gravel. Sedimentary superficial deposit formed between 860 and 116 thousand years ago during the Quaternary period.
Glacial Deposits	Clay, silt and sand. Sedimentary superficial deposit formed between 2.588 million and 11.8 thousand years ago during the Quaternary period.
Alluvium	Clay, silt, sand and gravel. Sedimentary superficial deposit formed between 11.8 thousand years ago and the present during the Quaternary period.
Relevant information sources: BGS Geology Viewer ☒ BGS Geoindex ☐ Previous SI reports ☐	

Table 3 - Site Geology (Solid Geology)

Strata	Description
Stewartby Member	Mudstone. Sedimentary bedrock formed between 166.1 and 163.5 million years ago during the Jurassic period.
Weymouth Member	Mudstone. Sedimentary bedrock formed between 163.5 and 157.3 million years ago during the Jurassic period.
West Walton Formation	Mudstone. Sedimentary bedrock formed between 163.5 and 157.3 million years ago during the Jurassic period.
Relevant information sources: BGS Geology Viewer ☒ BGS Geoindex ☐ Previous SI reports ☐	

3 FIELDWORK

3.1 General Fieldwork Information

The ground investigation works were completed between Monday 4th November to Friday 8th November 2024 with works completed during normal weekday shifts.

The fieldwork was carried out in general accordance with Eurocode 7, BS5930:2015+A1:2020 - 'Code of Practice for Ground Investigations'; BS10175 'Investigation of potentially contaminated sites – Code of Practice' (2001); Association of Geotechnical and Geo-environmental Specialist Guidelines for Good Practice in Geotechnical Ground Investigation (June 2016) and logged in accordance with BS EN ISO 14688-1:2018 and BS EN ISO 14688-2:2018. Dynamic Probing was undertaken in accordance with BS EN ISO 22476-2 (2005).

The final locations of exploratory holes were determined by the presence of underground services, practicalities, and any site access restrictions. The locations of exploratory holes are provided on drawing *70096495-210* - Ground Investigate Locations Phase1 with coordinates and levels recorded on the individual exploratory hole logs presented as Appendix A. All backfilling was completed to a sufficient standard upon the immediate completion of each ground investigation location, as requested by the client.

3.2 Exploratory Holes

The exploratory holes were completed using a combination of window sampling, dynamic probing, machine excavated trial pitting/trenching, hand dug pitting, and a DCP. The logging, sampling and subsampling of the exploratory holes were completed by a suitably qualified Geo-Environmental Engineer provided by Central Alliance.

The completed scope of works was as follows:

- 5No. Dynamic Sampled boreholes (All for solar array areas) completed to maximum depths between 3.80m and 5.00m bgl, with Dynamic Probing adjacent.
- 5No. Machine Excavated Trial Pits (3No. for solar array areas, 2No. for cable routes) completed to a maximum depth of 3.00m bgl, with thermal resistivity testing.
- 18No. Hand Excavated Trial Pits (12No. for solar array areas, 2No. for cable routes and 4No. for the haul road) completed to maximum depths between 1.30m and 1.50m bgl, with DCP adjacent.
- 2No. Soakaway tests.

This reduced number of exploratory holes was agreed prior to the ground investigation initialising due to the access arrangements that Gateley Hamer (land agent) had agreed with the various landholders and Claydon Estate at the time.

7No. Hand excavated pits were terminated before their 1.50m bgl target depth due to the ground conditions found which made their advancement too difficult. HP019 was terminated early due to water ingress and ground conditions.

TP014 was required to be moved 500mm West of the initial position due to the uncovering of a terracotta land drain. All Trial Pits reached scheduled depth.

For full details of the strata encountered, groundwater strikes, samples taken, in-situ testing, logging legend sheet, and calibration certificates please refer to the individual exploratory hole records presented as Appendix A.

Photographs of recovered samples, trial pit, and hand pit excavations, are provided as Appendix B.

3.3 Thermal Resistivity Testing

During the excavation of trial pits TP002, TP003, TP©001, TP©011 and TP014 in-situ Thermal Resistivity testing was undertaken between 6th November and 8th November 2024 by Structural Soils Ltd in accordance with IEEE442-2017 standards. All test results are presented in Appendix C.

3.4 Soakaway Testing

On the 6th and 7th November 2024 soakaway testing was undertaken within TP002 and TP014. The trial pits were excavated to 1.50m and water was then discharged over a short period. The test results are presented in Appendix D.

3.5 Monitoring Installations

No monitoring installations were fitted in any of the ground investigation locations on request of the client.

4 LABORATORY TESTING

4.1 Geotechnical Laboratory Testing

Laboratory testing was scheduled by WSP on selected soil samples recovered during the investigation. The samples were sent to Ian Farmer Associates at their testing facility in Washington, Tyne and Wear.

All testing has been carried out in accordance with the laboratory's UKAS accreditation following lab standards set out in BS EN INO 17892.

Completed geotechnical laboratory testing results are presented as Appendix E.

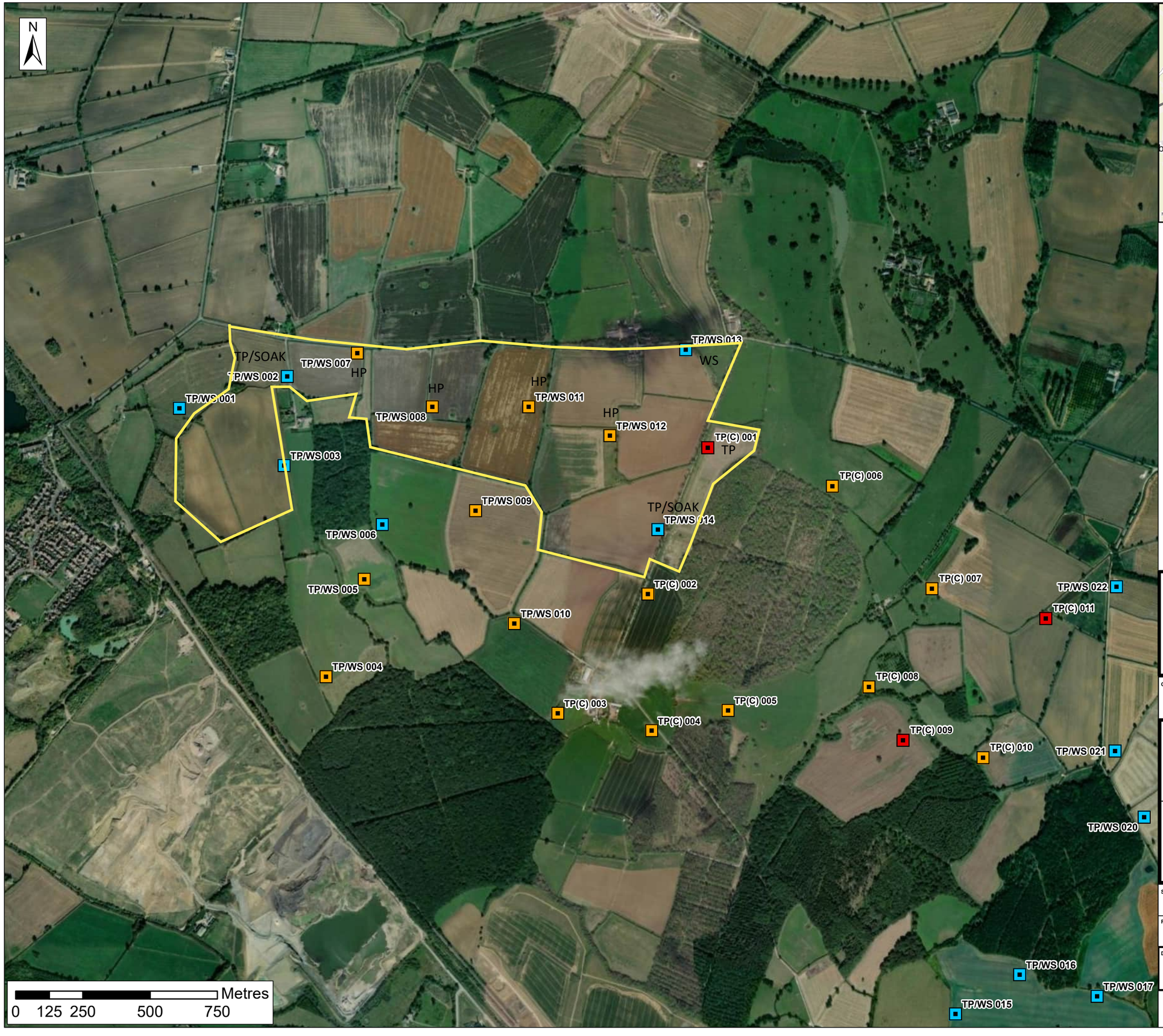
4.2 Chemical Laboratory Testing

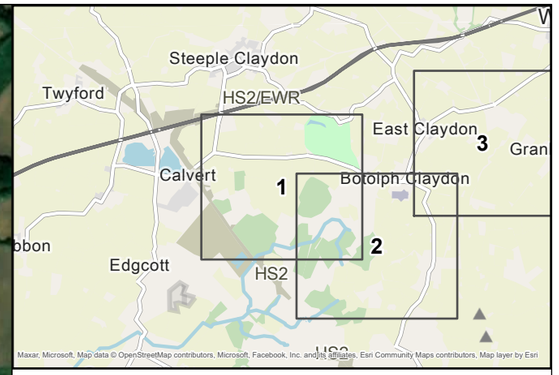
Chemical testing was scheduled by WSP on selected samples recovered during the ground investigation. The samples were sent to Envirolab at their laboratory in Hyde, Greater Manchester.

All testing was carried out in accordance with the laboratory's UKAS accreditation.

Completed chemical laboratory testing results are presented as Appendix F.

DRAWING





LEGEND

- Trial Pit - Cable Route
- Trial Pit or Window Sample
- Hand Excavated Trial Pit & DCP
- Possible area of Made Ground associated with line of former railway

Rosefield Solar Farm

WSP

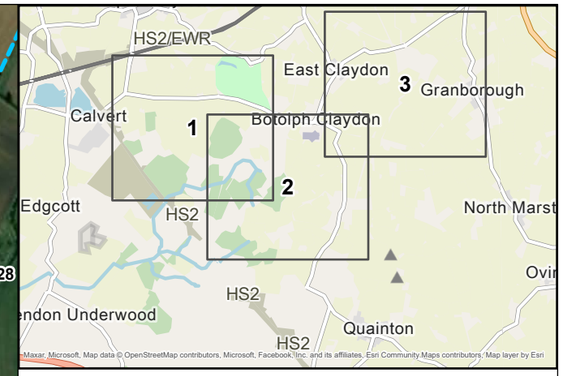
CLIENT: Custodian Energy Limited

PROJECT: Solar Farm - PV and BESS Design

TITLE: GROUND INVESTIGATION LAYOUT
SHEET 1 OF 3

SCALE @ A3:	CHECKED:		APPROVED:
1:13,750	OA		BD
PROJECT No:	DESIGNED:	DRAWN:	DATE:
70096495	CB	SC	17/04/2024

DRAWING No:	REV:
70096495-206	04



LEGEND

- Trial Pit - Cable Route
- Trial Pit or Window Sample
- Hand Excavated Trial Pit & DCP
- Possible area of Made Ground associated with line of former railway

Rosefield Solar Farm

WSP

CLIENT: Custodian Energy Limited

PROJECT: Solar Farm - PV and BESS Design

TITLE: GROUND INVESTIGATION LAYOUT
SHEET 2 OF 3

SCALE @ A3:	CHECKED:		APPROVED:
1:13,750	OA		BD
PROJECT No:	DESIGNED:	DRAWN:	DATE:
70096495	CB	SC	17/04/2024

DRAWING No:	REV:
70096495-206	04

LEGEND

- Trial Pit - Cable Route
- Trial Pit or Window Sample
- Hand Excavated Trial Pit & DCP
- Possible area of Made Ground associated with line of former railway

Rosefield Solar Farm

WSP

CLIENT: Custodian Energy Limited

PROJECT: Solar Farm - PV and BESS Design

TITLE: GROUND INVESTIGATION LAYOUT
SHEET 3 OF 3

SCALE @ A3:	CHECKED:		APPROVED:
1:13,750	OA		BD
PROJECT No:	DESIGNED:	DRAWN:	DATE:
70096495	CB	SC	17/04/2024

DRAWING No:	REV:
70096495-206	04

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

Appendix A
Exploratory Hole Logs

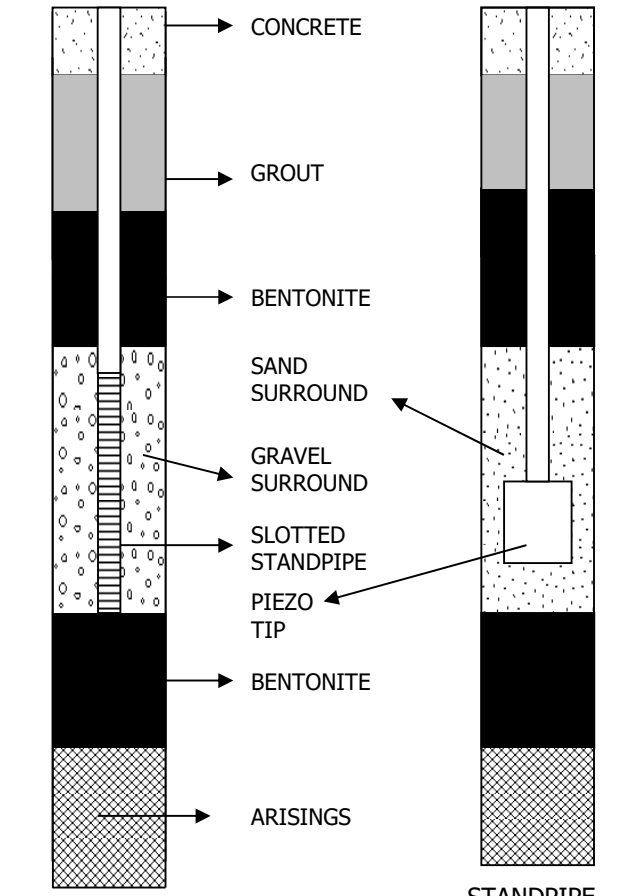
CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

EXPLORATORY HOLE LEGEND SHEET

STRATA LEGENDS

- TOPSOIL
- MADE GROUND
- CLAY
- SANDY GRAVELLY CLAY
- ORGANIC CLAY
- SILT
- SAND
- GRAVEL
- SAND & GRAVEL
- PEAT
- COBBLES
- BOULDERS
- MUDSTONE
- SILTSTONE
- SANDSTONE
- LIMESTONE
- CHALK

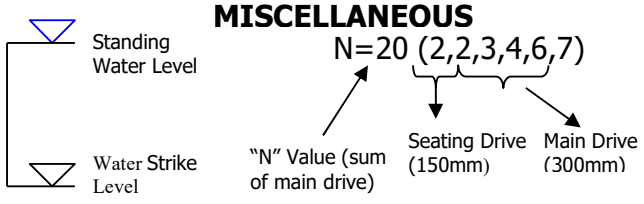
INSTALLATIONS / BACKFILL



SAMPLE & IN SITU TESTS

B	Bulk Disturbed Sample
D	Disturbed Sample
W	Water Sample
ES	Environmental Soil Sample
EW	Environmental Water Sample
U	Undisturbed Sample
UT	Undisturbed Thin Wall Sample
P	Piston Sample
S	SPT (Split Spoon)
C	CPT / Core Sample
HV	Hand Vane
PID	Photo Ionisation Detector

MISCELLANEOUS



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GROUND ENGINEERING TECHNICAL SERVICES

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Wakefield WF2 0XJ
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[redacted]

Exploratory Hole Number
HP(C)007
FINAL

Log Type
Inspection Pit
Sheet 1 of 1

Project No:	**2372536**	Location Details		Methodology & Plant	Scale: 1:30
Name:	**Rosefield Solar Farm**	Easting: **472067.46**	Northing: **224124.04**	Hand Pit	Checked By: MB
Location:	**Peartree Grain Store, Steeple Claydon**	Elevation: **111.28mAOD**	Final Depth: **1.50m**		Approved By: MB
Client:	**EDF**	Logger: **AW**	Grid System: **OSGB**	Hand Tools	Start Date: 05/11/2024
		Orientation: **N/A**	Inclination: **90°**		Finish Date: 05/11/2024

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Water Level (m)	Installation / Backfill	Samples & Testing: Depth (m)	Ref	Test Results
TOPSOIL: (farmed surface) Grass over brown slightly gravelly slightly clayey fine to coarse SAND. Gravel is angular to rounded fine to coarse quartz.		(0.80)				0.10 - 0.20	1 B	
From 0.40m, Becomes clayey.						0.30	2 D	
		0.80	110.48					
Grey slightly gravelly very sandy CLAY. Gravel is angular to subangular quartz. Sand is yellow to grey fine to coarse.		(0.70)				0.90 - 1.00	3 B	
From 1.30m, Colour becomes greyish yellow.						1.40	4 D	
EOH at 1.50m - Scheduled Depth		1.50	109.78					

Observations / Remarks	Breaking Out / Hard Strata		Stability & Backfill	Pit Dimensions
	From (m)	Remarks	Shoring:	m
			Stability:	m
			Backfill: Arisings	Orientation: °

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Exploratory Hole Number
HP(C)010
FINAL

Log Type
Inspection Pit
Sheet 1 of 1

Project No:	**2372536**	Location Details		Methodology & Plant	Scale: 1:30
Name:	**Rosefield Solar Farm**	Easting: **472236.09**	Northing: **223510.98**	Hand Pit	Checked By: MB
Location:	**Peartree Grain Store, Steeple Claydon**	Elevation: **106.98mAOD**	Final Depth: **1.50m**		Approved By: MB
Client:	**EDF**	Logger: **RW**	Grid System: **OSGB**	Hand Tools	Start Date: 06/11/2024
		Orientation: **N/A**	Inclination: **90°**		Finish Date: 06/11/2024

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Water Level (m)	Installation / Backfill	Samples & Testing: Depth (m)	Ref	Test Results
TOPSOIL: Firm brown gravelly sandy CLAY. Sand is fine to medium. Gravel is subangular fine to medium chalk and flint.		(0.30)				0.00 - 0.30	2 B	
						0.20	1 ES	
		0.30	106.68			0.30 - 0.60	3 B	
Stiff orangish brown gravelly slightly sandy CLAY. Gravel is subangular fine to medium chalk.		(0.30)				0.50	5 D	
		0.60	106.38					
Stiff grey gravelly CLAY. Gravel is subangular fine to medium chalk.		(0.90)				1.00	6 D	
						1.00 - 1.50	4 B	
EOH at 1.50m - Scheduled Depth		1.50	105.48					

Observations / Remarks	Breaking Out / Hard Strata		Stability & Backfill	Pit Dimensions
	From (m)	Remarks	Shoring:	m
			Stability:	m
			Backfill: Arisings	Orientation: °

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Exploratory Hole Number
HP(HR)004
FINAL

Log Type
Inspection Pit
Sheet 1 of 1

Project No:	**2372536**	Location Details		Methodology & Plant	Scale: 1:30
Name:	**Rosefield Solar Farm**	Easting: **475302.77**	Northing: **226129.40**	Hand Pit	Checked By: MB
Location:	**Peartree Grain Store, Steeple Claydon**	Elevation: **86.80mAOD**	Final Depth: **1.50m**		Approved By: MB
Client:	**EDF**	Logger: **RW**	Grid System: **OSGB**	Hand Tools	Start Date: 07/11/2024
		Orientation: **N/A**	Inclination: **90°**		Finish Date: 07/11/2024

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Water Level (m)	Installation / Backfill	Samples & Testing: Depth (m)	Ref	Test Results
TOPSOIL: Soft slightly gravelly slightly sandy CLAY. Sand is fine to medium. Gravel is subangular fine to medium chalk.		(0.30)				0.00 - 0.30	2 B	
						0.20	1 ES	
		0.30	86.50			0.30 - 0.60	3 B	
Soft greyish brown sandy slightly gravelly CLAY. Sand is fine to medium. Gravel is subangular fine to medium chalk.		(0.30)				0.50	5 D	
		0.60	86.20					
Stiff greyish brown slightly sandy CLAY. Sand is fine to medium.		(0.90)				1.00 - 1.50	4 B	
		1.50	85.30			1.50	6 D	
EOH at 1.50m - Scheduled Depth								

Observations / Remarks	Breaking Out / Hard Strata		Stability & Backfill	Pit Dimensions
	From (m)	Remarks	Shoring:	m
			Stability:	m
			Backfill: Arisings	Orientation: °

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

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Exploratory Hole Number
HP(HR)005
FINAL

Log Type
Inspection Pit
Sheet 1 of 1

Project No:	**2372536**	Location Details		Methodology & Plant	Scale: 1:30
Name:	**Rosefield Solar Farm**	Easting: **475385.94**	Northing: **226091.65**	Hand Pit	Checked By: MB
Location:	**Peartree Grain Store, Steeple Claydon**	Elevation: **86.50mAOD**	Final Depth: **1.50m**		Approved By: MB
Client:	**EDF**	Logger: **RW**	Grid System: **OSGB**	Hand Tools	Start Date: 07/11/2024
		Orientation: **N/A**	Inclination: **90°**		Finish Date: 07/11/2024

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Water Level (m)	Installation / Backfill	Samples & Testing: Depth (m)	Ref	Test Results
TOPSOIL: Soft brown sandy CLAY. Sand is fine to medium.		(0.30)				0.00 - 0.30	2 B	
						0.20	1 ES	
		0.30	86.20			0.30 - 0.60	3 B	
Soft orangish brown sandy slightly gravelly CLAY. Sand is fine to medium. Gravel is subangular fine to medium chalk.		(0.30)				0.50	5 D	
		0.60	85.90					
Stiff grey slightly gravelly CLAY. Gravel is subangular fine to medium chalk.		(0.90)				1.00 - 1.50	4 B	
		1.50	85.00			1.50	6 D	
EOH at 1.50m - Scheduled Depth								

Observations / Remarks	Breaking Out / Hard Strata		Stability & Backfill	Pit Dimensions
	From (m)	Remarks	Shoring:	m
			Stability:	m
			Backfill: Arisings	Orientation: °

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Exploratory Hole Number
HP(HR)006
FINAL

Log Type
Inspection Pit
Sheet 1 of 1

		Location Details			Methodology & Plant		
Project No:	**2372536**	Easting:	**475490.31**	Northing:	**226053.06**	Hand Pit	Scale: 1:30
Name:	**Rosefield Solar Farm**	Elevation:	**86.66mAOD**	Final Depth:	**1.50m**		Checked By: MB
Location:	**Peartree Grain Store, Steeple Claydon**	Logger:	**RW**	Grid System:	**OSGB**	Hand Tools	Approved By: MB
Client:	**EDF**	Orientation:	**N/A**	Inclination:	**90°**		Start Date: 07/11/2024
							Finish Date: 07/11/2024

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Water Level (m)	Installation / Backfill	Samples & Testing: Depth (m)	Ref	Test Results
TOPSOIL: Soft brown sandy CLAY. Sand is fine to medium.		(0.30)				0.00 - 0.30	2 B	
						0.20	1 ES	
		0.30	86.36			0.30 - 0.60	3 B	
Soft greyish brown slightly gravelly slightly sandy CLAY. Sand is fine to medium. Gravel is subangular fine to medium chalk.		(0.30)						
						0.50	5 D	
		0.60	86.06					
Soft orangish brown very gravelly slightly sandy CLAY. Sand is fine to medium. Gravel is subangular fine to medium chalk and flint.		(0.90)				1.00 - 1.50	4 B	
		1.50	85.16			1.50	6 D	
EOH at 1.50m - Scheduled Depth								

Observations / Remarks	Breaking Out / Hard Strata		Stability & Backfill	Pit Dimensions
	From (m)	Remarks	Shoring:	m
			Stability:	m
			Backfill: Arisings	Orientation: °

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Exploratory Hole Number
HP(HR)007
FINAL

Log Type
Inspection Pit
Sheet 1 of 1

Project No:	**2372536**	Location Details		Methodology & Plant	Scale: 1:30
Name:	**Rosefield Solar Farm**	Easting: **475490.31**	Northing: **226053.06**	Hand Pit	Checked By: MB
Location:	**Peartree Grain Store, Steeple Claydon**	Elevation: **86.66mAOD**	Final Depth: **1.50m**		Approved By: MB
Client:	**EDF**	Logger: **RW**	Grid System: **OSGB**	Hand Tools	Start Date: 07/11/2024
		Orientation: **N/A**	Inclination: **90°**		Finish Date: 07/11/2024

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Water Level (m)	Installation / Backfill	Samples & Testing: Depth (m)	Ref	Test Results
TOPSOIL: Soft brown sandy CLAY. Sand is fine to medium.		(0.30)				0.00 - 0.30	2 B	
						0.20	1 ES	
		0.30	86.36					
Soft greyish brown slightly sandy CLAY. Sand is fine to medium.						0.50	5 D	
						0.50 - 0.90	3 B	
		(1.20)						
						1.00 - 1.40	4 B	
		1.50	85.16			1.50	6 D	
EOH at 1.50m - Scheduled Depth								

Observations / Remarks	Breaking Out / Hard Strata		Stability & Backfill	Pit Dimensions
	From (m)	Remarks	Shoring:	m
			Stability:	m
			Backfill: Arisings	Orientation: °

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Exploratory Hole Number: **HP007** FINAL

Log Type: **Inspection Pit**

Sheet 1 of 1

Project No:	**2372536**	Location Details	Methodology & Plant
Name:	**Rosefield Solar Farm**	Easting: **469950.56** Northing: **224995.55**	Hand Pit
Location:	**Peartree Grain Store, Steeple Claydon**	Elevation: **88.67mAOD** Final Depth: **1.30m**	Hand Tools
Client:	**EDF**	Logger: **AW** Grid System: **OSGB**	
		Orientation: **N/A** Inclination: **90°**	

Scale: 1:30 | Checked By: MB | Approved By: MB | Start Date: 04/11/2024 | Finish Date: 04/11/2024

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Water Level (m)	Installation / Backfill	Samples & Testing: Depth (m)	Ref	Test Results
MADE GROUND: Grass over soft yellowish brown slightly gravelly silty CLAY. Gravel is subangular to rounded fine to medium quartz and chalk.		(0.15)						
Firm yellowish grey mottled yellow slightly gravelly CLAY. Gravel is angular to subangular fine to medium quartz.		0.15	88.52			0.15 - 0.30	1 B	
						0.40	2 D	
At 1.00m, Becomes stiff.		(1.15)						
EOH at 1.30m - Refusal		1.30	87.37					

Observations / Remarks	Breaking Out / Hard Strata		Stability & Backfill	Pit Dimensions
1) Terminated at 1.30m due to stiffness of clay, little progress made after 30 minutes.	From (m)	Remarks	Shoring:	m
			Stability:	m
			Backfill: Arisings	Orientation: °

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Exploratory Hole Number: **HP008**
FINAL

Log Type: **Inspection Pit**

		Location Details			Methodology & Plant		
Project No:	**2372536**	Easting:	**470192.79**	Northing:	**224786.86**	Hand Pit	Scale: 1:30
Name:	**Rosefield Solar Farm**	Elevation:	**90.29mAOD**	Final Depth:	**1.30m**		Checked By: MB
Location:	**Peartree Grain Store, Steeple Claydon**	Logger:	**AW**	Grid System:	**OSGB**	Hand Tools	Approved By: MB
Client:	**EDF**	Orientation:	**N/A**	Inclination:	**90°**		Start Date: 04/11/2024
							Finish Date: 04/11/2024

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Water Level (m)	Installation / Backfill	Samples & Testing: Depth (m)	Ref	Test Results
MADE GROUND: Firm yellow brown slightly gravelly slightly sandy silty CLAY with roots and rootlets. Sand is fine. Gravel is subangular to subrounded fine to medium flint, mudstone, chalk and brick. *After 0.30m, Brick and chalk absent.*		(0.50)				0.20 0.20 - 0.40 0.30	2 ES 1 B 3 D	
Firm light yellow grey heavily mottled yellow and orange slightly gravelly CLAY. Gravel is angular to subrounded fine to medium chalk, mudstone and quartz. *At 1.00m, Becomes stiff.*		0.50 (0.80)	89.79			0.70 - 0.80	4 B	
EOH at 1.30m - Refusal		1.30	88.99			1.30	5 D	

Observations / Remarks	Breaking Out / Hard Strata		Stability & Backfill	Pit Dimensions
	From (m)	Remarks	Shoring:	m
			Stability:	m
			Backfill: Arisings	Orientation: °

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Exploratory Hole Number: **HP011**
FINAL

Log Type: **Inspection Pit**

Project No:	**2372536**	Location Details		Methodology & Plant	Scale: 1:30
Name:	**Rosefield Solar Farm**	Easting: **470622.47**	Northing: **224781.11**	Hand Pit	Checked By: MB
Location:	**Peartree Grain Store, Steeple Claydon**	Elevation: **90.95mAOD**	Final Depth: **1.50m**		Approved By: MB
Client:	**EDF**	Logger: **AW**	Grid System: **OSGB**	Hand Tools	Start Date: 04/11/2024
		Orientation: **N/A**	Inclination: **90°**		Finish Date: 04/11/2024

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Water Level (m)	Installation / Backfill	Samples & Testing: Depth (m)	Ref	Test Results
MADE GROUND: Firm dark yellowish brown slightly gravelly silty CLAY. Gravel is angular to subangular fine to coarse quartz, brick, chalk and mudstone.		(0.20)				0.10	1 D	HV 0.10m, (p)=35 kPa (r)=8 kPa
MADE GROUND: Firm light yellow grey heavily mottled yellow slightly gravelly slightly sandy silty CLAY. Sand is fine to medium. Gravel is angular to subrounded fine to coarse brick, quartz, chalk and coal.		0.20	90.75			0.20 - 0.30	2 B	
		(0.60)				0.50	3 ES	HV 0.50m, (p)=38 kPa (r)=10 kPa
Firm to stiff light blue grey heavily mottled yellow slightly gravelly slightly sandy CLAY. Sand is fine to medium. Gravel is subangular to subrounded fine to medium chalk.		0.80	90.15			0.90	4 D	
		(0.70)				1.20 - 1.40	5 B	
EOH at 1.50m - Scheduled Depth		1.50	89.45					

Observations / Remarks	Breaking Out / Hard Strata		Stability & Backfill	Pit Dimensions
	From (m)	Remarks	Shoring:	m
			Stability:	m
			Backfill: Arisings	Orientation: °

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Exploratory Hole Number: **HP012**
FINAL

Log Type: **Inspection Pit**

		Location Details			Methodology & Plant		
Project No:	**2372536**	Easting:	**470875.71**	Northing:	**224698.09**	Hand Pit	Scale: 1:30
Name:	**Rosefield Solar Farm**	Elevation:	**91.50mAOD**	Final Depth:	**1.50m**		Checked By: MB
Location:	**Peartree Grain Store, Steeple Claydon**	Logger:	**AW**	Grid System:	**OSGB**	Hand Tools	Approved By: MB
Client:	**EDF**	Orientation:	**N/A**	Inclination:	**90°**		Start Date: 04/11/2024
							Finish Date: 04/11/2024

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Water Level (m)	Installation / Backfill	Samples & Testing: Depth (m)	Ref	Test Results
MADE GROUND: Grass over soft grey brown locally mottled yellow slightly gravelly silty CLAY. Gravel is angular to subangular fine to medium brick and quartz.		(1.50)				0.10 - 0.20	1 B	
From 0.20m, No brick found - assumed natural.						0.15 - 0.20	2 ES	
From 0.30m, Mottling throughout, no longer localised.						0.30	3 D	HV 0.30m, (p)=22 kPa (r)=5 kPa
						0.70 - 0.80	4 B	
From 0.90m, Primary colour is light grey. Becomes firm.						1.30	5 D	
						1.40	6 B	
EOH at 1.50m - Scheduled Depth		1.50	90.00					

Observations / Remarks	Breaking Out / Hard Strata		Stability & Backfill	Pit Dimensions
	From (m)	Remarks	Shoring:	m
			Stability:	m
			Backfill: Arisings	Orientation: °

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Exploratory Hole Number: **HP019** FINAL

Log Type: **Inspection Pit**

Project No:	**2372536**	Location Details		Methodology & Plant	Scale: 1:30
Name:	**Rosefield Solar Farm**	Easting: **473353.86**	Northing: **222929.53**	Hand Pit	Checked By: MB
Location:	**Peartree Grain Store, Steeple Claydon**	Elevation: **107.59mAOD**	Final Depth: **1.40m**		Approved By: MB
Client:	**EDF**	Logger: **AW**	Grid System: **OSGB**	Hand Tools	Start Date: 05/11/2024
		Orientation: **N/A**	Inclination: **90°**		Finish Date: 05/11/2024

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Water Level (m)	Installation / Backfill	Samples & Testing: Depth (m)	Ref	Test Results
TOPSOIL: Soft greyish brown slightly gravelly silty CLAY with rootlets. Gravel is subrounded to rounded fine quartz and chalk.		(0.50)						
		0.50	107.09			0.50 - 0.70	1 B	
Firm light yellow grey mottled orange yellow slightly gravelly CLAY. Gravel is subangular to subrounded fine chalk.						0.80	2 D	
From 1.00m, Locally mottled.		(0.90)						
						1.20 - 1.30	3 B	
EOH at 1.40m - Abandoned due to water ingress		1.40	106.19			1.40	4 D	

Observations / Remarks	Breaking Out / Hard Strata		Stability & Backfill	Pit Dimensions
1) Terminated at 1.40m due to water ingress and stiffness.	From (m)	Remarks	Shoring:	m
			Stability:	m
			Backfill: Arisings	Orientation: °

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Exploratory Hole Number: **HP020**
FINAL

Log Type: **Inspection Pit**

Project No:	**2372536**	Location Details		Methodology & Plant	Scale: 1:30
Name:	**Rosefield Solar Farm**	Easting: **472835.72**	Northing: **223250.89**	Hand Pit	Checked By: MB
Location:	**Peartree Grain Store, Steeple Claydon**	Elevation: **111.85mAOD**	Final Depth: **1.40m**		Approved By: MB
Client:	**EDF**	Logger: **AW**	Grid System: **OSGB**	Hand Tools	Start Date: 05/11/2024
		Orientation: **N/A**	Inclination: **90°**		Finish Date: 05/11/2024

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Water Level (m)	Installation / Backfill	Samples & Testing: Depth (m)	Ref	Test Results
MADE GROUND: (farmed surface) Soft brown slightly gravelly slightly sandy silty CLAY. Sand is fine. Gravel is angular to rounded fine to coarse brick, quartz and chalk. [TOPSOIL].		(0.30)				0.20	1 ES	
Firm light yellow grey mottled orange yellow slightly gravelly CLAY. Gravel is subangular to rounded fine to medium quartz and chalk.		0.30	111.55			0.40 - 0.60	2 B	
From 0.60m, Localised mottling.		(1.10)				0.90	3 D	
From 1.10m, Stiff.						1.20 - 1.40	4 B	
EOH at 1.40m - Refusal		1.40	110.45					

Observations / Remarks	Breaking Out / Hard Strata		Stability & Backfill	Pit Dimensions
1) Terminated at 1.40m due to stiffness of ground.	From (m)	Remarks	Shoring:	m
			Stability:	m
			Backfill: Arisings	Orientation: °

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Exploratory Hole Number: **HP021** FINAL

Log Type: **Inspection Pit**

Sheet 1 of 1

Project No:	**2372536**	Location Details	Methodology & Plant
Name:	**Rosefield Solar Farm**	Easting: **472806.58** Northing: **223591.30**	Hand Pit
Location:	**Peartree Grain Store, Steeple Claydon**	Elevation: **114.65mAOD** Final Depth: **1.40m**	Hand Tools
Client:	**EDF**	Logger: **AW** Grid System: **OSGB**	
		Orientation: **N/A** Inclination: **90°**	

Scale: 1:30 | Checked By: MB | Approved By: MB | Start Date: 05/11/2024 | Finish Date: 05/11/2024

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Water Level (m)	Installation / Backfill	Samples & Testing: Depth (m)	Ref	Test Results
MADE GROUND: (farmed surface) Soft brown slightly gravelly slightly sandy silty CLAY with rootlets. Sand is fine. Gravel is angular to rounded fine to medium chalk and quartz. [TOPSOIL].		(0.40)				0.10	1 B	
Firm yellow grey heavily mottled yellow orange slightly gravelly slightly sandy silty CLAY. Sand is fine to medium. Gravel is subangular to rounded fine to medium chalk and quartz. *From 0.60m, Locally mottled.*		0.40 (0.50)	114.25			0.50 - 0.60	2 B	
Stiff blueish grey locally mottled yellow orange slightly gravely CLAY. Gravel is angular to subangular fine to medium chalk.		0.90 (0.50)	113.75					
EOH at 1.40m - Scheduled Depth		1.40	113.25			1.40	3 D	

Observations / Remarks	Breaking Out / Hard Strata		Stability & Backfill	Pit Dimensions
	From (m)	Remarks	Shoring:	m
			Stability:	m
			Backfill: Arisings	Orientation: °

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Exploratory Hole Number: **HP022**
FINAL

Log Type: **Inspection Pit**

		Location Details				Methodology & Plant		
Project No:	**2372536**	Easting:	**472748.51**	Northing:	**224142.29**	Hand Pit	Scale:	1:30
Name:	**Rosefield Solar Farm**	Elevation:	**110.40mAOD**	Final Depth:	**1.30m**		Checked By:	MB
Location:	**Peartree Grain Store, Steeple Claydon**	Logger:	**AW**	Grid System:	**OSGB**	Hand Tools	Approved By:	MB
Client:	**EDF**	Orientation:	**N/A**	Inclination:	**90°**		Start Date:	05/11/2024
							Finish Date:	05/11/2024

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Water Level (m)	Installation / Backfill	Samples & Testing: Depth (m)	Ref	Test Results
MADE GROUND: (farmed surface) Soft brown slightly gravelly slightly sandy silty CLAY. Sand is fine. Gravel is angular to rounded fine to medium quartz, chalk and brick. [TOPSOIL].		(0.40)				0.10	1 ES	
		0.40	110.00					
Firm yellow grey mottled yellow orange slightly gravelly silty CLAY. Gravel is subangular to rounded fine chalk.		(0.90)				0.60 - 0.80	2 B	
						1.20	3 D	
EOH at 1.30m - Refusal		1.30	109.10					

Observations / Remarks	Breaking Out / Hard Strata		Stability & Backfill	Pit Dimensions
1) Terminated at 1.30m due to stiffness of ground.	From (m)	Remarks	Shoring:	m
			Stability:	m
			Backfill: Arisings	Orientation: °

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Exploratory Hole Number
HP024
FINAL

Log Type
Inspection Pit
Sheet 1 of 1

Project No:	**2372536**	Location Details		Methodology & Plant	Scale: 1:30
Name:	**Rosefield Solar Farm**	Easting:	**473414.32**	Northing: **224018.34**	Hand Pit	Checked By: MB
Location:	**Peartree Grain Store, Steeple Claydon**	Elevation:	**105.16mAOD**	Final Depth: **1.50m**		Approved By: MB
Client:	**EDF**	Logger:	**RW**	Grid System: **OSGB**	Hand Tools	Start Date: 06/11/2024
		Orientation:	**N/A**	Inclination: **90°**		Finish Date: 06/11/2024

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Water Level (m)	Installation / Backfill	Samples & Testing: Depth (m)	Ref	Test Results
TOPSOIL: Stiff brown slightly gravelly slightly sandy CLAY. Sand is fine to medium. Gravel is subangular fine to medium chalk and flint.		(0.30)				0.00 - 0.30 0.15 0.20	2 B 6 D 1 ES	
		0.30	104.86					
Stiff orangish brown sandy CLAY. Sand is fine to medium.		(0.60)				0.40 - 0.80	3 B	
		0.90	104.26			0.75	5 D	
Stiff slightly silty slightly sandy CLAY.		(0.60)				1.00 - 1.50	4 B	
		1.50	103.66					
EOH at 1.50m - Scheduled Depth								

Observations / Remarks	Breaking Out / Hard Strata		Stability & Backfill	Pit Dimensions
	From (m)	Remarks	Shoring: Stability: Backfill: Arisings	m m Orientation: °

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Exploratory Hole Number: **HP025** FINAL

Log Type: **Inspection Pit**

Sheet 1 of 1

Project No:	**2372536**	Location Details		Methodology & Plant	Scale: 1:30
Name:	**Rosefield Solar Farm**	Easting: **473258.93**	Northing: **223605.56**	Hand Pit	Checked By: MB
Location:	**Peartree Grain Store, Steeple Claydon**	Elevation: **102.39mAOD**	Final Depth: **1.40m**		Approved By: MB
Client:	**EDF**	Logger: **AW**	Grid System: **OSGB**	Hand Tools	Start Date: 05/11/2024
		Orientation: **N/A**	Inclination: **90°**		Finish Date: 05/11/2024

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Water Level (m)	Installation / Backfill	Samples & Testing: Depth (m)	Ref	Test Results
MADE GROUND: (farmed surface) Soft brown slightly gravelly slightly sandy silty CLAY with roots and rootlets. Sand is fine. Gravel is angular to subrounded fine to medium quartz, chalk and brick.		(0.40)				0.10	1 ES	
		0.40	101.99					
Firm yellow grey heavily mottled yellow orange slightly gravelly slightly sandy silty CLAY. Sand is fine to coarse. Gravel is subangular to rounded fine to medium mudstone, quartz and chalk.		(0.50)				0.50 - 0.70	2 B	
From 0.80m to 0.90m, Very sandy and gravelly.						0.80 - 0.90 0.85	3 B 4 D	
		0.90	101.49					
Stiff blueish grey locally mottled yellow orange slightly gravelly CLAY. Gravel is angular to subangular fine to medium chalk.		(0.50)				1.00 - 1.20	5 B	
		1.40	100.99					
EOH at 1.40m - Refusal						1.40	6 D	

Observations / Remarks	Breaking Out / Hard Strata		Stability & Backfill	Pit Dimensions
1) Terminated at 1.40m due to stiffness of ground.	From (m)	Remarks	Shoring: Stability: Backfill: Arisings	m m Orientation: °

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Exploratory Hole Number: **HP026** FINAL

Log Type: **Inspection Pit**

Sheet 1 of 1

Project No:	**2372536**	Location Details	Methodology & Plant
Name:	**Rosefield Solar Farm**	Easting: **473726.11** Northing: **223753.29**	Hand Pit
Location:	**Peartree Grain Store, Steeple Claydon**	Elevation: **97.67mAOD** Final Depth: **1.50m**	Hand Tools
Client:	**EDF**	Logger: **RW** Grid System: **OSGB**	
		Orientation: **N/A** Inclination: **90°**	

Scale: 1:30 | Checked By: MB | Approved By: MB | Start Date: 06/11/2024 | Finish Date: 06/11/2024

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Water Level (m)	Installation / Backfill	Samples & Testing: Depth (m)	Ref	Test Results
TOPSOIL: Stiff brown gravelly sandy CLAY. Gravel is subangular to subrounded fine to medium chalk and flint.		(0.30)				0.00 - 0.30	2 B	
						0.20	1 ES	
Stiff orangish brown gravelly sandy CLAY. Sand is fine to medium. Gravel is subangular fine to medium chalk and flint.		0.30	97.37					
		(0.60)				0.50 - 0.80	3 B	
						0.75	5 D	
Stiff grey gravelly CLAY. Gravel is subangular fine to medium chalk.		0.90	96.77			1.00 - 1.50	4 B	
		(0.60)						
EOH at 1.50m - Scheduled Depth		1.50	96.17			1.50	6 D	

Observations / Remarks	Breaking Out / Hard Strata		Stability & Backfill	Pit Dimensions
	From (m)	Remarks	Shoring:	m
			Stability:	m
			Backfill: Arisings	Orientation: °

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Exploratory Hole Number: **HP027** FINAL

Log Type: **Inspection Pit**

Sheet 1 of 1

		Location Details			Methodology & Plant		
Project No:	**2372536**	Easting:	**473823.32**	Northing:	**224265.58**	Hand Pit	Scale: 1:30
Name:	**Rosefield Solar Farm**	Elevation:	**97.67mAOD**	Final Depth:	**1.50m**		Checked By: MB
Location:	**Peartree Grain Store, Steeple Claydon**	Logger:	**RW**	Grid System:	**OSGB**	Hand Tools	Approved By: MB
Client:	**EDF**	Orientation:	**N/A**	Inclination:	**90°**		Start Date: 06/11/2024
							Finish Date: 06/11/2024

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Water Level (m)	Installation / Backfill	Samples & Testing: Depth (m)	Ref	Test Results
TOPSOIL: Stiff brown slightly gravelly slightly sandy CLAY. Sand is fine to medium. Gravel is angular to subangular fine to medium chalk and flint.		(0.30)				0.00 - 0.30	2 B	
						0.20	1 ES	
		0.30	97.37					
Stiff greyish brown sandy CLAY. Sand is fine to medium.		(0.50)				0.40 - 0.80	3 B	
		0.80	96.87			0.75	5 D	
Stiff grey gravelly CLAY. Gravel is angular to subangular fine to coarse chalk.		(0.70)				1.00 - 1.50	4 B	
EOH at 1.50m - Scheduled Depth		1.50	96.17			1.50	6 D	

Observations / Remarks	Breaking Out / Hard Strata		Stability & Backfill	Pit Dimensions
	From (m)	Remarks	Shoring:	m
			Stability:	m
			Backfill: Arisings	Orientation: °

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Exploratory Hole Number
TP(C)001
FINAL

Log Type
Trial Pit
Sheet 1 of 1

Project No:	**2372536**	Location Details		Methodology & Plant	Scale: 1:30
Name:	**Rosefield Solar Farm**	Easting: **471217.24**	Northing: **224643.95**	Machine Excavated Pit	Checked By: MB
Location:	**Peartree Grain Store, Steeple Claydon**	Elevation: **88.57mAOD**	Final Depth: **3.00m**		Approved By: MB
Client:	**EDF**	Logger: **AW**	Grid System: **OSGB**	Tracked Excavator	Start Date: 07/11/2024
		Orientation: **N/A**	Inclination: **90°**		Finish Date: 07/11/2024

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Water Level (m)	Installation / Backfill	Samples & Testing: Depth (m)	Ref	Test Results
MADE GROUND: Grass over soft to firm brown slightly gravelly slightly sandy silty CLAY with roots and rootlets. Sand is fine to medium. Gravel is angular to subrounded fine to medium quartz, brick and chalk.		(0.20)				0.10	1 ES	
		0.20	88.37			0.20 - 0.40	2 B	
Firm yellowish brown locally mottled grey slightly gravelly slightly sandy silty CLAY. Sand is fine. Gravel is angular to subrounded fine to medium quartz, mudstone and chalk.								HV 0.35m, (p)=90 kPa (r)=22 kPa
		(0.60)						HV 0.60m, (p)=76 kPa (r)=18 kPa
						0.70	3 D	HV 0.75m, (p)=94 kPa (r)=23 kPa
		0.80	87.77			0.80 - 0.90	4 B	
Soft yellowish orange gravelly very sandy silty CLAY. Sand is fine to coarse. Gravel is subangular to rounded fine to coarse quartz.		(0.10)	87.67			0.85	5 D	
		0.90						
Firm grey mottled yellow orange sandy silty CLAY. Sand is fine to coarse.								
From 1.20m, Becomes slightly gravelly. Gravel is angular to subangular fine to medium quartz.						1.30 - 1.50	6 B	
		(2.10)				1.90	7 D	
						2.30 - 2.50	8 B	
						2.90	9 D	
EOH at 3.00m - Scheduled Depth		3.00	85.57					

Observations / Remarks	Breaking Out / Hard Strata			Stability & Backfill	Pit Dimensions
	Depth Top (m)	Depth Base (m)	Duration (hh:mm)	Shoring:	m
				Stability:	m
				Backfill: Arisings	Orientation: °

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Exploratory Hole Number
TP(C)011
FINAL

Log Type
Trial Pit
Sheet 1 of 1

Project No:	**2372536**	Location Details		Methodology & Plant	Scale: 1:30
Name:	**Rosefield Solar Farm**	Easting: **472493.75**	Northing: **224015.84**	Machine Excavated Pit	Checked By: MB
Location:	**Peartree Grain Store, Steeple Claydon**	Elevation: **N/A**	Final Depth: **3.00m**		Approved By: MB
Client:	**EDF**	Logger: **AW**	Grid System: **OSGB**	Tracked Excavator	Start Date: 08/11/2024
		Orientation: **N/A**	Inclination: **90°**		Finish Date: 08/11/2024

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Water Level (m)	Installation / Backfill	Samples & Testing: Depth (m)	Ref	Test Results
MADE GROUND: Grass over soft brown slightly gravelly slightly sandy silty CLAY with roots. Gravel is angular to subrounded fine to coarse brick, chalk, quartz and coal.		(0.20) 0.20				0.10	1 ES	
Firm becoming stiff grey heavily mottled yellow orange slightly gravelly slightly sandy silty CLAY. Gravel is angular to subrounded fine to medium quartz and chalk.						0.20 - 0.40	2 B	HV 0.40m, (p)=70 kPa (r)=17 kPa
At 0.60m, Becomes stiff.								HV 0.60m, (p)=140 kPa (r)=35 kPa
						0.80	3 D	HV 0.80m, (p)=130 kPa (r)=30 kPa
From 1.00m, Colour becomes blueish grey.						1.30 - 1.50	4 B	
		(2.80)				1.90	5 D	
From 2.30m, Frequent shell fragments.						2.30 - 2.50	6 B	
						2.90	7 D	
EOH at 3.00m - Scheduled Depth		3.00						

Observations / Remarks	Breaking Out / Hard Strata			Stability & Backfill	Pit Dimensions
	Depth Top (m)	Depth Base (m)	Duration (hh:mm)	Shoring:	m
				Stability:	m
				Backfill: Arisings	Orientation: °

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Exploratory Hole Number: **TP002** FINAL

Log Type: **Trial Pit**

Project No:	**2372536**	Location Details		Methodology & Plant	Scale: 1:30
Name:	**Rosefield Solar Farm**	Easting: **469675.80**	Northing: **224884.62**	Machine Excavated Pit	Checked By: MB
Location:	**Peartree Grain Store, Steeple Claydon**	Elevation: **91.12mAOD**	Final Depth: **3.00m**		Approved By: MB
Client:	**EDF**	Logger: **AW**	Grid System: **OSGB**	Tracked Excavator	Start Date: 06/11/2024
		Orientation: **N/A**	Inclination: **90°**		Finish Date: 06/11/2024

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Water Level (m)	Installation / Backfill	Samples & Testing: Depth (m)	Ref	Test Results
MADE GROUND: Grass over firm brown slightly gravelly slightly sandy silty CLAY. Sand is fine to coarse. Gravel is angular to subrounded fine to coarse brick and quartz.		(0.25)				0.15	1 ES	
		0.25	90.87			0.30 - 0.50	2 B	HV 0.30m, (p)=110 kPa (r)=25 kPa
Stiff yellowish grey mottled yellowish orange slightly gravelly slightly sandy CLAY. Sand is coarse. Gravel is subangular to rounded fine to coarse quartz and chalk.		(0.65)						HV 0.50m, (p)=94 kPa (r)=23 kPa
						0.80	3 D	HV 0.80m, (p)=100 kPa (r)=25 kPa
		0.90	90.22			0.90 - 1.10	4 B	
Stiff bluish grey locally mottled yellowish orange slightly gravelly CLAY. Gravel is subangular to rounded fine to coarse quartz and chalk.						1.40	5 D	
						1.60 - 1.80	6 B	
		(2.10)				1.90	7 D	
						2.30 - 2.50	8 B	
						2.80	9 D	
EOH at 3.00m - Scheduled Depth		3.00	88.12					

Observations / Remarks	Breaking Out / Hard Strata			Stability & Backfill	Pit Dimensions
1) Soakaway test undertaken at 1.50m bgl.	Depth Top (m)	Depth Base (m)	Duration (hh:mm)	Shoring: None Stability: Stable Backfill: Arisings	3.00m 2.50m Orientation: °

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Exploratory Hole Number: **TP003** FINAL

Log Type: **Trial Pit**

		Location Details			Methodology & Plant		
Project No:	**2372536**	Easting:	**469757.91**	Northing:	**224516.61**	Machine Excavated Pit	Scale: 1:30
Name:	**Rosefield Solar Farm**	Elevation:	**94.34mAOD**	Final Depth:	**3.00m**		Checked By: MB
Location:	**Peartree Grain Store, Steeple Claydon**	Logger:	**AW**	Grid System:	**OSGB**	Tracked Excavator	Approved By: MB
Client:	**EDF**	Orientation:	**N/A**	Inclination:	**90°**		Start Date: 06/11/2024
							Finish Date: 06/11/2024

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Water Level (m)	Installation / Backfill	Samples & Testing: Depth (m)	Ref	Test Results
MADE GROUND: Grass over firm brown slightly gravelly slightly sandy silty CLAY. Sand is fine. Gravel is angular to subrounded fine to coarse quartz and brick.		(0.30)				0.10	1 ES	
Firm greyish yellow mottled yellowish orange slightly gravelly CLAY. Gravel is subangular to subrounded fine to coarse quartz and chalk.		0.30	94.04			0.30 - 0.50	2 B	HV 0.40m, (p)=50 kPa (r)=12 kPa
		(0.65)						HV 0.60m, (p)=60 kPa (r)=15 kPa
						0.80	3 D	HV 0.80m, (p)=60 kPa (r)=15 kPa
Stiff bluish grey mottled orangish yellow slightly gravelly CLAY. Gravel is angular to subangular fine to medium quartz.		0.95	93.39					
From 1.30m, Common yellow sand & gravel pockets. Sand is medium to coarse. Gravel is angular to subangular fine to coarse mudstone and quartz.						1.30 - 1.50	4 B	
At 2.00m, 75mm thick lense of sand & gravel. Sand is medium to coarse. Gravel is angular to subangular fine to coarse mudstone and quartz.		(2.05)				1.90	5 D	
From 2.50m, Pockets become rare.						2.30 - 2.50	6 B	
						2.90	7 D	
EOH at 3.00m - Scheduled Depth		3.00	91.34					

Observations / Remarks	Breaking Out / Hard Strata			Stability & Backfill	Pit Dimensions
	Depth Top (m)	Depth Base (m)	Duration (hh:mm)	Shoring: None Stability: Stable Backfill: Arisings	3.00m 1.50m Orientation: °

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Exploratory Hole Number: **TP014**
FINAL

Log Type: **Trial Pit**

		Location Details			Methodology & Plant		
Project No:	**2372536**	Easting:	**471071.24**	Northing:	**224333.19**	Machine Excavated Pit	Scale: 1:30
Name:	**Rosefield Solar Farm**	Elevation:	**90.09mAOD**	Final Depth:	**3.00m**		Checked By: MB
Location:	**Peartree Grain Store, Steeple Claydon**	Logger:	**AW**	Grid System:	**OSGB**	Tracked Excavator	Approved By: MB
Client:	**EDF**	Orientation:	**N/A**	Inclination:	**90°**		Start Date: 07/11/2024
							Finish Date: 07/11/2024

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Water Level (m)	Installation / Backfill	Samples & Testing: Depth (m)	Ref	Test Results
MADE GROUND: Soft to firm brown locally mottled yellow slightly gravelly slightly sandy silty CLAY with roots and rootlets. Sand is fine. Gravel is angular to subrounded fine to coarse quartz, mudstone and brick.		(0.20)				0.10	1 ES	
		0.20	89.89			0.30 - 0.50	2 B	
Soft to firm yellowish grey heavily mottled yellow orange slightly gravelly silty CLAY with roots and rootlets. Gravel is angular to rounded fine to medium mudstone and quartz.								HV 0.40m, (p)=108 kPa (r)=30 kPa
At 0.60m, Terracotta land drain at 0.60m. Pit moved West by 500mm.		(0.70)						HV 0.60m, (p)=110 kPa (r)=80 kPa
						0.80	3 D	HV 0.80m, (p)=124 kPa (r)=30 kPa
		0.90	89.19			0.90 - 1.10	4 B	
Firm yellowish orange gravelly sandy silty CLAY with shell fragments. Sand is fine to coarse. Gravel is angular to rounded fine to coarse chalk and quartz.		(0.20)				1.00	5 D	
		1.10	88.99					
Stiff blueish grey slightly gravelly slightly sandy CLAY. Sand is medium to coarse. Gravel is angular to subangular fine to medium mudstone, quartz and chalk.						1.30 - 1.50	6 B	
From 1.50m, Only quartz gravels.								
						1.80	7 D	
		(1.90)						
						2.40 - 2.60	8 B	
						2.90	9 D	
EOH at 3.00m - Scheduled Depth		3.00	87.09					

Observations / Remarks	Breaking Out / Hard Strata			Stability & Backfill	Pit Dimensions
1) At 0.60m, Terracotta land drain at 0.60m. Pit moved West by 500mm. 2) Soakaway test undertaken at 1.50m bgl - instructed to stop after 1 hour by client.	Depth Top (m)	Depth Base (m)	Duration (hh:mm)	Shoring: Stability: Backfill: Arisings	m m Orientation: °

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Start Date:	06/11/2024	Checked:	MB
End Date:	06/11/2024	Approved:	MB

Location ID

WS013

FINAL

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 5.00	Dynamic Sampling	Premier 110

Project No:	**2372536**
Name:	**Rosefield Solar Farm**
Location:	**Peartree Grain Store, Steeple Claydon**
Client:	**EDF**

Location Details

Easting:	**471182.83**	Northing:	**225008.33**
Elevation:	**87.32mAOD**	Final Depth:	**5.00m**
Logger:	**RW**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Log Type

Header Sheet

Scale: 1:50

Sheet 1 of 1

Hole Diameter

Depth (m)	Diam (mm)

Casing Diameter

Depth (m)	Diam (mm)

Hole Not Cased

Groundwater Strikes

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

No Groundwater Encountered

Installation / Instrument Details

Date	Instrument Details	To (m)	Resp. Zone (m)	Diam (mm)

No Monitoring Point/s Installed

If Methodology includes Dynamic Sampling refer to Runs table for info.

Backfill

Depth (m)	Legend Code
0.00 - 5.00	Bentonite

In-Situ Tests

PID	**0**
Hand Vane*	**0**
Standard Penetration Tests	**5**

* One count indicates an average reported result of 3 tests carried out at one depth where available.

Sample Summary

Environmental Samples			
Soil	**1**	Water	**0**
Geotechnical Samples			
Bulk	**7**	Large Bulk	**0**
Disturbed	**6**	Disturbed (NR)	**0**
Piston	**0**	Piston (NR)	**0**
Undisturbed	**0**	Undisturbed (NR)	**0**
Undisturbed Thin Wall			**0**
Undisturbed Thin Wall (NR)			**0**
Core Sample			**0**

(NR) Indicates sample undertaken but with 0% Recovery

Standard Penetration Test Summary

Test Type	Depth (m)	Casing (m)	Water (m)	Seating Blows	Main Blows	Penetration Total (mm)	N	Reported Result	Hammer Ref
Split Spoon	1.20	-	-	2	6	450	6	N=6 (1,1/1,1,2,2)	WLS03
Split Spoon	2.00	-	-	3	7	450	7	N=7 (2,1/2,2,1,2)	WLS03
Split Spoon	3.00	-	-	2	8	450	8	N=8 (1,1/2,1,2,3)	WLS03
Split Spoon	4.00	-	-	2	8	450	8	N=8 (1,1/2,2,2,2)	WLS03
Split Spoon	5.00	-	-	2	12	450	12	N=12 (2,3/2,3,3,4)	WLS03

SPT Hammer Ref.	Energy Ratio (%)
WLS03	67

Applicable to Cable Percussion Only

Chiselling

Depth (m)	Duration (mins)

Water Added

Depth (m)	Litres

Applicable to Rotary Only

Drilling Flush

Depth (m)	Flush Type	Flush Colour	Return %

Applicable to Dynamic Sampling Only

Dynamic Sampling Runs

Depth (m)	Diam (mm)	Recovery %	Remarks
1.20 - 2.00	101	100	
2.00 - 3.00	86	100	
3.00 - 4.00	76	100	
4.00 - 5.00	66	100	

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Start Date:	06/11/2024	Checked:	MB
End Date:	06/11/2024	Approved:	MB

Location ID
WS013
FINAL

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 5.00	Dynamic Sampling	Premier 110

Log Type
Dynamic Sampling

Scale: 1:50
Sheet 1 of 1

Project No:	**2372536**
Name:	**Rosefield Solar Farm**
Location:	**Peartree Grain Store, Steeple Claydon**
Client:	**EDF**

Location Details

Easting:	**471182.83**	Northing:	**225008.33**
Elevation:	**87.32mAOD**	Final Depth:	**5.00m**
Logged By:	**RW**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Samples & Testing: Depth (m)	Ref	Test Results
TOPSOIL: Stiff orangish brown sandy gravelly CLAY. Sand is fine to medium. Gravel is subangular fine to medium chalk and flint.		(0.30)					0.00 - 0.30	2 B	
		0.30	87.02				0.20	1 ES	
Orange brown very clayey fine to medium SAND.							0.40 - 0.80	3 B	
							0.50	5 D	
		(0.70)							
Stiff orangish brown slightly sandy CLAY. Sand is fine to medium.		1.00	86.32				1.00	6 D	
							1.00 - 1.20	4 B	
							1.20 - 1.60	7 B	SPT(S) 1.20m, N=6 (1,1/1,1,2,2)
							1.70	8 D	
		(1.90)					2.00 - 2.50	9 B	SPT(S) 2.00m, N=7 (2,1/2,2,1,2)
							2.80	10 D	
Stiff dark grey slightly gravelly slightly sandy CLAY. Sand is fine to medium. Gravel is subangular fine to medium chalk.		2.90	84.42				3.00 - 3.50	11 B	SPT(S) 3.00m, N=8 (1,1/2,1,2,3)
							3.80	12 D	
		(2.10)					4.00 - 4.50	13 B	SPT(S) 4.00m, N=8 (1,1/2,2,2,2)
							4.80	14 D	
EOH at 5.00m - Scheduled Depth		5.00	82.32						SPT(S) 5.00m, N=12 (2,3/2,3,3,4)

Observations / Remarks

Misc.
No Groundwater Encountered
Hole Not Cased
No Monitoring Point/s Installed

Backfill

Depth (m)	Material
0.00 - 5.00	Bentonite

Hammer Ref & Energy Ratio (%)
WLS03 (67%)

Dynamic Sampling Runs

From (m)	To (m)	Diam (mm)	Recovery (%)	Remarks
1.20	2.00	101	100	
2.00	3.00	86	100	
3.00	4.00	76	100	
4.00	5.00	66	100	

Installations

Instrument Details	Resp. Zone	Depth (m)	Diameter

Groundwater Strikes

Strike (m)	Casing (m)	Sealed (m)	Rises To (m)	Time (min)	Remarks

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Start Date:	06/11/2024	Checked:	MB
End Date:	06/11/2024	Approved:	MB

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 5.00	Dynamic Probing	Premier 110

Location ID

WS013/DP

FINAL

Project No:	**2372536**
Name:	**Rosefield Solar Farm**
Location:	**Peartree Grain Store, Steeple Claydon**
Client:	**EDF**

Location Details

Easting:	**471182.84**	Northing:	**225008.34**
Elevation:	**87.32mAOD**	Final Depth:	**5.00m**
Logger:	**RW**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Log Type

Header Sheet

Scale: 1:50

Sheet 1 of 1

Hole Diameter

Depth (m)	Diam (mm)

Casing Diameter

Depth (m)	Diam (mm)

Hole Not Cased

Groundwater Strikes

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

No Groundwater Encountered

Installation / Instrument Details

Date	Instrument Details	To (m)	Resp. Zone (m)	Diam (mm)

No Monitoring Point/s Installed

If Methodology includes Dynamic Sampling refer to Runs table for info.

Backfill

Depth (m)	Legend Code
0.00 - 5.00	Bentonite

In-Situ Tests

PID	0
Hand Vane*	0
Standard Penetration Tests	0

* One count indicates an average reported result of 3 tests carried out at one depth where available.

Sample Summary

Environmental Samples			
Soil	0	Water	0
Geotechnical Samples			
Bulk	0	Large Bulk	0
Disturbed	0	Disturbed (NR)	0
Piston	0	Piston (NR)	0
Undisturbed	0	Undisturbed (NR)	0
Undisturbed Thin Wall			0
Undisturbed Thin Wall (NR)			0
Core Sample			0

(NR) Indicates sample undertaken but with 0% Recovery

No Samples Taken

Standard Penetration Test Summary

Test Type	Depth (m)	Casing (m)	Water (m)	Seating Blows	Main Blows	Penetration Total (mm)	N	Reported Result	Hammer Ref

SPT Hammer Ref.	Energy Ratio (%)

No Standard Penetration Tests Undertaken

Applicable to Cable Percussion Only

Chiselling

Depth (m)	Duration (mins)

Water Added

Depth (m)	Litres

Applicable to Rotary Only

Drilling Flush

Depth (m)	Flush Type	Flush Colour	Return %

Applicable to Dynamic Sampling Only

Dynamic Sampling Runs

Depth (m)	Diam (mm)	Recovery %	Remarks

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Start Date:	06/11/2024	Checked:	MB
End Date:	06/11/2024	Approved:	MB

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 5.00	Dynamic Probing	Premier 110

Location ID

WS013/DP

FINAL

Log Type

Dynamic Probe

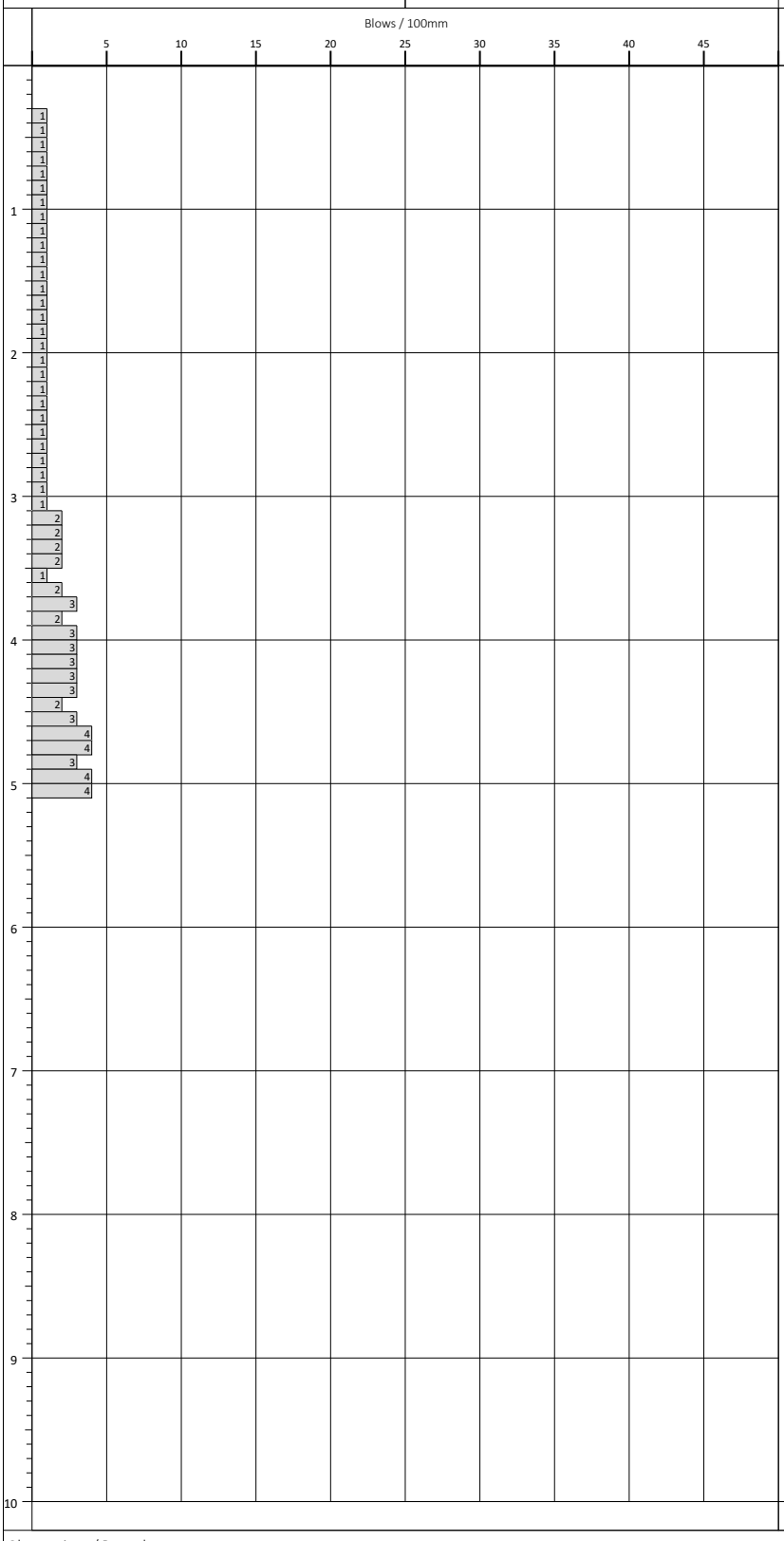
Scale: 1:50

Sheet 1 of 1

Project No: **2372536**
Name: **Rosefield Solar Farm**
Location: **Peartree Grain Store, Steeple Claydon**
Client: **EDF**

Location Details

Easting:	**471182.84**	Northing:	**225008.34**
Elevation:	**87.32mAOD**	Final Depth:	**5.00m**
Logged By:	**RW**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**



Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Samples	Torque (Nm)

Observations / Remarks

Equipment Information

Dynamic Probe Type:
DPSH-B

Fall Height:	Hammer Weight:
750mm	**64.0kg**
Cone Base Diam:	Rod Diam:

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Start Date:	04/11/2024	Checked:	MB
End Date:	04/11/2024	Approved:	MB

Location ID: **WS015**

FINAL

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 5.00	Dynamic Sampling	Premier 110

Project No:	**2372536**
Name:	**Rosefield Solar Farm**
Location:	**Peartree Grain Store, Steeple Claydon**
Client:	**EDF**

Location Details

Easting:	**472153.33**	Northing:	**222523.87**
Elevation:	**126.64mAOD**	Final Depth:	**5.00m**
Logger:	**RW**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Log Type: **Header Sheet**

Scale: 1:50

Sheet 1 of 1

Hole Diameter

Depth (m)	Diam (mm)

Casing Diameter

Depth (m)	Diam (mm)

Hole Not Cased

Groundwater Strikes

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

No Groundwater Encountered

Installation / Instrument Details

Date	Instrument Details	To (m)	Resp. Zone (m)	Diam (mm)

No Monitoring Point/s Installed

If Methodology includes Dynamic Sampling refer to Runs table for info.

Backfill

Depth (m)	Legend Code
0.00 - 5.00	Bentonite

In-Situ Tests

PID	0
Hand Vane*	3
Standard Penetration Tests	5

* One count indicates an average reported result of 3 tests carried out at one depth where available.

Sample Summary

Environmental Samples			
Soil	1	Water	0
Geotechnical Samples			
Bulk	6	Large Bulk	0
Disturbed	7	Disturbed (NR)	0
Piston	0	Piston (NR)	0
Undisturbed	0	Undisturbed (NR)	0
Undisturbed Thin Wall			0
Undisturbed Thin Wall (NR)			0
Core Sample			0

(NR) Indicates sample undertaken but with 0% Recovery

Standard Penetration Test Summary

Test Type	Depth (m)	Casing (m)	Water (m)	Seating Blows	Main Blows	Penetration Total (mm)	N	Reported Result	Hammer Ref
Split Spoon	1.20	-	-	2	10	450	10	N=10 (1,1/2,2,3)	WLS03
Split Spoon	2.00	-	-	5	17	450	17	N=17 (2,3/4,4,5,4)	WLS03
Split Spoon	3.00	-	-	4	11	450	11	N=11 (2,2/3,2,3,3)	WLS03
Split Spoon	4.00	-	-	6	11	450	11	N=11 (3,3/3,2,3,3)	WLS03
Split Spoon	5.00	-	-	7	23	450	23	N=23 (3,4/4,6,7,6)	WLS03

SPT Hammer Ref.	Energy Ratio (%)
WLS03	67

Applicable to Cable Percussion Only

Chiselling

Depth (m)	Duration (mins)

Water Added

Depth (m)	Litres

Applicable to Rotary Only

Drilling Flush

Depth (m)	Flush Type	Flush Colour	Return %

Applicable to Dynamic Sampling Only

Dynamic Sampling Runs

Depth (m)	Diam (mm)	Recovery %	Remarks
1.20 - 2.00	101	100	
2.00 - 3.00	86	100	
3.00 - 4.00	52	100	
4.00 - 5.00	66	100	

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Start Date:	04/11/2024	Checked:	MB
End Date:	04/11/2024	Approved:	MB

Location ID
WS015
FINAL

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 5.00	Dynamic Sampling	Premier 110

Log Type
Dynamic Sampling

Scale: 1:50
Sheet 1 of 1

Project No:	**2372536**
Name:	**Rosefield Solar Farm**
Location:	**Peartree Grain Store, Steeple Claydon**
Client:	**EDF**

Location Details

Easting:	**472153.33**	Northing:	**222523.87**
Elevation:	**126.64mAOD**	Final Depth:	**5.00m**
Logged By:	**RW**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Samples & Testing: Depth (m)	Ref	Test Results
TOPSOIL: Stiff brown slightly gravelly slightly sandy CLAY. Sand is fine to medium. Gravel is angular to subangular fine to medium flint.		(0.40)					0.00 - 0.30	2 B	
		0.40	126.24				0.30	1 ES	HV 0.30m, (p)=102 kPa (r)=61 kPa
Stiff orangish brown sandy CLAY. Sand is fine to medium.							0.40 - 0.80	3 B	
							0.50	5 D	
		(0.80)							
							1.00	6 D	
							1.00 - 1.20	4 B	
Stiff high strength brown slightly gravelly slightly sandy CLAY. Sand is fine to medium. Gravel is subangular fine to medium chalk.		1.20	125.44				1.20 - 1.80	7 B	SPT(S) 1.20m, N=10 (1,1/2,2,3,3)
									HV 1.80m, (p)=181 kPa (r)=104 kPa
							2.00	8 D	SPT(S) 2.00m, N=17 (2,3/4,4,5,4)
							2.00 - 2.50	9 B	
		(2.30)							
From 2.50m to 3.50m, Becoming slightly mottled grey.									HV 2.50m, (p)=209 kPa (r)=131 kPa
							2.70	10 D	
							3.00 - 3.50	11 B	SPT(S) 3.00m, N=11 (2,2/3,2,3,3)
Soft brownish orange very sandy CLAY. Sand is fine to medium.		3.50	123.14						
							3.60	12 D	
		(0.50)							
Orangish brown silty fine to medium SAND.		4.00	122.64				4.00 - 4.50	13 D	SPT(S) 4.00m, N=11 (3,3/3,2,3,3)
		(0.80)							
		4.80	121.84						
Stiff dark grey slightly sandy CLAY. Sand is fine to medium.		(0.20)					4.90	14 D	
EOH at 5.00m - Scheduled Depth		5.00	121.64						SPT(S) 5.00m, N=23 (3,4/4,6,7,6)

Observations / Remarks

Misc.
No Groundwater Encountered
Hole Not Cased
No Monitoring Point/s Installed

Backfill

Depth (m)	Material
0.00 - 5.00	Bentonite

Hammer Ref & Energy Ratio (%)
WLS03 (67%)

Dynamic Sampling Runs

From (m)	To (m)	Diam (mm)	Recovery (%)	Remarks
1.20	2.00	101	100	
2.00	3.00	86	100	
3.00	4.00	52	100	
4.00	5.00	66	100	

Installations

Instrument Details	Resp. Zone	Depth (m)	Diameter

Groundwater Strikes

Strike (m)	Casing (m)	Sealed (m)	Rises To (m)	Time (min)	Remarks

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End Date:	04/11/2024	Approved:	MB

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 5.00	Dynamic Probing	Premier 110

Location ID

WS015/DP

FINAL

Log Type

Header Sheet

Scale: 1:50

Sheet 1 of 1

Project No:	**2372536**
Name:	**Rosefield Solar Farm**
Location:	**Peartree Grain Store, Steeple Claydon**
Client:	**EDF**

Location Details

Easting:	**472152.89**	Northing:	**222523.97**
Elevation:	**126.68mAOD**	Final Depth:	**5.00m**
Logger:	**RW**	Grid System:	**OSGB**
Orientation:		Inclination:	

Hole Diameter

Depth (m)	Diam (mm)

Casing Diameter

Depth (m)	Diam (mm)

Hole Not Cased

Groundwater Strikes

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

No Groundwater Encountered

Installation / Instrument Details

Date	Instrument Details	To (m)	Resp. Zone (m)	Diam (mm)

No Monitoring Point/s Installed

If Methodology includes Dynamic Sampling refer to Runs table for info.

Backfill

Depth (m)	Legend Code
0.00 - 5.00	Bentonite

In-Situ Tests

PID	0
Hand Vane*	0
Standard Penetration Tests	0

* One count indicates an average reported result of 3 tests carried out at one depth where available.

Sample Summary

Environmental Samples			
Soil	0	Water	0
Geotechnical Samples			
Bulk	0	Large Bulk	0
Disturbed	0	Disturbed (NR)	0
Piston	0	Piston (NR)	0
Undisturbed	0	Undisturbed (NR)	0
Undisturbed Thin Wall			0
Undisturbed Thin Wall (NR)			0
Core Sample			0

(NR) Indicates sample undertaken but with 0% Recovery

No Samples Taken

Standard Penetration Test Summary

Test Type	Depth (m)	Casing (m)	Water (m)	Seating Blows	Main Blows	Penetration Total (mm)	N	Reported Result	Hammer Ref

SPT Hammer Ref.	Energy Ratio (%)

No Standard Penetration Tests Undertaken

Applicable to Cable Percussion Only

Chiselling

Depth (m)	Duration (mins)

Water Added

Depth (m)	Litres

Applicable to Rotary Only

Drilling Flush

Depth (m)	Flush Type	Flush Colour	Return %

Applicable to Dynamic Sampling Only

Dynamic Sampling Runs

Depth (m)	Diam (mm)	Recovery %	Remarks

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Start Date:	04/11/2024	Checked:	MB
End Date:	04/11/2024	Approved:	MB

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 5.00	Dynamic Probing	Premier 110

Location ID

WS015/DP

FINAL

Log Type

Dynamic Probe

Scale: 1:50

Sheet 1 of 1

Project No: **2372536**

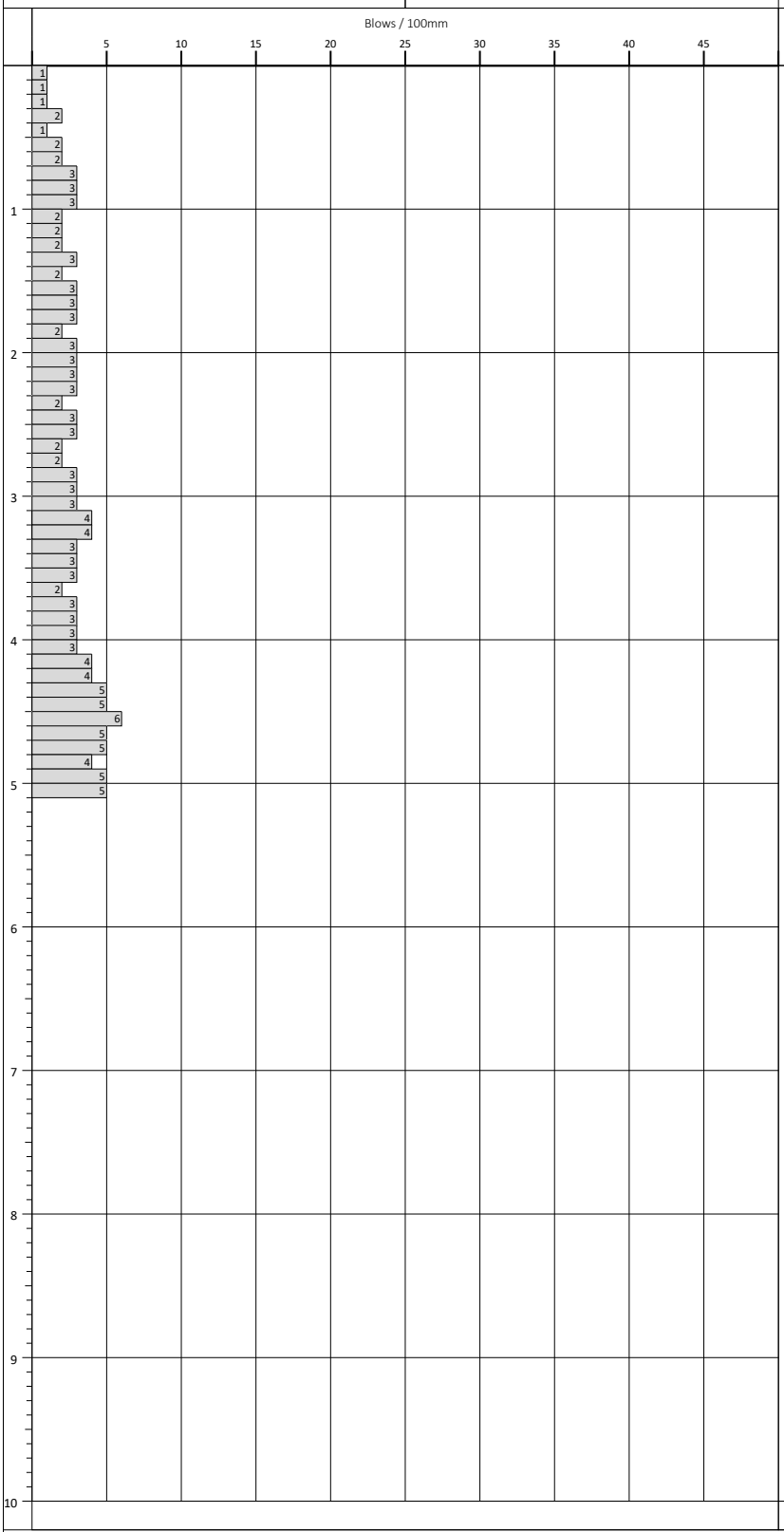
Name: **Rosefield Solar Farm**

Location: **Peartree Grain Store, Steeple Claydon**

Client: **EDF**

Location Details

Easting:	**472152.89**	Northing:	**222523.97**
Elevation:	**126.68mAOD**	Final Depth:	**5.00m**
Logged By:	**RW**	Grid System:	**OSGB**
Orientation:		Inclination:	



Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Samples	Torque (Nm)

Observations / Remarks

Equipment Information

Dynamic Probe Type:
DPSH-B

Fall Height: **750mm**
Hammer Weight: **64.0kg**
Cone Base Diam:
Rod Diam:

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End Date:	04/11/2024	Approved:	MB

Location ID
WS016
FINAL

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 3.80	Dynamic Sampling	Premier 110

Project No:	**2372536**
Name:	**Rosefield Solar Farm**
Location:	**Peartree Grain Store, Steeple Claydon**
Client:	**EDF**

Location Details

Easting:	**427426.70**	Northing:	**222730.71**
Elevation:	**130.48mAOD**	Final Depth:	**3.80m**
Logger:	**RW**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Log Type
Header Sheet

Scale: 1:50
Sheet 1 of 1

Hole Diameter

Depth (m)	Diam (mm)

Casing Diameter

Depth (m)	Diam (mm)

Hole Not Cased

Groundwater Strikes

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

No Groundwater Encountered

Installation / Instrument Details

Date	Instrument Details	To (m)	Resp. Zone (m)	Diam (mm)

No Monitoring Point/s Installed

If Methodology includes Dynamic Sampling refer to Runs table for info.

Backfill

Depth (m)	Legend Code
0.00 - 3.80	Bentonite

In-Situ Tests

PID	**0**
Hand Vane*	**3**
Standard Penetration Tests	**4**

* One count indicates an average reported result of 3 tests carried out at one depth where available.

Sample Summary

Environmental Samples			
Soil	**1**	Water	**0**
Geotechnical Samples			
Bulk	**6**	Large Bulk	**0**
Disturbed	**7**	Disturbed (NR)	**0**
Piston	**0**	Piston (NR)	**0**
Undisturbed	**0**	Undisturbed (NR)	**0**
Undisturbed Thin Wall			**0**
Undisturbed Thin Wall (NR)			**0**
Core Sample			**0**

(NR) Indicates sample undertaken but with 0% Recovery

Standard Penetration Test Summary

Test Type	Depth (m)	Casing (m)	Water (m)	Seating Blows	Main Blows	Penetration Total (mm)	N	Reported Result	Hammer Ref
Split Spoon	1.20	-	-	5	18	450	18	N=18 (2,3/4,4,4,6)	WLS03
Split Spoon	2.00	-	-	8	16	450	16	N=16 (4,4/3,4,4,5)	WLS03
Split Spoon	3.00	-	-	9	35	450	35	N=35 (4,5/6,9,8,12)	WLS03
Split Spoon	3.80	-	-	17	50	450	50	N=50 (8,9/12,11,16,11)	WLS03

SPT Hammer Ref.	Energy Ratio (%)
WLS03	67

Applicable to Cable Percussion Only

Chiselling

Depth (m)	Duration (mins)

Water Added

Depth (m)	Litres

Applicable to Rotary Only

Drilling Flush

Depth (m)	Flush Type	Flush Colour	Return %

Applicable to Dynamic Sampling Only

Dynamic Sampling Runs

Depth (m)	Diam (mm)	Recovery %	Remarks
1.20 - 2.00	101	100	
2.00 - 3.00	86	100	
3.00 - 4.00	76	80	Refused

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Start Date:	04/11/2024	Checked:	MB
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Location ID

WS016

FINAL

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 3.80	Dynamic Sampling	Premier 110

Log Type

Dynamic Sampling

Scale: 1:50

Sheet 1 of 1

Project No:	**2372536**
Name:	**Rosefield Solar Farm**
Location:	**Peartree Grain Store, Steeple Claydon**
Client:	**EDF**

Location Details

Easting:	**427426.70**	Northing:	**222730.71**
Elevation:	**130.48mAOD**	Final Depth:	**3.80m**
Logged By:	**RW**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Samples & Testing: Depth (m)	Ref	Test Results
TOPSOIL: Stiff brown sandy CLAY. Sand is fine to medium.		(0.15)					0.10	1 ES	
Stiff orangish brown sandy CLAY. Sand is fine to medium.		0.15	130.33				0.20 - 0.50	2 B	
		(0.35)							HV 0.30m, (p)=163 kPa (r)=81 kPa
							0.40	7 D	
Stiff grey sandy CLAY. Sand is fine to medium.		0.50	129.98				0.50 - 1.00	4 B	
							0.60	3 D	
		(0.50)							
							0.80	8 D	
Stiff grey gravelly sandy CLAY. Sand is fine to medium. Gravel is subangular fine to medium flint.		1.00	129.48				1.00 - 1.20	6 B	
							1.10	5 D	
							1.20 - 1.50	9 B	SPT(S) 1.20m, N=18 (2,3/4,4,4,6)
		(0.90)							
							1.80	10 D	HV 1.80m, (p)=241 kPa (r)=47 kPa
Stiff grey slightly gravelly slightly sandy CLAY. Sand is fine to medium. Gravel is subangular chalk.		1.90	128.58				2.00 - 2.50	11 B	SPT(S) 2.00m, N=16 (4,4/3,4,4,5)
							2.80	12 D	HV 2.80m, (p)=209 kPa (r)=37 kPa
		(1.90)					3.00 - 3.50	13 B	SPT(S) 3.00m, N=35 (4,5/6,9,8,12)
							3.70	14 D	
EOH at 3.80m - Refusal		3.80	126.68						SPT(S) 3.80m, N=50 (8,9/12,11,16,11)

Observations / Remarks

Misc.

No Groundwater Encountered
Hole Not Cased
No Monitoring Point/s Installed

Backfill

Depth (m)	Material
0.00 - 3.80	Bentonite

Hammer Ref & Energy Ratio (%)

WLS03 (67%)

Dynamic Sampling Runs

From (m)	To (m)	Diam (mm)	Recovery (%)	Remarks
1.20	2.00	101	100	
2.00	3.00	86	100	
3.00	4.00	76	80	Refused

Installations

Instrument Details	Resp. Zone	Depth (m)	Diameter

Groundwater Strikes

Strike (m)	Casing (m)	Sealed (m)	Rises To (m)	Time (min)	Remarks

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Start Date:	04/11/2024	Checked:	MB
End Date:	04/11/2024	Approved:	MB

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 5.00	Dynamic Probing	Premier 110

Location ID

WS016/DP

FINAL

Project No:	**2372536**
Name:	**Rosefield Solar Farm**
Location:	**Peartree Grain Store, Steeple Claydon**
Client:	**EDF**

Location Details

Easting:	**472427.31**	Northing:	**222731.29**
Elevation:	**130.46mAOD**	Final Depth:	**5.00m**
Logger:	**RW**	Grid System:	**OSGB**
Orientation:		Inclination:	

Log Type

Header Sheet

Scale: 1:50

Sheet 1 of 1

Hole Diameter

Depth (m)	Diam (mm)

Casing Diameter

Depth (m)	Diam (mm)

Hole Not Cased

Groundwater Strikes

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

No Groundwater Encountered

Installation / Instrument Details

Date	Instrument Details	To (m)	Resp. Zone (m)	Diam (mm)

No Monitoring Point/s Installed

If Methodology includes Dynamic Sampling refer to Runs table for info.

Backfill

Depth (m)	Legend Code
0.00 - 5.00	Bentonite

In-Situ Tests

PID	0
Hand Vane*	0
Standard Penetration Tests	0

* One count indicates an average reported result of 3 tests carried out at one depth where available.

Sample Summary

Environmental Samples			
Soil	0	Water	0
Geotechnical Samples			
Bulk	0	Large Bulk	0
Disturbed	0	Disturbed (NR)	0
Piston	0	Piston (NR)	0
Undisturbed	0	Undisturbed (NR)	0
Undisturbed Thin Wall			0
Undisturbed Thin Wall (NR)			0
Core Sample			0

(NR) Indicates sample undertaken but with 0% Recovery

No Samples Taken

Standard Penetration Test Summary

Test Type	Depth (m)	Casing (m)	Water (m)	Seating Blows	Main Blows	Penetration Total (mm)	N	Reported Result	Hammer Ref

SPT Hammer Ref.	Energy Ratio (%)

No Standard Penetration Tests Undertaken

Applicable to Cable Percussion Only

Chiselling

Depth (m)	Duration (mins)

Water Added

Depth (m)	Litres

Applicable to Rotary Only

Drilling Flush

Depth (m)	Flush Type	Flush Colour	Return %

Applicable to Dynamic Sampling Only

Dynamic Sampling Runs

Depth (m)	Diam (mm)	Recovery %	Remarks

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Start Date:	04/11/2024	Checked:	MB
End Date:	04/11/2024	Approved:	MB

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 5.00	Dynamic Probing	Premier 110

Location ID

WS016/DP

FINAL

Log Type

Dynamic Probe

Scale: 1:50

Sheet 1 of 1

Project No: **2372536**

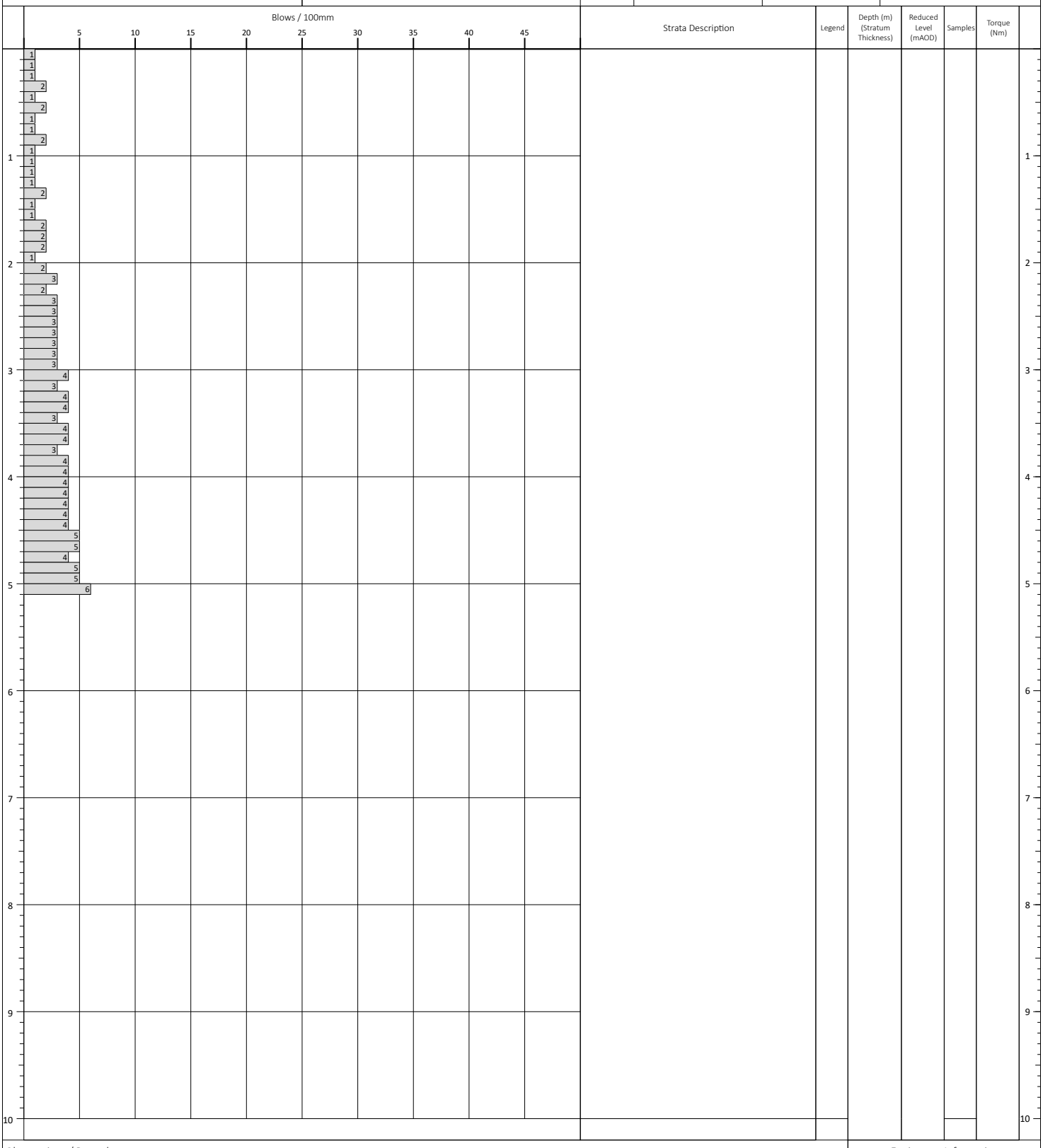
Name: **Rosefield Solar Farm**

Location: **Peartree Grain Store, Steeple Claydon**

Client: **EDF**

Location Details

Easting:	**472427.31**	Northing:	**222731.29**
Elevation:	**130.46mAOD**	Final Depth:	**5.00m**
Logged By:	**RW**	Grid System:	**OSGB**
Orientation:		Inclination:	



Observations / Remarks

Equipment Information

Dynamic Probe Type:
DPSH-B

Fall Height: **750mm**

Hammer Weight: **64.0kg**

Cone Base Diam:

Rod Diam:

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Start Date:	05/11/2024	Checked:	MB
End Date:	05/11/2024	Approved:	MB

Location ID

WS017

FINAL

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 5.45	Dynamic Sampling	Premier 110

Project No:	**2372536**
Name:	**Rosefield Solar Farm**
Location:	**Peartree Grain Store, Steeple Claydon**
Client:	**EDF**

Location Details

Easting:	**472685.04**	Northing:	**222634.25**
Elevation:	**131.83mAOD**	Final Depth:	**5.45m**
Logger:	**RW**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Log Type

Header Sheet

Scale: 1:50

Sheet 1 of 1

Hole Diameter

Depth (m)	Diam (mm)

Casing Diameter

Depth (m)	Diam (mm)

Hole Not Cased

Groundwater Strikes

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

No Groundwater Encountered

Installation / Instrument Details

Date	Instrument Details	To (m)	Resp. Zone (m)	Diam (mm)

No Monitoring Point/s Installed

If Methodology includes Dynamic Sampling refer to Runs table for info.

Backfill

Depth (m)	Legend Code
0.00 - 5.45	Bentonite

In-Situ Tests

PID	**0**
Hand Vane*	**0**
Standard Penetration Tests	**5**

* One count indicates an average reported result of 3 tests carried out at one depth where available.

Sample Summary

Environmental Samples			
Soil	**1**	Water	**0**
Geotechnical Samples			
Bulk	**6**	Large Bulk	**0**
Disturbed	**7**	Disturbed (NR)	**0**
Piston	**0**	Piston (NR)	**0**
Undisturbed	**0**	Undisturbed (NR)	**0**
Undisturbed Thin Wall			**0**
Undisturbed Thin Wall (NR)			**0**
Core Sample			**0**

(NR) Indicates sample undertaken but with 0% Recovery

Standard Penetration Test Summary

Test Type	Depth (m)	Casing (m)	Water (m)	Seating Blows	Main Blows	Penetration Total (mm)	N	Reported Result	Hammer Ref
Split Spoon	1.20	-	-	4	10	450	10	N=10 (2,2/2,2,3,3)	WLS03
Split Spoon	2.00	-	-	2	16	450	16	N=16 (1,1/3,3,4,6)	WLS03
Split Spoon	3.00	-	-	5	23	450	23	N=23 (2,3/4,5,6,8)	WLS03
Split Spoon	4.00	-	-	9	36	450	36	N=36 (4,5/7,8,9,12)	WLS03
Split Spoon	5.00	-	-	9	30	450	30	N=30 (4,5/5,6,10,9)	WLS03

SPT Hammer Ref.	Energy Ratio (%)
WLS03	67

Applicable to Cable Percussion Only

Chiselling

Depth (m)	Duration (mins)

Water Added

Depth (m)	Litres

Applicable to Rotary Only

Drilling Flush

Depth (m)	Flush Type	Flush Colour	Return %

Applicable to Dynamic Sampling Only

Dynamic Sampling Runs

Depth (m)	Diam (mm)	Recovery %	Remarks
1.20 - 2.00	101	100	
2.00 - 3.00	86	100	
3.00 - 4.00	76	100	
4.00 - 5.00	66	100	

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Start Date:	05/11/2024	Checked:	MB
End Date:	05/11/2024	Approved:	MB

Location ID
WS017
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Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 5.45	Dynamic Sampling	Premier 110

Log Type
Dynamic Sampling

Scale: 1:50
Sheet 1 of 1

Project No:	**2372536**
Name:	**Rosefield Solar Farm**
Location:	**Peartree Grain Store, Steeple Claydon**
Client:	**EDF**

Location Details

Easting:	**472685.04**	Northing:	**222634.25**
Elevation:	**131.83mAOD**	Final Depth:	**5.45m**
Logged By:	**RW**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Samples & Testing: Depth (m)	Ref	Test Results
TOPSOIL: Stiff brown sandy slightly gravelly CLAY. Sand is fine to medium. Gravel is subangular fine to medium chalk and flint.		(0.30)					0.00 - 0.30	2 B	
		0.30	131.53				0.20	1 ES	
Brown slightly gravelly very clayey fine to medium SAND. Gravel is subangular fine to medium chalk and flint.							0.40 - 0.70	3 B	
		(0.50)					0.50	5 D	
		0.80	131.03						
Yellowish greyish brown gravelly clayey fine to medium SAND. Gravel is subangular to rounded fine to medium flint and chalk.							0.90 - 1.20	4 B	
		(0.50)					1.00	6 D	
									SPT(S) 1.20m, N=10 (2,2/2,2,3,3)
Stiff orange and grey slightly gravelly sandy CLAY. Sand is fine to medium. Gravel is subangular fine to medium chalk and flint.		1.30	130.53				1.30 - 1.80	7 B	
							1.90	8 D	
							2.00 - 2.50	9 B	SPT(S) 2.00m, N=16 (1,1/3,3,4,6)
		(2.90)					2.80	10 D	
							3.00 - 3.50	11 B	SPT(S) 3.00m, N=23 (2,3/4,5,6,8)
							3.80	12 D	
									SPT(S) 4.00m, N=36 (4,5/7,8,9,12)
Stiff grey CLAY.		4.20	127.63				4.50	13 D	
		(1.25)					4.80	14 D	
									SPT(S) 5.00m, N=30 (4,5/5,6,10,9)
EOH at 5.45m - Scheduled Depth		5.45	126.38						

Observations / Remarks

Misc.
No Groundwater Encountered
Hole Not Cased
No Monitoring Point/s Installed

Backfill

Depth (m)	Material
0.00 - 5.45	Bentonite

Hammer Ref & Energy Ratio (%)
WLS03 (67%)

Dynamic Sampling Runs

From (m)	To (m)	Diam (mm)	Recovery (%)	Remarks
1.20	2.00	101	100	
2.00	3.00	86	100	
3.00	4.00	76	100	
4.00	5.00	66	100	

Installations

Instrument Details	Resp. Zone	Depth (m)	Diameter

Groundwater Strikes

Strike (m)	Casing (m)	Sealed (m)	Rises To (m)	Time (min)	Remarks

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Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 5.00	Dynamic Probing	Premier 110

Location ID

WS017/DP

FINAL

Log Type

Header Sheet

Scale: 1:50

Sheet 1 of 1

Project No:	**2372536**
Name:	**Rosefield Solar Farm**
Location:	**Peartree Grain Store, Steeple Claydon**
Client:	**EDF**

Location Details

Easting:	**472684.88**	Northing:	**222635.09**
Elevation:	**131.83mAOD**	Final Depth:	**5.00m**
Logger:	**RW**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Hole Diameter

Depth (m)	Diam (mm)

If Methodology includes Dynamic Sampling refer to Runs table for info.

Casing Diameter

Depth (m)	Diam (mm)

Hole Not Cased

Groundwater Strikes

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

No Groundwater Encountered

Installation / Instrument Details

Date	Instrument Details	To (m)	Resp. Zone (m)	Diam (mm)

No Monitoring Point/s Installed

Backfill

Depth (m)	Legend Code
0.00 - 5.00	Bentonite

In-Situ Tests

PID	0
Hand Vane*	0
Standard Penetration Tests	0

* One count indicates an average reported result of 3 tests carried out at one depth where available.

Sample Summary

Environmental Samples			
Soil	0	Water	0
Geotechnical Samples			
Bulk	0	Large Bulk	0
Disturbed	0	Disturbed (NR)	0
Piston	0	Piston (NR)	0
Undisturbed	0	Undisturbed (NR)	0
Undisturbed Thin Wall			0
Undisturbed Thin Wall (NR)			0
Core Sample			0

(NR) Indicates sample undertaken but with 0% Recovery

No Samples Taken

Standard Penetration Test Summary

Test Type	Depth (m)	Casing (m)	Water (m)	Seating Blows	Main Blows	Penetration Total (mm)	N	Reported Result	Hammer Ref

SPT Hammer Ref.	Energy Ratio (%)

No Standard Penetration Tests Undertaken

Applicable to Cable Percussion Only

Chiselling

Depth (m)	Duration (mins)

Water Added

Depth (m)	Litres

Applicable to Rotary Only

Drilling Flush

Depth (m)	Flush Type	Flush Colour	Return %

Applicable to Dynamic Sampling Only

Dynamic Sampling Runs

Depth (m)	Diam (mm)	Recovery %	Remarks

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Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 5.00	Dynamic Probing	Premier 110

Location ID

WS017/DP

FINAL

Log Type

Dynamic Probe

Scale: 1:50

Sheet 1 of 1

Project No: **2372536**

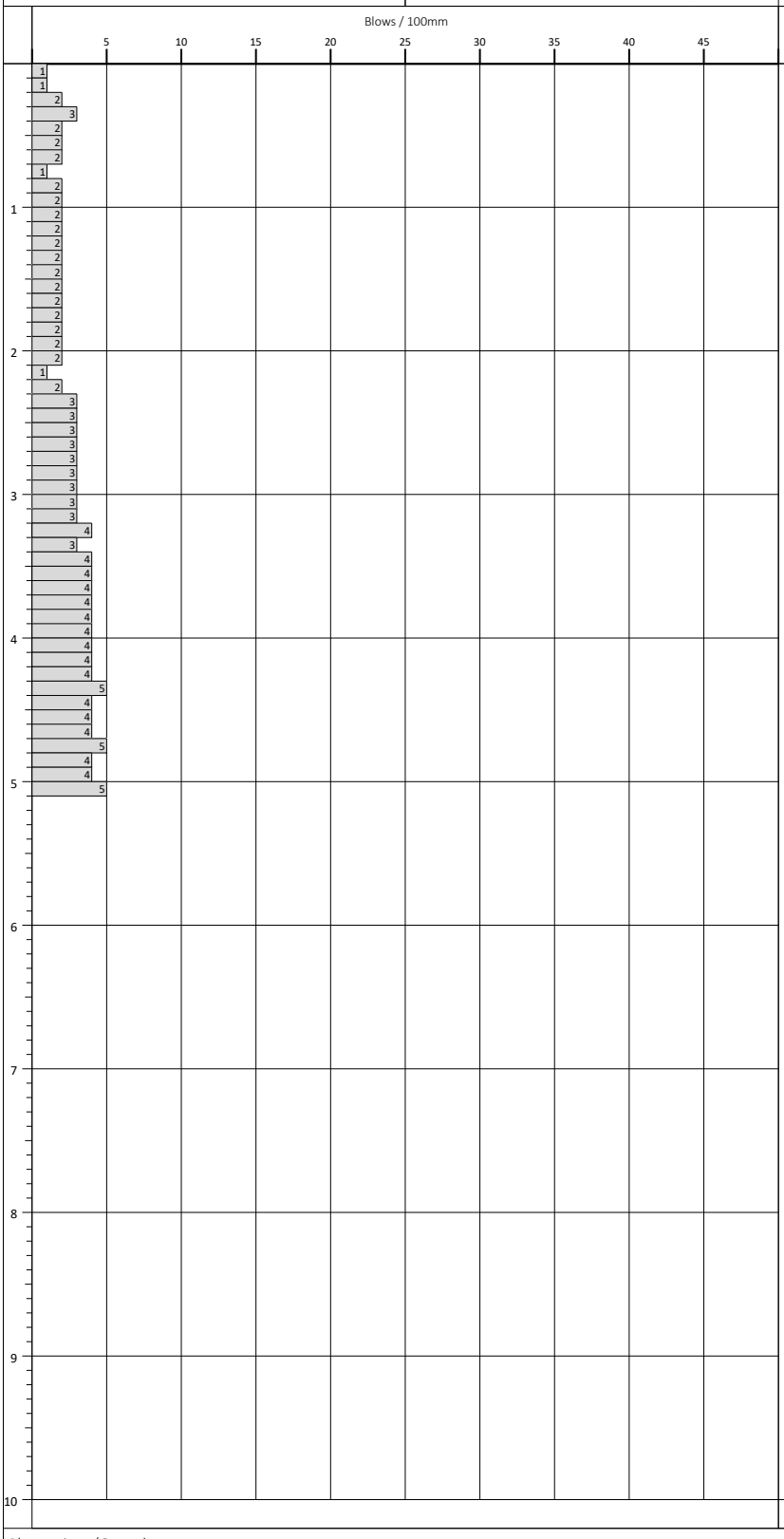
Name: **Rosefield Solar Farm**

Location: **Peartree Grain Store, Steeple Claydon**

Client: **EDF**

Location Details

Easting:	**472684.88**	Northing:	**222635.09**
Elevation:	**131.83mAOD**	Final Depth:	**5.00m**
Logged By:	**RW**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**



Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Samples	Torque (Nm)

Observations / Remarks

Equipment Information

Dynamic Probe Type:
DPSH-B

Fall Height: **750mm**

Hammer Weight: **64.0kg**

Cone Base Diam:

Rod Diam:

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Location ID

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Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 4.00	Dynamic Sampling	Premier 110

Project No:	**2372536**
Name:	**Rosefield Solar Farm**
Location:	**Peartree Grain Store, Steeple Claydon**
Client:	**EDF**

Location Details

Easting:	**472769.34**	Northing:	**222434.16**
Elevation:	**134.44mAOD**	Final Depth:	**4.00m**
Logger:	**RW**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Log Type

Header Sheet

Scale: 1:50

Sheet 1 of 1

Hole Diameter

Depth (m)	Diam (mm)

Casing Diameter

Depth (m)	Diam (mm)

Hole Not Cased

Groundwater Strikes

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

No Groundwater Encountered

Installation / Instrument Details

Date	Instrument Details	To (m)	Resp. Zone (m)	Diam (mm)

No Monitoring Point/s Installed

If Methodology includes Dynamic Sampling refer to Runs table for info.

Backfill

Depth (m)	Legend Code
0.00 - 4.00	Bentonite

In-Situ Tests

PID	**0**
Hand Vane*	**0**
Standard Penetration Tests	**4**

* One count indicates an average reported result of 3 tests carried out at one depth where available.

Sample Summary

Environmental Samples			
Soil	**1**	Water	**0**
Geotechnical Samples			
Bulk	**5**	Large Bulk	**0**
Disturbed	**5**	Disturbed (NR)	**0**
Piston	**0**	Piston (NR)	**0**
Undisturbed	**0**	Undisturbed (NR)	**0**
Undisturbed Thin Wall			**0**
Undisturbed Thin Wall (NR)			**0**
Core Sample			**0**

(NR) Indicates sample undertaken but with 0% Recovery

Standard Penetration Test Summary

Test Type	Depth (m)	Casing (m)	Water (m)	Seating Blows	Main Blows	Penetration Total (mm)	N	Reported Result	Hammer Ref
Split Spoon	1.20	-	-	2	13	450	13	N=13 (1,1/2,4,3,4)	WLS03
Split Spoon	2.00	-	-	5	22	450	22	N=22 (2,3/4,5,7,6)	WLS03
Split Spoon	3.00	-	-	8	21	450	21	N=21 (4,4/4,6,6,5)	WLS03
Split Spoon	4.00	-	-	14	50	450	50	N=50 (6,8/12,13,16,9)	WLS03

SPT Hammer Ref.	Energy Ratio (%)
WLS03	67

Applicable to Cable Percussion Only

Chiselling

Depth (m)	Duration (mins)

Water Added

Depth (m)	Litres

Applicable to Rotary Only

Drilling Flush

Depth (m)	Flush Type	Flush Colour	Return %

Applicable to Dynamic Sampling Only

Dynamic Sampling Runs

Depth (m)	Diam (mm)	Recovery %	Remarks
1.20 - 2.00	101	100	
2.00 - 3.00	86	100	
3.00 - 4.00	76	100	

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Location ID
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Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 4.00	Dynamic Sampling	Premier 110

Log Type
Dynamic Sampling

Scale: 1:50
Sheet 1 of 1

Project No:	**2372536**
Name:	**Rosefield Solar Farm**
Location:	**Peartree Grain Store, Steeple Claydon**
Client:	**EDF**

Location Details

Easting:	**472769.34**	Northing:	**222434.16**
Elevation:	**134.44mAOD**	Final Depth:	**4.00m**
Logged By:	**RW**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Samples & Testing: Depth (m)	Ref	Test Results
TOPSOIL: Firm brown gravelly sandy CLAY. Sand is fine to medium. Gravel is angular to subrounded chalk and flint.		(0.30)					0.00 - 0.30	2 B	
		0.30	134.14				0.20	1 ES	
Stiff yellowish greyish brown sandy slightly gravelly CLAY. Sand is fine to medium. Gravel is subangular to subrounded chalk and flint.							0.40 - 0.80	3 B	
							0.50	4 D	
		(0.90)							
							1.00	5 D	
Stiff dark grey gravelly slightly sandy CLAY. Sand is fine to medium. Gravel is subangular fine to medium chalk and flint.		1.20	133.24				1.20 - 1.80	6 B	SPT(S) 1.20m, N=13 (1,1/2,4,3,4)
							1.90	7 D	
							2.00 - 2.50	8 B	SPT(S) 2.00m, N=22 (2,3/4,5,7,6)
		(2.80)							
							2.80	9 D	
							3.00 - 3.50	10 B	SPT(S) 3.00m, N=21 (4,4/4,6,6,5)
							3.80	11 D	
EOH at 4.00m - Refusal		4.00	130.44						SPT(S) 4.00m, N=50 (6,8/12,13,16,9)

Observations / Remarks

Misc.
No Groundwater Encountered
Hole Not Cased
No Monitoring Point/s Installed

Backfill

Depth (m)	Material
0.00 - 4.00	Bentonite

Hammer Ref & Energy Ratio (%)
WLS03 (67%)

Dynamic Sampling Runs

From (m)	To (m)	Diam (mm)	Recovery (%)	Remarks
1.20	2.00	101	100	
2.00	3.00	86	100	
3.00	4.00	76	100	

Installations

Instrument Details	Resp. Zone	Depth (m)	Diameter

Groundwater Strikes

Strike (m)	Casing (m)	Sealed (m)	Rises To (m)	Time (min)	Remarks

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Start Date:	05/11/2024	Checked:	MB
End Date:	05/11/2024	Approved:	MB

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 5.00	Dynamic Probing	Premier 110

Location ID

WS018/DP

FINAL

Log Type

Header Sheet

Scale: 1:50

Sheet 1 of 1

Project No:	**2372536**
Name:	**Rosefield Solar Farm**
Location:	**Peartree Grain Store, Steeple Claydon**
Client:	**EDF**

Location Details

Easting:	**472768.47**	Northing:	**222434.54**
Elevation:	**134.50mAOD**	Final Depth:	**5.00m**
Logger:	**RW**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Hole Diameter

Depth (m)	Diam (mm)

If Methodology includes Dynamic Sampling refer to Runs table for info.

Casing Diameter

Depth (m)	Diam (mm)

Hole Not Cased

Groundwater Strikes

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

No Groundwater Encountered

Installation / Instrument Details

Date	Instrument Details	To (m)	Resp. Zone (m)	Diam (mm)

No Monitoring Point/s Installed

Backfill

Depth (m)	Legend Code
0.00 - 5.00	Bentonite

In-Situ Tests

PID	0
Hand Vane*	0
Standard Penetration Tests	0

* One count indicates an average reported result of 3 tests carried out at one depth where available.

Sample Summary

Environmental Samples			
Soil	0	Water	0
Geotechnical Samples			
Bulk	0	Large Bulk	0
Disturbed	0	Disturbed (NR)	0
Piston	0	Piston (NR)	0
Undisturbed	0	Undisturbed (NR)	0
Undisturbed Thin Wall			0
Undisturbed Thin Wall (NR)			0
Core Sample			0

(NR) Indicates sample undertaken but with 0% Recovery

No Samples Taken

Standard Penetration Test Summary

Test Type	Depth (m)	Casing (m)	Water (m)	Seating Blows	Main Blows	Penetration Total (mm)	N	Reported Result	Hammer Ref

SPT Hammer Ref.	Energy Ratio (%)

No Standard Penetration Tests Undertaken

Applicable to Cable Percussion Only

Chiselling

Depth (m)	Duration (mins)

Water Added

Depth (m)	Litres

Applicable to Rotary Only

Drilling Flush

Depth (m)	Flush Type	Flush Colour	Return %

Applicable to Dynamic Sampling Only

Dynamic Sampling Runs

Depth (m)	Diam (mm)	Recovery %	Remarks

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Start Date:	05/11/2024	Checked:	MB
End Date:	05/11/2024	Approved:	MB

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 5.00	Dynamic Probing	Premier 110

Location ID

WS018/DP

FINAL

Log Type

Dynamic Probe

Scale: 1:50

Sheet 1 of 1

Project No: **2372536**

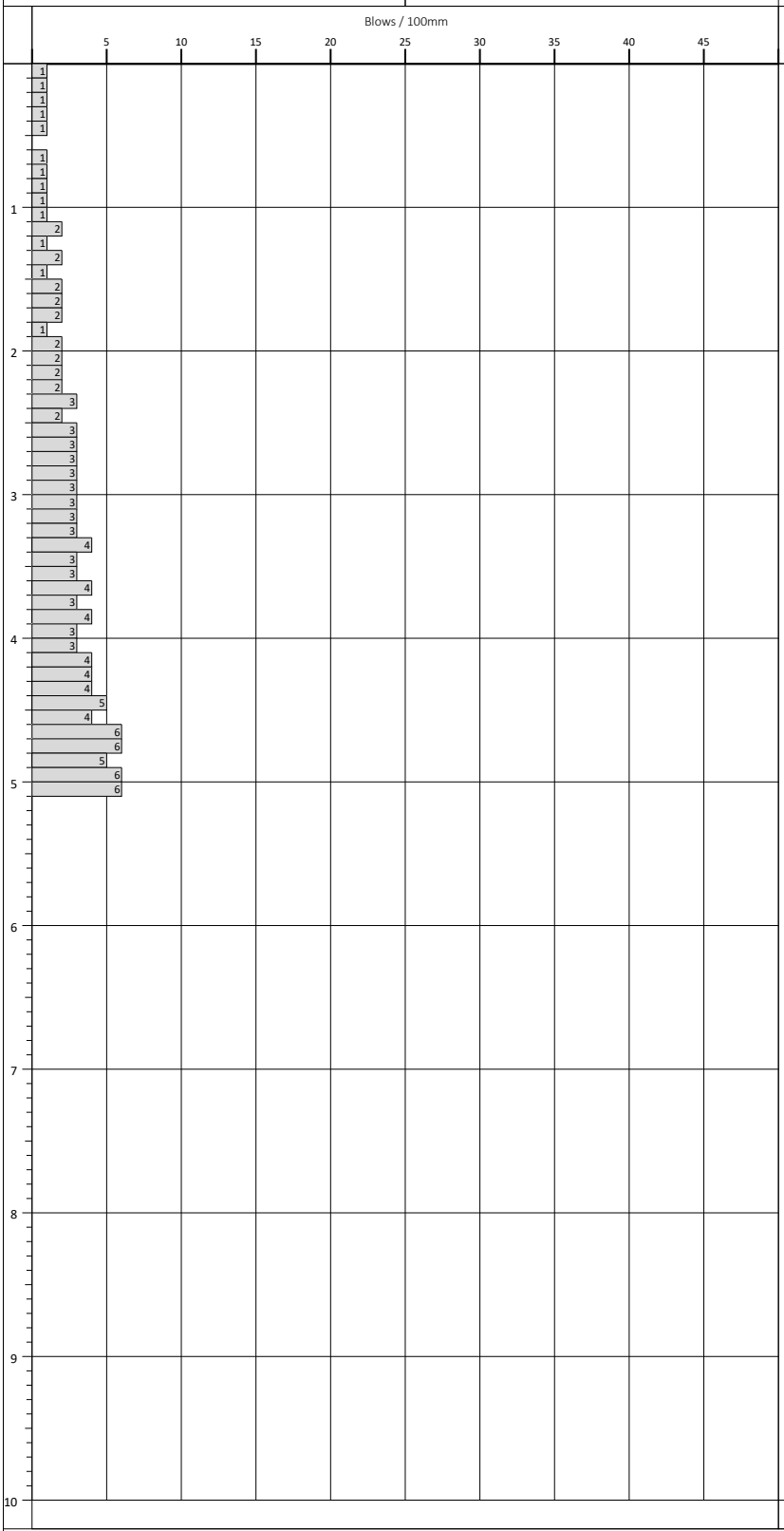
Name: **Rosefield Solar Farm**

Location: **Peartree Grain Store, Steeple Claydon**

Client: **EDF**

Location Details

Easting:	**472768.47**	Northing:	**222434.54**
Elevation:	**134.50mAOD**	Final Depth:	**5.00m**
Logged By:	**RW**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**



Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Samples	Torque (Nm)

Observations / Remarks

Equipment Information

Dynamic Probe Type:
DPSH-B

Fall Height: **750mm**

Hammer Weight: **64.0kg**

Cone Base Diam:

Rod Diam:

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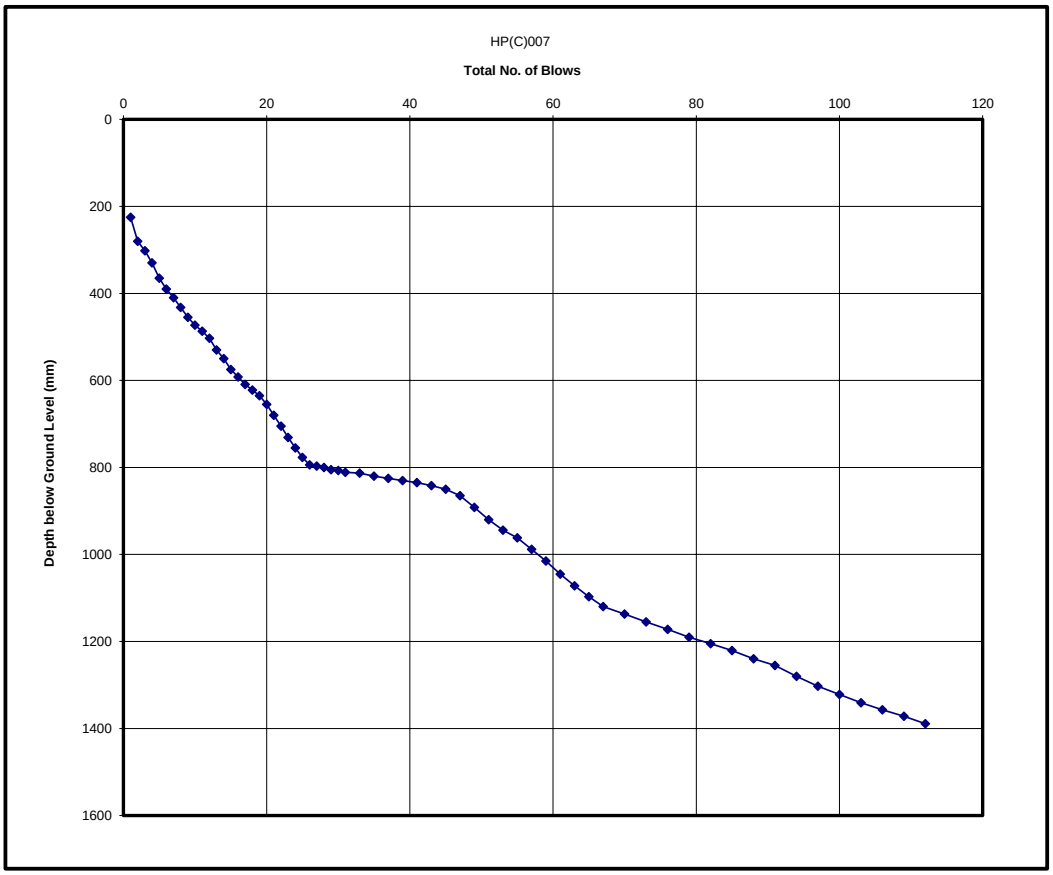
DCP Test Results Sheet / CBR Calculation

Client	EDF	
Site Name	Rosefield Solar Farm	
Job Number	2372536	
Specification	Van Heerden	
Test Number	HP(C)007	
Test Depth (mm)		0
Zero Reading (mm)		225
Date Of Test		04/11/2012
Easting	**Northing**	**Elevation**

No. Blows	Total Blows	Penetration	No. Blows	Total Blows	Penetration	No. Blows	Total Blows	Penetration
1	1	0	1	22	25	2	55	18
1	2	55	1	23	26	2	57	26
1	3	22	1	24	24	2	59	27
1	4	28	1	25	22	2	61	30
1	5	35	1	26	17	2	63	27
1	6	25	1	27	3	2	65	25
1	7	20	1	28	3	2	67	23
1	8	22	1	29	5	3	70	17
1	9	23	1	30	2	3	73	18
1	10	18	1	31	4	3	76	17
1	11	14	2	33	2	3	79	18
1	12	16	2	35	7	3	82	15
1	13	27	2	37	5	3	85	16
1	14	20	2	39	5	3	88	19
1	15	25	2	41	5	3	91	15
1	16	17	2	43	7	3	94	25
1	17	17	2	45	8	3	97	23
1	18	13	2	47	15	3	100	19
1	19	13	2	49	27	3	103	19
1	20	20	2	51	28	3	106	16
1	21	25	2	53	24	3	109	15
						3	112	17



Depth Range		Average penetration / blow. (mm)	Average CBR value (%)	Notes
225	280	27.50	6.2	
302	503	22.30	8.1	
530	635	18.86	10.0	
655	777	23.67	7.5	
794	850	4.12	70.1	
865	1120	12.27	17.3	
1137	1389	5.98	43.5	

CBR values derived from DCP based on conversion derived by Kleyn and Van Heerden by using the following equation :
Log10 (CBR) = 2.632 - 1.28 (Log10 (mm/blow))

Recorded by : AW
Checked by : MB
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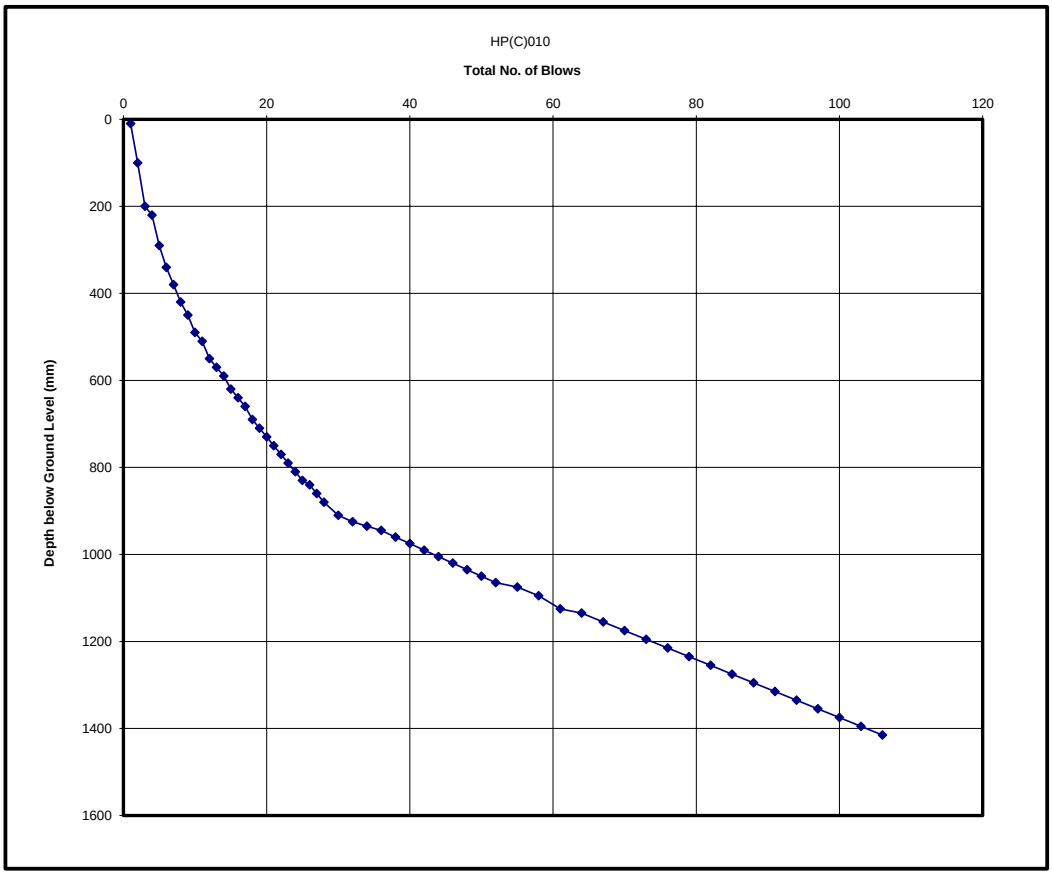
DCP Test Results Sheet / CBR Calculation

Client	EDF	
Site Name	Rosefield Solar Farm	
Job Number	2372536	
Specification	Van Heerden	
Test Number	HP(C)010	
Test Depth (mm)		0
Zero Reading (mm)		10
Date Of Test		04/11/2012
Easting	**Northing**	**Elevation**

No. Blows	Total Blows	Penetration	No. Blows	Total Blows	Penetration
1	1	0	2	30	30
1	2	90	2	32	15
1	3	100	2	34	10
1	4	20	2	36	10
1	5	70	2	38	15
1	6	50	2	40	15
1	7	40	2	42	15
1	8	40	2	44	15
1	9	30	2	46	15
1	10	40	2	48	15
1	11	20	2	50	15
1	12	40	2	52	15
1	13	20	3	55	10
1	14	20	3	58	20
1	15	30	3	61	30
1	16	20	3	64	10
1	17	20	3	67	20
1	18	30	3	70	20
1	19	20	3	73	20
1	20	20	3	76	20
1	21	20	3	79	20
1	22	20	3	82	20
1	23	20	3	85	20
1	24	20	3	88	20
1	25	20	3	91	20
1	26	10	3	94	20
1	27	20	3	97	20
1	28	20	3	100	20



Depth Range		Average penetration / blow. (mm)	Average CBR value (%)	Notes
10	200	63.33	2.1	
220	290	45.00	3.3	
340	490	40.00	3.8	
510	550	30.00	5.5	
570	830	21.54	8.4	
840	880	16.67	11.7	
910	925	11.25	19.3	
935	1065	7.00	35.5	
1075	1415	6.48	39.2	

CBR values derived from DCP based on conversion derived by Kleyn and Van Heerden by using the following equation :

Log10 (CBR) = 2.632 - 1.28 (Log10 (mm/blow))

Recorded by : AW

Checked by : MB

FINAL

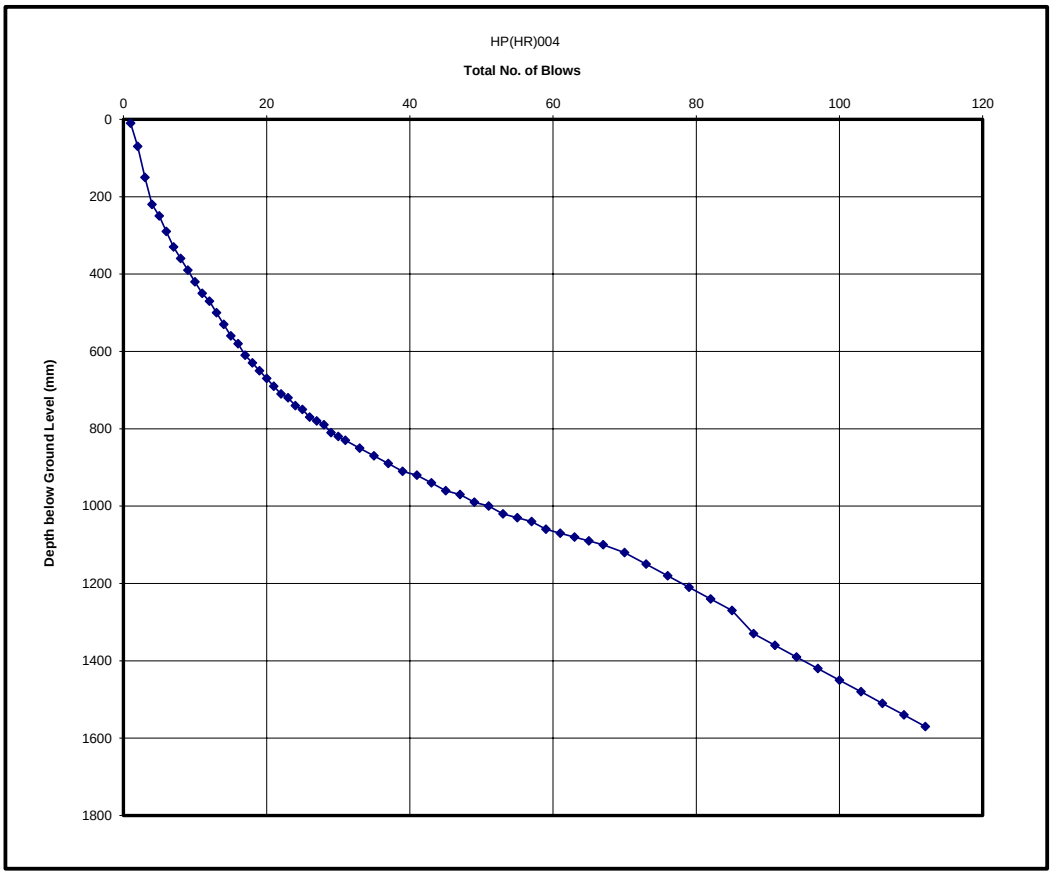
CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

Alliance House, South Park Way, Wakefield 41
Business Park, Wakefield, WF2 0XJ
Tel: 01924 229889
Email: info@central-alliance.co.uk

DCP Test Results Sheet / CBR Calculation

Client	EDF	
Site Name	Rosefield Solar Farm	
Job Number	2372536	
Specification	Van Heerden	
Test Number	HP(HR)004	
Test Depth (mm)		0
Zero Reading (mm)		10
Date Of Test		04/11/2012
Easting	**Northing**	**Elevation**

No. Blows	Total Blows	Penetration	No. Blows	Total Blows	Penetration	No. Blows	Total Blows	Penetration
1	1	0	1	22	20	2	55	10
1	2	60	1	23	10	2	57	10
1	3	80	1	24	20	2	59	20
1	4	70	1	25	10	2	61	10
1	5	30	1	26	20	2	63	10
1	6	40	1	27	10	2	65	10
1	7	40	1	28	10	2	67	10
1	8	30	1	29	20	3	70	20
1	9	30	1	30	10	3	73	30
1	10	30	1	31	10	3	76	30
1	11	30	2	33	20	3	79	30
1	12	20	2	35	20	3	82	30
1	13	30	2	37	20	3	85	30
1	14	30	2	39	20	3	88	60
1	15	30	2	41	10	3	91	30
1	16	20	2	43	20	3	94	30
1	17	30	2	45	20	3	97	30
1	18	20	2	47	10	3	100	30
1	19	20	2	49	20	3	103	30
1	20	20	2	51	10	3	106	30
1	21	20	2	53	20	3	109	30
						3	112	30



Depth Range		Average penetration / blow. (mm)	Average CBR value (%)	Notes
10	220	52.50	2.7	
250	710	27.22	6.2	
720	820	13.75	15.0	
830	1100	7.63	31.8	
1120	1270	9.44	24.2	
1330	1570	11.11	19.7	

CBR values derived from DCP based on conversion derived by Kleyn and Van Heerden by using the following equation :

Log10 (CBR) = 2.632 - 1.28 (Log10 (mm/blow))

Recorded by : RW

Checked by : MB

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CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

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Business Park, Wakefield, WF2 0XJ
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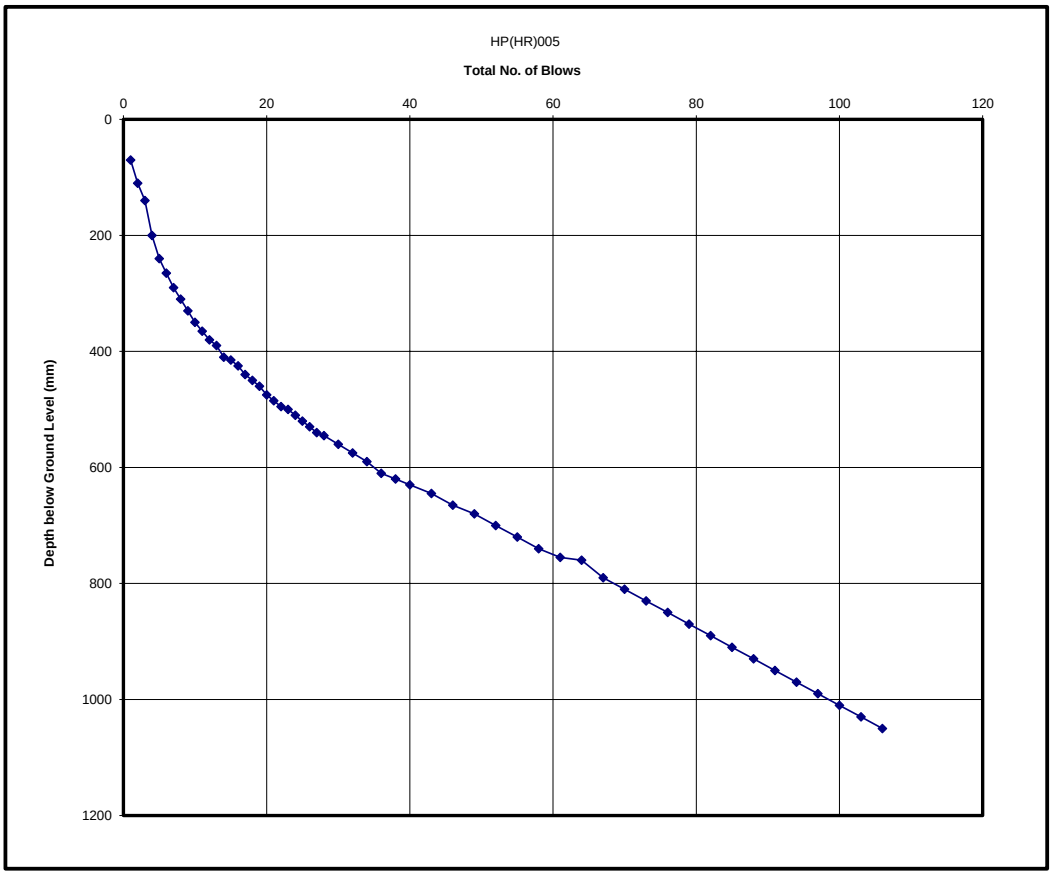
DCP Test Results Sheet / CBR Calculation

Client	EDF	
Site Name	Rosefield Solar Farm	
Job Number	2372536	
Specification	Van Heerden	
Test Number	HP(HR)005	
Test Depth (mm)		0
Zero Reading (mm)		70
Date Of Test		04/11/2012
Easting	**Northing**	**Elevation**

No. Blows	Total Blows	Penetration	No. Blows	Total Blows	Penetration	No. Blows	Total Blows	Penetration
1	1	0	1	20	15	3	55	20
1	2	40	1	21	10	3	58	20
1	3	30	1	22	10	3	61	15
1	4	60	1	23	5	3	64	5
1	5	40	1	24	10	3	67	30
1	6	25	1	25	10	3	70	20
1	7	25	1	26	10	3	73	20
1	8	20	1	27	10	3	76	20
1	9	20	1	28	5	3	79	20
1	10	20	2	30	15	3	82	20
1	11	15	2	32	15	3	85	20
1	12	15	2	34	15	3	88	20
1	13	10	2	36	20	3	91	20
1	14	20	2	38	10	3	94	20
1	15	5	2	40	10	3	97	20
1	16	10	3	43	15	3	100	20
1	17	15	3	46	20	3	103	20
1	18	10	3	49	15	3	106	20
1	19	10	3	52	20			



Depth Range		Average penetration / blow. (mm)	Average CBR value (%)	Notes
70	140	23.33	7.6	
200	240	50.00	2.9	
265	410	18.89	10.0	
415	540	10.00	22.5	
545	755	6.37	40.1	
760	1050	6.56	38.6	

CBR values derived from DCP based on conversion derived by Kleyn and Van Heerden by using the following equation :

Log10 (CBR) = 2.632 - 1.28 (Log10 (mm/blow))

Recorded by : AW

Checked by : MB

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CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

Alliance House, South Park Way, Wakefield 41
Business Park, Wakefield, WF2 0XJ
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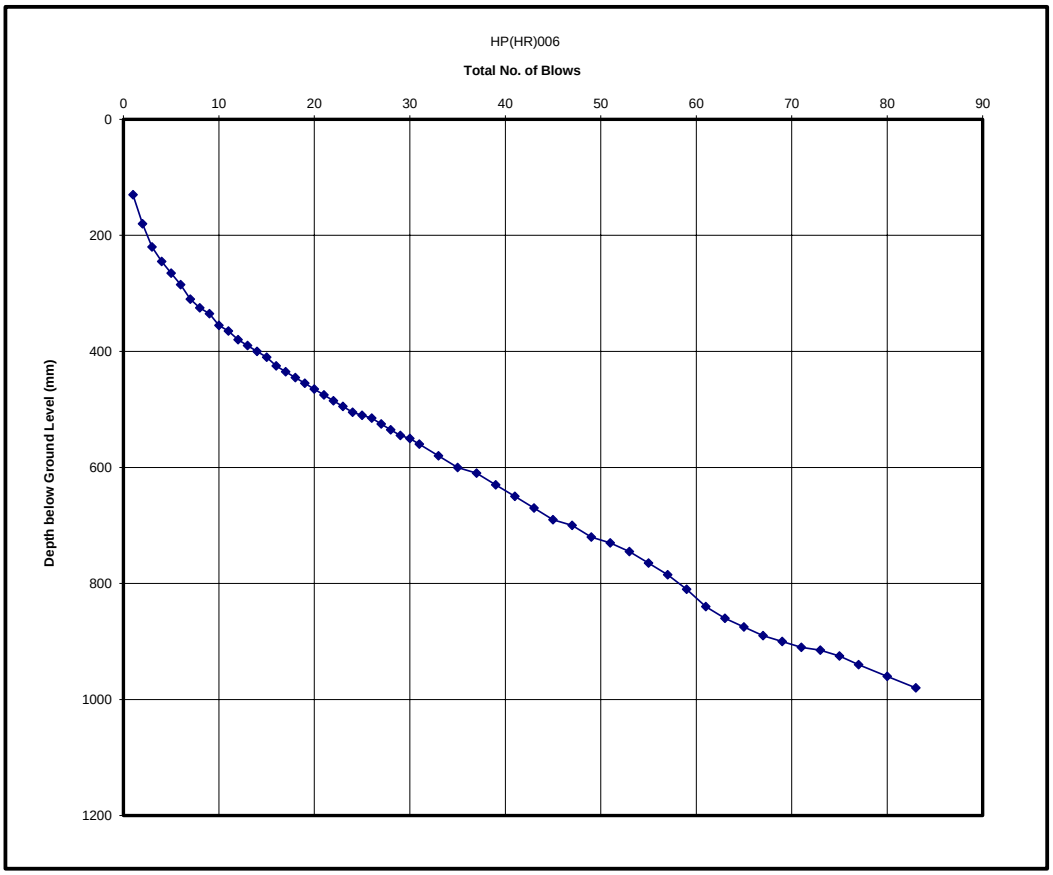
DCP Test Results Sheet / CBR Calculation

Client	EDF	
Site Name	Rosefield Solar Farm	
Job Number	2372536	
Specification	Van Heerden	
Test Number	HP(HR)006	
Test Depth (mm)		0
Zero Reading (mm)		130
Date Of Test		04/11/2012
Easting	**Northing**	**Elevation**

No. Blows	Total Blows	Penetration	No. Blows	Total Blows	Penetration	No. Blows	Total Blows	Penetration
1	1	0	1	20	10	2	47	10
1	2	50	1	21	10	2	49	20
1	3	40	1	22	10	2	51	10
1	4	25	1	23	10	2	53	15
1	5	20	1	24	10	2	55	20
1	6	20	1	25	5	2	57	20
1	7	25	1	26	5	2	59	25
1	8	15	1	27	10	2	61	30
1	9	10	1	28	10	2	63	20
1	10	20	1	29	10	2	65	15
1	11	10	1	30	5	2	67	15
1	12	15	1	31	10	2	69	10
1	13	10	2	33	20	2	71	10
1	14	10	2	35	20	2	73	5
1	15	10	2	37	10	2	75	10
1	16	15	2	39	20	2	77	15
1	17	10	2	41	20	3	80	20
1	18	10	2	43	20	3	83	20
1	19	10	2	45	20			



Depth Range		Average penetration / blow. (mm)	Average CBR value (%)	Notes
130	220	30.00	5.5	
245	285	38.33	4.0	
310	335	28.33	5.9	
355	505	21.67	8.4	
510	545	21.67	8.4	
550	600	20.00	9.3	
610	690	16.67	11.7	
700	720	15.00	13.4	
730	810	13.33	15.6	
840	875	15.00	13.4	
890	910	11.67	18.5	
915	980	11.67	18.5	

CBR values derived from DCP based on conversion derived by Kleyn and Van Heerden by using the following equation :

Log10 (CBR) = 2.632 - 1.28 (Log10 (mm/blow))

Recorded by : AW

Checked by : MB

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CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

Alliance House, South Park Way, Wakefield 41
Business Park, Wakefield, WF2 0XJ
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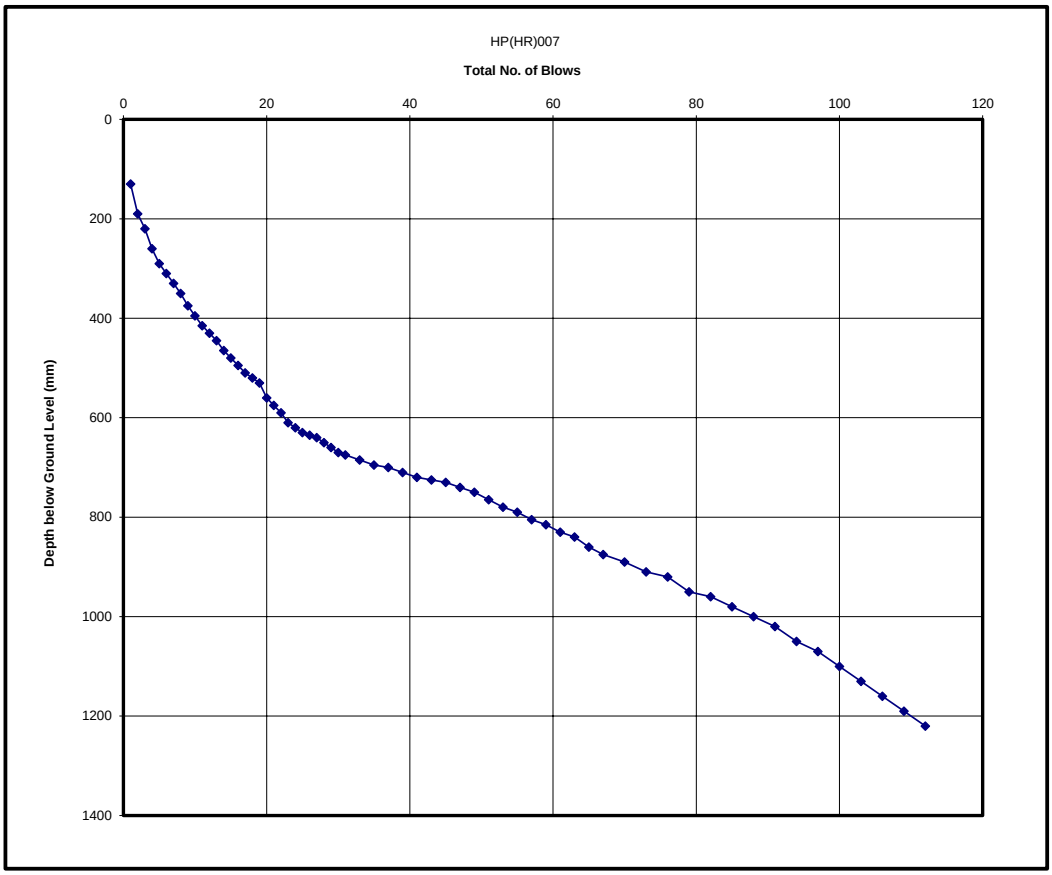
DCP Test Results Sheet / CBR Calculation

Client	EDF	
Site Name	Rosefield Solar Farm	
Job Number	2372536	
Specification	Van Heerden	
Test Number	HP(HR)007	
Test Depth (mm)		0
Zero Reading (mm)		130
Date Of Test		04/11/2012
Easting	**Northing**	**Elevation**

No. Blows	Total Blows	Penetration	No. Blows	Total Blows	Penetration	No. Blows	Total Blows	Penetration
1	1	0	1	22	15	2	55	10
1	2	60	1	23	20	2	57	15
1	3	30	1	24	10	2	59	10
1	4	40	1	25	10	2	61	15
1	5	30	1	26	5	2	63	10
1	6	20	1	27	5	2	65	20
1	7	20	1	28	10	2	67	15
1	8	20	1	29	10	3	70	15
1	9	25	1	30	10	3	73	20
1	10	20	1	31	5	3	76	10
1	11	20	2	33	10	3	79	30
1	12	15	2	35	10	3	82	10
1	13	15	2	37	5	3	85	20
1	14	20	2	39	10	3	88	20
1	15	15	2	41	10	3	91	20
1	16	15	2	43	5	3	94	30
1	17	15	2	45	5	3	97	20
1	18	10	2	47	10	3	100	30
1	19	10	2	49	10	3	103	30
1	20	30	2	51	15	3	106	30
1	21	15	2	53	15	3	109	30
						3	112	30



Depth Range		Average penetration / blow. (mm)	Average CBR value (%)	Notes
130	260	32.50	5.0	
290	530	18.00	10.6	
560	635	15.00	13.4	
640	670	8.75	26.7	
675	740	4.17	69.0	
750	840	6.25	41.0	
860	910	7.29	33.7	
920	950	6.67	37.8	
960	1220	8.18	29.1	

CBR values derived from DCP based on conversion derived by Kleyn and Van Heerden by using the following equation :

Log10 (CBR) = 2.632 - 1.28 (Log10 (mm/blow))

Recorded by : RW

Checked by : MB

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CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

Alliance House, South Park Way, Wakefield 41
Business Park, Wakefield, WF2 0XJ
Tel: 01924 229889
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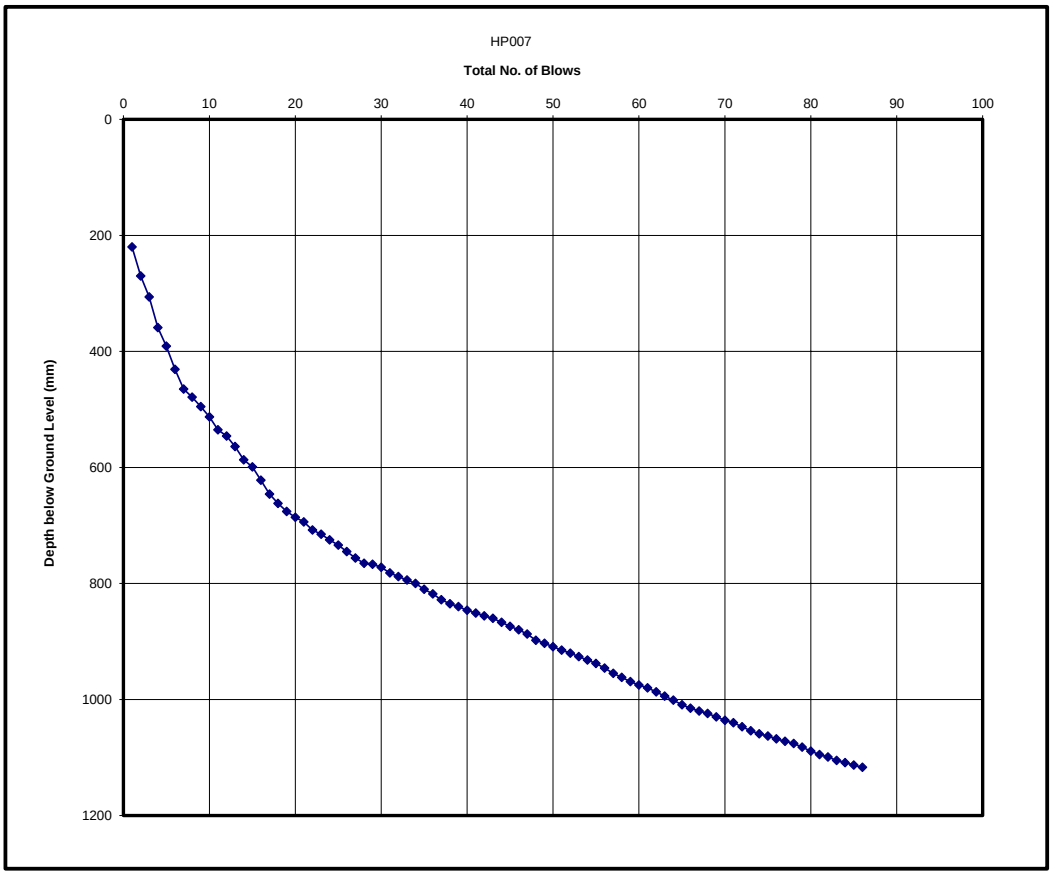
DCP Test Results Sheet / CBR Calculation

Client	EDF	
Site Name	Rosefield Solar Farm	
Job Number	2372536	
Specification	Van Heerden	
Test Number	HP007	
Test Depth (mm)		0
Zero Reading (mm)		220
Date Of Test		04/11/2012
Easting	**Northing**	**Elevation**

No. Blows	Total Blows	Penetration	No. Blows	Total Blows	Penetration	No. Blows	Total Blows	Penetration
1	1	0	1	30	5	1	59	7
1	2	50	1	31	10	1	60	6
1	3	36	1	32	6	1	61	5
1	4	53	1	33	6	1	62	7
1	5	32	1	34	6	1	63	7
1	6	40	1	35	10	1	64	7
1	7	34	1	36	8	1	65	8
1	8	14	1	37	10	1	66	6
1	9	16	1	38	7	1	67	5
1	10	18	1	39	5	1	68	4
1	11	22	1	40	6	1	69	6
1	12	11	1	41	5	1	70	6
1	13	18	1	42	5	1	71	4
1	14	23	1	43	4	1	72	7
1	15	12	1	44	7	1	73	7
1	16	23	1	45	7	1	74	5
1	17	24	1	46	6	1	75	4
1	18	16	1	47	7	1	76	5
1	19	14	1	48	11	1	77	4
1	20	10	1	49	5	1	78	4
1	21	8	1	50	6	1	79	6
1	22	14	1	51	6	1	80	7
1	23	7	1	52	5	1	81	6
1	24	10	1	53	6	1	82	4
1	25	9	1	54	6	1	83	6
1	26	11	1	55	6	1	84	4
1	27	11	1	56	8	1	85	4
1	28	9	1	57	9	1	86	4
1	29	2	1	58	7			



Depth Range		Average penetration / blow. (mm)	Average CBR value (%)	Notes
200	465	35.00	4.5	
479	676	17.58	10.9	
686	694	9.00	25.7	
708	765	10.14	22.1	
767	835	7.00	35.5	
840	856	5.25	51.3	
860	898	7.00	35.5	
903	1117	5.76	45.5	

CBR values derived from DCP based on conversion derived by Kleyn and Van Heerden by using the following equation :

Log10 (CBR) = 2.632 - 1.28 (Log10 (mm/blow))

Recorded by : AW

Checked by : MB

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CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

Alliance House, South Park Way, Wakefield 41
Business Park, Wakefield, WF2 0XJ
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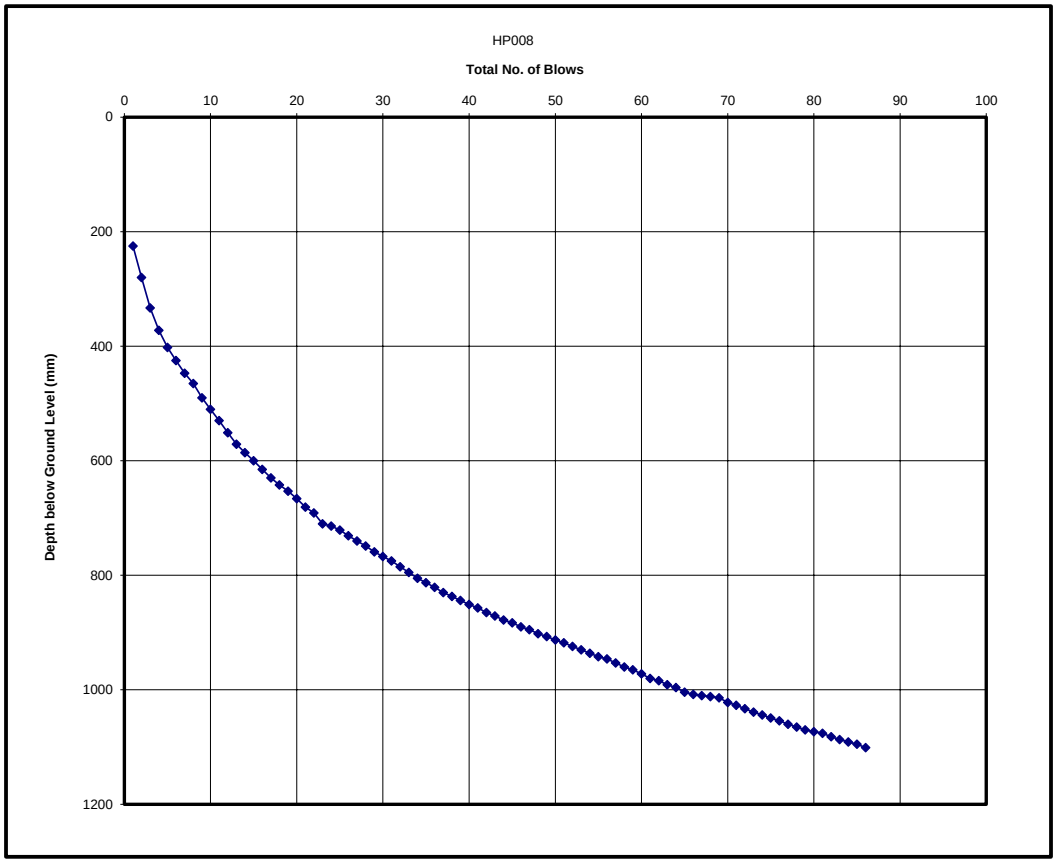
DCP Test Results Sheet / CBR Calculation

Client	EDF	
Site Name	Rosefield Solar Farm	
Job Number	2372536	
Specification	Van Heerden	
Test Number	HP008	
Test Depth (mm)		0
Zero Reading (mm)		225
Date Of Test		04/11/2012
Easting	**Northing**	**Elevation**

No. Blows	Total Blows	Penetration	No. Blows	Total Blows	Penetration	No. Blows	Total Blows	Penetration
1	1	0	1	30	8	1	59	5
1	2	55	1	31	8	1	60	7
1	3	53	1	32	10	1	61	8
1	4	39	1	33	10	1	62	4
1	5	30	1	34	10	1	63	7
1	6	23	1	35	8	1	64	5
1	7	22	1	36	8	1	65	8
1	8	18	1	37	9	1	66	4
1	9	25	1	38	7	1	67	2
1	10	20	1	39	7	1	68	2
1	11	20	1	40	7	1	69	2
1	12	21	1	41	6	1	70	8
1	13	20	1	42	8	1	71	5
1	14	15	1	43	6	1	72	6
1	15	14	1	44	7	1	73	6
1	16	15	1	45	5	1	74	5
1	17	15	1	46	7	1	75	5
1	18	12	1	47	5	1	76	5
1	19	11	1	48	7	1	77	6
1	20	13	1	49	5	1	78	5
1	21	15	1	50	6	1	79	5
1	22	10	1	51	5	1	80	3
1	23	19	1	52	6	1	81	3
1	24	4	1	53	6	1	82	6
1	25	7	1	54	6	1	83	5
1	26	10	1	55	6	1	84	4
1	27	9	1	56	4	1	85	4
1	28	9	1	57	7	1	86	6
1	29	10	1	58	7			



Depth Range		Average penetration / blow. (mm)	Average CBR value (%)	Notes
225	402	35.40	4.5	
425	615	19.36	9.7	
630	681	13.20	15.8	
691	710	14.50	14.0	
714	813	8.58	27.3	
821	857	7.33	33.5	
865	1004	6.13	42.1	
1008	1012	2.67	122.1	
1014	1101	4.94	55.4	

CBR values derived from DCP based on conversion derived by Kleyn and Van Heerden by using the following equation :

Log10 (CBR) = 2.632 - 1.28 (Log10 (mm/blow))

Recorded by : AW

Checked by : MB

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CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

Alliance House, South Park Way, Wakefield 41
Business Park, Wakefield, WF2 0XJ
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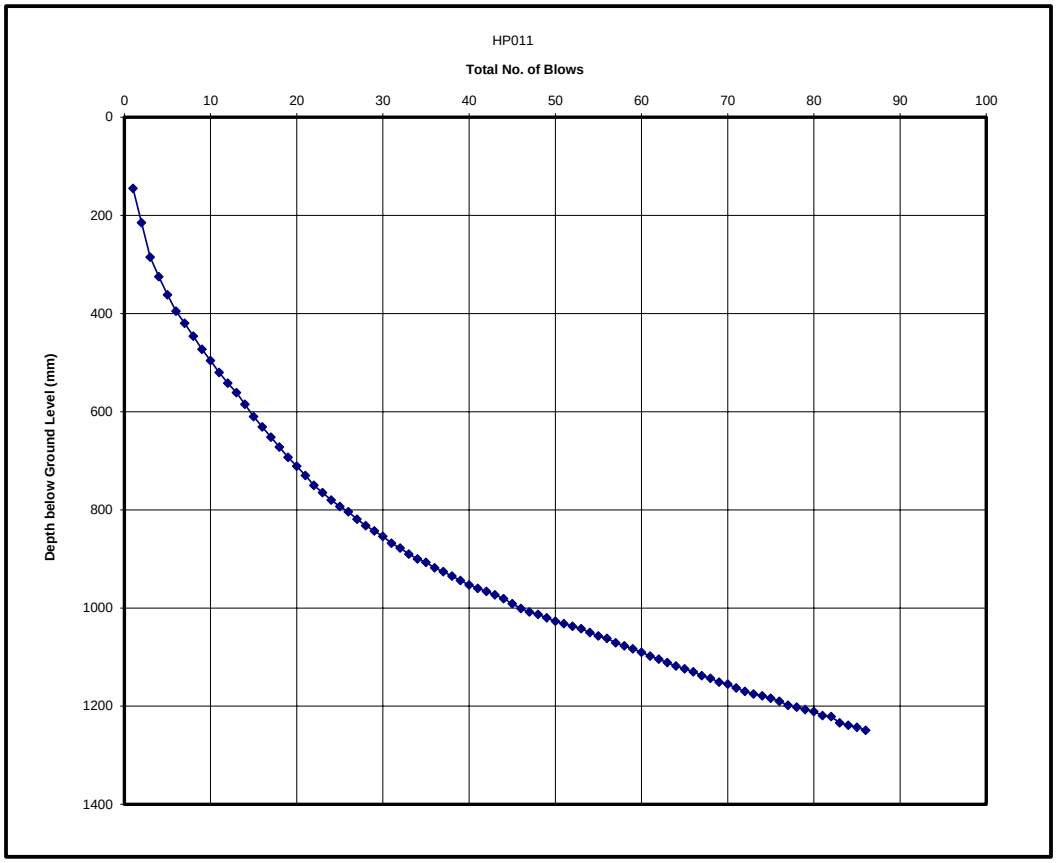
DCP Test Results Sheet / CBR Calculation

Client	EDF	
Site Name	Rosefield Solar Farm	
Job Number	2372536	
Specification	Van Heerden	
Test Number	HP011	
Test Depth (mm)		0
Zero Reading (mm)		145
Date Of Test		04/11/2012
Easting	**Northing**	**Elevation**

No. Blows	Total Blows	Penetration	No. Blows	Total Blows	Penetration	No. Blows	Total Blows	Penetration
1	1	0	1	30	11	1	59	6
1	2	70	1	31	14	1	60	7
1	3	70	1	32	10	1	61	8
1	4	40	1	33	12	1	62	6
1	5	37	1	34	10	1	63	7
1	6	33	1	35	7	1	64	7
1	7	25	1	36	11	1	65	6
1	8	26	1	37	8	1	66	6
1	9	27	1	38	9	1	67	8
1	10	23	1	39	9	1	68	5
1	11	24	1	40	9	1	69	8
1	12	22	1	41	7	1	70	4
1	13	19	1	42	6	1	71	8
1	14	24	1	43	7	1	72	7
1	15	25	1	44	8	1	73	5
1	16	21	1	45	10	1	74	4
1	17	21	1	46	10	1	75	5
1	18	20	1	47	7	1	76	6
1	19	21	1	48	5	1	77	8
1	20	18	1	49	7	1	78	4
1	21	19	1	50	7	1	79	5
1	22	20	1	51	5	1	80	4
1	23	15	1	52	5	1	81	8
1	24	15	1	53	5	1	82	2
1	25	13	1	54	8	1	83	13
1	26	11	1	55	7	1	84	5
1	27	15	1	56	5	1	85	4
1	28	13	1	57	9	1	86	6
1	29	11	1	58	6			



Depth Range		Average penetration / blow. (mm)	Average CBR value (%)	Notes
145	285	215.00	0.4	
325	730	545.78	0.1	
750	900	828.92	0.1	
907	1221	1084.57	0.1	
1234	1249	1241.25	0.0	

CBR values derived from DCP based on conversion derived by Kleyn and Van Heerden by using the following equation :

Log10 (CBR) = 2.632 - 1.28 (Log10 (mm/blow))

Recorded by : AW

Checked by : MB

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CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

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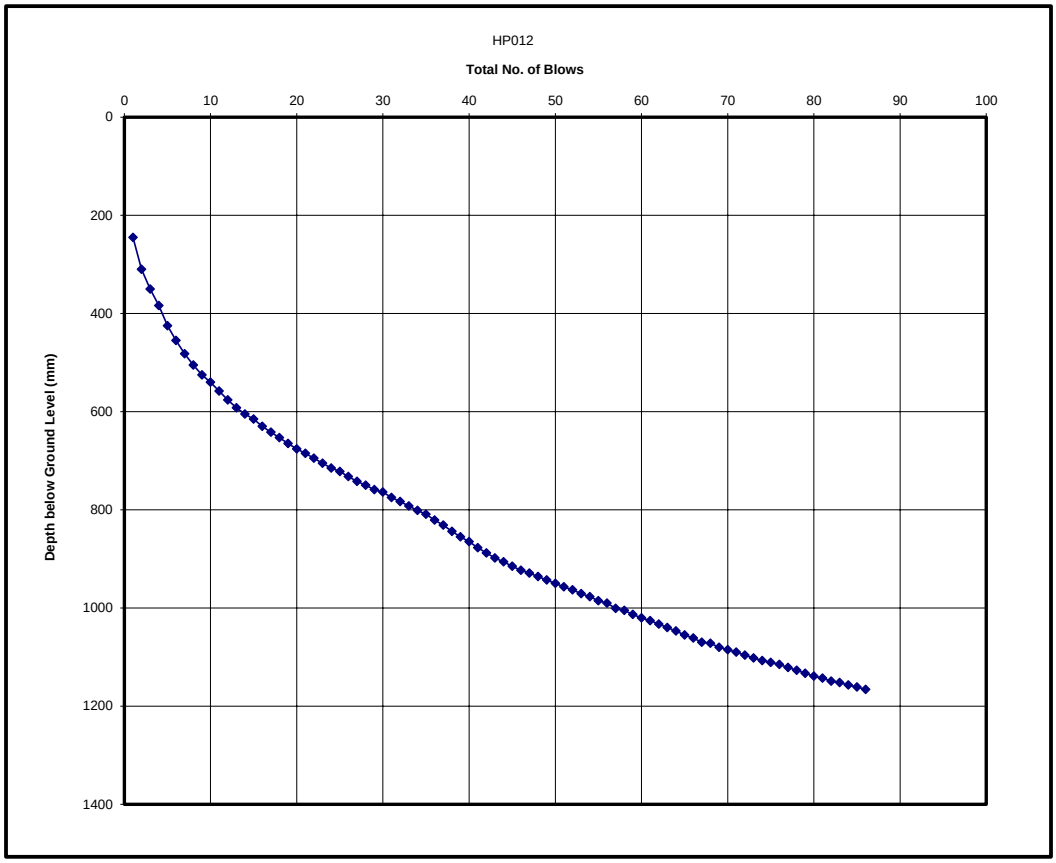
DCP Test Results Sheet / CBR Calculation

Client	EDF	
Site Name	Rosefield Solar Farm	
Job Number	2372536	
Specification	Van Heerden	
Test Number	HP012	
Test Depth (mm)		0
Zero Reading (mm)		245
Date Of Test		04/11/2012
Easting	**Northing**	**Elevation**

No. Blows	Total Blows	Penetration	No. Blows	Total Blows	Penetration	No. Blows	Total Blows	Penetration
1	1	0	1	30	5	1	59	8
1	2	65	1	31	11	1	60	7
1	3	40	1	32	8	1	61	6
1	4	34	1	33	9	1	62	7
1	5	41	1	34	9	1	63	7
1	6	30	1	35	8	1	64	7
1	7	27	1	36	12	1	65	8
1	8	23	1	37	10	1	66	6
1	9	20	1	38	13	1	67	9
1	10	15	1	39	11	1	68	2
1	11	18	1	40	10	1	69	8
1	12	18	1	41	12	1	70	5
1	13	16	1	42	11	1	71	5
1	14	13	1	43	10	1	72	6
1	15	10	1	44	8	1	73	6
1	16	15	1	45	9	1	74	5
1	17	12	1	46	8	1	75	4
1	18	11	1	47	6	1	76	4
1	19	12	1	48	7	1	77	6
1	20	11	1	49	7	1	78	6
1	21	9	1	50	7	1	79	6
1	22	10	1	51	7	1	80	6
1	23	10	1	52	6	1	81	4
1	24	10	1	53	8	1	82	6
1	25	7	1	54	6	1	83	3
1	26	10	1	55	8	1	84	5
1	27	10	1	56	5	1	85	4
1	28	8	1	57	11	1	86	5
1	29	9	1	58	4			



Depth Range		Average penetration / blow. (mm)	Average CBR value (%)	Notes
245	310	277.50	0.3	
350	455	403.50	0.2	
482	605	547.88	0.1	
615	898	758.24	0.1	
906	1166	1047.02	0.1	

CBR values derived from DCP based on conversion derived by Kleyn and Van Heerden by using the following equation :
Log10 (CBR) = 2.632 - 1.28 (Log10 (mm/blow))

Recorded by : AW
Checked by : MB
FINAL

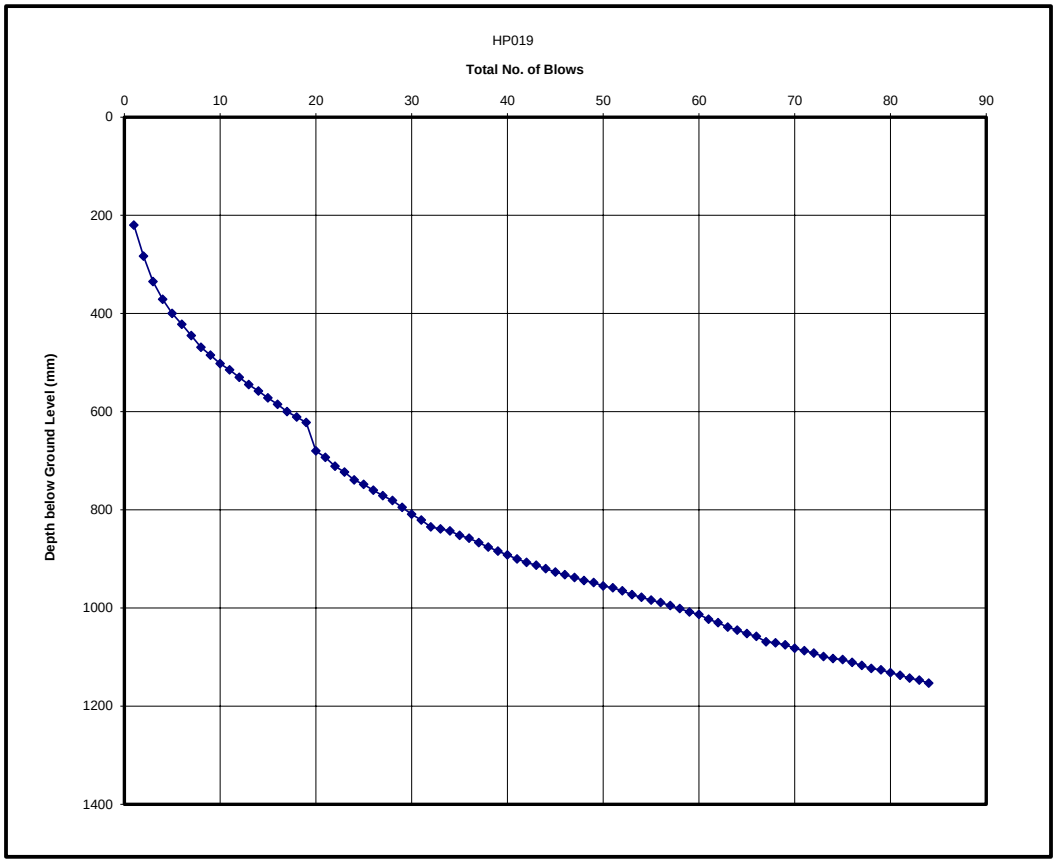
CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

Alliance House, South Park Way, Wakefield 41
Business Park, Wakefield, WF2 0XJ
Tel: 01924 229889
Email: info@central-alliance.co.uk

DCP Test Results Sheet / CBR Calculation

Client	EDF	
Site Name	Rosefield Solar Farm	
Job Number	2372536	
Specification	Van Heerden	
Test Number	HP019	
Test Depth (mm)		0
Zero Reading (mm)		220
Date Of Test		04/11/2012
Easting	**Northing**	**Elevation**

No. Blows	Total Blows	Penetration	No. Blows	Total Blows	Penetration	No. Blows	Total Blows	Penetration
1	1	0	1	30	14	1	57	6
1	2	63	1	31	12	1	58	6
1	3	52	1	32	14	1	59	7
1	4	36				1	60	5
1	5	29	1	33	4	1	61	10
1	6	22	1	34	4	1	62	7
1	7	23	1	35	9	1	63	9
1	8	24	1	36	6	1	64	6
1	9	16	1	37	9	1	65	7
1	10	17	1	38	9	1	66	6
1	11	13	1	39	8	1	67	11
1	12	15	1	40	8	1	68	2
1	13	15	1	41	8	1	69	4
1	14	13	1	42	7	1	70	7
1	15	14	1	43	6	1	71	5
1	16	13	1	44	7	1	72	5
1	17	15	1	45	7	1	73	7
1	18	11	1	46	5	1	74	4
1	19	11	1	47	6	1	75	2
1	20	58	1	48	6	1	76	6
1	21	13	1	49	4	1	77	6
1	22	18	1	50	7	1	78	6
1	23	12	1	51	4	1	79	3
1	24	16	1	52	6	1	80	6
1	25	9	1	53	8	1	81	5
1	26	12	1	54	5	1	82	6
1	27	11	1	55	6	1	83	4
1	28	10	1	56	5	1	84	6
1	29	14						



Depth Range		Average penetration / blow. (mm)	Average CBR value (%)	Notes
220	335	38.33	4.0	
371	445	27.50	6.2	
469	611	15.09	13.3	
622	680	34.50	4.6	
693	835	12.92	16.2	
839	843	7.33	33.5	
852	1008	6.60	38.3	
1013	1153	5.80	45.2	

CBR values derived from DCP based on conversion derived by Kleyn and Van Heerden by using the following equation :

Log10 (CBR) = 2.632 - 1.28 (Log10 (mm/blow))

Recorded by : AW

Checked by : MB

FINAL

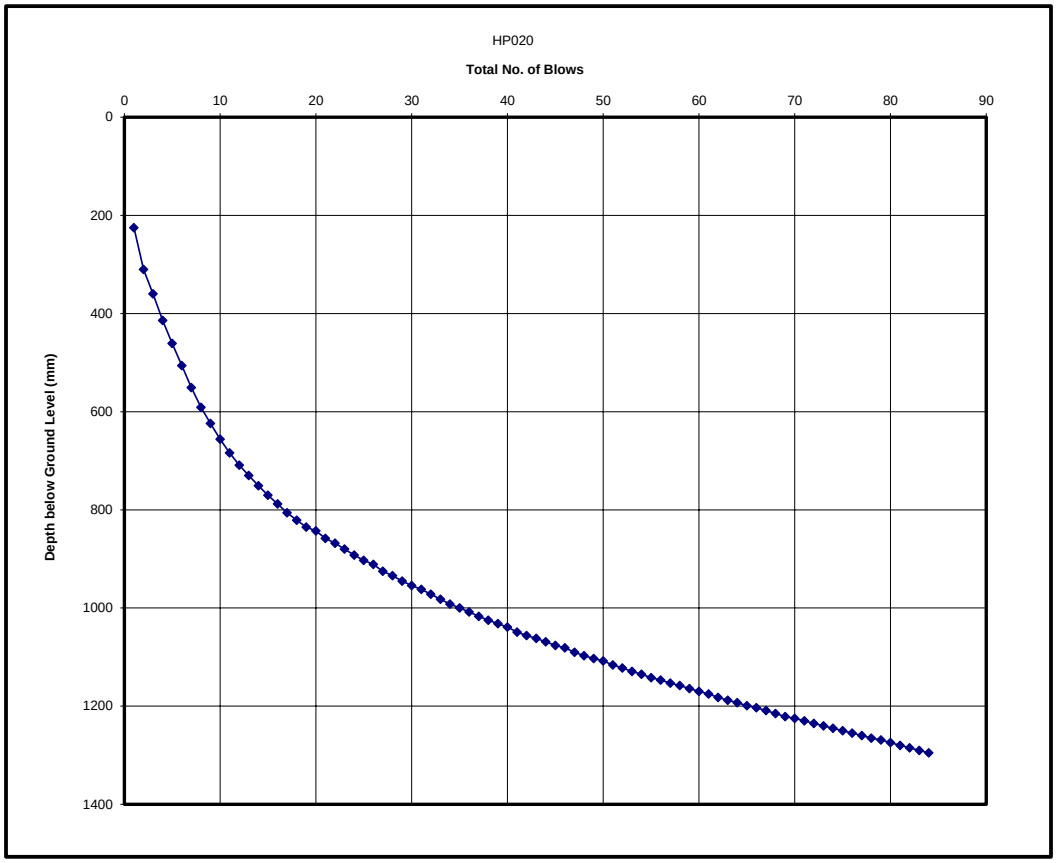
CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

Alliance House, South Park Way, Wakefield 41
Business Park, Wakefield, WF2 0XJ
Tel: 01924 229889
Email: info@central-alliance.co.uk

DCP Test Results Sheet / CBR Calculation

Client	EDF	
Site Name	Rosefield Solar Farm	
Job Number	2372536	
Specification	Van Heerden	
Test Number	HP020	
Test Depth (mm)		0
Zero Reading (mm)		225
Date Of Test		04/11/2012
Easting	**Northing**	**Elevation**

No. Blows	Total Blows	Penetration	No. Blows	Total Blows	Penetration	No. Blows	Total Blows	Penetration
1	1	0	1	29	11	1	57	6
1	2	85	1	30	9	1	58	5
1	3	50	1	31	8	1	59	6
1	4	54	1	32	10	1	60	6
1	5	47	1	33	10	1	61	5
1	6	45	1	34	10	1	62	7
1	7	45	1	35	8	1	63	6
1	8	40	1	36	8	1	64	5
1	9	33	1	37	9	1	65	6
1	10	32	1	38	8	1	66	4
1	11	28	1	39	7	1	67	6
1	12	25	1	40	7	1	68	6
1	13	21	1	41	10	1	69	6
1	14	21	1	42	7	1	70	4
1	15	19	1	43	6	1	71	5
1	16	18	1	44	7	1	72	5
1	17	18	1	45	7	1	73	5
1	18	15	1	46	5	1	74	5
1	19	14	1	47	9	1	75	5
1	20	8	1	48	7	1	76	5
1	21	15	1	49	6	1	77	5
1	22	10	1	50	5	1	78	5
1	23	12	1	51	8	1	79	4
1	24	12	1	52	6	1	80	5
1	25	11	1	53	7	1	81	6
1	26	8	1	54	6	1	82	5
1	27	14	1	55	7	1	83	5
1	28	9	1	56	5	1	84	5



Depth Range		Average penetration / blow. (mm)	Average CBR value (%)	Notes
225	310	42.50	3.5	
360	656	43.25	3.5	
684	730	24.67	7.1	
751	835	17.50	11.0	
843	1039	9.71	23.3	
1049	1295	5.82	45.0	

CBR values derived from DCP based on conversion derived by Kleyn and Van Heerden by using the following equation :

Log10 (CBR) = 2.632 - 1.28 (Log10 (mm/blow))

Recorded by : AW

Checked by : MB

FINAL

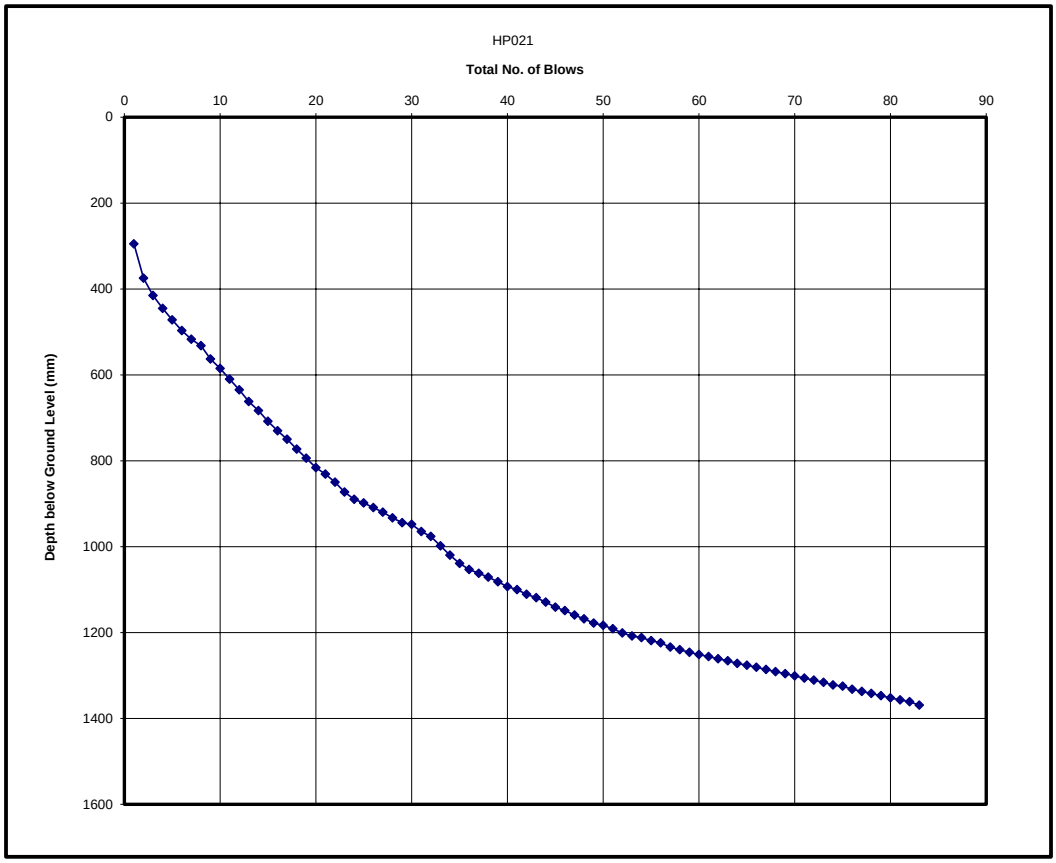
CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

Alliance House, South Park Way, Wakefield 41
Business Park, Wakefield, WF2 0XJ
Tel: 01924 229889
Email: info@central-alliance.co.uk

DCP Test Results Sheet / CBR Calculation

Client	EDF	
Site Name	Rosefield Solar Farm	
Job Number	2372536	
Specification	Van Heerden	
Test Number	HP021	
Test Depth (mm)		0
Zero Reading (mm)		295
Date Of Test		04/11/2012
Easting	**Northing**	**Elevation**

No. Blows	Total Blows	Penetration	No. Blows	Total Blows	Penetration	No. Blows	Total Blows	Penetration
1	1	0	1	29	11	1	57	10
1	2	80	1	30	4	1	58	6
1	3	40	1	31	17	1	59	6
1	4	30	1	32	11	1	60	5
1	5	27	1	33	22	1	61	5
1	6	25	1	34	22	1	62	5
1	7	20	1	35	19	1	63	5
1	8	15	1	36	14	1	64	6
1	9	31	1	37	9	1	65	4
1	10	22	1	38	9	1	66	5
1	11	25	1	39	11	1	67	5
1	12	25	1	40	11	1	68	5
1	13	27	1	41	7	1	69	5
1	14	21	1	42	11	1	70	5
1	15	25	1	43	8	1	71	5
1	16	22	1	44	10	1	72	5
1	17	20	1	45	12	1	73	5
1	18	23	1	46	8	1	74	6
1	19	21	1	47	10	1	75	3
1	20	22	1	48	9	1	76	7
1	21	15	1	49	10	1	77	5
1	22	19	1	50	5	1	78	5
1	23	23	1	51	8	1	79	5
1	24	17	1	52	10	1	80	5
1	25	8	1	53	7	1	81	5
1	26	11	1	54	4	1	82	4
1	27	11	1	55	7	1	83	8
1	28	13	1	56	5			



Depth Range		Average penetration / blow. (mm)	Average CBR value (%)	Notes
295	375	40.00	3.8	
415	532	26.17	6.6	
563	816	23.67	7.5	
850	890	19.67	9.5	
898	944	10.80	20.4	
948	1039	15.83	12.5	
1053	1369	6.88	36.3	

CBR values derived from DCP based on conversion derived by Kleyn and Van Heerden by using the following equation :
Log10 (CBR) = 2.632 - 1.28 (Log10 (mm/blow))

Recorded by : AW
Checked by : MB
FINAL

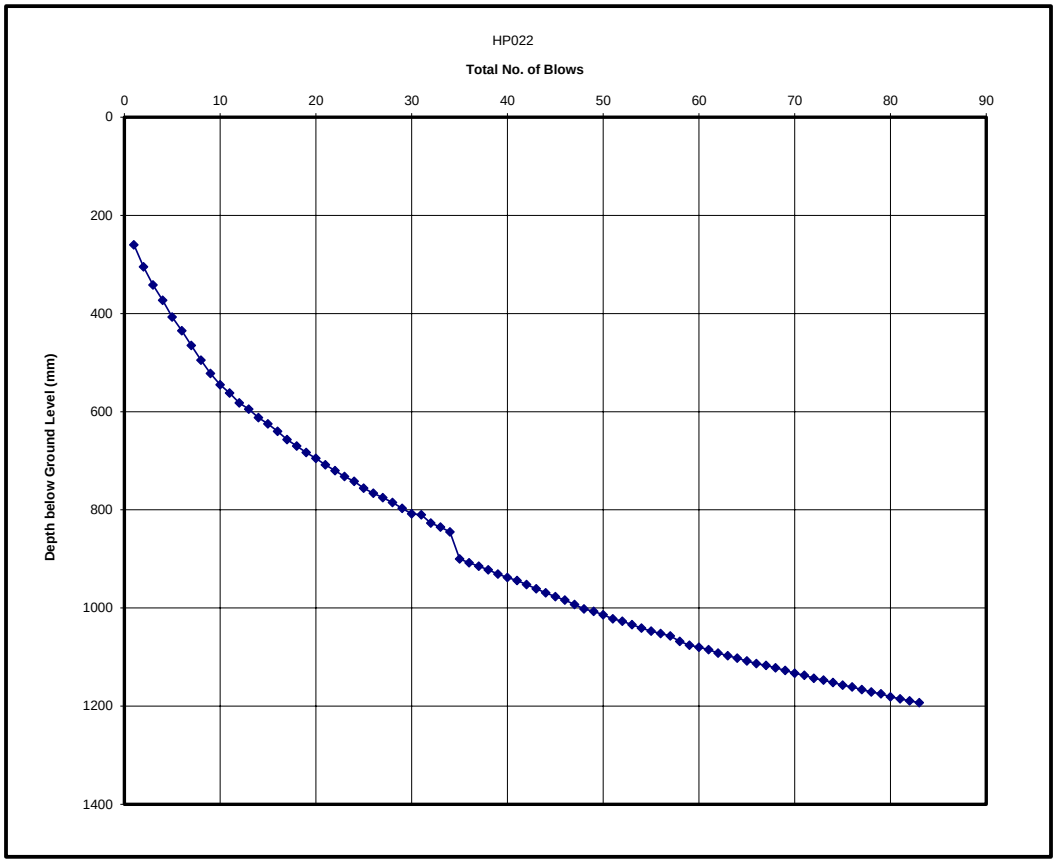
CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

Alliance House, South Park Way, Wakefield 41
Business Park, Wakefield, WF2 0XJ
Tel: 01924 229889
Email: info@central-alliance.co.uk

DCP Test Results Sheet / CBR Calculation

Client	EDF	
Site Name	Rosefield Solar Farm	
Job Number	2372536	
Specification	Van Heerden	
Test Number	HP022	
Test Depth (mm)		0
Zero Reading (mm)		260
Date Of Test		04/11/2012
Easting	**Northing**	**Elevation**

No. Blows	Total Blows	Penetration	No. Blows	Total Blows	Penetration	No. Blows	Total Blows	Penetration
1	1	0	1	29	12	1	57	5
1	2	45	1	30	11	1	58	11
1	3	37	1	31	2	1	59	8
1	4	31	1	32	17	1	60	4
1	5	34	1	33	8	1	61	5
1	6	28	1	34	10	1	62	7
1	7	30	1	35	55	1	63	5
1	8	30	1	36	8	1	64	5
1	9	27	1	37	7	1	65	6
1	10	23	1	38	7	1	66	5
1	11	17	1	39	9	1	67	4
1	12	20	1	40	7	1	68	5
1	13	13	1	41	6	1	69	5
1	14	17	1	42	8	1	70	6
1	15	13	1	43	9	1	71	4
1	16	15	1	44	8	1	72	6
1	17	17	1	45	8	1	73	4
1	18	13	1	46	7	1	74	5
1	19	13	1	47	9	1	75	5
1	20	12	1	48	9	1	76	4
1	21	13	1	49	5	1	77	5
1	22	12	1	50	7	1	78	5
1	23	12	1	51	8	1	79	4
1	24	10	1	52	5	1	80	6
1	25	14	1	53	7	1	81	4
1	26	10	1	54	7	1	82	4
1	27	9	1	55	6	1	83	4
1	28	10	1	56	5			



Depth Range		Average penetration / blow. (mm)	Average CBR value (%)	Notes
260	522	29.11	5.7	
545	808	13.62	15.1	
810	827	9.50	24.0	
837	892	9.00	25.7	
899	1195	7.10	34.9	

CBR values derived from DCP based on conversion derived by Kleyn and Van Heerden by using the following equation :

Log10 (CBR) = 2.632 - 1.28 (Log10 (mm/blow))

Recorded by : AW

Checked by : MB

FINAL

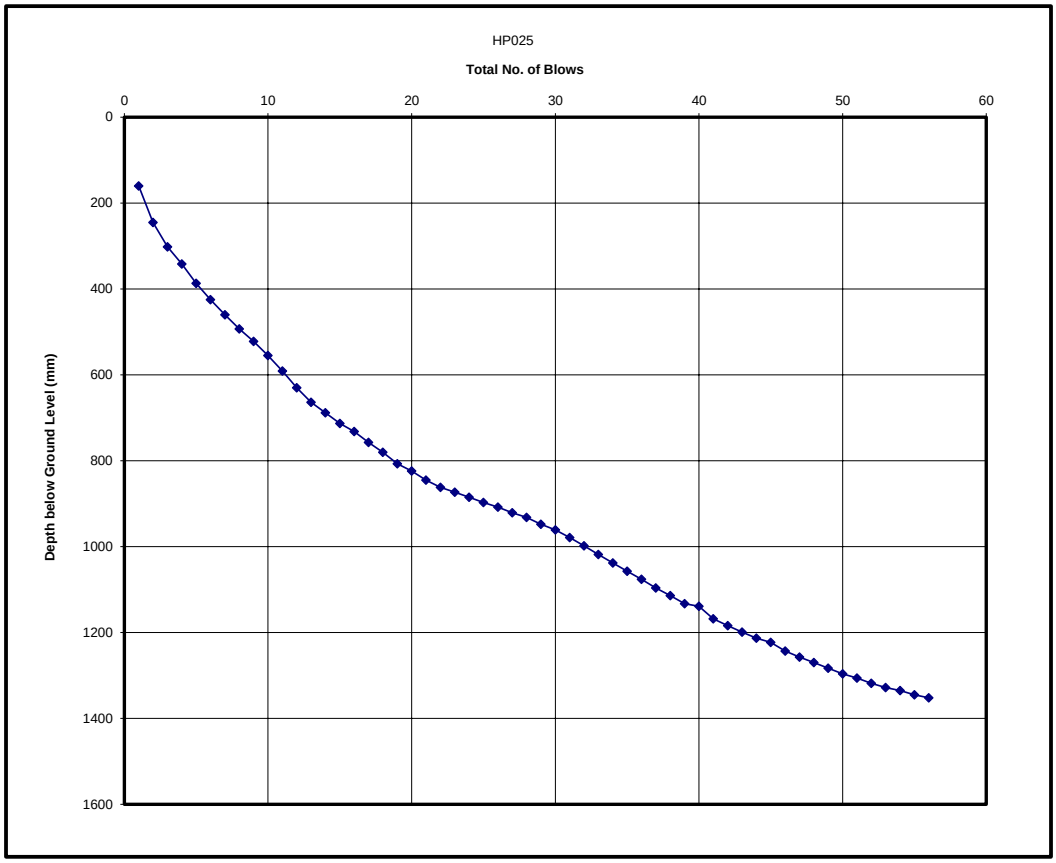
CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

Alliance House, South Park Way, Wakefield 41
Business Park, Wakefield, WF2 0XJ
Tel: 01924 229889
Email: info@central-alliance.co.uk

DCP Test Results Sheet / CBR Calculation

Client	EDF	
Site Name	Rosefield Solar Farm	
Job Number	2372536	
Specification	Van Heerden	
Test Number	HP025	
Test Depth (mm)		0
Zero Reading (mm)		160
Date Of Test		04/11/2012
Easting	**Northing**	**Elevation**

No. Blows	Total Blows	Penetration	No. Blows	Total Blows	Penetration	No. Blows	Total Blows	Penetration
1	1	0	1	20	17	1	39	19
1	2	85	1	21	21	1	40	6
1	3	57	1	22	17	1	41	29
1	4	40	1	23	11	1	42	16
1	5	45	1	24	12	1	43	15
1	6	38	1	25	12	1	44	14
1	7	35	1	26	11	1	45	10
1	8	33	1	27	13	1	46	20
1	9	29	1	28	11	1	47	14
1	10	33	1	29	16	1	48	13
1	11	36	1	30	13	1	49	13
1	12	39	1	31	18	1	50	13
1	13	34	1	32	19	1	51	10
1	14	24	1	33	20	1	52	12
1	15	25	1	34	20	1	53	10
1	16	19	1	35	19	1	54	7
1	17	25	1	36	19	1	55	10
1	18	23	1	37	20	1	56	7
1	19	27	1	38	18			



Depth Range		Average penetration / blow. (mm)	Average CBR value (%)	Notes
160	245	42.50	3.5	
302	630	38.50	4.0	
664	845	23.89	7.4	
862	961	12.89	16.3	
979	1352	15.04	13.3	

CBR values derived from DCP based on conversion derived by Kleyn and Van Heerden by using the following equation :
Log10 (CBR) = 2.632 - 1.28 (Log10 (mm/blow))

Recorded by : AW
Checked by : MB
FINAL

SPT Hammer Energy Test Report

in accordance with BSEN ISO 22476-3:2005

Safer Rig Services
Portview Road
Avonmouth
Bristol
BS11 9JE

SPT Hammer Ref:	WLS03
Test Date:	11/04/2024
Report Date:	15/04/2024
File Name:	CA WLS03.spt
Test Operator:	MS

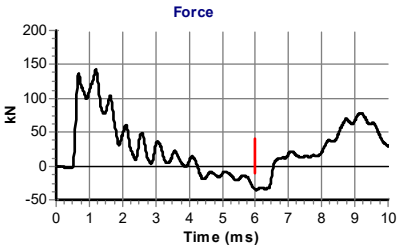
Instrumented Rod Data

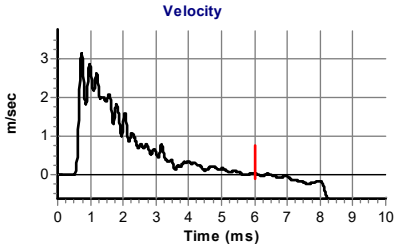
Diameter d_r (mm):	54
Wall Thickness t_r (mm):	6.8
Assumed Modulus E_a (GPa):	200
Accelerometer No.1:	73534
Accelerometer No.2:	73538

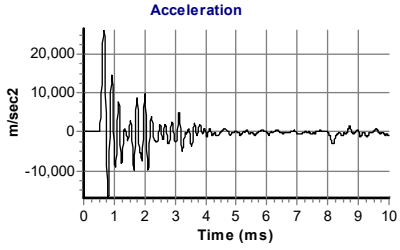
SPT Hammer Information

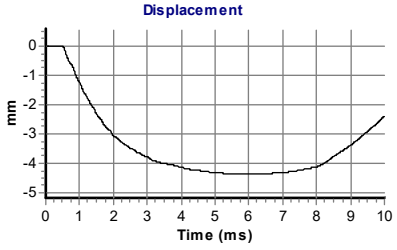
Hammer Mass m (kg):	63.5
Falling Height h (mm):	760
SPT String Length L (m):	12.2

Comments / Location









Calculations

Area of Rod A (mm2):	1008
Theoretical Energy E_{theor} (J):	473
Measured Energy E_{meas} (J):	316

Energy Ratio E_r (%): **67**

[redacted]

Signed: [redacted]

Title: Equipment Inspector

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

Appendix B
Exploratory Hole Photographs

PHOTOGRAPH 1 – HP(HR)007 – 0.00m to 1.50m bgl

Client	EDF
Project	2372536-Rosefield Solar Farm
Title	HP(HR)007

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 2 – HP(HR)007 – 0.00m to 1.50m bgl (Spoil)

Client	EDF
Project	2372536-Rosefield Solar Farm
Title	HP(HR)007

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 3 – HP(HR)007 – 0.00m to 0.00m bgl

Client	EDF
Project	2372536-Rosefield Solar Farm
Title	HP(HR)007

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 1 – HP004 – 0.00m to 1.50m bgl

Client	EDF
Project	2372536-Rosefield Solar Farm
Title	HP004

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 2 – HP004 – 0.00m to 1.50m bgl

Client	EDF
Project	2372536-Rosefield Solar Farm
Title	HP004

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 3 – HP004 – 0.00m to 1.50m bgl (Spoil)

Client	EDF
Project	2372536-Rosefield Solar Farm
Title	HP004

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 1 – HP005 – 0.00m to 0.00m bgl

PHOTOGRAPH 2 – HP005 – 0.00m to 0.00m bgl (Spoil)

Client	EDF
Project	2372536-Rosefield Solar Farm
Title	HP005

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 3 – HP005 – 0.00m bgl

Client	EDF
Project	2372536-Rosefield Solar Farm
Title	HP005

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 1 – HP006 – 0.00m to 1.50m bgl

Client	EDF
Project	2372536-Rosefield Solar Farm
Title	HP006

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 2 – HP006 – 0.00m to 1.50m bgl (Spoil)

Client	EDF
Project	2372536-Rosefield Solar Farm
Title	HP006

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 3 – HP006 – 0.00m to 1.50m bgl (Spoil)

Client	EDF
Project	2372536-Rosefield Solar Farm
Title	HP006

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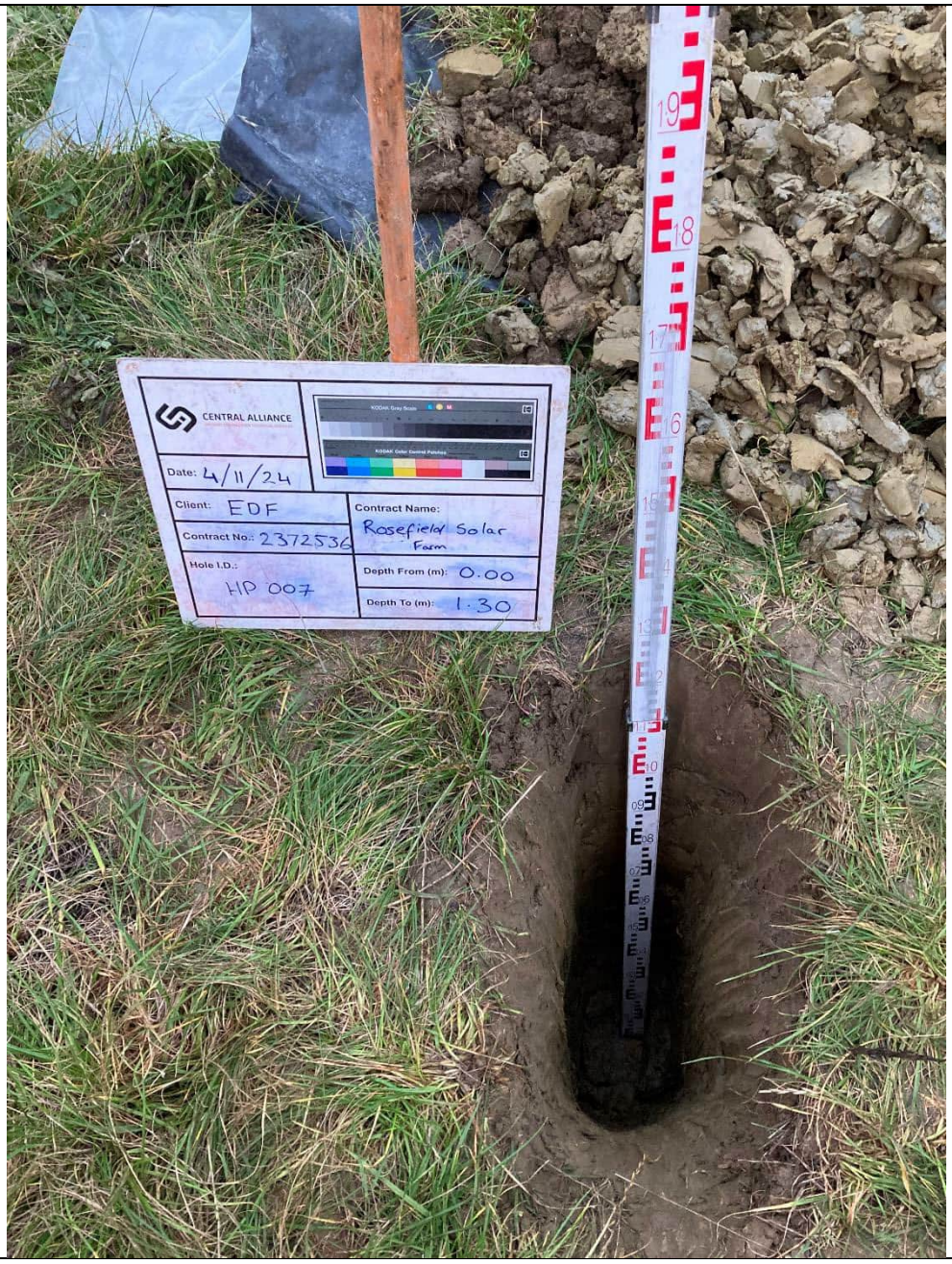
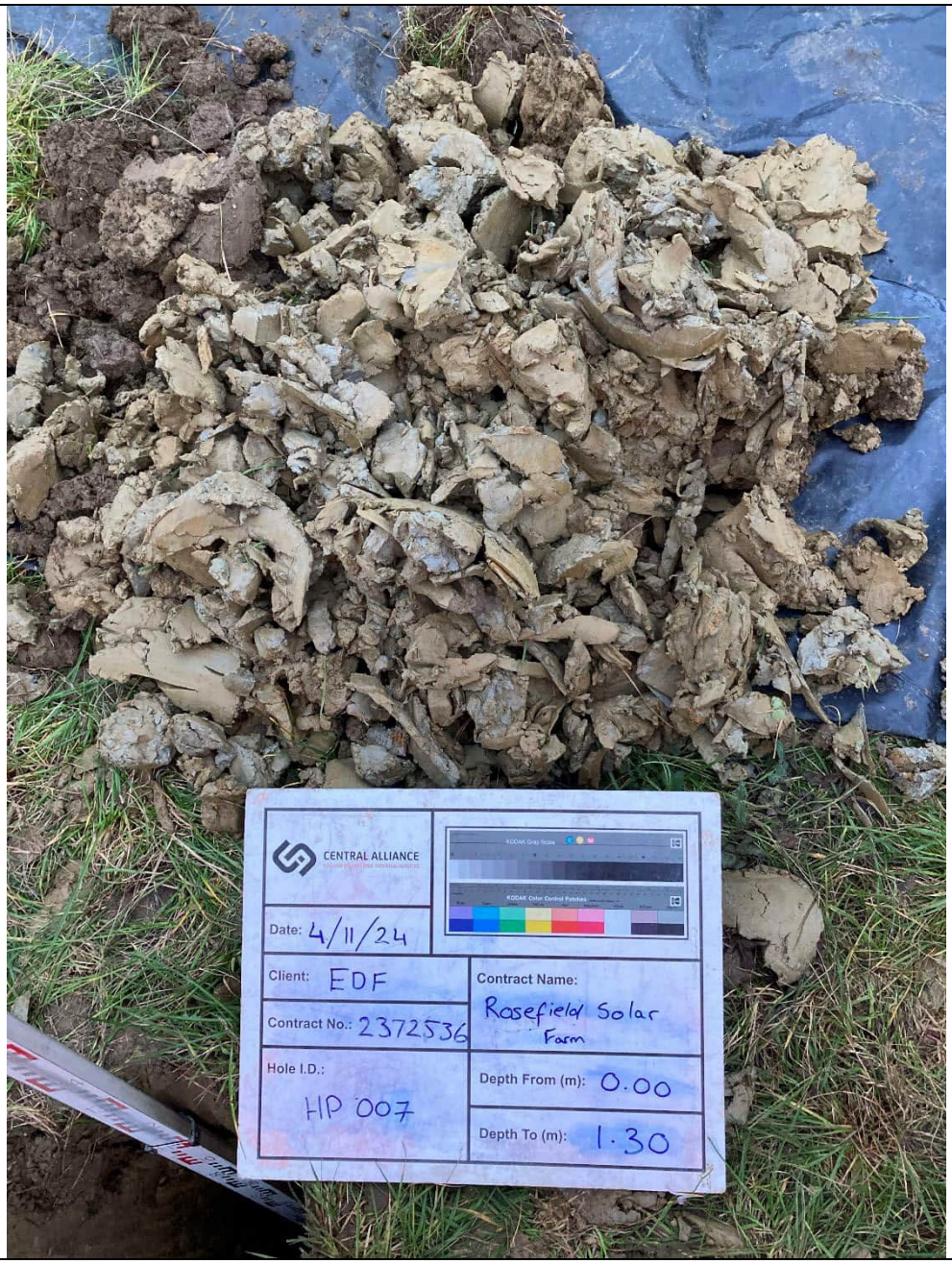
GROUND ENGINEERING TECHNICAL SERVICES



PHOTOGRAPH 1 – HP007 – 0.00m to 1.30m bgl

Client	EDF
Project	2372536 – Rosefield Solar Farm
Title	HP007

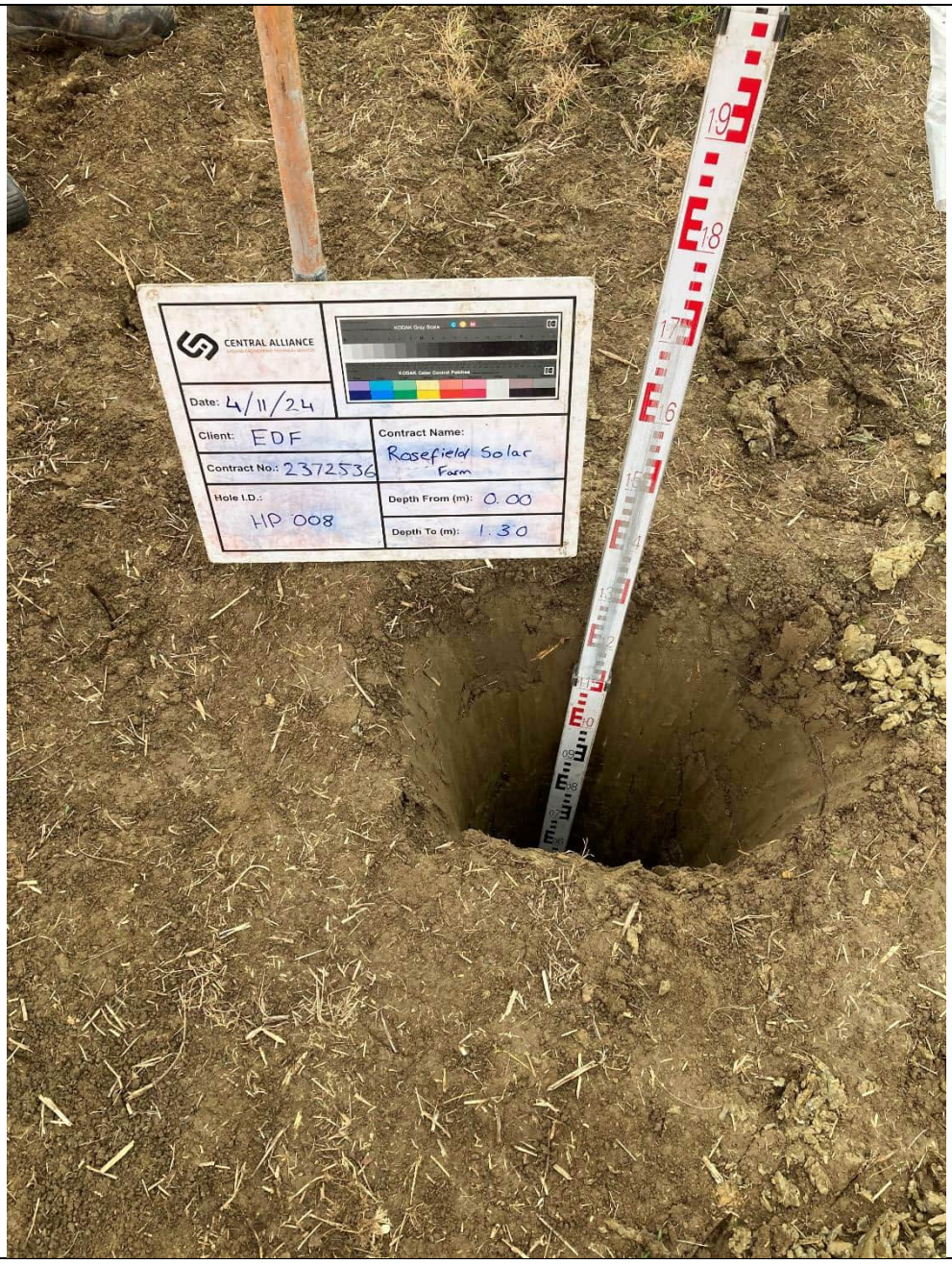
CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES



PHOTOGRAPH 2 – HP007 – 0.00m to 1.30m bgl (Spoil)

Client	EDF
Project	2372536 – Rosefield Solar Farm
Title	HP007

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES



PHOTOGRAPH 1 – HP008 – 0.00m to 1.30m bgl

Client	EDF
Project	2372536-Rosefield Solar Farm
Title	HP008

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 2 – HP008 – 0.00m to 1.30m bgl (Spoil)

Client	EDF
Project	2372536-Rosefield Solar Farm
Title	HP008

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 1 – HP(C)010 – 0.00m to 1.50m bgl

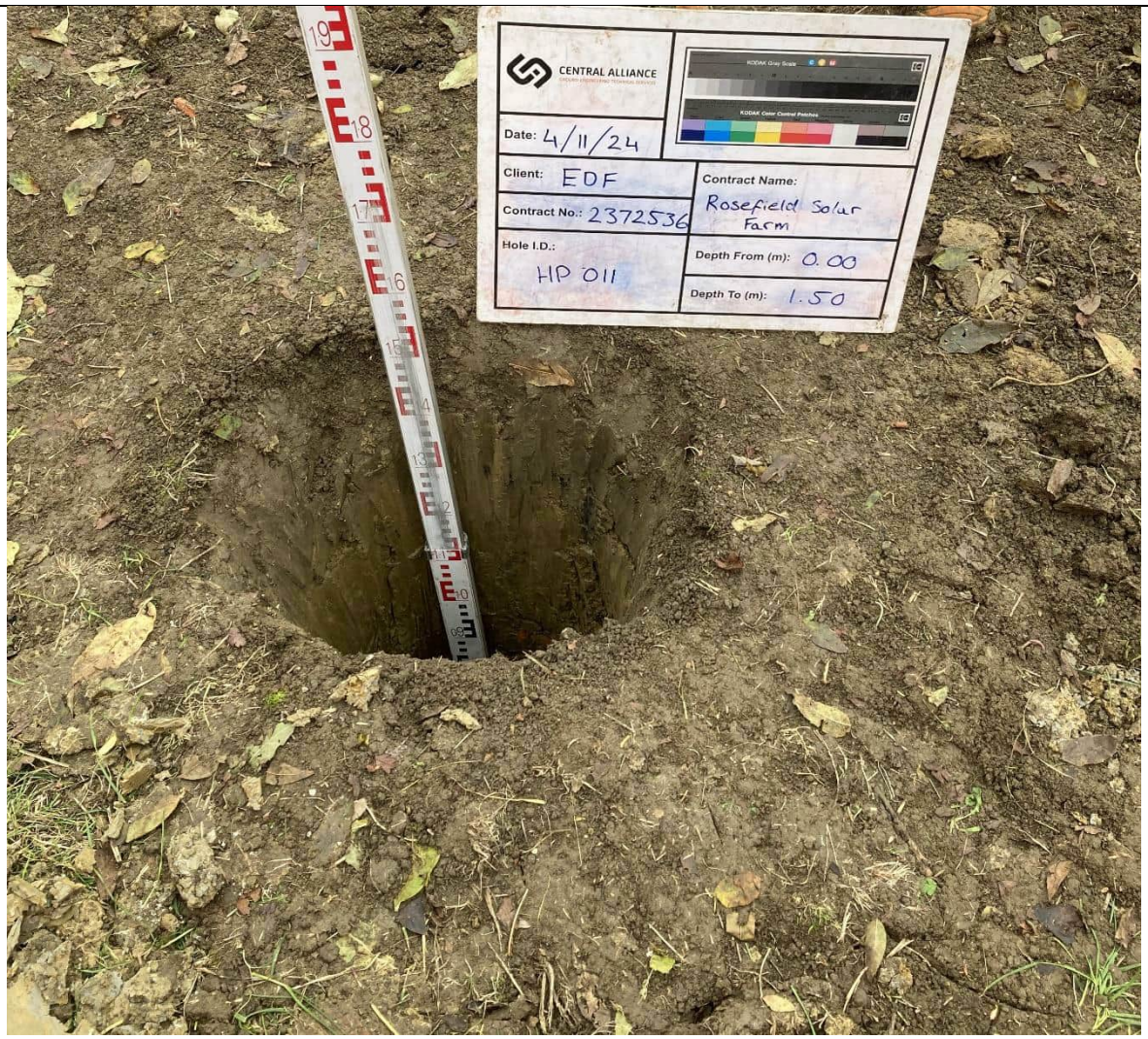
Client	EDF
Project	2372536-Rosefield Solar Farm
Title	HP(C)010

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 2 – HP(C)010 – 0.00m to 1.50m bgl (Spoil)

Client	EDF
Project	2372536-Rosefield Solar Farm
Title	HP(C)010

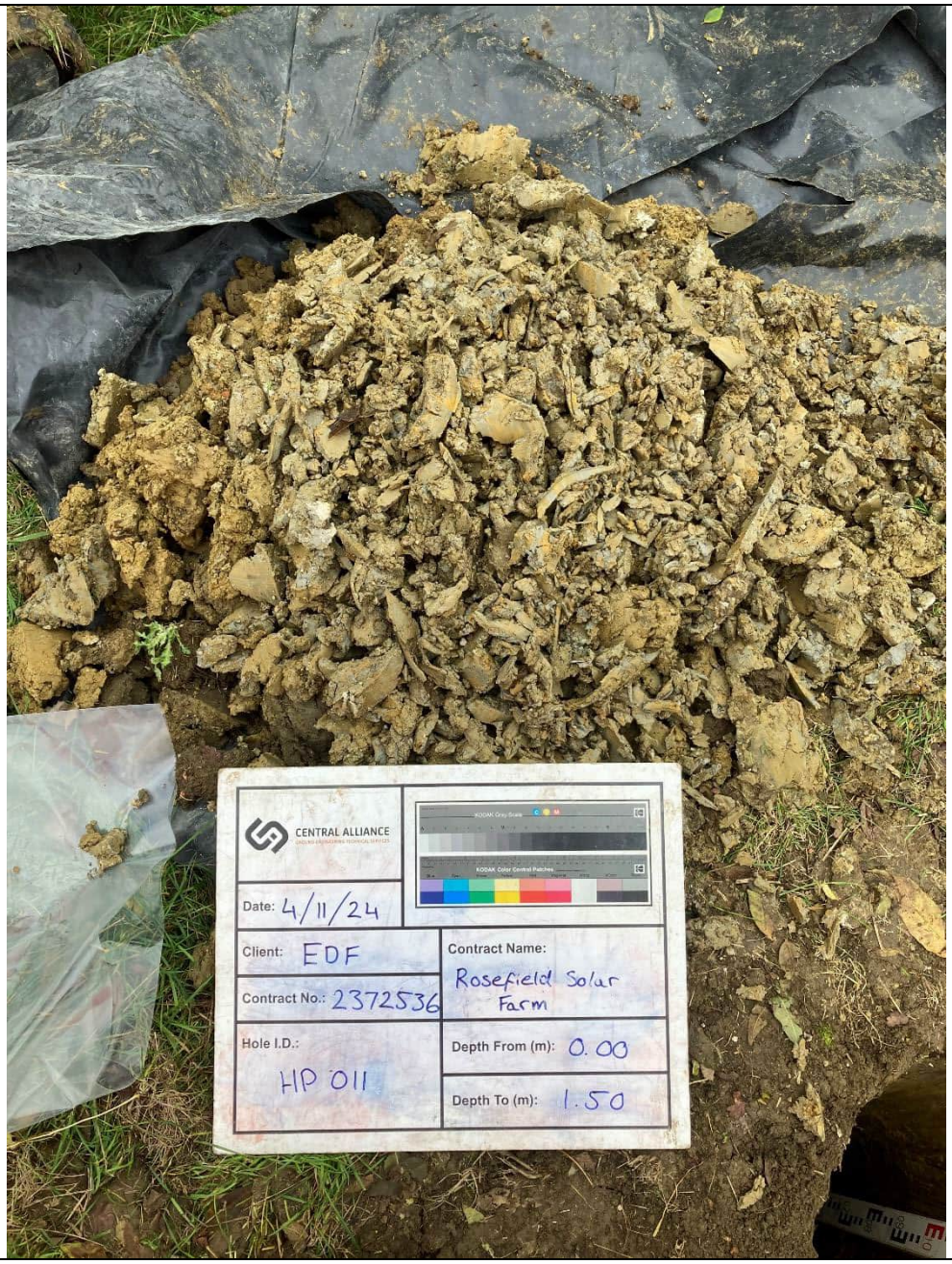
CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES



PHOTOGRAPH 1 – HP011 – 0.00m to 1.50m bgl

Client	EDF
Project	2372536-Rosefield Solar Farm
Title	HP011

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES



PHOTOGRAPH 2 – HP011 – 0.00m to 1.50m bgl

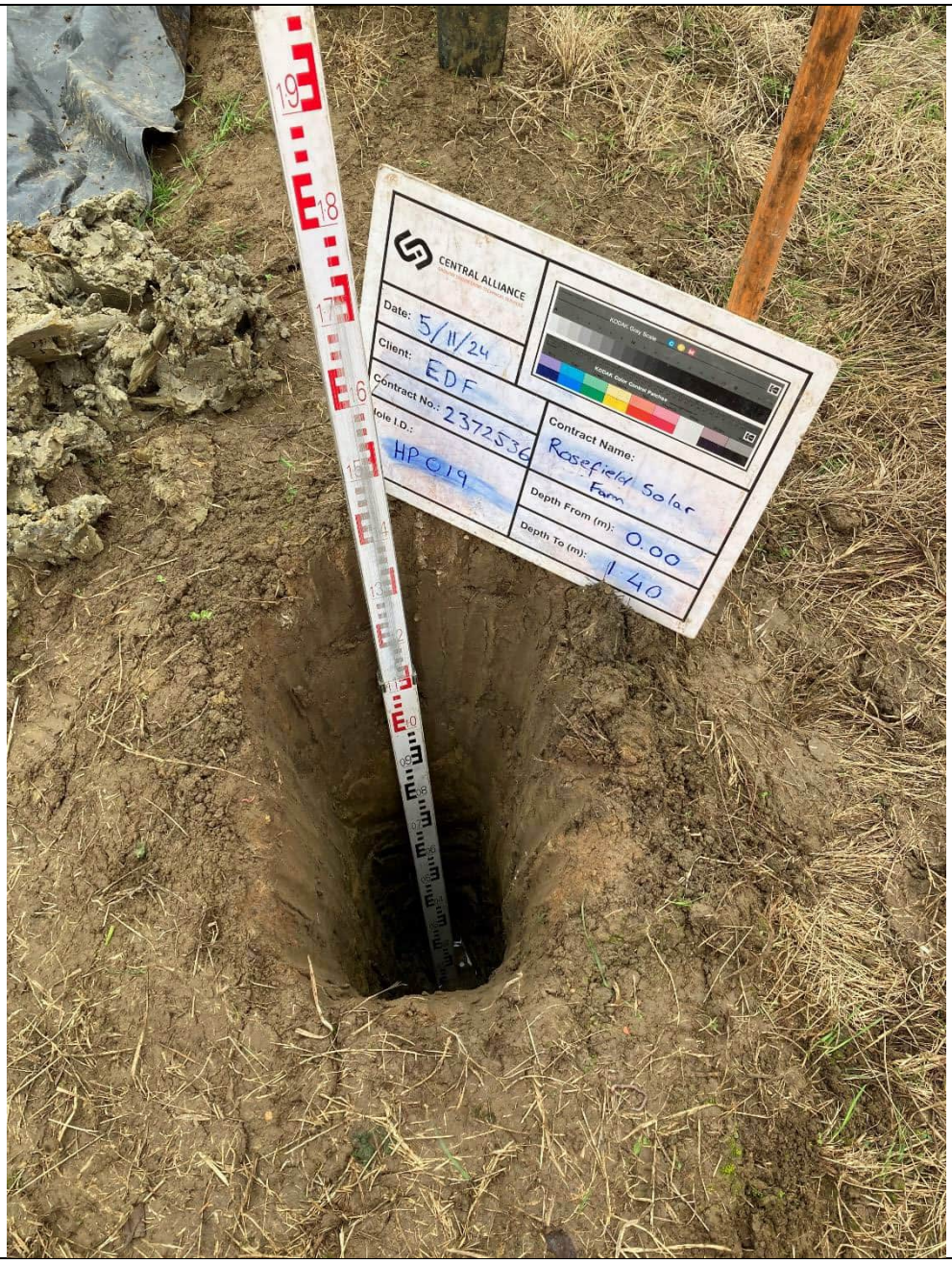
Client	EDF	CENTRAL ALLIANCE GROUND ENGINEERING TECHNICAL SERVICES
Project	2372536-Rosefield Solar Farm	
Title	HP011	

PHOTOGRAPH 1 – HP012 – 0.00m to 1.50m bgl

Client	EDF
Project	2372536-Rosefield Solar Farm
Title	HP012

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 2 – HP012 – 0.00m to 1.50m bgl (Spoil)



PHOTOGRAPH 1 – HP019 – 0.00m to 1.40m bgl

Client	EDF
Project	2372536-Rosefield Solar Farm
Title	HP019

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 2 – HP019 – 0.00m to 1.40m bgl (Spoil)

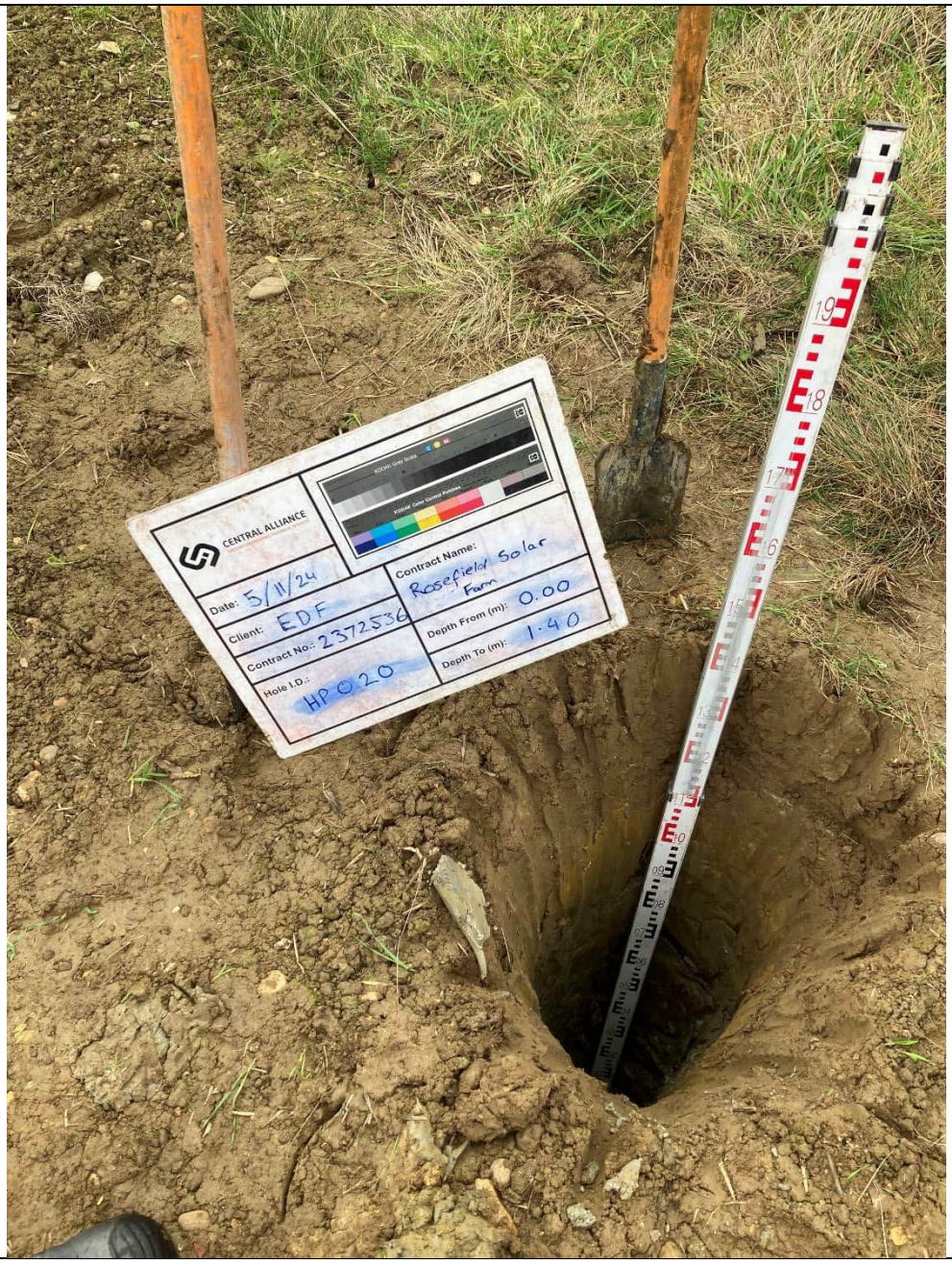
Client	EDF
Project	2372536-Rosefield Solar Farm
Title	HP019

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 2 – HP019 – 0.00m to 1.40m bgl

Client	EDF
Project	2372536-Rosefield Solar Farm
Title	HP019

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES



PHOTOGRAPH 1 – HP020 – 0.00m to 1.20m bgl

Client	EDF
Project	2372536-Rosefield Solar Farm
Title	HP020

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 2 – HP020 – 0.00m to 1.20m bgl

Client	EDF
Project	2372536-Rosefield Solar Farm
Title	HP020

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 3 – HP020 – 0.00m to 1.20m bgl

Client	EDF
Project	2372536-Rosefield Solar Farm
Title	HP020

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 1 – HP – 0.00m to 1.50m bgl

Client	EDF
Project	2372536-Rosefield Solar Farm
Title	HP021

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 2 – HP – 0.00m to 1.50m bgl (Spoil)

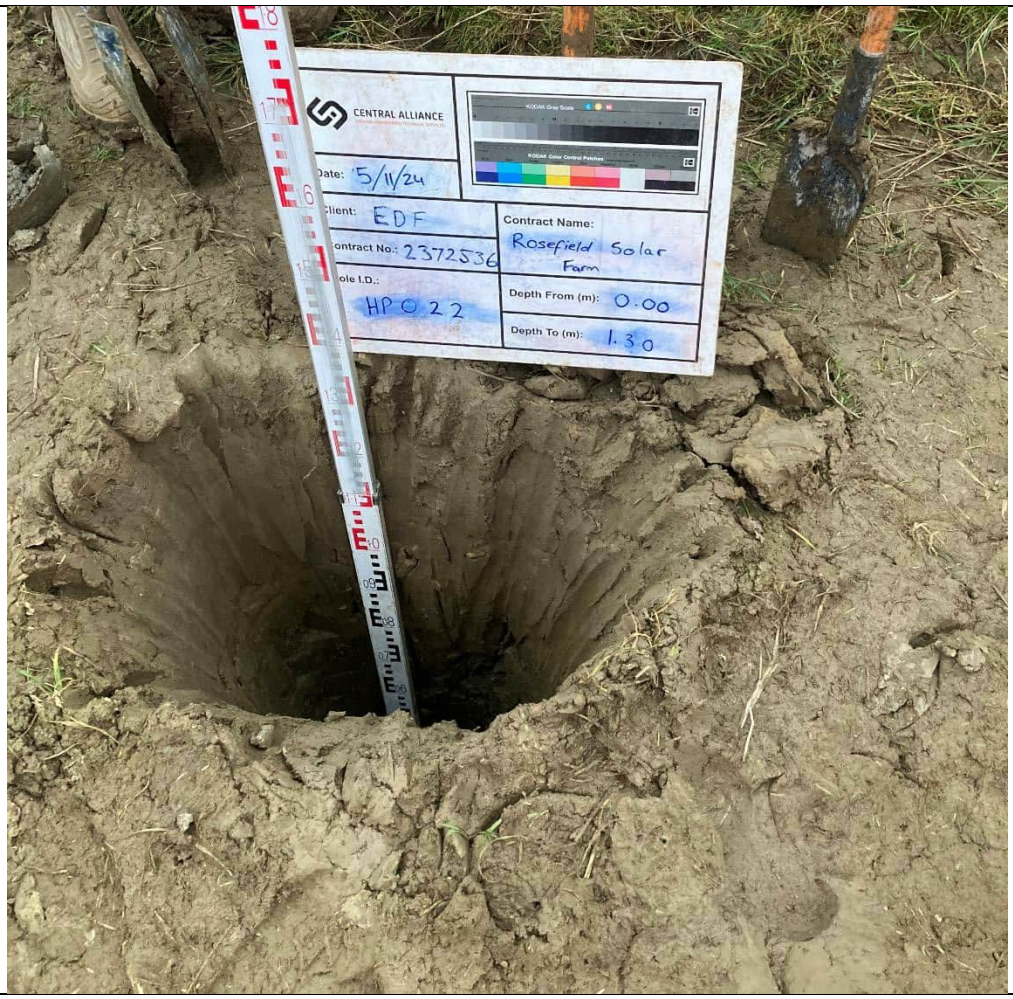
Client	EDF
Project	2372536-Rosefield Solar Farm
Title	HP021

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 3 – HP – 0.00m to 1.50m bgl

Client	EDF
Project	2372536-Rosefield Solar Farm
Title	HP021

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES



PHOTOGRAPH 1 – HP022 – 0.00m to 1.30m bgl

Client	EDF
Project	2372536-Rosefield Solar Farm
Title	HP022

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 2 – HP022 – 0.00m to 1.030m bgl (Spoil)

Client	EDF
Project	2372536-Rosefield Solar Farm
Title	HP022

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 3 – HP022 – 0.00m to 1.30m bgl

Client	EDF
Project	2372536-Rosefield Solar Farm
Title	HP022

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 1 – HP025 – 0.00m to 1.40m bgl

Client	EDF
Project	2372536-Rosefield Solar Farm
Title	HP025

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 2 – HP025 – 0.00m to 1.40m bgl (Spoil)

PHOTOGRAPH 3 – HP025 – 0.00m to 1.40m bgl

Client	EDF
Project	2372536-Rosefield Solar Farm
Title	HP025

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 1 – HP026 – 0.00m to 1.50m bgl

Client	EDF
Project	2372536-Rosefield Solar Farm
Title	HP026

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 1 – HP027 – 0.00m to 1.50m bgl

Client	EDF
Project	2372536-Rosefield Solar Farm
Title	HP027

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 1 – HPC007 – 0.00m to 1.50m bgl

Client	EDF
Project	2372536-Rosefield Solar Farm
Title	HPC007

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 2 – HPC007 – 0.00m to 1.50m bgl (Spoil)

Client	EDF
Project	2372536-Rosefield Solar Farm
Title	HPC007

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 1 – TP(C)001 – 0.00m to 3.00m bgl

Client	EDF
Project	2372536- Rosefield Solar Farm
Title	TP(C)001

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 2 – TP(C)001 – 0.00m to 3.00m bgl

Client	EDF
Project	2372536- Rosefield Solar Farm
Title	TP(C)001

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 3 – TP(C)001 – 0.00m to 3.00m bgl

Client	EDF
Project	2372536- Rosefield Solar Farm
Title	TP(C)001

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 4 – TP(C)001 – 0.00m to 3.00m bgl (Spoil)

Client	EDF
Project	2372536- Rosefield Solar Farm
Title	TP(C)001

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 1 – TP014 – 0.00m to 0.00m bgl

Client	EDF
Project	2372536-Rosefield Solar Farm
Title	TP014

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 2 – TP014 – 0.00m to 0.00m bgl

Client	EDF
Project	2372536-Rosefield Solar Farm
Title	TP014

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 3 – TP014 – 0.00m to 0.00m bgl

Client	EDF
Project	2372536-Rosefield Solar Farm
Title	TP014

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 4 – TP014 – 0.00m to 0.00m bgl

PHOTOGRAPH 5 – TP014 – 0.00m to 0.00m bgl

Client	EDF
Project	2372536-Rosefield Solar Farm
Title	TP014

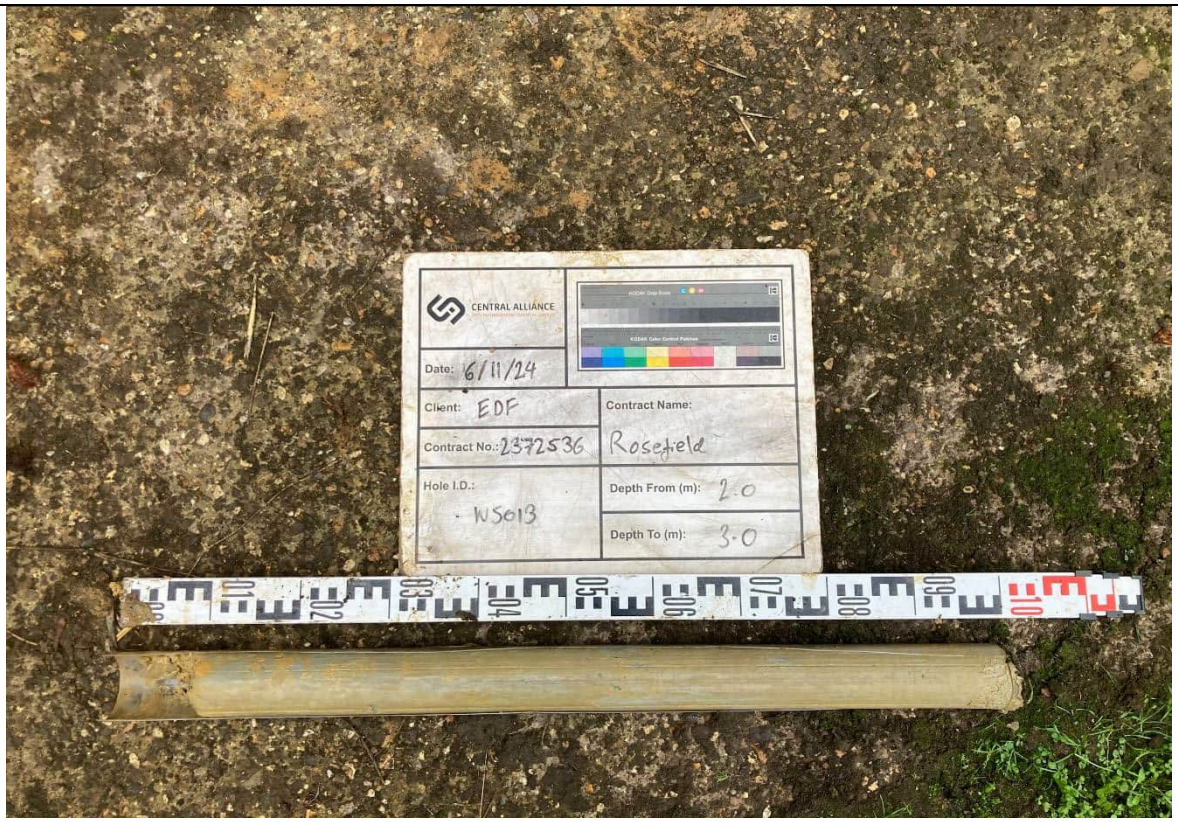
CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 1 – WS013 – 0.00m to 1.20m bgl

PHOTOGRAPH 2 – WS013 – 1.20m to 2.00m bgl

Client	EDF
Project	2372536-Rosefield Solar Farm
Title	WS013

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES



PHOTOGRAPH 3 – WS013 – 2.00m to 3.00m bgl

PHOTOGRAPH 4 – WS013 – 3.00m to 4.00m bgl

Client	EDF
Project	2372536-Rosefield Solar Farm
Title	WS013

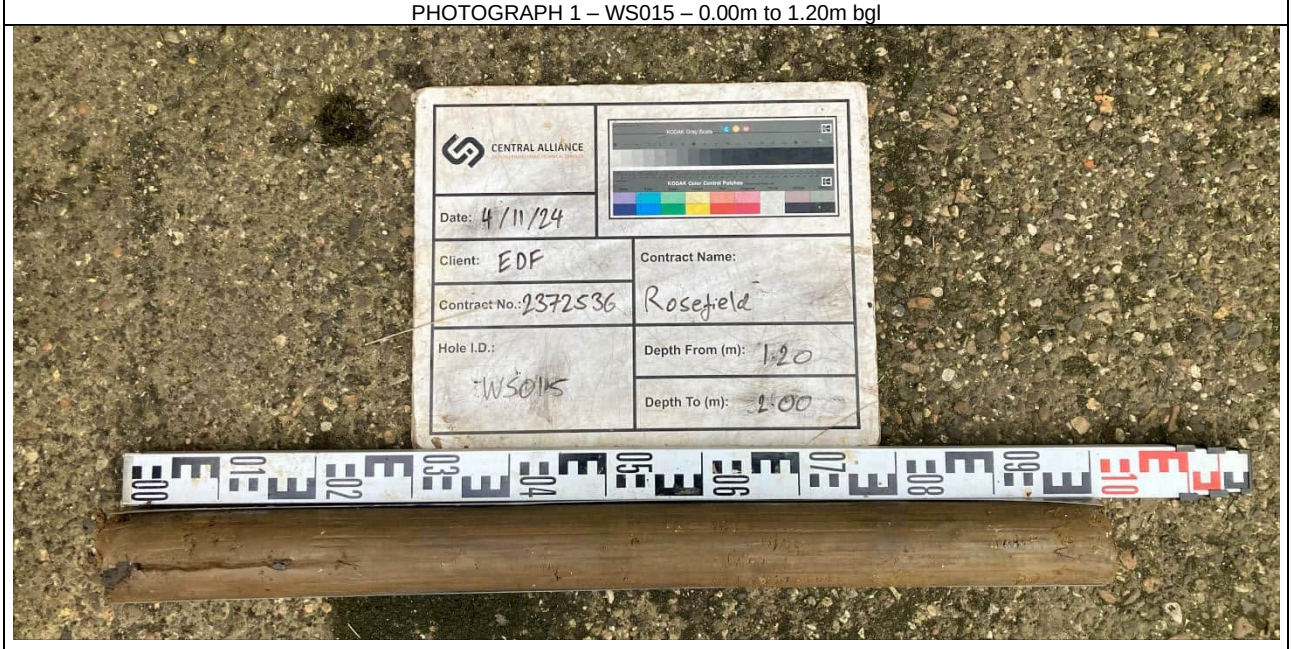
CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 5 – WS013 – 4.00m to 5.00m bgl

Client	EDF
Project	2372536-Rosefield Solar Farm
Title	WS013

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 1 – WS015 – 0.00m to 1.20m bgl



PHOTOGRAPH 2 – WS015 – 1.20m to 2.00m bgl

Client	EDF
Project	2372536 – Rosefield Solar Farm
Title	WS015

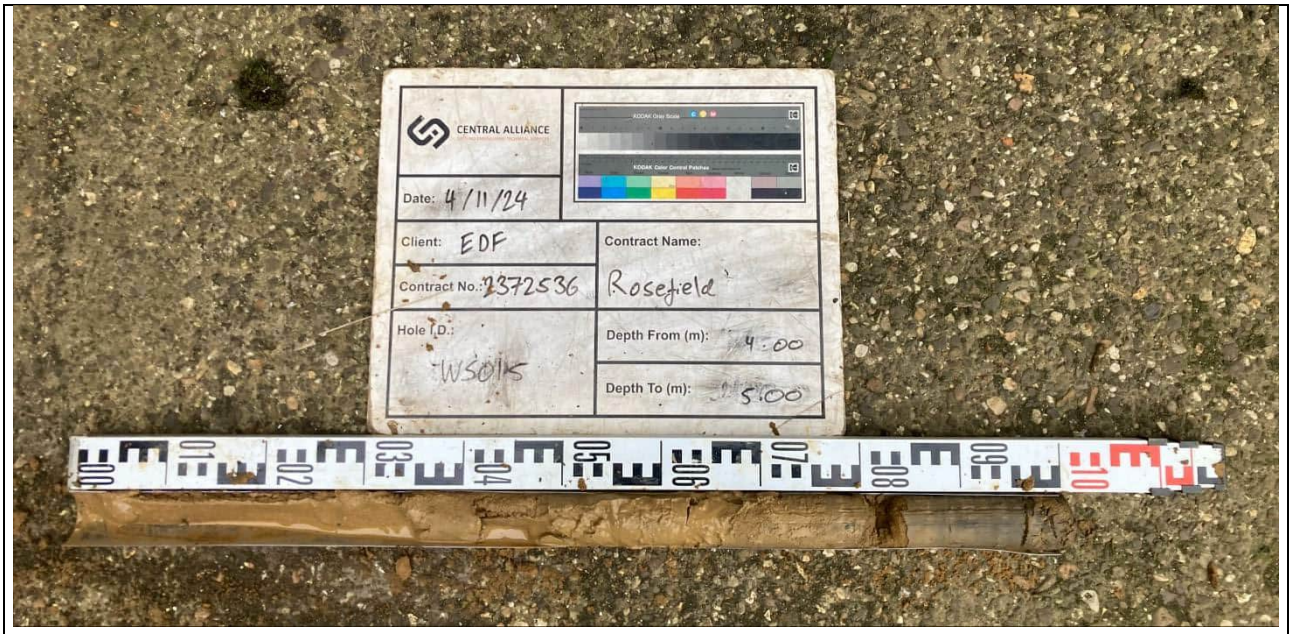
CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 3 – WS015 – 2.00m to 3.00m bgl

PHOTOGRAPH 4 – WS015 – 3.00m to 4.00m bgl

Client	EDF
Project	2372536 – Rosefield Solar Farm
Title	WS015

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES



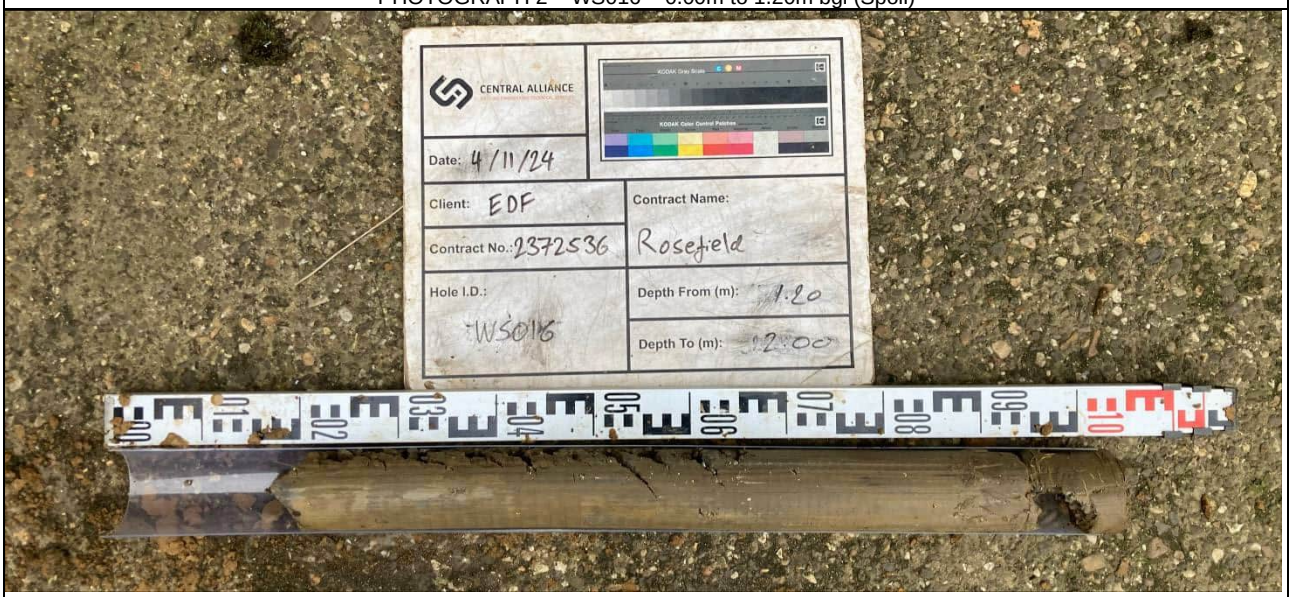
PHOTOGRAPH 5 – WS015 – 4.00m to 5.00m bgl

PHOTOGRAPH 1 – WS016 – 0.00m to 1.20m bgl

Client	EDF
Project	2372536 – Rosefield Solar Farm
Title	WS016

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 2 – WS016 – 0.00m to 1.20m bgl (Spoil)



PHOTOGRAPH 3 – WS016 – 1.20m to 2.00m bgl

Client	EDF
Project	2372536 – Rosefield Solar Farm
Title	WS016

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 4 – WS016 – 2.00m to 3.00m bgl

PHOTOGRAPH 5 – WS016 – 3.00m to 3.80m bgl

Client	EDF
Project	2372536 – Rosefield Solar Farm
Title	WS016

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 1 – WS017 – 1.20m to 2.00m bgl

PHOTOGRAPH 2 – WS017 – 2.00m to 3.00m bgl

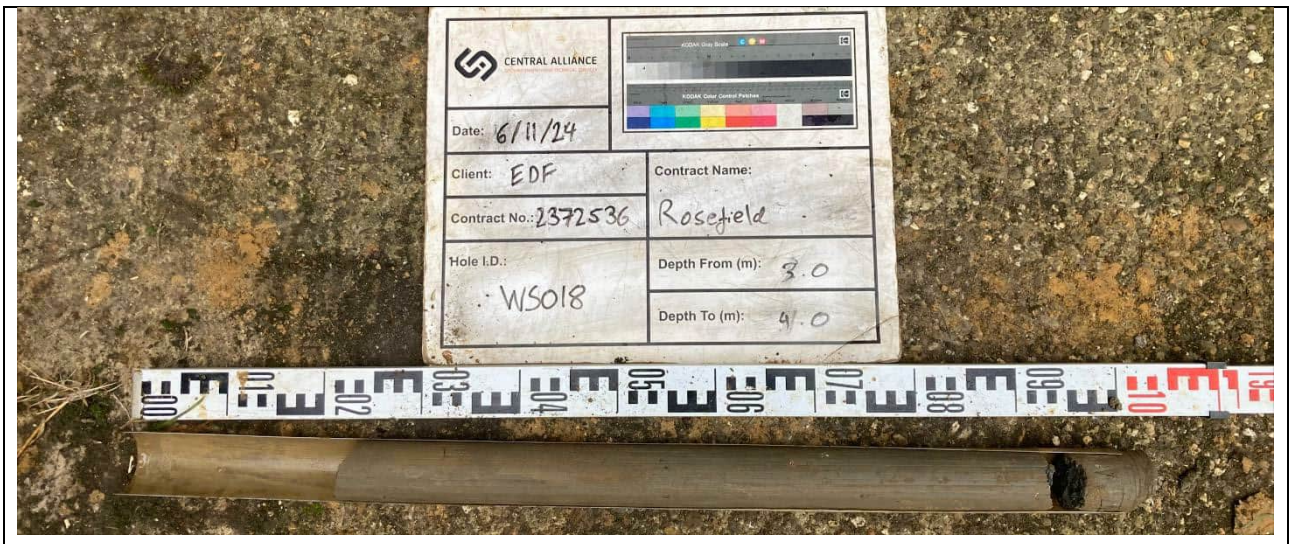
Client	EDF
Project	2372536-Rosefield Solar Farm
Title	WS017

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 3 – WS017 – 3.00m to 4.00m bgl

PHOTOGRAPH 1 – WS018 – 1.20m to 2.00m bgl

PHOTOGRAPH 2 – WS018 – 2.00m to 3.00m bgl



PHOTOGRAPH 3 – WS018 – 3.00m to 4.00m bgl

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

Appendix C
Thermal Resistivity Test Results

17 January 2025
2372536 – Rosefield Solar Farm

STRUCTURAL SOILS LTD

INSITU TESTING REPORT

1774

Report No. 785676R.01(00) Office Location: Castleford

Date 11-November-2024 Contract: Land West of Calvert

Client Address
Central Alliance,
Alliance House,
South Park Way,
Wakefield 41 Business Park,
Wakefield,
WF2 0XJ

For the Attention of: [redacted]

Order received	01-November-2024	Client Reference	None
Testing Started	06-November-2024	Client Order No.	None
Testing Completed	08-November-2024	Instruction Type	Written

Tests marked 'Not UKAS Accredited' in this report are not included in the UKAS Accreditation Schedule for our Laboratory.

UKAS Accredited Tests

* 15 no. In-situ Thermal Resistivity Tests in accordance with IEEE 442:2017

Not UKAS Accredited Tests

The results represent the ground conditions at the specified locations and depths at the time of testing.

Please Note: Remaining samples will be retained for a period of one month from today and will then be disposed of .
Test were undertaken on samples 'as received' unless otherwise stated.
Opinions and interpretations expressed in this report are outside the scope of accreditation for this laboratory.
Results relate only to items tested

Structural Soils Ltd, The Potteries, Pottery Street, Castleford, WF10 1NJ Tel.01977552255, email [redacted]@soils.co.uk

TESTING VERIFICATION CERTIFICATE

1774

The test results included in this report are certified as:-

ISSUE STATUS: **FINAL**

In accordance with the Structural Soils Ltd Laboratory Quality Management System, results sheets and summaries of results issued by the laboratory are checked by an approved signatory. The integrity of the test data and results are ensured by control of the computer system employed by the laboratory as part of the Software Verification Program as detailed in the Laboratory Quality Manual.

This testing verification certificate covers all testing compiled on or before the following datetime: **11/11/2024 12:01:52**.

Testing reported after this date is not covered by this Verification Certificate.

Approved Signatory
[redacted] **(National Manager)**

(Head Office)
Bristol Laboratory
Unit 1A, Princess Street
Bedminster
Bristol
BS3 4AG

Castleford Laboratory
The Potteries, Pottery Street
Castleford
West Yorkshire
WF10 1NJ

Hemel Laboratory
18 Frogmore Road
Hemel Hempstead
Hertfordshire
HP3 9RT

Tunbridge Wells Laboratory
Bridge House, North Farm Road
Tunbridge Wells
Kent
TN2 3DR

STRUCTURAL SOILS LTD	Contract: **Land West of Calvert**	Job No: **785676**

SUMMARY OF IN-SITU THERMAL RESISTIVITY TESTS

In accordance with IEEE 442:2017

Exploratory Position	Location	Depth of Probe (m)	Date of Test	Soil Temp (°C)	Average Thermal Conductivity (W/K.m)	SD Thermal Conductivity (W/K.m)	Average Thermal Resistivity (K.cm/W)	SD Thermal Resistivity (K.cm/W)	Weather Conditions	Sample Description
TP002	-	0.30	06/11/24	11.8	1.495	0.017	66.89	0.76	Overcast, 10.0°C	Yellowish light brown CLAY
TP002	-	0.45	06/11/24	12.3	1.699	0.037	58.86	1.28	Overcast, 10.0°C	Yellowish light brown CLAY
TP002	-	0.70	06/11/24	12.8	2.661	0.119	37.58	1.68	Overcast, 11.0°C	Yellowish light brown CLAY
TP003	-	0.40	06/11/24	12.1	1.623	0.051	61.61	1.94	Overcast, 11.0°C	Yellowish light brown CLAY
TP003	-	0.65	06/11/24	12.4	1.870	0.045	53.48	1.29	Overcast, 11.0°C	Yellowish light brown CLAY
TP003	-	0.80	06/11/24	12.5	1.852	0.050	54.00	1.46	Overcast, 11.0°C	Yellowish light brown CLAY
TP014	-	0.30	07/11/24	11.7	1.651	0.024	60.57	0.88	Overcast, 11.0°C	Dark Brown CLAY
TP014	-	0.50	07/11/24	12.1	1.750	0.031	57.14	1.01	Overcast, 11.0°C	Dark Brown CLAY

STRUCTURAL SOILS
1a Princess Street
Bedminster
Bristol
BS3 4AG

Compiled By [redacted]

Date: **11.11.24**

Contract Ref: **785676**

Contract: **Land West of Calvert**

SUMMARY OF IN-SITU THERMAL RESISTIVITY TESTS

In accordance with IEEE 442:2017

Exploratory Position	Location	Depth of Probe (m)	Date of Test	Soil Temp (°C)	Average Thermal Conductivity (W/K.m)	SD Thermal Conductivity (W/K.m)	Average Thermal Resistivity (K.cm/W)	SD Thermal Resistivity (K.cm/W)	Weather Conditions	Sample Description
TP014	-	0.80	07/11/24	12.4	2.403	0.047	41.61	0.81	Overcast, 11.0°C	Orangish brown CLAY
TPC001	-	0.30	07/11/24	12.0	1.742	0.026	57.41	0.86	Overcast, 12.0°C	Dark brown CLAY
TPC001	-	0.60	07/11/24	12.4	1.298	0.046	77.04	2.73	Overcast, 12.0°C	Dark brown CLAY
TPC001	-	0.80	07/11/24	12.8	1.365	0.008	73.26	0.43	Overcast, 12.0°C	Orangish brown gravelly sandy CLAY
TPC011	-	0.30	08/11/24	11.2	1.801	0.021	55.52	0.65	Overcast, 8.0°C	Light brown CLAY
TPC011	-	0.50	08/11/24	11.7	1.442	0.008	69.35	0.38	Overcast, 8.0°C	Yellowish light brown CLAY
TPC011	-	0.80	08/11/24	12.2	1.501	0.027	66.62	1.20	Overcast, 9.0°C	Yellowish light brown CLAY

STRUCTURAL SOILS
1a Princess Street
Bedminster
Bristol
BS3 4AG

Compiled By: [redacted]

Date: **11.11.24**

Contract: **Land West of Calvert**

Contract Ref: **785676**

AGS

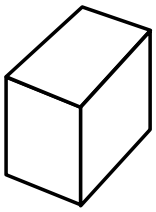
CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

Appendix D
Soakaway Test Results

SOAKAWAY TEST - DATA SHEET

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

Job Name	Rosefield		Job Number	2372536	
Trial Pit Numbers:		TP002	Test Numbers	1	06/11/2024



Orientation

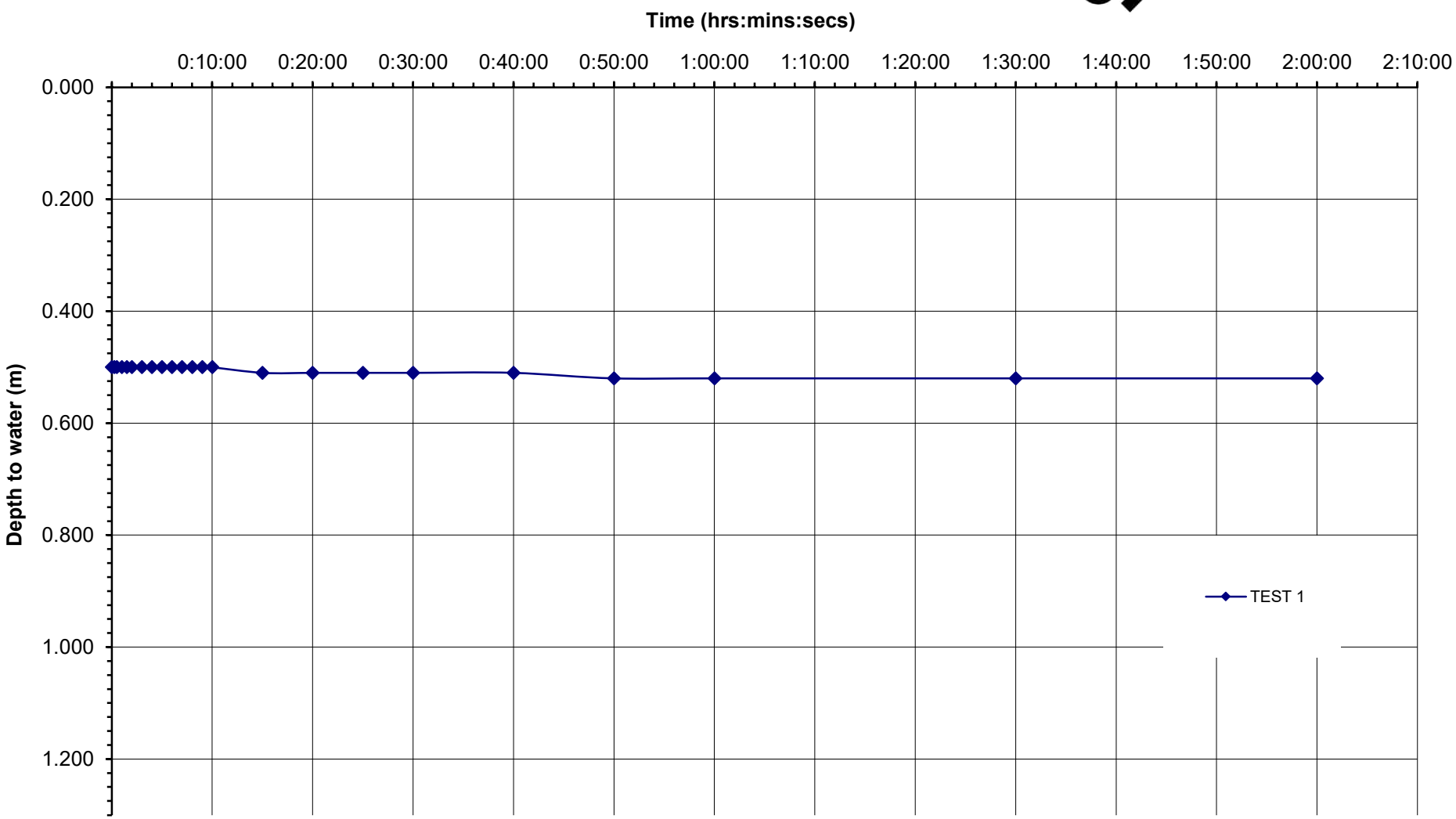
Test 1		**Test 2**		**Test 3**			
Trial Pit Dimensions		Trial Pit Dimensions		Trial Pit Dimensions		Trial Pit Dimensions	
Length:	3.00 m	Length:		Length:		Length:	
Width:	0.50 m	Width:		Width:		Width:	
Depth:	1.50 m	Depth:		Depth:		Depth:	
Effective Depth:	1.00 m	Effective Depth:		Effective Depth:		Effective Depth:	

Test Data **Test Data** **Test Data** **Test Data**

Time (hh:mm:ss)	Depth (mbgl)	Time (hh:mm:ss)	Depth (mbgl)	Time (hh:mm:ss)	Depth (mbgl)	Time (hh:mm:ss)	Depth (mbgl)
0:00:00	0.500	0:00:00		0:00:00		0:00:00	
0:00:15	0.500	0:00:15		0:00:15		0:00:15	
0:00:30	0.500	0:00:30		0:00:30		0:00:30	
0:01:00	0.500	0:01:00		0:01:00		0:01:00	
0:01:30	0.500	0:01:30		0:01:30		0:01:30	
0:02:00	0.500	0:02:00		0:02:00		0:02:00	
0:03:00	0.500	0:03:00		0:03:00		0:03:00	
0:04:00	0.500	0:04:00		0:04:00		0:04:00	
0:05:00	0.500	0:05:00		0:05:00		0:05:00	
0:06:00	0.500	0:06:00		0:06:00		0:06:00	
0:07:00	0.500	0:07:00		0:07:00		0:07:00	
0:08:00	0.500	0:08:00		0:08:00		0:08:00	
0:09:00	0.500	0:09:00		0:09:00		0:09:00	
0:10:00	0.500	0:10:00		0:10:00		0:10:00	
0:15:00	0.510	0:15:00		0:15:00		0:15:00	
0:20:00	0.510	0:20:00		0:20:00		0:20:00	
0:25:00	0.510	0:25:00		0:25:00		0:25:00	
0:30:00	0.510	0:30:00		0:30:00		0:30:00	
0:40:00	0.510	0:40:00		0:40:00		0:40:00	
0:50:00	0.520	0:50:00		0:50:00		0:50:00	
1:00:00	0.520	1:00:00		1:00:00		1:00:00	
1:30:00	0.520	1:30:00		1:30:00		1:30:00	
2:00:00	0.520	2:00:00		2:00:00		2:00:00	
3:00:00		3:00:00		3:00:00		3:00:00	
4:00:00		4:00:00		4:00:00		4:00:00	
5:00:00		5:00:00		5:00:00		5:00:00	
6:00:00		6:00:00		6:00:00		6:00:00	
7:00:00		7:00:00		7:00:00		7:00:00	
8:00:00		8:00:00		8:00:00		8:00:00	

Soakaway Test

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES



SOAKAWAY TEST - CALCULATION SHEET
Position:
Nomenclature:

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

Symbol:	Function:	Units:
f	Soil Infiltration Rate	m/s
V_{p75-25}	Effective storage volume of water in the trial pit between 75% and 25% effective depth	m^3
a_{s50}	Internal surface area of the trial pit up to 50% effective depth and including the base area	m^2
t_{p75-25}	Time for the water level to fall from 75% to 25% effective depth	seconds
d_{eff}	Effective depth	m
$d_{eff75-25}$	Depth between 75% and 25% of the effective depth	m
a_{base}	Trial pit base area	m^2

Test	**Test 1**
d_{eff} =	1.00 m
0.75 d_{eff} =	0.75 m
0.25 d_{eff} =	0.25 m
$d_{eff75-25}$ =	0.50 m
a_{base} =	1.50 m
V_{p75-25} =	0.75 m
a_{s50} =	5.00 m

To calculate $t_{p75-25,}$ use the Depth v Time graphs and draw on a linear line of best fit.

Then work out the time it takes for the water level to drop by $d_{eff75-25}$

Enter the time (in minutes) below:

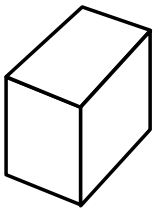
t_{p75-25} =	
t_{p75-25} =	
f =	

Total fall:	0.02 m
((d_{eff} - Total fall) / d_{eff}) x 100%	98.0%

SOAKAWAY TEST - DATA SHEET

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

Job Name	Rosefield		Job Number	2372536	
Trial Pit Numbers:		TP014	Test Numbers	1	07/11/2-24



Orientation

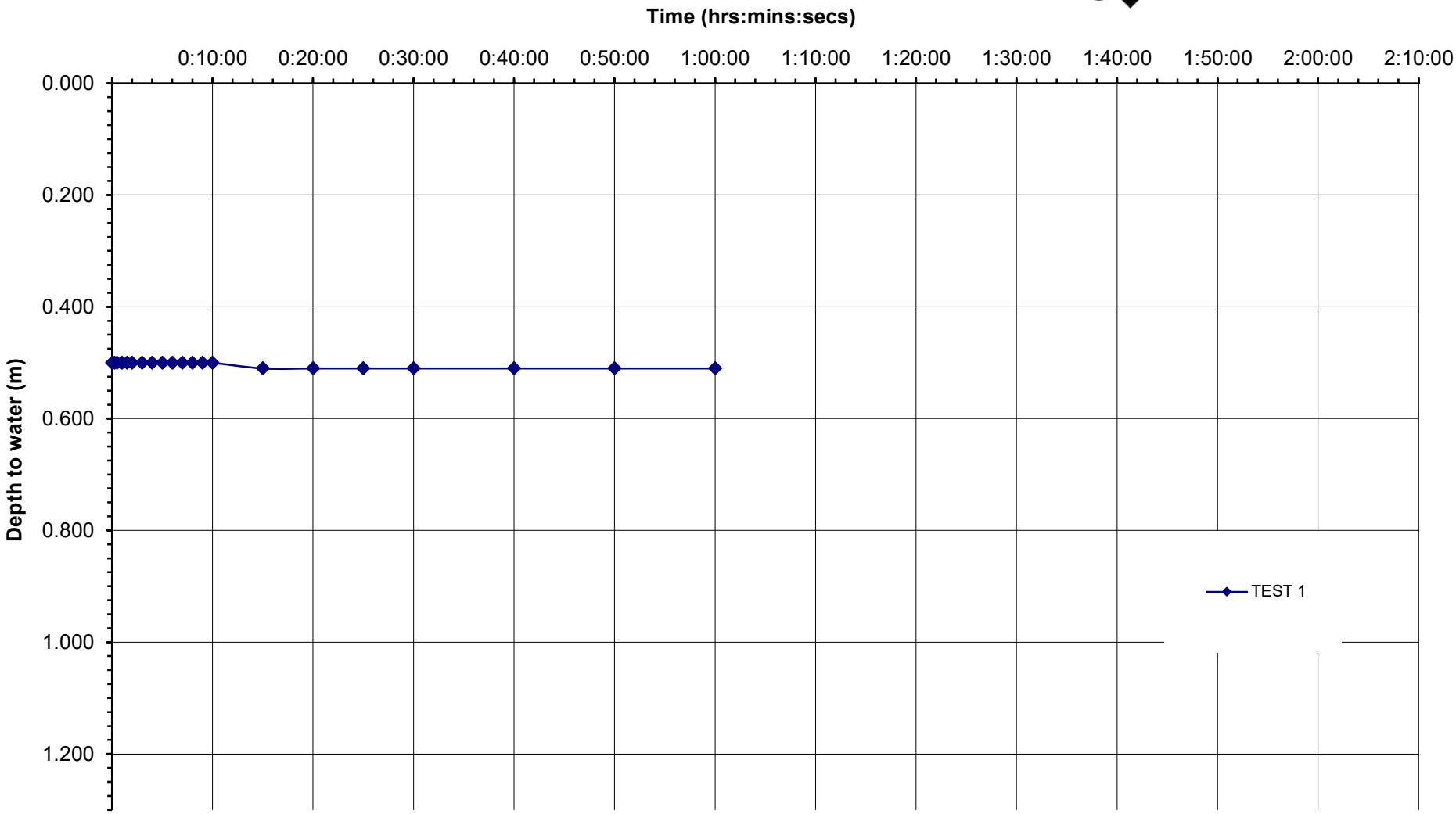
Test 1		**Test 2**		**Test 3**			
Trial Pit Dimensions		Trial Pit Dimensions		Trial Pit Dimensions		Trial Pit Dimensions	
Length:	2.85 m	Length:		Length:		Length:	
Width:	0.90 m	Width:		Width:		Width:	
Depth:	1.50 m	Depth:		Depth:		Depth:	
Effective Depth:	1.00 m	Effective Depth:		Effective Depth:		Effective Depth:	

Test Data **Test Data** **Test Data** **Test Data**

Time (hh:mm:ss)	Depth (mbgl)	Time (hh:mm:ss)	Depth (mbgl)	Time (hh:mm:ss)	Depth (mbgl)	Time (hh:mm:ss)	Depth (mbgl)
0:00:00	0.500	0:00:00		0:00:00		0:00:00	
0:00:15	0.500	0:00:15		0:00:15		0:00:15	
0:00:30	0.500	0:00:30		0:00:30		0:00:30	
0:01:00	0.500	0:01:00		0:01:00		0:01:00	
0:01:30	0.500	0:01:30		0:01:30		0:01:30	
0:02:00	0.500	0:02:00		0:02:00		0:02:00	
0:03:00	0.500	0:03:00		0:03:00		0:03:00	
0:04:00	0.500	0:04:00		0:04:00		0:04:00	
0:05:00	0.500	0:05:00		0:05:00		0:05:00	
0:06:00	0.500	0:06:00		0:06:00		0:06:00	
0:07:00	0.500	0:07:00		0:07:00		0:07:00	
0:08:00	0.500	0:08:00		0:08:00		0:08:00	
0:09:00	0.500	0:09:00		0:09:00		0:09:00	
0:10:00	0.500	0:10:00		0:10:00		0:10:00	
0:15:00	0.510	0:15:00		0:15:00		0:15:00	
0:20:00	0.510	0:20:00		0:20:00		0:20:00	
0:25:00	0.510	0:25:00		0:25:00		0:25:00	
0:30:00	0.510	0:30:00		0:30:00		0:30:00	
0:40:00	0.510	0:40:00		0:40:00		0:40:00	
0:50:00	0.510	0:50:00		0:50:00		0:50:00	
1:00:00	0.510	1:00:00		1:00:00		1:00:00	
1:30:00		1:30:00		1:30:00		1:30:00	
2:00:00		2:00:00		2:00:00		2:00:00	
3:00:00		3:00:00		3:00:00		3:00:00	
4:00:00		4:00:00		4:00:00		4:00:00	
5:00:00		5:00:00		5:00:00		5:00:00	
6:00:00		6:00:00		6:00:00		6:00:00	
7:00:00		7:00:00		7:00:00		7:00:00	
8:00:00		8:00:00		8:00:00		8:00:00	

Soakaway Test

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES



SOAKAWAY TEST - CALCULATION SHEET
Position:
Nomenclature:

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

Symbol:	Function:	Units:
f	Soil Infiltration Rate	m/s
V_{p75-25}	Effective storage volume of water in the trial pit between 75% and 25% effective depth	m^3
a_{s50}	Internal surface area of the trial pit up to 50% effective depth and including the base area	m^2
t_{p75-25}	Time for the water level to fall from 75% to 25% effective depth	seconds
d_{eff}	Effective depth	m
$d_{eff75-25}$	Depth between 75% and 25% of the effective depth	m
a_{base}	Trial pit base area	m^2

Test	**Test 1**
d_{eff} =	1.00 m
0.75 d_{eff} =	0.75 m
0.25 d_{eff} =	0.25 m
$d_{eff75-25}$ =	0.50 m
a_{base} =	2.57 m
V_{p75-25} =	1.28 m
a_{s50} =	6.32 m

To calculate $t_{p75-25,}$ use the Depth v Time graphs and draw on a linear line of best fit.

Then work out the time it takes for the water level to drop by $d_{eff75-25}$

Enter the time (in minutes) below:

t_{p75-25} =	
t_{p75-25} =	
f =	

Total fall:	-0.50 m
((d_{eff} - Total fall) / d_{eff}) x 100%	150.0%

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

Appendix E
Geotechnical Laboratory Testing Results

17 January 2025
2372536 – Rosefield Solar Farm

IAN FARMER ASSOCIATES

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Alliance House
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F.A.O. [redacted]

Final Test Report - 2282314 / 1

Site:	Rosefield Solar Farm
Job Number:	2282314
Originating Client:	EDF
Originating Reference:	2372536
Date Sampled:	Not Given
Date Scheduled:	05/12/2024
Date Testing Started:	06/12/2024
Date Testing Finished:	07/01/2025

Previous Reports		Amendments	Date Issued

Amendments:

Authorised By: [redacted]

Quality Supervisor

Report Issue Date: 07/01/2025

Site: Rosefield Solar Farm **Job Number:** 2282314

Client: EDF **Page:** 2

Determination of Water Content, Liquid Limit and Plastic Limit and Derivation of Plasticity and Liquidity Index

Borehole / Trial Pit	Depth (m)	Sample	Natural Water Content %	Sample Preparation Natural = Hand picked Sieved = Washed on 425µm			Liquid Limit %	Plastic Limit %	Plasticity Index %	Liquidity Index	Class	One-point PI Only		Description / Remarks
				Natural / Sieved	Passing %	Calc. WC %						Cone Penetration (mm)	Correction Factor	
HP(C)007	1.40	D4	19.3	Sieved	93	21	30	16	14	0.33	CL			Brown gravelly, sandy, silty CLAY
HP(C)010	1.00	D6	14.6	Sieved	52	28	45	19	26	0.34	CI			Brown gravelly, silty CLAY
HP(HR)004	0.50	D5	45.2	Natural	97	47	85	47	38	-0.01	MV			Brown clayey SILT
HP(HR)005	0.50	D5	21.3	Natural	69	31	58	23	35	0.22	CH			Brown gravelly, silty CLAY
HP(HR)006	0.50	D5	28.5	Natural	100	29	70	26	44	0.06	CH/CVO			Brown sandy, silty CLAY
HP(HR)007	0.50	D5	46.3	Natural	97	48	91	41	50	0.13	ME			Brown clayey SILT
HP007	0.40	D2	36.1	Natural	100	36	65	32	33	0.12	CH			Brown silty CLAY
HP008	1.30	D5	23.6	Natural	100	24	61	22	39	0.04	CH	20.1 20.1	0.999	Brown silty CLAY
HP012	1.30	D5	24.2	Natural	100	24	53	21	32	0.10	CH			Brown silty CLAY
HP019	1.40	D4	24.6	Natural	100	25	57	23	34	0.05	CH			Brown silty CLAY
HP020	0.90	D3	24.5	Natural	100	25	56	23	33	0.05	CH			Brown silty CLAY
HP021	1.40	D3	20.8	Natural	100	21	55	23	32	-0.07	CH			Brown silty CLAY
HP022	1.20	D3	30.2	Natural	100	30	67	26	41	0.10	CH			Brown silty CLAY
HP024	0.75	D5	24.3	Natural	100	24	65	22	43	0.05	CH			Brown sandy, silty CLAY
HP025	0.85	D4	18.9	Sieved	73	26	73	30	43	-0.10	CV			Btown gravelly, sandy, silty CLAY
HP025	1.40	D6	26.5	Natural	100	27	62	26	36	0.01	CH			Brown silty CLAY
HP026	1.50	D6	27.5	Natural	100	28	51	25	26	0.10	CH			Brown silty CLAY
HP027	1.50	D6	31.3	Natural	100	31	67	35	32	-0.12	MH	20.3 20.4	0.994	Brown sandy CLAY/SILT
TP(C)001	0.70	D3	40.5	Natural	100	41	77	37	40	0.09	MV			Brown SILT/CLAY
TP(C)001	1.90	D7	39.8	Natural	100	40	45	20	25	0.79	CI			Brown slightly gravelly, sandy, silty CLAY
TP(C)001	2.90	D9	23.9	Natural	100	24	61	28	33	-0.12	CH			Brown silty CLAY
TP(C)011	0.80	D3	26.9	Natural	100	27	67	26	41	0.02	CH			Brown silty CLAY
TP(C)011	1.90	D5	21.6	Sieved	94	23	48	22	26	0.04	CI			Brown silty CLAY
TP002	0.80	D3	33.5	Natural	100	34	82	30	52	0.07	CV			Brown silty CLAY

Method of Preparation: BS EN ISO 17892-1 : 2014 + A1 : 2022 : Clause 5.1 Water content test preparation
BS EN ISO 17892-12 : 2018 + A2 : 2022 : Clause 5.2 Specimen preparation for liquid and plastic limits

Method of Test: BS EN ISO 17892-1 : 2014 + A1 : 2022 : Clause 5.2 Water content test execution
BS EN ISO 17892-12 : 2018 + A2 : 2022 : Clause 5.3 Determination of liquid limit by the fall cone method. 80g / 30° Cone
BS EN ISO 17892-12 : 2018 + A2 : 2022 : Clause 5.5 Determination of plastic limit

UKAS TESTING 1464

General Remarks: All samples tested with increasing water content, unless otherwise stated.
All samples tested to four-point method, unless the extra 'One-point PI Only' data is reported.

Results reported relate only to the samples tested.

Site: Rosefield Solar Farm **Job Number:** 2282314

Client: EDF **Page:** 3

Determination of Water Content, Liquid Limit and Plastic Limit and Derivation of Plasticity and Liquidity Index

Borehole / Trial Pit	Depth (m)	Sample	Natural Water Content %	Sample Preparation Natural = Hand picked Sieved = Washed on 425µm			Liquid Limit %	Plastic Limit %	Plasticity Index %	Liquidity Index	Class	One-point PI Only		Description / Remarks
				Natural / Sieved	Passing %	Calc. WC %						Cone Penetration (mm)	Correction Factor	
TP002	1.90	D7	31.9	Natural	100	32	55	27	28	0.18	CH			Brown slightly gravelly, silty, sandy CLAY
TP003	0.80	D3	34.7	Natural	100	35	87	33	54	0.03	CV			Brown silty CLAY
TP014	0.80	D3	26.9	Natural	100	27	64	25	39	0.05	CH			Brown silty CLAY
TP014	1.80	D7	22.2	Natural	100	22	49	21	28	0.04	CI			Brown silty CLAY
WS013	2.80	D10	34.9	Natural	100	35	57	27	30	0.26	CH			Brown silty CLAY
WS013	4.80	D14	34.5	Natural	100	35	60	31	29	0.12	CH			Brown slightly gravelly, silty CLAY
WS015	3.60	D12	22.9	Sieved	98	23	31	19	12	0.37	CL			Brown silty, sandy CLAY
WS017	3.80	D12	23.3	Natural	100	23	45	20	25	0.13	CI			Brown silty CLAY
WS018	2.80	D9	18.6	Natural	100	19	51	20	31	-0.05	CH			Brown slightly gravelly, silty CLAY

Method of Preparation: BS EN ISO 17892-1 : 2014 + A1 : 2022 : Clause 5.1 Water content test preparation
BS EN ISO 17892-12 : 2018 + A2 : 2022 : Clause 5.2 Specimen preparation for liquid and plastic limits

Method of Test: BS EN ISO 17892-1 : 2014 + A1 : 2022 : Clause 5.2 Water content test execution
BS EN ISO 17892-12 : 2018 + A2 : 2022 : Clause 5.3 Determination of liquid limit by the fall cone method. 80g / 30° Cone
BS EN ISO 17892-12 : 2018 + A2 : 2022 : Clause 5.5 Determination of plastic limit

UKAS TESTING 1464

General Remarks: All samples tested with increasing water content, unless otherwise stated.
All samples tested to four-point method, unless the extra 'One-point PI Only' data is reported.

Results reported relate only to the samples tested.

IAN FARMER ASSOCIATES

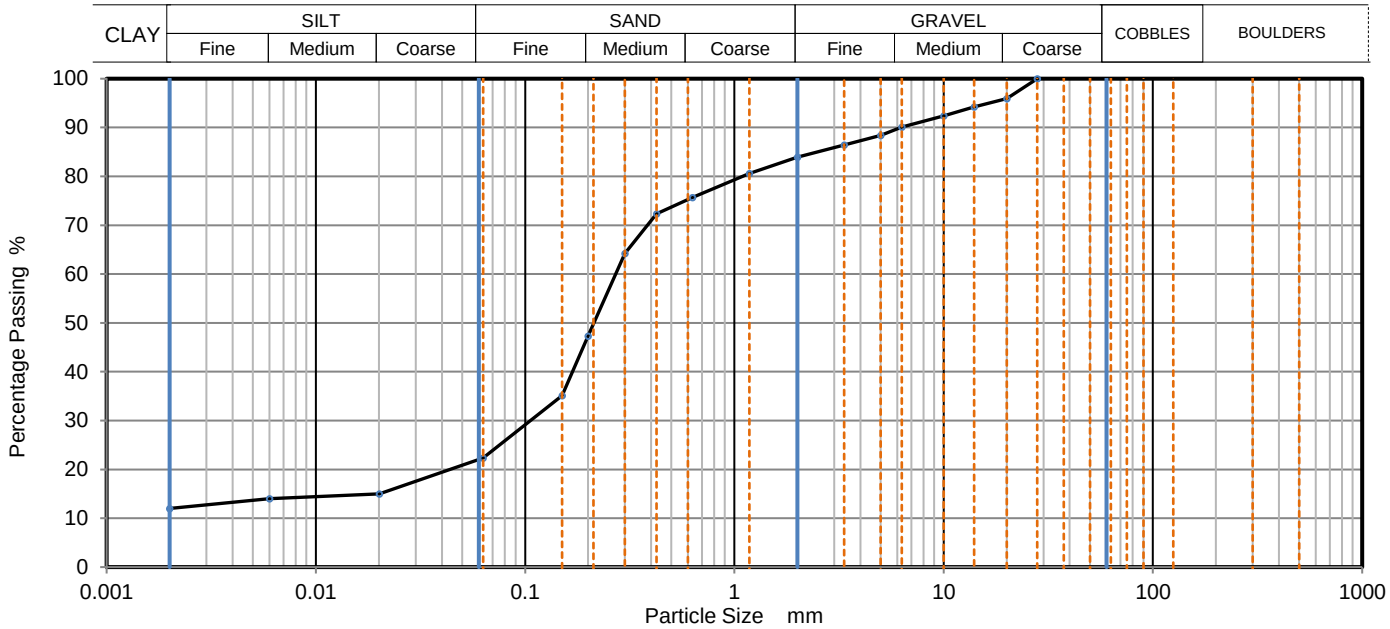
Laboratory Test Report 2282314 / 1

Site: Rosefield Solar Farm **Job Number:** 2282314

Client: EDF **Page:** 4

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Borehole / Trial Pit	Depth (m)	Sample	Testing Type	Description
HP(C)007	0.90	B3	Wet Sieve + Pipette	Brown gravelly, silty, clayey SAND



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
		0.0201	15
		0.0060	14
		0.0020	12
28	100		
20	96		
14	94		
10	92		
6.3	90		
5	88		
3.35	86		
2	84	Particle density	(assumed)
1.18	81	2.65	Mg/m3
0.63	76		
0.425	72		
0.3	64		
0.2	47		
0.15	35		
0.063	22		

Dry Mass of sample, g 2225

Sample Proportions	% dry mass
Very coarse	0
Gravel	16
Sand	62
Silt	10
Clay	12

Grading Analysis		
D100	mm	28
D60	mm	0.271
D30	mm	0.106
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Remarks

Preparation and testing in accordance with BS17892 unless noted below

Method of Preparation: BS EN 17892:Part4:2016, clause 5.2.2 Preparation of samples for wet sieving test
BS EN 17892:Part4:2016, clause 5.4.2 Preparation of samples for pipette test

Method of Test: BS EN 17892:Part4:2016, clause 5.2.3 Determination of particle size distribution by wet sieving method
BS EN 17892:Part4:2016, clause 5.4.3 Determination of sedimentation by pipette method

UKAS TESTING 1464

Result reported relates only to the sample tested.

IAN FARMER ASSOCIATES

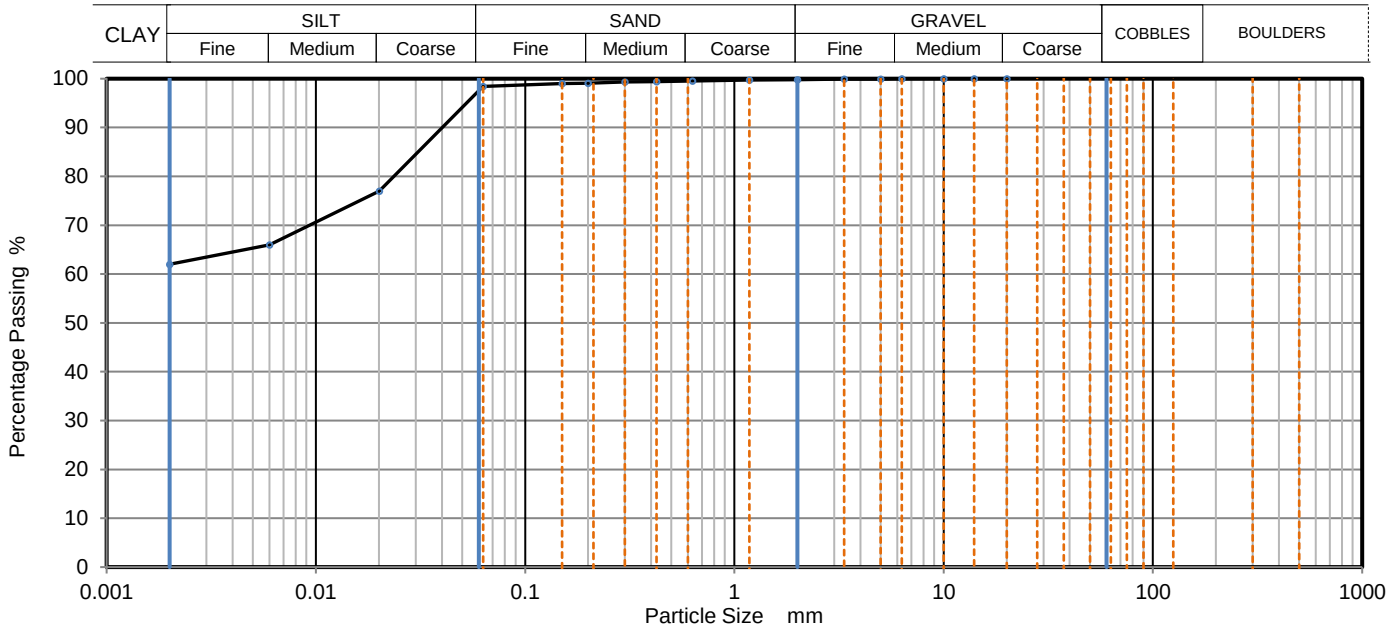
Laboratory Test Report	2282314 / 1

Site: Rosefield Solar Farm **Job Number:** 2282314

Client: EDF **Page:** 5

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Borehole / Trial Pit	Depth (m)	Sample	Testing Type	Description
HP(C)010	1.00	B4	Wet Sieve + Pipette	Brown silty CLAY



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
		0.0201	77
		0.0060	66
		0.0020	62
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100	Particle density	(assumed)
1.18	100	2.65	Mg/m3
0.63	100		
0.425	99		
0.3	99		
0.2	99		
0.15	99		
0.063	98		

Dry Mass of sample, g	1014

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	1
Silt	36
Clay	62

Grading Analysis		
D100	mm	6.3
D60	mm	
D30	mm	
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Remarks

Preparation and testing in accordance with BS17892 unless noted below

Method of Preparation: BS EN 17892:Part4:2016, clause 5.2.2 Preparation of samples for wet sieving test
BS EN 17892:Part4:2016, clause 5.4.2 Preparation of samples for pipette test

Method of Test: BS EN 17892:Part4:2016, clause 5.2.3 Determination of particle size distribution by wet sieving method
BS EN 17892:Part4:2016, clause 5.4.3 Determination of sedimentation by pipette method

UKAS TESTING
1464

Result reported relates only to the sample tested.

IAN FARMER ASSOCIATES

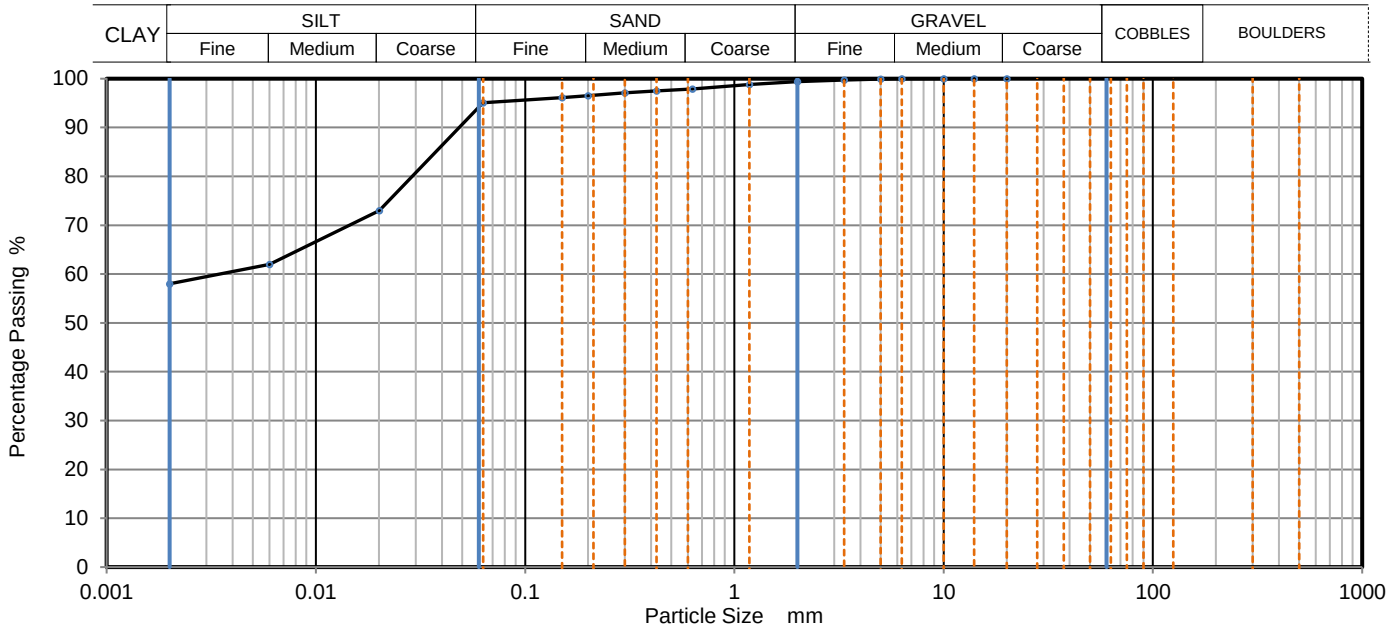
Laboratory Test Report	2282314 / 1

Site: Rosefield Solar Farm **Job Number:** 2282314

Client: EDF **Page:** 6

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Borehole / Trial Pit	Depth (m)	Sample	Testing Type	Description
HP008	0.70	B4	Wet Sieve + Pipette	Brown silty CLAY



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
		0.0201	73
		0.0060	62
		0.0020	58
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	99	Particle density	(assumed)
1.18	99	2.65	Mg/m3
0.63	98		
0.425	98		
0.3	97		
0.2	97		
0.15	96		
0.063	95		

Dry Mass of sample, g	544

Sample Proportions	% dry mass
Very coarse	0
Gravel	1
Sand	4
Silt	37
Clay	58

Grading Analysis		
D100	mm	6.3
D60	mm	0.00343
D30	mm	
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Remarks

Preparation and testing in accordance with BS17892 unless noted below

Method of Preparation: BS EN 17892:Part4:2016, clause 5.2.2 Preparation of samples for wet sieving test
BS EN 17892:Part4:2016, clause 5.4.2 Preparation of samples for pipette test

Method of Test: BS EN 17892:Part4:2016, clause 5.2.3 Determination of particle size distribution by wet sieving method
BS EN 17892:Part4:2016, clause 5.4.3 Determination of sedimentation by pipette method

UKAS TESTING
1464

Result reported relates only to the sample tested.

IAN FARMER ASSOCIATES

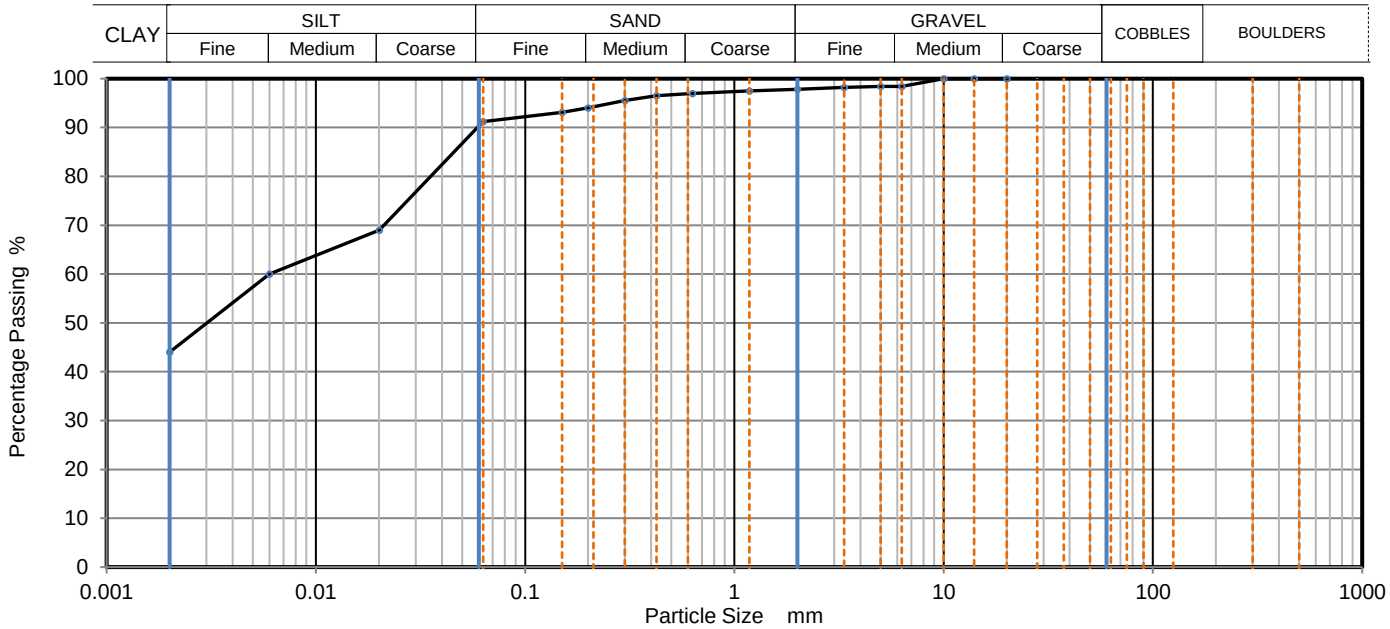
Laboratory Test Report	2282314 / 1

Site: Rosefield Solar Farm **Job Number:** 2282314

Client: EDF **Page:** 7

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Borehole / Trial Pit	Depth (m)	Sample	Testing Type	Description
HP012	0.70	B4	Wet Sieve + Pipette	Brown, slightly sandy, silty CLAY



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
		0.0201	69
		0.0060	60
		0.0020	44
20	100		
14	100		
10	100		
6.3	98		
5	98		
3.35	98		
2	98	Particle density	(assumed)
1.18	98	2.65	Mg/m3
0.63	97		
0.425	97		
0.3	96		
0.2	94		
0.15	93		
0.063	91		

Dry Mass of sample, g	542

Sample Proportions	% dry mass
Very coarse	0
Gravel	2
Sand	7
Silt	47
Clay	44

Grading Analysis		
D100	mm	10
D60	mm	0.00637
D30	mm	
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Remarks

Preparation and testing in accordance with BS17892 unless noted below

Method of Preparation: BS EN 17892:Part4:2016, clause 5.2.2 Preparation of samples for wet sieving test
BS EN 17892:Part4:2016, clause 5.4.2 Preparation of samples for pipette test

Method of Test: BS EN 17892:Part4:2016, clause 5.2.3 Determination of particle size distribution by wet sieving method
BS EN 17892:Part4:2016, clause 5.4.3 Determination of sedimentation by pipette method

UKAS TESTING
1464

Result reported relates only to the sample tested.

IAN FARMER ASSOCIATES

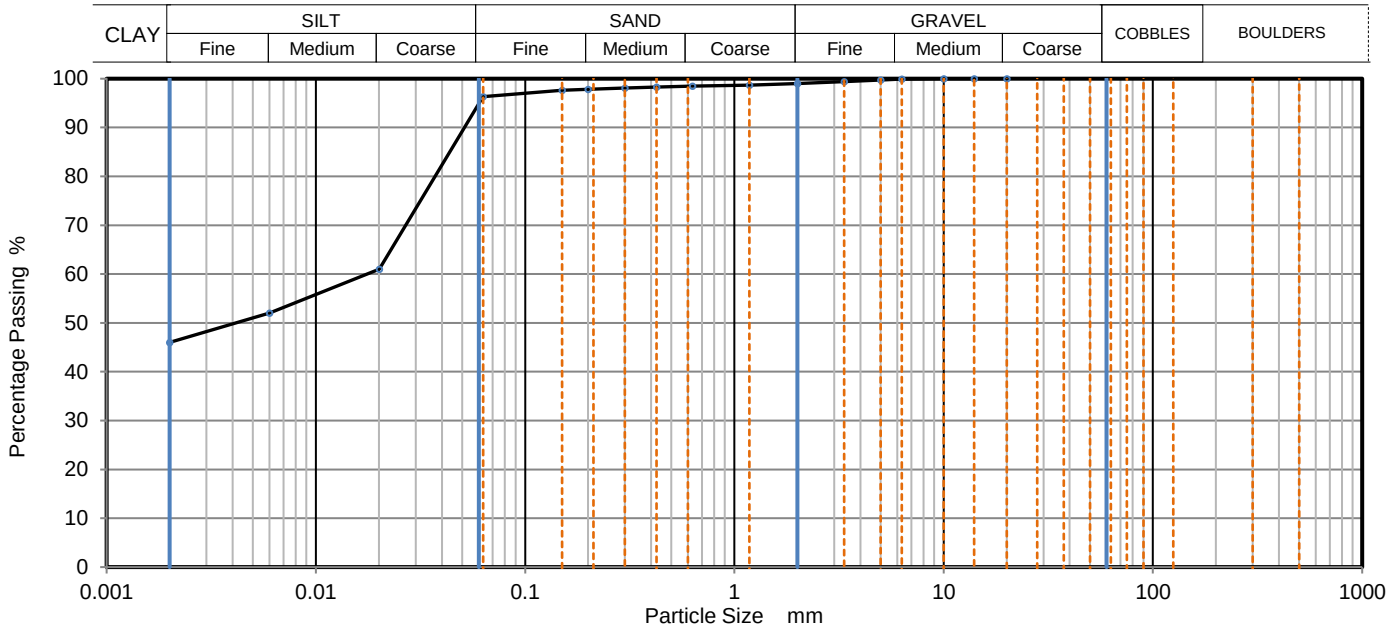
Laboratory Test Report	2282314 / 1

Site: Rosefield Solar Farm **Job Number:** 2282314

Client: EDF **Page:** 8

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Borehole / Trial Pit	Depth (m)	Sample	Testing Type	Description
HP019	1.20	B3	Wet Sieve + Pipette	Brown silty CLAY



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
		0.0201	61
		0.0060	52
		0.0020	46
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	99		
2	99	Particle density	(assumed)
1.18	99	2.65	Mg/m3
0.63	99		
0.425	98		
0.3	98		
0.2	98		
0.15	98		
0.063	96		

Dry Mass of sample, g	610

Sample Proportions	% dry mass
Very coarse	0
Gravel	1
Sand	3
Silt	51
Clay	46

Grading Analysis		
D100	mm	10
D60	mm	0.0165
D30	mm	
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Remarks

Preparation and testing in accordance with BS17892 unless noted below

Method of Preparation: BS EN 17892:Part4:2016, clause 5.2.2 Preparation of samples for wet sieving test
BS EN 17892:Part4:2016, clause 5.4.2 Preparation of samples for pipette test

Method of Test: BS EN 17892:Part4:2016, clause 5.2.3 Determination of particle size distribution by wet sieving method
BS EN 17892:Part4:2016, clause 5.4.3 Determination of sedimentation by pipette method

UKAS TESTING
1464

Result reported relates only to the sample tested.

IAN FARMER ASSOCIATES

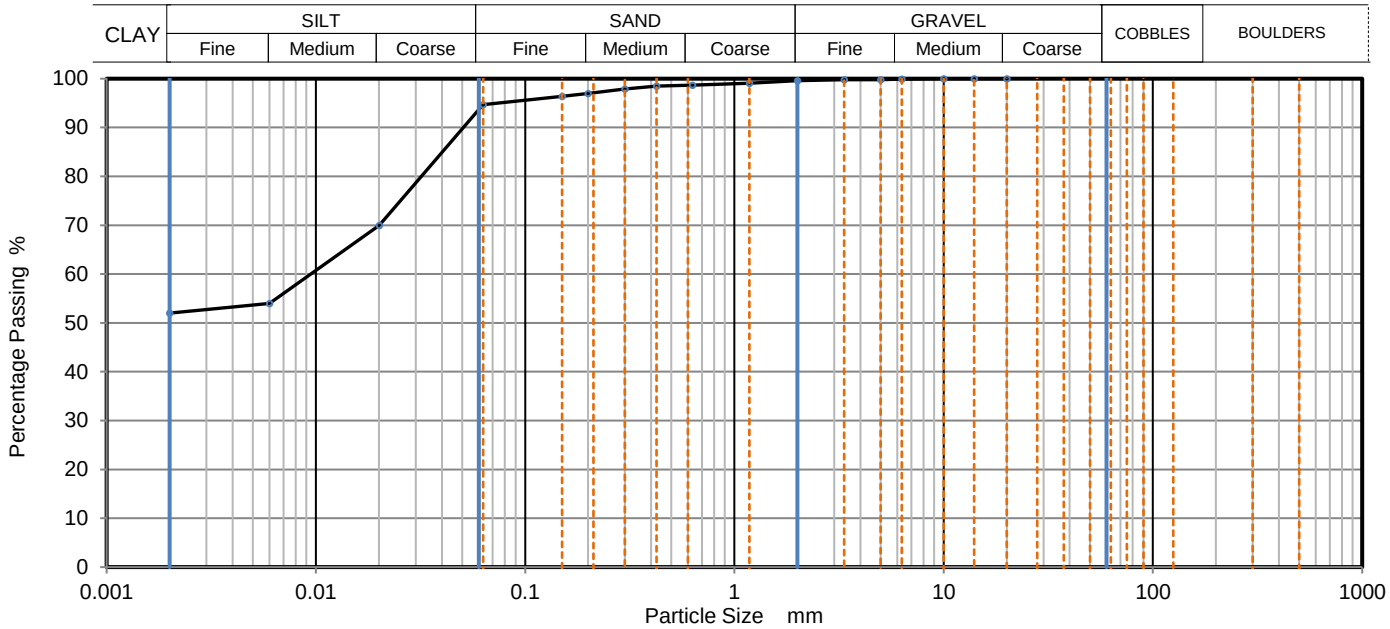
Laboratory Test Report 2282314 / 1

Site: Rosefield Solar Farm **Job Number:** 2282314

Client: EDF **Page:** 9

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Borehole / Trial Pit	Depth (m)	Sample	Testing Type	Description
HP022	0.60	B2	Wet Sieve + Pipette	Brown slightly sandy, silty CLAY



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
		0.0201	70
		0.0060	54
		0.0020	52
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100	Particle density	(assumed)
1.18	99	2.65	Mg/m3
0.63	99		
0.425	99		
0.3	98		
0.2	97		
0.15	96		
0.063	95		

Dry Mass of sample, g 597

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	5
Silt	42
Clay	52

Grading Analysis		
D100	mm	10
D60	mm	0.00925
D30	mm	
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Remarks

Preparation and testing in accordance with BS17892 unless noted below

Method of Preparation: BS EN 17892:Part4:2016, clause 5.2.2 Preparation of samples for wet sieving test
BS EN 17892:Part4:2016, clause 5.4.2 Preparation of samples for pipette test

Method of Test: BS EN 17892:Part4:2016, clause 5.2.3 Determination of particle size distribution by wet sieving method
BS EN 17892:Part4:2016, clause 5.4.3 Determination of sedimentation by pipette method

UKAS TESTING 1464

Result reported relates only to the sample tested.

IAN FARMER ASSOCIATES

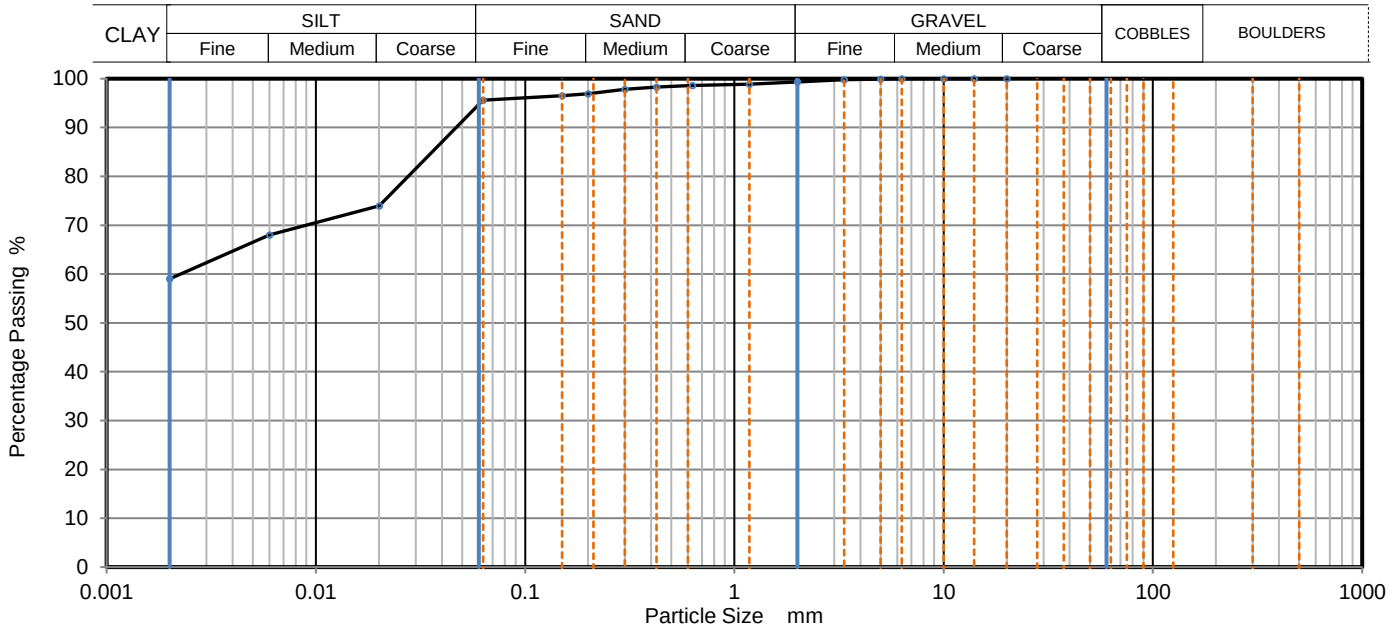
Laboratory Test Report	2282314 / 1

Site: Rosefield Solar Farm **Job Number:** 2282314

Client: EDF **Page:** 10

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Borehole / Trial Pit	Depth (m)	Sample	Testing Type	Description
HP024	1.00	B4	Wet Sieve + Pipette	Brown silty CLAY



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
		0.0201	74
		0.0060	68
		0.0020	59
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	99	Particle density	(assumed)
1.18	99	2.65	Mg/m3
0.63	99		
0.425	98		
0.3	98		
0.2	97		
0.15	97		
0.063	96		

Dry Mass of sample, g	537

Sample Proportions	% dry mass
Very coarse	0
Gravel	1
Sand	4
Silt	36
Clay	59

Grading Analysis		
D100	mm	6.3
D60	mm	0.00218
D30	mm	
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Remarks

Preparation and testing in accordance with BS17892 unless noted below

Method of Preparation: BS EN 17892:Part4:2016, clause 5.2.2 Preparation of samples for wet sieving test
BS EN 17892:Part4:2016, clause 5.4.2 Preparation of samples for pipette test

Method of Test: BS EN 17892:Part4:2016, clause 5.2.3 Determination of particle size distribution by wet sieving method
BS EN 17892:Part4:2016, clause 5.4.3 Determination of sedimentation by pipette method

UKAS TESTING
1464

Result reported relates only to the sample tested.

IAN FARMER ASSOCIATES

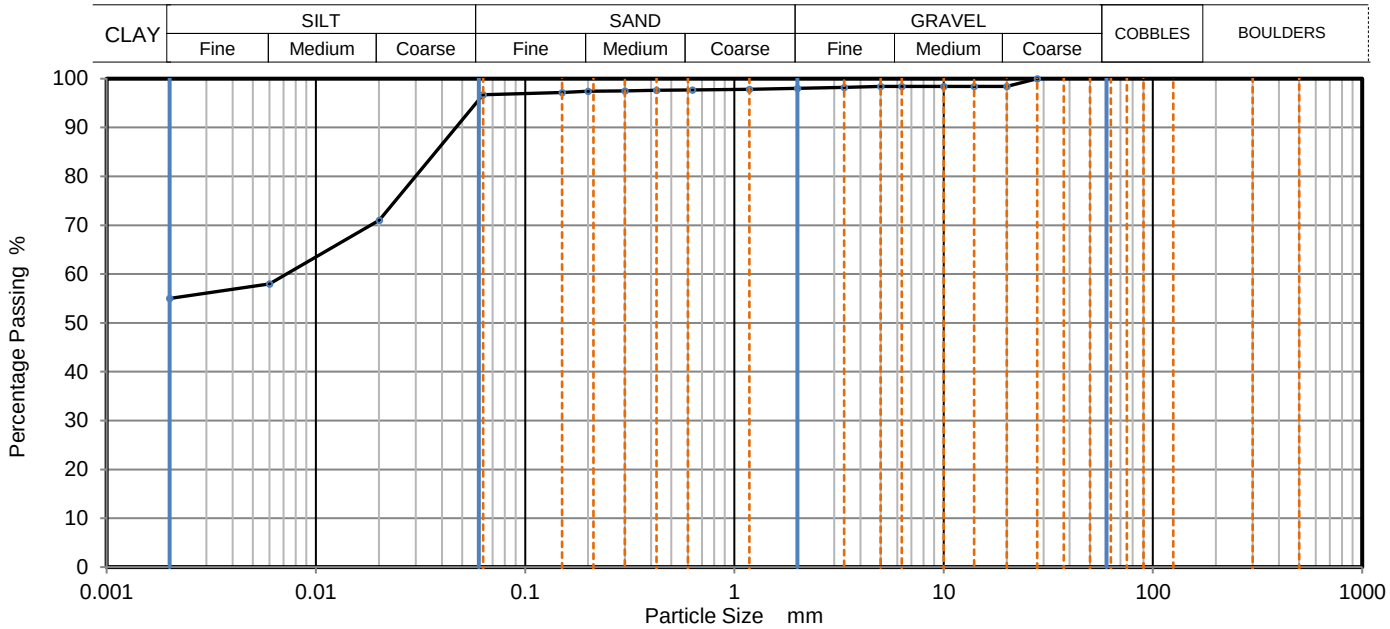
Laboratory Test Report	2282314 / 1

Site: Rosefield Solar Farm **Job Number:** 2282314

Client: EDF **Page:** 11

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Borehole / Trial Pit	Depth (m)	Sample	Testing Type	Description
HP027	1.00	B4	Wet Sieve + Pipette	Brown silty CLAY



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
		0.0201	71
		0.0060	58
		0.0020	55
28	100		
20	98		
14	98		
10	98		
6.3	98		
5	98		
3.35	98		
2	98	Particle density	(assumed)
1.18	98	2.65	Mg/m3
0.63	98		
0.425	98		
0.3	98		
0.2	97		
0.15	97		
0.063	97		

Dry Mass of sample, g	788

Sample Proportions	% dry mass
Very coarse	0
Gravel	2
Sand	1
Silt	42
Clay	55

Grading Analysis		
D100	mm	28
D60	mm	0.00748
D30	mm	
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Remarks

Preparation and testing in accordance with BS17892 unless noted below

Method of Preparation: BS EN 17892:Part4:2016, clause 5.2.2 Preparation of samples for wet sieving test
BS EN 17892:Part4:2016, clause 5.4.2 Preparation of samples for pipette test

Method of Test: BS EN 17892:Part4:2016, clause 5.2.3 Determination of particle size distribution by wet sieving method
BS EN 17892:Part4:2016, clause 5.4.3 Determination of sedimentation by pipette method

UKAS TESTING
1464

Result reported relates only to the sample tested.

IAN FARMER ASSOCIATES

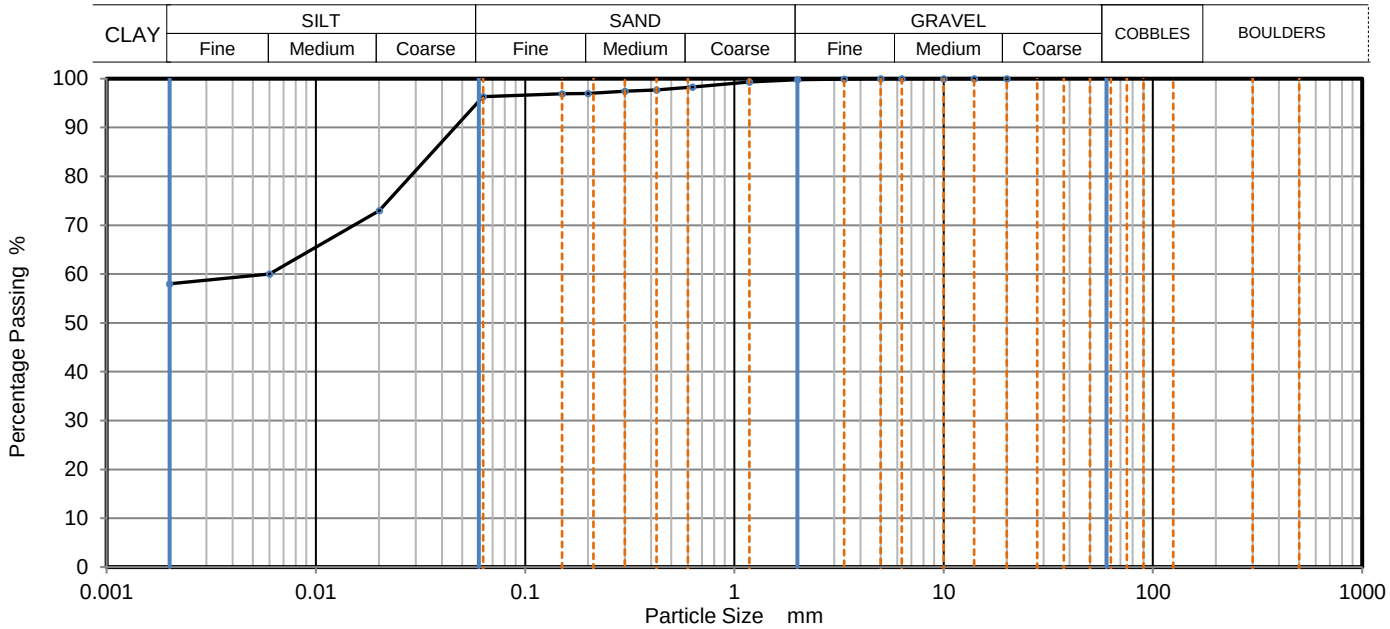
Laboratory Test Report	2282314 / 1

Site: Rosefield Solar Farm **Job Number:** 2282314

Client: EDF **Page:** 12

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Borehole / Trial Pit	Depth (m)	Sample	Testing Type	Description
TP(C)001	1.30	B6	Wet Sieve + Pipette	Brown silty CLAY



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
		0.0201	73
		0.0060	60
		0.0020	58
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100	Particle density	(assumed)
1.18	99	2.65	Mg/m3
0.63	98		
0.425	98		
0.3	97		
0.2	97		
0.15	97		
0.063	96		

Dry Mass of sample, g	633

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	4
Silt	38
Clay	58

Grading Analysis		
D100	mm	5
D60	mm	0.00603
D30	mm	
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Remarks

Preparation and testing in accordance with BS17892 unless noted below

Method of Preparation: BS EN 17892:Part4:2016, clause 5.2.2 Preparation of samples for wet sieving test
BS EN 17892:Part4:2016, clause 5.4.2 Preparation of samples for pipette test

Method of Test: BS EN 17892:Part4:2016, clause 5.2.3 Determination of particle size distribution by wet sieving method
BS EN 17892:Part4:2016, clause 5.4.3 Determination of sedimentation by pipette method

UKAS TESTING
1464

Result reported relates only to the sample tested.

IAN FARMER ASSOCIATES

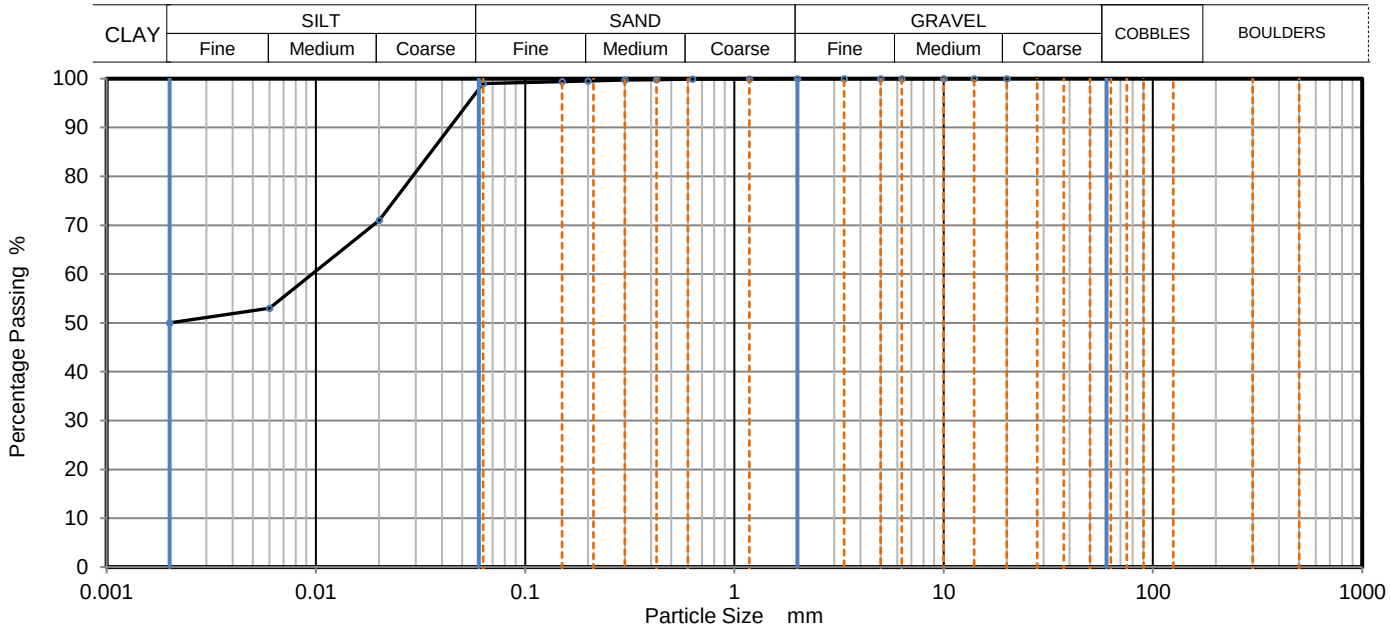
Laboratory Test Report	2282314 / 1

Site: Rosefield Solar Farm **Job Number:** 2282314

Client: EDF **Page:** 13

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Borehole / Trial Pit	Depth (m)	Sample	Testing Type	Description
TP(C)011	1.30	B4	Wet Sieve + Pipette	Brown silty CLAY



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
		0.0201	71
		0.0060	53
		0.0020	50
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100	Particle density	(assumed)
1.18	100	2.65	Mg/m3
0.63	100		
0.425	100		
0.3	100		
0.2	100		
0.15	99		
0.063	99		

Dry Mass of sample, g	668

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	1
Silt	49
Clay	50

Grading Analysis		
D100	mm	3.35
D60	mm	0.0093
D30	mm	
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Remarks

Preparation and testing in accordance with BS17892 unless noted below

Method of Preparation: BS EN 17892:Part4:2016, clause 5.2.2 Preparation of samples for wet sieving test
BS EN 17892:Part4:2016, clause 5.4.2 Preparation of samples for pipette test

Method of Test: BS EN 17892:Part4:2016, clause 5.2.3 Determination of particle size distribution by wet sieving method
BS EN 17892:Part4:2016, clause 5.4.3 Determination of sedimentation by pipette method

UKAS TESTING
1464

Result reported relates only to the sample tested.

IAN FARMER ASSOCIATES

Laboratory Test Report	2282314 / 1

Site: Rosefield Solar Farm **Job Number:** 2282314

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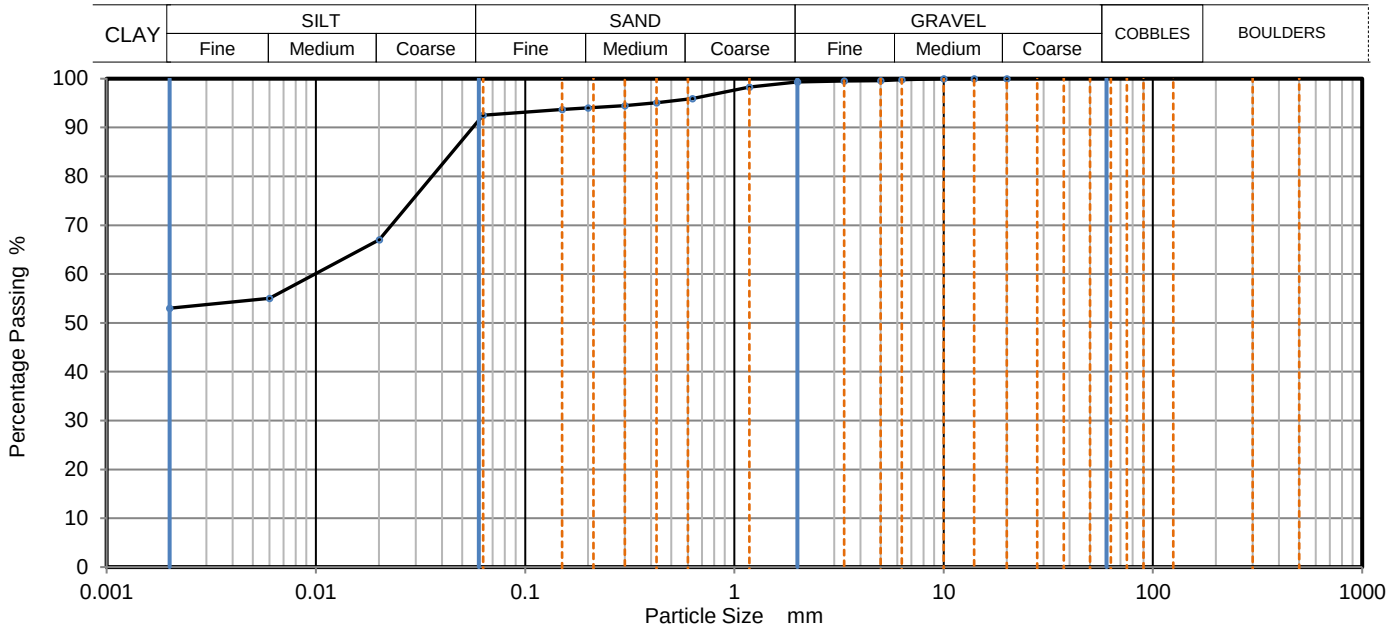
DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Borehole / Trial Pit	Depth (m)	Sample	Testing Type	Description
TP(C)011	2.30	B6	Wet Sieve + Pipette	Brown slightly sandy, silty CLAY



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
		0.0201	67
		0.0060	55
		0.0020	53
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	99	Particle density	(assumed)
1.18	98	2.65	Mg/m3
0.63	96		
0.425	95		
0.3	95		
0.2	94		
0.15	94		
0.063	93		

Dry Mass of sample, g	605

Sample Proportions	% dry mass
Very coarse	0
Gravel	1
Sand	7
Silt	39
Clay	53

Grading Analysis		
D100	mm	10
D60	mm	0.0101
D30	mm	
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Remarks

Preparation and testing in accordance with BS17892 unless noted below

Method of Preparation: BS EN 17892:Part4:2016, clause 5.2.2 Preparation of samples for wet sieving test
BS EN 17892:Part4:2016, clause 5.4.2 Preparation of samples for pipette test

Method of Test: BS EN 17892:Part4:2016, clause 5.2.3 Determination of particle size distribution by wet sieving method
BS EN 17892:Part4:2016, clause 5.4.3 Determination of sedimentation by pipette method

UKAS TESTING
1464

Result reported relates only to the sample tested.

IAN FARMER ASSOCIATES

Laboratory Test Report	2282314 / 1

Site: Rosefield Solar Farm **Job Number:** 2282314

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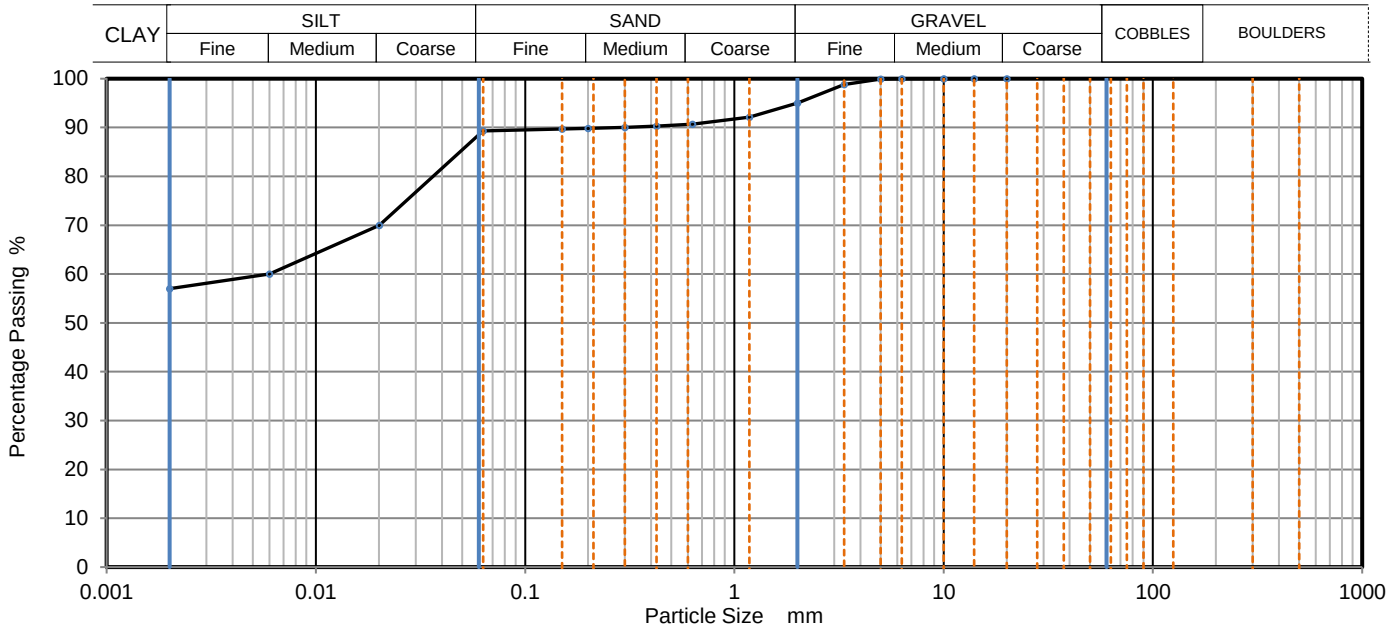
DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Borehole / Trial Pit	Depth (m)	Sample	Testing Type	Description
TP002	1.60	B6	Wet Sieve + Pipette	Brown slightly sandy, silty CLAY



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
		0.0201	70
		0.0060	60
		0.0020	57
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	99		
2	95	Particle density	(assumed)
1.18	92	2.65	Mg/m3
0.63	91		
0.425	90		
0.3	90		
0.2	90		
0.15	90		
0.063	89		

Dry Mass of sample, g	810

Sample Proportions	% dry mass
Very coarse	0
Gravel	5
Sand	6
Silt	32
Clay	57

Grading Analysis		
D100	mm	6.3
D60	mm	0.00513
D30	mm	
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Remarks

Preparation and testing in accordance with BS17892 unless noted below

Method of Preparation: BS EN 17892:Part4:2016, clause 5.2.2 Preparation of samples for wet sieving test
BS EN 17892:Part4:2016, clause 5.4.2 Preparation of samples for pipette test

Method of Test: BS EN 17892:Part4:2016, clause 5.2.3 Determination of particle size distribution by wet sieving method
BS EN 17892:Part4:2016, clause 5.4.3 Determination of sedimentation by pipette method

UKAS TESTING
1464

Result reported relates only to the sample tested.

IAN FARMER ASSOCIATES

Laboratory Test Report	2282314 / 1

Site: Rosefield Solar Farm **Job Number:** 2282314

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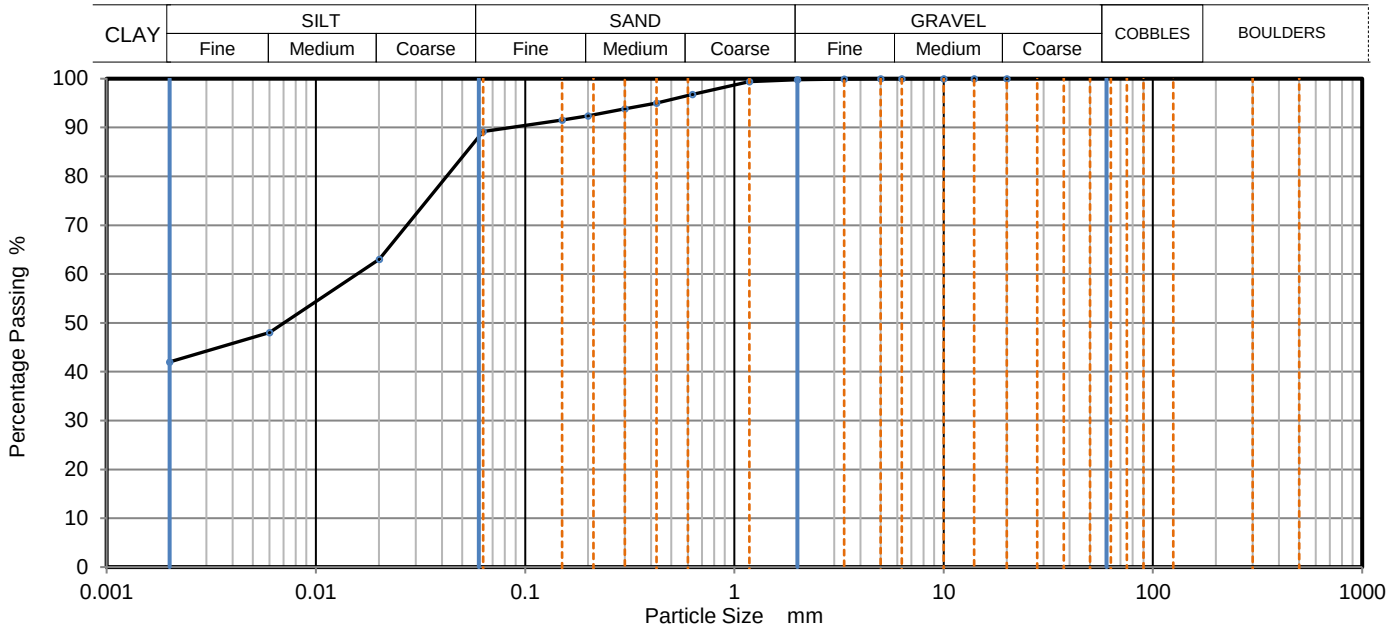
DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Borehole / Trial Pit	Depth (m)	Sample	Testing Type	Description
TP003	1.30	B4	Wet Sieve + Pipette	Brown sandy, silty CLAY



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
		0.0201	63
		0.0060	48
		0.0020	42
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100	Particle density	(assumed)
1.18	99	2.65	Mg/m3
0.63	97		
0.425	95		
0.3	94		
0.2	92		
0.15	92		
0.063	89		

Dry Mass of sample, g	608

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	11
Silt	47
Clay	42

Grading Analysis		
D100	mm	6.3
D60	mm	0.0161
D30	mm	
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Remarks

Preparation and testing in accordance with BS17892 unless noted below

Method of Preparation: BS EN 17892:Part4:2016, clause 5.2.2 Preparation of samples for wet sieving test
BS EN 17892:Part4:2016, clause 5.4.2 Preparation of samples for pipette test

Method of Test: BS EN 17892:Part4:2016, clause 5.2.3 Determination of particle size distribution by wet sieving method
BS EN 17892:Part4:2016, clause 5.4.3 Determination of sedimentation by pipette method

UKAS TESTING
1464

Result reported relates only to the sample tested.

IAN FARMER ASSOCIATES

Laboratory Test Report	2282314 / 1

Site: Rosefield Solar Farm **Job Number:** 2282314

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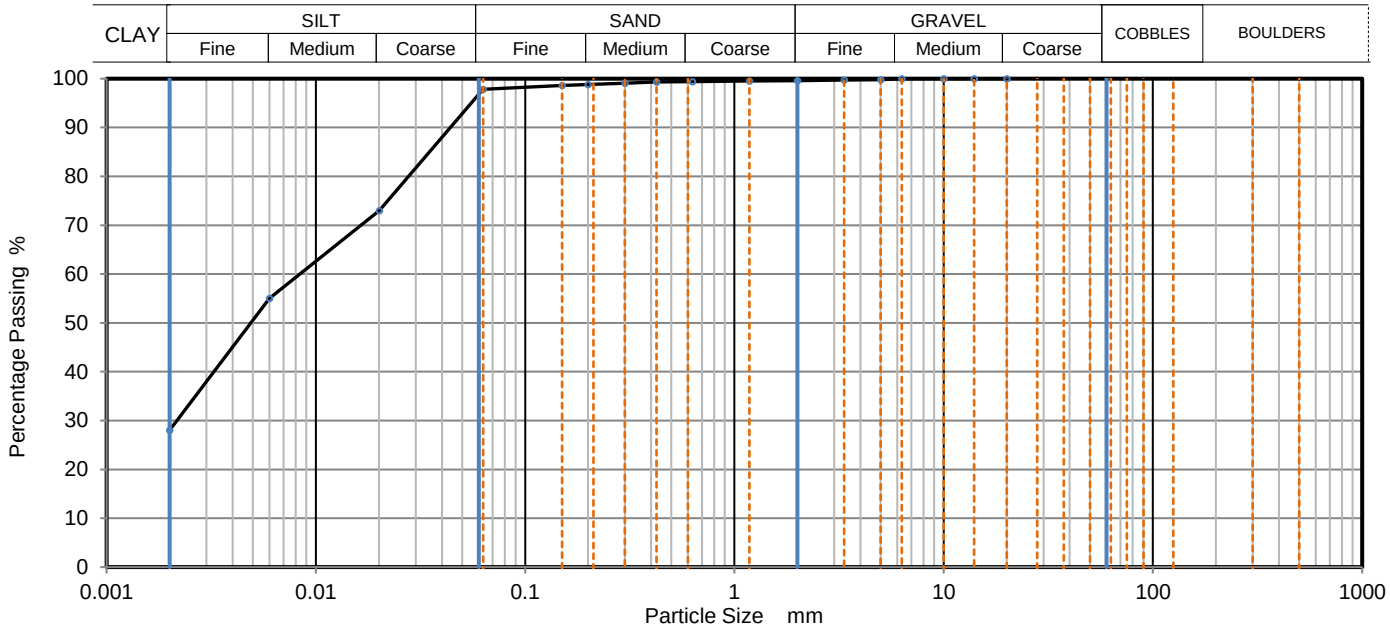
DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Borehole / Trial Pit	Depth (m)	Sample	Testing Type	Description
TP014	1.30	B6	Wet Sieve + Pipette	Brown clayey SILT



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
		0.0201	73
		0.0060	55
		0.0020	28
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	100		
2	100	Particle density	(assumed)
1.18	100	2.65	Mg/m3
0.63	99		
0.425	99		
0.3	99		
0.2	99		
0.15	99		
0.063	98		

Dry Mass of sample, g	930

Sample Proportions	% dry mass
Very coarse	0
Gravel	0
Sand	2
Silt	70
Clay	28

Grading Analysis		
D100	mm	6.3
D60	mm	0.0084
D30	mm	0.00216
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Remarks

Preparation and testing in accordance with BS17892 unless noted below

Method of Preparation: BS EN 17892:Part4:2016, clause 5.2.2 Preparation of samples for wet sieving test
BS EN 17892:Part4:2016, clause 5.4.2 Preparation of samples for pipette test

Method of Test: BS EN 17892:Part4:2016, clause 5.2.3 Determination of particle size distribution by wet sieving method
BS EN 17892:Part4:2016, clause 5.4.3 Determination of sedimentation by pipette method

UKAS TESTING
1464

Result reported relates only to the sample tested.

IAN FARMER ASSOCIATES

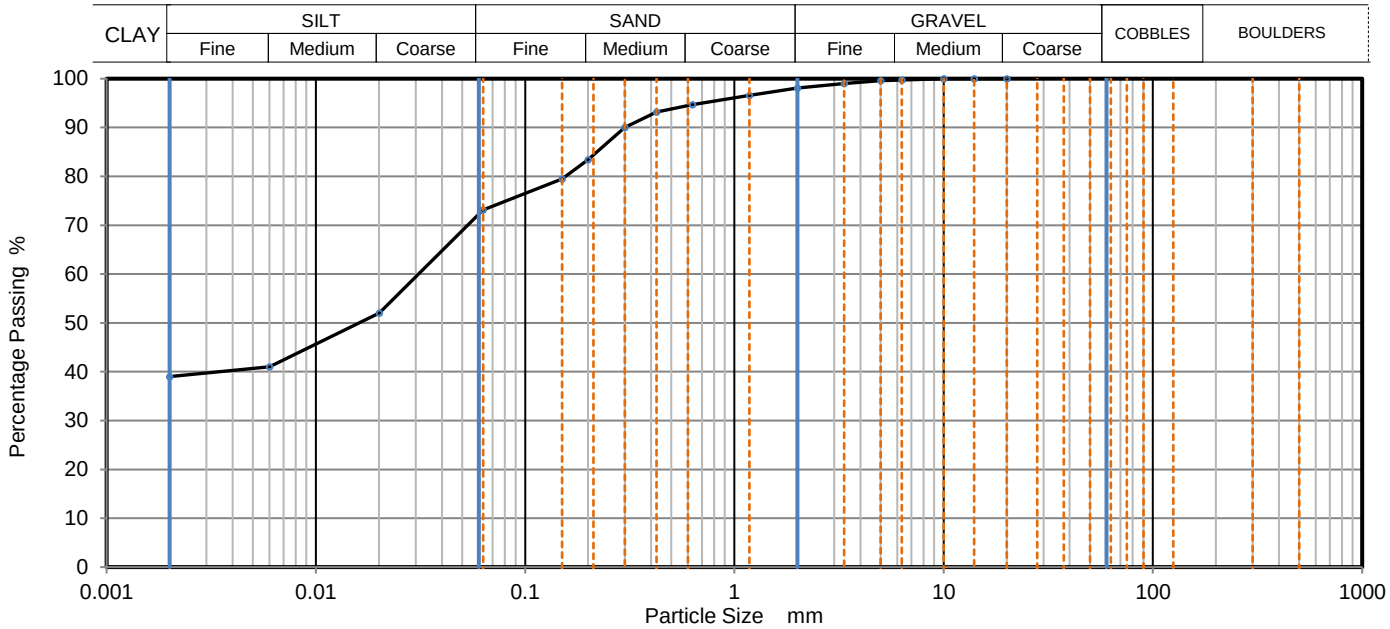
Laboratory Test Report 2282314 / 1

Site: Rosefield Solar Farm **Job Number:** 2282314

Client: EDF **Page:** 18

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Borehole / Trial Pit	Depth (m)	Sample	Testing Type	Description
WS016	3.00	B13	Wet Sieve + Pipette	Brown sandy, silty CLAY



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
		0.0201	52
		0.0060	41
		0.0020	39
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	99		
2	98	Particle density	(assumed)
1.18	97	2.65	Mg/m3
0.63	95		
0.425	93		
0.3	90		
0.2	83		
0.15	80		
0.063	73		

Dry Mass of sample, g 530

Sample Proportions	% dry mass
Very coarse	0
Gravel	2
Sand	25
Silt	34
Clay	39

Grading Analysis		
D100	mm	10
D60	mm	0.0307
D30	mm	
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Remarks

Preparation and testing in accordance with BS17892 unless noted below

Method of Preparation: BS EN 17892:Part4:2016, clause 5.2.2 Preparation of samples for wet sieving test
BS EN 17892:Part4:2016, clause 5.4.2 Preparation of samples for pipette test

Method of Test: BS EN 17892:Part4:2016, clause 5.2.3 Determination of particle size distribution by wet sieving method
BS EN 17892:Part4:2016, clause 5.4.3 Determination of sedimentation by pipette method

UKAS TESTING 1464

Result reported relates only to the sample tested.

IAN FARMER ASSOCIATES

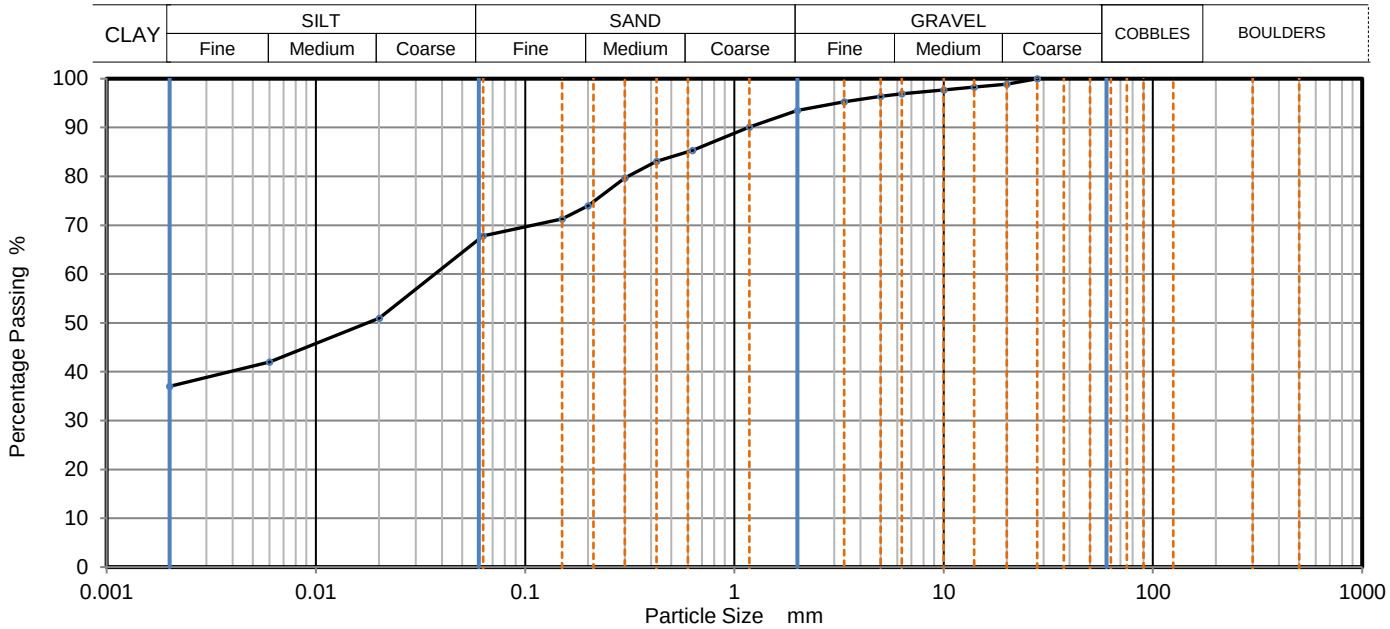
Laboratory Test Report 2282314 / 1

Site: Rosefield Solar Farm **Job Number:** 2282314

Client: EDF **Page:** 19

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Borehole / Trial Pit	Depth (m)	Sample	Testing Type	Description
WS017	3.00	B11	Wet Sieve + Pipette	Brown slightly gravelly, silty, sandy CLAY



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
		0.0201	51
		0.0060	42
		0.0020	37
28	100		
20	99		
14	98		
10	98		
6.3	97		
5	96		
3.35	95		
2	94	Particle density	(assumed)
1.18	90	2.65	Mg/m3
0.63	85		
0.425	83		
0.3	80		
0.2	74		
0.15	71		
0.063	68		

Dry Mass of sample, g 1793

Sample Proportions	% dry mass
Very coarse	0
Gravel	7
Sand	26
Silt	31
Clay	37

Grading Analysis		
D100	mm	28
D60	mm	0.0367
D30	mm	
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Remarks

Preparation and testing in accordance with BS17892 unless noted below

Method of Preparation: BS EN 17892:Part4:2016, clause 5.2.2 Preparation of samples for wet sieving test
BS EN 17892:Part4:2016, clause 5.4.2 Preparation of samples for pipette test

Method of Test: BS EN 17892:Part4:2016, clause 5.2.3 Determination of particle size distribution by wet sieving method
BS EN 17892:Part4:2016, clause 5.4.3 Determination of sedimentation by pipette method

UKAS TESTING 1464

Result reported relates only to the sample tested.

IAN FARMER ASSOCIATES	Laboratory Test Report	2282314 / 1

Site: Rosefield Solar Farm **Job Number:** 2282314

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Determination of California Bearing Ratio (CBR)

Borehole / Trial Pit	Depth (m)	Sample	% Passing 20mm Sieve	Description
HP(HR)004	0.30	**B3**	**93.40%**	Brown gravelly, silty CLAY

Specimen Preparation

Condition

Details: Recompacted with specified standard effort using kg rammer

Initial Specimen details

Bulk density	2.07	Mg/m3
Dry density	1.75	Mg/m3
Water content	18	%

Soaking details: Not soaked

Period of soaking: days

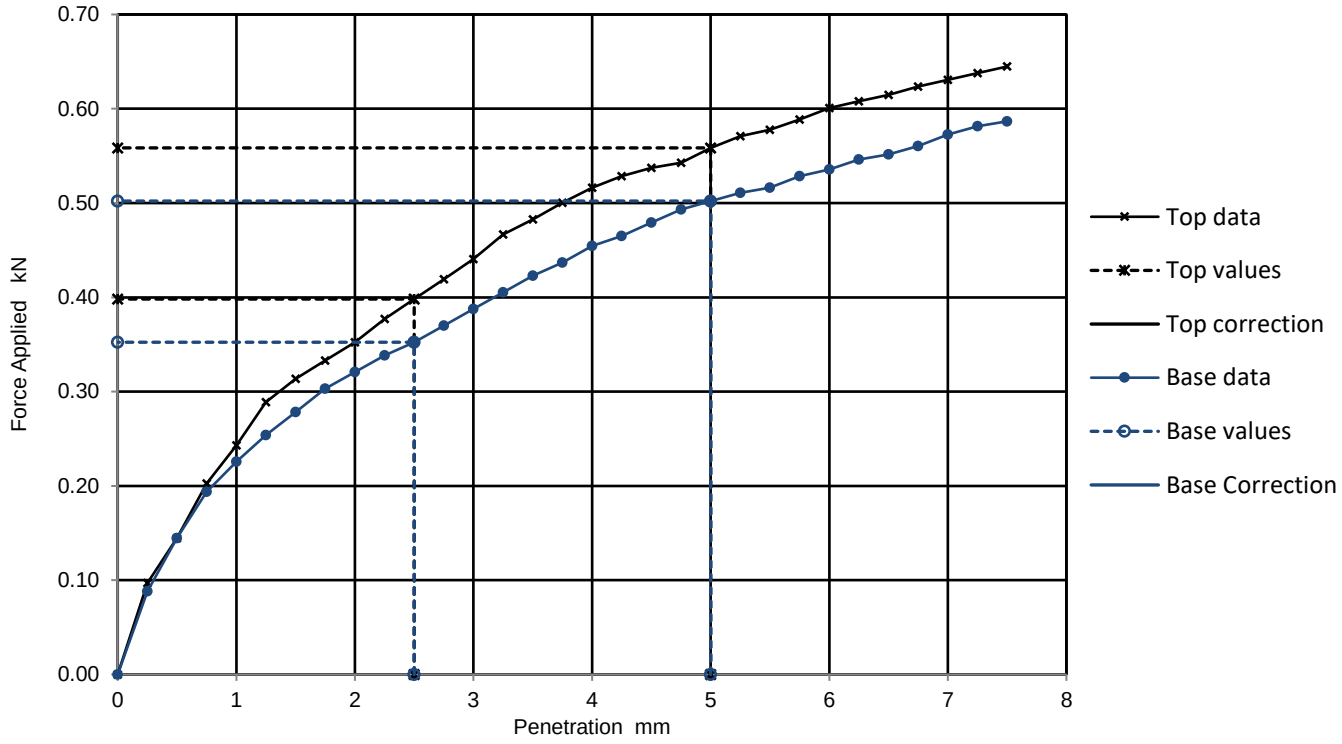
Time to surface: days

Amount of swell recorded: mm

Dry density after soaking: Mg/m3

Surcharge applied: 4.2 kg / 3 kPa

Force v Penetration Plots



RESULTS

	Curve correction applied	CBR Values, % 2.5mm	5mm	Highest	Average	Water Content %
TOP	No	3.0	2.8	3.0	2.8	21.5
BASE	No	2.7	2.5	2.7		20.5

Approved
Sanaz Sayehvand

Method of Preparation: BS1377 : Part 2 : 2022, clause 15.2, Recompacted with specified standard effort using kg rammer

Method of Test: BS1377 : Part 2 : 2022, clause 15.4, Penetration test procedure to determine California Bearing Ratio (CBR)

Remarks:

Result reported relates only to the sample tested.

UKAS TESTING 1464

IAN FARMER ASSOCIATES

Laboratory Test Report | 2282314 / 1

Site: Rosefield Solar Farm | **Job Number:** 2282314

Client: EDF | **Page:** 21

Determination of California Bearing Ratio (CBR)

Borehole / Trial Pit	Depth (m)	Sample	% Passing 20mm Sieve	Description
HP(HR)004	1.00	**B4**	**100%**	Brown silty CLAY

Specimen Preparation

Condition

Details: Recompacted with specified standard effort using kg rammer

Initial Specimen details

Bulk density	1.76	Mg/m3
Dry density	1.24	Mg/m3
Water content	42.3	%

Soaking details: Not soaked

Period of soaking: days

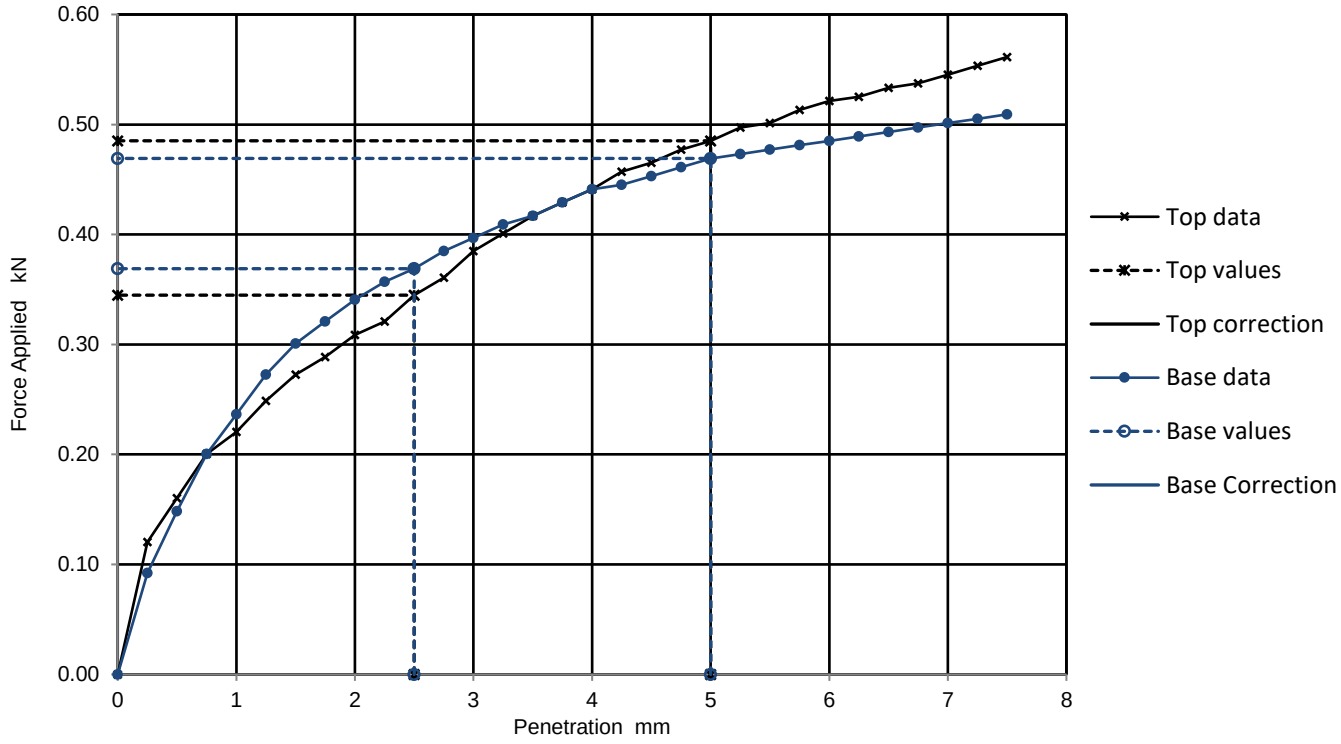
Time to surface: days

Amount of swell recorded: mm

Dry density after soaking: Mg/m3

Surcharge applied: 4.2 kg / 3 kPa

Force v Penetration Plots



RESULTS

	Curve correction applied	CBR Values, % 2.5mm	5mm	Highest	Average	Water Content %
TOP	No	2.6	2.4	2.6	2.7	39.9
BASE	No	2.8	2.3	2.8		41.9

Approved
Sanaz Sayehvand

Method of Preparation: BS1377 : Part 2 : 2022, clause 15.2, Recompacted with specified standard effort using kg rammer

Method of Test: BS1377 : Part 2 : 2022, clause 15.4, Penetration test procedure to determine California Bearing Ratio (CBR)

Remarks:

Result reported relates only to the sample tested.

UKAS TESTING 1464

IAN FARMER ASSOCIATES

Laboratory Test Report 2282314 / 1

Site: Rosefield Solar Farm **Job Number:** 2282314

Client: EDF **Page:** 22

Determination of California Bearing Ratio (CBR)

Borehole / Trial Pit	Depth (m)	Sample	% Passing 20mm Sieve	Description
HP(HR)005	0.30	**B3**	**96.70%**	Brown sandy, silty CLAY

Specimen Preparation

Condition

Details: Recompacted with specified standard effort using kg rammer

Initial Specimen details

Bulk density	1.69	Mg/m3
Dry density	1.20	Mg/m3
Water content	40.6	%

Soaking details: Not soaked

Period of soaking: days

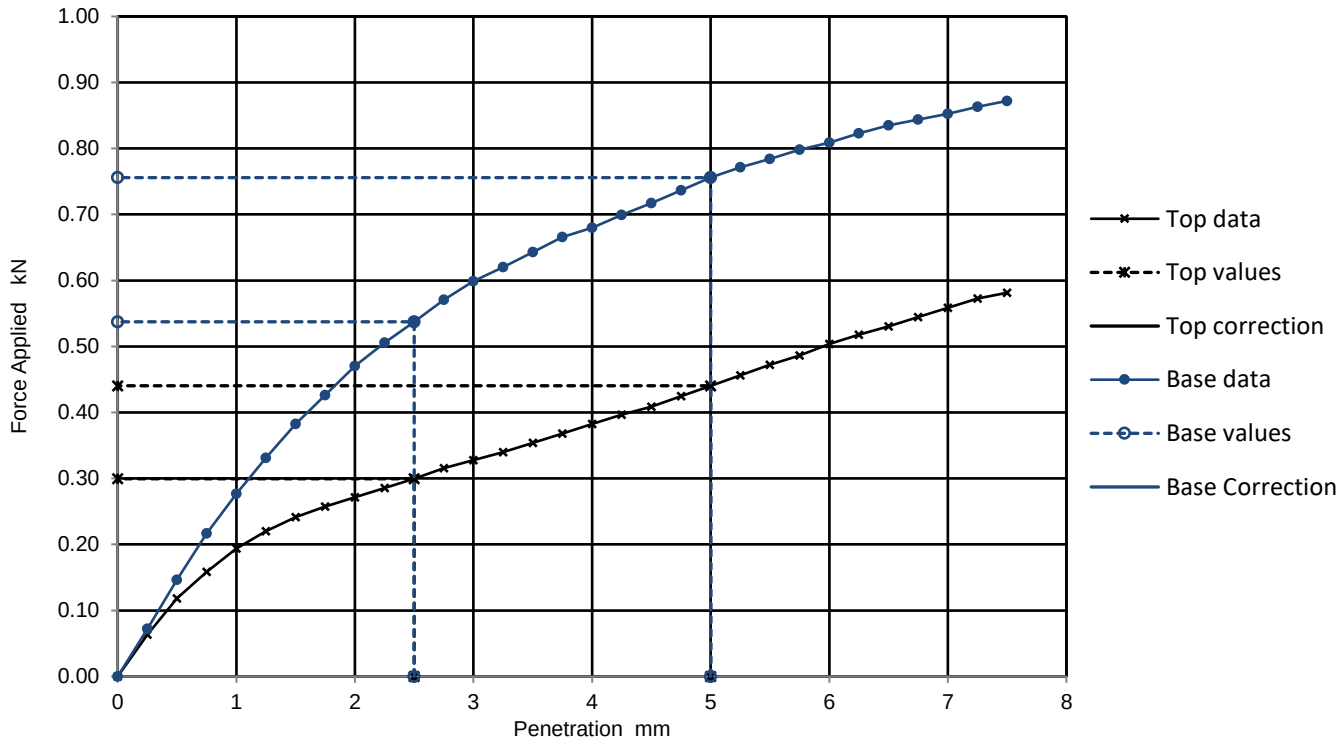
Time to surface: days

Amount of swell recorded: mm

Dry density after soaking: Mg/m3

Surcharge applied: 4.2 kg; 3 kPa

Force v Penetration Plots



RESULTS

	Curve correction applied	CBR Values, % 2.5mm	5mm	Highest	Average	Water Content %
TOP	No	2.3	2.2	2.3		40.7
BASE	No	4.1	3.8	4.1		41.7

Approved
Sanaz Sayehvand

Method of Preparation: BS1377 : Part 2 : 2022, clause 15.2, Recompacted with specified standard effort using kg rammer

Method of Test: BS1377 : Part 2 : 2022, clause 15.4, Penetration test procedure to determine California Bearing Ratio (CBR)

Remarks:

Result reported relates only to the sample tested.

UKAS TESTING 1464

IAN FARMER ASSOCIATES

Laboratory Test Report 2282314 / 1

Site: Rosefield Solar Farm **Job Number:** 2282314

Client: EDF **Page:** 23

Determination of California Bearing Ratio (CBR)

Borehole / Trial Pit	Depth (m)	Sample	% Passing 20mm Sieve	Description
HP(HR)005	1.00	**B4**	**100%**	Brown silty CLAY

Specimen Preparation

Condition

Details: Recompacted with specified standard effort using kg rammer

Initial Specimen details

Bulk density	1.78	Mg/m3
Dry density	1.30	Mg/m3
Water content	37.3	%

Soaking details: Not soaked

Period of soaking: days

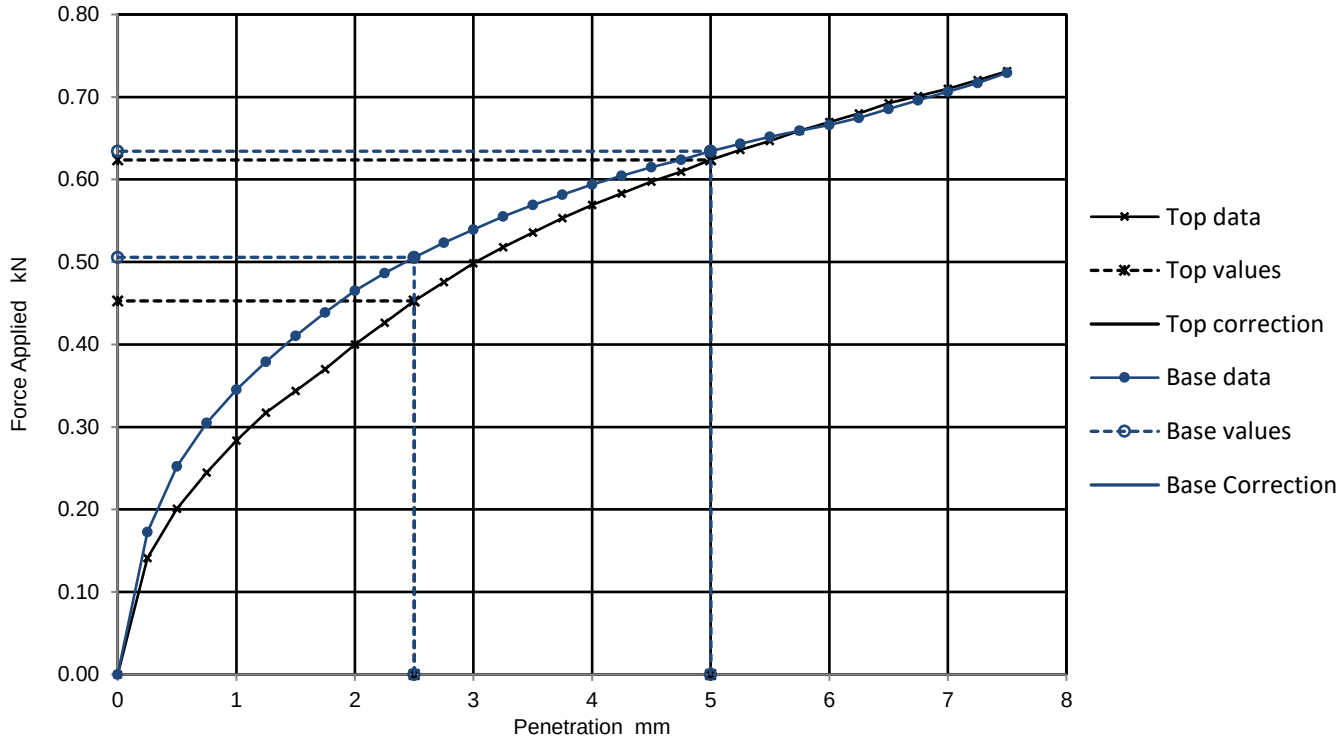
Time to surface: days

Amount of swell recorded: mm

Dry density after soaking: Mg/m3

Surcharge applied: 4.2 kg; 3 kPa

Force v Penetration Plots



RESULTS

	Curve correction applied	CBR Values, % 2.5mm	5mm	Highest	Average	Water Content %
TOP	No	3.4	3.1	3.4	3.6	37.3
BASE	No	3.8	3.2	3.8		36.8

Approved
Sanaz Sayehvand

Method of Preparation: BS1377 : Part 2 : 2022, clause 15.2, Recompacted with specified standard effort using kg rammer

Method of Test: BS1377 : Part 2 : 2022, clause 15.4, Penetration test procedure to determine California Bearing Ratio (CBR)

Remarks:

Result reported relates only to the sample tested.

UKAS TESTING 1464

IAN FARMER ASSOCIATES	Laboratory Test Report	2282314 / 1

Site: Rosefield Solar Farm **Job Number:** 2282314

Client: EDF **Page:** 24

Determination of California Bearing Ratio (CBR)

Borehole / Trial Pit	Depth (m)	Sample	% Passing 20mm Sieve	Description
HP(HR)006	0.30	**B3**	**99.10%**	Brown silty CLAY

Specimen Preparation

Condition

Details: Recompacted with specified standard effort using kg rammer

Initial Specimen details

Bulk density	1.89	Mg/m3
Dry density	1.46	Mg/m3
Water content	29.5	%

Soaking details: Not soaked

Period of soaking: days

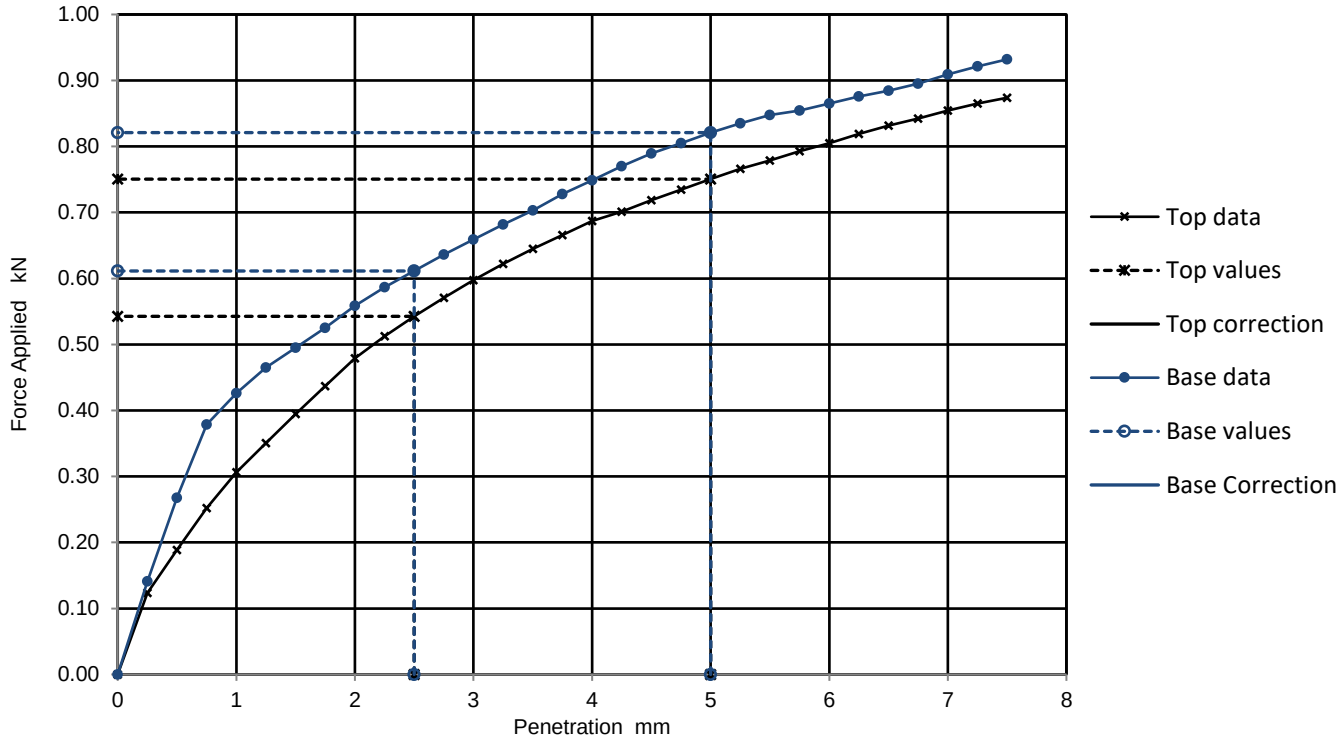
Time to surface: days

Amount of swell recorded: mm

Dry density after soaking: Mg/m3

Surcharge applied: 4.2 kg / 3 kPa

Force v Penetration Plots



RESULTS

	Curve correction applied	CBR Values, % 2.5mm	5mm	Highest	Average	Water Content %
TOP	No	4.1	3.8	4.1	4.4	28.5
BASE	No	4.6	4.1	4.6		28.7

Approved
Sanaz Sayehvand

Method of Preparation: BS1377 : Part 2 : 2022, clause 15.2, Recompacted with specified standard effort using kg rammer

Method of Test: BS1377 : Part 2 : 2022, clause 15.4, Penetration test procedure to determine California Bearing Ratio (CBR)

Remarks:

Result reported relates only to the sample tested.

UKAS TESTING 1464

IAN FARMER ASSOCIATES

Laboratory Test Report 2282314 / 1

Site: Rosefield Solar Farm **Job Number:** 2282314

Client: EDF **Page:** 25

Determination of California Bearing Ratio (CBR)

Borehole / Trial Pit	Depth (m)	Sample	% Passing 20mm Sieve	Description
HP(HR)006	1.00	**B4**	**100%**	Brown sandy, silty CLAY

Specimen Preparation

Condition

Details: Recompacted with specified standard effort using kg rammer

Initial Specimen details

Bulk density	1.78	Mg/m3
Dry density	1.27	Mg/m3
Water content	40.4	%

Soaking details: Not soaked

Period of soaking: days

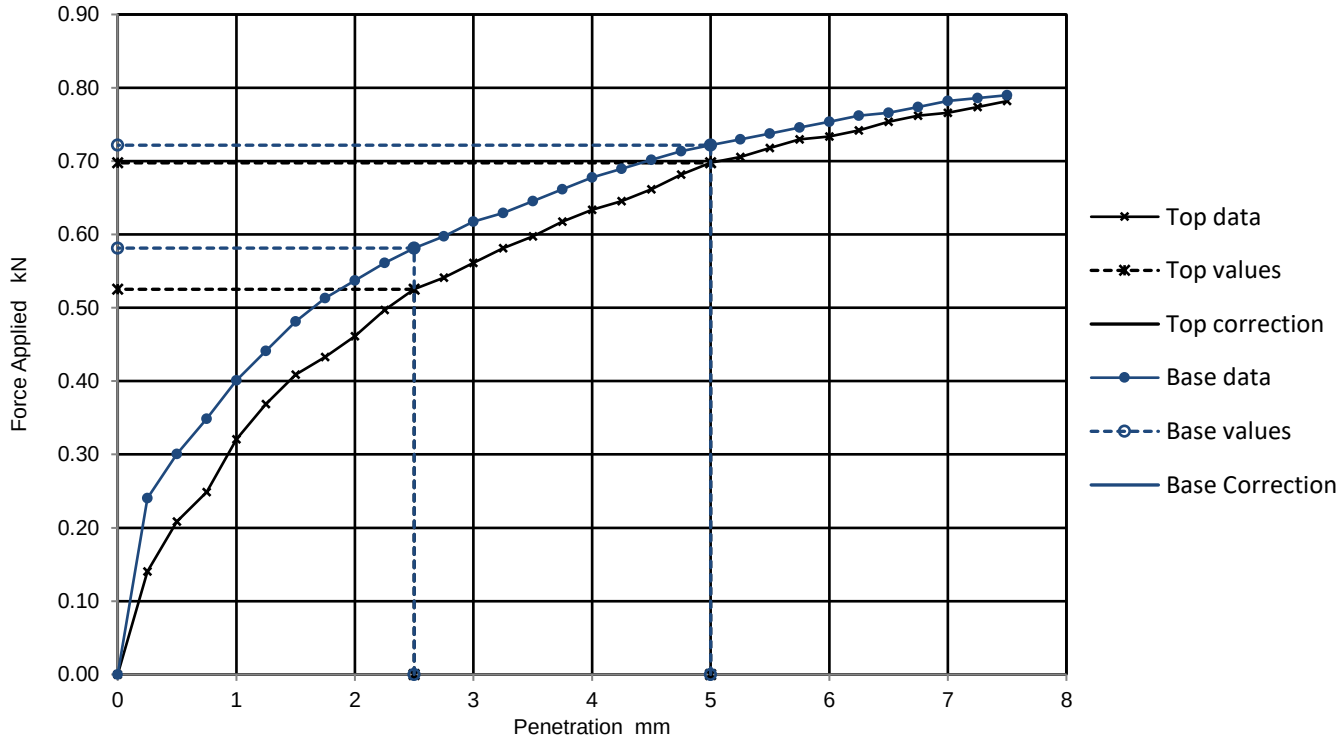
Time to surface: days

Amount of swell recorded: mm

Dry density after soaking: Mg/m3

Surcharge applied: 4.2 kg, 3 kPa

Force v Penetration Plots



RESULTS

	Curve correction applied	CBR Values, % 2.5mm	5mm	Highest	Average	Water Content %
TOP	No	4.0	3.5	4.0	4.2	36.8
BASE	No	4.4	3.6	4.4		36.2

Approved
Sanaz Sayehvand

Method of Preparation: BS1377 : Part 2 : 2022, clause 15.2, Recompacted with specified standard effort using kg rammer

Method of Test: BS1377 : Part 2 : 2022, clause 15.4, Penetration test procedure to determine California Bearing Ratio (CBR)

Remarks:

Result reported relates only to the sample tested.

UKAS TESTING 1464

IAN FARMER ASSOCIATES

Laboratory Test Report | 2282314 / 1

Site: Rosefield Solar Farm | **Job Number:** 2282314

Client: EDF | **Page:** 26

Determination of California Bearing Ratio (CBR)

Borehole / Trial Pit	Depth (m)	Sample	% Passing 20mm Sieve	Description
HP(HR)007	0.50	**B3**	**100%**	Brown sandy, silty CLAY

Specimen Preparation

Condition

Details: Recompacted with specified standard effort using kg rammer

Initial Specimen details

Bulk density	1.68	Mg/m3
Dry density	1.17	Mg/m3
Water content	44.2	%

Soaking details: Not soaked

Period of soaking: days

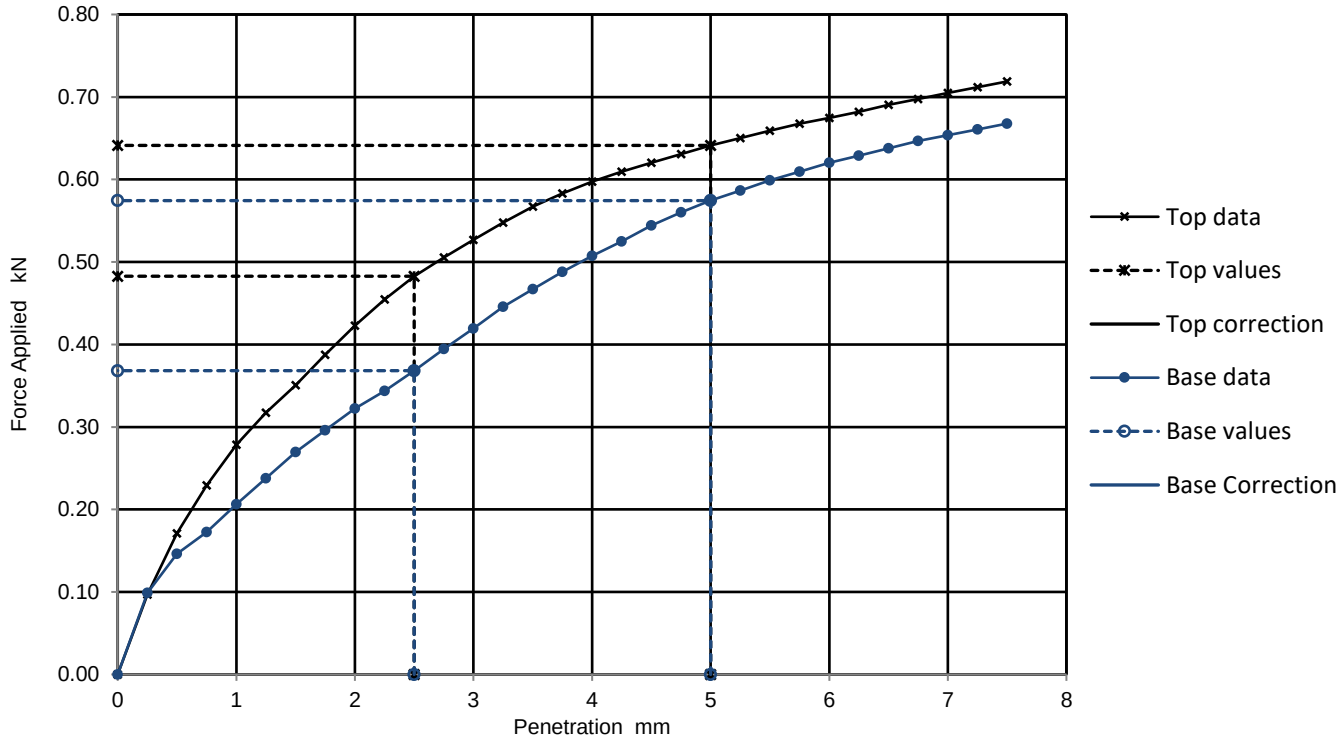
Time to surface: days

Amount of swell recorded: mm

Dry density after soaking: Mg/m3

Surcharge applied: 4.2 kg / 3 kPa

Force v Penetration Plots



RESULTS

	Curve correction applied	CBR Values, % 2.5mm	5mm	Highest	Average	Water Content %
TOP	No	3.7	3.2	3.7		44.5
BASE	No	2.8	2.9	2.9		44.5

Approved
Sanaz Sayehvand

Method of Preparation: BS1377 : Part 2 : 2022, clause 15.2, Recompacted with specified standard effort using kg rammer

Method of Test: BS1377 : Part 2 : 2022, clause 15.4, Penetration test procedure to determine California Bearing Ratio (CBR)

Remarks:

Result reported relates only to the sample tested.

UKAS TESTING 1464

IAN FARMER ASSOCIATES	Laboratory Test Report	2282314 / 1

Site: Rosefield Solar Farm **Job Number:** 2282314

Client: EDF **Page:** 27

Determination of California Bearing Ratio (CBR)

Borehole / Trial Pit	Depth (m)	Sample	% Passing 20mm Sieve	Description
HP021	0.50	**B2**	**100%**	Brown sandy, silty CLAY

Specimen Preparation

Condition

Details: Recompacted with specified standard effort using kg rammer

Initial Specimen details

Bulk density	1.80	Mg/m3
Dry density	1.36	Mg/m3
Water content	32.2	%

Soaking details: Not soaked

Period of soaking: days

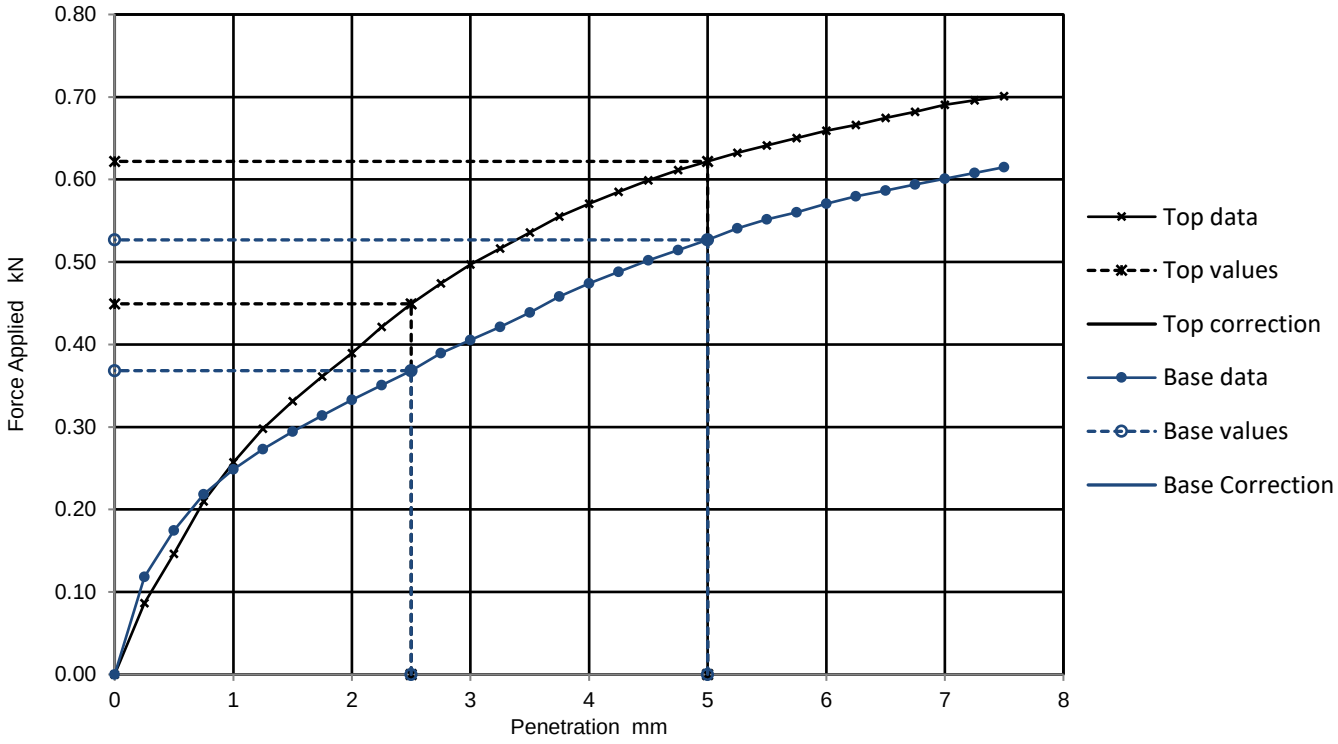
Time to surface: days

Amount of swell recorded: mm

Dry density after soaking: Mg/m3

Surcharge applied: 4.2 kg / 3 kPa

Force v Penetration Plots



RESULTS

	Curve correction applied	CBR Values, %				Water Content %
		2.5mm	5mm	Highest	Average	
TOP	No	3.4	3.1	3.4	3.1	32.4
BASE	No	2.8	2.6	2.8		35.3

Approved
Sanaz Sayehvand

Method of Preparation: BS1377 : Part 2 : 2022, clause 15.2, Recompacted with specified standard effort using kg rammer

Method of Test: BS1377 : Part 2 : 2022, clause 15.4, Penetration test procedure to determine California Bearing Ratio (CBR)

Remarks:

Result reported relates only to the sample tested.

UKAS TESTING 1464

IAN FARMER ASSOCIATES	Laboratory Test Report	2282314 / 1

Site: Rosefield Solar Farm **Job Number:** 2282314

Client: EDF **Page:** 28

Determination of California Bearing Ratio (CBR)

Borehole / Trial Pit	Depth (m)	Sample	% Passing 20mm Sieve	Description
HP025	0.50	**B2**	**100%**	Brown sandy, gravelly, silty CLAY

Specimen Preparation

Condition

Details: Recompacted with specified standard effort using kg rammer

Initial Specimen details

Bulk density	1.91	Mg/m3
Dry density	1.51	Mg/m3
Water content	26.6	%

Soaking details: Not soaked

Period of soaking: days

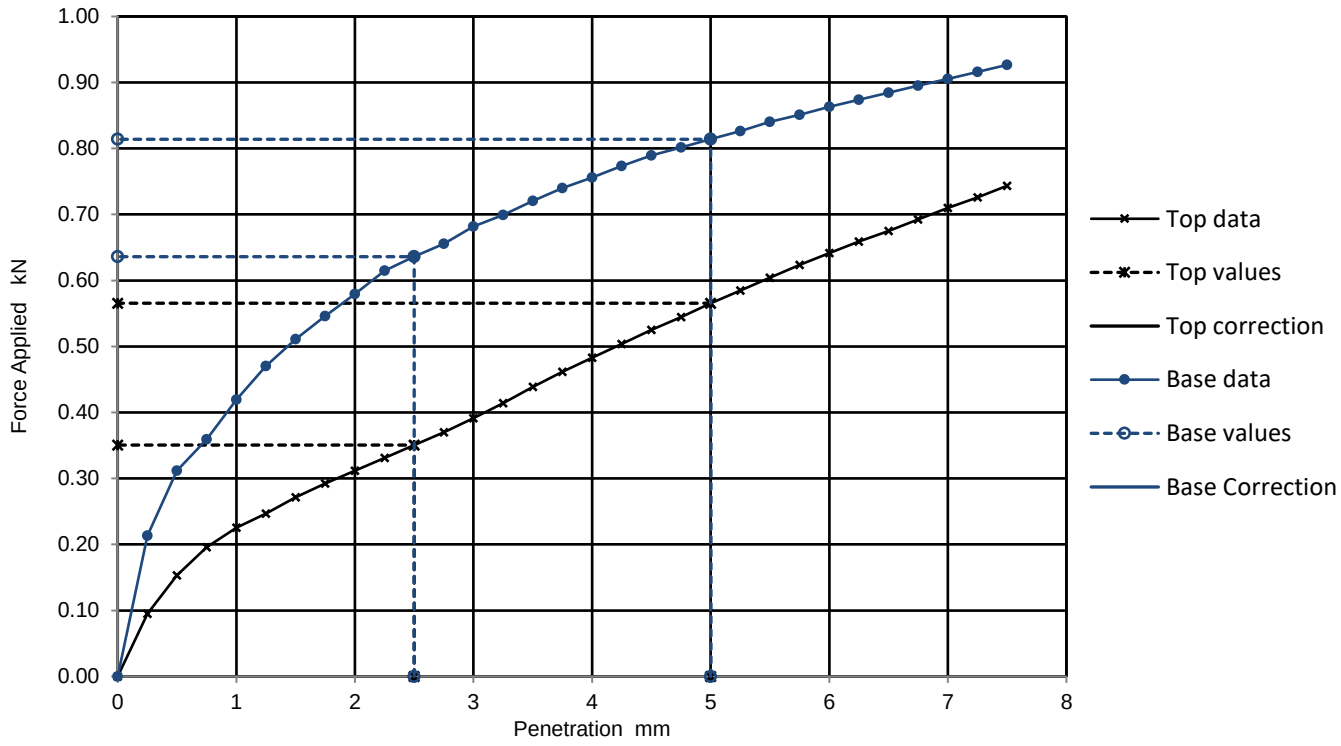
Time to surface: days

Amount of swell recorded: mm

Dry density after soaking: Mg/m3

Surcharge applied: 4.2 kg / 3 kPa

Force v Penetration Plots



RESULTS

	Curve correction applied	CBR Values, % 2.5mm	5mm	Highest	Average	Water Content %
TOP	No	2.7	2.8	2.8		27.7
BASE	No	4.8	4.1	4.8		28.1

Approved
Sanaz Sayehvand

Method of Preparation: BS1377 : Part 2 : 2022, clause 15.2, Recompacted with specified standard effort using kg rammer

Method of Test: BS1377 : Part 2 : 2022, clause 15.4, Penetration test procedure to determine California Bearing Ratio (CBR)

Remarks:

Result reported relates only to the sample tested.

UKAS TESTING 1464

IAN FARMER ASSOCIATES

Laboratory Test Report 2282314 / 1

Site: Rosefield Solar Farm **Job Number:** 2282314

Client: EDF **Page:** 29

Determination of California Bearing Ratio (CBR)

Borehole / Trial Pit	Depth (m)	Sample	% Passing 20mm Sieve	Description
TP(C)001	0.20	**B2**	**100%**	Brown sandy, silty CLAY

Specimen Preparation

Condition

Details: Recompacted with specified standard effort using kg rammer

Initial Specimen details

Bulk density	1.66	Mg/m3
Dry density	1.19	Mg/m3
Water content	39.1	%

Soaking details: Not soaked

Period of soaking: days

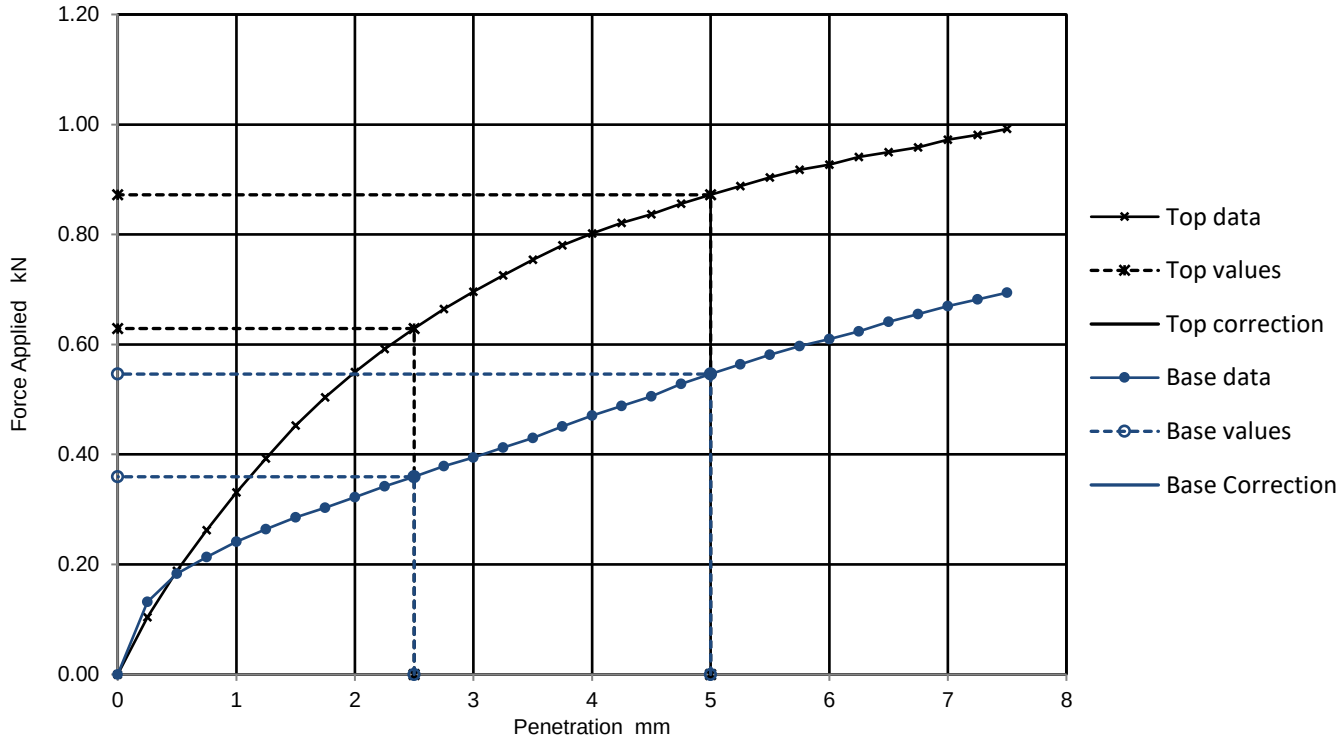
Time to surface: days

Amount of swell recorded: mm

Dry density after soaking: Mg/m3

Surcharge applied: 4.2 kg / 3 kPa

Force v Penetration Plots



RESULTS

	Curve correction applied	CBR Values, % 2.5mm	5mm	Highest	Average	Water Content %
TOP	No	4.8	4.4	4.8		38.8
BASE	No	2.7	2.7	2.7		39.6

Approved
Sanaz Sayehvand

Method of Preparation: BS1377 : Part 2 : 2022, clause 15.2, Recompacted with specified standard effort using kg rammer

Method of Test: BS1377 : Part 2 : 2022, clause 15.4, Penetration test procedure to determine California Bearing Ratio (CBR)

Remarks:

Result reported relates only to the sample tested.

UKAS TESTING 1464

IAN FARMER ASSOCIATES	Laboratory Test Report	2282314 / 1

Site: Rosefield Solar Farm **Job Number:** 2282314

Client: EDF **Page:** 30

Determination of California Bearing Ratio (CBR)

Borehole / Trial Pit	Depth (m)	Sample	% Passing 20mm Sieve	Description
TP(C)011	0.20	**B2**	**100%**	Brown silty CLAY

Specimen Preparation

Condition

Details: Recompacted with specified standard effort using kg rammer

Initial Specimen details

Bulk density	1.94	Mg/m3
Dry density	1.50	Mg/m3
Water content	29.1	%

Soaking details: Not soaked

Period of soaking: days

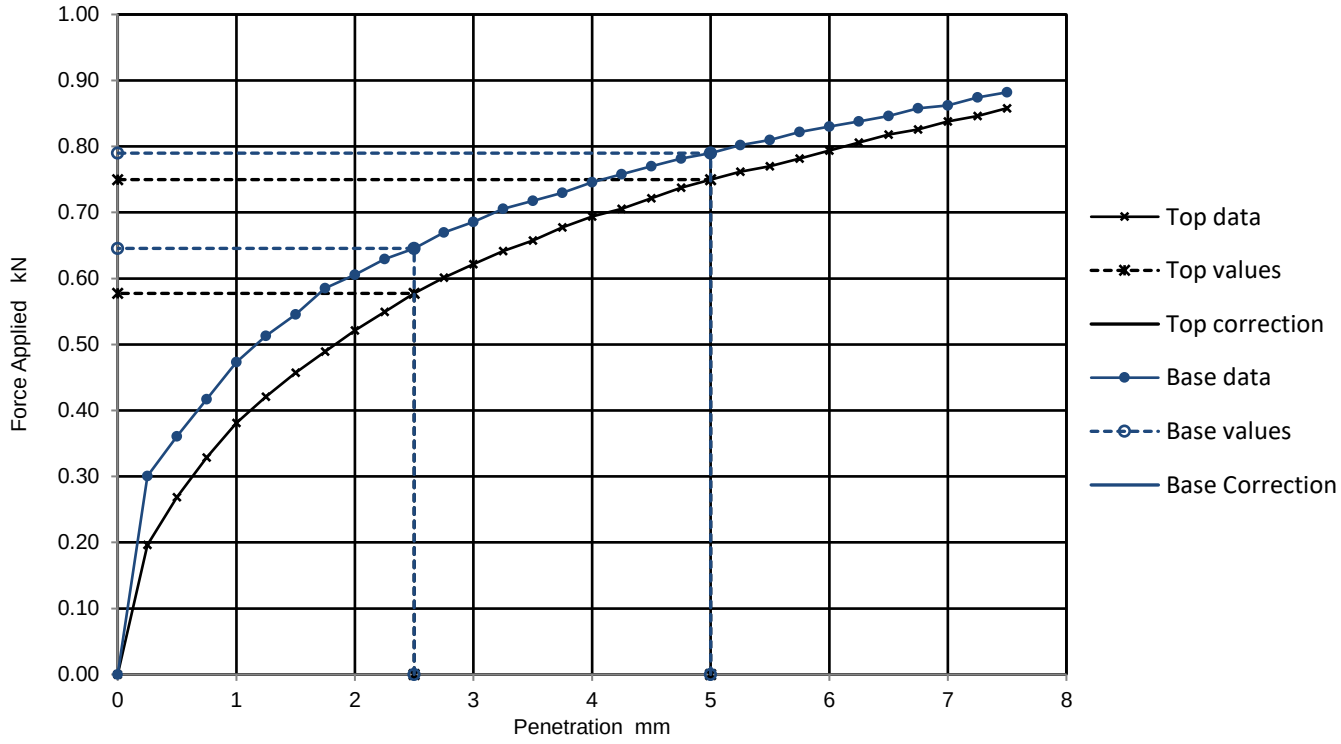
Time to surface: days

Amount of swell recorded: mm

Dry density after soaking: Mg/m3

Surcharge applied: 4.2 kg / 3 kPa

Force v Penetration Plots



RESULTS

	Curve correction applied	CBR Values, % 2.5mm	5mm	Highest	Average	Water Content %
TOP	No	4.4	3.7	4.4	4.6	27.2
BASE	No	4.9	3.9	4.9		27.1

Approved
Sanaz Sayehvand

Method of Preparation: BS1377 : Part 2 : 2022, clause 15.2, Recompacted with specified standard effort using kg rammer

Method of Test: BS1377 : Part 2 : 2022, clause 15.4, Penetration test procedure to determine California Bearing Ratio (CBR)

Remarks:

Result reported relates only to the sample tested.

UKAS TESTING 1464

IAN FARMER ASSOCIATES

Laboratory Test Report | 2282314 / 1

Site: Rosefield Solar Farm | **Job Number:** 2282314

Client: EDF | **Page:** 31

Determination of California Bearing Ratio (CBR)

Borehole / Trial Pit	Depth (m)	Sample	% Passing 20mm Sieve	Description
TP002	0.30	**B2**	**99.70%**	Brown silty CLAY

Specimen Preparation

Condition

Details: Recompacted with specified standard effort using kg rammer

Initial Specimen details

Bulk density	1.79	Mg/m3
Dry density	1.35	Mg/m3
Water content	33	%

Soaking details: Not soaked

Period of soaking: days

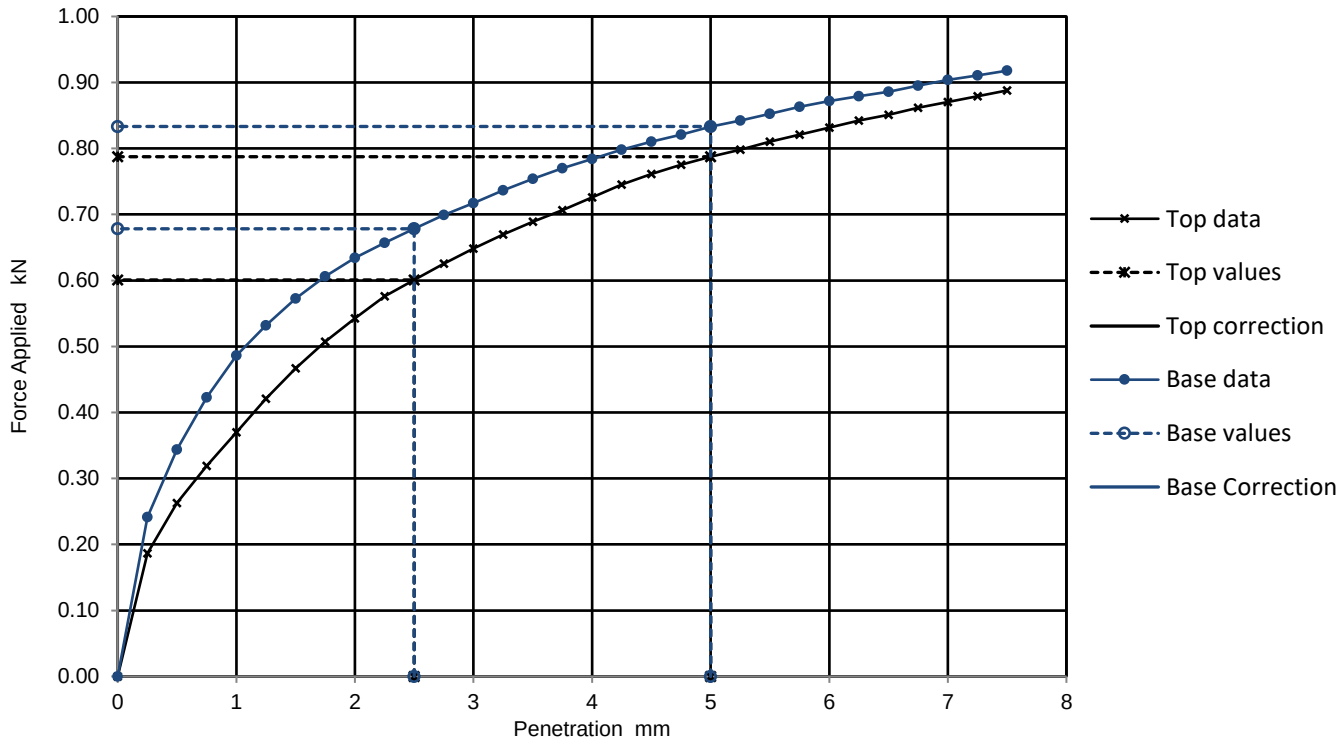
Time to surface: days

Amount of swell recorded: mm

Dry density after soaking: Mg/m3

Surcharge applied: 4.2 kg / 3 kPa

Force v Penetration Plots



RESULTS

	Curve correction applied	CBR Values, % 2.5mm	5mm	Highest	Average	Water Content %
TOP	No	4.6	3.9	4.6	4.8	33.5
BASE	No	5.1	4.2	5.1		33.6

Approved
Sanaz Sayehvand

Method of Preparation: BS1377 : Part 2 : 2022, clause 15.2, Recompacted with specified standard effort using kg rammer

Method of Test: BS1377 : Part 2 : 2022, clause 15.4, Penetration test procedure to determine California Bearing Ratio (CBR)

Remarks:

Result reported relates only to the sample tested.

UKAS TESTING 1464

IAN FARMER ASSOCIATES

Laboratory Test Report	2282314 / 1

Site: Rosefield Solar Farm **Job Number:** 2282314

Client: EDF **Page:** 32

Determination of California Bearing Ratio (CBR)

Borehole / Trial Pit	Depth (m)	Sample	% Passing 20mm Sieve	Description
TP003	0.30	**B2**	**99.70%**	Brown silty CLAY

Specimen Preparation

Condition

Details: Recompacted with specified standard effort using kg rammer

Initial Specimen details

Bulk density	1.80	Mg/m3
Dry density	1.31	Mg/m3
Water content	37.2	%

Soaking details: Not soaked

Period of soaking: days

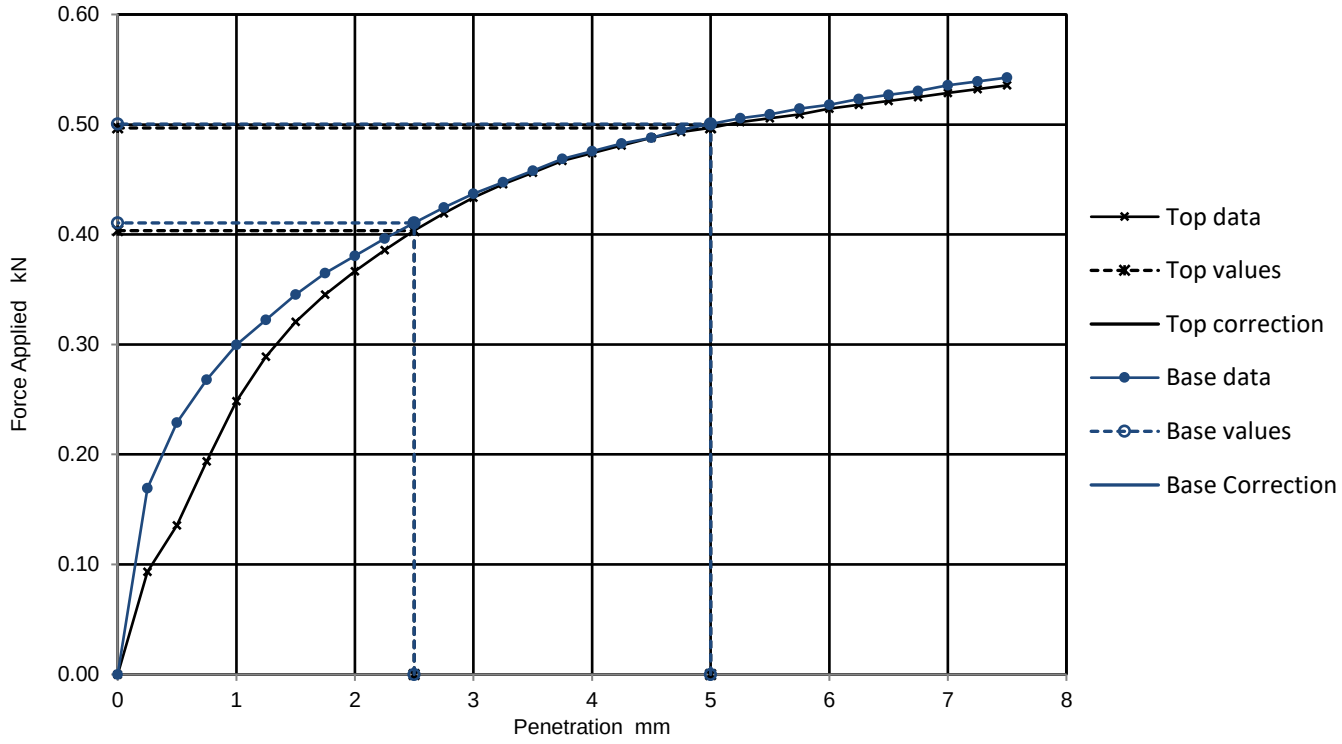
Time to surface: days

Amount of swell recorded: mm

Dry density after soaking: Mg/m3

Surcharge applied: 4.2 kg, 3 kPa

Force v Penetration Plots



RESULTS

	Curve correction applied	CBR Values, % 2.5mm	5mm	Highest	Average	Water Content %
TOP	No	3.1	2.5	3.1	3.1	38
BASE	No	3.1	2.5	3.1		37.1

Approved
Sanaz Sayehvand

Method of Preparation: BS1377 : Part 2 : 2022, clause 15.2, Recompacted with specified standard effort using kg rammer

Method of Test: BS1377 : Part 2 : 2022, clause 15.4, Penetration test procedure to determine California Bearing Ratio (CBR)

Remarks:

Result reported relates only to the sample tested.

UKAS TESTING 1464

IAN FARMER ASSOCIATES	Laboratory Test Report	2282314 / 1

Site: Rosefield Solar Farm **Job Number:** 2282314

Client: EDF **Page:** 33

Determination of California Bearing Ratio (CBR)

Borehole / Trial Pit	Depth (m)	Sample	% Passing 20mm Sieve	Description
TP014	0.30	**B2**	**100%**	Brown silty CLAY

Specimen Preparation

Condition

Details: Recompacted with specified standard effort using kg rammer

Initial Specimen details

Bulk density	1.76	Mg/m3
Dry density	1.27	Mg/m3
Water content	39	%

Soaking details: Not soaked

Period of soaking: days

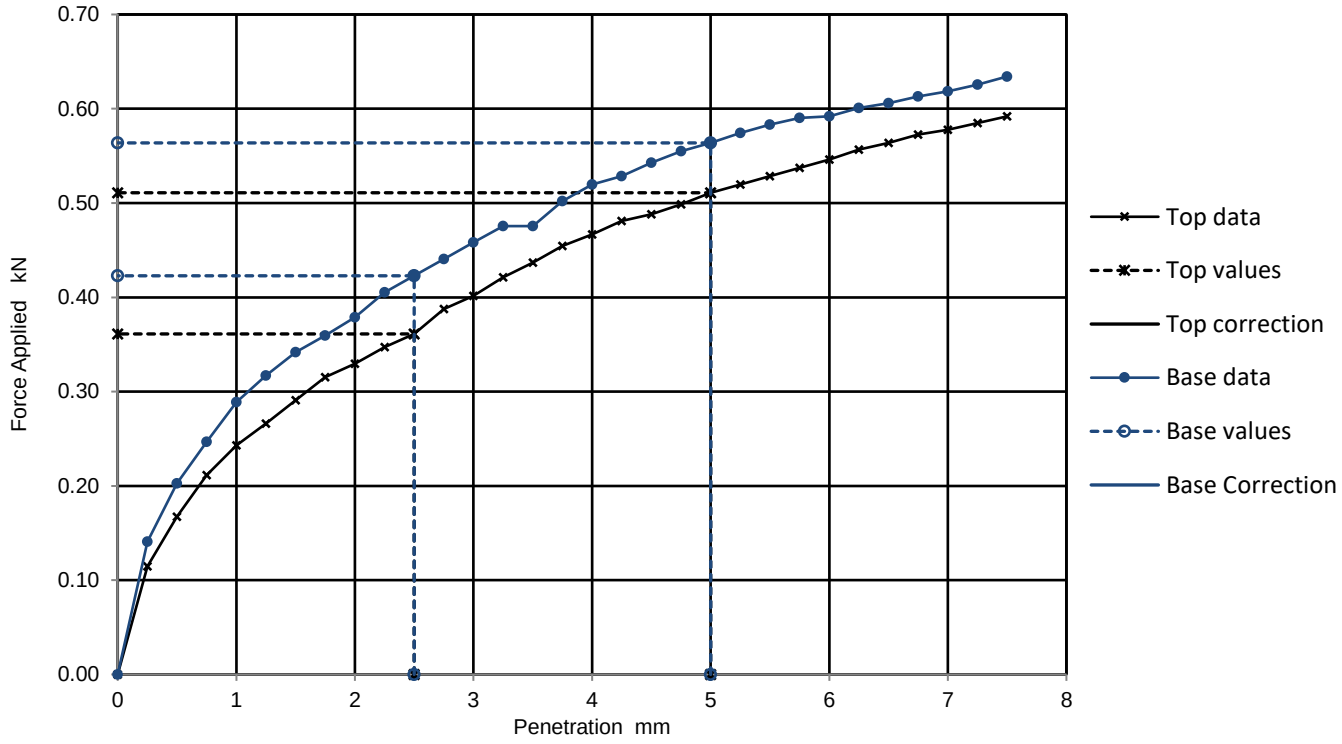
Time to surface: days

Amount of swell recorded: mm

Dry density after soaking: Mg/m3

Surcharge applied: 4.2 kg / 3 kPa

Force v Penetration Plots



RESULTS

	Curve correction applied	CBR Values, %				Water Content %
		2.5mm	5mm	Highest	Average	
TOP	No	2.7	2.6	2.7	3.0	43
BASE	No	3.2	2.8	3.2		42.8

Approved
Sanaz Sayehvand

Method of Preparation: BS1377 : Part 2 : 2022, clause 15.2, Recompacted with specified standard effort using kg rammer

Method of Test: BS1377 : Part 2 : 2022, clause 15.4, Penetration test procedure to determine California Bearing Ratio (CBR)

Remarks:

Result reported relates only to the sample tested.

UKAS TESTING 1464

Final Test Report - 2282314 / 1

Site:	Rosefield Solar Farm
Job Number:	2282314
Originating Client:	EDF

All opinions and interpretations contained within this report are outside of our Scope of Accreditation.

Samples will be retained for 28 days from date of issue of the final test report before being disposed of, unless we receive written instruction to the contrary.

Report End

Report Issue Date: 07/01/2025

envirolab
Hattersley Science & Technology Park
Stockport Road, Hattersley, SK14 3QU

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 24/12031
Issue Number: 1 **Date:** 16 December, 2024

Client: Ian Farmer Associates (Newcastle) Lab
Unit 4, Faraday Close
Pattinson North Industrial Estate
Washington
Tyne and Wear
NE38 8QJ

Project Manager: [redacted]
Project Name: Rosefield Solar Farm
Project Ref: 2282314
Order No: P7543086
Date Samples Received: 11/12/24
Date Instructions Received: 11/12/24
Date Analysis Completed: 16/12/24

Approved by:

[redacted]
Deputy Client Services Supervisor

Envirolab Job Number: 24/12031

Client Project Name: Rosefield Solar Farm

Client Project Ref: 2282314

Lab Sample ID	24/12031/1	24/12031/2	24/12031/3	24/12031/4	24/12031/5	24/12031/6	24/12031/7	Units	Limit of Detection	Method ref
Client Sample No	4	5	5	5	7	3	5			
Client Sample ID	HP(C)007	HP(C)010	HP026	HP027	TP(C)001	TP(C)011	TP012			
Depth to Top	1.40	0.50	0.75	0.75	1.90	0.80	1.40			
Depth To Bottom										
Date Sampled		06-Nov-24	06-Nov-24	06-Nov-24			06-Nov-24			
Sample Type	SOIL - D	SOIL - D	SOIL - D	SOIL - D	SOIL - D	SOIL - D	SOIL - D			
Sample Matrix Code	6A	6AE	3A	6A	6A	6A	6A			
% Stones >10mm$_A$	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	% w/w	0.1	A-T-044
pH BRE$_D$$^{M\#}$	7.49	8.19	8.34	8.16	8.49	8.23	8.15	pH	0.01	A-T-031s
Sulphate BRE (water sol 2:1)$_D$$^{M\#}$	-	33	155	20	-	-	348	mg/l	10	A-T-026s
Sulphate BRE (acid sol)$_D$$^{M\#}$	-	0.02	0.09	0.03	-	-	0.10	% w/w	0.02	A-T-028s
Sulphur BRE (total)$_D$	-	0.01	0.05	0.02	-	-	0.04	% w/w	0.01	A-T-024s

Envirolab Job Number: 24/12031

Client Project Name: Rosefield Solar Farm

Client Project Ref: 2282314

Lab Sample ID	24/12031/8	24/12031/9	24/12031/10	24/12031/11	24/12031/12	24/12031/13		Units	Limit of Detection	Method ref
Client Sample No	9	13	10	14	5	7				
Client Sample ID	WS015	WS015	WS016	WS016	WS018	WS018				
Depth to Top	2.00	4.00	1.80	3.70	1.00	1.90				
Depth To Bottom										
Date Sampled		04-Nov-24		04-Nov-24	05-Nov-24					
Sample Type	SOIL - B	SOIL - D	SOIL - D	SOIL - D	SOIL - D	SOIL - D				
Sample Matrix Code	6A	1A	6AE	3A	6AE	6A				
% Stones >10mm$_A$	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		% w/w	0.1	A-T-044
pH BRE$_D$$^{M\#}$	8.36	8.44	7.98	7.91	8.28	8.25		pH	0.01	A-T-031s
Sulphate BRE (water sol 2:1)$_D$$^{M\#}$	51	290	2070	1980	24	241		mg/l	10	A-T-026s
Sulphate BRE (acid sol)$_D$$^{M\#}$	0.03	0.06	3.60	2.31	<0.04	0.07		% w/w	0.02	A-T-028s
Sulphur BRE (total)$_D$	0.02	0.02	1.49	0.93	0.01	0.04		% w/w	0.01	A-T-024s

Report Notes

General

•This report shall not be reproduced, except in full, without written approval from Envirolab.
•The client Sample No, Client Sample ID, Depth to top, Depth to Bottom and Date Sampled are all provided by the client and can affect the validity of results.
•The results reported herein relate only to the material supplied to the laboratory.
•The residue of any samples contained within this report, and any received within the same delivery, will be disposed of **four weeks** after the initial scheduling. For samples tested for Asbestos we will retain a portion of the dried sample for a minimum of **six months** after the initial Asbestos testing is completed.
•Analytical results reflect the quality of the sample at the time of analysis only.
•Opinions and Interpretations expressed are outside our scope of accreditation.
•A deviating sample report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid.
•If a sample is outside of the calibration range or affected by interferences then it may need diluting. This will result in the limit of detection (LOD) being raised.
•Subcontracted Analysis: Please see the appended report for any deviations, current LODs and accreditation status of the test.

Key

Superscript "#"	Accredited to ISO 17025
Superscript "M"	Accredited to MCertS
Superscript "U"	Individual result not accredited
None of the above symbols	Analysis unaccredited
Subscript "A"	Analysis performed on as-received Sample
Subscript "D"	Analysis performed on the dried sample, crushed to pass 2mm sieve.
Subscript "D" on Asbestos	Analysis performed on a dried aliquot of sample provided.
Subscript "^"	Analysis has dependant options against results. Details appear in the comments of your Sample receipt
IS	Insufficient Sample for analysis
US	Unsuitable Sample for analysis
NDP	No Determination Possible
NAD	No Asbestos Detected
Trace	Asbestos found not suitable for Gravimetric Quantification – not enough to accurately weigh.
N/A	Not applicable

Asbestos

Identification: Asbestos in soil analysis is performed on a dried aliquot of the submitted sample and cannot guarantee to identify asbestos if only present in small numbers as discrete fibres/fragments in the original sample.
Stones etc. are not removed from the sample prior to analysis
"Trace Asbestos Identified" will be reported if there is not enough present to verify the type.
Quantification: Generally a 2 stage process including visual identification, hand picking and weighing, and fibre counting. Where ACMs are found a percentage asbestos is assigned to each with reference to 'HSG264, Asbestos: The survey guide' and the calculated asbestos content is expressed as a percentage of the dried soil sample aliquot used. If asbestos is identified as being present but is not in a form that is suitable for analysis by hand picking and weighing (normally if the asbestos is present as free fibres). "TRACE" will be reported as a quantification result.
PLEASE INFORM THE LABORATORY IF YOU WOULD LIKE THE STAGE 3 SEDIMENTATION PROCESS CARRIED OUT. Note this will be subcontracted.

Assigned Matrix Codes

1	SAND	6	CLAY/LOAM	A	Contains Stones
2	LOAM	7	OTHER	B	Contains Construction Rubble
3	CLAY	8	Asbestos Bulk (Only Asbestos ID accredited)	C	Contains visible hydrocarbons
4	LOAM/SAND	9	Incinerator Ash (some Metals accredited)	D	Contains glass / metal
5	SAND/CLAY			E	Contains roots / twigs
Note: 7,8,9 matrices are not covered by our ISO 17025 or MCertS accreditation, unless stated above.					

Soil Chemical Analysis:
All results are reported as dry weight (<40°C).
For samples with Matrix Codes 1 - 6 natural stones, brick and concrete fragments >10mm and any extraneous material (visible glass, metal or twigs) are removed and excluded from the sample prior to analysis and reported results corrected to a whole sample basis. This is reported as '% stones >10mm'.
For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis and this supersedes any "A" subscripts
All analysis is performed on the sample as received for soil samples which are positive for asbestos or the client has informed asbestos may be present and/or if they are from outside the European Union and this supersedes any "D" subscripts.

TPH by method A-T-007:
For waters, free and visible oils are excluded from the sample used for analysis, so the reported result represents the dissolved phase only.
Results "with Clean up" indicates samples cleaned up with Silica during extraction.

EPH CWG (method A-T-055) from TPH CWG:
EPH CWG results have humics mathematically subtracted through instrument calculation.
Where these humic substances have been identified in any IDs from "TPH CWG with clean up" please note that the concentration is **NOT** included in the quantified results but present in the ID for information.

Electrical Conductivity of water by method A-T-037:
Results greater than 12900µS/cm @ 25^0C / 11550µS/cm @ 20^0C fall outside the calibration range and as such are unaccredited.

Please contact your client manager if you require any further information.

Envirolab Deviating Samples Report

Hattersley Science & Technology Park, Stockport Road, Hattersley, SK14 3QU
Tel. 0161 368 4921 email. ask@envlab.co.uk

Client: Ian Farmer Associates (Newcastle) Lab, Unit 4, Faraday Close, Pattinson North Industrial Estate, Washington, Tyne and Wear, NE38 8QJ

Project No: 24/12031

Date Received: 11/12/2024 (am)

Project: Rosefield Solar Farm

Cool Box Temperatures (°C): 8.8

Clients Project No: 2282314

Lab Sample ID	24/12031/1	24/12031/2	24/12031/3	24/12031/4	24/12031/5	24/12031/6	24/12031/7	24/12031/8	24/12031/9	24/12031/10	24/12031/11	24/12031/12
Client Sample No	4	5	5	5	7	3	5	9	13	10	14	5
Client Sample ID/Depth	HP(C)007 1.40m	HP(C)010 0.50m	HP026 0.75m	HP027 0.75m	TP(C)001 1.90m	TP(C)011 0.80m	TP012 1.40m	WS015 2.00m	WS015 4.00m	WS016 1.80m	WS016 3.70m	WS018 1.00m
Date Sampled		06/11/24	06/11/24	06/11/24			06/11/24		04/11/24		04/11/24	05/11/24
Deviation Code												
E (no date)	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓
F		✓	✓	✓			✓		✓		✓	✓

Lab Sample ID	24/12031/13
Client Sample No	7
Client Sample ID/Depth	WS018 1.90m
Date Sampled	
Deviation Code	
E (no date)	✓
F	

Key

E (no date) *No sampling date provided (all results affected if not provided)*

F *Maximum holding time exceeded between sampling date and analysis for analytes listed below*

HOLDING TIME EXCEEDANCES

Lab Sample ID	24/12031/2	24/12031/3	24/12031/4	24/12031/7	24/12031/9	24/12031/11	24/12031/12
Client Sample No	5	5	5	5	13	14	5
Client Sample ID/Depth	HP(C)010 0.50m	HP026 0.75m	HP027 0.75m	TP012 1.40m	WS015 4.00m	WS016 3.70m	WS018 1.00m
Date Sampled	06/11/24	06/11/24	06/11/24	06/11/24	04/11/24	04/11/24	05/11/24
Sulphate BRE (water sol 2:1)	✓	✓	✓	✓	✓	✓	✓

Lab Sample ID	24/12031/2	24/12031/3	24/12031/4	24/12031/7	24/12031/9	24/12031/11	24/12031/12
Client Sample No	5	5	5	5	13	14	5
Client Sample ID/Depth	HP(C)010 0.50m	HP026 0.75m	HP027 0.75m	TP012 1.40m	WS015 4.00m	WS016 3.70m	WS018 1.00m
Date Sampled	06/11/24	06/11/24	06/11/24	06/11/24	04/11/24	04/11/24	05/11/24
Sulphate BRE (acid sol)	✓	✓	✓	✓	✓	✓	✓

If, at any point before reaching the laboratory, the temperature of the samples has breached those set in published standards, e.g. BS-EN 5667-3, ISO 18400-102:2017, then the concentration of any affected analytes may differ from that at the time of sampling.

Envirolab Analysis Dates

Lab Sample ID	24/12031/1	24/12031/2	24/12031/3	24/12031/4	24/12031/5	24/12031/6	24/12031/7	24/12031/8	24/12031/9	24/12031/10	24/12031/11	24/12031/12
Client Sample No	4	5	5	5	7	3	5	9	13	10	14	5
Client Sample ID/Depth	HP(C)007 1.40m	HP(C)010 0.50m	HP026 0.75m	HP027 0.75m	TP(C)001 1.90m	TP(C)011 0.80m	TP012 1.40m	WS015 2.00m	WS015 4.00m	WS016 1.80m	WS016 3.70m	WS018 1.00m
Date Sampled		06/11/24	06/11/24	06/11/24			06/11/24		04/11/24		04/11/24	05/11/24
A-T-024s		13/12/2024	13/12/2024	13/12/2024			13/12/2024	13/12/2024	13/12/2024	13/12/2024	16/12/2024	13/12/2024
A-T-026s		13/12/2024	13/12/2024	13/12/2024			13/12/2024	13/12/2024	13/12/2024	13/12/2024	13/12/2024	13/12/2024
A-T-028s		13/12/2024	13/12/2024	13/12/2024			13/12/2024	13/12/2024	13/12/2024	13/12/2024	13/12/2024	13/12/2024
A-T-031s	13/12/2024	13/12/2024	13/12/2024	13/12/2024	13/12/2024	13/12/2024	13/12/2024	13/12/2024	13/12/2024	13/12/2024	13/12/2024	13/12/2024
A-T-044	13/12/2024	13/12/2024	13/12/2024	13/12/2024	13/12/2024	13/12/2024	13/12/2024	13/12/2024	13/12/2024	13/12/2024	13/12/2024	13/12/2024

Lab Sample ID	24/12031/13
Client Sample No	7
Client Sample ID/Depth	WS018 1.90m
Date Sampled	
A-T-024s	13/12/2024
A-T-026s	13/12/2024
A-T-028s	13/12/2024
A-T-031s	13/12/2024
A-T-044	13/12/2024

The above dates are the analysis completion dates, please note that these are not necessarily the date that the analysis was weighed/extracted.

End of Report

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

Appendix F
Chemical Laboratory Testing Results

envirolab
Hattersley Science & Technology Park
Stockport Road, Hattersley, SK14 3QU

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 24/11960
Issue Number: 1 **Date:** 13 December, 2024

Client:
Central Alliance
Alliance House
South Park Way
South Park Way
Wakefield 41 Business Park
Wakefield
WF2 0XJ

Project Manager: Lab results/[redacted]
Project Name: Rosefield Solar Farm
Project Ref: 2372536
Order No: N/A
Date Samples Received: 07/11/24
Date Instructions Received: 09/12/24
Date Analysis Completed: 13/12/24

Approved by:

[redacted]
Client Service Manager

Envirolab Job Number: 24/11960

Client Project Name: Rosefield Solar Farm

Client Project Ref: 2372536

Lab Sample ID	24/11960/2	24/11960/3	24/11960/6	24/11960/7	24/11960/8	24/11960/12	24/11960/14	Units	Limit of Detection	Method ref
Client Sample No	1	1	2	3	2	1	1			
Client Sample ID	HP(HR)004	HP(HR)005	HP008	HP011	HP012	HP025	HP027			
Depth to Top	0.20	0.20	0.20	0.50	0.15	0.10	0.20			
Depth To Bottom										
Date Sampled	07-Nov-24	07-Nov-24	04-Nov-24	04-Nov-24	04-Nov-24	05-Nov-24	06-Nov-24			
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES			
Sample Matrix Code	6AE	6AE	6AE	6A	6AE	6AE	6A			
% Stones >10mm$_A$	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	% w/w	0.1	A-T-044
Cyanide (free)$_A^{M\#}$	<1	<1	<1	<1	<1	<1	<1	mg/kg	1	A-T-042sFCN
Cyanide (total)$_A^{M\#}$	<1	<1	<1	<1	<1	<1	<1	mg/kg	1	A-T-042sTCN
Arsenic$_D^{M\#}$	9	13	10	6	6	12	7	mg/kg	1	A-T-024s
Cadmium$_D^{M\#}$	0.6	0.7	0.6	<0.5	<0.5	0.5	<0.5	mg/kg	0.5	A-T-024s
Copper$_D^{M\#}$	20	21	17	12	17	13	13	mg/kg	1	A-T-024s
Chromium$_D^{M\#}$	35	45	49	33	55	47	52	mg/kg	1	A-T-024s
Lead$_D^{M\#}$	24	28	24	10	20	23	14	mg/kg	1	A-T-024s
Mercury$_D$	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	mg/kg	0.17	A-T-024s
Nickel$_D^{M\#}$	26	32	29	25	29	29	33	mg/kg	1	A-T-024s
Selenium$_D^{M\#}$	<1	<1	<1	<1	<1	<1	<1	mg/kg	1	A-T-024s
Zinc$_D^{M\#}$	110	257	80	48	79	86	90	mg/kg	5	A-T-024s

Envirolab Job Number: 24/11960

Client Project Name: Rosefield Solar Farm

Client Project Ref: 2372536

Lab Sample ID	24/11960/2	24/11960/3	24/11960/6	24/11960/7	24/11960/8	24/11960/12	24/11960/14	Units	Limit of Detection	Method ref
Client Sample No	1	1	2	3	2	1	1			
Client Sample ID	HP(HR)004	HP(HR)005	HP008	HP011	HP012	HP025	HP027			
Depth to Top	0.20	0.20	0.20	0.50	0.15	0.10	0.20			
Depth To Bottom										
Date Sampled	07-Nov-24	07-Nov-24	04-Nov-24	04-Nov-24	04-Nov-24	05-Nov-24	06-Nov-24			
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES			
Sample Matrix Code	6AE	6AE	6AE	6A	6AE	6AE	6A			
Asbestos in Soil (inc. matrix) ^										
Asbestos in soil$_D^{\#}$	NAD	NAD	NAD	NAD	NAD	NAD	NAD			A-T-045
Asbestos Matrix (visual)$_D$	-	-	-	-	-	-	-			A-T-045
Asbestos Matrix (microscope)$_D$	-	-	-	-	-	-	-			A-T-045
Asbestos ACM - Suitable for Water Absorption Test?$_D$	N/A	N/A	N/A	N/A	N/A	N/A	N/A			A-T-045

Envirolab Job Number: 24/11960

Client Project Name: Rosefield Solar Farm

Client Project Ref: 2372536

Lab Sample ID	24/11960/2	24/11960/3	24/11960/6	24/11960/7	24/11960/8	24/11960/12	24/11960/14	Units	Limit of Detection	Method ref
Client Sample No	1	1	2	3	2	1	1			
Client Sample ID	HP(HR)004	HP(HR)005	HP008	HP011	HP012	HP025	HP027			
Depth to Top	0.20	0.20	0.20	0.50	0.15	0.10	0.20			
Depth To Bottom										
Date Sampled	07-Nov-24	07-Nov-24	04-Nov-24	04-Nov-24	04-Nov-24	05-Nov-24	06-Nov-24			
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES			
Sample Matrix Code	6AE	6AE	6AE	6A	6AE	6AE	6A			
PAH-16MS										
Acenaphthene$_A^{M\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-019s
Acenaphthylene$_A^{M\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-019s
Anthracene$_A^{M\#}$	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	mg/kg	0.02	A-T-019s
Benzo(a)anthracene$_A^{M\#}$	0.08	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	0.04	A-T-019s
Benzo(a)pyrene$_A^{M\#}$	0.10	0.06	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	0.04	A-T-019s
Benzo(b)fluoranthene$_A^{M\#}$	0.13	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	0.05	A-T-019s
Benzo(ghi)perylene$_A^{M\#}$	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	0.05	A-T-019s
Benzo(k)fluoranthene$_A^{M\#}$	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	mg/kg	0.07	A-T-019s
Chrysene$_A^{M\#}$	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	mg/kg	0.06	A-T-019s
Dibenzo(ah)anthracene$_A^{M\#}$	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	0.04	A-T-019s
Fluoranthene$_A^{M\#}$	0.23	0.15	<0.08	<0.08	<0.08	<0.08	0.17	mg/kg	0.08	A-T-019s
Fluorene$_A^{M\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-019s
Indeno(123-cd)pyrene$_A^{M\#}$	0.07	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	0.03	A-T-019s
Naphthalene $_A^{M\#}$	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	0.03	A-T-019s
Phenanthrene$_A^{M\#}$	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.07	mg/kg	0.03	A-T-019s
Pyrene$_A^{M\#}$	0.20	0.13	<0.07	<0.07	<0.07	<0.07	0.15	mg/kg	0.07	A-T-019s
Total PAH-16MS$_A^{M\#}$	0.81	0.43	<0.08	<0.08	<0.08	<0.08	0.39	mg/kg	0.01	A-T-019s

Envirolab Job Number: 24/11960

Client Project Name: Rosefield Solar Farm

Client Project Ref: 2372536

Lab Sample ID	24/11960/16	24/11960/17						Units	Limit of Detection	Method ref
Client Sample No	1	1								
Client Sample ID	TP(C)011	TP002								
Depth to Top	0.10	0.15								
Depth To Bottom										
Date Sampled	08-Nov-24	06-Nov-24								
Sample Type	SOIL - ES	SOIL - ES								
Sample Matrix Code	6A	6AE								
% Stones >10mm$_A$	<0.1	<0.1						% w/w	0.1	A-T-044
Cyanide (free)$_A^{M\#}$	<1	<1						mg/kg	1	A-T-042sFCN
Cyanide (total)$_A^{M\#}$	<1	<1						mg/kg	1	A-T-042sTCN
Arsenic$_D^{M\#}$	9	9						mg/kg	1	A-T-024s
Cadmium$_D^{M\#}$	<0.5	0.6						mg/kg	0.5	A-T-024s
Copper$_D^{M\#}$	14	21						mg/kg	1	A-T-024s
Chromium$_D^{M\#}$	37	43						mg/kg	1	A-T-024s
Lead$_D^{M\#}$	19	30						mg/kg	1	A-T-024s
Mercury$_D$	<0.17	<0.17						mg/kg	0.17	A-T-024s
Nickel$_D^{M\#}$	25	26						mg/kg	1	A-T-024s
Selenium$_D^{M\#}$	<1	<1						mg/kg	1	A-T-024s
Zinc$_D^{M\#}$	67	92						mg/kg	5	A-T-024s

Envirolab Job Number: 24/11960

Client Project Name: Rosefield Solar Farm

Client Project Ref: 2372536

Lab Sample ID	24/11960/16	24/11960/17						Units	Limit of Detection	Method ref
Client Sample No	1	1								
Client Sample ID	TP(C)011	TP002								
Depth to Top	0.10	0.15								
Depth To Bottom										
Date Sampled	08-Nov-24	06-Nov-24								
Sample Type	SOIL - ES	SOIL - ES								
Sample Matrix Code	6A	6AE								
Asbestos in Soil (inc. matrix) ^										
Asbestos in soil$_{D}^{\#}$	NAD	NAD								A-T-045
Asbestos Matrix (visual)$_{D}$	-	-								A-T-045
Asbestos Matrix (microscope)$_{D}$	-	-								A-T-045
Asbestos ACM - Suitable for Water Absorption Test?$_{D}$	N/A	N/A								A-T-045

Envirolab Job Number: 24/11960

Client Project Name: Rosefield Solar Farm

Client Project Ref: 2372536

Lab Sample ID	24/11960/16	24/11960/17						Units	Limit of Detection	Method ref
Client Sample No	1	1								
Client Sample ID	TP(C)011	TP002								
Depth to Top	0.10	0.15								
Depth To Bottom										
Date Sampled	08-Nov-24	06-Nov-24								
Sample Type	SOIL - ES	SOIL - ES								
Sample Matrix Code	6A	6AE								
PAH-16MS										
Acenaphthene$_A^{M\#}$	<0.01	<0.01						mg/kg	0.01	A-T-019s
Acenaphthylene$_A^{M\#}$	<0.01	<0.01						mg/kg	0.01	A-T-019s
Anthracene$_A^{M\#}$	<0.02	<0.02						mg/kg	0.02	A-T-019s
Benzo(a)anthracene$_A^{M\#}$	<0.04	<0.04						mg/kg	0.04	A-T-019s
Benzo(a)pyrene$_A^{M\#}$	<0.04	<0.04						mg/kg	0.04	A-T-019s
Benzo(b)fluoranthene$_A^{M\#}$	<0.05	<0.05						mg/kg	0.05	A-T-019s
Benzo(ghi)perylene$_A^{M\#}$	<0.05	<0.05						mg/kg	0.05	A-T-019s
Benzo(k)fluoranthene$_A^{M\#}$	<0.07	<0.07						mg/kg	0.07	A-T-019s
Chrysene$_A^{M\#}$	<0.06	<0.06						mg/kg	0.06	A-T-019s
Dibenzo(ah)anthracene$_A^{M\#}$	<0.04	<0.04						mg/kg	0.04	A-T-019s
Fluoranthene$_A^{M\#}$	<0.08	<0.08						mg/kg	0.08	A-T-019s
Fluorene$_A^{M\#}$	<0.01	<0.01						mg/kg	0.01	A-T-019s
Indeno(123-cd)pyrene$_A^{M\#}$	<0.03	<0.03						mg/kg	0.03	A-T-019s
Naphthalene $_A^{M\#}$	<0.03	<0.03						mg/kg	0.03	A-T-019s
Phenanthrene$_A^{M\#}$	<0.03	<0.03						mg/kg	0.03	A-T-019s
Pyrene$_A^{M\#}$	<0.07	<0.07						mg/kg	0.07	A-T-019s
Total PAH-16MS$_A^{M\#}$	<0.08	<0.08						mg/kg	0.01	A-T-019s

Report Notes

General

•This report shall not be reproduced, except in full, without written approval from Envirolab.
•The client Sample No, Client Sample ID, Depth to top, Depth to Bottom and Date Sampled are all provided by the client and can affect the validity of results.
•The results reported herein relate only to the material supplied to the laboratory.
•The residue of any samples contained within this report, and any received within the same delivery, will be disposed of **four weeks** after the initial scheduling. For samples tested for Asbestos we will retain a portion of the dried sample for a minimum of **six months** after the initial Asbestos testing is completed.
•Analytical results reflect the quality of the sample at the time of analysis only.
•Opinions and Interpretations expressed are outside our scope of accreditation.
•A deviating sample report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid.
•If a sample is outside of the calibration range or affected by interferences then it may need diluting. This will result in the limit of detection (LOD) being raised.
•Subcontracted Analysis: Please see the appended report for any deviations, current LODs and accreditation status of the test.

Key

Superscript "#"	Accredited to ISO 17025
Superscript "M"	Accredited to MCertS
Superscript "U"	Individual result not accredited
None of the above symbols	Analysis unaccredited
Subscript "A"	Analysis performed on as-received Sample
Subscript "D"	Analysis performed on the dried sample, crushed to pass 2mm sieve.
Subscript "D" on Asbestos	Analysis performed on a dried aliquot of sample provided.
Subscript "^"	Analysis has dependant options against results. Details appear in the comments of your Sample receipt
IS	Insufficient Sample for analysis
US	Unsuitable Sample for analysis
NDP	No Determination Possible
NAD	No Asbestos Detected
Trace	Asbestos found not suitable for Gravimetric Quantification – not enough to accurately weigh.
N/A	Not applicable

Asbestos

Identification: Asbestos in soil analysis is performed on a dried aliquot of the submitted sample and cannot guarantee to identify asbestos if only present in small numbers as discrete fibres/fragments in the original sample.
Stones etc. are not removed from the sample prior to analysis
"Trace Asbestos Identified" will be reported if there is not enough present to verify the type.
Quantification: Generally a 2 stage process including visual identification, hand picking and weighing, and fibre counting. Where ACMs are found a percentage asbestos is assigned to each with reference to 'HSG264, Asbestos: The survey guide' and the calculated asbestos content is expressed as a percentage of the dried soil sample aliquot used. If asbestos is identified as being present but is not in a form that is suitable for analysis by hand picking and weighing (normally if the asbestos is present as free fibres). "TRACE" will be reported as a quantification result.
PLEASE INFORM THE LABORATORY IF YOU WOULD LIKE THE STAGE 3 SEDIMENTATION PROCESS CARRIED OUT. Note this will be subcontracted.

Assigned Matrix Codes

1	SAND	6	CLAY/LOAM	A	Contains Stones
2	LOAM	7	OTHER	B	Contains Construction Rubble
3	CLAY	8	Asbestos Bulk (Only Asbestos ID accredited)	C	Contains visible hydrocarbons
4	LOAM/SAND	9	Incinerator Ash (some Metals accredited)	D	Contains glass / metal
5	SAND/CLAY			E	Contains roots / twigs
Note: 7,8,9 matrices are not covered by our ISO 17025 or MCertS accreditation, unless stated above.					

Soil Chemical Analysis:
All results are reported as dry weight (<40°C).
For samples with Matrix Codes 1 - 6 natural stones, brick and concrete fragments >10mm and any extraneous material (visible glass, metal or twigs) are removed and excluded from the sample prior to analysis and reported results corrected to a whole sample basis. This is reported as '% stones >10mm'.
For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis and this supersedes any "A" subscripts
All analysis is performed on the sample as received for soil samples which are positive for asbestos or the client has informed asbestos may be present and/or if they are from outside the European Union and this supersedes any "D" subscripts.

TPH by method A-T-007:
For waters, free and visible oils are excluded from the sample used for analysis, so the reported result represents the dissolved phase only.
Results "with Clean up" indicates samples cleaned up with Silica during extraction.

EPH CWG (method A-T-055) from TPH CWG:
EPH CWG results have humics mathematically subtracted through instrument calculation.
Where these humic substances have been identified in any IDs from "TPH CWG with clean up" please note that the concentration is **NOT** included in the quantified results but present in the ID for information.

Electrical Conductivity of water by method A-T-037:
Results greater than 12900µS/cm @ 25^0C / 11550µS/cm @ 20^0C fall outside the calibration range and as such are unaccredited.

Please contact your client manager if you require any further information.

Envirolab Deviating Samples Report

Hattersley Science & Technology Park, Stockport Road, Hattersley, SK14 3QU
Tel. 0161 368 4921 email. ask@envlab.co.uk

Client: Central Alliance, Alliance House, South Park Way, South Park Way, Wakefield 41 Business Park, Wakefield, WF2 0XJ

Project: Rosefield Solar Farm

Clients Project No: 2372536

Project No: 24/11960

Date Received: 09/12/2024 (am)

Cool Box Temperatures (°C): 12.1-13.0, 10.4-10.5

Lab Sample ID	24/11960/2	24/11960/3	24/11960/6	24/11960/7	24/11960/8	24/11960/12	24/11960/14	24/11960/16	24/11960/17
Client Sample No	1	1	2	3	2	1	1	1	1
Client Sample ID/Depth	HP(HR)004 0.20m	HP(HR)005 0.20m	HP008 0.20m	HP011 0.50m	HP012 0.15m	HP025 0.10m	HP027 0.20m	TP(C)011 0.10m	TP002 0.15m
Date Sampled	07/11/24	07/11/24	04/11/24	04/11/24	04/11/24	05/11/24	06/11/24	08/11/24	06/11/24
Deviation Code									
F	✓	✓	✓	✓	✓	✓	✓	✓	✓

Key

F *Maximum holding time exceeded between sampling date and analysis for analytes listed below*

HOLDING TIME EXCEEDANCES

Lab Sample ID	24/11960/2	24/11960/3	24/11960/6	24/11960/7	24/11960/8	24/11960/12	24/11960/14	24/11960/16	24/11960/17
Client Sample No	1	1	2	3	2	1	1	1	1
Client Sample ID/Depth	HP(HR)004 0.20m	HP(HR)005 0.20m	HP008 0.20m	HP011 0.50m	HP012 0.15m	HP025 0.10m	HP027 0.20m	TP(C)011 0.10m	TP002 0.15m
Date Sampled	07/11/24	07/11/24	04/11/24	04/11/24	04/11/24	05/11/24	06/11/24	08/11/24	06/11/24
PAH-16MS	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cyanide (free)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cyanide (total)	✓	✓	✓	✓	✓	✓	✓	✓	✓

If, at any point before reaching the laboratory, the temperature of the samples has breached those set in published standards, e.g. BS-EN 5667-3, ISO 18400-102:2017, then the concentration of any affected analytes may differ from that at the time of sampling.

Envirolab Analysis Dates

Lab Sample ID	24/11960/2	24/11960/3	24/11960/6	24/11960/7	24/11960/8	24/11960/12	24/11960/14	24/11960/16	24/11960/17
Client Sample No	1	1	2	3	2	1	1	1	1
Client Sample ID/Depth	HP(HR)004 0.20m	HP(HR)005 0.20m	HP008 0.20m	HP011 0.50m	HP012 0.15m	HP025 0.10m	HP027 0.20m	TP(C)011 0.10m	TP002 0.15m
Date Sampled	07/11/24	07/11/24	04/11/24	04/11/24	04/11/24	05/11/24	06/11/24	08/11/24	06/11/24
A-T-019s	13/12/2024	13/12/2024	13/12/2024	13/12/2024	13/12/2024	13/12/2024	13/12/2024	13/12/2024	13/12/2024
A-T-024s	12/12/2024	12/12/2024	12/12/2024	12/12/2024	12/12/2024	12/12/2024	12/12/2024	12/12/2024	12/12/2024
A-T-042sFCN	12/12/2024	12/12/2024	12/12/2024	12/12/2024	12/12/2024	12/12/2024	12/12/2024	12/12/2024	12/12/2024
A-T-042sTCN	12/12/2024	12/12/2024	12/12/2024	12/12/2024	12/12/2024	12/12/2024	12/12/2024	12/12/2024	12/12/2024
A-T-044	12/12/2024	12/12/2024	12/12/2024	12/12/2024	12/12/2024	12/12/2024	12/12/2024	12/12/2024	12/12/2024
A-T-045	11/12/2024	11/12/2024	11/12/2024	10/12/2024	10/12/2024	10/12/2024	11/12/2024	11/12/2024	11/12/2024

The above dates are the analysis completion dates, please note that these are not necessarily the date that the analysis was weighed/extracted.

End of Report

Rosefield
Solar Farm

rosefieldsolarfarm.co.uk

Application Document Ref: EN010158/APP/6.4
Planning Inspectorate Scheme Ref: EN010158