

ALDBROUGH HYDROGEN PATHFINDER PROJECT PHASE 2 FEED PROJECT

GROUND INVESTIGATION REPORT
(FACTUAL ACCOUNT OF FIELDWORK AND LABORATORY TESTING)

Report No A3039-23

June 2024

Issue No 1

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SOCOTEC

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1 INTRODUCTION

SOCOTEC UK Limited (SOCOTEC) was commissioned in December 2023 by SSE Hornsea Limited (SSE) to carry out a ground investigation at the Aldbrough Gas Storage facility, East Riding of Yorkshire. The investigation was required to obtain geotechnical information necessary to inform the design of a proposed electrolyser and open cycle gas turbine.

The investigation supervisor, on behalf of SSE, was Black & Veatch (U.K.) Limited (BV).

The scope of the investigation was specified by BV and comprised boreholes, laboratory testing and reporting. The fieldwork was carried out between 22 January and 15 February 2024.

The investigation was performed in accordance with the contract specification (Document reference: 416312.78.0101), and the general requirements of BS 5930:2015+A1 (2020), BS EN 1997-2 (2007), BS EN ISO 22475-1 (2021) and other relevant related standards identified.

This report presents a description of the ground investigation work carried out together with the factual records of the fieldwork and laboratory testing. It comprises the Factual Account section of a Ground Investigation Report (GIR), as defined in the UK Specification for Ground Investigation draft Third Edition (2022), also identified as the Factual Report section in BS 5930:2015+A1 (2020). The information is also presented in digital data format as defined in AGS 4.0.4 (2017).

2 SITE SETTING

2.1 Location and Description

Aldbrough Gas Storage facility is located approximately 2.5 km southeast of Aldbrough village centre, at National Grid reference TA 260370, see Site Location Plan in Appendix A.

The site comprises an area measuring approximately 300 by 250 m. It is generally level at an elevation of about 12 mOD.



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The site is located within an industrial facility surrounded by primarily agricultural land. The site is bound to the north and east by agricultural fields, to the south by East Newton drain, and to the west by the Cess Dale drain. The North Sea coast is located approximately 1 km to the northeast of the site.

2.2 Published Geology

The published geological map for the area, BGS Sheet 73 (1998), and the BGS GeoIndex Onshore online viewer (2024) show the site located on Glacial Till deposits, described as a diamicton of Devensian age. Alluvium, described as clay, silt, sand and gravel is present in the southwestern margin of the site.

Bedrock is shown to be the Rowe Chalk Formation of Cretaceous age and described as white flint-bearing chalk.

3 FIELDWORK

3.1 General

The exploratory hole locations were selected by SSE and set out to coordinates specified by SSE. The positions were surveyed by SOCOTEC to National Grid and Ordnance Datum, and the locations are shown on the Exploratory Hole Location Plan in Appendix A.

All exploratory hole locations were surveyed for underground services, prior to any excavation, using a Cable Avoidance Tool (CAT) and PAS 128 Type B compliant, non-intrusive geophysical utility survey methods. Where applicable hand dug service inspection pits were then excavated to a depth of 1.20 m with simultaneous scanning using a CAT.

3.2 Exploratory Holes

The exploratory holes are listed in Table 1.



TABLE 1 SUMMARY OF EXPLORATORY HOLES

ТҮРЕ	QUANTITY	DEPTH RANGE (m)	REMARKS
Cable percussion boring	11	5.00 to 15.00	BVB-101 to BVB-111
Dynamic (windowless) sampling	4	2.45	BVB-112 to BVB-115

The exploratory hole logs are presented in Appendix B. These include descriptions of the strata encountered together with details of the equipment and methods used, sampling and field testing carried out, water depths and other field observations. Explanations of the terms and abbreviations used on the logs are given in the Key to Exploratory Hole Records in Appendix B, along with other explanatory information. The geological material descriptions are in accordance with BS 5930:2015+A1 (2020), following BS EN ISO 14688-1 (2018) and BS EN ISO 14689 (2018) for soils and rocks respectively.

Standard penetration tests (SPT) in the boreholes were carried out in accordance with BS EN ISO 22476-3+A1 (2011). The SPT hammer energy ratio certificates are included in Appendix B and the results are presented on the logs without any corrections to the measured blow-counts or derived N values.

Pocket penetrometer and hand vane tests were carried out on selected sample material from the exploratory holes. The results of these tests are included on the logs presented in Appendix B.

Geotechnical samples were transferred from site to the Doncaster office of SOCOTEC for temporary retention.

4 GEOTECHNICAL LABORATORY TESTING

Geotechnical laboratory testing of selected samples was scheduled by BV. The testing is in progress at the time of the issue of this report and is being carried out at the SOCOTEC Central laboratory, in accordance with test methods as stated within the test reports. The completed testing is listed in Table 2 and the results are presented in Appendix C.



TABLE 2 SUMMARY OF GEOTECHNICAL LABORATORY TESTS

TEST TYPE ¹	QUANTITY	REMARKS
Classification/index tests		
Water content	99	
Particle size distribution	23	By sieving and sedimentation

Note 1 : Test type names based on Thomas Telford (2022) Table 15.4 and Bill K.





5 REFERENCES

- AGS: 2017: Electronic Transfer of Geotechnical and Geoenvironmental Data (Edition 4.0.4 February 2017). Association of Geotechnical and Geoenvironmental Specialists.
- BGS England and Wales Sheet 73: 1998: Hornsea. 1:50000 geological map (Solid and Drift). British Geological Survey.
- BGS GeoIndex Onshore: 2024. www.bgs.ac.uk. British Geological Survey.
- BS 5930:2015+A1: 2020: Code of practice for ground investigations.
- BS EN 1997-2: 2007 (Incorporating corrigendum June 2010): Eurocode 7 Geotechnical design Part 2 Ground investigation and testing.
- BS EN ISO 14688-1:2018: Geotechnical investigation and testing Identification and classification of soil Part 1 Identification and description.
- BS EN ISO 14688-2:2018: Geotechnical investigation and testing Identification and classification of soil Part 2 Principles for a classification.
- BS EN ISO 22475-1: 2021: Geotechnical investigation and testing Sampling methods and groundwater measurements Part 1 Technical principles for the sampling of soil, rock and groundwater.
- BS EN ISO 22476-3:2005+A1: 2011: Geotechnical investigation and testing Field testing Part 3 Standard penetration test.
- CS 229: 2020: Data for pavement assessment. Design Manual for Roads and Bridges. Highways England.
- UK Specification for Ground Investigation. Third edition: 2022: ICE Publishing. Thomas Telford Ltd.

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Α1

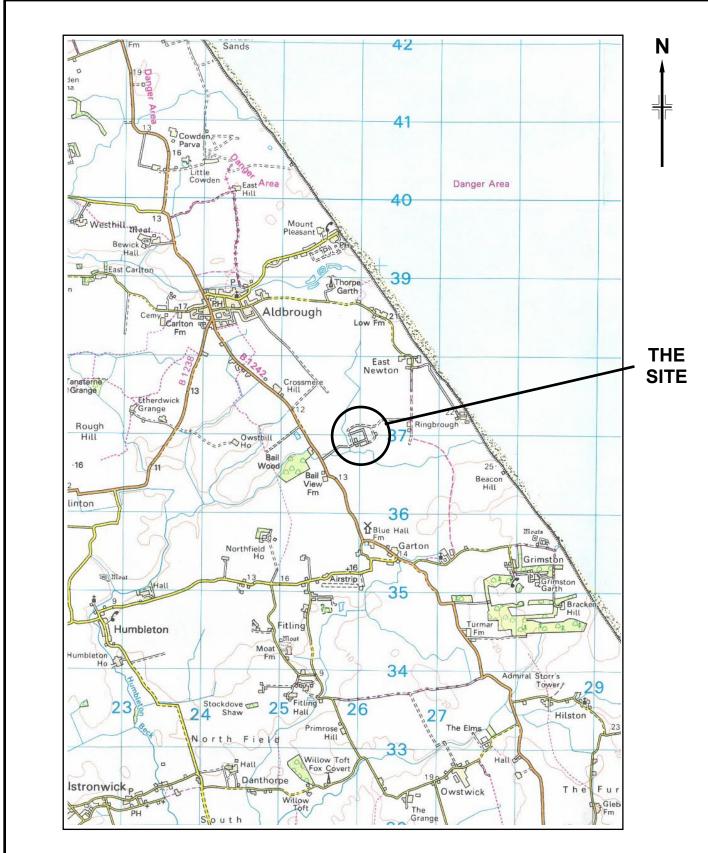
A2



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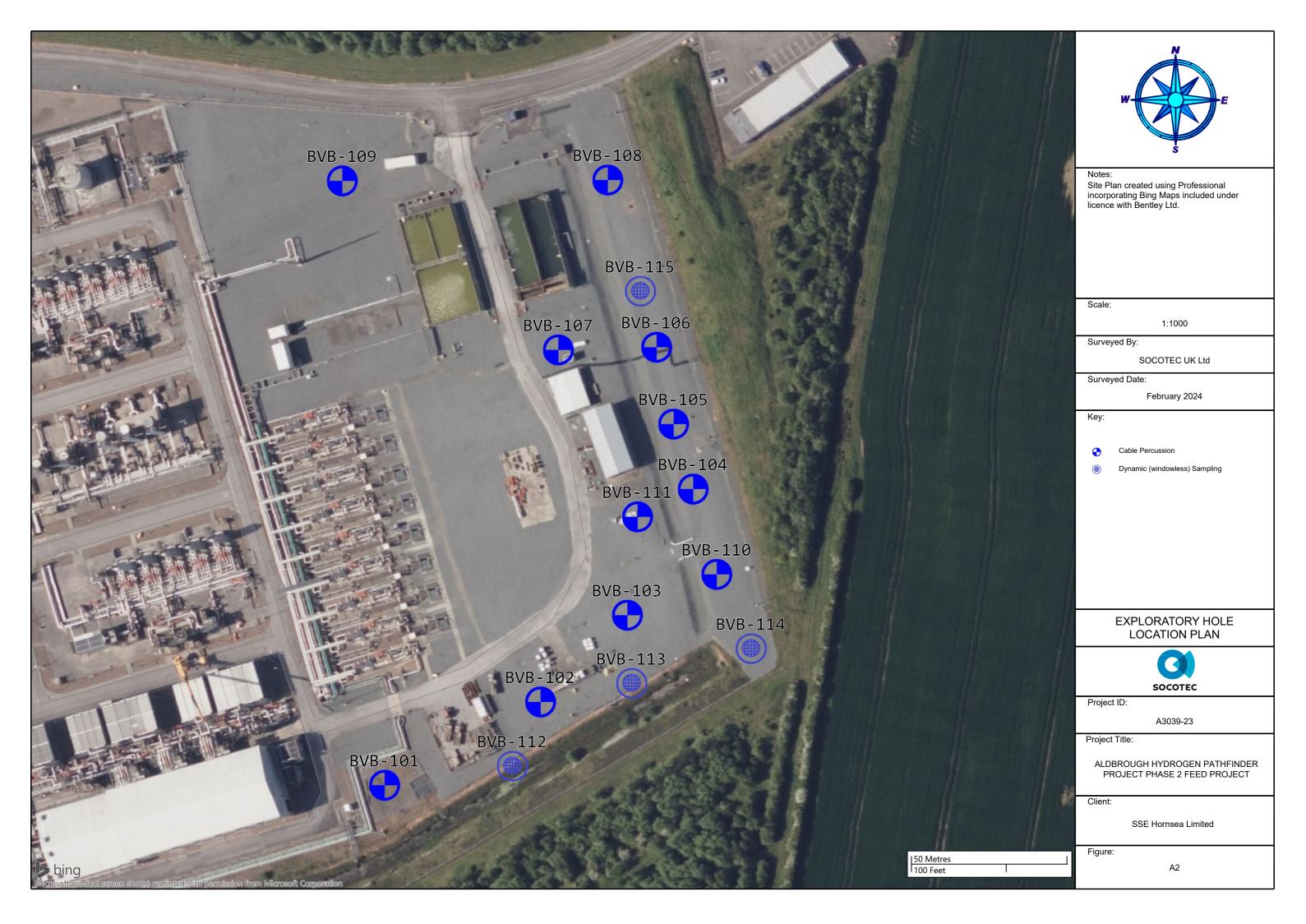
Site Location Plan





Reproduced from the 2016 Ordnance Survey 1:50 000 scale Landranger Map No 107 by permission of Ordnance Survey on behalf of The Controller of His Majesty's Stationery Office, © Crown copyright, SOCOTEC UK Limited. All rights reserved. Licence Number 100006060

Notes: Scale 1:50 000	Project	ALBROUGH HYDROGEN PATHFINDER PROJECT PHASE 2 FEED PROJECT	Figure
	Project No.	A3039-23	A1
	Carried out for	SSE Hornsea Limited	



Borehole Logs



APPENDIX EXPLORATORY HOLE RECORDS Key to Exploratory Hole Records Hammer Energy Ratio Certificates Borehole Logs (Dynamic Sampling)

Key TH55 and RP03 BVB-101 to BVB-111 BVB-112 to BVB-115

Key to Exploratory Hole Records



SAMPLES

Undisturbed

U Driven tube sample

UT Driven thin wall tube sample $\begin{tabular}{lll} \end{tabular}$ nominally 100 mm diameter and 100% recovery unless otherwise stated

TW Pushed thin wall tube sample
P Pushed piston sample
CBR CBR mould sample

BLK Block sample

C Core sample (from rotary core) taken for laboratory testing.

Disturbed

D Small sample (including samples recovered from SPT)

B Bulk sample

LB Large Bulk sample (comprising more than one container as required)

Other

W Water sample
G Gas sample
ES Soil sample

Water sample Environmental chemistry samples (in more than one container where appropriate)

Comments to samples

Sequential sample reference numbers are assigned to every sample taken during hole construction.

NR - No Recovery. Used where tube sampling has been attempted but no sample obtained (for whatever reason).

Samples not shown on exploratory hole logs:

• subsamples / specimens taken for on-site testing, eg point load testing

samples taken from borehole installations (ie water or gas) after hole construction

DYNAMIC SAMPLING Dynamic sampling includes 'window' and 'windowless' sampling methods, with and without a sample liner respectively

Dys Dynamic sampling range showing tube / liner recovery (rec.) and diameter. Material retained as separate samples.

L Retained complete liner sample (with sample reference number)

IN SITU/FIELD TESTS

SPT S or SPT C Standard Penetration Test, open shoe (S) or solid cone (C). The Standard Penetration Test is defined in BS EN ISO

22476-3:2005+A1:2011. The open shoe configuration is used without a sample liner unless shown otherwise. Samples

recovered by SPT open shoe are shown as type D.

The incremental blow counts are given in the Field Records column; each increment is 75 mm unless stated otherwise and any penetration under self-weight in mm (SW) is noted. Where the full 300 mm test drive is achieved the total number of blows for the test drive is presented as N = ** in the Test column. Where the test drive blows reach the limiting value (usually 50) the total blow count beyond the seating drive is given (without the N = prefix). See Note 7 also.

IV in situ/field vane shear strength, peak (p) and remoulded (r), kPa
HV Hand vane shear strength, peak (p) and remoulded (r), kPa
PP Pocket penetrometer test, converted to shear strength, kPa

KFH, KRH, KPI Permeability tests: KFH = falling head, KRH = rising head, KPI = packer inflow (water pressure test). Results presented

on separate report sheets.

PID VOC concentration using hand-held photo-ionisation detector, ppmv

DRILLING RECORDS

Classification of discontinuity state - as defined in BS 5930:2015+A1:2020

TCR Total Core Recovery, %
SCR Solid Core Recovery, %
RQD Rock Quality Designation, %

If Fracture spacing, mm - presented as minimum, mode (or 'typical' value) and maximum spacing.

FI Fracture Index - presented as number of fractures per metre.

NI Non-intact - used to indicate where the core is fragmented (ie non-Solid Core).

NA Not-applicable - used where a measurement is inappropriate (eg for non-rock materials, zones of no recovery)

NIDD Non-intact Drilling Induced – used to indicate where rock believed to be non-fractured in the ground has been recovered

as Non-intact due to the drilling process. (Used only where specified)

NDP No Discontinuities Present – used to indicate where core is non-fractured. (Used only where specified as alternative

representation to showing a single If value for the depth range of non-fractured core.)

CRF Core Recovered in the Following run (length in m) – used to indicate length adjustment to TCR (and SCR, RQD and If

accordingly) where slipped/dropped core from a core run has been recovered in the subsequent run.

AZCL Assessed Zone of Core Loss – used to indicate estimated depth range corresponding to core loss (for TCR<100 %).

Assumed to be at the start of the core run where no judgement is possible. Not shown for core loss less than 5 %.

Flush returns – presented as estimated percentage in the Records column, with colour where relevant.

Notes:

See report text for full references of standards.

Updated Oct 2022 v1.4 col

Key

Key to Exploratory Hole Records



GROUNDWATER Groundwater entry ∇ Depth to groundwater after observation period **INSTALLATIONS** Any installations are shown on the Exploratory Hole Record in the rightmost Backfill column with appropriate graphic. Standpipe/ piezometer SP Standpipe SPIE Standpipe piezometer Piezometer PPIE Pipe Pneumatic piezometer Tip Electronic piezometer Inclinometer or Slip Indicator **ICE** Biaxial inclinometer Inclinometer tubing for use with probe ICM Slip indicator SLIP Settlement **Pressure Cells Points ESET** Electronic settlement cell/gauge **EPCE** Electronic embedment pressure cell Magnetic extensometer settlement point **PPCE** Electronic push-in pressure cell **INSTALLATION /** A legend describing the installation is shown in the rightmost column. Legend symbols used to describe the backfill **BACKFILL** materials are indicated below. **LEGENDS** Macadam Concrete Grout Bentonite Sand Gravel Arisings **STRATUM** The legend symbols used for graphical representation of soils, rocks and other materials on the borehole logs are shown below. For soils with significant proportions of secondary soil types, a combination of two or more symbols is used. **LEGENDS** Note that the Made Ground / Fill stratum legend does not differentiate between engineered and non-engineered anthropogenic materials. Peat Macadam Concrete Made Ground / Fill Void or No Information ماد عادي Sand Silt Gravel Cobbles **Boulders** Coal 000 Conglomerate Chalk Mudstone Siltstone Sandstone Breccia Limestone Metamorphic Igneous Metamorphic Metamorphic Tuff Igneous Igneous (Fine) (Med) (Coarse) (Fine) (Med) (Coarse)

Key to Exploratory Hole Records



NOTES

- 1 **Geological materials** are described in accordance with BS 5930:2015+A1:2020, which is compliant with BS EN ISO 14688-1:2018 and 14689-1:2018 for soils and rocks respectively.
- The **consistency** determined during description for fine soils (clay and silt) is reported for strata where undisturbed samples are available. Where the logger considers that the samples may not be representative of the in situ condition, for whatever reason, the reported consistency may be omitted, or qualified using the terms *Probably*, where the logger is reasonably confident of the assessment, or *Possibly*, where there is less certainty.
- The presence of **very coarse particles** (cobbles and boulders) is included in the stratum descriptions on logs using the proportional terminology of BS 5930 where possible. However, due to their relatively large size in relation to the diameter of boreholes, and volumes of samples recovered, these records may not be fully representative of their size and frequency in the ground. Where sample mass precludes a reliable estimate of the proportion of very coarse particles, their presence may be described using undefined qualitative terms, eg occasional, frequent, etc, or by noting the number of cobbles/boulders observed.
- The **declination of bedding and joints** is given with respect to the normal to the core axis, ie perpendicular to the direction of drilling. In a vertical borehole this will therefore correspond to the dip.
- The assessment of **SCR**, **RQD** and **Fracture Spacing** excludes all non-natural fractures (ie drilling induced) where these can be positively identified.
- Observations of discernible **groundwater entries** during the advancement of the exploratory hole are given at the foot of the log and in the Legend column. The absence of a recorded groundwater entry should not, however, be interpreted as a groundwater level below the base of the borehole. Under certain conditions groundwater entry may not be observed, for instance, drilling with water flush or overwater, or boring at a rate faster than water can accumulate in the borehole. Similarly, where water entry observations do exist, groundwater may also be present at higher elevations in the ground than where recorded in the borehole. In addition, where appropriate, water levels in the hole at the time of recovering individual samples or carrying out in situ tests and at shift changes are given in the Records column.
- The borehole logs present the results of **Standard Penetration Tests** recorded in the field without correction or interpretation. However, in certain ground conditions (eg high hydraulic head or where very coarse particles are present) some judgement may be necessary in considering whether the results are representative of in situ mass conditions.
- Date Time Casing Water

 Overnight pauses in hole progress are shown by a horizontal line together with records of casing depth and water level at the start and end of shift, together with the corresponding date and time. Casing depths and water levels are also shown at the time of tube sampling and Standard Penetration Tests.

REFERENCES

- BS EN ISO 14688-1:2018 : Geotechnical investigation and testing Identification and classification of soil. Part 1 Identification and description. British Standards Institution
- BS EN ISO 14689 : 2018 : Geotechnical investigation and testing Identification and classification of rock. British Standards Institution
- 3 BS EN ISO 22476-3:2005+A1 : 2011 : Geotechnical investigation and testing Field testing. Part 3 Standard penetration test. British Standards Institution
- 4 BS 5930:2015+A1:2020 : Code of practice for ground investigations. British Standards Institution



SPT Hammer Energy Test Report

in accordance with BSEN ISO 22476-3:2005

Socotec uk **Progress close Binley**

Coventry CV3 2TF

SPT Hammer Ref: TH55

Test Date:

10/07/2023

Report Date:

27/07/2023

File Name:

TH55.spt

Test Operator:

ŘΡ

Instrumented Rod Data

Diameter d_r (mm):

54

Wall Thickness t_r (mm):

6.6

Assumed Modulus Ea (GPa): 208 Accelerometer No.1:

72570

Accelerometer No.2:

72571

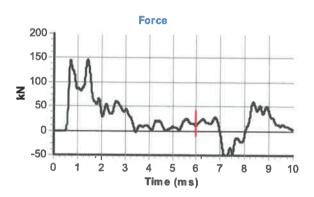
SPT Hammer Information

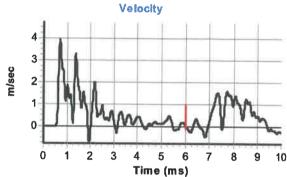
Hammer Mass m (kg): 63.5 Falling Height h (mm): 760

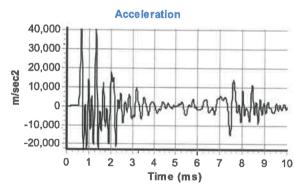
SPT String Length L (m): 20.0

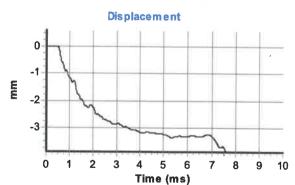
Comments / Location

TEST









Calculations

Area of Rod A (mm2):

983

Theoretical Energy E_{theor} (J):

473

Measured Energy E_{meas} (J):

331

Energy Ratio E_r (%):

70

Signed: P.Phillips

Title:

Depot Supervisor

SPT Hammer Energy Test Report

in accordance with BSEN ISO 22476-3:2005

ARCHWAY ENGINEERING (UK) LTD AINLEYS INDUSTRIAL ESTATE

ELLAND

WEST YORKSHIRE

HX5 9JP

SPT Hammer Ref: RP03

Test Date:

26/06/2023

Report Date:

26/06/2023

File Name:

RP03.spt

Test Operator:

CM

Instrumented Rod Data

Diameter d_r (mm):

54

Wall Thickness t_r (mm):

6.5

Assumed Modulus Ea (GPa): 208

... 200

Accelerometer No.1:

72572

Accelerometer No.2:

72757

SPT Hammer Information

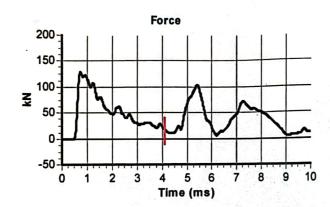
Hammer Mass m (kg): 63.5

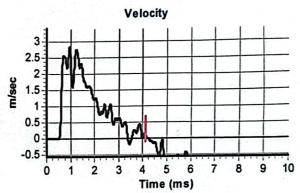
Falling Height h (mm): 760

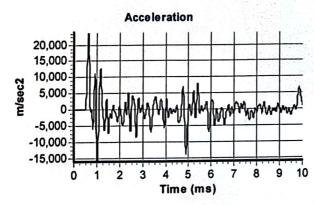
SPT String Length L (m): 10.0

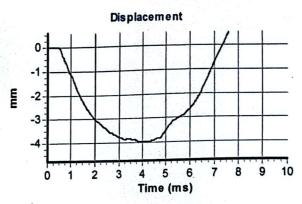
Comments / Location

R P DRILLING LTD - 85452









Calculations

Area of Rod A (mm2):

970

Theoretical Energy E_{theor} (J):

473

Measured Energy E_{meas} (J):

323

Energy Ratio E_r (%):

68

Signed: C.McCLUSKEY

Title:

FITTER

The recommended calibration interval is 12 months



Checked	Dep	oth	Dates		Meth	od		Equipment	Ria	Crew	Logger I	Logged	Но	ole	Casii	na	I	Depth Related Remarks		Г		SOCOTEC
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Approved																				National G	rid	N 436893.99
																						System OSGB
	<u> </u>							_		TCP %	<u> </u>											
	Time		Sampl			Field 1		Samp / Test	Coring Depth	TCR % SCR % RQD		er added		Depth	Level	Legend		Strata Description			∰ Water Entry	Backfill
0 Casing	Water	Depth	Type & No.	Records	Depth	Type	Records	Casing Water	(Diameter	%	Flus	sh details		(Thickness	5)	*******	Dark brown	Main n gravelly silty fine to coarse SAND. Gravel is angular to	Detail		5	
_		0.30	D 1											(0.5	0)		subangular f (MADE GRO	n gravelly silty fine to coarse SAND. Gravel is angular to fine to coarse of limestone.				
-		0.30 - 0.40 0.50	B 2 D 3	-										0.50	+10.98	× - 6-	`	·				
]		0.50 - 0.70	B 4	-												×× × ×	angular to su	rown mottled grey slightly sandy gravelly silty CLAY. Gravel is subangular fine to medium of sandstone and mudstone. white specs (5-10mm) of chalk.				
1 -		1.00	D 5											(0.7	0)	×× • -×	(GLACIAL T	TILL)				
-		1.00 - 1.20 1.20	B 6 D 7	-	1.20 - 1.65	SPT S	N=10 (2,2/2,2,3,3)	1.20 Dry						1.20	+10.28	~~~×	Firm light hr	rown mottled grey slightly sandy gravelly silty CLAY. Gravel is				
]		1.20 - 1.70	B 8	-	1.20	PP	ID TH55 Er 70% 50 kPa									<u> </u>	angular to su	subangular fine to coarse of sandstone and mudstone. Occasional				
_																× × ×	(GLACIAL T	chalk and coal. TILL)				
_ =																× × ×						
2 —		2.00 - 2.45 2.00 - 2.40	UT 9 B 10	75 blows 89% rec				2.00 Dry						(1.8	0)	× × ×						
-																× × ×						
-		2.50	D 11		2.50	PP	144 kPa									× × ×						
]		2.75 2.75 - 3.30	D 12 B 13	-	2.75 - 3.20	SPT S	N=9 (2,2/2,2,2,3) ID TH55 Er 70%	2.70 Dry								× × × ×						
3 —		2 0.00												3.00	+8.48	× × ×	Firm dark br	prown slightly sandy slightly gravelly silty CLAY. Gravel is angular				
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														0.00	70.40	×		f dark brown mottled grey slightly sandy slightly gravelly Silty CLAY. ngular to subangular fine to coarse of sandstone, mudstone, chalk				
-					5.50	, pp	405 l-D-									X - 0 - X	and coal. (GLACIAL T					
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-																X - 0 - X						
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]		6.30 - 6.75 6.30 - 6.80	UT 20 B 22	50 blows 89% rec				6.30 Dry								8 0 X						
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7 🚽																X - 0 - X						
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-																× × • •						
		7.80	D 23	_	7.80 - 8.25	SPT S	N=21 (2,3/4,5,5,7)	7.80 Dry								x _ o _ x						
8 —		7.80 - 8.00	B 24	-	0.20		ID TH55 Er 70%							8.00	+3.48	××× 0.4	Stiff dark bro	rownish grey slightly sandy gravelly silty CLAY. Gravel is angular to				
]																× × • •	subrounded	d fine to coarse of sandstone, mudstone, coal and chalk.				
-																× × 0 ×	(GLACIAL T	iii.i.j				
																× × 0 ×						
9 —		9.00	D 25	_												× × • •						
																× × • •						
		9.30 - 9.75 9.30 - 9.60	UT 26 B 28	55 blows 89% rec				9.30 Dry								x _ o _ x						
																× × 0 ×						
		9.80	D 27	-										_		× × 0 ×						
10 —	j													(4.0	0)	O V (Hole continues on next sheet				
General Remarks								<u> </u>									oring / Chisellin	ng Groundwater Entries				
Coneral NelliaikS																		Duration (mins) Tool No. Depth Ren				Sealed
Notes									.==							Status			Borehole			
For explanation of s	ymbols a	and abbreviati	ons see Key to	Exploratory Hole Records	s. All	oject Diect No		HYDROGEN PATH	IFINDER PR	DJECT PH	HASE 2 FEED P	PROJECT						Scale 1:50 AET Printed 24 Jun 2024 12:26:35		P	VP 40	,
depths and reduced	i ievels in	ı metres. Strat	um tnickness g	iven in brackets in depth		oject No. rried out fo	A3039-23 or SSE Hornsea L	Limited									DRA		GS	Б	VB-10	'
					J.	out it	SSE HOHIOGAL											© Copyright SOCOTEC UK Limited	00		Sheet 1 of 2	

Checked	Dep	oth	Dates		Meth	od		Equipment	Pi/	Crew	Logger	Logged	н	ole	Cas	ina			Depth Related Rem	arke	1			SOCOTEC
Checked	0.00 -	1.20 24 Ja	n 24 - 24 Jan 24	4	Hand excavated Cable percus	inspection	pit	Hand tools	K	P/AB	TP	24 Jan 24	Depth	Dia. (mm)	Depth	Dia. (mm)	Depth	Remarks	Dopar Rolatou Roll	uno		Ground Leve		11.48 mOD
M Stanley	1.20 -	15.00 24 Ja	n 24 - 25 Jan 24	4	Cable percus	sion boring		Dando 175	"	P/AB	TP	24 Jan 24	15.00	200	15.00	200						Coordinates		E 526124.00
Approved																						National Gri	d	N 436893.99
																								System OSGB
Date	Time		Sample	es		Field T	Tests	Samp / Test	Coring	TCR SCR	% v	Nater added		Depth	Level	Legend			Strata Des	cription		<u>-</u>	Water	Backfill
Casing	Water	Depth	Type & No.	Records	Depth	Туре	Records	Casing Water	Depth (Diamet	ROI	D	Flush details		(Thickness					Main		Detail	Chis	Entry	
10					10.00	PP	131 kPa									<u>x</u>	Stiff dark bro	rownish grey slightly s	sandy gravelly silty CLAY. (ndstone, mudstone, coal ar	Gravel is angular to				
_																<u> </u>	(GLACIAL T	TILL)	nasione, madetone, coar ar	id offaire.				
		10.50	D 29	-												× × 0 ×								
1		10.80	D 30	-	10.80 - 11.25	SPT S	N=15 (3,4/4,4,3,4) ID TH55 Er 70%	10.80 Dry								× × 0 ×								
11 —		10.80 - 11.30	B 31	-			ID 1H55 Er 70%									× × 0 ×								
-																× × 0 ×								
																× × 0 ×								
_																× × 0 ×								
12		12.00	D 32	=										12.00	-0.52	× × 0 ×	Firm to stiff (dark brownish grey s	slightly sandy slightly grave	Illy silty CLAY				
24 Jan 24 12.30		12.30 - 12.75	UT 33	59 blows 89% rec				12.30 Dry								× × 0 ×	Gravel is and	ngular to subrounded	slightly sandy slightly grave fine to medium of sandsto	ne and mudstone				
- 25 Jan 24 - 12.30	0800 Dry	12.30 - 12.80	B 34	00 2.0.00 00 70 100				12.00 2.,								× × 0 ×	(GLACIAL T	TILL)						
]	ĺ															× × 0 ×								
13 —																× <u>°×</u> °-×								
-																× × 0 ×								
1 1	- 1	13.50	D 35	_										(3.0	0)	× × 0 ×								
					40.00	007.5	N 00 /2 ///	40.00 -						(0.0)	,	× × 0 ×								
14 —		13.80 13.80 - 14.20	D 36 B 37	-	13.80 - 14.25 14.00	SPTS	ID TH55 Er 70%	13.80 Dry								× - 0 - ×								
14					14.00	''	144 kPa									× ×								
= =		14.40 - 15.00	B 38	-												× - ×								
]																× - ×								
- 25 Jan 24 15.00	1200 Dry															× × 0-2								
15	,	15.00	D 39	_										15.00	-3.52			END O	F EXPLORATORY HOLE					15.00
]																								
16 —																								
]																								
_																								
]																								
17 —																								
]																								
_																								
-																								
18 🚽																								
]																								
	- 1																							
19 —																								
-																								
	- 1																							
20 —																								
																	. ,							
General Remarks																	oring / Chisellin Depths	ng Duration (mins)	Tool	Groundwater Entries No. Depth Remarks				Sealed
Notes																Status			1	1	Borehole			
	mbols a	and abbreviation	ns see Key to E	Exploratory Hole Record ven in brackets in depth	s. All	ject		HYDROGEN PATH	IFINDER PI	ROJECT P	PHASE 2 FEE	ED PROJECT				Julius		A F.T.	Scale 1:50			-	/D 404	
depths and reduced	levels in	metres. Strat	um thickness giv	ven in brackets in depth		ject No. ried out fo	A3039-23 or SSE Hornsea L	imited									DRA	AF I	Printed 24 Jun 202	44 12:26:35 FEC UK Limited AGS		R/	/B-101	
					Cal	. rea out 10	, GOL HUITISEAL												© Copyright SOCOT	EC UK Limited AGS		S	Sheet 2 of 2	

Checked	Dep	oth	Dates		Meth	od		Equipment	Rig C	rew L	Logger Logged	Г н	lole	Casi	na	1	Depth Related Remarks		Т		SOCOTE	:c
	0.00 -	1.20 22 Ja	an 24 - 22 Jan 2 an 24 - 23 Jan 2		Hand excavated Cable percus	Inspection		Hand Tools Dando 175	KP/	AB	TP 22 Jan 24 TP 22 Jan 24	Depth 15.00	Dia. (mm) 200	Depth 15.00		Depth	Remarks		Ground Le		11.70 mOI	
M Stanley	1.20	10.00	311 Z + 20 0 G11 Z		Cable persus	olori bolling		Dundo 170	147		22 0411 24	15.00	200	15.00	200				Coordinate National G		E 526173.6 N 436922.2	
Approved																			National G	ria	System OSGB	
																					.,	
5.4						F1.1.15		0	0	TCR %	 						Otati Para latina					\dashv
	Time		Sample			Field 1		Samp / Test	Coring Depth	TCR % SCR % RQD	1		Depth	Level	Legend		Strata Description		r G	Water Entry	Backfill	
0 Casing	Water	Depth	Type & No.	Records	Depth	Type	Records	Casing Water	(Diameter)	%	Flush details		(Thicknes	5)	x	Dark brown	Main gravelly fine to coarse SAND. Gravel is angular to subangular	Detail		5		\dashv
=		0.30	D 1	-									(0.5	0)		fine to mediu	um of grey limestone. OUND)					
]		0.30 - 0.40 0.50	B 2 D 3	-									0.50	+11.20	× × ×	Light orangis	sh brown slightly gravelly silty fine to medium SAND. Gravel is	0.45 weed membrane 0.50 gas membrane				
-		0.50 - 0.70	B 4	-									(0.7	0)	× × ×		ubrounded fine to medium of sandstone. Rare specs of coal and	0.50-0.70 Particle size distribution testing ind				
1 —		1.00	D 5	-									(0.7	0)	× × ×	grey clay. (GLACIAL T	TLL)	slightly sandy slightly silty CLAY.	gravelly			
1 -		1.00 - 1.20 1.20	B 6 D 7	-	1.20 - 1.65	SPT S	N=17 (2,4/4,4,4,5) ID TH55 Er 70%	1.20 Dry					1.20	+10.50	X X X X X X X X		rown slightly sandy slightly gravelly silty CLAY. Gravel is angular to	only out it.				
		1.20 - 1.80	B 8	-			15 11100 21 70%								× × 0 ×	(5-20mm) of						
]		1.80	D 9	_											× × 0 ×	(GLACIAL T	TLL)					
2 —		2.00 - 2.45	UT 10	65 blows 89% rec	1.90	PP	188 kPa	2.00 Dry							× × 0 ×	<						
]		2.00 - 2.50	B 12	-				,							× × 0 ×	<						
		2.50	D 11	-										0)	× <u>° ×</u> ° ×	<u> </u>						
		2.70	D 13	-	2.70 - 3.15	SPT S	N=13 (2,3/3,3,3,4)	2.75 Dry					(2.8	U)	× × 0.2	<u> </u>						
3 —		2.70 - 3.00 3.00	B 14 D 15	_			ID TH55 Er 70%								x _ o _ x							
					3.30	PP	81 kPa								× ×							
		3.50 - 3.95	UT 16	15 blows 100% rec	3.30	"	o i kra	3.50 Dry							x _ o _ x	9 (
		3.50 - 4.00	B 18												x _ o _ x	<						
4 —		4.00	D 17										4.00	+7.70	××							
		4.00											4.00	11.10	×	partings of s	dark brown slightly gravelly silty CLAY with closely spaced soft grey silt. Gravel is angular to subrounded fine to medium of					
															×	musdstone, (GLACIAL T	sandstone, chalk and coal. TLL)					
															× :	<u> </u>						
22 Jan 24 5.00	1600 Dry	5.00	D 40		5.00 5.45	CDT C	N-46 (2 4/4 4 4 4)	5.00 D							×	<						
5 - 23 Jan 24 5.00	0800 Drv	5.00 5.00 - 5.20	D 19 B 20	-	5.00 - 5.45	SPT S	N=16 (3,4/4,4,4,4) ID TH55 Er 70%	5.00 Dry							<u>×</u> <u>×</u> .	<						
3.00	Diy														×	<						
-															××	₹						
-															×	₹						
6 —		6.00	D 21	-									(4.0	0)	×	2						
															×	2						
-		6.50 - 6.95 6.50 - 6.60	UT 22 B 24	75 blows 100% rec	6.50	PP	56 kPa	6.50 Dry							×	2						
]															×	2						
7 —		7.00	D 23	-											×	2						
]															×	<u> </u>						
-		7.50	D 25	-											×	<u> </u>						
															×	<u> </u>						
8 —		8.00 8.00 - 8.20	D 26 B 27	-	8.00 - 8.45 8.00	SPT S PP	N=16 (3,3/3,4,4,5) ID TH55 Er 70%	8.00 Dry					8.00	+3.70	× × ×	Firm to stiff of	dark brown mottled grey slightly sandy slightly gravelly silty CLAY.					
		5.50 - 0.20	521		0.00		88 kPa								× - × - ×	Gravel is and Occasional s	gular to subangular fine to medium of sandstone and mudstone. specks (5-25mm)of coal and chalk.					
]															× × ×	(GLACIAL T	TILL)					
=															× × 0	<u> </u>						
9 🚽		9.00	D 28	-											× × 0	<u> </u>						
															× × × ×	<u> </u>						
-		9.50 - 9.95	UT 29	65 blows 100% rec				9.50 Dry							× × × ×	<u> </u>						
-		9.50 - 10.00	B 31	_											0-0-X	< -						
10 —													(4.0	0)	X-0-X		Hole continues on next sheet					
General Remarks																oring / Chisellin Depths	g Groundwater Entrie Duration (mins) Tool No. Depth R				Seale	led
															1							
															1							
Notes					<u> </u>										Status	•		Borehole				\dashv
For explanation of s	symbols a	and abbreviati	ons see Key to I	Exploratory Hole Records	s. All	oject		HYDROGEN PATH	IFINDER PRO	JECT PHA	ASE 2 FEED PROJECT				Status		Scale 1:50		_	VD 454		
depths and reduced	l levels in	metres. Stra	tum thickness gi	iven in brackets in depth	column.	oject No. rried out fo	A3039-23	imited								DRA	AFT Printed 24 Jun 2024 12:26:36	■T AGS	В	VB-102	2	
					Ca	rried out fo	or SSE Hornsea L	.maleu									© Copyright SOCOTEC UK Limited	AGS		Sheet 1 of 2		

Checked	De	pth	Dates		Meth			Equipment	Rig	Crew	Logger	Logged	H	ole	Cas	ing	Ī	Depth Related Remarks		SOCOTEC
	0.00 - 1.20 -	- 1.20 22 - 15.00 22	2 Jan 24 - 22 Jan 2 2 Jan 24 - 23 Jan 2	4 4	Hand excavated Cable percus			Hand Tools Dando 175		P/AB P/AB	TP TP	22 Jan 24 22 Jan 24	Depth 15.00	Dia. (mm) 200	Depth 15.00	Dia. (mm) 200	Depth			11.70 mOD
M Stanley]				r	9							10.00	200	.0.00	200		Coordina National		E 526173.63 N 436922.25
Approved																		Nauonai	Jilu	System OSGB
																				-
D-4-	Time	Γ	0		1	Field	F4-	Comm / Took		TCR	1%	Matan addad						Otanto Description	$\overline{\Box}$	
Date	Time		Sample			Field 1			Coring Depth		ו חו	Water added		Depth	Level	Legend		Strata Description	Water Entry	Backfill
10 Casing	Water	Depth 10.00		Records	Depth	Type	Records	Casing Water	(Diamete	r) %	,	Flush details		(Thicknes	5)	~	Firm to stiff of	Main Detail f dark brown mottled grey slightly sandy slightly gravelly silty CLAY.	5	
-																× × × 0-	Gravel is an	f dark brown mottled grey slightly sandy slightly gravelly silty CLAY. Ingular to subangular fine to medium of sandstone and mudstone. Il specks (5-25mm)of coal and chalk.		
-		10.50	D 32	_												× × 0	(GLACIAL T	TILL)		
																× × 0				
11 —		11.00	D 33	_	11.00 - 11.45	SPT S		11.00 Dry								<u>~°×</u> °				
		11.00 - 11	1.20 B 34	_			ID TH55 Er 70%									× × 0				
																× × 0	× ×			
]																× × 0	X			
12 —		12.00	D 35	_										12.00	-0.30	× × 0.	Eirm to stiff	f dark brown mottled grey slightly sandy slightly gravelly silty CLAY.		
]																× × 0	Gravel is an	angular to subangular fine to medium of sandstone, mudstone,		
		12.50 - 12	2.95 UT 36 3.00 B 38	54 blows 100% rec				12.50 Dry								× × 0 −	chalk and co (GLACIAL T	TILL)		
		12.50 - 13	3.00 B 38	_												<u>∞ × </u> 0.	×			
13 —		13.00	D 37	_												<u>×~°×</u> ∘-	×			
																<u>x~~</u> ∘_>	X			
-														(3.0	0)	× × 0-	×			
=																× × o-	X			
14 —		14.00	D 39	_	14.00 - 14.45	SPT S	N=17 (3,4/4,4,4,5)	14.00 Dry								× ^ 0-	×			
]		14.00 - 15	5.00 B 40				ID TH55 Er 70%									× ^ 0-	×			
-																8 <u>°</u> ×	X d			
- - 23 Jan 24	1620															× × ×	×			
15.00	Dry													15.00	-3.30	<u>x</u>	×	END OF EXPLORATORY HOLE		15.00
-																		END OF EAPLORATORY HOLE		
=																				
=																				
16 —																				
"																				
]																				
-																				
17 —																				
]																				
-																				
18 —																				
"																				
19 —																				
'																				
20 =																				
20 —																				
General Remarks	i	<u> </u>	1	1	1	L		•	•					1			l Boring / Chisellin Depths	ing Groundwater Entries Duration (mins) Tool No. Depth Remarks		Sealed
																'	- Spuis	To. Depth remarks		Sealeu
Notes For explanation of	eymhala	and abbrov	iations see Koute	Evnloratory Holo Possed	Pro	oject	ALDBROUGH	HYDROGEN PATH	IFINDER PR	OJECT P	PHASE 2 FEE	ED PROJECT				Status	5	Scale 1:50		
depths and reduce	ed levels i	n metres. S	stratum thickness gi	Exploratory Hole Record ven in brackets in depth	column. Pro	oject No.	A3039-23										DRA	AFT Printed 24 Jun 2024 12:26:36	3VB-102	2
					Ca	rried out fo	or SSE Hornsea I	Limited										AFT Printed 24 Jun 2024 12:26:36 © Copyright SOCOTEC UK Limited AGS	Sheet 2 of 2	

Checked	Depth		Dates		Meth			Equipment		Crew	Logger L	Logged	Но		Casir				Depth Related Remark	S					SOCOTEC
			24 - 25 Jan 24 24 - 26 Jan 24		Hand excavated Cable percus			Hand Tools Dando 175		/AB /AB		5 Jan 24 9 Jan 24	Depth 15.00	Dia. (mm) 200	Depth 15.00	Dia. (mm) 200	Depth	Remarks				Ground Lev Coordinates			1.76 mOD 526200.99
																						National Gri			136951.00
Approved																								System	OSGB
Date T	Time		Sample	es		Field T	ests	Samp / Test	Coring Depth	TCR 9	% % Wate	er added		Depth	Level	Legend			Strata Descri	otion		Sel.	Water	Backf	fill
Casing W	Vater	Depth	Type & No.	Records	Depth	Туре	Records	Casing Water	(Diameter	RQD %		sh details		(Thickness)	*****			Main		Detail	Chisel.	Entry		
-		0.00	5.4														GRAVEL of b	f brick, concrete sandsto	nd angular to subangular fir one and limestone. Occasio	e to coarse nal white					
]		0.30 0.30 - 0.50	D 1 B 2	_										(0.7)	0)		specks of cha (MADE GRO	chalk and black specks on (OUND)	of coal.	0	45 gas membrane				
=		0.50 0.50 - 0.70	D 3 B 4	_										0.70	+11.06	· ^ - o -	Soft to firm lic	light orangish brown slid	ghtly sandy slightly gravelly		50-0.70 gravelly san	i			
1 —		1.00	D 5	_	1.00	PP	131 kPa									<u> </u>	Gravel is and	ngular to subangular fine	e to coarse of sandstone an	d limestone.					
=		1.00 - 1.20 1.20	B 6 D 7	_	1.20 - 1.65	SPT S	N=9 (2,2/2,2,2,3)	1.20 Dry						(0.8)	0)	×°×°°	(ALLUVIUM)	M)							
		1.20 - 1.60	B 8	-			ID TH55 Er 70%							1.50	+10.26	× × ×	Coft to firm d	dorle brown aliabtle arou	velly silty CLAY. Gravel is ar	aular ta					
																<u> </u>	subrounded f	d fine to medium of sand	dstone and mudstone and c	oal. Occasional					
2 —					2.00	PP	119 kPa									× × ×	specks of cha (ALLUVIUM)								
3														(1.5	0)	××									
		2.50	D 9	-												×x									
] ;	2.75 - 3.20	UT 10	35 blows 100% rec				2.75 Dry								×	9								
3 —] ;	2.75 - 3.30	B 12	-	3.00	PP	100 kPa							3.00	+8.76	X × X	Stiff light brow	rown slightly sandy slight	atly gravelly silty CLAY with	closely spaced					
		3.30	D 11	_	3.30 - 3.75	SPT S	N=9 (1,1/1,2,3,3)	3.30 Dry								X 0 X	partings of so	soft grey silt. Gravel is a chalk and coal.	angular to subrounded fine t	o medium of					
-		3.30 3.30 - 3.60	D 13 B 14	-			ID TH55 Er 70%	2.,								× - 0 - X	(GLACIAL TI								
]																× × ×									
4 —					4.00	PP	119 kPa									× - ×									
]																× × · ·									
		4.50	D 15	-										(3.0	0)	××									
]	4	4.80 - 5.15	UT 16	55 blows 100% rec				4.80 Dry								×- <u>0</u> -x									
5 —	4	4.80 - 5.20	B 17	-				,								<u> </u>									
																× × • •									
-		5.50	D 18	-												× × 0 ×									
]																× × · ·									
6 🚽					6.00	PP	125 kPa							6.00	+5.76	×-0-x	Stiff dark bro	rown slightly sandy sligh	ntly gravelly silty CLAY with	some grev					
-		6.30	D 19	-	6.30 - 6.75	SPT S	N=8 (2,2/2,2,2,2)	6.30 Dry								× <u>×</u> ∘ <u>×</u>	lamination. G and coal. Rai	Gravel is angular to sub Rare greenish mottling pr	ntly gravelly silty CLAY with bangular fine to coarse of saresent.	indstone, chalk					
]	1 '	6.30 - 6.80	B 20	-			ID TH55 Er 70%									<u>x~°~</u> ×	(GLACIAL TI	TILL)							
=																x _ o _ x									
7 🚽																× × • · ×									
=																× × o									
	1630															× ^ o _ x									
7.80	Dry .	7.80 - 8.25	UT 21	65 blows 100% rec				7.80 Dry								× × ×									
8 - 26 Jan 24 (7.80	0838 Dry	7.80 - 8.30	B 23	_	8.00	PP	156 kPa							(4.0	0)	× - ×									
		8.30	D 22	-												× × ×									
_																× × × 0									
]																× × × 0 =									
9 🚽		9.00	D 24	-												× × • • •									
=		9.30	D 25	-	9.30 - 9.75	SPT S	N=9 (2,2/2,2,2,3)	9.30 Dry								× × 0									
_		9.30 - 9.80	B 26				ID TH55 Er 70%									× × ×									
1																× × · · ·									
10 —														10.00	+1.76	- 0 X		Hole cont	tinues on next sheet						
General Remarks																	oring / Chiselling			Groundwater Entries					
																		Duration (mins)	Tool	No. Depth Rema	rks				Sealed
Notes					Pro	ject	ALDBROUGH	HYDROGEN PATH	FINDER PR	OJECT PI	HASE 2 FEED P	PROJECT				Status			Scale 1:50		Borehole				
For explanation of sym depths and reduced le	nbols and evels in m	abbreviation netres. Stratur	s see Key to E n thickness giv	exploratory Hole Records ven in brackets in depth o	S. All	ject No.	A3039-23										DRA	AFT	Printed 24 Jun 2024 1	2:26:36		B	VB-103	}	
					Car	rried out fo	r SSE Hornsea L	imited											© Copyright SOCOTEC	2:26:36 UK Limited	SS		Sheet 1 of 2		

C	hecked	0.00	epth - 1.20 25 J	Dates an 24 - 25 Jan 2	24	Methor Hand excavated	inspection pi	it	Equipment Hand Tools	Rig	Crew P/AB P/AB	Logger TP	Logged 25 Jan 24	Depth	ole Dia. (mm)	Cas Depth	ing Dia. (mm)	Depth	Depth Related Remarks Remarks Ground Level	SOCOTEC 11.76 mOD
	Stanley	1.20 -	- 15.00 25 J	an 24 - 26 Jan 2	24	Cable percuss	sion boring		Dando 175	К	P/AB	TP	29 Jan 24	15.00	200	15.00	200		Coordinates National Grid	E 526200.99 N 436951.00
A	pproved																			System OSGB
	Date	Time	 	Sampl	los		Field Tes	ete	Samp / Test	Coring	TCR	1 %	Water added						Strata Description	
10 -	Casing	Water	Depth	Type & No.		Depth	Туре	Records	Casing Water	Depth (Diamete	TCR SCR RQI er) %	R % ND	Flush details		Depth (Thicknes	Level s)	Legend		Main Detail G Entry	Backfill
10	- - -					10.00	PP	144 kPa	-								8 0 × 0 -	Stiff dark bro subangular fi mottling.	wn slightly sandy slightly gravelly silty CLAY. Gravel is angular to ne to medium of sandstone, chalk and coal. Occasional green	
	_		10.50	D 27	-												x × 0 ×	(GLACÍAL TI	LL)	
11 -]		10.80 - 11.29 10.80 - 11.20	UT 28 B 30	68 blows 100% rec				10.80 Dry								× × 0-			
	-		11.20	D 29	-												× × 0 ×			
	-																× × × ×	9		
12 -	- - -		12.00	D 31		12.00	PP	163 kPa									x - 0 - x	K G		
	-		12.30	D 32		12.30 - 12.75	SPT S	N=8 (2,2/2,2,2,2)	12.30 Dry								X 0 X 0 X	<u> </u>		
			12.30 - 12.8	B 33				ID TH55 Er 70%							(5.0	0)	X × 0 -			
13 -	-																x × 0 ×			
																	× × 0-			
	<u>-</u> -		13.50	D 34	=												8-0-X	<u> </u>		
14 -	-		13.80 - 14.2 13.80 - 14.3	UT 35 B 37	45 blows 100% rec	14.00	PP	131 kPa	13.80 Dry								× × × ×	9		
	-																× × 0-			
		4=00	14.50 14.50 - 15.0	D 36 B 38	-			450.5									× × 0 ×			
15 -	- 26 Jan 24 15.00	1700 Dry				14.80	PP	156 kPa	-						15.00	-3.24	8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		END OF EXPLORATORY HOLE	15.00
	-																			
	-																			
16 -	-																			
	-																			
17 -	-																			
	-																			
	-																			
18 -	-																			
	-																			
	-																			
19 -	<u>-</u> -																			
	-																			
20 -	-																			
Gene	ral Remark	;	1						l			ı	<u> </u>		I		Hard B	 oring / Chiselling Depths D	Groundwater Entries No. Depth Remarks	Sealed
																	\perp			
Notes For ex	planation o	symbols	and abbreviati	ons see Key to	Exploratory Hole Record	S. All	oject		HYDROGEN PATH	IFINDER PI	ROJECT F	PHASE 2 FE	EED PROJECT				Status		Scale 1:50 Brinted 24 Jun 2024 13:36:36 DVD 104	,
depth	s and reduc	ed levels i	ın metres. Stra	um thickness gi	iven in brackets in depth	column.	eject No. Fried out for	A3039-23 SSE Hornsea	Limited									DRA	FT Printed 24 Jun 2024 12:26:36 © Copyright SOCOTEC UK Limited AGS Sheet 2 of 2)
																			Ollect 2 of Z	

	hecked	Dep	oth	Dates	<u> </u>	Metho	od		Equipment	Rig (rew Logg	er Logged		ole	Ca	sing	ı	Depth Related Remarks				SOCOTEC
i	Stanley	0.00 - 1.20 -	1.20 30 J 15.00 30 J	an 24 - 30 Jan 2 an 24 - 31 Jan 2	4 4 ⊢	Hand excavated Cable percuss			Hand tools Dando 175	KP/ KP/	AB MH	30 Jan 24	Depth 15.00	Dia. (mm) 200	Depth 15.00	Dia. (mm) 200	Depth	Remarks		Ground Leve Coordinates		12.25 mOD E 526221.19
	,																			National Grid		N 436992.28
А	proved																					System OSGB
	Date	Time		Sample	es		Field To	ests	Samp / Test	Coring	TCR % SCR %	Water added		Depth	Level	Legend		Strata Description		-	Water	Backfill
0 -	Casing	Water	Depth	Type & No.	Records	Depth	Туре	Records	Casing Water	Depth (Diameter)	RQD %	Flush details		(Thicknes	-			Main	Detail	Ċ.	Entry	
	1		0.30 - 0.50	B 1										0.10	•	15	(MADE GR	OUNĎ)	0.10 black plastic wov geofabric	en		
			0.50	D 2	_									(0.5	•		chalk, chert angular of b	rown sandy silty angular to subrounded fine to coarse GRAVEL of , red brick and limestone with low cobble content. Cobbles are				
			0.60 - 1.00	B 3	-									0.60	+11.6	55	(FILL)		0.05 haranina fina wi			
1 -	-		1.00	D 4	-									(0.6	0)		partings of s	soft grey silt. Gravel is subrounded to well rounded fine to medium	0.85 becoming firm wi	avel size		
			1.00 - 1.20 1.20	D 6	-	1.20 - 1.65	SPT S	N=9 (2,2/2,2,2,3) ID TH55 Er 70%	1.20 Dry					1.20	+11.0)5	(Weathered	GLACIAL TILL)	pockets of green medicoarse sand			
			1.20 - 1.70	B 7	-			ID 11100 E1 7070									spaced part		1.00 1 No. subrounder (100mm) of chalk	1 CODDIE		
																	(GLACIAL T	TILL)				
2 -	1		2.00 - 2.45	U 8	54 blows 100% rec	2.00	PP	125 kPa	2.00 D=					(1.8	(0)		0					
	1		2.00 - 2.50	B 10					2.00 Dry					(1.0	~,		•					
			2.50	D 9	_												0					
l	1		2.75 2.75 - 3.20	D 11 B 12		2.75 - 3.20	SPT S	N=11 (3,3/3,3,2,3) ID TH55 Er 70%	2.75 Dry								•					
3 -			2.73 - 3.20	D 12				ID 11103 Et 7070						3.00	+9.25	5	Firm dark bi	rown slightly sandy slightly gravelly CLAY with closely spaced soft				
			3.30 - 3.45		48 blows 100% rec				3.30 Dry								grey silt. Grant limestone.	ravel is angular to subrounded fine to medium of chalk, coal and				
			3.30 - 3.80 3.50	B 15 D 14	-												(GLACIAL T	TILL)				
	1																					
4 -						4.00	PP	144 kPa									-					
																	- - -					
	1													(3.0	0)		-					
			4.80 4.80 - 5.30	D 16 B 17	-	4.80 - 5.25	SPT S	N=11 (2,2/2,2,3,4) ID TH55 Er 70%	4.80 Dry								•					
5 -	1		4.00 - 5.30	БП				ID 11105 El 70%									•					
																	•					
																	•					
																_	•					
6 -	30 Jan 24	1630												6.00	+6.25	5	Firm to stiff	dark brown slightly sandy slightly gravelly CLAY with closely to aced medium gravel size pockets of green silt. Gravel is angular to				
	6.30 31 Jan 24	Dry 0900	6.30 - 6.75 6.30 - 6.80	UT 18 B 20	38 blows 100% rec				6.30 Damp								subrounded (GLACIAL T	fine to medium of limestone, chalk and coal.				
	6.30	Dry	0.00 0.00	520													(GLACIAL I	nict)				
	1		6.80	D 19	-												-					
7 -																	-					
	1																					
_			7.80 7.80 - 8.30	D 21 B 22		7.80 - 8.25	SPT S	N=11 (2,2/2,3,3,3) ID TH55 Er 70%	7.80 Dry					/4.0	0)		•					
8 -						8.00	PP	156 kPa						(4.0	u)							
	1																					
· ·																	•					
9 -																	•					
]	‡		0.0-														•					
			9.30 - 9.75 9.30 - 9.80	UT 23 B 25	50 blows 10% rec				9.30 Dry								-					
			0.00	D.C.													-					
10 -			9.80	D 24										10.00	+2.25	5	•	Hele continues are stated				
Ĺ																		Hole continues on next sheet				
Gene	al Remarks																oring / Chisellir Depths	ng Groundwater Entries Duration (mins) Tool No. Depth Rei				Sealed
																		1				
Notes																Status	<u> </u>		Borehole			
For ex	planation of s	ymbols a	and abbreviati	ons see Key to E	Exploratory Hole Records.	. All	oject No.		HYDROGEN PATH	IFINDER PRO	JECT PHASE 2	2 FEED PROJECT						Scale 1:50		D)	/D 404	
depth	and reduced	revels in	n metres. Stra	tum thickness gi	ven in brackets in depth c		oject No. rried out fo	A3039-23 r SSE Hornsea L	_imited								DRA		AGS		/B-104	
																		© Copyright SOCOTEC UK Limited	100	S	heet 1 of 2	

С	hecked	De	epth - 1.20 3	Date	es 30 Jan 24		Methor		oit	Equipmen Hand tools	t Rig	Crew P/AB	Logger MH	Logged 30 Jan 24		ole Dia. (mm)	Casi Depth	ng Dia. (mm)	Depth	Depth Related Remarks Remarks Gro	ound Level		SOCOTEC 12.25 mOD
М	Stanley	1.20 -	- 15.00	0 Jan 24 -	31 Jan 24	'	Cable percuss	sion boring	on.	Dando 175	5 K	P/AB P/AB	TP	31 Jan 24	15.00	200	15.00	200	Бериі	Со	ordinates		E 526221.19
A	proved	1																		Na	tional Grid	Sys	N 436992.28 stem OSGB
	Date	Time			Samples			Field Te		Samp / Test	Coring Depth	TCR SCR RQ	2 % 2 % 1D	Water added		Depth	Level	Legend		Strata Description	isel. M	/ater intry	Backfill
10 -	Casing	Water	Depth	1 Тур	oe & No.	Records	Depth	Туре	Records	Casing Water	(Diamet	er) %		Flush details		(Thicknes	5)	× ^ o _ × _ o _ ×	Firm to stiff da	Main Detail dark brown slightly sandy slightly gravelly silty CLAY. Gravel is ubangular fine to medium of chalk and coal. Sand is fine. Small	5	-	
																		× × ×	pockets of gre (GLACIAL TIL	reenish weathered sandstone.			
			10.80	,	D 26		10.80 - 11.25	SPT S	N=18 (2,3/3,4,5,6)	10.80 Dry								8-0-X					
11 -			10.80 - 11	1.30	B 27				ID TH55 Er 70%									8 × 0 ×					
																		× × × ×					
																		× - 0 - X					
12 -	-						12.00	PP	175 kPa									8 × × ×					
			12.30 - 12 12.30 - 12	2.75 L 2.80	UT 28 B 30	48 blows 100% rec				12.30 Dry						,-,		× ^ 0 - X					
-			12.80		D 29											(5.0	U)	× × • ×					
13 -			12.60	´ '	D 29													× × × × × ×					
																		8 × × 0 ×					
-			13.80 - 14	4 30	B 31		13.80 - 14.25	ent e	N=47 (2 2/4 4 4 E)	12.90 Day								× × 0 × 0					
14 -			13.60 - 14	4.30	531		13.60 - 14.23	3513	N=17 (3,3/4,4,4,5) ID TH55 Er 70%	13.80 Dry								× × 0 - ×					
	-		14.30 - 15	5.00	B 32	-												× ×					
-		4400					44.00	nn										× × 0.2					
15 -	31 Jan 24 15.00	Dry					14.80	PP								15.00	-2.75	8 0 X		END OF EXPLORATORY HOLE			15.00
-																							
16 -																							
-																							
17 -																							
-																							
18 -																							
	-																						
1																							
19 -																							
	1																						
1																							
20 -	1																						
Gener	al Remarks															Hard Bo	oring / Chiselling	Groundwater Entries			01- 1		
																		Depths D	Duration (mins) Tool No. Depth Remarks			Sealed	
Notes		evmhala	and obbes	viations as	a Kauta F	voloratory Holo Desert-	Pro	ject	ALDBROUGH	HYDROGEN PAT	HFINDER P	ROJECT F	PHASE 2 FE	EED PROJECT				Status		Scale 1:50			
depths	piariation of and reduce	symbols ed levels i	in metres. S	nauons see Stratum thic	ckness give	xploratory Hole Records en in brackets in depth o	column. Pro	ject No. ried out for	A3039-23 SSE Hornsea L	imited									DRAF	ACS	BVB	3-104	
							J Cai	out ioi	SOL HOMBOAL											© Copyright SOCOTEC UK Limited	Sheet	t 2 of 2	

Checked	Dept	th	Dates	<u> </u>	Meth	od		Equipment	Rig C	rew L	.ogger Logged	н	ole	Casi	na		Depth Related Remarks		T		SOCOTEC
	0.00 - 1	1.20 05 F	eb 24 - 05 Feb 2 eb 24 - 06 Feb 2		Hand excavated Cable percus	inspection		Hand tools Dando 175	KP/	AB	TP 16 Feb 24 TP 16 Feb 24		Dia. (mm) 200	Depth 15.00		Depth	Remarks		Ground Lev		12.41 mOD
M Stanley	1.20	0.00	001001		odbio porodo	olon boning		Dundo 170	107		1010024	15.00	200	15.00	200				Coordinate National G		E 526214.35 N 437013.08
Approved																			National Gi	ria	System OSGB
																					.,
Data 3	Ti		0			F:-1-1.7		Comm. / Tout	Carian	TCR %	Water added						Streets Descript				
	Time	5	Sampl		5.4	Field T		Samp / Test	Coring Depth	TCR % SCR % RQD			Depth	Level	Legend		Strata Descript		Chical	Water Entry	Backfill
0 Casing V	Water	Depth	Type & No.	Records	Depth	Туре	Records	Casing Water	(Diameter)	%	Flush details		(Thickness	-		Light grey an	Main ngular to subangular medium to coarse GRAVEL of	Detail limestone.	<u> </u>		
=		0.30	D 1	_									0.20 (0.3	+12.21		(MADE GRO	DUND) bwn slightly sandy gravelly CLAY with occasional clo grey silt. Gravel is angular to subrounded fine to coal				
-		0.30 - 0.50 0.50	D 3	-									0.50	+11.91		partings of g	grey silt. Gravel is angular to subrounded fine to coal ed brick and chalk.	0.50-0.70 Falticle SIZ			
-		0.50 - 0.70	B 4	-									(0.7	0)		(MADE GRO		distribution testing inc sandy silty GRAVEL.	licates very		
1 —		1.00	D 5										(0.7			medium space	aced partings of grey silt. Gravel is angular to subanç limestone, chalk and coal.	gular medium			
]		1.00 - 1.20 1.20 - 1.65	D 7	-	1.20 - 1.65	SPT S	N=8 (1,2/2,2,2,2) ID TH55 Er 70%	1.20 Dry					1.20	+11.21		(GLACIAL TI	TLL)	anal alasah ta			
		1.20 - 1.70	B 8	-	1.50	PP	ID 1H35 El 70%	_								medium space	light brown slightly sandy gravelly CLAY with occasion code partings of grey and yellow silt. Gravel is angular partings of grey and yellow silt.	ar to			
]																GLACIAL TI	medium to coarse of chalk, coal and limestone.				
2 —		2.00 - 2.45		56 blows 100% rec				2.00 Dry													
		2.00 - 2.70		-				 								•					
		2.50	D 10	_																	
		2.75 - 3.20		_	2.75 - 3.20	SPT S	N=14 (3,3/3,3,4,4)	2.75 Dry					(2.8	0)							
3 —		2.75 - 3.30	B 13	-	3.00	PP	ID TH55 Er 70%	Diy													
					3.00	"															
]		3.30 3.30 - 3.80	UT 14 B 16	54 blows 100% rec				3.30 Dry													
]																					
		3.80	D 15										4.00	.0.44							
4 —													4.00	+8.41		Firm to stiff li	light brown slightly sandy slightly gravelly CLAY with aced partings of grey silt. Gravel is angular to subrou	occasional nded fine to			
-																medium of lir (GLACIAL TI	imestone, chalk, coal and chert.	nada iiilo to			
-																(GLACIAL II	ice				
]		4.80 - 5.25 4.80 - 5.30		-	4.80 - 5.25	SPT S	N=13 (2,3/3,3,3,4) ID TH55 Er 70%	4.80 Dry													
5 —		4.00 - 5.30	D 10		5.00	PP	ID 11105 El 70%														
=																					
-																					
-																					
6 —													(4.0	0)		9					
]		6.30 - 6.75	UT 19	56 blows 100% rec				4.80 Dry								9					
		6.30 - 6.80	B 21	00 210110 10070 100												9					
- 05 Feb 24 6.80	1700 Dry	6.80	D 20													9					
7 — 06 Feb 24 6.80	0800 Dry	0.80	D 20													9					
- 10.00	Diy																				
<u> </u>																9					
-																					
		7.80 - 8.25 7.80 - 8.30	D 22 B 23	_	7.80 - 8.25	SPT S	N=14 (1,1/2,2,3,7) ID TH55 Er 70%	7.80 Dry					8.00	.4.44		9					
8 —					8.00	PP							8.00	+4.41			own slightly sandy slightly gravelly CLAY with occasiings of grey silt. Gravel is angular to subrounded fine				
																of limestone,	e, chalk and coal.				
																(OLACIAL II	·/				
]																					
9 —																					
]		9.30 - 9.75	UT 24	58 blows 100% rec				9.30 Dry								9					
-		9.30 - 9.80	B 25																		
10 —													(4.0	0)			Hole continues on next sheet				
															Hord D	oring / Chicollina	in I c	roundwater Entries			
General Remarks																oring / Chiselling Depths [g Duration (mins) Tool	roundwater Entries No. Depth Remarks			Sealed
Notes															Status		<u>_</u>	Borehole			
For explanation of syr	mbols ar	nd abbreviat	ions see Key to	Exploratory Hole Records	S. All	oject		HYDROGEN PATH	FINDER PRO	JECT PHA	SE 2 FEED PROJECT				J. C.		Scale 1:50		-	VD 46	_
depths and reduced le	levels in	metres. Stra	tum thickness gi	iven in brackets in depth	column.	oject No. rried out fo	A3039-23	imited								DRA	AFT Printed 24 Jun 2024 12	26:37 JK Limited AGS	В	VB-10	•
					L Ca	rried out fo	or SSE Hornsea L	.maleu									© Copyright SOCOTEC U	JK Limited AGS		Sheet 1 of 2	



Checked	Dep		Dates		Meth			Equipment		Crew	Logger	Logged		ole	Cas	ing		Depth Related Remarks
M Stanley	0.00 - 1.20 -	1.20 05 F 15.00 05 F	eb 24 - 05 Feb 2 eb 24 - 06 Feb 2	24 24	Hand excavated Cable percus	inspection sion boring	pit	Hand tools Dando 175		P/AB P/AB	TP TP	16 Feb 24 16 Feb 24	Depth 15.00	Dia. (mm) 200	Depth 15.00	Dia. (mm) 200	Depth	Remarks Ground Level 12.41 mOI Coordinates E 526214.3
•																		National Grid N 437013.0
Approved																		System OSGB
Date	Time	•	Sample	es		Field T	Tests .	Samp / Test	Coring	TCR SCR	% v	Nater added		Depth	Level	Legend		Strata Description
Casing	Water	Depth	Type & No.	Records	Depth	Туре	Records	Casing Water	Depth (Diamete	RQD) [.	Flush details		(Thickness		Legena		Main Detail g Entry
10																	Stiff dark bro spaced partir	rown slightly sandy slightly gravelly CLAY with occasional closely tings of grey silt. Gravel is angular to subrounded fine to medium
-																	of limestone, (GLACIAL TI	e, chalk and coal.
-																	•	
11 —		10.80 - 11.2	5 D 26	_	10.80 - 11.25	SPTS	N=17 (3,3/3,4,5,5) ID TH55 Er 70%	10.80 Damp									-	
"																		
=		11.80	B 27															
12 —		11.00	D 21		12.00	PP								12.00	+0.41		Stiff dark bro	rough elighthy conductive CLAV with occasional medium appead
1		12.30 - 12.7	5 UT 28	85 blows 100% rec				12.30 Damp									partings of g	rown slightly sandy gravelly CLAY with occasional medium spaced grey silt. Gravel is subangular to subrounded fine to coarse of chalk and coal.
4		12.30 - 12.8	0 B 30					Last Bump									(GLACIAL TI	TILL)
1		12.80	D 29	_													9	
13																	-	
														(3.0	0)		-	
-		13.80 - 14.2	5 D 31	_	13.80 - 14.25	SPT S		13.80 Damp										
14 —		13.80 - 14.3	0 B 32	-			ID TH55 Er 70%										•	
		14.30 - 15.0	0 B 33	-													-	
-																		
06 Feb 24 15.00	1500 Dry																•	
15 - 15.00	Diy													15.00	-2.59	. Kreingerja		END OF EXPLORATORY HOLE
-																		
16																		
10 -																		
_																		
1																		
17 —																		
]																		
=																		
18 =																		
=																		
4																		
1																		
19																		
=																		
20 =																		
20 —																		
General Remarks			•								-						oring / Chiselling Depths [Duration (mins) Tool No. Depth Remarks Seale
																		1 12.00 Rose to 11.00 m after 20 minutes. Medium inflow 12.5
Notes																Status	;	Borehole
For explanation of s	ymbols a	and abbreviat	ons see Key to E	Exploratory Hole Records	s. All		ALDBROUGH A3039-23	HYDROGEN PATH	IFINDER PR	OJECT P	HASE 2 FEE	ED PROJECT					DRA	Scale 1:50
depths and reduced	ievels in	n metres. Stra	ıum tnıckness gi	ven in brackets in depth		ect No. rried out fo		Limited									DKA	ACS
																		© Copyright SOCOTEC UK Limited Sheet 2 of 2

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Checked	Depth		Dates n 24 - 31 Jan 24		Meth Hand excavated		mit	Equipment		ig Crew KP/AB	Logger	Logged		ole		sing		Depth Related Remarks	Ground Lev	vol	12.62 mOD
M Stanley			b 24 - 31 Jan 24 b 24 - 01 Feb 24		Cable percus			Hand tools Dando 175		KP/AB KP/AB	TP TP	31 Jan 24 01 Feb 24	15.00	Dia. (mm) 200	15.00	Dia. (mm) 200) Depth	Remarks	Coordinates		E 526208.10
Approved																			National Gr	rid	N 437037.72
																					System OSGB
Date	Time		Samples	<u> </u> s		Field 1		Samp / Test	Coring	TC	R % R %	Water added		Donath	11	1		Strata Description		Water	Backfill
Casing	Water	Depth	Type & No.	Records	Depth	Туре	Records	Casing Water	Dep	n R	R % QD %	Flush details		Depth (Thickness	Level s)	Legend	1	Main Detail	Chise	Entry	Ваский
0			5.											0.20	0) +12.4	2	(MADE GRO	angular to subangular medium to coarse GRAVEL of limestone. OUND) 0.10 plastic woven of cover	eofabric		
		0.30 0.30 - 0.50 0.50	D 1 B 2 D 3											0.50	0) +12.1	2	of brick, lime	rown slightly sandy angular to subangular fine to coarse GRAVEL estone and coal. Sand is coarse.			
-		0.50 - 1.20	B 4											(0.7	0)			own slightly sandy slightly gravelly CLAY with closely to medium tings of grey silt. Gravel is angular to subangular fine to medium of			
1 — 31 Jan 24 1.20	1700 Dry													(0.7			brick, limesto (MADE GRO	tone, coal and chalk.			
	0902	1.20 1.20 - 1.70	D 5 B 6		1.20 - 1.65	SPT S	N=9 (2,2/2,2,2,3) ID TH55 Er 70%	1.20 Dry						1.20	+11.4	2		rown slightly sandy slightly gravelly CLAY with dark grey of silt. Gravel is angular to subrounded fine to medium of			
	Dry				1.50	PP		-										chalk and coal.			
]		0.00 0.45		55.11 4000/				0.00													
2 —		2.00 - 2.45 2.00 - 2.70	UT 7 B 9	55 blows 100% rec				2.00 Dry						(2.1	0)						
]		2.50	D 8											,	-,		•				
		2.75	D 10		2.75 - 3.20	SPT S	N=12 (2,2/3,3,3,3)	2.75 Dry													
3 —		2.75 - 3.20	B 11		3.00	PP	ID TH55 Er 70%														
		3.30 - 3.75 3.30 - 3.80	UT 12 B 14	55 blows 100% rec				3.30 Dry						3.30	+9.32	2	Firm to stiff li	light brown slightly sandy slightly gravelly CLAY with closely to			
-		3.30 - 3.00	D 14														medium of cl	aced grey partings of silt. Gravel is angular to subrounded fine to chalk, limestone and coal.			
		3.80	D 13														(GLACIAL TI	3.80-4.00 occasiona (10-100mm) of chal			
4 <u>-</u>														(1.7	0)						
																	- · · · · · · · · · · · · · · · · · · ·				
-		4.80	D 15		4.80 - 5.25	SPT S	N=15 (3,3/3,3,4,5)	4.80 Dry													
5 -		4.80 - 5.30	B 16		5.00	PP	ID TH55 Er 70%							5.00	+7.62	2 8 6 6	Firm to stiff of	dark brown slightly sandy slightly gravelly silty CLAY. Gravel is			
-																<u>∞×</u> ₀.	Occasional r	subrounded fine to medium of chalk, coal and limestone. medium gravel size pockets of green weathered sandstone.			
_																× × 0	GLACIAL TI	IILL)			
-														(1.8	0)	× ^ 0	×				
6 —		0.00 0.75	LIT 47	40 hlava 070/				0.00 P								<u>×°×</u> °.	×				
]		6.30 - 6.75 6.30 - 6.80	UT 17 B 19	48 blows 67% rec				6.30 Dry								× × 0	×				
		6.80	D 18											6.80	+5.82	2 8 × 0	Firm to stiff a	dark brown slightly sandy slightly gravelly silty CLAY. Gravel is			
7 🚽																8 × 0		subrounded fine to medium of sandstone, chalk, coal and			
=														(1.2	0)	× ^ 0	(GLACIAL TI	TILL)			
_														,	-,	×° <u>×</u> °.	×				
8 —		7.80 7.80 - 8.30	D 20 B 21		7.80 - 8.25 8.00	SPT S PP	N=13 (2,2/2,3,4,4) ID TH55 Er 70%	7.80 Dry						8.00	+4.62	××.	×			1 ₹	
					0.00									0.00	14.02		to medium s	own slightly sandy slightly gravelly CLAY with occasional closely spaced pockets of grey silt. Gravel is angular to subrounded fine			
																	(GLACIAL TI	of chalk, coal and limestone. IILL)			
]																					
9 —																					
		9.30 - 9.75 9.30 - 9.80	UT 22 B 24	64 blows 100% rec				9.30 Dry						(2.8	0)						
																	•				
10 —		9.80	D 23															Holo continuos as next sheet			
																		Hole continues on next sheet			
General Remarks																	Boring / Chiselling Depths I	ng Groundwater Entries Duration (mins) Tool No. Depth Remarks			Sealed
Notes For explanation of sy	mbols and	d abbreviatio	ns see Kev to Fy	xploratory Hole Records	s. All	oject	ALDBROUGH	HYDROGEN PATH	IFINDER	PROJECT	PHASE 2 FE	ED PROJECT				Status		Scale 1:50			
depths and reduced	levels in m	netres. Stratu	um thickness give	xploratory Hole Records en in brackets in depth		oject No. rried out fo	A3039-23 or SSE Hornsea I	imited									DRA	AFT Printed 24 Jun 2024 12:26:38 © Copyright SOCOTEC UK Limited AGS	В	VB-106	6
					Cal	i ieu out 10	JI JOE HUITISEA I	-milliou										© Copyright SOCOTEC UK Limited		Sheet 1 of 2	



	Checked	De	pth 24 la	Dates in 24 - 31 Jan 24		Meth		4	Equipme			Logger	Logged		ole	Cas			Depth Related Remarks	Ground Leve		SOCOTEC 12.62 mOD
N	/I Stanley	1.20 -	- 1.20 31 Ja - 15.00 01 Fe	in 24 - 31 Jan 24 b 24 - 01 Feb 24		Hand excavated Cable percus			Hand too Dando 1		P/AB P/AB	TP TP	31 Jan 24 01 Feb 24	Depth 15.00	Dia. (mm) 200	Depth 15.00	200	Depth 10.80 - 15.00	Remarks Unable to take UT100 sample as too much water in borehole.	Coordinates	•	E 526208.10
	pproved																			National Grid		N 437037.72
^	ррготец																					System OSGB
	Date	Time		Samples	s		Field	Tests	Samp / Test	Coring Depth	TCR %	6	Water added		Depth	Level	Legend		Strata Description	- se -	Water	Backfill
10 -	Casing	Water	Depth	Type & No.	Records	Depth	Туре	Records	Casing Wat		r) RQD		Flush details		(Thicknes	s)		Ctiff dorly bro	Main Detail	퍙	Entry	
	_																	to medium s	own slightly sandy slightly gravelly CLAY with occasional closely spaced pockets of grey silt. Gravel is angular to subrounded fine of chalk, coal and limestone.			
	_																	(GLACIAL T	ILL)			
]		10.80	D 25		10.80 - 11.25	SPT S	N=17 (2,3/3,3,5,6)	10.80 Dr	,					10.80	+1.82			10.80-15.00 very wet		1 🗷	
11 -	_		10.80 - 11.30	B 26				ID TH55 Er 70%									× × 0	to subrounde	ed fine to medium of chalk, coal and limestone.			
																	× × 0 ×	(GLACIAL TI	ILL)			
	-																× × 0 ×	<u> </u>				
	-																× <u>×</u> ∘ <u>×</u>	<u> </u>				
12 -	-					12.00	PP										<u> </u>	9				
	-		12.30	D 27		12.30 - 12.75	SPT S	N=13 (2,3/3,3,3,4)	12.30 8.0	0							×					
	-		12.30 - 12.80	B 28				ID TH55 Er 70%									× × ×					
															(4.2	0)	× × ×	4				
13 -	_														(4.2	,	×-0-×	4				
]																× × × 0	4				
	_																× × × ×	9				
1	-		13.80 13.80 - 14.30	D 29 B 30		13.80 - 14.25	SPT S	N=13 (4,4/4,3,4,2) ID TH55 Er 70%	13.80 8.0	0							× × 0 × 0 ×					
14 -	_																<u>x</u> ∘ <u>×</u> ∘ <u>×</u>	<				
			14.30 - 15.00	B 31													8-0-X	9				
]																x _ o _ x	9				
15 -	- 01 Feb :	24 1630 8.00													15.00	-2.38	× ^ 0 - ×	<u> </u>				15.00
"	-														10.00	2.00			END OF EXPLORATORY HOLE			.0.00
]																					
	_																					
16 -	_																					
	1																					
	_																					
	=																					
17 -	-																					
	_																					
	1																					
18 -																						
	-																					
	-																					
19 -	_																					
18 -	-																					
	1																					
	=																					
20 -	_																					
Gene	ral Remar	(S																oring / Chiselling Depths I	Duration (mins) Tool No. Depth Remarks	minuto - BA C	nflour	Sealed
																			1 10.80 Rose to 8.00 m after 20	minutes. Medium i	HIIOW	11.00
Notes	s						nigot	AL DEDOLLOU		THEINDED DO	O IEOT DU	JACE 0 E					Status	s	Scale 4:50 Borehole			
For e	xplanation	of symbols ced levels i	and abbreviation	ons see Key to Ex um thickness give	xploratory Hole Record en in brackets in depth	us. All	oject oject No.	ALDBROUGH A3039-23	HYDROGEN PA	II OFINDEK PK	OJEC I PH	iase 2 Fb	EED PKOJECI					DRA	Scale 1:50 Printed 24 Jun 2024 12:26:38	BV	B-106	
				3.10	254		rried out fo		Limited										© Copyright SOCOTEC UK Limited Printed 24 Jun 2024 12:26:38 © Copyright SOCOTEC UK Limited		neet 2 of 2	
																			© Copyright COCOTEC On Entitled	31	L UI L	

Checked	Dep	oth	Dates		Meth	nod		Equipment	Rig C	rew I	Logger Logged	н	ole	Cas	na	1	Depth Related Remarks	Т		SOCOTEC
Checked	0.00 -	1.20 08 F	eb 24 - 08 Feb 2		Hand excavated	inspection		Hand tools	KP/	DH	TP 16 Feb 24	Depth	Dia. (mm)	Depth	Dia. (mm)	Depth	Remarks	Ground Level		11.85 mOD
M Stanley	1.20 - 1	15.00 13 F	eb 24 - 14 Feb 2	24	Cable percus	ssion boring		Dando 175	KP/I	DH	TP 16 Feb 24	15.00	200	15.00	200			Coordinates		E 526176.40
Approved																		National Grid		N 437036.02
7.66.0100																				System OSGB
Date	Time		Sampl	les		Field T	Tests	Samp / Test	Coring	TCR % SCR %	Water added						Strata Description		Weter	
		B	•		5				Depth	RQD	1		Depth	Level	Legend				Water Entry	Backfill
0 Casing	Water	Depth	Type & No.	Records	Depth	Type	Records	Casing Water	(Diameter)	%	Flush details		(Thickness	-	********	Light grey and	Main Detail angular to subrounded medium to coarse GRAVEL of limestone.	0		
]		0.30	D 1										0.20	+11.65		(MADE GRO	OÜND)			
		0.30 - 0.50	B 3	-									0.50	0) +11.35		GRAVEL of lin	rown slightly sandy angular to subrounded medium to coarse f limestone, chalk, brick and coal.			
		0.50 0.70 - 0.90	D 2 B 5	_									0.00	11.00		(MADE GROU Soft light brow	OUND) rown slightly sandy gravelly CLAY with closely to medium spaced			
=													(0.7	0)		partings of green	grey silt. Gravel is angular to subangular medium to coarse of chalk and coal.			
1 — 08 Feb 24 1.20	1700 Dry	1.00	D 4	-												(GLACIAL TIL				
- 13 Feb 24	1432	1.20 - 1.65 1.20 - 1.70	D 5 B 6	_	1.20 - 1.65	SPT S	N=9 (2,2/2,2,2,3) ID TH55 Er 70%	1.20 Dry					1.20	+10.65		Soft to firm lig	light brown slightly sandy gravelly CLAY with occasional closely to aced partings of grey silt. Gravel is angular to subrounded fine to			
1.20	Dry				1.50	PP										coarse of lime	mestone, chalk, chert and coal.			
-																(GLACIAL TIL	TILL)			
2 —		2.00 - 2.45	UT 7	49 blows 100% rec				2.00 Dry												
		2.00 - 2.43	B 9	49 blows 100 /6 fec				2.00 Diy					(1.8	0)						
1																				
-		2.50	D 8	-												*				
		2.75 - 3.20	D 10	-	2.75 - 3.20	SPT S		2.75 Dry								•				
3 —		2.75 - 3.20	B 11		3.00	PP	ID TH55 Er 70%						3.00	+8.85		Firm light have	rown clightly candy gravelly CLAV with accessional medium access			
		0.5-														partings or gre	rown slightly sandy gravelly CLAY with occasional medium spaced grey and yellow silt. Gravel is angular to subrounded fine to			
		3.30 - 3.75	UT 12	55 blows 100% rec				3.30 Dry								coarse of che	hert, chalk, limestone and coal.			
=																(SE IOIAL III	,			
-		3.80	D 13	-																
4 —																				
]																•				
3													(2.8	0)		•				
- 13 Feb 24																•				
4.80 - 14 Feb 24	Dry 0838	4.80 - 5.25		-	4.80 - 5.25	SPT S	N=12 (2,3/3,3,3,3)	4.80 Dry												
5 -4.80	Dry	4.80 - 5.30	B 15		5.00	PP	ID TH55 Er 70%													
-																				
																-				
=													5.80	+6.05		Firm to stiff da	dark brown slightly sandy gravelly CLAY with occasional closely			
6 —																to medium sp	spaced partings of grey silt. Gravel is angular to subangular fine to sandstone, limestone coal and chalk.			
1		6.30 - 6.75	UT 16	70 blows 100% rec				6.30 Dry								(GLACIAL TIL				
4		6.30 - 6.70	B 18	-												9				
-																				
		6.80	D 17	-									(2.2	0)						
/]																				
]																				
-																				
		7.80 - 8.25	D 19		7.80 - 8.25	SPT S	N=15 (3,3/3,3,4,5)	7.80 Dry												
8 —		7.80 - 8.30	B 20	-	8.00	PP	ID TH55 Er 70%						8.00	+3.85		Cett a-11	rough dighth, and a grouph, CLAV within-lates to			
																medium spac	rown slightly sandy gravelly CLAY with occasional closely to aced green and grey partings of silt. Gravel is subrounded to le to medium of limestone, chalk and coal. 8.30 1 No. angular coal.			
																rounded fine to	ie to medium of limestone, chalk and coal. 8.30 1 No. angular c (70-80mm) of chalk	bble		
7																(OLACIAL III	(10 comm) of drain			
9 —																				
]		9.30 - 9.75	LIT 04	78 blows 100% rec				0.30 0												
]		9.30 - 9.75 9.30 - 9.80	UT 21 B 23	70 DIOWS TOU% rec				9.30 Dry												
]																•				
	- 1	9.80	D 22	-																
10 —															Trong (Hole continues on next sheet			
General Remarks																oring / Chiselling Depths D	ng Groundwater Entries Duration (mins) Tool No. Depth Remarks			Sealed
Notes								IIVDDC 051: 5:	FINIDES :	\IEC= -:	AOE 0 FFF5 55 1-1				Status	3	Borehole			
For explanation of sy	ymbols a	and abbreviat	ons see Key to	Exploratory Hole Records	S. All	oject		HYDROGEN PATE	FINDER PRC	MECT PHA	ASE 2 FEED PROJECT					DD 4.5	Scale 1:50	D\/	D 407	. i
depths and reduced	levels in	metres. Stra	tum thickness g	iven in brackets in depth	column.	oject No.	A3039-23	insite d								DRAF	AFT Printed 24 Jun 2024 12:26:38 © Copyright SOCOTEC UK Limited AGS	BA	B-107	
					Ca	rried out fo	or SSE Hornsea L	Limited									© Copyright SOCOTEC UK Limited AGS	Sh	eet 1 of 2	i
					-										-		•			



Observed	Dep	oth	Dates		Meth	od		Equipment	Pig	Crew	Logger Logged	Т.	łole	Casi	ina		Den	pth Related Remarks			SOCOTEC
Checked	0.00 -	1.20 08 F	eb 24 - 08 Feb 2	24	Hand excavated	inspection	pit	Hand tools	KF	P/DH	TP 16 Feb 24	Depth	Dia. (mm)	Depth	Dia. (mm)	Depth	Remarks	our rolling rolling	Ground Le		11.85 mOD
M Stanley	1.20 -	15.00 13 F	eb 24 - 14 Feb 2	24	Cable percus	sion boring		Dando 175	K	P/DH	TP 16 Feb 24	15.00	200	15.00	200				Coordinate		E 526176.40
Approved														l					National G	rid	N 437036.02
														l							System OSGB
Date	Time		Sampl	es		Field T	Tests	Samp / Test	Coring	TCR % SCR %	Water added		Depth	Level	Legend			Strata Description	-		Backfill
Casing	Water	Depth	Type & No.	Records	Depth	Туре	Records	Casing Water	Depth (Diamete	ROD	Flush details		(Thicknes				Main	Det	il .	Entry	
10													(4.3	30)		Stiff dark bro	rown slightly sandy gravelly CLA	AY with occasional closely to			
_													,			rounded fine (GLACIAL T	e to medium of limestone, chall	of silt. Gravel is subrounded to lk and coal.			
-																(GLACIAL I	TILL)				
1		10.80 - 11.2	5 D 24	-	10.80 - 11.25	SPT S	N=17 (3,4/4,4,4,5) ID TH55 Er 70%	10.80 Dry								•					
11 —		10.80 - 11.3	B 25	-			ID 1H55 Er 70%									•					
=																· .					
																· .					
																•					
12 —					12.00	PP										•					
]		12.30 - 12.7	5 UT 26	75 blows 100% rec				12.30 Dry					12.30	-0.45		•					
		12.30 - 12.7	B 28	73 blows 100 /6 fec				12.30 Diy					12.50	-0.43		Stiff dark bro	rown slightly sandy gravelly CLA dark grey silt. Gravel is subang	AY with rare medium spaced gular to subrounded fine to medium			
=																of limestone (GLACIAL T	e, chalk and coal.	gular to subrounded fine to medium			
13 —		12.80	D 27	-												(=2.5)/12 1	-1				
'																•					
																•					
]													(2.7	70)		•					
1 =		13.80 - 14.2 13.80 - 15.0	5 D 29 0 B 30	-	13.80 - 14.25	SPT S	N=15 (3,3/3,3,4,5) ID TH55 Er 70%	13.80 Dry								•					
14 —																•					
=																•					
-																•					
14 Feb 24 15.00	1700 Dry															•					
15 - 15.00	Diy												15.00	-3.15	in the state of th		END OF EXPLORAT	TORY HOLE			15.00
]																					
-																					
16																					
-																					
-																					
=																					
17 —																					
=																					
18 —																					
]																					
]																					
19 —																					
]																					
=																					
20 =																					
20 —																					
General Remarks						•					. '		*			oring / Chisellin Depths	ng Duration (mins)	Groundwater Entries Tool No. Depth Remarks			Sealed
															'			To John Remarks			Coulou
																					
Notes For explanation of s	vmbolo o	and abbrovict	one see Koute	Evnloratory Holo Possed	e ΔII Pro	ject	ALDBROUGH	HYDROGEN PATH	IFINDER PR	OJECT PH	IASE 2 FEED PROJECT				Status	•	Scale	le 1:50			
depths and reduced	levels in	n metres. Stra	tum thickness gi	Exploratory Hole Record iven in brackets in depth	column. Pro	ject No.	A3039-23									DRA	AFT Print	ted 24 Jun 2024 12:26:38	В	VB-10	7
					Car	rried out fo	or SSE Hornsea L	imited									© C	ted 24 Jun 2024 12:26:38 Copyright SOCOTEC UK Limited AGS		Sheet 2 of 2	

SOCOTEC

С	hecked	De		Dates		Meth			Equipment		Crew Lo		ged	Hole		Cas			Depth Related Remarks				SOCOTEC
l M	Stanley			6 Feb 24 - 06 Feb 24 6 Feb 24 - 07 Feb 24		Hand excavated Cable percus			Hand tools Dando 175			TP 07 F	eb 24 De j eb 24 15.			Depth 15.00	Dia. (mm) 200	Depth	Remarks		Ground Level Coordinates		12.92 mOD E 526190.94
																					National Grid		N 437091.28
A	oproved																						System OSGB
	Date	Time		Sample	es		Field T	ests	Samp / Test	Coring	TCR % SCR %	Water a	dded	Dept	th	Level	Legend		Strata Description		sel.	Water	Backfill
0 -	Casing	Water	Depth	Type & No.	Records	Depth	Туре	Records	Casing Water	Depth (Diameter	RQD %	Flush	etails	(Thic	ickness)				Main	Detail	Chi	Entry	
ľ	-													0.20	(0.20)) +12.72		(MADE GRO					
]		0.30 0.30 - 0.	.50 B 2	-													partings of gr	wn slightly sandy gravely CLAY with closely to medium spaced rey silt. Gravel is angular to subangular fine to medium of				
	-		0.50	D3											(0.80))		limestone, ch (GLACIAL TII	nert and chalk.				
1 -]		1.00	D 4	_									1.00)	+11.92		Firm limbs barr	dishth, and de secoli, Ol AV, title desk to an discussion				
	=		1.00 - 1. 1.20 - 1.	.65 D 6	-	1.20 - 1.65	SPT S	N=9 (2,2/2,2,2,3)	1.20 Dry									partings of gr	own slightly sandy gravelly CLAY with closely to medium spaced rey silt. Gravel is subrounded to rounded fine to medium of chalk,				
	_		1.20 - 1.	.70 B 7	-	1.50	PP	ID TH55 Er 70% 88 kPa										(GLACIAL TIL	LL)				
]																						
2 -	=		2.00 - 2.		68 blows 100% rec				2.00 Dry														
]		2.00 - 2.	.70 B 10	-																		
	-		2.50	D 9	-																		
	06 Feb 24		2.75 - 3. 2.75 - 3.	20 D 11 20 B 12	-	2.75 - 3.20	SPT S	N=13 (2,2/2,3,3,5) ID TH55 Er 70%	2.75 Dry														
3 -	3.00 - 07 Feb 24	Dry 0800	2.75 - 5.	.20 612		3.00	PP	106 kPa							(4.00))							
	3.00	Dry	3.30 - 3.	.75 UT 13	48 blows 100% rec				3.30 Dry														
-	-		3.30 - 3.	.80 B 15																			
]		3.80	D 14	-																		
4 -	-																						
	- - -																						
-	1																						
]		4.80 - 5. 4.80 - 5.	.25 D 16 .30 B 17	-	4.80 - 5.25	SPT S	N=13 (2,3/3,3,3,4) ID TH55 Er 70%	4.80 Dry														
5 -						5.00	PP	131 kPa						5.00)	+7.92		Firm to stiff da	lark brown slightly sandy gravelly CLAY with medium spaced rey silt. Gravel is subrounded to rounded fine to medium of chalk,				
	-																	limestone and	d coal.				
']																	, ,	,				
6 -	-																						
0																							
Ι.]		6.30 - 6. 6.30 - 6.	.75 UT 18 .80 B 19	56 blows 100% rec				6.30 Dry						(3.00))							
	-														(0.00)	,							
7 -]																						
	1																						
-	_																						
	1		7.80 - 8.	.25 D 20	_	7.80 - 8.25	SPT S	N=15 (3,3/3,4,4,4)	7.80 Dry														
8 -	-		7.80 - 8.	30 B 21	=	8.00	PP	ID TH55 Er 70% 163 kPa						8.00)	+4.92		Stiff dark brov	wn slightly sandy slightly gravelly CLAY with occasional medium				
]																	to coarse gra	avel size pockets of grey silt. Gravel is angular to subrounded fine f chalk, coal and limestone.				
-	1																	(GLACIAL TII					
	=																						
9 -	-																					1 🔫	
	1		9.30 - 9.	.75 UT 22	56 blows 100% rec				9.30 Dry														
-	-		9.30 - 9.	.80 B 24																			
]		9.80	D 23	-																		
10 -															(4.00))			Hole continues on next sheet			1 🔻	
Gene	al Remarks				I				1	<u> </u>								oring / Chiselling					
																	'	epths D	Duration (mins) Tool No. Depth Re	marks se to 9.00 m after 20 n	ninutes. Medium i	nflow	Sealed 10.50
<u></u>																	-			1_			
Notes For ex		symbols :	and abbrev	riations see Kev to F	Exploratory Hole Records	ls. All	oject		HYDROGEN PATH	FINDER PRO	DJECT PHAS	SE 2 FEED PRO	JECT				Status		Scale 1:50	Borehole	_		
					ven in brackets in depth	column. Pro	oject No.	A3039-23	Limited									DRA	FT Printed 24 Jun 2024 12:26:39	■T AGS	BV	B-108	
						Cal	rried out fo	r SSE Hornsea I	Liilliteu										© Copyright SOCOTEC UK Limited	160	Sh	neet 1 of 2	

С	necked		epth - 1.20 0	Date 06 Feb 24 - 0		- F	Metho		oit	Equipment Hand tools		Crew P/DH	Logger TP	Logged 07 Feb 24		ole Dia. (mm)	Cas Depth	ing Dia. (mm)	Depth	Depth Related Remarks	Ground Leve	el	SOCOTEC 12.92 mOD
М	Stanley			06 Feb 24 - 0			Cable percuss	sion boring		Dando 175	K	P/DH	TP	07 Feb 24	15.00	200	15.00	200	1 2000		Coordinates		E 526190.94 N 437091.28
A	proved																				National Gri	a	System OSGB
	I		<u> </u>									TOD.	. 0/					<u> </u>					
	Date Casing	Time Water	Depth	h Tvn	Samples e & No.	s Records	Depth	Field Te Type	ests Records	Samp / Test Casing Water	Coring Depth (Diamete	TCR SCR RQI r) %	D	Water added Flush details		Depth (Thickness	Level	Legend		Strata Description Main Detail	Chisel.	Water Entry	Backfill
10 -	-		200	,,,,		11000100	200	1,500		June 11 and 11 a	(Diamote	1, 76	<u> </u>			(************	-,		Stiff dark brow to coarse grav	wn slightly sandy slightly gravelly CLAY with occasional medium vel size pockets of grey silt. Gravel is angular to subrounded fine chalk, coal and limestone.			
																			to medium of o	chalk, coal and limestone. LL)			
			10.80 - 1 10.80 - 1	11.25 [D 25 B 26		10.80 - 11.25	SPT S	N=16 (3,3/3,4,4,5) ID TH55 Er 70%	10.80 Dry									•				
11 -	- - -								15 11100 21 1070										-				
																			•				
	-						40.00									40.00	.0.00		•				
12 -			12.30 - 1	2 75 U	JT 27	58 blows 100% rec	12.00	PP	169 kPa	12.30 9.00						12.00	+0.92	× × 0 ×	Firm to stiff da	ark brown slightly sandy slightly gravelly silty CLAY. Gravel is brouned fine to medium of chalk, limestone and coal. LL)			
-			12.30 - 1	2.80 E	B 29	00 510110 10070100				12.00								× × 0.4	(GEACIAE TIE)			
13 -			12.80	ο σ	D 28													× × 0 -	X C				
13	-																	X 0 X 0 X					
-																(3.0	0)	× × 0	K				
14 -	-		13.80 - 14 13.80 - 14	4.25 E	D 30 B 31	-	13.80 - 14.25	SPT S	N=18 (2,3/3,4,5,6) ID TH55 Er 70%	13.80 Damp								× × 0 ×					
			14.30 - 1	5.00 E	B 32	-												× - 0 - ×	K K				
-																		x × 0 × 0	X X				
15 -	07 Feb 24 15.00	1700 Dry	-													15.00	-2.08	X 0 X 0 X	9	END OF EXPLORATORY HOLE			15.00
-	-																						
16 -																							
17 -	-																						
-] - - -																						
18 -																							
-																							
19 -																							
	-																						
20																							
20 -	<u> </u>																	Hard D	oring / Chicollina	I Groundwater Entrice			
Gene	al Remarks																	I I I I	oring / Chiselling Depths Du	Groundwater Entries Furnation (mins) Tool No. Depth Remarks			Sealed
Notes							Pro	ject	ALDBROUGH	HYDROGEN PATH	FINDER PF	ROJECT P	PHASE 2 FI	EED PROJECT				Status	3	Scale 1:50			
For ex depths	planation of and reduce	symbols d levels i	and abbrevin metres. S	viations see Stratum thic	e Key to Ex kness give	xploratory Hole Records en in brackets in depth o	column. Pro	ject No.	A3039-23		-			-					DRAF		B/	/B-108	
							Car	ried out for	SSE Hornsea L	Liifilleu										© Copyright SOCOTEC UK Limited AGS		Sheet 2 of 2	

Checked	Dept		Dates 24 - 08 Feb 24	4	Meth Hand excavated		pit	Equipment Hand tools	Rig C		Logger Logged TP 08 Feb 24		lole Dia. (mm)	Cas Depth	ing Dia. (mm)	Depth	Depth Related Remarks	Ground Level	11.62 mOD
M Stanley	1.20 - 5	5.25 08 Feb	24 - 08 Feb 24	4	Cable percus	sion boring	r	Dando 175			TP 08 Feb 2	5.00	200	5.00	200	Jopan Jopan		Coordinates	E 526105.00
Approved																		National Grid	N 437088.67 System OSGB
	Time		Sample			Field T			Coring Depth	TCR % SCR % RQD	i .		Depth	Level	Legend		Strata Description	Chisel.	Vater Backfill Entry
0 Casing	Water	Depth	Type & No.	Records	Depth	Туре	Records	Casing Water	(Diameter)	%	Flush detai	s	(Thicknes	0)			Main Detail subangular to subrounded medium to coarse GRAVEL of	5	,
		0.30 0.40 - 0.50 0.50 0.70 - 1.20	D 1 B 2 D 3 B 4										0.20 (0.2 0.40	+11.42 0) +11.22	KXXXXXXX	brick and ch	ROUND) r angular to subangular fine to coarse GRAVEL of limestone, red chalk.		
		1.20 - 1.65 1.20 - 1.70	D 6 B 7	-	1.20 - 1.65 1.50	SPT S	N=8 (2,2/2,2,2,2) ID TH55 Er 70% 113 kPa	1.20 Dry								chalk, limes (GLACIAL T	estone and coal.		
2 -		2.00 - 2.45	UT 8	54 blows 10% rec				2.00 Dry											
-		2.50 2.75 - 3.20 2.75 - 3.30	D 9 D 10 B 11	-	2.75 - 3.20	SPT S	N=11 (3,3/2,3,3,3) ID TH55 Er 70%	2.75 Dry					(4.8	5)		9			
3 —		3.30 - 3.75 3.30 - 3.80	UT 12 B 14	47 blows 100% rec	3.00	PP	125 kPa	3.30 Dry								9 9			
4 —		3.80	D 13	=															
		4.80 - 5.25 4.80 - 5.25	D 15 B 16	-	4.50 4.80 - 5.25	PP SPT S	150 kPa N=13 (2,3/3,3,3,4) ID TH55 Er 70%	4.80 Dry								6			
5 08 Feb 24 - 5.00	1445 Dry												5.25	+6.37	The state of		END OF EXPLORATORY HOLE		5.25
6 -																			
7 —																			
, <u> </u>																			
8 —																			
9 —																			
10 —																			
															<u> </u>				
General Remarks																Boring / Chisellin Depths	lling Groundwater Entries Duration (mins) Tool No. Depth Remarks		Sealed
Notes For explanation of sidepths and reduced	ymbols ar levels in	nd abbreviation metres. Stratu	ns see Key to E m thickness giv	Exploratory Hole Records ven in brackets in depth	column.	oject oject No. rried out fo	A3039-23		IFINDER PRO	JECT PHA	ASE 2 FEED PROJEC	т			Status		Scale 1:50 Printed 24 Jun 2024 12:26:39 © Copyright SOCOTEC UK Limited		3-109 st 1 of 1

Checked		pth 20 29	Dates Jan 24 - 29 Jan 2	4	Meth Hand excavated		nit	Equipment Hand tools	Rig (Crew	Logger TP	Logged 29 Jan 24		ole Dia. (mm)	Cas Depth	ng Dia. (mm)	Depth	Remarks	Depth Related Re	marks		Ground Lev	el	12.30 mOD
M Stanley			Jan 24 - 29 Jan 2		Cable percus	sion boring	pit	Dando 175		AB		29 Jan 24	5.00	200	5.00	200	Depth	Remarks				Coordinates		E 526229.63
Approved	1																					National Gr	id	N 436964.95 System OSGB
																								·
Date	Time		Sample			Field 1	Tests	Samp / Test	Coring Depth	TCR % SCR % RQD	% Wa	ter added		Depth	Level	Legend		·	Strata De	scription		Chisel.	Water Entry	Backfill
0 Casing	Water	Depth	Type & No.	Records	Depth	Туре	Records	Casing Water) %		ush details		(Thickness			Dark brown	gravelly slightly clay	Main yey fine to coarse SAND.	Gravel is angular to	Detail	ភ	Linuy	
- - -		0.30 0.30 - 0.50	D 1 B 2	-										0.30	+12.00	XXXXXXXXX	MADE GRO	fine to medium of lin OUND)		velly silty CLAY	_			
		0.50 0.50 - 0.70	D 3	-										0.50	+11.80	× × 0	fragments.		n slightly sandy slightly gra fine to medium of chalk, o	coal and brick	/			
1 -		1.00	D 5 B 6	-										(0.7	0)	× × 0-	(MADE GRO	dark orangish brown	n slightly sandy slightly gra soft grev silt. Gravel is and	avelly silty CLAY]			
-		1.00 - 1.20 1.20 1.20 - 1.70	D 7	-	1.20 - 1.65 1.20	SPT S PP	N=11 (2,2/2,3,3,3) ID TH55 Er 70% 125 kPa	1.20 Dry						1.20	+11.10	× × ×	⟨GLACIAL T	TILL)	soft grey silt. Gravel is and dred brick.		_			
-							125 KPa									×°×°-	angular to su	angish brown silghtiy subangular fine to me TILL)	y sandy slightly gravelly si edium of sandstone, chalk	and coal.				
2 —		2.00 - 2.45		35 blows 100% rec				2.00 Dry						(1.8	0)	8 × × ·	X 4							
-		2.00 2.00 - 2.50		-										(1.0	~,	×× 0-	<u> </u>							
		2.50 2.75	D 11 D 13	-	2.75 - 3.20	SPT S	N=11 (2,3/3,3,2,3)	2.75 Dry								× × 0-	<u> </u>							
3 —		2.75 - 3.20		_	3.00	PP	ID TH55 Er 70% 106 kPa	2.75 Diy						3.00	+9.30	×× 0-	Firm to stiff I	light brown slightly s	sandy slightly gravelly silty	CLAY, Gravel is				
		3.30 - 3.75	5 UT 15	45 blows 100% rec				3.30 Dry								× · · · · · · · · · · · · · · · · · · ·	angular to si (GLACIAL T	subangular fine to me	edium of sandstone, chalk	and coal.				
-																× × 0	K C							
4 —		3.80	D 16	_										(2.0	0)	8 <u> </u>	9							
																<u>x</u>								
																× × 0	X C							
- 29 Jan 24 5 - 5.00	1700 Dry	4.80 4.80 - 5.00	D 17 B 18	-	4.80 - 5.25 5.00	SPT S PP	N=12 (2,2/2,3,3,4) ID TH55 Er 70% 119 kPa	4.80 Dry						5.00	+7.30	× ^ 0-	<u> </u>	END C	OF EXPLORATORY HOLE					5.00
							110 14 4																	
_																								
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General Remarks	i																oring / Chisellin Depths	ng Duration (mins)	Tool	Groundwater En No. Depth				Sealed
Notes					ı					_	_	_				Status	,		<u> </u>		Borehole			
For explanation of	symbols a	and abbreviat n metres. Stra	tions see Key to E atum thickness ai	Exploratory Hole Records ven in brackets in depth	S. All	oject oject No.	ALDBROUGH A3039-23	HYDROGEN PATH	IFINDER PRO	DJECT PH	HASE 2 FEED	PROJECT					, DRA	AFT	Scale 1:50 Printed 24 Jun 20	024 12:26:40		В	VB-110)
						rried out fo		Limited											© Copyright SOCC		■T AGS		Sheet 1 of 1	
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SOCOTEC

Column C	Checked	Dept		Dates		Meth			Equipment	Rig Cı		Logger Logged	H	ole	Cas	ing		Depth Related Remarks			SOCOTEC
10 10 10 10 10 10 10 10	M Stanlay								Hand Tools Dando 175			TP 15 Feb 24 TP 15 Feb 24	Depth 5.00		Depth 5.00	Dia. (mm) 200	n) Depth F	Remarks			11.78 mOD
State The Th	ivi Stariley												0.00	200	0.00						
Carlo Table Tabl	Approved																		National	Jilu .	
Carlo Table Tabl																					,
Carlo Table Tabl		<u></u>		0			=:		0	0.1	TCR %	144				<u> </u>	1	Olivia Branchi III			
10 10 10 10 10 10 10 10				•						Depth	RQD	1		1		Legend	d	·		n l	Backfill
1	0 Casing				Records	Depth	Type	Records	Casing Water	(Diameter)		Flush details				3 *************************************	Light grev angu	ular to subangular medium to coarse GRAVEL of limestone.	iil	ا ق	
All 1 1 1 1 1 1 1 1 1	3													0.10	•		⟨MADE GROUN	ND) /			
1.00 1.00				D 3	_									0.45	+11.33	· 💥	GRAVEL of lime	nestone, red brick, chalk and coal. Sand is fine to medium. 0.45-0.46 black g	as membrane		
100	1		0.50 - 1.20	0 B 4	-												Soft dark brown	n slightly sandy gravelly CLAY with frequent closely spaced			
100 1 20 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 =		1 00	D.5										(0.7	(5)		red brick, limest	stone and chert. Sand is medium to coarse.			
1/2 1/2	. =		1.20 - 1.6	5 D6	_	1.20 - 1.65	SPT S	N=10 (2,2/2,2,3,3)	1.20 Dry					1.20	+10.58	3	· ·	,			
### Clauses Part Pa	1		1.20 - 1.70	0 B7	-			ID TH55 Er 70%									spaced pockets	s of grey silt. Gravel is angular to subrounded fine to medium			
2	3																				
1,100 1,10	=																(GLACIAL TILL)	-)			
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 —				54 blows 100% rec	2.00	PP	113 kPa	2.00 Dry					(1.8	30)						
27-2-30 010 12 27-30 070 170 010 12 12 12 12 12 12 12 12 12 12 12 12 12	3																				
1	=		2.50	D 9	-																
3 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	3		2.75 - 3.20 2.75 - 3.20	0 D 12 0 B 11	_	2.75 - 3.20	SPT S		2.75 Dry								•				
### 1	3 —													3.00	+8.78			nt brown slightly sandy gravelly CLAY with occasional medium			
## 1	1				68 blows 100% rec				3.30 Dry								of limestone, ch	halk and coal. Sand is fine to medium.			
### ALES OLD AND AND AND AND AND AND AND AND AND AN	=		3.30 - 3.80	0 B 14	-												(GLACIAL TILL)	L)			
1 15 56 24 170	‡																				
### #### #############################	4 🚽					4.00	PP	169 kPa						(2.0	00)						
City See 170	=																				
1	4																				
5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	15 Feb 24	1700	4.80 - 5.2	5 D 15	_	4.80 - 5.25	SPT S	N=17 (3.3/4.4.4.5)	4.80 Dry												
The state of the s	5 - 5.00	Dry	4.80 - 5.30	0 B 16	_		PP	ID TH55 Er 70%						5.00	+6.78		* <u>*</u>	END OF EXPLORATORY HOLE			5.00
area of Remarks Total Remarks Total Remarks Depth Duration (network) Total Remarks Remarks Total Remarks Remarks Total Remarks Remarks Remarks Remarks Remarks Depth Duration (network) Total Remarks Remark	3																				
area of Remarks Total Remarks Total Remarks Depth Duration (network) Total Remarks Remarks Total Remarks Remarks Total Remarks Remarks Remarks Remarks Remarks Depth Duration (network) Total Remarks Remark																					
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oneral Remarks ermination Reason: Scheduled BH depth achieved Hard Boring / Chiselling Depths Duration (mins) Tool No. Depth Remarks Depths Duration (mins) Tool No. Depth Remarks	8 —																				
oneral Remarks ermination Reason: Scheduled BH depth achieved Hard Boring / Chiselling Depths Duration (mins) Tool No. Depth Remarks Depths Duration (mins) Tool No. Depth Remarks	-																				
oneral Remarks ermination Reason: Scheduled BH depth achieved Hard Boring / Chiselling Depths Duration (mins) Tool No. Depth Remarks Depths Duration (mins) Tool No. Depth Remarks	=																				
oneral Remarks ermination Reason: Scheduled BH depth achieved Hard Boring / Chiselling Depths Duration (mins) Tool No. Depth Remarks Depths Duration (mins) Tool No. Depth Remarks]																				
emeral Remarks ermination Reason: Scheduled BH depth achieved Hard Boring / Chiselling Depths Duration (mins) Tool Groundwater Entries No. Depth Remarks	9 —																				
emeral Remarks ermination Reason: Scheduled BH depth achieved Hard Boring / Chiselling Depths Duration (mins) Tool Groundwater Entries No. Depth Remarks]																				
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Depths Duration (mins) Tool No. Depth Remarks Sealed Otes or explanation of symbols and abbreviations see Key to Exploratory Hole Records. All explts and reduced levels in metres. Stratum thickness given in brackets in depth column. Project ALDBROUGH HYDROGEN PATHFINDER PROJECT PHASE 2 FEED PROJECT Project No. A3039-23 DRAFT DRAFT DRAFT Drained 24 Jun 2024 12:26:40 BVB-111	10 -																1				
Depths Duration (mins) Tool No. Depth Remarks Sealed Otes or explanation of symbols and abbreviations see Key to Exploratory Hole Records. All explts and reduced levels in metres. Stratum thickness given in brackets in depth column. Project ALDBROUGH HYDROGEN PATHFINDER PROJECT PHASE 2 FEED PROJECT Project No. A3039-23 DRAFT DRAFT DRAFT Drained 24 Jun 2024 12:26:40 BVB-111	0															Hard F	Boring / Chiselling	Groundwater Entries			
otes or explanation of symbols and abbreviations see Key to Exploratory Hole Records. All Project No. A3039-23 or explanation of symbols and reduced levels in metres. Stratum thickness given in brackets in depth column. Project ALDBROUGH HYDROGEN PATHFINDER PROJECT PHASE 2 FEED PROJECT Project No. A3039-23 BORE-111 BYB-111		n: Schedu	uled BH der	oth achieved																	Sealed
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Carried out for SSE Hornsea Limited		ymbols ar	nd abbrevia	itions see Key to E	Exploratory Hole Records	s. All			HYDROGEN PATH	FINDER PRO	JECT PH/	ASE 2 FEED PROJECT				-	רסאבז	Scale 1:50		2VR_11•	, l
© Copyright SOCOTEC UK Limited Sheet 1 of 1	depuis and reduced	ieveis in	menes. Str	atum unckness glv	ven in brackets in depth				Limited							-	יוארו	ACS			'
																		© Copyright SOCOTEC UK Limited		Sheet 1 of 1	



Observed	Dept	th	Dates	1	Meth	od		Equipment	Rig C	row I	Logger Logged	н	ole	Cas	ina	1		Depth Related Re	marke		T		SOCOTEC
Checked	0.00 - 1	1.20 02 Fe	b 24 - 02 Feb 2	24	Hand excavated	inspection	pit	Hand tools	KP/	AB	TP 05 Feb 24	Depth	Dia. (mm)	Depth		Depth	Remarks	Deptil Related Rel	marks		Ground Lev	/el	11.48 mOD
M Stanley	1.20 - 2	2.45 05 Fe	b 24 - 05 Feb 2	24	Dynamic (window	/less) samp	ling	Competitor Da	art BW/	CS	TP 05 Feb 24	2.00	86			1					Coordinates	s	E 526165.14
Annuavad																					National Gr	id	N 436901.25
Approved																							System OSGB
	T							0	0- 1	TCR %	144.				Т						<u> </u>		
Date	Time		Sample	es		Field T	ests	Samp / Test	Coring Depth	TCR % SCR % RQD	Water added		Depth	Level	Legend			Strata De	scription		ise.	Water Entry	Backfill
Casing	Water	Depth	Type & No.	Records	Depth	Туре	Records	Casing Water	(Diameter)	KQD %	Flush details		(Thicknes					Main		Detail	Chis	Entry	
		0.10 - 0.30	B 1	-									0.10	0) +11.38		(MADE GR	OUND)	to coarse GRAVEL of limes					
1 1													0.40	0) +11.08		Firm reddisl	n brown slightly sar	ndy gravelly CLAY with low spaced fine pockets of grey to coarse of chalk, limesto	cobble content and	,			
													0.40			subangular	to subrounded fine	to coarse of chalk, limesto	ne and chert.				
																Cobbles (65	5-100mm) are subro	ounded of red brick.		/			
1 - 02 Feb 24	1400	1.00 - 2.00	B 4	_												Firm reddish	n brown slightly sar	ndy gravelly CLAY with clos angular to subrounded fine	ely spaced fine				
1	Dry	1.20 - 1.65	D 2	_	1.20 - 1.65	SPTS	N=17 (2,2/4,3,4,6)	- Dry									reen silt. Gravel is tone and coal.	angular to subrounded fine	to medium of				
- 05 Feb 24	0745 Dry	1.20 - 2.00	DYS	100% rec, dia 77mm	1		ID RP03 Er 68%						(2.0	5)		(GLACIAL T	TLL)						
7	,	1.50	D 3	-	1.50	PP							,	-,									
2 —		2.00 - 2.45	D 5	-	2.00 - 2.45	SPT S	N=17 (2,3/4,4,4,5)	- Dry															
05 Feb 24							ID RP03 Er 68%									•							
	Dry												2.45	+9.03	1 K 1 K 1 T 2 1 1 1			OF EVOLODATORY LIGHT					2.45
7														2.20			END	OF EXPLORATORY HOLE					<u> </u>
]																							
3 —																							
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1 1																							
10 —																							
General Remarks			1	1	1	1		I			1 1		1			Boring / Chisellin			Groundwater Ent			1	
Termination Reason	n: Schedu	uled BH depth	achieved													Depths	Duration (mins)	Tool	No. Depth	Remarks			Sealed
																							l
Notes					Т										Ctat			1		Dorobola			
	vmhole ar	nd abbreviation	ns see Kev to I	Exploratory Hole Records	s All Pro	oject	ALDBROUGH	HYDROGEN PATH	IFINDER PRO	JECT PHA	ASE 2 FEED PROJECT				Status			Scale 1:50		Borehole			
depths and reduced	levels in	metres. Strat	ım thickness gi	Exploratory Hole Records iven in brackets in depth	column. Pro	ject No.	A3039-23									DRA	\FT	Printed 24 Jun 20	24 12:26:40		B'	VB-112	2
						rried out fo	r SSE Hornsea L	imited										© Copyright SOCO	TEC UK I imited	AGS		Sheet 1 of 1	
																		5 Sopyrigin GOOG	. 10 O.Y Ellillou				



			Datas	T	Moth	a.d		Eguinmant	Dia	Craw	Lamman	Lammad		ala I	Coo	·		Doubh Bolated Bomorko				s	SOCOTEC
Checked	0.00 - 1	1.20 02 Fe	Dates b 24 - 02 Feb 2	4	Meth Hand excavated	inspection	pit	Equipment Hand tools	K	P/AB	Logger TP	06 Feb 24	Depth	ole Dia. (mm)	Cas Depth		Depth	Depth Related Remarks Remarks		Ground Leve	el		1.63 mOD
M Stanley	1.20 - 2	2.45 05 Fe	b 24 - 05 Feb 2	4 □	Oynamic (window	rless) samp	ling	Competitor Da	art B'	W/CS	TP	06 Feb 24	2.00	86						Coordinates			26203.00
Approved																				National Gri	d		36929.00
																						System	OSGB
	_																						
Date	Time		Sample	es		Field T	ests	Samp / Test	Coring	TCR SCR RQ	R %	Water added		Depth	Level	Legend		Strata Description		Sel.	Water	Backf	fill
0 Casing	Water	Depth	Type & No.	Records	Depth	Туре	Records	Casing Water	Depth (Diamete	er) RQ)D	Flush details		(Thickness				Main	Detail	Ğ	Entry		
		0.20 - 0.30	B 1	_										0.10)) +11.53		(MADE GRO	gular to subangular medium to coarse GRAVEL of lime JND)	/				
-														0.40)) +11.23	× ×	Dark grey sar chalk and coa	ndy angular to subrounded fine to coarse GRAVEL of I al. Rare wood fragments (5-15mm)	imestone, 0.40 gas membrane				
]																× × ×	\ (MADE GRO	IND)	/1				
1 205104	4000	4.00	D.0													8 × ×	Gravel is ang	orown slightly sandy gravelly silty CLAY with low cobbular to subrounded fine to medium of chalk, limestone s (65-100) are subrounded of limestone.	, coal and				
1 — 02 Feb 24	Dry	1.00 1.20 - 1.65	B 2 D 3		1.20 - 1.65	SDT S	N=18 (2,2/4,4,4,6)	- Dry								× × ×	(GLACIAL TII	L)					
05 Feb 24	0745 Dry	1.20 - 2.00	DYS	100% rec, dia 77mm			ID RP03 Er 68%	Diy						(2.05	5)	×>							
7	J.y				1.50	PP								(2.00	-,	× × ×							
]		1.80	D 4	-												× × ×							
2 —		2.00 - 2.45	D 5	_	2.00 - 2.45	SPT S	N=16 (2,2/4,4,3,5) ID RP03 Er 68%	Dry								×							
05 Feb 24	1028 Dry						15 14 00 21 00%									× ~ ~ ~ ~							
-	Di y													2.45	+9.18	O O		END OF EXPLORATORY HOLE				2.45	
1																							
3 🚽																							
]																							
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1.0																							
General Remarks	<u>I</u> _		1														oring / Chiselling Depths D	uration (mins) Tool No.	ndwater Entries Depth Remarks		1	ı	Sealed
Termination Reaso	n: Schedu	uled BH depth	achieved														p L		Jopan Romano				Coaleu
lotes					Dro	niect	AI DRPOLICU	HYDROGEN PATH	IEINDED DI	ROJECT	PHASE 2 E	FED PRO IECT				Status	;	Scale 1:50	Borehole				
or explanation of s lepths and reduced	ymbols ar levels in	nd abbreviation metres. Strati	ns see Key to E um thickness gi	Exploratory Hole Records ven in brackets in depth	column. Pro	oject oject No. rried out fo	A3039-23		ITINDEK PI	NOJECI F	FINASE 2 FI	EED PKUJEUI					DRAI		41 AGS	В\	/B-113	3	
					Cal	10	. OOL HOHISEA L											© Copyright SOCOTEC UK	Limited	5	Sheet 1 of 1		

DRAFT



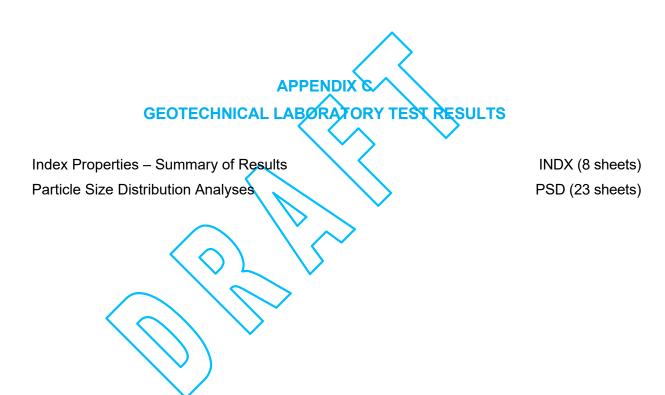
			Dates		Meth	1			Dia	O 1	1				Cas	·		Depth Related Remark				SOCOTEC
Checked	0.00 -	- 1.20 0	Feb 24 - 05 Feb 2	24	Hand excavated	inspection	pit	Equipment Hand tools	ŀ	(P	MH TP	30 Jan 24	Depth	ole Dia. (mm)	Depth		Depth	Remarks	S	Ground Leve	el	12.34 mOD
M Stanley	1.20 -	- 2.45	5 Feb 24 - 05 Feb 2	24 L	Dynamic (window	viess) samp	ling	Competitor Da	irt BW	V/CS	IP	05 Feb 24	2.00	86						Coordinates		E 526241.37
Approved	1																			National Grid	id	N 436941.25 System OSGB
																						System 03GB
					Τ					TCR %	%					1						
Date	Time		Sampl			Field T			Coring Depth	SCR %	%	Water added		Depth	Level	Legend		Strata Descrip		hisel.	Water Entry	Backfill
0 Casing	Water			Records	Depth	Туре	Records	Casing Water	(Diameter	r) %		Flush details		(Thickness (0.1	0) +12.24		Light grey sub	Main bangular medium to coarse GRAVEL of limestone	Detail e.	ō		
- -		0.20		-										0.10	0)		\(\)\ (MADE GROI	UND)	/			
		0.40 - 0.	60 B 2	-										0.40	+11.94		Gravel is suba	brown slightly sandy gravelly CLAY with low cobb angular to subrounded fine to coarse of chalk, lim is (100mm) are subrounded of red brick.	estone and 0.60-1.00 becoming s	+iff		
_		0.80	D 3	_													I\(RFWORKFF) FILL)	//			
1 🚽																	subrounded fi (GLACIAL TIL	brown slightly sandy gravelly CLAY. Gravel is sub ine to coarse of chalk, limestone and chert.				
=		1.20 - 1. 1.20 - 2.	65 D 4 00 B 5	-	1.20 - 1.65	SPT S	N=8 (1,2/1,2,2,3) ID RP03 Er 68%	- Dry									(02.00.2					
4		1.20 - 2	00 DYS	100% rec, dia 77mm	1.50	PP	.5							(2.0	5)		•					
																	•					
2 —		2.00 - 2.	45 D 6	-	2.00 - 2.45	SPT S	N=19 (3,3/3,4,6,6)	Dry									•					
05 Feb 24	1000						ID RP03 Er 68%										•					
1	Dry													2.45	+9.89		<u>:</u>	END OF EXPLORATORY HOLE				2.45
3 —																						
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10 —																						
General Barrai																Hard R	Soring / Chiselling		Groundwater Entries			
General Remarks Termination Reason		duled BH d	epth achieved															uration (mins) Tool	No. Depth Remarks			Sealed
Notes					<u> </u>											Status	<u> </u>	<u>_</u>	Borehole			
For explanation of	symbols	and abbrev	iations see Key to	Exploratory Hole Record	S. All	oject		HYDROGEN PATH	FINDER PR	OJECT PH	HASE 2 FE	ED PROJECT				Julius		Scale 1:50		ים	/D 44	4
depths and reduced	d levels i	n metres. S	tratum thickness g	iven in brackets in depth	column.	oject No. rried out fo	A3039-23 r SSE Hornsea L	_imited									DRAF		AGS	R/	VB-11	4
					Jul		552.101110001											© Copyright SOCOTEC	UK Limited		Sheet 1 of 1	

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Checked	Dept		Dates		Meth			Equipment			Logger	Logged	Н		Cas				Depth Related Rem	arks		Ι		SOCOTEC
M Stanley	0.00 - 1 1.20 - 2	1.20 05 Fel 2.45 05 Fel	o 24 - 05 Feb 2 o 24 - 05 Feb 2	24 24 E	Hand excavated Dynamic (window	inspection (less) samp	pit ling	Hand tools Competitor Da		cs	MH TP	30 Jan 24 05 Feb 24	Depth 2.00	Dia. (mm) 86	Depth	Dia. (mm)	Depth	Remarks				Ground Lev Coordinate		12.78 mOD E 526202.37
																						National Gr		N 437055.63
Approved																								System OSGB
Date	Time	'	Sample	es		Field T	ests	Samp / Test	Coring	TCR % SCR %	, Wa	ater added		Depth	Level	Legend		'	Strata Des	cription			Water	Backfill
Casing	Water	Depth	Type & No.	Records	Depth	Туре	Records	Casing Water	Depth (Diameter)	RQD		ush details		(Thickness		Legenu			Main		Detail	Chisel	Entry	Backiiii
0 -		0.20	D 1					-		T				0.15	5) +12.63		Light grey su	ואון)	to coarse GRAVEL of limest	one.				
-		0.20 - 0.40	B 2											0.15			Yellowish bro	own sandy silty sub	bangular to subrounded fine rick and chert with medium of	to coarse	7			
=		0.50 0.60 - 1.00	D 3 B 4											0.45	+12.33		Sand is med	ium to coarse. Cob	obles (100mm) are subround	led of red brick	1			
]																	and limestor				0.80-1.00 becoming s	tiff		
1 =								_									subrounded	fine to coarse of lin	ndy gravelly CLAY. Gravel is mestone, chert and chalk.	subangular to				
]		1.20 - 2.00	DYS	100% rec, dia 77mm	1.20 - 1.65	SPT S	N=17 (2,2/4,4,4,5) ID RP03 Er 68%	Dry									(GLACIAL T	ILL)						
-		1.50	D 6	-	1.50	PP								(2.0	0)									
-																	-							
2 —		2.00 - 2.45	D 5	-	2.00 - 2.45	SPT S	N=19 (2,3/3,5,5,6) ID RP03 Er 68%	Dry																
05 Feb 24	1020 Dry						15 TG 05 El 00%																	
1	Diy													2.45	+10.33			END (OF EXPLORATORY HOLE					2.45
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General Remarks				l				<u> </u>	l		1						oring / Chisellin			Groundwater En				
Termination Reasor	n: Schedu	ıled BH depth	achieved															Duration (mins)	Tool	No. Depth				Sealed
																				1				
Notes					Pro	oject	ALDBROUGH	HYDROGEN PATH	IFINDER PRO	JECT PH	HASE 2 FEED	PROJECT				Status			Scale 1:50		Borehole			
For explanation of sy depths and reduced	/mbols an levels in i	nd abbreviatio metres. Stratu	ns see Key to E Im thickness gi	Exploratory Hole Records ven in brackets in depth	s. All column. Pro	ject No.	A3039-23										DRA	.FT	Printed 24 Jun 202	4 12:26:41		B'	VB-11	5
						rried out fo	or SSE Hornsea L	imited											© Copyright SOCOT	EC UK Limited	AGS		Sheet 1 of 1	
																			_ 55FJgiil 55501		-			





		Sample		ı		р	p_{d}	W	< 425	W	W _P	l _P	I _P #	l _P #	<i>p</i> ₅	
Hole No.	No.	Dept	h (m)	type	Soil Description				µm sieve				Penetration mm	Correlation		Remarks
		from	to	,		Mg	/m3	%		%	%	%	Penel	Corre	Mg/m3	
BVB-101	2	0.30	0.40	В	Brown sandy gravelly CLAY.			12.5								
BVB-101	4	0.50	0.70	В	Orangish brown slightly sandy gravelly CLAY.			19.4								
BVB-101	6	1.00	1.20	В	Brown slightly sandy slightly gravelly CLAY.			20.3	92 h	42 a ▲	20	22				
BVB-101	10	2.00	2.40	В	Brown slightly gravelly sandy CLAY.			15.8								
BVB-101	17	4.80		D	Brown slightly gravelly CLAY.			15.3								
BVB-101	24	7.80	8.00	В	Brown slightly gravelly CLAY.			16.2								
BVB-101	28	9.30	9.60	В	Brown slightly gravelly CLAY.			16								
BVB-101	30	10.80		D	Brown slightly gravelly CLAY.			17.1								
BVB-101	38	14.40	15.00	В	Brown slightly gravelly CLAY.			24								
BVB-102	2	0.30	0.40	В	Brown sandy gravelly CLAY.			12.8								
BVB-102	4	0.50	0.70	В	Dark brown slightly sandy slightly gravelly silty CLAY.			14.7	80 h	35 a ▲	18	17				
BVB-102	6	1.00	1.20	В	Brown slightly gravelly sandy CLAY.			15.5								
BVB-102	8	1.20	1.80	В	Reddish brown slightly sandy slightly gravelly CLAY.			16.7								

Project No

Key: p bulk density, linear

a 4 point cone test WP Plastic limit

<425um preparation

ps particle density

dry density pd

b 1 point cone test

WL Liquid limit n from natural soil

d Deviation to standard, minimum mass requirement not achieved

-g = gas jar BS1377 2022 Part 9.2

Water content decreased

IP Plasticity Index

NP non - plastic s sieved specimen

-p = small pyknometer

IP # Plasticity Index 1 point test

h removed by hand

Water content increased

o oven dried prior to testing

* test carried out to BS1377 1990

Figure

QA Ref SLR 1 Rev 2.98 Mar 17





ALDBROUGH HYDROGEN Project Name **PATHFINDER**

A3039-23

INDX

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		Sample				р	$p_{\!\scriptscriptstyle ext{d}}$	W	< 425	W	W _P	Ι _Ρ	I _P #	l _P #	p ₅	
Hole No.	No.	Dept		type	Soil Description				µm sieve				Penetration mm	Correlation		Remarks
		from	to	, ·		Mg	/m3	%		%	%	%	Penel	Corre	Mg/m3	
BVB-102	12	2.00	2.50	В	Reddish brown slightly gravelly CLAY.			19.2								
BVB-102	14	2.70	3.00	В	Reddish brown slightly gravelly CLAY.			17.1								
BVB-102	20	5.00	5.20	В	Brown CLAY.			21.7								
BVB-102	24	6.50	6.60	В	Brown slightly gravelly CLAY.			19.6								
BVB-102	27	8.00	8.20	В	Brown slightly gravelly CLAY.			17.7								
BVB-102	34	11.00	11.20	В	Brown slightly gravelly CLAY.			16.4								
BVB-102	40	14.00	15.00	В	Brown sandy gravelly CLAY.			8.9								
BVB-103	2	0.30	0.50	В	Reddish brown sandy gravelly CLAY.			17.7								
BVB-103	4	0.50	0.70	В	Reddish brown sandy gravelly CLAY.			21.1								
BVB-103	6	1.00	1.20	В	Brown slightly gravelly sandy CLAY.			18.4								
BVB-103	8	1.20	1.60	В	Orangish brown slightly gravelly sandy CLAY.			15.6								
BVB-103	14	3.30	3.60	В	Brown slightly gravelly CLAY.			16.1								
BVB-103	20	6.30	6.80	В	Brown slightly gravelly CLAY.			22.1								

Key: p bulk density, linear

a 4 point cone test WP Plastic limit

<425um preparation

ps particle density

dry density pd

b 1 point cone test

WL Liquid limit n from natural soil

d Deviation to standard, minimum mass requirement not achieved

-g = gas jar BS1377 2022 Part 9.2

IP Plasticity Index

NP non - plastic s sieved specimen -p = small pyknometer

Water content decreased

IP # Plasticity Index 1 point test

* test carried out to BS1377 1990

h removed by hand

Water content increased

o oven dried prior to testing

Figure

QA Ref SLR 1 Rev 2.98 Mar 17





Project No ALDBROUGH HYDROGEN Project Name

A3039-23

PATHFINDER

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		Sample		ı		р	$p_{\!\scriptscriptstyle ext{d}}$	W	< 425	WĹ	W _P	Ι _Ρ	l _P #	l _P #	p ₅	
Hole No.	No.	Dept	h (m)	type	Soil Description				µm sieve				Penetration mm	lation		Remarks
		from	to	-9		Mg	/m3	%		%	%	%	Penet mm	Correlation	Mg/m3	
BVB-103	23	7.80	8.30	В	Dark brown slightly sandy slightly gravelly silty CLAY.			18.1	89 h	41 a ▲	19	22				
BVB-103	26	9.30	9.80	В	Brown slightly gravelly CLAY.			21.7								
BVB-103	33	12.30	12.80	В	Brown slightly gravelly CLAY.			20.9								
BVB-103	37	13.80	14.30	В	Brown slightly sandy slightly gravelly CLAY.			12.4								
BVB-103	38	14.50	15.00	В	Brown slightly gravelly CLAY.			12.8								
BVB-104	1	0.30	0.50	В	Brownish grey sandy clayey GRAVEL with medium cobble content.			7.3								
BVB-104	3	0.60	1.00	В	Brownish grey sandy gravelly CLAY.			14.7								
BVB-104	5	1.00	1.20	В	Brown slightly gravelly CLAY.			23.2								
BVB-104	10	2.00	2.50	В	Brown slightly gravelly CLAY.			14.3								
BVB-104	27	10.80	11.30	В	Reddish brown slightly gravelly CLAY.			20.5								
BVB-104	30	12.30	12.80	В	Brown slightly gravelly CLAY.			16.4								
BVB-104	31	13.80	14.30	В	Brown slightly gravelly CLAY.			13.4								
BVB-105	2	0.30	0.50	В	Brownish grey sandy gravelly CLAY.			6.6								

Key: p bulk density, linear

a 4 point cone test WP Plastic limit <425um preparation ps particle density

dry density pd

b 1 point cone test

WL Liquid limit n from natural soil

d Deviation to standard, minimum mass requirement not achieved

-g = gas jar BS1377 2022 Part 9.2

IP Plasticity Index

NP non - plastic s sieved specimen

-p = small pyknometer

Water content decreased

IP # Plasticity Index 1 point test

h removed by hand

Water content increased

o oven dried prior to testing

* test carried out to BS1377 1990

A3039-23

Figure

QA Ref SLR 1 Rev 2.98 Mar 17





Project No Project Name **PATHFINDER**

ALDBROUGH HYDROGEN

INDX

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		Sample	е			р	p_{d}	W	< 425	WL	W_{P}	Ι _Ρ	l _P #	l _P #	p₅	
Hole No.		Dept	h (m)		Soil Description				μm sieve				ıtion	tion		Remarks
	No.	from	to	type		Ма	/m3	%		%	%	%	Penetration mm	Correlation	Mg/m3	
BVB-105	4	0.50	0.70	В	Brown very sandy silty GRAVEL.	9		9.7			, ,		ш с	Ü	mg.mz	
BVB-105	6	1.00	1.20	В	Brown slightly gravelly CLAY.			25.2								
BVB-105	8	1.20	1.70	В	Reddish brown slightly gravelly CLAY.			21.5								
BVB-105	11	2.00	2.70	В	Reddish brown and dark grey slightly gravelly silty CLAY.			17.3								
BVB-105	13	2.75	3.30	В	Brown slightly sandy slightly gravelly silty CLAY.			17.1	85 n	32 a ▲	16	16				
BVB-105	16	3.30	3.80	В	Reddish brown slightly gravelly CLAY.			17.5								
BVB-105	22	7.80	8.25	D	Greyish brown slightly gravelly CLAY.			15.5								
BVB-105	26	10.80	11.25	D	Brown slightly gravelly CLAY.			23.9								
BVB-105	31	13.80	14.25	D	Brown CLAY.			24.6								
BVB-105	33	14.30	15.00	В	Brown slightly gravelly CLAY.			18.3								
BVB-106	2	0.30	0.50	В	Brownish grey sandy gravelly CLAY with medium cobble content.			6.5								
BVB-106	4	0.50	1.20	В	Greyish brown sandy gravelly CLAY.			10.7								
BVB-106	11	2.75	3.20	В	Reddish brown slightly gravelly CLAY.			18.7								
General notes:	All above tests	carried or	ut to BS E	N ISO	17892 unless annotated otherwise. Cor	ne type u	sed 80g	/ 30 degre	es. See	Remarks	for furt	her det	ails			

Key: p bulk density, linear

a 4 point cone test

<425um preparation

ps particle density

dry density pd

b 1 point cone test

WL Liquid limit n from natural soil -g = gas jar BS1377 2022 Part 9.2

IP Plasticity Index

s sieved specimen

d Deviation to standard, minimum mass requirement not achieved

-p = small pyknometer

Water content decreased

IP # Plasticity Index 1 point test

NP non - plastic

h removed by hand

Water content increased

o oven dried prior to testing

* test carried out to BS1377 1990

QA Ref SLR 1 Rev 2.98 Mar 17





Project No A3039-23 ALDBROUGH HYDROGEN Project Name **PATHFINDER**

WP Plastic limit

Figure INDX

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		Sampl	е			р	$p_{\!\scriptscriptstyle ext{d}}$	W	< 425	WĹ	W _P	Ι _Ρ	l _P #	l _P #	p ₅	
Hole No.		Dept	h (m)		Soil Description				μm sieve				tion	ion		Remarks
	No.	from	to	type		Mg	/m3	%		%	%	%	Penetration mm	Correlation	Mg/m3	
BVB-106	16	4.80	5.30	В	Dark brown slightly gravelly silty CLAY.	mg		16.8	80 h	32 a ▲	16	16	ш с	J	mgc	
BVB-106	19	6.30	6.80	В	Brown slightly gravelly CLAY.			16.5								
BVB-106	26	10.80	11.30	В	Brown slightly gravelly CLAY.			17.7								
BVB-106	30	13.80	14.30	В	Dark brown gravelly CLAY.			22.6	60 s	32 a ▲	16	16				
BVB-107	1	0.30		D	Reddish brown slightly gravelly sandy CLAY.			19.6								
BVB-107	2	0.50		D	Reddish brown slightly gravelly sandy CLAY.			16.5								
BVB-107	6	1.20	1.70	В	Reddish brown slightly gravelly CLAY.			24.7								
BVB-107	9	2.00	2.50	В	Brown slightly gravelly CLAY.			15.8								
BVB-107	20	7.80	8.30	В	Greyish brown slightly gravelly CLAY.			15.8								
BVB-107	23	9.30	9.80	В	Dark brown slightly sandy slightly gravelly silty CLAY.			16.8	83 h	31 a ▲	15	16				
BVB-107	30	13.80	15.00	В	Brown slightly sandy CLAY.			33.3	99 h	47 a ▲	21	26				
BVB-108	2	0.30	0.50	В	Brown slightly gravelly CLAY.			20.1								
BVB-108	5	1.00	1.20	В	Brown slightly gravelly CLAY.			19.9								
General notes:	All above tests	carried o	ut to BS E	N ISO	17892 unless annotated otherwise. Cor	ne type u	sed 80g /	/ 30 degre	ees. See	Remarks	for furt	her deta	ails			

Project No

Key: p bulk density, linear

a 4 point cone test

WP Plastic limit <425um preparation

d Deviation to standard, minimum mass requirement not achieved

s sieved specimen

ps particle density

dry density pd

b 1 point cone test

WL Liquid limit n from natural soil -g = gas jar BS1377 2022 Part 9.2

IP Plasticity Index

NP non - plastic

-p = small pyknometer

Water content decreased

IP # Plasticity Index 1 point test

* test carried out to BS1377 1990

h removed by hand

Water content increased

o oven dried prior to testing

QA Ref SLR 1 Rev 2.98 Mar 17





ALDBROUGH HYDROGEN Project Name **PATHFINDER**

A3039-23

Figure INDX

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Hole No.	No.	Dant				р	$p_{\!\scriptscriptstyle d}$	W	< 425 µm	WL	W_P	l _P	l _P #	l _P #	p ₅	
			h (m)	type	Soil Description				sieve				Penetration mm	Correlation		Remarks
		from	to			Mg	/m3	%		%	%	%	Pen mm	Corl	Mg/m3	
BVB-108	12	2.75	3.20	В	Brown slightly gravelly CLAY.			20.8								
BVB-108	15	3.30	3.80	В	Brown slightly gravelly silty CLAY.			21.3								
BVB-108	17	4.80	5.30	В	Dark brown slightly sandy slightly gravelly silty CLAY.			22.2	84 h	34 a ▲	18	16				
BVB-108	19	6.30	6.80	В	Brown slightly gravelly silty CLAY.			17								
BVB-108	26	10.80	11.30	В	Brown slightly gravelly silty CLAY.			21.3								
BVB-108	30	13.80	14.25	D	Brown slightly gravelly CLAY.			18.2								
BVB-108	32	14.30	15.00	В	Brown slightly gravelly CLAY.			15.1								
BVB-109	2	0.40	0.50	В	Brown slightly gravelly CLAY.			18.5								
BVB-109	3	0.50		D	Brown slightly gravelly CLAY.			22.9								
BVB-109	4	0.70	1.20	В	Dark brown slightly gravelly silty CLAY.			17.6	78 h	36 a ▲	18	18				
BVB-109	6	1.20	1.65	D	Brown slightly gravelly CLAY.			30.3								
BVB-109	15	4.80	5.25	D	Brown slightly gravelly CLAY.			28.3								
BVB-110	2	0.30	0.50	В	Greyish brown slightly gravelly CLAY.			18.1								

Project No

Key: p bulk density, linear

a 4 point cone test WP Plastic limit <425um preparation
b 1 point cone test WL Liquid limit n from natural soil

ps particle density

dry density pd

d Deviation to standard, minimum mass requirement not achieved

-g = gas jar BS1377 2022 Part 9.2

IP Plasticity Index

NP non - plastic

s sieved specimen -p = small pyknometer

Water content decreased

IP # Plasticity Index 1 point test

* test carried out to BS1377 1990

h removed by hand

Water content increased

o oven dried prior to testing

Figure

QA Ref SLR 1 Rev 2.98 Mar 17





ALDBROUGH HYDROGEN Project Name **PATHFINDER**

A3039-23

INDX

The results reported relate only to the samples tested; opinions and interpretations expressed herein are outside the scope of UKAS accreditation. This data summary does not replace the full report for the summarised data. The full report can be issued

		Sample		ı		р	$p_{\!\scriptscriptstyle ext{d}}$	W	< 425	W	W _P	Ι _Ρ	l _P #	l _P #	p ₅	
Hole No.	No.	Dept	h (m)	type	Soil Description				µm sieve				Penetration mm	Correlation		Remarks
	_	from	to	31		Mg.	/m3	%		%	%	%	Penet	Corre	Mg/m3	
BVB-110	6	1.00	1.20	В	Dark brown slightly sandy slightly gravelly silty CLAY.			25.7	87 h	56 a ▲	21	35				
BVB-110	18	4.80	5.00	В	Brown slightly gravelly CLAY.			17.5								
BVB-111	2	0.10	0.45	В	Brown sandy gravelly CLAY.			14.1								
BVB-111	3	0.50		D	Brown slightly sandy slightly gravelly CLAY.			18.5								
BVB-111	4	0.50	1.20	В	Dark brown slightly sandy slightly gravelly silty CLAY.			18.2	66 n	31 a ▲	16	15				
BVB-111	7	1.20	1.70	В	Brown slightly gravelly CLAY.			18.3								
BVB-111	11	2.75	3.20	В	Brown slightly gravelly CLAY.			19.1								
BVB-112	1	0.10	0.30	В	Greyish brown slightly gravelly CLAY.			21.5								
BVB-112	4	1.00	2.00	В	Greyish brown slightly sandy slightly gravelly silty CLAY.			19.3	76 h	37 a ▲	18	19				
BVB-112	2	1.20	1.65	D	Brown slightly gravelly CLAY.			15.7								
BVB-112	5	2.00	2.45	D	Light brown slightly gravelly silty CLAY.			16.7	87 so	36 b	18	18	19.4 19.4	1		
BVB-113	1	0.20	0.30	В	Brown sandy gravelly CLAY.			17.1								
BVB-113	2	1.20	1.65	D	Light brown slightly sandy slightly gravelly silty CLAY.			16.6	95 so	37 a ▲	18	19				

Key: p bulk density, linear

a 4 point cone test WP Plastic limit <425um preparation ps particle density

dry density pd

b 1 point cone test

n from natural soil

d Deviation to standard, minimum mass requirement not achieved

-g = gas jar BS1377 2022 Part 9.2

IP Plasticity Index

NP non - plastic s sieved specimen

WL Liquid limit

-p = small pyknometer

Water content decreased

IP # Plasticity Index 1 point test

Water content increased

o oven dried prior to testing

* test carried out to BS1377 1990

h removed by hand

Figure

QA Ref

SLR 1 Rev 2.98 Mar 17





Project No A3039-23

Project Name

ALDBROUGH HYDROGEN **PATHFINDER**

INDX

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		Sample				р	p_{d}	W	< 425 μm	WL	W_{P}	Ι _Ρ	I _P #	l _P #	p s	
Hole No.	No.		h (m)	type	Soil Description				sieve				Penetration mm	Correlation		Remarks
		from	to			Mg	/m3	%		%	%	%	Pen	Corr	Mg/m3	
BVB-113	5	2.00	2.45	D	Orangish brown slightly gravelly silty CLAY.			14.4	89 so	37 a ▲	18	19				
BVB-114	2	0.40	0.60	В	Brown slightly gravelly silty CLAY.			23.2	96 h	51 a ▲	23	28				
BVB-114	4	1.20	1.65	D	Brown slightly gravelly silty CLAY.			16								
BVB-114	5	1.20	2.00	В	Dark brown slightly sandy gravelly silty CLAY with occasional brick fragments.			16.3	78 h	36 a ▲	18	18				
BVB-114	6	2.00	2.45	D	Brown slightly gravelly silty CLAY.			18.5								
BVB-115	2	0.20	0.40	В	Grey sandy silty GRAVEL.			6.1								
BVB-115	4	0.60	1.00		Brown slightly sandy slightly gravelly silty CLAY.			21	91 h	50 a ▲	22	28				
BVB-115	5	2.00	2.45	D	Grey mottled light brown slightly sandy slightly gravelly silty CLAY.			15.6	89 so	37 a ▲	19	18				

Key: p bulk density, linear

a 4 point cone test

WP Plastic limit <425um preparation

d Deviation to standard, minimum mass requirement not achieved

ps particle density

dry density pd

b 1 point cone test

n from natural soil

-g = gas jar BS1377 2022 Part 9.2

IP Plasticity Index

WL Liquid limit NP non - plastic

s sieved specimen

-p = small pyknometer

Water content decreased

IP # Plasticity Index 1 point test

h removed by hand

Water content increased

o oven dried prior to testing

* test carried out to BS1377 1990

QA Ref SLR 1 Rev 2.98 Mar 17





Project No ALDBROUGH HYDROGEN Project Name

A3039-23

PATHFINDER

Figure INDX

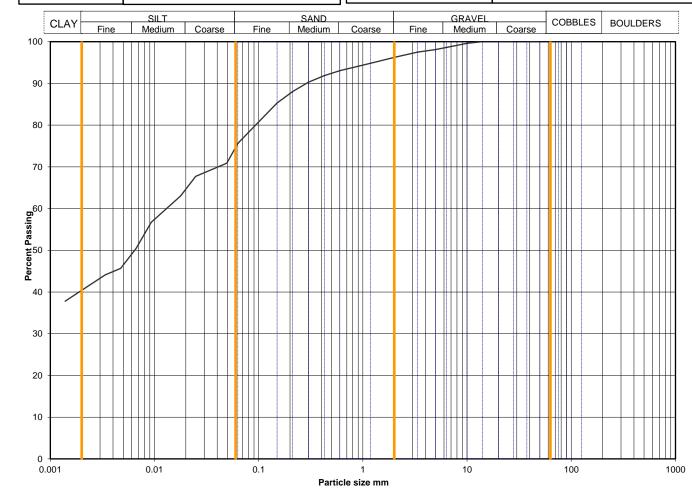
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 Sample Details:
 SAMPLE ID:
 Hole No
 BVB-101

 Sample Depth (m BGL)
 1.00 - 1.20

 Sample Type and No
 B6

 Specimen Ref
 Specimen Ref



Sievin	g	Sediment	ation	
Particle Size	%	Particle Size	%	
mm	Passing	mm	Passing	
125	100	0.0630	76	
90	100	0.0495	71	
75	100	0.0351	69	
63	100	0.0249	68	
50	100	0.0178	63	
37.5	100	0.0093	57	
28	100	0.0066	50	
20	100	0.0047	46	
14	100	0.0034	44	
10	100	0.0014	38	
6.3	99			
5	98			
3.35	98			
2	96			
1.18	95	Particle density	, Ma/m2	
0.6	93	Farticle derisity	y, ivig/iii3	
0.425	92	2.65 a	ssumed	
0.3	90	Drumass of sample lin		
0.212	88	Dry mass of sample, kg		
0.15	85	0.0		
0.063	76	0.8		

Soil description	Brown slightly sandy slightly gravelly CLAY.		
Preparation / Pretreatment	Sieve: pre dried, Hydro: as BS EN ISO 17892		
Remarks			

Sample		Whole	*<63mm
Proportions	Cobbles / boulders	0	0
*<63mm values to aid description only	Gravel	4	4
	Sand	21	21
	Silt	35	35
	Clay	40	40

Uniformity Coefficient		D60 / D10	Not	applicable
	BS EN ISO 17892-4			
Test Method	5	Sieving	5.2	wet sieve
	Sedi	mentation	5.3	hydrometer

QA Ref SLR 2,9 Rev 2.23 Jul 17





Project No

Project Name

A3039-23

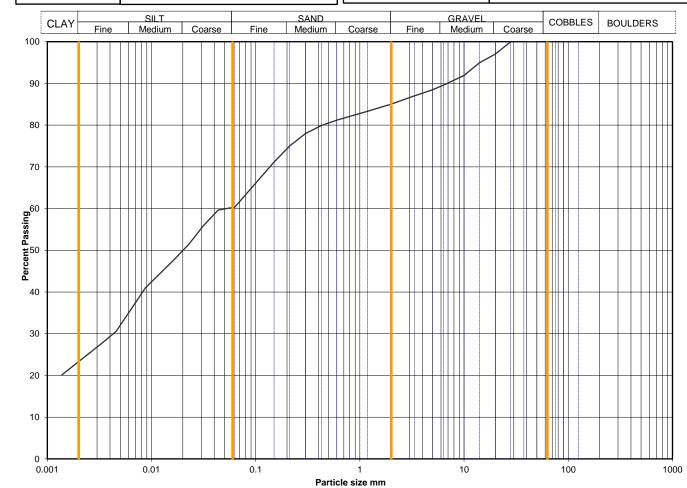
ALDBROUGH HYDROGEN

PATHFINDER

Figure

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Sievin	g	Sediment	ation	
Particle Size	%	Particle Size	%	
mm	Passing	mm	Passing	
125	100	0.0630	60	
90	100	0.0436	60	
75	100	0.0314	56	
63	100	0.0228	51	
50	100	0.0164	48	
37.5	100	0.0087	41	
28	100	0.0063	36	
20	97	0.0046	31	
14	95	0.0033	28	
10	92	0.0014	20	
6.3	90			
5	88			
3.35	87			
2	85			
1.18	83	Particle density	, Ma/m2	
0.6	81	Farticle derisity	y, ivig/iiis	
0.425	80	2.65 a	ssumed	
0.3	78	Drumage of completion		
0.212	75	Dry mass of sample, kg		
0.15	71	2.2		
0.063	60	3.3		

Soil description	Dark brown slightly sandy slightly gravelly silty CLAY.		
Preparation / Pretreatment	Sieve: pre dried, Hydro: as BS EN ISO 17892		
Remarks			

Sample		Whole	*<63mm
Proportions	Cobbles / boulders	0	0
	Gravel	15	15
*<63mm values to aid description only	Sand	25	25
	Silt	37	37
	Clay	23	23

Uniformity Coefficient		D60 / D10	Not	applicable
	BS EN ISO 17892-4			
Test Method	5	Sieving	5.2	wet sieve
	Sedi	mentation	5.3	hydrometer

QA Ref SLR 2,9 Rev 2.23 Jul 17





Project No

Project Name

A3039-23

ALDBROUGH HYDROGEN

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Figure

PSD

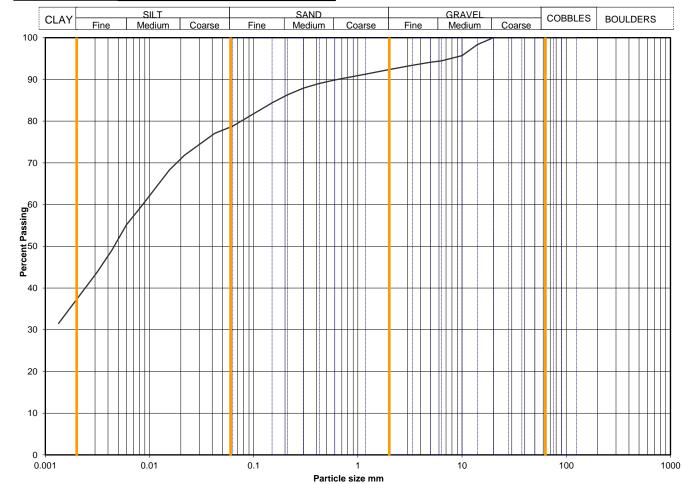
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 SAMPLE ID:
 Hole No
 BVB-103

 Sample Depth (m BGL)
 7.80 - 8.30

 Sample Type and No
 B23

 Specimen Ref
 Specimen Ref



Sievin	a	Sediment	ation	
Particle Size	9 %	Particle Size	%	
	, ,		, ,	
mm	Passing	mm	Passing	
125	100	0.0630	79	
90	100	0.0421	77	
75	100	0.0302	74	
63	100	0.0216	72	
50	100	0.0155	68	
37.5	100	0.0083	60	
28	100	0.0060	55	
20	100	0.0044	49	
14	98	0.0031	44	
10	96	0.0013	32	
6.3	94			
5	94			
3.35	93			
2	92			
1.18	91	Particle density	/ Ma/m3	
0.6	90	i article derisit	/, IVIG/1113	
0.425	89	2.65 assumed		
0.3	88	Dry moss of sample lies		
0.212	86	 Dry mass of sample, kg 		
0.15	84	0.9		
0.063	79	0.9		

S	oil description	Dark brown slightly sandy slightly gravelly silty CLAY.		
	Preparation / Pretreatment	Sieve: pre dried, Hydro: as BS EN ISO 17892		
	Remarks			

Sample		Whole	*<63mm
Proportions	Cobbles / boulders	0	0
*<63mm values to aid description only	Gravel	8	8
	Sand	14	14
	Silt	42	42
	Clay	37	37

Uniformity Coefficient		D60 / D10	Not	applicable
	BS EN ISO 17892-4			
Test Method	S	Sieving	5.2	wet sieve
	Sedi	mentation	5.3	hydrometer

QA Ref SLR 2,9 Rev 2.23 Jul 17





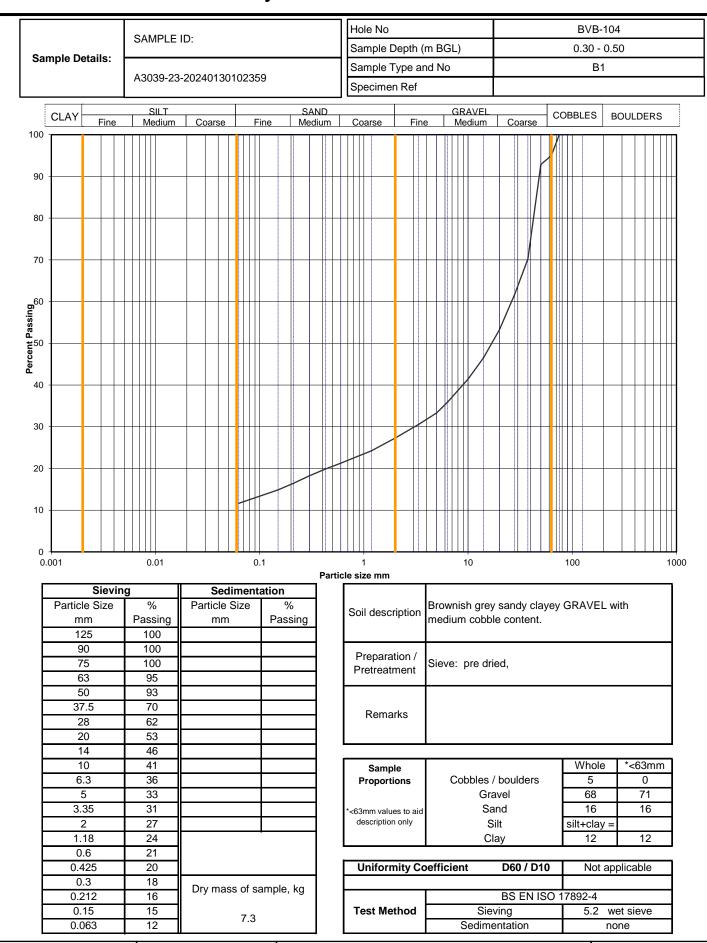
Project No Project Name A3039-23

ALDBROUGH HYDROGEN PATHFINDER

Figure

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Figure

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Particle Size Distribution Analysis Hole No BVB-105 SAMPLE ID: Sample Depth (m BGL) 0.50 - 0.70 Sample Details: Sample Type and No В4 A3039-23-20240205070340 Specimen Ref SILT SAND GRAVEL **COBBLES BOULDERS** CLAY Fine Medium Coarse Fine Medium Coarse Fine Medium Coarse 100 90 80 70 Percent Passing 40 30 20 10 0.01 0.1 10 0.001 100 1000 Particle size mm

<u> </u>	Sieving Sedimentation			
Sievin				
Particle Size	%	Particle Size	%	
mm	Passing	mm	Passing	
125	100	0.0630	27	
90	100	0.0504	26	
75	100	0.0359	24	
63	100	0.0255	24	
50	100	0.0183	21	
37.5	97	0.0096	18	
28	87	0.0068	16	
20	57	0.0050	11	
14	51	0.0041	10	
10	50	0.0016	7	
6.3	49			
5	45			
3.35	42			
2	38			
1.18	36	Particle densit	Ma/m3	
0.6	35	Farticle derisity	y, wg/ms	
0.425	33	2.65 assumed		
0.3	32	Dry mass of sample, kg		
0.212	30	Diyillass 01 Se	ampie, ky	
0.15	29	0.4		
0.063	27	9.4		

Soil description	Brown very sandy silty GRAVEL.
Preparation / Pretreatment	Sieve: natural material Hydro:
Remarks	

Sample		Whole	*<63mm
Proportions	Cobbles / boulders	0	0
	Gravel	62	62
*<63mm values to aid	Sand	11	11
description only	Silt	19	19
	Clay	8	8

Uniformity Coefficient		D60 / D10	4976
Test Method	;	Sieving	
	Sed	limentation	

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Project No

Project Name

A3039-23

ALDBROUGH HYDROGEN PATHFINDER

Figure

PSD

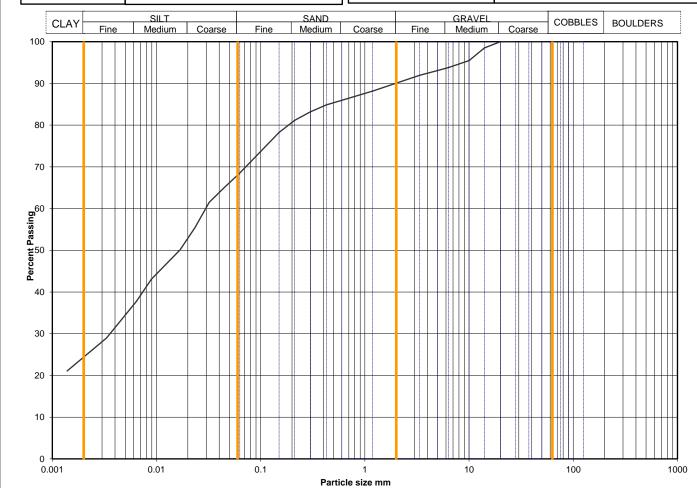
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 Sample Details:
 Hole No
 BVB-105

 Sample Depth (m BGL)
 2.75 - 3.30

 Sample Type and No
 B13

 Specimen Ref
 Specimen Ref



Sievin	a	Sedimentation		
Particle Size	9 %	Particle Size %		
	, ,		, -	
mm	Passing	mm	Passing	
125	100	0.0630	69	
90	100	0.0446	65	
75	100	0.0321	62	
63	100	0.0233	55	
50	100	0.0168	50	
37.5	100	0.0089	43	
28	100	0.0064	38	
20	100	0.0046 33		
14	99	0.0033		
10	95	0.0014	21	
6.3	94			
5	93			
3.35	92			
2	90			
1.18	88	Particle density	/ Ma/m3	
0.6	86	Farticle derisity	/, IVIG/1113	
0.425	85	2.65 assumed		
0.3	83	Dry mass of sample, kg		
0.212	81	Dry mass or so	ampie, ky	
0.15	78	1.0		
0.063	69	1.0		

Soil description	Brown slightly sandy slightly gravelly silty CLAY.		
Preparation / Pretreatment	Sieve: pre dried, Hydro: as BS EN ISO 17892		
Remarks			

Sample		Whole	*<63mm
Proportions	Cobbles / boulders	0	0
	Gravel	10	10
*<63mm values to aid	Sand	22	22
description only	Silt	44	44
	Clay	24	24

Uniformity Co	efficient	D60 / D10	Not applicable	
	BS EN ISO 17892-4			
Test Method	5	Sieving	5.2	wet sieve
	Sedi	mentation	5.3	hydrometer

QA Ref SLR 2,9 Rev 2.23 Jul 17





Project No
Project Name

A3039-23

ALDBROUGH HYDROGEN

PATHFINDER

Figure

PSD

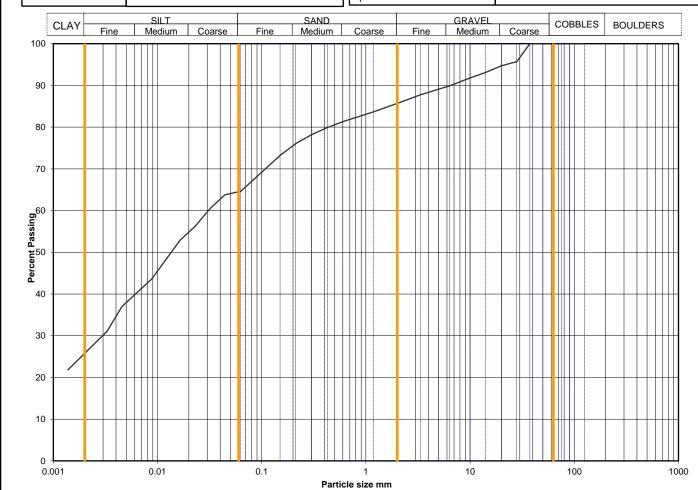
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 Sample Details:
 SAMPLE ID:
 Hole No
 BVB-106

 Sample Depth (m BGL)
 4.80 - 5.30

 Sample Type and No
 B16

 Specimen Ref



Sievin	a	Sedimentation		
Particle Size	9 %	Particle Size %		
	, ,		, , ,	
mm	Passing	mm	Passing	
125	100	0.0630	65	
90	100	0.0443	64	
75	100	0.0318	60	
63	100	0.0229	56	
50	100	0.0164	53	
37.5	100	0.0088	44	
28	96	0.0063	40	
20	95	0.0045 37		
14	93	0.0033	31	
10	92	0.0014	22	
6.3	90			
5	89			
3.35	88			
2	86			
1.18	84	Particle density	, Ma/m3	
0.6	81	Particle density, Mg/m3		
0.425	80	2.65 assumed		
0.3	78	Dry mass of sample, kg		
0.212	76	Diyillass 01 se	ampie, ky	
0.15	73	2.0		
0.063	65	2.0		

Soil description	Dark brown slightly gravelly silty CLAY.
Preparation / Pretreatment	Sieve: pre dried, natural material Hydro: as BS EN ISO 17892
Remarks	

Sample		Whole	*<63mm
Proportions	Cobbles / boulders	0	0
	Gravel	14	14
*<63mm values to aid	Sand	21	21
description only	Silt	39	39
	Clay	26	26

Uniformity Co	efficient	D60 / D10	Not applicable	
		BS EN ISO 17892-4		
Test Method	S	Sieving	5.2	wet sieve
	Sedi	mentation	5.3	hydrometer

QA Ref SLR 2,9 Rev 2.23 Jul 17





Project No

Project Name

A3039-23

ALDBROUGH HYDROGEN PATHFINDER

Figure

PSD

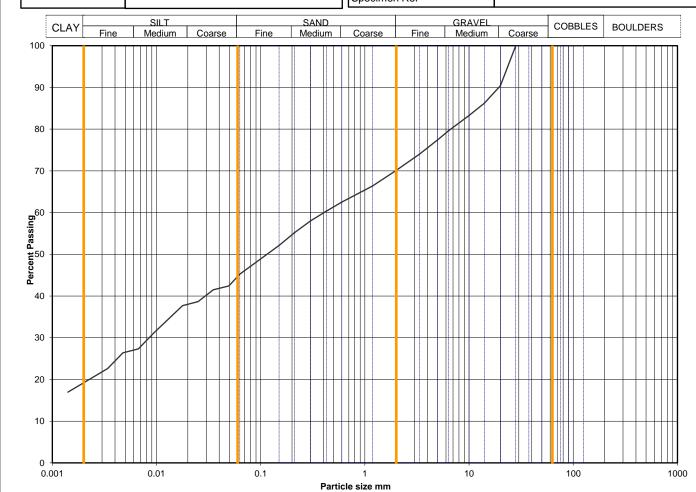
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 SAMPLE ID:
 Hole No
 BVB-106

 Sample Depth (m BGL)
 13.80 - 14.30

 Sample Type and No
 B30

 Specimen Ref
 Specimen Ref



0			
Sievin	g	Sediment	ation
Particle Size	%	Particle Size	%
mm	Passing	mm	Passing
125	100	0.0630	45
90	100	0.0495	42
75	100	0.0351	41
63	100	0.0250	39
50	100	0.0178	38
37.5	100	0.0094	31
28	100	0.0067	27
20	90	0.0048	26
14	86	0.0034	23
10	83	0.0014	17
6.3	80		
5	77		
3.35	74		
2	70		
1.18	66	Particle densit	, Ma/m2
0.6	63	Farticle derisity	y, ivig/iiis
0.425	60	2.65 assumed	
0.3	58	Drumana of comple les	
0.212	55	 Dry mass of sample, kg 	
0.15	52	0.0	
0.063	45	0.8	

Soil description	Dark brown gravelly CLAY.		
Preparation / Pretreatment	Sieve: pre dried, Hydro: as BS EN ISO 17892		
Remarks			

Sample		Whole	*<63mm
Proportions	Cobbles / boulders	0	0
	Gravel	30	30
*<63mm values to aid description only	Sand	25	25
	Silt	26	26
	Clay	19	19

Uniformity Coefficient		D60 / D10	Not	applicable
	BS EN ISO 17892-4			
Test Method	5	Sieving	5.2	wet sieve
	Sedi	mentation	5.3	hydrometer

QA Ref SLR 2,9 Rev 2.23 Jul 17





Project No

Project Name

A3039-23

ALDBROUGH HYDROGEN

PATHFINDER

Figure

PSD

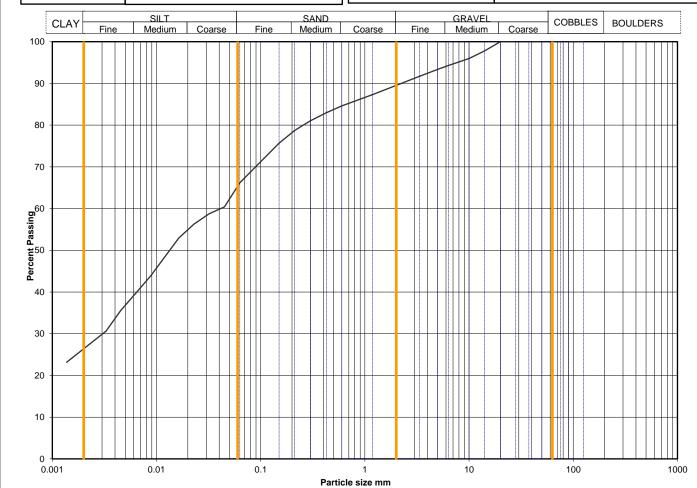
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 SAMPLE ID:
 Hole No
 BVB-107

 Sample Depth (m BGL)
 9.30 - 9.80

 Sample Type and No
 B23

 Specimen Ref
 Specimen Ref



Sievin	a	Sediment	ation
Particle Size	%	Particle Size	%
mm	Passing	mm	Passing
125	100	0.0630	66
90	100	0.0448	60
75	100	0.0319	59
63	100	0.0228	56
50	100	0.0164	53
37.5	100	0.0088	44
28	100	0.0063	40
20	100	0.0045	36
14	98	0.0033	31
10	96	0.0014	23
6.3	94		
5	93		
3.35	92		
2	90		
1.18	87	Particle density	, Ma/m2
0.6	85	Farticle derisity	y, ivig/iiis
0.425	83	2.65 assumed	
0.3	81	During of completion	
0.212	79	 Dry mass of sample, kg 	
0.15	76		
0.063	66	0.9	

Soil description	Dark brown slightly sandy slightly gravelly silty CLAY.		
Preparation / Pretreatment	Sieve: pre dried, Hydro: as BS EN ISO 17892		
Remarks			

Sample		Whole	*<63mm
Proportions	Cobbles / boulders	0	0
*<63mm values to aid description only	Gravel	11	11
	Sand	23	23
	Silt	40	40
	Clay	26	26

Uniformity Coefficient		D60 / D10	Not	applicable
	BS EN ISO 17892-4			
Test Method	5	Sieving	5.2	wet sieve
	Sedi	mentation	5.3	hydrometer

QA Ref SLR 2,9 Rev 2.23 Jul 17





Project No A3039-23

Project Name ALDBROUGH HYDROGEN

PATHFINDER

Figure

PSD

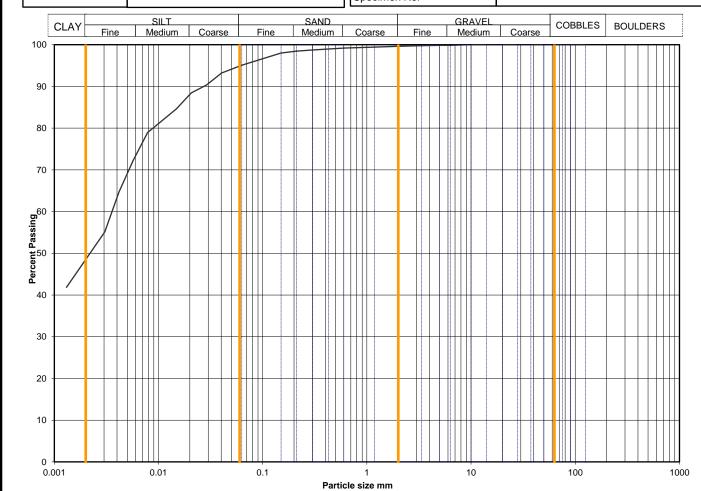
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 SAMPLE ID:
 Hole No
 BVB-107

 Sample Depth (m BGL)
 13.80 - 15.00

 Sample Type and No
 B30

 Specimen Ref
 Specimen Ref



Sievin	a	Sediment	ation
Particle Size	9 %	Particle Size	T
	, ,		%
mm	Passing	mm	Passing
125	100	0.0630	95
90	100	0.0402	93
75	100	0.0288	90
63	100	0.0206	88
50	100	0.0148	85
37.5	100	0.0079	79
28	100	0.0057	72
20	100	0.0042	65
14	100	0.0031	55
10	100	0.0013	42
6.3	100		
5	100		
3.35	100		
2	100		
1.18	99	Particle density	, Ma/m2
0.6	99	Farticle derisity	y, wg/ms
0.425	99	2.65 assumed	
0.3	99	Drumoss of comple les	
0.212	98	Dry mass of sample, kg	
0.15	98	0.5	
0.063	95	1 0.5	

Soil description	Brown slightly sandy CLAY.		
Preparation / Pretreatment	Sieve: pre dried, Hydro: as BS EN ISO 17892		
Remarks			

Sample		Whole	*<63mm
Proportions	Cobbles / boulders	0	0
	Gravel	0	0
*<63mm values to aid description only	Sand	5	5
	Silt	47	47
	Clay	49	49

Uniformity Coefficient		D60 / D10	Not	applicable
	BS EN ISO 17892-4			
Test Method	5	Sieving	5.2	wet sieve
	Sedi	mentation	5.3	hydrometer

QA Ref SLR 2,9 Rev 2.23 Jul 17





Project No A3039-23

Project Name

ALDBROUGH HYDROGEN PATHFINDER

Figure

PSD

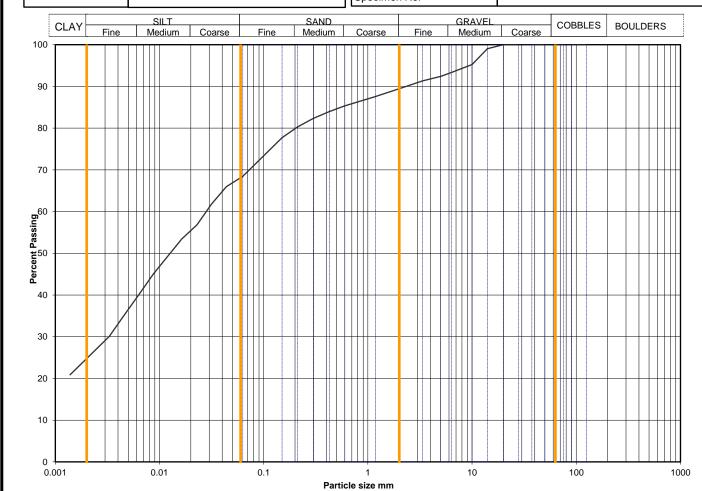
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 Sample Details:
 SAMPLE ID:
 Hole No
 BVB-108

 Sample Depth (m BGL)
 4.80 - 5.30

 Sample Type and No
 B17

 Specimen Ref



Sievin	g	Sediment	ation	
Particle Size	%	Particle Size	%	
mm	Passing	mm	Passing	
125	100	0.0630	68	
90	100	0.0438	66	
75	100	0.0316	62	
63	100	0.0228	57	
50	100	0.0164	53	
37.5	100	0.0088	45	
28	100	0.0063	40	
20	100	0.0046	35	
14	99	0.0033	30	
10	95	0.0014	21	
6.3	93			
5	92			
3.35	91			
2	89			
1.18	88	Particle densit	, Ma/m3	
0.6	85	Farticle derisity	y, wg/ms	
0.425	84	2.65 assumed		
0.3	82	Drumana of completion		
0.212	80	 Dry mass of sample, kg 		
0.15	78	0.0		
0.063	68	0.8		

Soil description	Dark brown slightly sandy slightly gravelly silty CLAY.			
Preparation / Pretreatment	Sieve: pre dried, Hydro: as BS EN ISO 17892			
Remarks				

Sample		Whole	*<63mm
Proportions	Cobbles / boulders	0	0
*<63mm values to aid description only	Gravel	11	11
	Sand	21	21
	Silt	44	44
	Clay	25	25

Uniformity Coefficient		D60 / D10	Not applicable	
	BS EN ISO 17892-4			
Test Method	5	Sieving	5.2	wet sieve
	Sedi	Sedimentation		hydrometer

QA Ref SLR 2,9 Rev 2.23 Jul 17





Project No

Project Name

ALDBROUGH HYDROGEN PATHFINDER

A3039-23

Figure

PSD

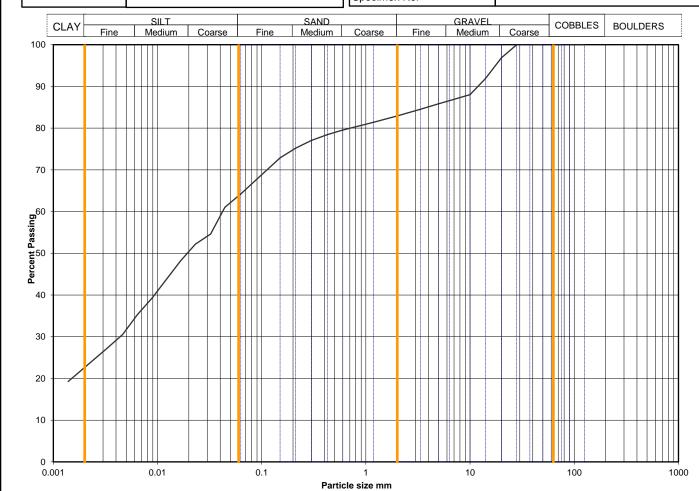
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 Sample Details:
 SAMPLE ID:
 Hole No
 BVB-109

 Sample Depth (m BGL)
 0.70 - 1.20

 Sample Type and No
 B4

 Specimen Ref



Sievin	a	Sediment	ation	
Particle Size	9 %	Particle Size		
	, ,		%	
mm	Passing	mm	Passing	
125	100	0.0630	64	
90	100	0.0443	61	
75	100	0.0323	55	
63	100	0.0231	52	
50	100	0.0166	48	
37.5	100	0.0089	39	
28	100	0.0064	35	
20	97	0.0046	31	
14	92	0.0033	27	
10	88	0.0014	19	
6.3	87			
5	86			
3.35	85			
2	83			
1.18	81	Particle density	, Ma/m2	
0.6	80	Farticle derisity	, wg/ms	
0.425	78	2.65 assumed		
0.3	77	Dry mass of sample lies		
0.212	75	Dry mass of sample, kg		
0.15	73	0.9		
0.063	64	0.9		

Soil description	Dark brown slightly gravelly silty CLAY.			
Preparation / Pretreatment	Sieve: pre dried, Hydro: as BS EN ISO 17892			
Remarks				

Sample		Whole	*<63mm
Proportions	Cobbles / boulders	0	0
*<63mm values to aid description only	Gravel	17	17
	Sand	19	19
	Silt	42	42
	Clay	23	23

Uniformity Coefficient		D60 / D10	Not	applicable
	BS EN ISO 17892-4			
Test Method	5	Sieving	5.2	wet sieve
	Sedi	mentation	5.3	hydrometer

QA Ref SLR 2,9 Rev 2.23 Jul 17





Project No
Project Name

A3039-23

ALDBROUGH HYDROGEN PATHFINDER

Figure

PSD

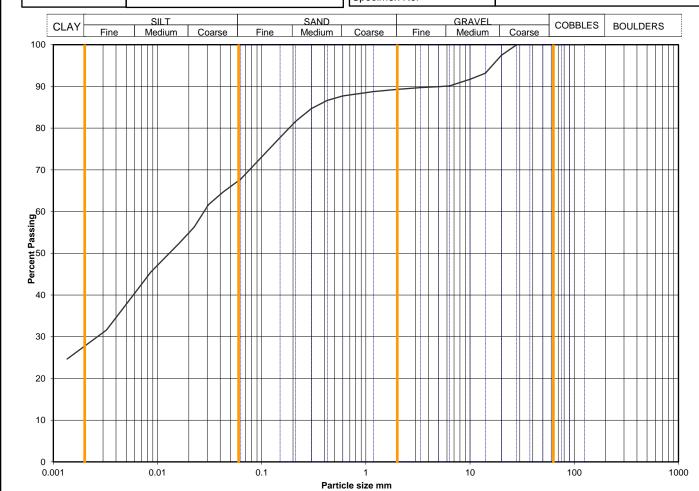
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 SAMPLE ID:
 Hole No
 BVB-110

 Sample Depth (m BGL)
 1.00 - 1.20

 Sample Type and No
 B6

 Specimen Ref
 Specimen Ref



Sievin	a	Sediment	ation	
	_			
Particle Size	%	Particle Size	%	
mm	Passing	mm	Passing	
125	100	0.0630	68	
90	100	0.0429	65	
75	100	0.0308	62	
63	100	0.0224	56	
50	100	0.0161	52	
37.5	100	0.0086	45	
28	100	0.0062	41	
20	97	0.0045	36	
14	93	0.0032	32	
10	92	0.0014	25	
6.3	90			
5	90			
3.35	90			
2	89			
1.18	89	Particle density	, Ma/m2	
0.6	88	Farticle derisity	, wg/ms	
0.425	87	2.65 assumed		
0.3	85	Drumoss of somela lie		
0.212	82	Dry mass of sample, kg		
0.15	78	0.8		
0.063	68	0.8		

S	oil description	Dark brown slightly sandy slightly gravelly silty CLAY.			
	Preparation / Pretreatment	Sieve: pre dried, Hydro: as BS EN ISO 17892			
	Remarks				

Sample		Whole	*<63mm
Proportions	Cobbles / boulders	0	0
*<63mm values to aid description only	Gravel	11	11
	Sand	22	22
	Silt	40	40
	Clay	28	28

Uniformity Coefficient		D60 / D10	Not	applicable
	BS EN ISO 17892-4			
Test Method	5	Sieving	5.2	wet sieve
	Sedi	mentation	5.3	hydrometer

QA Ref SLR 2,9 Rev 2.23 Jul 17





Project No
Project Name

A3039-23

ALDBROUGH HYDROGEN

PATHFINDER

Figure

PSD

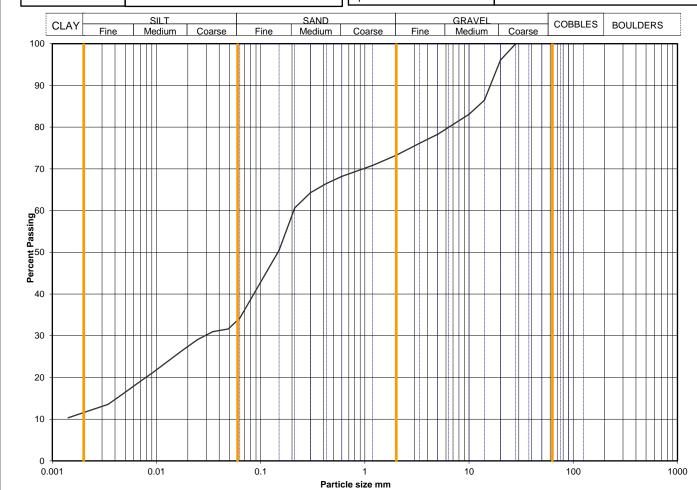
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 SAMPLE ID:
 Hole No
 BVB-111

 Sample Depth (m BGL)
 0.50 - 1.20

 Sample Type and No
 B4

 Specimen Ref
 Specimen Ref



Sievin	a	Sedimentation		
Particle Size	%	Particle Size	%	
			, ,	
mm	Passing	mm	Passing	
125	100	0.0630	34	
90	100	0.0488	32	
75	100	0.0346	31	
63	100	0.0247	29	
50	100	0.0177	26	
37.5	100	0.0094	21	
28	100	0.0067	19	
20	96	0.0048	16	
14	86	0.0034	14	
10	83	0.0014	10	
6.3	80			
5	78			
3.35	76			
2	73			
1.18	71	Particle density	/ Ma/m3	
0.6	68	i article derisit	y, ivig/iiio	
0.425	66	2.65 a	ssumed	
0.3	64	Dry mass of sa	ample ka	
0.212	61	Diyillass 01 so	ampie, ky	
0.15	50	0.9		
0.063	34	0.9		

Soil description	Dark brown slightly sandy slightly gravelly silty CLAY.			
Preparation / Pretreatment	Sieve: pre dried, Hydro: as BS EN ISO 17892			
Remarks				

Sample		Whole	*<63mm
Proportions	Cobbles / boulders	0	0
	Gravel	27	27
*<63mm values to aid	Sand	39	39
description only	Silt	23	23
	Clay	12	12

Uniformity Coefficient		pefficient D60 / D10		applicable
	BS EN ISO 17892-4			
Test Method	5	Sieving	5.2	wet sieve
	Sedi	mentation	5.3	hydrometer

QA Ref SLR 2,9 Rev 2.23 Jul 17





Project No

Project Name

A3039-23

ALDBROUGH HYDROGEN PATHFINDER

Figure

PSD

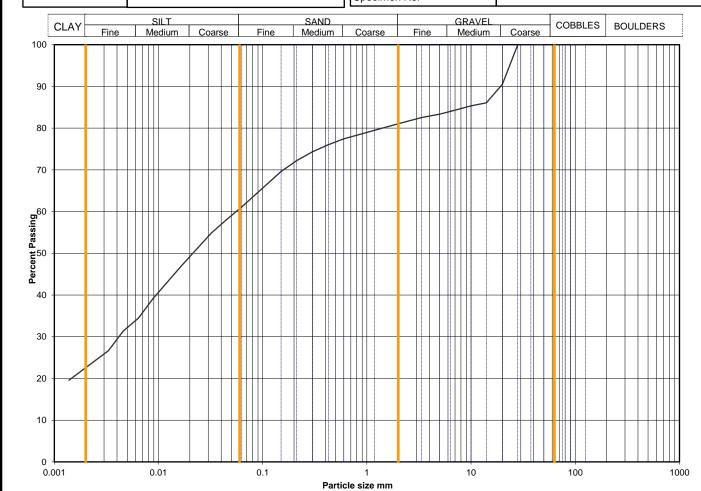
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 SAMPLE ID:
 Hole No
 BVB-112

 Sample Depth (m BGL)
 1.00 - 2.00

 Sample Type and No
 B4

 Specimen Ref
 Specimen Ref



Sievin	a	Sedimentation		
Particle Size	9 %	Particle Size	%	
	, ,		, ,	
mm	Passing	mm	Passing	
125	100	0.0630	61	
90	100	0.0446	58	
75	100	0.0321	55	
63	100	0.0231	51	
50	100	0.0166	47	
37.5	100	0.0089	39	
28	100	0.0064	34	
20	91	0.0046	31	
14	86	0.0033	27	
10	85	0.0014	20	
6.3	84			
5	83			
3.35	83			
2	81			
1.18	79	Particle density	, Ma/m2	
0.6	77	Farticle derisity	y, wg/ms	
0.425	76	2.65 a	ssumed	
0.3	74	Dry mass of sa	ample ka	
0.212	72	Diyillass 01 Sa	ampie, kg	
0.15	70	0.8		
0.063	61	0.8		

Soil description	Greyish brown slightly sandy slightly gravelly silty CLAY.		
Preparation / Pretreatment	Sieve: pre dried, Hydro: as BS EN ISO 17892		
Remarks			

Sample		Whole	*<63mm
Proportions	Cobbles / boulders	0	0
	Gravel	19	19
*<63mm values to aid	Sand	20	20
description only	Silt	39	39
	Clay	23	23

Uniformity Co	efficient	D60 / D10	Not applicable	
	BS EN ISO 17892-4			
Test Method	5	Sieving	5.2	wet sieve
	Sedi	mentation	5.3	hydrometer

QA Ref SLR 2,9 Rev 2.23 Jul 17





Project No A3039-23

Project Name ALDBRO

ALDBROUGH HYDROGEN PATHFINDER

Figure

PSD

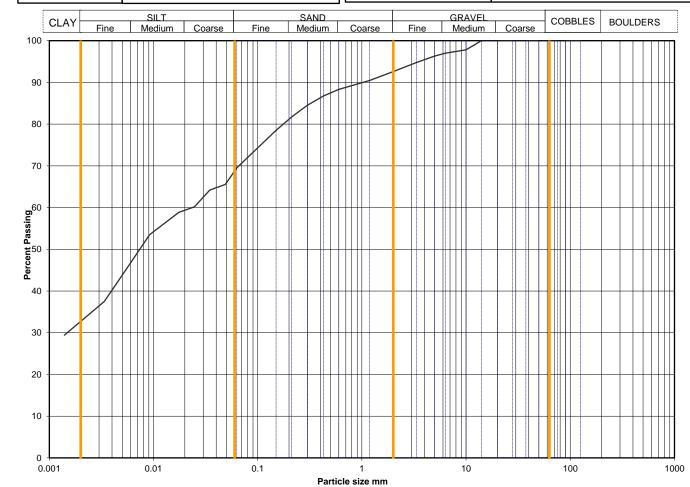
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 SAMPLE ID:
 Hole No
 BVB-112

 Sample Depth (m BGL)
 2.00 - 2.45

 Sample Type and No
 D5

 Specimen Ref



Sievin	a	Sedimentation		
Particle Size	9 %	Particle Size	%	
	, ,		, -	
mm	Passing	mm	Passing	
125	100	0.0630	70	
90	100	0.0488	66	
75	100	0.0346	64	
63	100	0.0247	60	
50	100	0.0175	59	
37.5	100	0.0092	54	
28	100	0.0066	48	
20	100	0.0047	43	
14	100	0.0034	37	
10	98	0.0014	29	
6.3	97			
5	96			
3.35	95			
2	93			
1.18	90	Particle density	/ Ma/m3	
0.6	88	i article derisit	/, IVIG/1113	
0.425	87	2.65 a	ssumed	
0.3	85	Dry mass of sample, kg		
0.212	82	Dry mass or so	ampic, kg	
0.15	79	0.1		
0.063	70	0.1		

Soil description	Light brown slightly gravelly silty CLAY.		
Preparation / Pretreatment	Sieve: pre dried, Hydro: as BS EN ISO 17892		
Remarks			

Sample		Whole	*<63mm
Proportions	Cobbles / boulders	0	0
	Gravel	8	8
*<63mm values to aid	Sand	23	23
description only	Silt	37	37
	Clay	33	33

Uniformity Co	efficient	D60 / D10	Not applicable	
		BS EN ISO 17892-4		
Test Method	5	Sieving	5.2	wet sieve
	Sedi	mentation	5.3	hydrometer

QA Ref SLR 2,9 Rev 2.23 Jul 17





roject No	A3039-23
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Project Name ALDBROUGH HYDROGEN

PATHFINDER

Figure

PSD

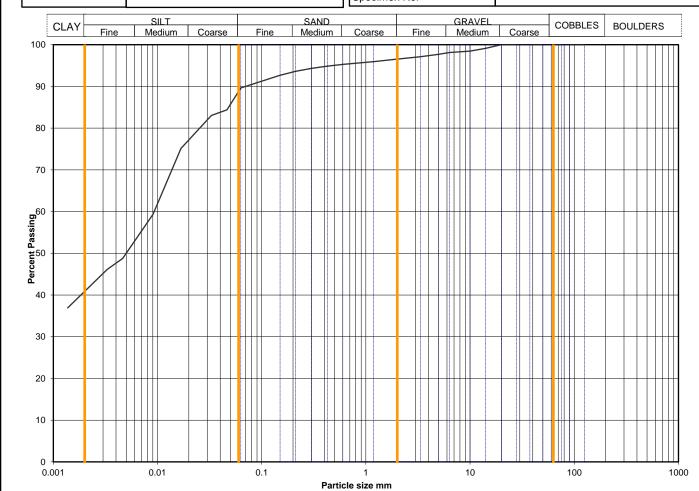
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 Sample Details:
 SAMPLE ID:
 Hole No
 BVB-113

 Sample Depth (m BGL)
 1.20 - 1.65

 Sample Type and No
 D2

 Specimen Ref



Sievin	a	Sedimentation		
Particle Size	9 %	Particle Size %		
	, ,		, -	
mm	Passing	mm	Passing	
125	100	0.0630	90	
90	100	0.0464	84	
75	100	0.0329	83	
63	100	0.0235	79	
50	100	0.0168	75	
37.5	100	0.0090	59	
28	100	0.0065	54	
20	100	0.0046	49	
14	99	0.0033	46	
10	98	0.0014	37	
6.3	98			
5	98			
3.35	97			
2	97			
1.18	96	Particle density	, Ma/m2	
0.6	95	Farticle derisity	y, wg/ms	
0.425	95	2.65 assumed		
0.3	94	Dry many of comple lea		
0.212	94	Dry mass of sample, kg		
0.15	93	0.4		
0.063	90			

Soil description	Light brown slightly sandy slightly gravelly silty CLAY.	
Preparation / Pretreatment	Sieve: pre dried, Hydro: as BS EN ISO 17892	
Remarks		

Sample		Whole	*<63mm
Proportions	Cobbles / boulders	0	0
	Gravel	3	3
*<63mm values to aid	Sand	7	7
description only	Silt	49	49
	Clay	41	41

Uniformity Coefficient		D60 / D10	Not	applicable
	BS EN ISO 17892-4			
Test Method	S	Sieving	5.2	wet sieve
	Sedi	mentation	5.3	hydrometer

QA Ref SLR 2,9 Rev 2.23 Jul 17





Project No Project Name A3039-23

ALDBROUGH HYDROGEN

PATHFINDER

Figure

PSD

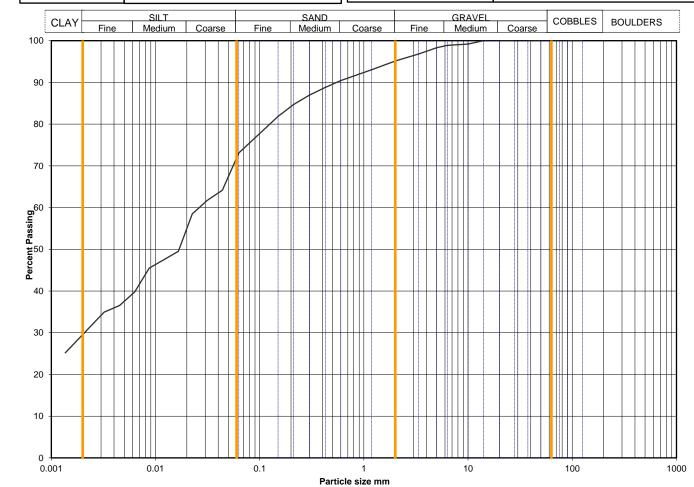
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 SAMPLE ID:
 Hole No
 BVB-113

 Sample Depth (m BGL)
 2.00 - 2.45

 Sample Type and No
 D5

 Specimen Ref



Sievin	a	Sedimentation		
Particle Size	9 %	Particle Size %		
	, ,		, ,	
mm	Passing	mm	Passing	
125	100	0.0630	73	
90	100	0.0438	64	
75	100	0.0313	62	
63	100	0.0225	58	
50	100	0.0166	50	
37.5	100	0.0087	45	
28	100	0.0063	40	
20	100	0.0045	37	
14	100	0.0032	35	
10	99	0.0014	25	
6.3	99			
5	98			
3.35	97			
2	95			
1.18	93	Particle density	, Ma/m3	
0.6	90	i article derisit	y, ivig/iiio	
0.425	89	2.65 assumed		
0.3	87	Dry mass of sample, kg		
0.212	85	Dry mass of sample, kg		
0.15	82	0.1		
0.063	73			

Soil description	Orangish brown slightly gravelly silty CLAY.	
Preparation / Pretreatment	Sieve: pre dried, Hydro: as BS EN ISO 17892	
Remarks		

Sample		Whole	*<63mm
Proportions	Cobbles / boulders	0	0
	Gravel	5	5
*<63mm values to aid	Sand	22	22
description only	Silt	44	44
	Clay	30	30

Uniformity Coefficient		D60 / D10	Not	applicable
	BS EN ISO 17892-4			
Test Method	5	Sieving	5.2	wet sieve
	Sedi	mentation	5.3	hydrometer

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Project No
Project Name

A3039-23

ALDBROUGH HYDROGEN PATHFINDER

Figure

PSD

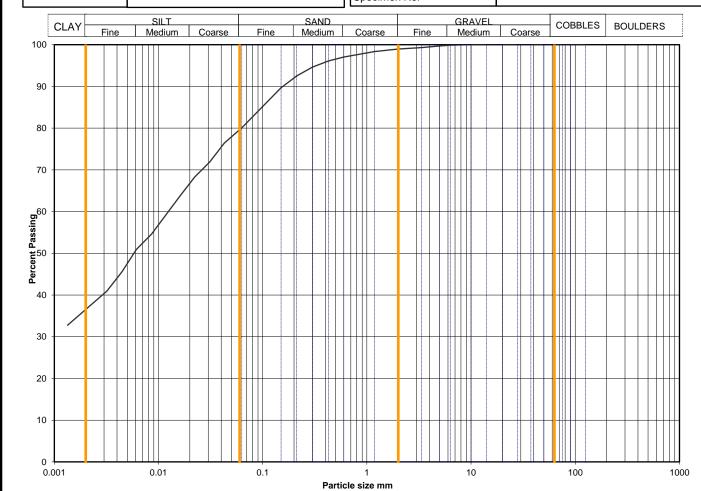
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 Sample Details:
 SAMPLE ID:
 Hole No
 BVB-114

 Sample Depth (m BGL)
 0.40 - 0.60

 Sample Type and No
 B2

 Specimen Ref



Sievin	a	Sedimentation		
Particle Size	9 %			
	, ,		%	
mm	Passing	mm	Passing	
125	100	0.0630	80	
90	100	0.0429	76	
75	100	0.0309	72	
63	100	0.0222	68	
50	100	0.0160	64	
37.5	100	0.0086	55	
28	100	0.0062	51	
20	100	0.0044	46	
14	100	0.0032	41	
10	100	0.0013	33	
6.3	100			
5	100			
3.35	99			
2	99			
1.18	98	Particle density	, Ma/m2	
0.6	97	Farticle derisity	y, wg/ms	
0.425	96	2.65 assumed		
0.3	95	Drumana of comple lea		
0.212	93	 Dry mass of sample, kg 		
0.15	90	0.4		
0.063	80			

Soil description	Brown slightly gravelly silty CLAY.	
Preparation / Pretreatment	Sieve: pre dried, Hydro: as BS EN ISO 17892	
Remarks		

Sample		Whole	*<63mm
Proportions	Cobbles / boulders	0	0
*<63mm values to aid description only	Gravel	1	1
	Sand	19	19
	Silt	44	44
	Clay	37	37

Uniformity Coefficient		D60 / D10	Not	applicable
	BS EN ISO 17892-4			
Test Method	5	Sieving	5.2	wet sieve
	Sedimentation 5.3 hydrome		hydrometer	

QA Ref SLR 2,9 Rev 2.23 Jul 17





Project No A3039-23

Project Name ALDBR

ALDBROUGH HYDROGEN PATHFINDER

Figure

PSD

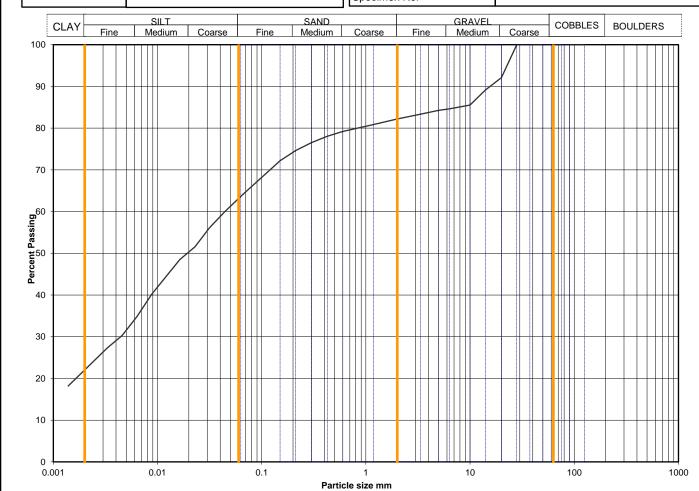
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 SAMPLE ID:
 Hole No
 BVB-114

 Sample Depth (m BGL)
 1.20 - 2.00

 Sample Type and No
 B5

 Specimen Ref
 Specimen Ref



Sievin	a	Sedimentation		
Particle Size	9 %	Particle Size	%	
	, ,			
mm	Passing	mm	Passing	
125	100	0.0630	64	
90	100	0.0438	60	
75	100	0.0316	56	
63	100	0.0228	52	
50	100	0.0164	49	
37.5	100	0.0088	40	
28	100	0.0064	35	
20	92	0.0046	30	
14	89	0.0033	27	
10	86	0.0014	18	
6.3	85			
5	84			
3.35	83			
2	82			
1.18	81	Particle density	, Ma/m3	
0.6	79	i article derisit	y, ivig/iiio	
0.425	78	2.65 a	ssumed	
0.3	77	Dry mass of sample, kg		
0.212	75	Dry mass or so	ampio, kg	
0.15	72	1.0		
0.063	64	1.0		

Soil description	Dark brown slightly sandy gravelly silty CLAY with occasional brick fragments.	
Preparation / Pretreatment	Sieve: pre dried, Hydro: as BS EN ISO 17892	
Remarks		

Sample		Whole	*<63mm
Proportions	Cobbles / boulders	0	0
*<63mm values to aid	Gravel	18	18
	Sand	19	19
description only	Silt	42	42
	Clay	22	22

Uniformity Coefficient		D60 / D10	Not	applicable
	BS EN ISO 17892-4			
Test Method	5	Sieving	5.2	wet sieve
	Sedimentation 5.3 hydrome		hydrometer	

QA Ref SLR 2,9 Rev 2.23 Jul 17





Project No
Project Name

A3039-23

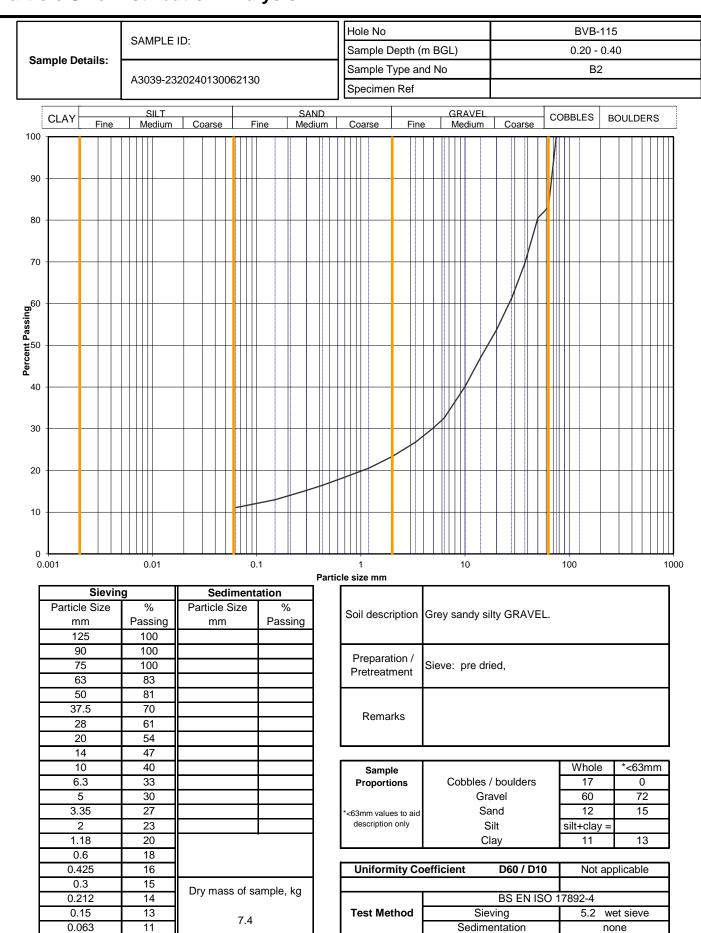
ALDBROUGH HYDROGEN

PATHFINDER

Figure

PSD

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QA Ref SLR 2,9 Rev 2.23 Jul 17





Project No A3039-23

Project Name ALDBROUGH HYDROGEN

PATHFINDER

Figure

PSD

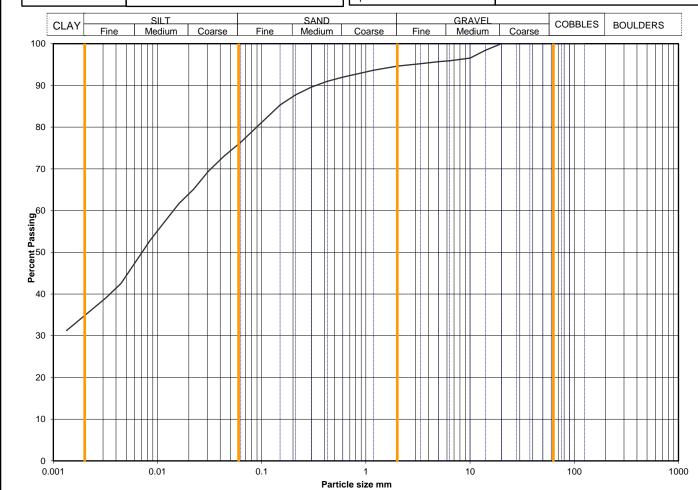
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 Sample Details:
 SAMPLE ID:
 Hole No
 BVB-115

 Sample Depth (m BGL)
 0.60 - 1.00

 Sample Type and No
 B4

 Specimen Ref



Sievin	g	Sediment	ation
Particle Size	%	Particle Size	%
mm	Passing	mm	Passing
125	100	0.0630	76
90	100	0.0429	73
75	100	0.0308	69
63	100	0.0222	65
50	100	0.0160	62
37.5	100	0.0086	53
28	100	0.0062	48
20	100	0.0045	43
14	98	0.0032	39
10	97	0.0013	31
6.3	96		
5	96		
3.35	95		
2	95		
1.18	94	Particle density	, Ma/m2
0.6	92	Farticle derisity	y, ivig/iii3
0.425	91	2.65 a	ssumed
0.3	90	Dry mass of sample, kg	
0.212	88	Diy iiiass oi sa	ampie, kg
0.15	85	0.8	
0.063	76	0.8	

Soil description	Brown slightly sandy slightly gravelly silty CLAY.	
Preparation / Pretreatment	Sieve: pre dried, Hydro: as BS EN ISO 17892	
Remarks		

Sample		Whole	*<63mm
Proportions	Cobbles / boulders	0	0
	Gravel	5	5
*<63mm values to aid	Sand	18	18
description only	Silt	42	42
	Clay	35	35

Uniformity Coefficient		D60 / D10	Not applicable
	BS EN ISO 17892-4		
Test Method	Ç	Sieving	5.2 wet sieve
	Sed	Sedimentation 5.3	

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ALDBROUGH HYDROGEN

PATHFINDER

Figure

PSD

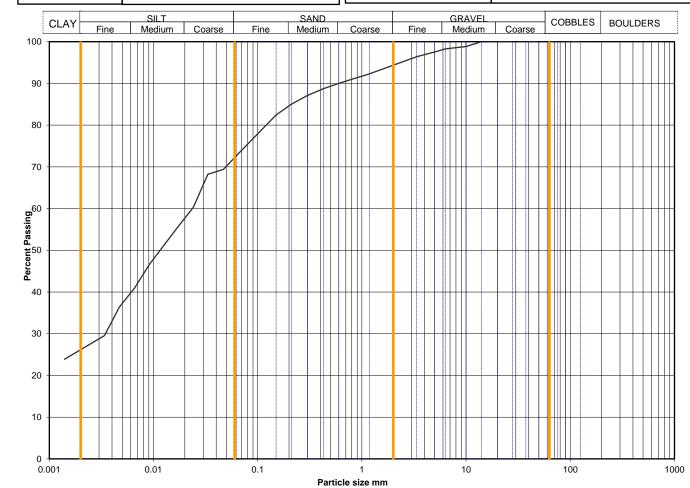
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 SAMPLE ID:
 Hole No
 BVB-115

 Sample Depth (m BGL)
 2.00 - 2.45

 Sample Type and No
 D5

 Specimen Ref
 D5



Sievin	a	Sedimentation		
Particle Size	9 %	Particle Size	%	
	, ,		, -	
mm	Passing	mm	Passing	
125	100	0.0630	73	
90	100	0.0469	69	
75	100	0.0333	68	
63	100	0.0241	60	
50	100	0.0173	56	
37.5	100	0.0091	47	
28	100	0.0066	41	
20	100	0.0047	36	
14	100	0.0034	30	
10	99	0.0014	24	
6.3	98			
5	98			
3.35	96			
2	94			
1.18	92	Particle density	, Ma/m2	
0.6	90	Farticle derisity	, wg/ms	
0.425	89	2.65 a	ssumed	
0.3	87	Dry mass of sample, kg		
0.212	85	Dry mass or so	ampie, ky	
0.15	82	0.4		
0.063	73	0.4		

Soil description	Grey mottled light brown slightly sandy slightly gravelly silty CLAY.	
Preparation / Pretreatment	Sieve: pre dried, Hydro: as BS EN ISO 17892	
Remarks		

Sample		Whole	*<63mm
Proportions	Cobbles / boulders	0	0
	Gravel	6	6
*<63mm values to aid	Sand	22	22
description only	Silt	47	47
	Clay	26	26

Uniformity Coefficient		D60 / D10	Not applicable	
	BS EN ISO 17892-4			
Test Method	5	Sieving	5.2	wet sieve
	Sedimentation		5.3 hydrometer	

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ALDBROUGH HYDROGEN PATHFINDER

Figure

PSD

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