







Planning Boundary **Environmental Permit** New PFA Cell Boundary

Thorpe Marsh Green Energy Hub Limited 20 St. James's Street, 7th Floor, London, England, SW1A 1ES

(EPR/CP3091SC/V002)

1620016237 / REH2023N03018

Date	Figure No.	Revision
May 2024	2	1.0
Prepared By	Scale	
PH	1:10,000	@A4

Thorpe Marsh Green Energy Hub Limited

RAMBOLL

Monitoring Well ID:	Location (GR):
The following measurements/observation	ions should be taken before decommissioning:
Cover Condition:	
End Cap Condition:	
Reason for decommissioning:	
Photograph before decommissioning:	
Depth to water:	Depth to base:
From borehole logs:	
Installation depth:	Screen section interval:
Well pipe diameter:	Borehole / well pack diameter:
Decommissioning Details	
Method of Decommissioning:	
Depth and position of each backfill/sea	l material:
Type and quantity of backfilling materia	als:
Changes made to the borehole/well du	ring the abandonment (e.g. casing removal).
Problems encountered in the decommi	ssioning procedure:

The location of each well should be marked on the ground following decommissioning and the location photographed.



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Header Sheet

Log Type

Exploratory Hole Number

BH1 DRAFT



2371077 Location Details Methodology & Plant Scale: 1:50 Project No: From (m) 0.00 - 1.20 1.20 - 15.00 Method Inspection Pit Cable Percussion Plant Used Hand Tools Dando 3000 409640.50 BJ Easting: 459577.99 Checked: Northing: Name: Thorpe Marsh NH Elevation: 18.54mAOD Final Depth: 15.00m Approved: Location: Thorpe-in-Balne Logger: н Grid System: OSGB Start Date: 22/04/2021 Client: End Date: 22/04/2021 Egniol Orientation: N/A Inclination: 90°

Hole Di	Hole Diameter				
Depth (m)	Diam (mm)				
15.00	200				

Casing Diameter					
Depth (m)	Diam (mm)				
15.00	200				
l					
l					
l					

	Groundwater Strikes						
Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks		
12.00	-	-	20	11.40			

$\overline{}$							
	Installation / Instrument Details						
Date Instrument Details To (m) Resp. Zone (m)							
22/04/2021	Standpipe	15.00	1.00 - 15.00	75			

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

Backfill			
Depth (m)	Legend Code		
0.00 - 0.20	Grout		
0.20 - 1.00	Bentonite		
1.00 - 15.00	Gravel		

In-Situ Tests		
PID	0	
Hand Vane*	0	
Standard Penetration Tests	0	

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

Sample Summary			
Enviro	nmer	ntal Samples	
Soil 1 Water			0
Geote	chnic	cal Samples	
Bulk	2	Large Bulk	0
Disturbed	0	Disturbed (NR)	0
Piston	0	Piston (NR)	0
Undisturbed	0	Undisturbed (NR)	0
Undisturbed Thin Wall			0
Undisturbed Thin Wall (NR)			0
Core Sample			0
			<00

(NR) Indicates sample undertaken but with

Test Type Depth (m) Casing (m) Water Seating Main Penetration Total (mm) N Reported Result	Hammer Ref
(m) (m) Blows Blows Iotal (mm)	
9, 200	

SPT Hammer Ref.	Energy Ratio (%)

No Standard Penetration Tests Undertaken

Chiselling			Water Added		
Depth (m)	Duration (mins)		Depth (m)	Litres	
]			

Ar IIII	plicable to	Rotary Onl	y					
Drilling Flush								
Depth (m)	Flush Type	Flush Colour	Return %					

	Applicab	le to Dy	namic S	ampling Only
		Dynamic	Sampling	Runs
[Depth (m)	Diam (mm)	Recovery %	Remarks
Į				



2371077

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Northing:

Location Details:

459577.99

Easting:

Web: www.central-alliance.co.uk

409640.50

Log Type Cable **Percussion**

Sheet 1 of 2

Methodology & Plant

Exploratory Hole Number

BH1

DRAFT

Scale:

Checked By:

CENTRAL ALLIANCE GEO

1:50

BJ

Depth (m) 0.00 - 1.20 1.20 - 15.00 Method Inspection Pit Cable Percussio Plant Used Hand Tools Dando 3000 Thorpe Marsh Name: Elevation: 18.54mAOD Final Depth: 15.00m Approved By: NH Location: Thorpe-in-Balne Logged By: Grid System: OSGB Start Date: 22/04/2021 Client: Egniol Orientation: N/A Inclination: Finish Date: 22/04/2021 Depth (m) (Stratum Thickness) Water Added (Litres) Casing Ø (mm) Depth (m) Reduced Samples & Testing Chiselling (mins) Water Level (m) Installation / Backfill Strata Description Level (mAOD) Depth (m) MADE GROUND: Light grey slightly gravelly silty fine to medium SAND. Gravel is angular to subangular fine to coarse mixed lithologies. [PFA] 5.00 - 5.50 1 B (15.00) 10 Continued on Next Page Observations / Remarks Misc. Shift Information Backfill Installations To (m) Instrument Details Casing Used
No Monitoring Point Installed
Hammer Ref & Energy Ratio (%) Groundwater Strikes
 Strike (m)
 Rises To (m)
 Time (min)

 12.00
 11.40
 20



2371077

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Northing:

Location Details:

459577.99

Easting:

Percussion Web: www.central-alliance.co.uk

409640.50

Log Type Cable

Sheet 2 of 2

Exploratory Hole Number

BH1

DRAFT

Methodology & Plant

Scale:

Checked By:

CENTRAL ALLIANCE GEO

1:50

BJ

Depth (m) 0.00 - 1.20 1.20 - 15.00 Method Inspection Pit Cable Percussio Plant Used Hand Tools Dando 3000 Thorpe Marsh Name: Elevation: 18.54mAOD Final Depth: 15.00m Approved By: NH Location: Thorpe-in-Balne Logged By: Grid System: OSGB Start Date: 22/04/2021 Client: Egniol Orientation N/A Inclination: Finish Date: 22/04/2021 Depth (m) (Stratum Thickness) Casing Ø (mm) Depth (m) Reduced Water Added (Litres) Samples & Testing Chiselling (mins) Water Level (m) Installation , Backfill Strata Description Level (mAOD) Depth (m) MADE GROUND: Light grey slightly gravelly silty fine to medium SAND. Gravel is angular to subangular fine to coarse mixed lithologies. [PFA] 11 11.80 12.00 12 13 14 EOH at 15.00m - Scheduled depth 17 18 19 20 Observations / Remarks Shift Information Backfill Installations To (m) Material
0.20 Grout
1.00 Bentonite
15.00 Gravel Instrument Details Casing Used
No Monitoring Point Installed
Hammer Ref & Energy Ratio (%) Groundwater Strikes
 Strike (m)
 Rises To (m)
 Time (min)

 12.00
 11.40
 20



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Header Sheet

Log Type

Exploratory Hole Number

BH2 DRAFT



Project No:	2371077	Location Details				Methodology & Plant			Scale:	1:50	
			459538.35	Northing:	409285.76	From (m)	Method		Plant Used	Checked:	BJ
Name:	Thorpe Marsh	Easting:	455550155	reor crimig.	103203.70	0.00 - 1.20	Inspection Pit		Hand Tools	Circoncu.	
		Elevation:	19.58mAOD	Final Depth:	15.00m	1.20 - 15.00	Cable Percussion	on	Dando 2000	Approved:	NH
Location:	Thorpe-in-Balne	l.		0:10.						c	22/04/2024
		Logger:	JP	Grid System:	OSGB					Start Date:	22/04/2021
Client:	Egniol	Orientation:	N/A	Inclination:	90°					End Date:	22/04/2021
Ciletti.	Egilloi	Orientation.	IN/A	memation.	30					end Date.	22/04/2021

Hole Di	ameter
Depth (m)	Diam (mm)
15.00	200

Casing D	iameter
⊢ Ť	
Depth (m)	Diam (mm)
15.00	200
I	

	Groundwater Strikes									
Strike	rike Casing Sealed Time Rose To Remarks									
(m)	(m)	(m)	(min)	(m)	Remarks					
ł										
l										

	Installation / Instrument Details										
Date	Instrument Details	To (m)	Resp. Zone (m)	Diam (mm)							
07/05/2021	Standpipe	15.00	1.00 - 15.00	75							

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

No Groundwater Encountered

Backfill							
Depth (m)	Legend Code						
0.00 - 0.20	Concrete						
0.20 - 1.00	Bentonite						
1.00 - 15.00	Gravel						

In-Situ Tests	
PID	0
Hand Vane*	0
Standard Penetration Tests	0

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

Sample Summary						
	ntal Samples	nmer	Enviror			
0	Water	1	Soil			
Geotechnical Samples						
0	Large Bulk	2	Bulk			
0	Disturbed (NR)	0	Disturbed			
0	Piston (NR)	0	Piston			
0	Undisturbed (NR)	Undisturbed 0 Undisturbed (NR)				
Undisturbed Thin Wall 0						
Undisturbed Thin Wall (NR) 0						
Core Sample 0						

(NR) Indicates sample undertaken but with 0% Recovery

	Standard Penetration Test Summary									
Test Type		Casing				Penetration	N	Reported Result	Hammer Ref	
7,1	(m)	(m)	(m)	Blows	Blows	Total (mm)		.,		
			_							
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	0	U))		1						
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D. ~	100	_	M,	12	1					
31 W) _	2 (M)	0 6		10					
N 1/2 6	1		(A)	100						
	1110	T (A)	1	U						

SPT Hammer Ref.	Energy Ratio (%)

No Standard Penetration Tests Undertaken

Chis	elling	Water	Added
Depth (m)	Duration (mins)	Depth (m)	Litres

Ap	plicable to	Rotary Onl	y
	Drilling		
Depth (m)	Flush Type	Flush Colour	Return %

	Applicable to Dynamic Sampling Only									
		Dynamic	Sampling	Runs						
	Depth (m)	Diam (mm)	Recovery %	Remarks						
П										
П										
П										
П										
Н										



Continued on Next Page

Misc.

Casing Used
No Monitoring Point Installed
Hammer Ref & Energy Ratio (%)

Observations / Remarks

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Log Type Cable **Percussion**

DRAFT

Exploratory Hole Number

BH2



10

Installations

Groundwater Strikes

Instrument Details

Strike (m) Rises To (m) Time (min)

Web: www.central-alliance.co.uk Sheet 1 of 2 GEO Location Details: Methodology & Plant Project No: 2371077 Scale: 1:50 Depth (m) 0.00 - 1.20 1.20 - 15.00 Method Inspection Pit Cable Percussio Plant Used Hand Tools Dando 2000 BJ Easting: 459538.35 Northing: 409285.76 Checked By: Name: Thorpe Marsh Elevation: 19.58mAOD Final Depth: 15.00m Approved By: NH Location: Thorpe-in-Balne Logged By: Grid System: OSGB Start Date: 22/04/2021 Client: Egniol Orientation: N/A Inclination: Finish Date: 22/04/2021 Depth (m) (Stratum Thickness) Water Added (Litres) Casing Ø (mm) Depth (m) Reduced Samples & Testing Chiselling (mins) Water Level (m) Installation , Backfill Strata Description Level (mAOD) Depth (m) MADE GROUND: Light grey slightly gravelly silty fine to medium SAND. Gravel is angular to subangular fine to coarse mixed lithologies. [PFA] (15.00) 8.00 - 8.50 2 B

Shift Information

Depth (m) Casing (m) Water (m)

Backfill

To (m)

From (m) 0.00 0.20 1.00



2371077

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Location Details:

Log Type

Cable

Sheet 2 of 2

Cable Percussion

Methodology & Plant

BH2 DRAFT

Exploratory Hole Number



1:50

Scale:

Depth (m) 0.00 - 1.20 1.20 - 15.00 Method Inspection Pit Cable Percussio Plant Used Hand Tools Dando 2000 BJ Easting: 459538.35 Northing: 409285.76 Checked By: Thorpe Marsh Name: Elevation: 19.58mAOD Final Depth: 15.00m Approved By: NH Location: Thorpe-in-Balne Logged By: Grid System: OSGB Start Date: 22/04/2021 Client: Egniol Orientation: N/A Inclination: Finish Date: 22/04/2021 Depth (m) (Stratum Thickness) Water Added (Litres) Casing Ø (mm) Depth (m) Reduced Samples & Testing Chiselling (mins) Water Level (m) Installation , Backfill Strata Description Level (mAOD) Depth (m) MADE GROUND: Light grey slightly gravelly silty fine to medium SAND. Gravel is angular to subangular fine to coarse mixed lithologies. [PFA] 11 12 13 14 EOH at 15.00m - Scheduled depth 17 18 19 20 Observations / Remarks Shift Information Backfill Installations To (m) Material
0.20 Concrete
1.00 Bentonite
15.00 Gravel Depth (m) Casing (m) Water (m) From (m) Resp. Zone | Depth (m) | Diameter | 1.00 - 15.00 | 15.00 | 75 Instrument Details Casing Used
No Monitoring Point Installed
Hammer Ref & Energy Ratio (%) Groundwater Strikes Strike (m) Rises To (m) Time (min)



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Header

Sheet

BH3 DRAFT



Project No:	2371077		Location Details				Methodology & Plant			Scale:	1:50
		Easting:	459347.94	Northing:	409112.18	From (m)	Met	hod	Plant Used	Checked:	BJ
Name:	Thorpe Marsh	Lusting.	155517151	reor criming.	103111110	0.00 - 1.20	Inspect	ion Pit	Hand Tools	Circoncu.	
		Elevation:	16.10mAOD	Final Depth:	15.00m	1.20 - 15.00	Cable Pe	rcussion	Dando 3000	Approved:	NH
Location:	Thorpe-in-Balne	Logger:	н	Grid System:	OSGB					Start Date:	22/04/2021
Client:	Egniol	Orientation:	N/A	Inclination:	90°					End Date:	23/04/2021

Hole Di	ameter
Depth (m)	Diam (mm)
15.00	200

Casing Diameter								
⊢ Ť								
Depth (m)	Diam (mm)							
15.00	200							
I								

Groundwater Strikes										
Strike	Casing	Sealed	Time	Rose To	Remarks					
(m)	(m)	(m)	(min)	(m)	Remarks					
ł										
l										

	Installation / Instrument Details										
Date	Instrument Details	To (m)	Resp. Zone (m)	Diam (mm)							
23/04/2021	Standpipe	15.00	1.00 - 15.00	75							

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

No Groundwater Encountered

Backfill							
Depth (m)	Legend Code						
0.00 - 0.20	Grout						
0.20 - 1.00	Bentonite						
1.00 - 15.00	Gravel						

In-Situ Tests	
PID	0
Hand Vane*	0
Standard Penetration Tests	0

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

Sample Summary						
Environmental Samples						
0	Soil 1 Water					
Geotechnical Samples						
0	Large Bulk	2	Bulk			
0	Disturbed (NR)	0	Disturbed			
0	Piston (NR)	0	Piston			
0	Undisturbed (NR)	0	Undisturbed			
0	Undisturbed Thin Wall					
0	Undisturbed Thin Wall (NR)					
0	Core Sample					

(NR) Indicates sample undertaken but with 0% Recovery

ſ	Standard Penetration Test Summary											
ſ	Test Type		Casing				Penetration	N	Reported Result	Hammer Ref		
L	rest type	(m)	(m)	(m)	Blows	Blows	Total (mm)		neported nesare			
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Ø	11121	11/110	Â	X	V							

SPT Hammer Ref.	Energy Ratio (%)

No Standard Penetration Tests Undertaken

Chis	elling	Water	Added
Depth (m)	Duration (mins)	Depth (m)	Litres

Drilling Flush							
Depth (m)	Flush Type	Flush Colour	Return %				

Applic	Applicable to Dynamic Sampling Only								
Dynamic Sampling Runs									
Depth (m) Diam (mm)	Recovery %	Remarks						



2371077

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Location Details:

Web: www.central-alliance.co.uk

Log Type

Cable

Percussion

Sheet 1 of 2

Exploratory Hole Number

DRAFT

Methodology & Plant

Scale:



1:50

Depth (m) 0.00 - 1.20 1.20 - 15.00 Method Inspection Pit Cable Percussio Plant Used Hand Tools Dando 3000 BJ Easting: 459347.94 Northing: 409112.18 Checked By: Thorpe Marsh Name: Elevation: 16.10mAOD Final Depth: 15.00m Approved By: NH Location: Thorpe-in-Balne Logged By: Grid System: OSGB Start Date: 22/04/2021 Client: Egniol Orientation N/A Inclination: Finish Date: 23/04/2021 Depth (m) (Stratum Thickness) Water Added (Litres) Casing Ø (mm) Depth (m) Reduced Samples & Testing Chiselling (mins) Water Level (m) Installation / Backfill Strata Description Level (mAOD) Depth (m) MADE GROUND: Light grey slightly gravelly silty fine to medium SAND. Gravel is angular to subangular fine to coarse mixed lithologies. [PFA] (15.00) 10 Continued on Next Page Observations / Remarks Misc. Shift Information Backfill Installations To (m) Instrument Details Casing Used
No Monitoring Point Installed
Hammer Ref & Energy Ratio (%) Groundwater Strikes Strike (m) Rises To (m) Time (min)



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Log Type

Cable

Percussion

BH3 DRAFT

Exploratory Hole Number

CENTRAL ALLIANCE

Sheet 2 of 2 Location Details: Methodology & Plant Project No: 2371077 Scale: 1:50 Method Inspection Pit Cable Percussion Plant Used Hand Tools Dando 3000 Depth (m) 0.00 - 1.20 1.20 - 15.00 Easting: 459347.94 Checked By: BJ 409112.18 Northing: Name: Thorpe Marsh Elevation: Approved By: 16.10mAOD Final Depth: 15.00m NH

Location:	Thorpe-in-Balne	Elevation:	16.10n	mAOD	Final De		5.00m	1.20 - 1	5.00	Cable Pe	rcussion		Dando 3000		Approved By:	NH
		Logged By:	н		Grid Sys		SGB									22/04/2021
Client:	Egniol	Orientation:	N/A		Inclinati		0°						Ι			23/04/2021
	Strata Description			Legend	Depth (m) (Stratum	Reduced Level (mAOD)	Chiselling (mins)	Water Added	Hole Ø (mm)	Casing Ø (mm)	Water Level (m)	Installation / Backfill		1	Samples & Testing	
SANI	DE GROUND: Light grey slightly gravelly silty fir D. Gravel is angular to subangular fine to coars logies. [PFA]	ne to medio se mixed			Thickness)	(mAOD)	(IIIIIS)	(Litres)	Depth (m)	Depth (m)	Level (III)	BALKIIII	Depth (m)	Ref	Test Results	
11 -	iogies. [FrA]															11 -
- - - - - - - 12 —																12 -
-																
13 -						Me		JIEN	No.							13 -
																14 -
15	EOH at 15.00m - Scheduled depth	ı		R	15,00		3). . M	200 15.00	200 15.00						15 -
16 — - - - - - -					D Arr											16 -
- - 17 - - - - -																17 -
 18 																18 -
- - 19 — - - - - - -																19 -
20																20 -
20																20 -
Observatio	ns / Remarks		1isc.				rmation	, . 1			Backfill				Installations	
		awater Encountered asing Used	No Monitoring Point installed Hammer Ref & Energy Ratio (%)	Date 22/04	00:00	Depth 15.0	n (m) Casi	ng (m) V	vater (m)	0.00 0.20 1.00	To (m) 0.20 1.00 15.00	Grout Bentonite Gravel		indpipe G	1.00 - 15.00 Froundwater Strikes	Depth (m) Diamete 15.00 75
		No Ground	No Monita Hammer R										Strike (m) Ris	ses 10 (m)	n inne (min) Re	emarks



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Header Sheet

Log Type

Exploratory Hole Number

BH4 DRAFT



Project No:	2371077		Location [Details			Methodology & P	lant	Scale:	1:50
Name:	Thorpe Marsh	Easting:	459189.53	Northing:	409173.46	From (m) 0.00 - 1.20	Method Inspection Pit	Plant Used Hand Tools	Checked:	BJ
	·	Elevation:	16.71mAOD	Final Depth:	15.00m	1.20 - 15.00	Cable Percussion	Dando 3000	Approved:	NH
Location:	Thorpe-in-Balne	Logger:	н	Grid System:	OSGB				Start Date:	26/04/2021
Client:	Egniol	Orientation:	N/A	Inclination:	90°				End Date:	27/04/2021

Hole Di	ameter
Depth (m)	Diam (mm)
15.00	200

Casing Diameter							
Depth (m)	Diam (mm)						
15.00	200						

	Groundwater Strikes							
Strike	Casing	Sealed	Time	Rose To	Dl			
(m)	(m)	(m)	(min)	(m)	Remarks			

	Installation / Instrument Details									
Date	Instrument Details	To (m)	Resp. Zone (m)	Diam (mm)						
27/04/2021	Standpipe	15.00	1.00 - 15.00	75						

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

No Groundwater Encountered

Backfill						
Depth (m)	Legend Code					
0.00 - 0.20	Grout					
0.20 - 1.00	Bentonite					
1.00 - 15.00	Gravel					

In-Situ Tests	
PID	0
Hand Vane*	0
Standard Penetration Tests	0

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

Sample Summary							
Environmental Samples							
Soil	1	Water	0				
Geote	Geotechnical Samples						
Bulk	2	Large Bulk	0				
Disturbed	0	Disturbed (NR)	0				
Piston	0	Piston (NR)	0				
Undisturbed	0	Undisturbed (NR)	0				
Undisturbed Thin Wall 0							
Undisturbed Thin Wall (NR) 0							
Cor	re San	nple	0				
			40				

(NR) Indicates sample undertaken but with 0% Recovery

				Sta	ndard	Penetrati	on T	est Summary	
Test Type	Depth (m)	Casing (m)	Water (m)	Seating Blows		Penetration Total (mm)	N	Reported Result	Hammer Ref

SPT Hammer R	ef. Energy Ratio (%)

No Standard Penetration Tests Undertaken

1		
	Depth (m)	Litres
J		

	Drilling	Flush	
Depth (m)	Flush Type	Flush Colour	Return %

Applicable to Dynamic Sampling Only						
	Dynamic	Sampling	Runs			
Depth (m)	Diam (mm)	Recovery %	Remarks			



Cable **Percussion**

Log Type

DRAFT

Exploratory Hole Number

BH4



Groundwater Strikes

Strike (m) Rises To (m) Time (min)

Web: www.central-alliance.co.uk Sheet 1 of 2 GEO Project No: Location Details: Methodology & Plant 2371077 Scale: 1:50 Depth (m) 0.00 - 1.20 1.20 - 15.00 Method Inspection Pit Cable Percussio Plant Used Hand Tools Dando 3000 BJ Easting: 459189.53 Northing: 409173.46 Checked By: Thorpe Marsh Name: Elevation: 16.71mAOD Final Depth: 15.00m Approved By: NH Location: Thorpe-in-Balne Logged By: Grid System: OSGB Start Date: 26/04/2021 Client: Egniol Orientation N/A Inclination: Finish Date: 27/04/2021 Depth (m) (Stratum Thickness) Water Added (Litres) Casing Ø (mm) Depth (m) Reduced Samples & Testing Chiselling (mins) Water Level (m) Installation / Backfill Strata Description Level (mAOD) Depth (m) MADE GROUND: Light grey slightly gravelly silty fine to medium SAND. Gravel is angular to subangular fine to coarse mixed lithologies. [PFA] 5.00 5.00 - 5.50 (15.00) 10 Continued on Next Page Observations / Remarks Misc. Shift Information Backfill Installations
 Time
 Depth (m)
 Casing (m)
 Water (m)

 00:00
 15:00
 15:00
 From (m) 0.00 0.20 1.00 To (m) Instrument Details Casing Used
No Monitoring Point Installed
Hammer Ref & Energy Ratio (%)



Web: www.central-alliance.co.uk

Cable **Percussion**

Log Type

BH4 DRAFT

Strike (m) Rises To (m) Time (min)

Exploratory Hole Number

CENTRAL ALLIANCE

Sheet 2 of 2 GEO Methodology & Plant Location Details: Project No: 2371077 Scale: 1:50 Depth (m) 0.00 - 1.20 1.20 - 15.00 Method Inspection Pit Cable Percussio Plant Used Hand Tools Dando 3000 Easting: 459189.53 Northing: 409173.46 Checked By: BJ Thorpe Marsh Name: Elevation: 16.71mAOD Final Depth: 15.00m Approved By: NH Location: Thorpe-in-Balne Logged By: Grid System: OSGB Start Date: 26/04/2021 Client: Egniol Orientation: N/A Inclination: Finish Date: 27/04/2021 Depth (m) (Stratum Thickness) Casing Ø (mm) Depth (m) Reduced Water Added (Litres) Samples & Testing Chiselling (mins) Water Level (m) Installation , Backfill Strata Description Level (mAOD) Depth (m) MADE GROUND: Light grey slightly gravelly silty fine to medium SAND. Gravel is angular to subangular fine to coarse mixed lithologies. [PFA] 11 12 13 14 EOH at 15.00m - Scheduled depth 17 18 19 20 Observations / Remarks Shift Information Backfill Installations | Shift Information | Time | Depth (m) | Casing (m) | Water (m) | From (m) | 00:00 | 15:00 | 15:00 | - 0.20 | 1:00 | Resp. Zone | Depth (m) | Diameter | 1.00 - 15.00 | 15.00 | 75 To (m) Instrument Details Casing Used
No Monitoring Point Installed
Hammer Ref & Energy Ratio (%) Groundwater Strikes



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Header Sheet

Log Type

Exploratory Hole Number

BH5 DRAFT CENTRAL ALLIANCE

Project No:	2371077		Location I	Details			Met	hodology & P	lant	Scale:	1:50
		Easting:	459179.40	Northing:	409413.21	From (m)	Meth	nod	Plant Used	Checked:	BJ
Name:	Thorpe Marsh	Lusting.	455275140	reor crimig.	105115121	0.00 - 1.20	Inspecti		Hand Tools	orreoneu.	
		Elevation:	18.42mAOD	Final Depth:	15.00m	1.20 - 15.00	Cable Per	cussion	Dando 2000	Approved:	NH
Location:	Thorpe-in-Balne			Cuid Custom	occn					Ctt D-t-	27/04/2021
	·	Logger:	н	Grid System:	OSGB					Start Date:	27/04/2021
Client:	Egniol	Orientation:	N/A	Inclination:	90°					End Date:	27/04/2021

Hole Diameter						
Depth (m)	Diam (mm)					
15.00	200					

Casing Diameter						
Depth (m)	Diam (mm)					
15.00	200					
l						
I						

	Groundwater Strikes						
Strike	Casing	Sealed	Time	Rose To	Remarks		
(m)	(m)	(m)	(min)	(m)	Remarks		
9.00	-	-	20	8.50			

	Installation / Instrument Details						
	•			Diam			
Date	Instrument Details	To (m)	Resp. Zone (m)	(mm)			
27/04/2021	Standpipe	15.00	1.00 - 15.00	75			

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

Backfill					
Depth (m)	Legend Code				
0.00 - 0.20	Concrete				
0.20 - 1.00	Bentonite				
1.00 - 15.00	Gravel				

In-Situ Tests	
PID	0
Hand Vane*	0
Standard Penetration Tests	0

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

Sample Summary									
Enviro	nmer	ntal Samples							
Soil	1	Water	0						
Geotechnical Samples									
Bulk	2	2 Large Bulk							
Disturbed	0	Disturbed (NR)	0						
Piston	0	Piston (NR)	0						
Undisturbed	0	Undisturbed (NR)	0						
Undistu	rbed '	Thin Wall	0						
Undisturbed Thin Wall (NR)									
Co	re San	nple	0						
			<(C						

(NR) Indicates sample undertaken but with 0% Recovery

	Standard Penetration Test Summary											
Test Type		Casing				Penetration	N	Reported Result	Hammer Ref			
,,,,,	(m)	(m)	(m)	Blows	Blows	Total (mm)						
0		١.	0									
173	O2 .	.0										
W/	(-4	ř l								
	$()^{\prime})$			0		R						
17-13-	11 11	\sim										
	151	11 11.	5									
(D)		17.	U M		1/							
0 /Z ~ (C		a (C)	0 6	M	1/1							
	(A 1									
3/110/11	11/10		7/5	n								

SPT Hammer Ref.	Energy Ratio (%)

No Standard Penetration Tests Undertaken

Chis	elling		Water	Added
Depth (m)	Duration (mins)		Depth (m)	Litres
]		

Drilling Flush										
Depth (m)	Flush Type	Flush Colour	Return %							

	Applicab	le to Dy	namic S	ampling Only
		Dynamic	Sampling	Runs
	Depth (m)	Diam (mm)	Recovery %	Remarks
L				



Cable Percussion Web: www.central-alliance.co.uk

Log Type

BH5 DRAFT

Exploratory Hole Number

CENTRAL ALLIANCE GEO

Sheet 1 of 2 Location Details: Methodology & Plant Project No: 2371077 Scale: 1:50 Method Inspection Pit Cable Percussion Plant Used Hand Tools Dando 2000 Depth (m) 0.00 - 1.20 1.20 - 15.00 Easting: Checked By: BJ 459179.40 409413.21 Northing: Name: Thorpe Marsh Elevation: Final Depth: 15.00m Approved By: 18.42mAOD NH

	Location:	Thorpe-in-Balne	Logged By:	18.42mAOD	Grid Sy		DSGB								Start Date:	NH 27/04/2021
The property of the property o	Client:	Egniol														27/04/2021
MADE GROUND: Light grey sightly greetly ally fire to medium SANG Ground is supplied to subdangation fine to counter mixed Intelliging 1979 1		Charte Description			Depth (m)		Chiselling			Casing Ø	Water In	nstallation /			Samples & Testing	
SANC Grave its angular to subangular fine to coanse mixed thotologies. [PFA] 1					(Stratum Thickness)	(mAOD)		(Litres)	Depth (m)	(mm) Depth (m)		Backfill	Depth (m)	Ref	Test Result	s
2 - (15.00) (15.00) (15.00) (25.00)	SAND.	Gravel is angular to subangular fine to coars	ie to mediu ie mixed	m												1-
8 - Continued on Next Page Observations / Remarks Misc. Shift Information Seed on Section Series on Section Series on Section Sectio								- 19					2.00 - 2.50	1 B		2 —
(15.00) 8.50 8.50 8.50 8.50 8.50 8.50 8.50 8.5																4
(15.00) (15	6-				DA1	50	3									6-
Continued on Next Page Observations / Remarks Misc. Shift Information Backfill Installations Date Time Depth (m) Casing (m) Water (m) From (m) To (m) Material Instrument Details Resp. Zone Depth (m)	7				(15.00)								8.00	3 ES		7 — 7 — - - - - - - - 8 —
Continued on Next Page Observations / Remarks Misc. Shift Information Backfill Installations Date Time Depth (m) Casing (m) Water (m) From (m) To (m) Material Instrument Details Resp. Zone Depth (m)											8.70		8.00 - 8.50	2 B		- - - - - - - - 9 —
Date Time Deoth (m) Casing (m) Water (m) From (m) To (m) Material Instrument Details Resp. Zone Deoth (m)	10	Continued on Next Page									•					10 —
Date Time Depth (m) Casing (m) Water (m) From (m) To (m) Material Instrument Details Resp. Zone Depth (m) Casing (m) Part (m) To (m) Material Instrument Details Resp. Zone Depth (m) Casing (m) Part (m) To (m) Material Instrument Details Resp. Zone Depth (m) Casing (m) Part (m) Casing (m) Part	Observations	/ Remarks	Mi													
			Sroundwater Encountered Casing Used Monitoring Point Installed	Date Date	Time	Depth	h (m) Cas	ing (m) V	Vater (m)	0.00 0.20	0.20 1.00	Concrete Bentonite	Sta	GI es To (m)	roundwater Strikes	15.00 75



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Cable

Percussion

BH5 DRAFT

Exploratory Hole Number

CENTRAL ALLIANCE

Sheet 2 of 2 GEO Location Details: Methodology & Plant Project No: 2371077 Scale: 1:50 Method Inspection Pit Cable Percussion Plant Used Hand Tools Dando 2000 Depth (m) 0.00 - 1.20 1.20 - 15.00 Easting: Checked By: BJ 459179.40 409413.21 Northing: Name: Thorpe Marsh Elevation: Final Depth: 15.00m Approved By: 18.42mAOD NH

Loca	ation:	Thorpe-in-Balne	Logged By:	18.42m HI	IIAOD	Grid Sys		SGB								Start Date:		NH 7/04/2021
Clie			Orientation:			Inclinat		0°								Finish Date:		7/04/2021
				<u> </u>		Depth (m)	Reduced		Water	Hole Ø	Casing Ø					Samples & Tes		.,,
		Strata Description			Legend	(Stratum Thickness)	Level (mAOD)	Chiselling (mins)	Added (Litres)	(mm) Depth (m	(mm)	Water Level (m)	Installation / Backfill	Depth (m)	Ref		t Results	
111	MADE G SAND. G lithologid	ROUND: Light grey slightly gravelly silty fir ravel is angular to subangular fine to coars es. [PFA]	ne to mediu se mixed	um								0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0						11 -
12 -																		12 -
-												•						12 - - - - -
13									A CH			• • • • • • • • • • • • • • • • • • • •						13 -
14 — 																		14 -
		EOH at 15.00m - Scheduled depth	ı		R	(15,00)	3.42	3) °	200 15.00	200 15.00							15
16 				1		DELL												16 - - - - -
																		17 — - - - - - -
																		18 -
19 - - - - - - -																		19 -
20 -												-						20 -
Obs	ervations /	Remarks	М	lisc.			Shift Info	rmation	1			Backfill				Installation	S	
				No Montoring Point Installed Hammer Ref & Energy Ratio (%)	Date	Time			sing (m)	Water (m)	From (m) 0.00 0.20 1.00		Material Concrete Bentonite Gravel		nent Deta		Zone Dep 15.00 1	oth (m) Diameter 5.00 75
			Groundwate	No Monitoria Hammer Ref &										Strike (m) Ri			Rem	arks



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Log Type

Exploratory Hole Number

BH6 DRAFT



Project No:	2371077		Location I	Details			Met	thodology & P	lant	Scale:	1:50
		Easting:	459203.28	Northing:	409586.45	From (m)	Met	hod	Plant Used	Checked:	BJ
Name:	Thorpe Marsh	Lusting.	133203120	rvor crimig.	103300113	0.00 - 1.20	Inspect		Hand Tools	circoncu.	55
		Elevation:	18.47mAOD	Final Depth:	15.00m	1.20 - 15.00	Cable Pe	rcussion	Dando 3000	Approved:	NH
Location:	Thorpe-in-Balne	Logger:	н	Grid System:	OSGB					Start Date:	27/04/2021
Client:	Egniol	Orientation:	N/A	Inclination:	90°					End Date:	27/04/2021

Hole Di	ameter
Depth (m)	Diam (mm)
15.00	200

Casing D	iameter
Depth (m)	Diam (mm)
15.00	200

	Groundwater Strikes					
Strike	Casing	Sealed	Time	Rose To	Remarks	
(m)	(m)	(m)	(min)	(m)	Remarks	
ł						

	Installation / Instrument Details						
Date	Instrument Details	To (m)	Resp. Zone (m)	Diam (mm)			
27/04/2021	Standpipe	15.00	1.00 - 15.00	75			

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

No Groundwater Encountered

Backfill					
Depth (m)	Legend Code				
0.00 - 0.20	Concrete				
0.20 - 1.00	Bentonite				
1.00 - 15.00	Gravel				

In-Situ Tests	
PID	0
Hand Vane*	0
Standard Penetration Tests	0

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

Sample Summary					
Environmental Samples					
Soil	Soil 1 Water				
Geotechnical Samples					
Bulk	2	Large Bulk	0		
Disturbed	0	Disturbed (NR)	0		
Piston	0	Piston (NR)	0		
Undisturbed	0	Undisturbed (NR)	0		
Undisturbed Thin Wall 0					
Undisturbed Thin Wall (NR) 0					
Core Sample 0					
			30		

(NR) Indicates sample undertaken but with 0% Recovery

					Sta	ndard	Penetrati	on T	est Summary	
	Test Type	Depth (m)	Casing (m)	Water (m)	Seating Blows		Penetration Total (mm)	N	Reported Result	Hammer Ref
0.04										

SPT Hammer Ref.	Energy Ratio (%)

No Standard Penetration Tests Undertaken

1		
	Depth (m)	Litres
J		

Ap	plicable to	Rotary On	у			
Drilling Flush						
Depth (m)	Flush Type	Flush Colour	Return %			

Applic	Applicable to Dynamic Sampling Only						
	Dynamic Sampling Runs						
Depth (m	Depth (m) Diam (mm) Recovery % Remarks						



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Log Type

Cable

Percussion

DRAFT

Exploratory Hole Number

BH6



Sheet 1 of 2 GEO Project No: Location Details: Methodology & Plant 2371077 Scale: 1:50 Depth (m) 0.00 - 1.20 1.20 - 15.00 Method Inspection Pit Cable Percussio Plant Used Hand Tools Dando 3000 409586.45 BJ Easting: 459203.28 Northing: Checked By: Name: Thorpe Marsh Elevation: 18.47mAOD Final Depth: 15.00m Approved By: NH Location: Thorpe-in-Balne Logged By: Grid System: OSGB Start Date: 27/04/2021 Client: Egniol Orientation: N/A Inclination: Finish Date: 27/04/2021 Depth (m) (Stratum Thickness) Water Added (Litres) Casing Ø (mm) Depth (m) Reduced Samples & Testing Chiselling (mins) Water Level (m) Installation , Backfill Strata Description Level (mAOD) Depth (m) MADE GROUND: Light grey slightly gravelly silty fine to medium SAND. Gravel is angular to subangular fine to coarse mixed lithologies. [PFA] 5.00 - 5.50 1 B (15.00) 10 Continued on Next Page Observations / Remarks Misc. Shift Information Backfill Installations | Depth (m) | Casing (m) | Water (m) | From (m) | 0.00 | 0.20 | 1.00 | To (m) Instrument Details Casing Used
No Monitoring Point Installed
Hammer Ref & Energy Ratio (%) Groundwater Strikes Strike (m) Rises To (m) Time (min)



2371077

Alliance House, South Park Way Wakefield 41 Business Park Wakefield WF2 0XJ Tel +44(0)1924 229889

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Northing:

409586.45

Location Details:

459203.28

Easting:

Log Type

Cable **Percussion**

Sheet 2 of 2

Exploratory Hole Number **BH6**

DRAFT

Methodology & Plant



Scale:

Checked By:



1:50

BJ

Depth (m) 0.00 - 1.20 1.20 - 15.00 Method Inspection Pit Cable Percussio Plant Used Hand Tools Dando 3000 Thorpe Marsh Name: Elevation: 18.47mAOD Final Depth: 15.00m Approved By: NH Location: Thorpe-in-Balne Logged By: Grid System: OSGB Start Date: 27/04/2021 Client: Egniol Orientation: N/A Inclination: Finish Date: 27/04/2021 Depth (m) (Stratum Thickness) Water Added (Litres) Casing Ø (mm) Depth (m) Reduced Samples & Testing Chiselling (mins) Water Level (m) Installation , Backfill Strata Description Level (mAOD) Depth (m) MADE GROUND: Light grey slightly gravelly silty fine to medium SAND. Gravel is angular to subangular fine to coarse mixed lithologies. [PFA] 11 12 13 14 EOH at 15.00m - Scheduled depth 17 18 19 20 Observations / Remarks Shift Information Backfill Installations To (m) Material
0.20 Concrete
1.00 Bentonite
15.00 Gravel Depth (m) Casing (m) Water (m) From (m) Resp. Zone | Depth (m) | Diameter | 1.00 - 15.00 | 15.00 | 75 Instrument Details Casing Used
No Monitoring Point Installed
Hammer Ref & Energy Ratio (%) Groundwater Strikes Strike (m) Rises To (m) Time (min)



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Log Type

Header

Exploratory Hole Number

MW1D





2371077 Location Details Methodology & Plant Scale: 1:50 Project No: From (m) 0.00 - 1.20 1.20 - 15.00 Method Inspection Pit Cable Percussion Plant Used Hand Tools Dando 2000 409841.07 BJ Easting: 459707.68 Checked: Northing: Name: Thorpe Marsh NH Elevation: 8.93mAOD Final Depth: 15.00m Approved: Location: Thorpe-in-Balne Logger: Grid System: OSGB Start Date: 27/04/2021 Client: End Date: 29/04/2021 Egniol Orientation: N/A Inclination: 90°

Hole Di	ameter
Depth (m)	Diam (mm)
15.00	200

Casing D	iameter
Depth (m)	Diam (mm)
15.00	200
l	
l	

	Groundwater Strikes										
Strike	Casing	Sealed	Time	Rose To	Damania.						
(m)	(m)	(m)	(min)	(m)	Remarks						
1.80	1.50	-	0	1.80							
3.90	4.50	-	0	3.90							
7.70	7.50	-	0	7.70							
12.50	12.50	-	0	12.50							

Installation / Instrument Details											
Date	Instrument Details	To (m)	Resp. Zone (m)	Diam (mm)							
29/04/2021	Standpipe	15.00	5.00 - 15.00	75							

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

Backfill							
Depth (m)	Legend Code						
0.00 - 0.20	Concrete						
0.20 - 5.00	Bentonite						
5.00 - 15.00	Gravel						

In-Situ Tests						
PID	0					
Hand Vane*	0					
Standard Penetration Tests	7					

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

			_						
Sample Summary									
Environmental Samples									
Soil	Soil 4								
Geote	chnic	cal Samples							
Bulk	Bulk 12 Large Bulk								
Disturbed	17	Disturbed (NR)	0						
Piston	0	Piston (NR)	0						
Undisturbed	3	Undisturbed (NR)	0						
Undistu	rbed 1	Thin Wall	0						
Undisturbe	ed Thi	n Wall (NR)	0						
Cor	e San	nple	0						

(NR) Indicates sample undertaken but with

Standard Penetration Test Summary											
Test Type	Depth	Casing	Water	Seating		Penetration	N	Reported Result	Hammer Ref		
rest type	(m)	(m)	(m)	Blows	Blows	Total (mm)	14	Reported Result	Hammer Ker		
Split Spoon	1.20	-	-	1	1	450		N=1 (1,/,1,,)	JB03		
Split Spoon	2.00	-	-	2	1	450		N=2 (1,1/1,,,1)	JB03		
Split Spoon	3.00	-	-	2	2	450		N=2 (1,1/,1,,1)	JB03		
Split Spoon	4.00	-	-	2	7	450	7	N=7 (1,1/1,2,2,2)	JB03		
Split Spoon	8.00	-	-	4	14	450	14	N=14 (2,2/3,4,4,3)	JB03		
Split Spoon	9.45	-	-	5	20	450	20	N=20 (2,3/5,5,5,5)	JB03		
Split Spoon	12.00	-	-	8	28	450	28	N=28 (4,4/6,6,7,9)	JB03		

SPT Hammer Ref.	Energy Ratio (%)
JB03	97

Applicable to Cable Percussion Only

Chise	elling	Water	Added
Depth (m)	Duration (mins)	Depth (m)	Litres

Drilling Flush												
Depth (m)	Flush Type	Flush Colour Return										
	Depth (m)											

Applicable to Rotary Only

Applicable to Dynamic Sampling Only												
Dynamic Sampling Runs												
Depth (m)	Depth (m) Diam (mm) Recovery % Remarks											



2371077

Project No:

Alliance House, South Park Way Wakefield 41 Business Park Wakefield WF2 0XJ Tel +44(0)1924 229889

Location Details:

Web: www.central-alliance.co.uk

Log Type

Cable

Percussion
Sheet 1 of 2

Exploratory Hole Number

Methodology & Plant

MW1D

DRAFT



1:50

Scale:

Depth (m) 0.00 - 1.20 1.20 - 15.00 Method Plant Used Easting 459707.68 Northing: 409841.07 Checked By: BJ Name: **Thorpe Marsh** Hand Tools Dando 2000 Elevation: 8.93mAOD Final Depth: 15.00m Approved By NH Location: Thorpe-in-Balne Logged By: Grid System: OSGB Start Date: 27/04/2021 Client Egniol Orientation N/A Inclination: Finish Date: 29/04/2021 Depth (m) Reduced Samples & Testing Water Level (m) Installation , Backfill Strata Description Legend (Stratum Thickness Level (mAOD) Added (Litres) (mm) Depth (m (mins) Depth (m) MADE GROUND: Light grey CONCRETE. (0.50)0.50 8.43 MADE GROUND: Light grey slightly gravelly silty fine to medium 0.70 1 D SAND. Gravel is angular to subangular fine to coarse mixed lithologies. [PFA] 1.20 - 1.65 1.20 - 1.70 1.20 - 1.70 2 D 3 B 33 ES SPT(S) 1.20m, N=1 (1,/,1,,) (2.30) SPT(S) 2.00m, N=2 (1,1/1,,,1) 6.12 2.80 2.80 - 3.00 Dark brown PEAT with strong hydrocarbon odour. (0.20) 3.00 sile 5.92 SPT(S) 3.00m, N=2 (1,1/,1,,1) [Hemingbrough Formation] Blackish brown slightly clayey gravelly SAND. Gravel is angular to subangular fine to coarse sandstone. [Hemingbrough 3.80 10 D From 3.90m, medium high cobble content. Boulders are subangular to 4.00 - 4.45 11 D SPT(S) 4.00m, N=7 (1,1/1,2,2,2) subrounded fine to coarse sandstone. 4.80 12 D 13 D Greyish brown slightly sandy silty CLAY with medium boulder 5.00 - 5.50 content. Sand is fine to coarse. Boulders are angular to subangular fine to coarse sandstone. [Hemingbrough **Formation** 15 D SPT(S) 8.00m, N=14 (2,2/3,4,4,3) (7.50)9 9.45 - 9.95 21 U SPT(S) 9.45m, N=20 (2,3/5,5,5,5) 9.50 - 10.00 22 B 10 Continued on Next Page Observations / Remarks Misc. Shift Information Backfill Installations To (m) Depth (m) Casing (m) Water (m) Instrument Details Casing Used

No Monitoring Point Ins
Hammer Ref & Energy Rc
1803 (97(%) Groundwater Strikes (m) Time (min) Strike (m) 1.80 3.90 7.70



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Log Type

Cable

Percussion

MW1D DRAFT

Exploratory Hole Number

CENTRAL ALLIANCE

Sheet 2 of 2 GEO Location Details: Methodology & Plant Project No: 2371077 Scale: 1:50 Method Inspection Pit Cable Percussion Plant Used Hand Tools Dando 2000 Depth (m) 0.00 - 1.20 1.20 - 15.00 409841.07 Checked By: BJ Easting: 459707.68 Northing: Name: Thorpe Marsh Elevation: Approved By: Final Depth: 15.00m 8.93mAOD NH

Locati	on: Thorpe-in-Balne	Elevation:		nAOD	Final De		5.00m	1.20 - 1	13.00	Cable Pe	rcussion		Dando 2000		Approved By:	NH	
		Logged By:	JP		Grid Sys		SGB								Start Date:	27/04/20	
Client:	: Egniol	Orientation:	N/A		Inclinati	on: 9		Water	Hole Ø	Casing Ø			I		Finish Date: Samples & Testing	29/04/20	-21
	Strata Description			Legend	Depth (m) (Stratum Thickness)	Level (mAOD)	Chiselling (mins)	Added (Litres)	(mm) Depth (m)	(mm) Depth (m)	Water Level (m)	Installation / Backfill	Depth (m)	Ref	Test Resul	ts	
- (Greyish brown slightly sandy silty CLAY with mediu content. Sand is fine to coarse. Boulders are angul subangular fine to coarse sandstone. [Hemingbrow Formation]	lar to	r			. ,							10.50 - 10.95	23 U			
** - - - - - - - -													11.50	25 D			-
12 -	Greyish brown fine to coarse SAND. [Hemingbrou	gh Formati	ion]		12.50	-3.58					12.50 12.50		12.00 - 12.45 12.00 - 12.50 12.00 - 12.50	27 B	SPT(S) 12.00m, N=28 (4	4,4/6,6,7,9)	12
13 -													13.00	28 D		1	13 -
14 -					(2.50)	SUL			EK	1	a l		13.50 - 13.95 13.50 - 14.00	29 D 30 B		1	14 –
													14.50	31 D			-
15 -	EOH at 15.00m - Scheduled depth		P	B.	15,00	608	3	D.	15.00	200 15.00		<u>. ⊢°.</u>	15.00 - 15.45	32 D		2	15 ⁻
16 -			N.		Dry 1											1	16 -
17 -																1	17 ⁻
18 —																1	18 -
19 -																1	19 —
20									-							2	20 -
Obser	vations / Remarks	N	1isc.			Shift Info	rmation	1	1		Backfill				Installations		_
			No Monitoring Point Installed Hammer Ref & Energy Ratio (%) 1803 (97(%)	Date 27/04 28/04	Time 00:00 00:00		(m) Ca:	sing (m) 1 3.00 15.00	Water (m) - - -	From (m) 0.00 0.20 5.00	To (m) 0.20 5.00 15.00	Material Concrete Bentonite Gravel			ails Resp. Zone 5.00 - 15.00 roundwater Strikes		75
		Ground	No Moni. Hammer)										1.80 3.90 7.70	1.80 3.90 7.70	0 0		



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Sheet

Log Type Exploratory Hole Number

Header

MW2
DRAFT

CENTRAL ALLIANCE

Project No:	2371077		Location (Details			Methodology & P	Scale:	1:50	
Name:	Thorpe Marsh	Easting: 459777.17		Northing:	409563.73	From (m) 0.00 - 1.20	Method Inspection Pit	Plant Used Hand Tools	Checked:	BJ
	·	Elevation:	10.79mAOD	Final Depth:	18.00m	1.20 - 18.00	Cable Percussion	Dando 2000	Approved:	NH
Location:	Thorpe-in-Balne	Logger:	JP	Grid System:	OSGB				Start Date:	29/04/2021
Client:	Egniol	Orientation:	N/A	Inclination:	90°				End Date:	30/04/2021

Hole Di	ameter
Depth (m)	Diam (mm)
18.00	200

Casing Diameter					
Diam (mm)					
200					

	Groundwater Strikes								
Strike	Strike Casing Sealed Time Rose To								
(m)	(m)	(m)	(min)	(m)	Remarks				
4.20	4.50	-	0	0.00					
10.90	10.50	-	0	0.00					
14.90	15.00	-	0	0.00					

Installation / Instrument Details						
Date	Instrument Details	To (m)	Resp. Zone (m)	Diam (mm)		
30/04/2021	Standpipe	18.00	10.00 - 18.00	75		

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

Backfill				
Depth (m)	Legend Code			
0.00 - 0.20	Concrete			
0.20 - 10.00	Bentonite			
10.00 - 18.00	Gravel			

In-Situ Tests	
PID	0
Hand Vane*	0
Standard Penetration Tests	0

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

Sample Summary							
Sam	pie s	Summary					
Enviror	nmer	ntal Samples					
Soil	Soil 0 Water						
Geote	Geotechnical Samples						
Bulk	0	Large Bulk	0				
Disturbed	Disturbed 0 Disturbed (NR)						
Piston	0	Piston (NR)	0				
Undisturbed	Undisturbed 0 Undisturbed (NR)						
Undisturbed Thin Wall							
Undisturbed Thin Wall (NR)							
Cor	e San	nple	0				

(NR) Indicates sample undertaken but with 0% Recovery

No Samples Taken

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

SPT Hammer Ref.	Energy Ratio (%)

No Standard Penetration Tests Undertaken

elling	ı	Water Added		
Duration (mins)		Depth (m)	Litres	
	elling Duration (mins)			

Drilling Flush					
Depth (m)	Flush Type	Flush Colour	Return %		

Applicab	Applicable to Dynamic Sampling Only							
Dynamic Sampling Runs								
Depth (m)	Diam (mm)	Recovery %	Remarks					



2371077

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Location Details:

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Log Type

Cable

Percussion

Sheet 1 of 2

Exploratory Hole Number

MW2
DRAFT

Methodology & Plant



1:50

Scale:

Depth (m) 0.00 - 1.20 1.20 - 18.00 Method Inspection Pit Cable Percussio Plant Used Hand Tools Dando 2000 409563.73 Easting 459777.17 Northing: Checked By: BJ Name: **Thorpe Marsh** Elevation: 10.79mAOD Final Depth: 18.00m Approved By: NH Thorpe-in-Balne Location: Logged By: Grid System: OSGB Start Date: 29/04/2021 Client: Egniol Orientation N/A Inclination: Finish Date: 30/04/2021 Depth (m) (Stratum Thickness) Casing Ø (mm) Depth (m) Reduced Water Added (Litres) Samples & Testing Chiselling (mins) Water Level (m) Installation , Backfill Strata Description Level (mAOD) Depth (m) MADE GROUND: Light grey slightly gravelly silty fine to medium SAND. Gravel is angular to subangular fine to coarse mixed lithologies. (PFA) 7.20 3.59 Brown slightly gravelly slightly sandy silty CLAY. Gravel is subangular to angular fine to coarse sandstone siltstone. Sand is fine to coarse. [Hemingbrough Formation] 10 Continued on Next Page Observations / Remarks Misc. Shift Information Backfill Installations Depth (m) Casing (m) Water (m) To (m) Instrument Details Groundwater Strikes (m) Time (min) 0.00 0.00 0.00



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Cable Percussion

Log Type

MW2
DRAFT

Exploratory Hole Number

CENTRAL ALLIANCE

Sheet 2 of 2 2371077 Location Details: Methodology & Plant Scale: 1:50 Project No: Method Inspection Pit Plant Used Hand Tools Easting: 459777.17 409563.73 Checked By: BJ Name: Northing: Thorpe Marsh

Name	: Thorpe Marsh	Elevation:		9mAOD	Final De		8.00m	0.00 - 1 1.20 - 1	1.20 8.00	Inspect Cable Pe	tion Pit rcussion		Hand Tools Dando 2000		Approved By:	NH
Locat	ion: Thorpe-in-Balne	Logged By:	JP	SIIIAOD	Grid Sy		SGB								Start Date:	29/04/2021
Client	: Egniol	Orientation:	N/A		Inclinat		0°								Finish Date:	30/04/2021
	-5		,		Depth (m)	Reduced		Water	Hole Ø	Casing Ø					Samples & Testing	30,01,2021
	Strata Description			Legend	(Stratum Thickness)	Level (mAOD)	Chiselling (mins)	Added (Litres)	(mm) Depth (m)	(mm) Depth (m)	Water Level (m)	Installation / Backfill	Depth (m)	Ref	Test Results	
+	Brown slightly gravelly slightly sandy silty CLAY. Gra	evel is														
1 1	subangular to angular fine to coarse sandstone silt		d is													
	fine to coarse. [Hemingbrough Formation]															-
1 1				<u> </u>												
1 1				<u> </u>	(7.30)											
11 -				 -							10.90					11 -
				F_=_								. ∄ .				
																-
				<u> </u>								·: H				
12 -				<u> </u>												12 -
1 1				<u> </u>												
1 4																-
=				<u></u>												
				<u> </u>												-
13 -																13 -
				<u></u>			n					:: 				
-								- PP								=
-				<u> </u>		- M	The	481	NP.			:: 目 ::				-
					18 00	SII "	Mis	9)	SII							
14 -				<u></u> ,			Plin	W)	201		\bigcirc $/$					14 -
					11111 4	90	1797	711	1/1/2	1 1						-
1 +	Brown slightly gravelly silty fine to coarse SAND. G	ravel is		C.	14,50	-3.71	0,~	2000	M	11/1						-
1 1	angular to subangular fine to medium sandstone s				Um C	H. M	1/1			ļo.						
- 15 -	[Hemingbrough Formation]		0		Me		$\mathcal{O}_{III_{II}}$	0	-11		14.90					15 [–]
			1	09		UB		00								13 .
				1/100	16 m		(2)									
					1100											-
					Maa											
16 -				0	Director											16 =
-					(3.50)											
			`		(3.30)											
=	At 16.50m, 1No. subangular sandstone cobble.															-
17 -																17 -
1 7																
]																
]																-
18	EOH at 18.00m - Scheduled depth			×1111	18.00	-7.21			200 18.00	200 18.00						18 -
	·															
																-
=																
19 -																19 -
=																-
																-
20																20 -
Obse	rvations / Remarks	М	isc.			Shift Info					Backfill				Installations	
		,	<u> </u>	Date	Time	Depth	(m) Casi	ing (m) V	Vater (m)	From (m) 0.00	To (m)	Material Concrete	Instrum	ent Det	ails Resp. Zone D	epth (m) Diameter 18.00 75
		interec	No Montoring Point Installed Hammer Ref & Energy Ratio (%)							0.20	10.00 18.00	Bentonite Gravel	3.0			
		r Encou	Energy											G	roundwater Strikes	
		dwate: Casing	Ref &										Strike (m) Ris	es To (m) Time (min) Re	emarks
		Groum	тттел										4.20 10.90	0.00	0	
		2	ĭ										14.90	0.00	0	



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Header Sheet

Log Type

Exploratory Hole Number

MW3 DRAFT



Project No:	2371077		Location I	Details			Met	hodology & P	lant	Scale:	1:50
		Easting:	459502.83	Northing:	409076.59	From (m)	Met	hod	Plant Used	Checked:	BJ
Name:	Thorpe Marsh	Lusting.	455502105	reor criming.	103070133	0.00 - 1.20	Inspect	ion Pit	Hand Tools	onconcu.	
		Elevation:	2.24mAOD	Final Depth:	13.00m	1.20 - 13.00	Cable Pe	rcussion	Dando 2000	Approved:	NH
Location:	Thorpe-in-Balne	Logger:	JP	Grid System:	OSGB					Start Date:	23/04/2021
Client:	Egniol	Orientation:	N/A	Inclination:	90°					End Date:	26/04/2021

Hole Di	ameter
Depth (m)	Diam (mm)
13.00	200

Casing Diameter										
Depth (m)	Diam (mm)									
13.00	200									

	Groundwater Strikes											
Strike	Casing	Sealed	Time	Rose To	Dl							
(m)	(m)	(m)	(min)	(m)	Remarks							

	Installation / Instrument Details											
Date	Instrument Details	To (m)	Resp. Zone (m)	Diam (mm)								
26/04/2021	Standpipe	13.00	8.50 - 13.00	75								

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

No Groundwater Encountered

Backfill						
Depth (m)	Legend Code					
0.00 - 0.20	Concrete					
0.20 - 8.50	Bentonite					
8.50 - 13.00	Gravel					

In-Situ Tests	
PID	0
Hand Vane*	0
Standard Penetration Tests	0

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

Sample Summary									
Environmental Samples									
Soil	Soil 0 Water								
Geotechnical Samples									
Bulk	0	Large Bulk	0						
Disturbed	0	Disturbed (NR)	0						
Piston	0	Piston (NR)	0						
Undisturbed	0	Undisturbed (NR)	0						
Undistu	irbed '	Thin Wall	0						
Undisturbed Thin Wall (NR)									
Co	re San	nple	0						
			40						

(NR) Indicates sample undertaken but with 0% Recovery

No Samples Taken

ſ					Sta	ndard	Penetrati	on T	est Summary	
ı	Test Type						Penetration	N	Reported Result	Hammer Ref
ı	icst type	(m)	(m)	(m)	Blows	Blows	Total (mm)		Reported Result	Tidililile Nei
ı										
ı										
ı										
		7								
	0 1	$\sim 1/1$	Ι.	0						
	15	(O) ,	. 0							
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đ	≫/// "°	\cap	(M		6		1			
Л		//////////	-							
7		200	0	2	1	1	(()) "			
d	40) J	17/20	111 .	1/1	S .					
Y	2) (_	On,		1 1				
9	" WC) _	2 (M)	0 6		10				
1		9 (1 N	100					
2	11011	//// 0	ÍA.		N.					

SPT Hammer Ref.	Energy Ratio (%)

No Standard Penetration Tests Undertaken

Chis	elling	Water Added			
Depth (m)	Duration (mins)	Depth (m)	Litres		

Drilling Flush									
Depth (m)	Flush Type	Flush Colour	Return %						

Applicable to Dynamic Sampling Only								
	Dynamic	Sampling	Runs					
Depth (m)	Diam (mm)	Recovery %	Remarks					



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Cable Percussion

Log Type

Exploratory Hole Number

MW3

DRAFT

CENTRAL ALLIANCE

GEO Methodology & Plant Location Details: 2371077 Scale: 1:50 Project No: Depth (m) 0.00 - 1.20 1.20 - 13.00 Method Inspection Pit Cable Percussio Plant Used Hand Tools Dando 2000 Easting 459502.83 Northing: 409076.59 Checked By: BJ Name: **Thorpe Marsh** Elevation: 2.24mAOD Final Depth: 13.00m Approved By: NH Thorpe-in-Balne Location: Logged By: Grid System: OSGB Start Date: 23/04/2021 Client Egniol Orientation N/A Inclination: Finish Date: 26/04/2021 Depth (m) Reduced Water Added (Litres) Casing Ø Samples & Testing Water Level (m) Installation , Backfill Strata Description (Stratum Thickness) Level (mAOD) (mm) Depth (m (mins) Depth (m) MADE GROUND: Light brown silty CLAY. [PFA] (5.70) MADE GROUND: Stiff light brownish grey slightly sandy slightly gravelly silty CLAY. Sand is fine to coarse. Gravel is angular to subangular fine to coarse mudstone siltstone sandstone. [PFA] -3.96 MADE GROUND: Light grey slightly gravelly silty fine to medium SAND. Gravel is angular to subangular fine to coarse mixed lithologies. [PFA] (2.20) 8.40 -6.16 Light greyish brown slightly gravelly silty SAND. Gravel is angular to subangular fine to medium sandstone. [Hemingbrough Formation] Continued on Next Page Observations / Remarks Misc. Shift Information Backfill Installations Depth (m) Casing (m) Water (m) To (m) Instrument Details Groundwater Strikes Strike (m) Rises To (m) Time (min)



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Cable Percussion

Log Type

MW3
DRAFT

Exploratory Hole Number



Project No: 2371077 Location Details: Methodology & Plant Scale: 1:50 Depth (m) 0.00 - 1.20 1.20 - 13.00 Method Inspection Pit Cable Percussio Plant Used Hand Tools Dando 2000 409076.59 Checked Bv: BJ Easting: 459502.83 Northing: Name: Thorpe Marsh Elevation: 2.24mAOD Final Depth: 13.00m Approved By: NH Location: Thorpe-in-Balne Logged By: Grid System: OSGB Start Date: 23/04/2021 26/04/2021 Client: Egniol Orientation: N/A Inclination: Finish Date: Depth (m) (Stratum Thickness) Water Added (Litres) Casing Ø (mm) Depth (m) Reduced Samples & Testing Chiselling (mins) Water Level (m) Installation , Backfill Strata Description Level (mAOD) Depth (m) (4.60) 11 Between 11.40m and 13.00m gravel is fine to coarse. 12 200 13.00 13.00 -10.76 13 EOH at 13.00m - Scheduled depth 14 17 18 19 20 Observations / Remarks Shift Information Backfill Installations To (m) Material
0.20 Concrete
8.50 Bentonite
13.00 Gravel Time Depth (m) Casing (m) Water (m) From (m) Resp. Zone | Depth (m) | Diameter | 8.50 - 13.00 | 13.00 | 75 Instrument Details Casing Used
No Monitoring Point Installed
Hammer Ref & Energy Ratio (%) Groundwater Strikes Strike (m) Rises To (m) Time (min)



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Sheet

Log Type

Header

Exploratory Hole Number

MW4D
DRAFT



Project No: 2371077 Location Details Methodology & Plant Scale: 1:50 From (m) 0.00 - 1.20 1.20 - 15.00 Method Inspection Pit Cable Percussio Plant Used Hand Tools Dando 2000 BJ Easting: 459674.83 409328.16 Checked: Northing: Name: Thorpe Marsh NH Elevation: 10.98mAOD Final Depth: 15.00m Approved: Location: Thorpe-in-Balne Logger: Grid System: OSGB Start Date: 21/04/2021 Client: End Date: 21/04/2021 Egniol Orientation: N/A Inclination: 90°

Hole Diameter									
Depth (m)	Diam (mm)								
15.00	200								

Casing Diameter										
Depth (m)	Diam (mm)									
15.00	200									

	Groundwater Strikes										
Strike Casing Sealed Time Rose To Remarks											
(m)	(m)	(m)	(min)	(m)	Remarks						
4.70	4.70 4.50 - 0 0.00										
11.20	10.50	-	0	0.00							

Installation / Instrument Details										
Instrument Details	To (m)	Resp. Zone (m)	Diam (mm)							
Standpipe	15.00	11.20 - 15.00	75							
	Instrument Details	Instrument Details To (m)	Instrument Details To (m) Resp. Zone (m)							

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

5 1 60								
Backfill								
Depth (m)	Legend Code							
0.00 - 0.20	Grout							
0.20 - 11.20	Bentonite							
11.20 - 15.00	Gravel							

In-Situ Tests					
PID	0				
Hand Vane*	0				
Standard Penetration Tests	0				

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

Sample Summary						
Environmental Samples						
Soil 0 Water						
Geotechnical Samples						
Bulk	0	Large Bulk	0			
Disturbed	0	Disturbed (NR)	0			
Piston 0 Piston (NR)						
Undisturbed	0	Undisturbed (NR)	0			
Undisturbed Thin Wall						
Undisturbed Thin Wall (NR)						
Со	re San	nple	0			
		·	20/1			

(NR) Indicates sample undertaken but with 0% Recovery

No Samples Taken

				Sta	ndard	Penetrati	on T	est Summary	
Test Type	Depth (m)	Casing (m)	Water (m)	Seating Blows		Penetration Total (mm)	N	Reported Result	Hammer Ref
	(111)	(111)	(111)	biows	BIOWS	Total (IIIII)			
0,1			C.						
		-10	1						
	M	4		6		R			
	71111					\bigcirc			
400	27/2/2	111 "		\					
N C	Me.		On	R	1 "				
N D	7				ľ				
*/10 / /	0 // //	(A)	17/5	L.					1

SPT Hammer Ref.	Energy Ratio (%)

No Standard Penetration Tests Undertaken

Applicable to Cable Percussion Only

Chis	elling		Water	Added
Depth (m)	Depth (m) Duration (mins)		Depth (m)	Litres

<i>J</i> y							
	Drilling						
Depth (m)	Flush Type	Flush Colour	Return %				
			1				

Applicable to Rotary Only

Applic	Applicable to Dynamic Sampling Only											
Dynamic Sampling Runs												
Depth (m	Depth (m) Diam (mm) Recovery % Remarks											



2371077

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Location Details:

Cable Percussion

Methodology & Plant

CENTRAL ALLIANCE GEO

1:50

Scale:

Sheet 1 of 2

Log Type

MW4D DRAFT

Exploratory Hole Number

Depth (m) 0.00 - 1.20 1.20 - 15.00 Method Inspection Pit Cable Percussio Plant Used Hand Tools Dando 2000 Easting 459674.83 Northing: 409328.16 Checked By: BJ Name: **Thorpe Marsh** Elevation: 10.98mAOD Final Depth: 15.00m Approved By: NH Thorpe-in-Balne Location: Logged By: Grid System: OSGB Start Date: 21/04/2021 Client: Egniol Orientation N/A Inclination: Finish Date: 21/04/2021 Depth (m) (Stratum Thickness) Casing Ø (mm) Depth (m) Reduced Water Added (Litres) Samples & Testing Water Level (m) Installation / Backfill Strata Description Level (mAOD) (mins) Depth (m) MADE GROUND: Light grey slightly gravelly silty fine to medium SAND. Gravel is angular to subangular fine to coarse mixed lithologies. [PFA] 8.80 2.18 Light grey thinly laminated slightly gravelly slightly sandy silty CLAY. Sand is fine to coarse. Gravel is angular to subangular fine to coarse sandstone siltstone mudstone. [Hemingbrough Formation] 10 Continued on Next Page Observations / Remarks Misc. Shift Information Backfill Installations Depth (m) Casing (m) Water (m) To (m) Instrument Details Groundwater Strikes (m) Time (min) Strike (m) 4.70 11.20



Easting:

Project No:

Name:

2371077

Thorpe Marsh

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Cable Percussion

Log Type

MW4D DRAFT

Exploratory Hole Number

CENTRAL ALLIANCE GEO Web: www.central-alliance.co.uk Sheet 2 of 2 Location Details: Methodology & Plant Scale: 1:50 Method Inspection Pit Cable Percussion Plant Used Hand Tools Dando 2000 Depth (m) 0.00 - 1.20 1.20 - 15.00 459674.83 Checked By: BJ 409328.16 Northing: Elevation: Final Depth: 15.00m Approved By: 10.98mAOD NH

Loos#-	Thomas in Poly-	Elevation:	10.98mA	AOD	Final De		5.00m	1.20 -	15.00	Cable Pe	ercussion		Dando 2000		Approved By:		
Location:	Thorpe-in-Balne	Logged By:	JP		Grid Sys		OSGB								Start Date:	21/04,	
Client:	Egniol	Orientation:	N/A		Inclinati	on: 9	0°	\perp							Finish Date:	21/04,	/2021
	Strata Description		Le	egend	Depth (m) (Stratum	Reduced Level (mAOD)	Chiselling (mins)	Audeu	Hole Ø (mm)	Casing Ø (mm)	Water Level (m)	Installation / Backfill		Ref	Samples & Testin		
1-	From 11.20m, greyish brown sandy partings. Sand is medium	to coarse.			Thickness)			(Litres)	Depth (m)	Depth (m)	11.20		Depth (m)			esults	11 -
12 -								× 44	2								12 -
14 -																	14 -
15	EOH at 15.00m - Scheduled depth		8	<u> </u>	15,00	4,02	3	0.	200 15.00	200 15.00							15 -
16 -					Dan.												16 -
- - 17 — - - - -																	17 -
18 -																	18 -
19 -																	19 -
20			-														20 -
Observation	ns / Remarks	М	isc.		9	Shift Info	rmation				Backfill				Installations		
2 3 31	·			Date	Time			sing (m)	Water (m)	From (m) 0.00		Material Grout		nent Deta		ne Depth (m	Diameter 75
		Groundwater Encountered Casing Used	zy Ratio (0.20 11.20	11.20 15.00	Bentonite Gravel	ətd	opipe	11.20 - 15	13.00	,,,
		ter Ena ing Use	& Energ												roundwater Stri		
		undwa Cas	ner Ref										Strike (m) Ris 4.70	0.00		Remarks	
		1005	Нати										11.20	0.00	0		



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Header Sheet

Log Type

Exploratory Hole Number

MW4S

DRAFT



Project No:	2371077	Location Details					Methodology & P	Scale:	1:50	
Name: Thorpe Marsh	Thorne March	Easting:	459663.10	Northing:	409311.32	From (m)	Method	Plant Used	Checked:	ВЈ
	Thorpe Warsh	Elevation:	10.59mAOD	Final Depth:	83.00m	0.00 - 1.20 1.20 - 83.00	Inspection Pit Rotary Open Holing	Hand Tools MC900GT	Approved:	NH
Location:	Thorpe-in-Balne	Logger:	MN	Grid System:	OSGB				Start Date:	03/06/2021
Client:	Egniol	Orientation:	N/A	Inclination:	90°				End Date:	10/05/2021

Hole Di	ameter
Depth (m)	Diam (mm)
83.00	155

Casing Diameter
Depth (m) Diam (mm)
83.00 155

	Groundwater Strikes										
Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks						
(111)	(111)	(111)	(111111)	(111)							

Installation / Instrument Details											
Date	Instrument Details	To (m)	Resp. Zone (m)	Diam (mm)							
10/05/2021	Standpipe	83.00	78.00 - 83.00	75							

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

No Groundwater Encountered

Backfill								
Legend Code								
Bentonite								
Gravel								

In-Situ Tests						
PID	0					
Hand Vane*	0					
Standard Penetration Tests	0					

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

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

(NR) Indicates sample undertaken but with 0% Recovery

No Samples Taken

	Standard Penetration Test Summary											
Test Typ	e Depth	Casing (m)	Water (m)		Main Blows	Penetration Total (mm)	N	Reported Result	Hammer Ref			
				SIOWS	A							

SPT Hammer Ref.	Energy Ratio (%)

No Standard Penetration Tests Undertaken

Chise	elling		Water	Added
Depth (m)	Duration (mins)		Depth (m)	Litres
		J		

Drilling Flush					
Depth (m)	Flush Type	Flush Colour	Return %		

Applicat	Applicable to Dynamic Sampling Only						
	Dynamic Sampling Runs						
Depth (m)	Diam (mm)	Recovery %	Remarks				



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Sheet 1 of 9

Rotary Borehole

Log Type

MW4S DRAFT

Exploratory Hole Number



Methodology & Plant 2371077 Location Details Scale: 1:50 Project No: From (m) 0.00 - 1.20 1.20 - 83.00 Method Inspection Pit Rotary Open Holing Plant Used Hand Tools MC900GT Easting 459663.10 Northing: 409311.32 Checked By: BJ Name: **Thorpe Marsh** Elevation: 10.59mAOD Final Depth: 83.00m Approved By NH Thorpe-in-Balne Location: Logged By: MN Grid System: OSGB Start Date: 03/06/2021 Client: Egniol Orientation N/A Inclination: Finish Date: 10/05/2021 Depth (m) Reduced Hole Ø Samples & Testing Strata Description (Stratum Thickness Level (mAOD) Ref Depth (m) Brown slightly sandy slightly gravelly silty CLAY. Sand is fine to coarse. Gravel is angular to subangular fine to coarse sandstone and siltstone. [Hemingbrough Formation] Brown silty slightly gravelly fine to coarse SAND. Gravel is angular to subangular fine to medium sandstone and siltstone. [Hemingbrough Formation] 8.70 1.89 Brown CLAY (Drillers description) [Hemingbrough Formation] Continued on Next Page Observations / Remarks Misc. Shift Information Backfill Installations Depth (m) Casing (m) Water (m) To (m) Material Instrument Details Casing Used
No Monitoring Point Installed
Hammer Ref & Energy Ratio (%) Drilling Fluid Depth (m) Colour Return % Type



Continued on Next Page

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Rotary Borehole

Log Type

MW4S
DRAFT

Exploratory Hole Number



20

Return %

Depth (m)

Туре

Colour

Web: www.central-alliance.co.uk Sheet 2 of 9 GEO Project No: Location Details Methodology & Plant 2371077 Scale: 1:50 From (m) 0.00 - 1.20 1.20 - 83.00 Method Inspection Pit Rotary Open Holing Plant Used Hand Tools MC900GT 459663.10 409311.32 BJ Easting: Northing: Checked By: Name: Thorpe Marsh Elevation: 10.59mAOD Final Depth: 83.00m Approved By NH Location: Thorpe-in-Balne Logged By: MN Grid System: OSGB Start Date: 03/06/2021 10/05/2021 Client: Egniol Orientation: N/A Inclination: Finish Date: Depth (m) (Stratum Thickness) Hole Ø (mm) Depth (m Reduced Samples & Testing Strata Description Level (mAOD) Ref Depth (m) Brown CLAY (Drillers description) [Hemingbrough Formation] 11 (4.80) 12 13 13.50 Fine to coarse GRAVEL (Drillers description). [Hemingbrough (0.70) 14 Brown gravelly CLAY (Drillers description) [Hemingbrough 17 18 19 -

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Observations / Remarks	Misc.			Shift Inforn	ation			Backfill		Inst	allations		
		Date	Time	Depth (r) Casing (m)	Water (m)	From (m)	To (m)	Material	Instrument Details	Resp. Zone	Depth (m)	Di
	pa (%	03/06	08:00	0.00	-	-	0.00	73.00	Bentonite	Standpipe	78.00 - 83.00	83.00	Г
	ita ta	03/06	17:00	58.00	58.00	-	73.00	83.00	Gravel				П
	R 58	04/06	08:00	58.00	58.00	-							L
	Sed int												
	nter I ng U ng Po ng Po k Ene									Drill	ling Fluid		



Rotary Borehole

Log Type

MW4S DRAFT

Exploratory Hole Number



Sheet 3 of 9 Location Details 2371077 Methodology & Plant Project No: Scale: 1:50 Method Inspection Pit Rotary Open Holing Plant Used Hand Tools MC900GT From (m) 0.00 - 1.20 1.20 - 83.00 Easting: 459663.10 409311.32 Checked By: BJ Northing: Name: Thorpe Marsh Final Depth: 83.00m Elevation: Approved By: 10.59mAOD NH Thorpe-in-Balne

Location:	Thorpe-in-Balne	Logged By:	MN		Grid Syst	tem: OS	GB							Start Da	ite: 0	3/06/2021
Client:	Egniol	Orientation:	N/A		Inclination	on: 90	•							Finish D	ate: 1	0/05/2021
	Strata Description		Leg				Hole Ø (mm)	Casing Ø (mm)	Water	Installation /	,		Sample	es & Testing		
				Th	hickness) (n	nAOD) De	epth (m)	Depth (m)	Level (m)	Backfill	Depth (m)	Ref		Test Resul	ts	
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	Continued on Next Page															30
Observations	s / Remarks		isc.	ate	S Time	hift Inform Depth (sing (m)	Water (m	n) From (m	Backfill) To (m)	Material	Instrument	Installa Details R	ations lesp. Zone Dep	th (m) Dismot
		No Groundwater Encountered Casing Used No Manitoring Point Installed	(%) 0,	3/06 3/06	08:00 17:00	0.00 58.00		58.00	water (m	0.00 73.00	73.00 83.00	Bentonite Gravel	Standp		8.00 - 83.00 8	3.00 75
		incouni ed nt Inst	rgy Rat	4/06	08:00	58.00		58.00	-	, 3.00	25.00	3*61				
		rater E. ting Usi	& Ene											Drilling		
		oundw Cas	ner Ref										Depth (m)	Туре	Colour	Return %
		No G	Натг													
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Rotary Borehole

Log Type

MW4S DRAFT

Exploratory Hole Number



Sheet 4 of 9 Location Details Methodology & Plant 2371077 Project No: Scale: 1:50 Method Inspection Pit Rotary Open Holing Plant Used Hand Tools MC900GT From (m) 0.00 - 1.20 1.20 - 83.00 459663.10 409311.32 Checked By: BJ Easting: Northing: Name: Thorpe Marsh Approved By: Elevation: Final Depth: 83.00m 10.59mAOD NH Thorpe-in-Balne Location:

Locatio	on: Thorpe-in-Balne	Logged By:	MN	Grid Sys	tem: OSG	В						St	art Date:	03/06/2021
Client:	Egniol	Orientation:	N/A	Inclinati	ion: 90°							Fi	nish Date:	10/05/2021
	Strata Description		Legend		educed Ho Level (m	e Ø Casing m) (mm	vvater	Installation /			Sam	nples & Test	ing	
				Thickness) (mAOD) Dept	h (m) Depth	(m) Level (m) Backfill	Depth (m)	Ref		Te	st Results	
	Brown gravelly CLAY (Drillers description) [Hemingb Formation]	orough		Thickness) (mAOD) Dept	h (m) Depth	(m)		Depth (m)	Ref		Te	st Results	31 - 32 - 33 -
34 —														34
36														36 -
38 -				29.00	28 21									38 -
39 — E	Brown very sandy gravelly CLAY (Drillers description Hemingbrough Formation] Continued on Next Page	n)			28.31									39 -
Observ	vations / Remarks	Mi	sc.		Shift Inform	ation			Backfill			lı	nstallations	
		No Groundwater Encountered Casing Used No Monitorina Point Installed		Time 08:00 17:00	Depth (m 0.00 58.00 58.00		m) Water (m) From (m) 0.00 73.00		Material Bentonite Gravel	Star	ent Details ndpipe	Resp. Zone D 78.00 - 83.00	83.00 75
		No Ground's Cas No Monitori	Натте r Ref								Depth (m)	Туре	Colour	Return %



Rotary Borehole

Log Type

MW4S DRAFT

Exploratory Hole Number



Sheet 5 of 9 Location Details Methodology & Plant 2371077 Project No: Scale: 1:50 Method Inspection Pit Rotary Open Holing Plant Used Hand Tools MC900GT From (m) 0.00 - 1.20 1.20 - 83.00 Easting: 459663.10 Checked By: BJ 409311.32 Northing: Name: Thorpe Marsh Elevation: Final Depth: 83.00m 10.59mAOD Approved By: NH Location: Thorpe-in-Balne

Loc	ation: Thorpe-in-Balne	Logged By:	MN		Grid Sy	stem: O	SGB							Start Date:	03/06/2021
Clie	nt: Egniol	Orientation:	N/A		Inclinat	tion: 90	0°							Finish Date:	10/05/2021
	Shorts Donnistian			Legend			Hole Ø	Casing Ø	Water	Installation /		•	Samples &	Testing	
	Strata Description			Legend	Thickness)	Level (mAOD) D	(mm) Depth (m)	(mm) Depth (m)	Level (m)	Backfill	Depth (m)	Ref		Test Results	
41 -	Brown very sandy gravelly CLAY (Drillers descriptio [Hemingbrough Formation]	n)													41 -
43 -															43 -
45 -															45 -
47 -															47 -
48 -					(19.10)										48 -
49 -															49
50 -	Continued on Next Page														50 -
Obs	ervations / Remarks	No Groundwater Encountered So Sand Manufactured South Instituted South In	k Energy Ratio (%)	Date 03/06 03/06 04/06	Time 08:00 17:00 08:00	Shift Info Depth 0.00 58.0 58.0	(m) Ca	sing (m) - 58.00 58.00	Water (n	n) From (m) 0.00 73.00	Backfill To (m) 73.00 83.00	Material Bentonite Gravel	Instrument Det Standpipe	Installations ails Resp. Zon. 78.00 - 83.0 Drilling Fluid	e Depth (m) Diameter 0 83.00 75
		No Groundwa Casin	Hammer Ref &										Depth (m) Ty	/pe Color	ur Return %



Rotary Borehole

Log Type

MW4S
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Exploratory Hole Number



Sheet 6 of 9 Location Details Methodology & Plant 2371077 Project No: Scale: 1:50 Method Inspection Pit Rotary Open Holing Plant Used Hand Tools MC900GT From (m) 0.00 - 1.20 1.20 - 83.00 409311.32 Easting: 459663.10 Checked By: BJ Northing: Name: Thorpe Marsh Elevation: Final Depth: 83.00m 10.59mAOD Approved By: NH Location: Thorpe-in-Balne

Loc	ation: Thorpe-in-Balne	ogged By:	MN		Grid Sys	stem: (OSGB							Start Date:	03/06/20	021
Clie	ent: Egniol	Orientation:	N/A		Inclinat	ion: 9	90°							Finish Date:	10/05/20	
					Depth (m) R	teduced	Hole Ø	Casing Ø	Water	Installation /			Samples &	Testing		
	Strata Description			Legend 1	(Stratum (hickness)	mAOD)	(mm) Depth (m)	(mm) Depth (m)	Level (m)	Backfill	Depth (m)	Ref		Test Results		
51	Brown very sandy gravelly CLAY (Drillers description [Hemingbrough Formation]			Legend	(Stratum	Level	(mm)	(mm)	Water Level (m)	Installation / Backfill	Depth (m)	Ref	Samples &			51 - 52 - 53 - 53 - 54 - 55 - 55 - 55 - 55 - 55
557	Very soft sandy gravelly CLAY. (Drillers description). [Hemingbrough Formation] Continued on Next Page	. Acc				20 47.41					Double W					56
Obs	L servations / Remarks	Mi	SC.			Shift Info	ormation			<u>' </u>	Backfill	-		Installations		
		No Groundwater Encountered Casing Used No Monitoring Point Installed		Date 03/06 03/06 04/06	Time 08:00 17:00 08:00	Dept 0.0 58.	h (m) C	ssing (m) - 58.00 58.00	Water (m	n) From (m) 0.00 73.00		Material Bentonite Gravel	Instrument Det Standpipe Depth (m) To			75



Rotary Borehole

Log Type

MW4S DRAFT

Exploratory Hole Number

CENTRAL ALLIANCE

Sheet 7 of 9 Location Details Methodology & Plant Project No: 2371077 Scale: 1:50 Method Inspection Pit Rotary Open Holing Plant Used Hand Tools MC900GT From (m) 0.00 - 1.20 1.20 - 83.00 409311.32 Easting: 459663.10 Checked By: BJ Northing: Name: Thorpe Marsh Elevation: Final Depth: 83.00m 10.59mAOD Approved By: NH Location: Thorpe-in-Balne Grid System: OSGB Start Date: 03/06/2021 Logged By: MN

Loca		Logged By:	MN		Grid	System:	OSGB							06/2021
Clien	t: Egniol	Orientation:	N/A			nation:	90°			1	1			05/2021
	Strata Description			Legend	Depth (m) (Stratum	Reduced Level	(mm)	Casing Ø (mm)	Water Level (m)	Installation / Backfill			Samples & Testing	
\vdash	Very soft sandy gravelly CLAY. (Drillers description)			* * * *	Thickness)	(mAOD)	Depth (m) Depth (m)			Depth (m)	Ref	Test Results	
	[Hemingbrough Formation]	•]
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Obse	rvations / Remarks	Mi	isc.				nformatio				Backfill		Installations	() c:
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		No Groundwater Encountered Casing Used No Monitoring Point Installed	rgy Rati	04/06	08:0		58.00	58.00	-	/3.00	65.00	Graver		
		vater E. sing Usı ina Poli	& Ener										Drilling Fluid	
		roundiv Cas Ionitori	ner Ref										Depth (m) Type Colour	Return %
		No G	Hamı											
				L					L					



Project No:

Name:

2371077

Thorpe Marsh

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Rotary Borehole

Log Type

Exploratory Hole Number

DRAFT

CENTRAL ALLIANCE

Web: www.central-alliance.co.uk Sheet 8 of 9 GEO Location Details Methodology & Plant Scale: 1:50 Method Inspection Pit Rotary Open Holing Plant Used Hand Tools MC900GT From (m) 0.00 - 1.20 1.20 - 83.00 Easting: 459663.10 409311.32 Checked By: BJ Northing: Final Depth: 83.00m NH 10.59mAOD

		Elevation: 1	0.59mAOD	Final	Depth:	83.00m	1.20	- 83.00	Rotary Op	en Holing		MC900GT	Approved By:	NH
Loca	ation: Thorpe-in-Balne	Logged By: N	1N	Grid	System:	OSGB							Start Date:	03/06/2021
Clie	nt: Egniol	Orientation: N	/A	Inclin	ation:	90°							Finish Date:	10/05/2021
		•		Depth (m)	Reduced	Hole Ø	Casing Ø	Water	Installation /			Samples &	Testing	
	Strata Description		Legend	(Stratum Thickness)	Level (mAOD)	(mm) Depth (m)	(mm) Depth (m)	Level (m)	Backfill	Depth (m)	Ref		Test Results	
-	Very soft sandy gravelly CLAY. (Drillers description).	***											
-	[Hemingbrough Formation]			4										1
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71 -				1										71 -
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-	GRAVEL. (Drillers description) [Chester Formation]]		71.50	-60.91									-
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-	Brown SAND and GRAVEL. (Drillers description). [GFORMATION]	Chester		2/6/110)° (M.	M Pin	201		\bigcirc "				
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Obs	ervations / Remarks	Misc.			Shift Ir		n	1	Ή	Backfill			Installations	
			Date	Time 08:00	e De		Casing (m)	Water (n	n) From (m) 0.00	To (m)	Material Bentonite	Instrument Det Standpipe		Depth (m) Diameter 83.00 75
		No Groundwater Encountered Casing Used No Montroring Point Installed Hammer Ref & Energy Ratio (%)	03/06 03/06 04/06	17:00 08:00)	58.00 58.00	58.00 58.00	-	73.00	83.00	Gravel	standbibe	76.00 - 83.00	03.00 /5
		r Enco Used Point II	34/06	06.00			55.00						· · ·	
		dwate 'asing oring l										Depth (m) Ty	Drilling Fluid /pe Colour	Return %
		Groun C Monita										Separ (III) IV	PC COIDUIT	ACLUITI 76
		No I Ham												



Rotary Borehole

Log Type

MW4S
DRAFT

Exploratory Hole Number

CENTRAL ALLIANCE

Sheet 9 of 9 Location Details Methodology & Plant Project No: 2371077 Scale: 1:50 Method Inspection Pit Rotary Open Holing Plant Used Hand Tools MC900GT From (m) 0.00 - 1.20 1.20 - 83.00 459663.10 Easting: Checked By: BJ 409311.32 Northing: Name: Thorpe Marsh Elevation: Final Depth: 83.00m Approved By: 10.59mAOD NH

Location:	Thorpe-in-Balne	Logged Bu	MN	9mAUD		Deptn:	83.00m							Start Date:	NH 03/06/2021
Client:	Egniol	Logged By: Orientation:	N/A			System: ation:	OSGB 90°							Finish Date:	10/05/2021
one in a					Depth (m)	Reduced	Hole Ø	Casing Ø	Water	Installation /			Samples &		10,03,2021
	Strata Description			Legend	(Stratum Thickness)	Level (mAOD)	(mm) Depth (m)	(mm) Depth (m)	Level (m)		Depth (m)	Ref		Test Results	
- SANDS	STONE (Drillers description). [Chester Format	tion]			(5.00)										81
82 -							155	155							82 -
83	EOH at 83.00m - Scheduled Depth	I		• • • • •	83.00	-72.41	<u>155</u> 83.00	<u>155</u> 83.00							83 -
84 -															84 :
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Observations	/ Remarks	М	isc.			Shift In	l formatio	n_			Backfill			Installations	
		No Groundwater Encountered Cosing Used	No Montoring Point installed Hammer Ref & Energy Ratio (%)	Date 03/06 03/06 04/06	Time 08:00 17:00 08:00	, ,	oth (m) 0 0.00 58.00 58.00	Casing (m) - 58.00 58.00	Water (m) From (m) 0.00 73.00		Material Bentonite Gravel	Instrument Det Standpipe Depth (m) Ty	Drilling Fluid Pee Colou	



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Header Sheet

Log Type

Exploratory Hole Number

MW5S

DRAFT



Project No:	2371077		Location I	Details			Met	hodology & P	lant	Scale:	1:50
		Easting:	459343.37	Northing:	409070.05	From (m)	Met	hod	Plant Used	Checked:	BJ
Name:	Thorpe Marsh	Lusting.	100010107	reor criming.	105070105	0.00 - 1.20	Inspect	ion Pit	Hand Tools	Circoncu.	
		Elevation:	10.93mAOD	Final Depth:	45.00m	1.20 - 45.00	Rotary Op	en Holing	MC900GT	Approved:	NH
Location:	Thorpe-in-Balne	Logger:	NE	Grid System:	OSGB					Start Date:	26/04/2021
Client:	Egniol	Orientation:	N/A	Inclination:	90°					End Date:	29/04/2021

ameter
Diam (mm)
155

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

Casing E	Diameter		Groundwater Strikes								
Depth (m)	Diam (mm)	Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks				
45.00	155										

	installation / instrume	ent Deta	IIIS	
Date	Instrument Details	To (m)	Resp. Zone (m)	Diam (mm)
29/04/2021	Standpipe	45.00	35.00 - 45.00	75

No Groundwater Encountered

В	Backfill Depth (m) Legend Code						
Depth (m) Legend Code							
0.00 - 0.50	Concrete						
0.50 - 35.00	Bentonite						
35.00 - 45.00	Gravel						

In-Situ Tests	
PID	0
Hand Vane*	0
Standard Penetration Tests	0

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

Sam	ple 9	Summary				
Enviro	nmer	ntal Samples				
Soil 0 Water						
Geote	echnic	cal Samples				
Bulk	0	Large Bulk	0			
Disturbed	0	Disturbed (NR)	0			
Piston	0	Piston (NR)	0			
Undisturbed	0	Undisturbed (NR)	0			
Undistu	Thin Wall	0				
Undisturb	ed Thi	in Wall (NR)	0			
Co	re San	nple	0			
			700			

(NR) Indicates sample undertaken but with 0% Recovery

No Samples Taken

				Sta	ndard	Penetrati	on T	est Summary	
Test Type						Penetration	N	Reported Result	Hammer Ref
,,,,,,,	(m)	(m)	(m)	Blows	Blows	Total (mm)			
	0								
			0						
112	(O) 1		1						
	_		100						
01111		<i>DI</i>							
	111 1	2		·					
	211.	0	20	L	_ ^				
	750	11/11							
40) <u> </u>		17.	4 11 13	F 1	1 1	1			
J. 76				M	1/1 .				
4 (O)	1		. 1		D .				
7 1/0 //E	1/1	Θ_{λ}	M.						
	11110								

ĺ	SPT Hammer Ref.	Energy Ratio (%)

No Standard Penetration Tests Undertaken

Applicable to Cable Percussion Only

Chise	Chiselling pth (m) Duration (mins)	Water	Added
Depth (m)	Duration (mins)	Depth (m)	Litres

V.				
		Drilling	Flush	
	Depth (m)	Flush Type	Flush Colour	Return %
	19.40 - 25.00	Air/Mist	Brown	90
	25.00 - 29.80	Air/Mist	Brown	90
ı	29.80 - 31.30	Air/Mist	Brown	80
ı	31.30 - 35.00	Air/Mist	Brown	50
ı	35.00 - 36.30	Air/Mist	Brown	90
ı	36.30 - 37.80	Air/Mist	Reddish Brown	90
ı	37.80 - 39.30	Air/Mist	Red	90
ı	39.30 - 40.80	Air/Mist	Red	90
ı	40.80 - 45.00	Air/Mist	Red	90
ı				
ı				
ı				
ı				
ı				
ı				
	1		1	1

Applicable to Rotary Only

	Applicab	le to Dy	mamic S	ampling Only
		Dynamic	Sampling	Runs
	Depth (m)	Diam (mm)	Recovery %	Remarks
П				
П				
П				
П				
Н				



Project No:

2371077

Alliance House, South Park Way Wakefield 41 Business Park Wakefield WF2 0XJ Tel +44(0)1924 229889 Web: www.central-alliance.co.uk

Northing:

409070.05

Location Details

459343.37

Easting:

Rotary Borehole

Log Type

Exploratory Hole Number MW5S

CENTRAL ALLIANCE GEO

1:50

DRAFT Sheet 1 of 5 Methodology & Plant Scale:

> BJ Checked By: Approved By: NH Start Date:

From (m) 0.00 - 1.20 1.20 - 45.00 Method Inspection Pit Rotary Open Holing Plant Used Hand Tools MC900GT Thorpe Marsh Name: Elevation: 10.93mAOD Final Depth: 45.00m Location: Thorpe-in-Balne Logged By: Grid System: OSGB 26/04/2021 Client: Egniol Orientation: N/A Inclination: Finish Date: 29/04/2021 Hole Ø (mm) Depth (m Depth (m) Reduced Samples & Testing Strata Description (Stratum Thickness Level (mAOD) Ref Depth (m) MADE GROUND: Light grey slightly gravelly silty fine to medium SAND. Gravel is angular to subangular fine to coarse mixed lithologies. [PFA] 10 Continued on Next Page Observations / Remarks Misc. Shift Information Backfill Installations To (m) Instrument Details Casing Used
No Monitoring Point Installed
Hammer Ref & Energy Ratio (%) Drilling Fluid Type Air/Mist Air/Mist Air/Mist 90 90 80



Rotary Borehole

Log Type

Exploratory Hole Number

MW5S

DRAFT

CENTRAL ALLIANCE

Sheet 2 of 5 Location Details 2371077 Methodology & Plant Project No: Scale: 1:50 Method Inspection Pit Rotary Open Holing Plant Used Hand Tools MC900GT From (m) 0.00 - 1.20 1.20 - 45.00 Easting: 459343.37 Checked By: BJ 409070.05 Northing: Name: Thorpe Marsh Elevation: Final Depth: 45.00m 10.93mAOD Approved By: NH e_in_Ralı

Locat	tion: Thorpe-in-Balne	Logged By:	NE	JIIIAOD		System:	OSGB								t Date:	26/04/2021
Clien	nt: Egniol	Orientation:	N/A			nation:	90°									29/04/2021
Circii	La L	Officiations	.,,,		Depth (m)	Reduced	Hole Ø	Casing Ø					Samn	les & Testing		25/04/2021
	Strata Description			Legend	(Stratum Thickness)	Level (mAOD)	(mm) Depth (m)	(mm)	Water Level (m)	Installation / Backfill	Depth (m)	Ref	Jamp		Results	
1	MADE GROUND: Light grey slightly gravelly sil SAND. Gravel is angular to subangular fine to	ty fine to medio	um		THICKIESS	(IIIAOD)	Departing	Depth (iii)			Deptii (iii)	Rei		iest r	esuits	
+	lithologies. [PFA] Light brownish grey slightly sandy slightly grav Gravel is angular to subangular fine to coarse				10.50	0.43										-
	siltstone. [Hemingbrough Formation]															11 -
.]				 												- -
12 -																12 ⁻
13 -				 												12 -
-				 												13 -
				 	(6.50)	No.			NO.							- - -
14 -											DI					14 -
-					Dell			CO								-
15 -			P					6.								15 -
-					40	20										
16						7										16 -
																,
17 -	Light brown slightly gravelly slightly clayey fin		ID.		17.00	-6.07										17 -
	Gravel is angular to subangular fine to coarse [Hemingbrough Formation]	sandstone.														-
=																
18 -																18 -
7																
1					(3.00)											•
3					(5.00)											
-																
19 –																19 -
1																
4																
-																
20 +	Continued on Next Page				20.00	-9.07										20 -
Ohse	ervations / Remarks		lisc.			Shift In	formation	n		Η	Backfill	1		Inst	allations	
2230			_	Date	Tim	e Dep	th (m)	Casing (m)	Water (m		To (m)	Material	Instrumer	nt Details	Resp. Zone D	epth (m) Diameter
		intered	No Monitoring Point Installed Hammer Ref & Energy Ratio (%)	26/04 27/04	17:0 17:0	0 1	9.40	19.40 31.40	-	0.00 0.50	0.50 35.00	Concrete Bentonite	Stand	pipe	35.00 - 45.00	45.00 75
		Encou	oint Ir. ergy R.	28/04 29/04	00:0 11:0	0 4	5.00	35.00	:	35.00	45.00	Gravel				
		water sing to	ring P f& En												ling Fluid	
		round	Monita mer Re										Depth (m) 19.40 - 25.00	Type Air/Mist	Colour	Return %
		No G	Ham										25.00 - 29.80 29.80 - 31.30	Air/Mist Air/Mist	Brown Brown	90 80
										_1					1	



Rotary Borehole

Log Type

MW5S DRAFT

Exploratory Hole Number

CENTRAL ALLIANCE

Sheet 3 of 5 Location Details 2371077 Methodology & Plant Project No: Scale: 1:50 Method Inspection Pit Rotary Open Holing Plant Used Hand Tools MC900GT From (m) 0.00 - 1.20 1.20 - 45.00 Easting: 459343.37 Checked By: BJ 409070.05 Northing: Name: Thorpe Marsh Elevation: Final Depth: 45.00m 10.93mAOD Approved By: NH e_in_Ralı

Location:	Thorpe-in-Balne	Logged By:	NE	IIIAOD		System:	OSGB								t Date:	26/04/2021
Client:	Egniol	Orientation:	N/A			ation:	90°								sh Date:	29/04/2021
					Depth (m)	Reduced	Hole Ø	Casing Ø					Samp	les & Testing		
	Strata Description			Legend	(Stratum	Level	(mm)	(mm)	Water Level (m)	Installation / Backfill	Depth (m)	Ref				
descrip	SAND and GRAVEL with high cobble contention) [Hemingbrough Formation] CLAY (Drillers description) [Hemingbrough I			Legend	(5tratum Thickness) (5.00)	Level (mAOD)	Composition (mm) Depth (m) Depth (m)	(mm) Depth (m)		Backfill	Depth (m)	Ref		Test	Results	21 - 22 - 23 - 24 - 25 - 26 -
Soft br	own SAND (Drillers description) [Chester Fo Continued on Next Page / Remarks	Mi	-+		29.80		of formation		Water (et	a) Scom (m)	Backfill	Material	Instrumen		tallations	29 - 30 -
		red	%	26/04 27/04	17:00)	19.40	19.40	Water (m	0.00	0.50	Material Concrete	Instrumer Stand		35.00 - 45.00	9epth (m) Diameter 45.00 75
		No Groundwater Encountered Casing Used No Monitoring Point Installed	Ratio	28/04	17:00 00:00)	35.00 45.00	31.40 35.00	-	0.50 35.00	35.00 45.00	Bentonite Gravel				
		er Encu Used Point I	nergy	29/04	11:00			-	-					· ·	lling Elvid	
		dwate 'asing	lef& E										Depth (m)	Dri Type	lling Fluid Colour	Return %
		Sroum. C Monite	тег б										19.40 - 25.00	Air/Mist	Brown	90
		No C	Нат										25.00 - 29.80 29.80 - 31.30	Air/Mist Air/Mist	Brown Brown	90 80
															1	



Project No:

Name:

2371077

Thorpe Marsh

Alliance House, South Park Way Wakefield 41 Business Park Wakefield WF2 0XJ Tel +44(0)1924 229889 Web: www.central-alliance.co.uk

Northing:

Final Depth: 45.00m

409070.05

Location Details

459343.37

10.93mAOD

Easting:

Elevation:

Rotary Borehole

Log Type

MW5S DRAFT

Exploratory Hole Number

CENTRAL ALLIANCE

Location	Thorpe-in-Balne	Elevation:		3mAOD		Depth:	45.00m	1.20	- 45.00	KOLATY O	pen Holing		MC900G1	Approved By:	NH
Location:	•	Logged By:				System:	OSGB							Start Date:	26/04/2021
Client:	Egniol	Orientation	n: N/A			ation:	90°			ı				Finish Date:	29/04/2021
	Strata Description			Legend	Depth (m) (Stratum	Reduced Level	Hole Ø (mm)	Casing Ø (mm)	Water	Installation / Backfill			Samples &	Testing	
					Thickness)	(mAOD)	Depth (m)	Depth (m)	Level (m)	Backilli	Depth (m)	Ref		Test Results	
Soft I	prown SAND (Drillers description) [Chester Fo	ormation]													
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				11 11											
- Red v	weathered SANDSTONE. [Chester Formation]			J	36.30	-25.37					•				
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40	Continued on Next Page										1				40 -
Observation	ns / Remarks		Misc.		-	Shift Ir	nformation	n		<u> </u>	Backfill			Installations	
				Date	Time	e De	pth (m)	asing (m)	Water (m		To (m)	Material	Instrument Det	ails Resp. Zone	Depth (m) Diamete
		ıntere	Casing Used No Monitoring Point Installed Hammer Ref & Energy Ratio (%)	26/04 27/04	17:00 17:00) :	19.40 35.00	19.40 31.40	-	0.00 0.50	35.00	Concrete Bentonite	Standpipe	35.00 - 45.00	45.00 75
		Encou	Jsed oint In ergy R.	28/04 29/04	00:00 11:00	3 '	45.00	35.00	-	35.00	45.00	Gravel			
		vater	ising L ring Pi f& Ene											Drilling Fluid	
		round	Conito Per Re,										19.40 - 25.00 Air/	ype Colour /Mist Brown	90
		No Grou	No N Hamn										25.00 - 29.80 Air/	/Mist Brown /Mist Brown	90 80



Rotary Borehole

Log Type

Exploratory Hole Number

MW5S

DRAFT

CENTRAL ALLIANCE

Sheet 5 of 5 Location Details Methodology & Plant 2371077 Project No: Scale: 1:50 Method Inspection Pit Rotary Open Holing Plant Used Hand Tools MC900GT From (m) 0.00 - 1.20 1.20 - 45.00 Easting: 459343.37 409070.05 Checked By: BJ Northing: Name: Thorpe Marsh Elevation: Final Depth: 45.00m Approved By: 10.93mAOD NH Location: Thorpe-in-Balne Start Date: 26/04/2021 Grid System: OSGB

Location:	Thorpe-in-Balne	Logged By:	NE		Grid	System:	OSGB							Start D	ate:	26/04/20	21
Client:	Egniol	Orientation:	N/A		Inclir	nation:	90°							Finish	Date:	29/04/20	21
	Strata Description			Legend	Depth (m) (Stratum	Reduced Level	Hole Ø (mm)	Casing Ø (mm)	Water Level (m)	Installation / Backfill		Ι.,	Sampl	es & Testing			
- Red v	veathered SANDSTONE. [Chester Formation]		\dashv		Thickness)	(mAOD)	Depth (m)	Depth (m)		· . :H. · .	Depth (m)	Ref		Test Res	ults		
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45	EOH at 45.00m - 5m into rockhead		0	<u></u>	45.00	-34.07	155 45.00	<u>155</u> 45.00	S. C.							4	15 -
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Observation	ns / Remarks	Mis	sc.			Shift I	nformatio	n	<u> </u>	1	Backfill	1		Instal	lations		_
			_	Date 26/04	Time 17:0	e De		Casing (m) 19.40	Water (n	n) From (m) 0.00	To (m) 0.50	Material Concrete	Instrument	Details	Resp. Zone 35.00 - 45.00		meter 75
		counter 1 Installe	y Ratio (27/04 28/04	17:00 00:0	0	35.00 45.00	31.40 35.00	-	0.50 35.00	35.00 45.00	Bentonite Gravel	Standp				-
		No Groundwater Encountered Casing Used No Monitoring Point Installed	& Energ	29/04	11:0	u		-	-					Drillin	g Fluid		_
		oundwi Casi onitorir	ner Ref l										Depth (m) 19.40 - 25.00	Type Air/Mist	Colour	Return 90	
		No M	Hamr										25.00 - 29.80 29.80 - 31.30	Air/Mist Air/Mist	Brown Brown	90 80	



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Header Sheet

Log Type

Exploratory Hole Number

MW6D DRAFT

CENTRAL ALLIANCE

2371077 Location Details Methodology & Plant Scale: 1:50 Project No: From (m) 0.00 - 1.20 1.20 - 15.00 Method Inspection Pit Cable Percussion Plant Used Hand Tools Dando 3000 BJ Easting: 459111.44 409221.15 Checked: Northing: Name: Thorpe Marsh NH Elevation: 9.83mAOD Final Depth: 15.00m Approved: Location: Thorpe-in-Balne Logger: н Grid System: OSGB Start Date: 21/04/2021 Client: End Date: 21/04/2021 Egniol Orientation: N/A Inclination: 90°

Hole Di	ameter
Depth (m)	Diam (mm)
15.00	200

Diam (mm)
200

	Groundwater Strikes								
Strike	Casing	Sealed	Time	Rose To	Remarks				
(m)	(m)	(m)	(min)	(m)	Remarks				
5.00	-	-	20	4.00					
12.00	-	-	20	11.00					

	Installation / Instrument Details							
Date	Instrument Details	To (m)	Resp. Zone (m)	Diam (mm)				
22/04/2021	Standpipe	15.00	10.00 - 15.00	75				

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

Backfill				
Depth (m)	Legend Code			
0.00 - 0.20	Concrete			
0.20 - 10.00	Bentonite			
10.00 - 15.00	Gravel			

In-Situ Tests	
PID	0
Hand Vane*	0
Standard Penetration Tests	0

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

Sample Summary						
Environmental Samples						
Soil	1	Water	0			
Geote	chnic	cal Samples				
Bulk	2	Large Bulk	0			
Disturbed	0	Disturbed (NR)	0			
Piston	0	Piston (NR)	0			
Undisturbed	0	Undisturbed (NR)	0			
Undisturbed Thin Wall						
Undisturbed Thin Wall (NR)						
Cor	e San	nple	0			

(NR) Indicates sample undertaken but with 0% Recovery

	Standard Penetration Test Summary								
Test Type	Depth (m)	Casing (m)	Water (m)	Seating Blows		Penetration Total (mm)	N	Reported Result	Hammer Ref
	(m)	(m)	(m)	BIOWS	BIOWS	iotai (mm)			
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1 10 C	a (2 6		9				
10/1/2	0///		75	17					

SPT Hammer Ref.	Energy Ratio (%)

No Standard Penetration Tests Undertaken

Applicable to Cable Percussion Only

Chis	elling	Water	Added
Depth (m)	Duration (mins)	Depth (m)	Litres

	Drilling	Flush	
Depth (m)	Flush Type	Flush Colour	Return %

Applicab	Applicable to Dynamic Sampling Only							
Dynamic Sampling Runs								
Depth (m)	Diam (mm)	Recovery %	Remarks					



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Web: www.central-alliance.co.uk Sheet 1 of 2

Cable Percussion

Log Type

MW6D DRAFT

Exploratory Hole Number

CENTRAL ALLIANCE

Methodology & Plant Location Details: Project No: 2371077 Scale: 1:50 Method Inspection Pit Cable Percussion Plant Used Hand Tools Dando 3000 Depth (m) 0.00 - 1.20 1.20 - 15.00 459111.44 409221.15 Easting: Checked By: BJ Northing: Name: Thorpe Marsh Approved By: Elevation: Final Depth: 15.00m 9.83mAOD NH Thorpe-in-Balne Location:

Loca	ation:	Thorpe-in-Balne	Logged By:	н		Grid Sy	stem: O	SGB								Start Date:	21/04/2021
Clie	nt:	Egniol	Orientation:	N/A		Inclinat	ion: 9	0°								Finish Date:	21/04/2021
		Strata Description			Legend	Depth (m) (Stratum	Reduced Level	Chiselling	Water Added	Hole Ø (mm)	Casing Ø (mm)	Water	Installation /			Samples & Testing	
					Legend	Thickness)	(mAOD)	(mins)	(Litres)	Depth (m)	Depth (m)	Level (m)	Backfill	Depth (m)	Ref	Test Res	ults
1	SAND. G	GROUND: Light grey slightly gravelly silty fi Gravel is angular to subangular fine to coar ies. [PFA]		um								4.00		2.00 2.00 - 2.50	3 ES 18		2-
5 —												4.60					5
8 — 	Light gre	eyish brown slightly gravelly very sandy CL	AY. Gravel is	S		9.50	0.33							8.00 - 8.50	2 B		8-
-	angular	to subangular fine to coarse sandstone sili	tstone. Sand	d is													-
10 -		coarse. [Hemingbrough Formation]															10
		Continued on Next Page															10
Obs	ervations /	Remarks		isc.				rmation	i()	V-4- ()	F 1 1	Backfill				Installations	Donath (M.
			Groundwater Encountered Casing Used No Monitoring Point Installed	mer Ref & Energy Ratio (%)	Date	Time	Depth	n (m) Cas	ing (m) V	vater (m)	From (m) 0.00 0.20 10.00	To (m) 0.20 10.00 15.00	Material Concrete Bentonite Gravel	Strike (m) Ri	ses To (m) 4.00	roundwater Strike	
			V ON	Ham.										12.00	11.00	20	



Project No:

2371077

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Location Details:

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Cable Percussion

Sheet 2 of 2

Log Type

Exploratory Hole Number

MW6D

DRAFT

Methodology & Plant



1:50

Scale:

Depth (m) 0.00 - 1.20 1.20 - 15.00 Method Inspection Pit Cable Percussio Plant Used Hand Tools Dando 3000 BJ Easting 459111.44 Northing: 409221.15 Checked By: Thorpe Marsh Name: Elevation: 9.83mAOD Final Depth: 15.00m Approved By: NH Location: Thorpe-in-Balne Logged By: Grid System: OSGB Start Date: 21/04/2021 Client: Egniol Orientation: N/A Inclination: Finish Date: 21/04/2021 Depth (m) (Stratum Thickness) Casing Ø (mm) Depth (m) Water Added (Litres) Samples & Testing Chiselling (mins) Installation , Backfill Strata Description Level (mAOD) Depth (m) Light greyish brown slightly gravelly very sandy CLAY. Gravel is angular to subangular fine to coarse sandstone siltstone. Sand is fine to coarse. [Hemingbrough Formation] 11 12.00 12 14 EOH at 15.00m - Scheduled depth 17 18 19 20 Observations / Remarks Shift Information Backfill Installations To (m) Material
0.20 Concrete
10.00 Bentonite
15.00 Gravel Depth (m) Casing (m) Water (m) From (m) Instrument Details Groundwater Strikes Strike (m) 5.00 12.00 4.00 11.00



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Sheet

Log Type

Header

Exploratory Hole Number

MW7S

DRAFT



Project No:	2371077	Location Details			Methodology & Plant				Scale:	1:50	
		Easting:	459097.00	Northing:	409672.60	From (m)	Met	hod	Plant Used	Checked:	ВЈ
Name:	Thorpe Marsh		133037100			0.00 - 1.20	Inspect	ion Pit	Hand Tools		
		Elevation:	12.15mAOD	Final Depth:	50.00m	1.20 - 50.00	Rotary Op	en Holing	Fraste PLG	Approved:	NH
Location:	Thorpe-in-Balne	Logger:	MN	Grid System:	OSGB					Start Date:	01/06/2021
Client:	Egniol	Orientation:	N/A	Inclination:	90°					End Date:	02/06/2021

Hole Di	ameter
Depth (m)	Diam (mm)
50.00	155

iameter
Diam (mm)
152

	Groundwater Strikes											
Strike	Casing	Remarks										
(m)	(m)	(m)	(min)	(m)	Remarks							
42.50	-	-	0	0.00								

	Installation / Instrument Details											
Date	Instrument Details		Resp. Zone (m)	Diam (mm)								
03/06/2021	Standpipe	50.00	45.00 - 50.00	75								

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

Backfill									
Legend Code									
Bentonite									
Gravel									

In-Situ Tests							
PID	0						
Hand Vane*	0						
Standard Penetration Tests	0						

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

Sample Summary									
Environmental Samples									
0	Soil 0 Water								
	Geotechnical Samples								
0	Large Bulk	0	Bulk						
0	Disturbed (NR)	0	Disturbed						
0	Piston (NR)	0	Piston						
0	Undisturbed (NR)	0	Undisturbed						
0	Undisturbed Thin Wall								
0	Undisturbed Thin Wall (NR)								
0	nple	e San	Cor						

(NR) Indicates sample undertaken but with 0% Recovery

No Samples Taken

				Sta	ndard	Penetrati	on T	est Summary	
Test Type				Seating Blows		Penetration	Ν	Reported Result	Hammer Ref
	(m)	(m)	(m)	BIOWS	BIOWS	Total (mm)			
	0								
0	\sim	١.	0						
173	(O)	.0							
4	(4	r					
	177			1		R			
17:4	11/11								
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10/1/2	1/1/8	\bowtie_{λ}		17					

SPT Hammer Ref.	Energy Ratio (%)

No Standard Penetration Tests Undertaken

Applicable to Cable Percussion Only

Chis	elling		Water Added			
Depth (m)	Duration (mins)		Depth (m)	Litres		
]				

	Drilling	Flush	
Depth (m)	Flush Type	Flush Colour	Return %

	Applicab	le to Dy	namic S	ampling Only	
		Dynamic	Sampling	Runs	
	Depth (m)	Diam (mm)	Recovery %	Remarks	1
-					



Easting:

Elevation:

Project No:

Name:

2371077

Thorpe Marsh

Alliance House, South Park Way Wakefield 41 Business Park Wakefield WF2 0XJ Tel +44(0)1924 229889

Rotary Borehole

Log Type

MW7S DRAFT

Exploratory Hole Number

CENTRAL ALLIANCE

Web: www.central-alliance.co.uk Sheet 1 of 5 GEO Location Details Methodology & Plant Scale: 1:50 Method Inspection Pit Rotary Open Holing Plant Used Hand Tools Fraste PLG From (m) 0.00 - 1.20 1.20 - 50.00 459097.00 Checked By: BJ 409672.60 Northing: Final Depth: 50.00m Approved By: 12.15mAOD NH

Locat	ion: Thorpe-in-Balne	Logged Du	12.15r MN	IIAUU		Deptn:	OSGB							Approved By:	NH 01/06/2021
Clien		Logged By: Orientation:	N/A			System: nation:	90°							Start Date: Finish Date:	02/06/2021
					Depth (m)	Reduced	Hole Ø	Casing Ø	Water	Installation /			Samples &	1	02/00/2021
	Strata Description			Legend	(Stratum Thickness)	Level (mAOD)	(mm) Depth (m)	(mm) Depth (m)	Level (m)		Depth (m)	Ref		Test Results	
	MADE GROUND: CONCRETE.		8		(0.20) 0.20	11.95									
	MADE GROUND: CRUSHED STONE.		8		(0.30)	11.55									-
+	MADE GROUND: Light grey slightly gravelly silty fin	ne to mediu	um		0.50	11.65									-
	SAND. Gravel is angular to subangular fine to coars				(0.70)										-
1 -	lithologies. [PFA]				(0.70)										1 -
1 }	Soft brown sandy gravel CLAY. (Drillers description)).	- 8	******	1.20	10.95									-
	[Hemingbrough Formation]			Ī :											_
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1	Soft brownish grey CLAY (Drillers description). [Her	mingbroug	h		5,50	65									_
	Formation]		F		A.	1									-
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10	Continued on Next Page		-T		10.00										10 -
Obse	rvations / Remarks		lisc.	Date	Tim		oth (m)	n Casing (m)	Water (m) From (m)	Backfill To (m)	Material	Instrument Det	Installations ails Resp. Zone	Depth (m) Diameter
		tered	atio (%)	01/06 01/06	08:0 17:0	0	0.00 1.20	- :	-	0.00 45.00	45.00 50.00	Bentonite Gravel	Standpipe	45.00 - 50.00	50.00 75
		Sncouni Used	No Monitoring Point Installed Hammer Ref & Energy Ratio (%)	02/06	08:0	0	1.20	-	-					- W	
		Water I Casing	toring I Ref & Er										Depth (m) Ty	Drilling Fluid ype Colour	Return %
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Rotary Borehole

Log Type

MW7S
DRAFT

Exploratory Hole Number



Sheet 2 of 5 Location Details Methodology & Plant Project No: 2371077 Scale: 1:50 Method Inspection Pit Rotary Open Holing Plant Used Hand Tools Fraste PLG From (m) 0.00 - 1.20 1.20 - 50.00 Easting: 459097.00 409672.60 Checked By: BJ Northing: Name: Thorpe Marsh Elevation: Final Depth: 50.00m 12.15mAOD Approved By: NH Location: Thorpe-in-Balne Start Date: Grid System: OSGB 01/06/2021 Logged By: MN

		Logged By:	IVIN			system:	USGB						Start Date: 01/06/2021
Clie	nt: Egniol	Orientation:	N/A		Inclir	nation:	90°				1		Finish Date: 02/06/2021
	Strata Description			Legend	Depth (m)	Reduced Level	Hole Ø	Casing Ø	Water	Installation /			Samples & Testing
				cegena	(Stratum Thickness)	(mAOD)	(mm) Depth (m)	(mm) Depth (m)	Level (m)	Backfill	Depth (m)	Ref	Test Results
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Obs	ervations / Remarks	Mis	sc.			Shift In	formatio				Backfill		Installations
		P	· ·	Date 01/06	Time 08:0	e Dep	oth (m) 0	Casing (m)	Water (r	m) From (m) 0.00	To (m) 45.00	Material Bentonite	Instrument Details Resp. Zone Depth (m) Diameter
		Groundwater Encountered Casing Used No Monitoring Point Installed	atio (01/06	17:0	0	1.20	-	-	45.00	50.00	Gravel	Statiupipe 45.00 - 50.00 50.00 75
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Rotary Borehole

Log Type

MW7S DRAFT

Exploratory Hole Number



Sheet 3 of 5 Location Details Methodology & Plant 2371077 Project No: Scale: 1:50 Method Inspection Pit Rotary Open Holing Plant Used Hand Tools Fraste PLG From (m) 0.00 - 1.20 1.20 - 50.00 Easting: 459097.00 409672.60 Checked By: BJ Northing: Name: Thorpe Marsh Elevation: Final Depth: Approved By: 12.15mAOD 50.00m NH Location: Thorpe-in-Balne Grid System: **OSGB** Start Date: 01/06/2021 Logged By: MN

ocation:	i norpe-in-Baine		MN				OSGB							1/06/2021
Client:	Egniol	Orientation:	N/A		Inclina	ition:	90°			1	T			2/06/2021
	Strata Description			Legend	(Stratum	Reduced Level	Hole Ø (mm)	Casing Ø (mm)	Water Level (m)	Installation / Backfill			Samples & Testing	
Firm a					Thickness)	(mAOD)	Depth (m)	Depth (m)	Level (III)	Backiiii	Depth (m)	Ref	Test Results	
Forma	reddish brown CLAY (Drillers description). [H	emingbrougr	n											
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servation	s / Remarks	Mis	ir.			Shift Int	formation	<u> </u>		<u> </u>	Backfill		Installations	
SSCI VALIUIII	o, nemana			Date	Time	Dep	th (m)		Water (n	n) From (m)	To (m)	Material	Instrument Details Resp. Zone Dep	
		Groundwater Encountered Casing Used No Monitoring Point Installed	atio (%	01/06 01/06	08:00 17:00	1	0.00 1.20		- :	0.00 45.00	45.00 50.00	Bentonite Gravel	Standpipe 45.00 - 50.00 5	0.00 75
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		oundw C Monito	ımer Re										Depth (m) Type Colour	Return %
		Š VO.	Нат											



Alliance House, South Park Way Wakefield 41 Business Park Wakefield WF2 0XJ Tel +44(0)1924 229889

Rotary Borehole

Log Type

MW7S DRAFT

Exploratory Hole Number



Web: www.central-alliance.co.uk Sheet 4 of 5 GEO Methodology & Plant Location Details Project No: 2371077 Scale: 1:50 From (m) 0.00 - 1.20 1.20 - 50.00 Method Inspection Pit Rotary Open Holing Plant Used Hand Tools Fraste PLG BJ Easting: 459097.00 Northing: 409672.60 Checked By: Thorpe Marsh Name: Elevation: 12.15mAOD Final Depth: 50.00m Approved By NH Thorpe-in-Balne Location: Logged By: MN Grid System: OSGB Start Date: 01/06/2021 Client: Egniol Orientation N/A Inclination: Finish Date: 02/06/2021 Hole Ø (mm) Depth (m Depth (m) Reduced Samples & Testing Strata Description (Stratum Thickness Level (mAOD) Ref Depth (m) Firm reddish brown CLAY (Drillers description). [Hemingbrough Formation 31 31.50 Soft brown silty CLAY (Drillers description). [Hemingbrough Formation] 32 33 34 Firm brown CLAY (Drillers description) [Hemingbrough Formation] 37 38 (4.92) 39 40 Continued on Next Page Observations / Remarks Misc. Shift Information Backfill Installations Depth (m) Casing (m) Water (m) To (m) Material Instrument Details Casing Used
No Monitoring Point Installed
Hammer Ref & Energy Ratio (%) Drilling Fluid Depth (m) Туре Colour Return %



Easting:

Elevation:

Project No:

Name:

2371077

Thorpe Marsh

Alliance House, South Park Way Wakefield 41 Business Park Wakefield WF2 0XJ Tel +44(0)1924 229889

Rotary Borehole

Log Type

Exploratory Hole Number

CENTRAL ALLIANCE

DRAFT Web: www.central-alliance.co.uk Sheet 5 of 5 Location Details Methodology & Plant Scale: 1:50 Method Inspection Pit Rotary Open Holing Plant Used Hand Tools Fraste PLG From (m) 0.00 - 1.20 1.20 - 50.00 459097.00 Checked By: BJ 409672.60 Northing: Final Depth: 50.00m Approved By: 12.15mAOD NH

		Elevation:	12.1	5mAOD	Fina	l Depth:	50.00m	1.20	0 - 50.00	Rotary O	pen Holing		Fraste PLG	Approved By:	NH
Loca	ation: Thorpe-in-Balne	Logged By:	MN		Grid	System:	OSGB							Start Date:	01/06/2021
Clie	nt: Egniol	Orientation:	N/A		Incli	nation:	90°							Finish Date:	02/06/2021
					Depth (m)			Casing Ø	Water	Installation /			Samples &	Testing	
	Strata Description			Legend	(Stratum Thickness)	Level (mAOD)	(mm) Depth (m)	(mm) Depth (m)	Level (m)	Backfill	Depth (m)	Ref		Test Results	
-	Firm brown CLAY (Drillers description) [Hemingbro	ough													
-	Formation]	_													
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_	Brown SAND and fine to coarse GRAVEL. (Drillers of	description)		40.72	-28.57									
	[Chester Formation]		,-												44 -
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Ohe	ervations / Remarks		lisc.			Shift I	nformation			<u> </u>	Backfill			Installations	
203	erradona / Inchina			Date	Tim	ne De	pth (m)	asing (m)			To (m) N	/laterial	Instrument Det	ails Resp. Zone De	pth (m) Diameter
		ered	No Montoring Point Installed Hammer Ref & Energy Ratio (%)	01/06 01/06	08:0 17:0	00	0.00 1.20	- 1	- :	0.00 45.00	45.00 E 50.00	lentonite Gravel	Standpipe	45.00 - 50.00	50.00 75
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Sheet

RBH141

1 of 2

CLIENT WEST BURTON B LTD

SITE THORPE MARSH GREEN ENERGY HUB: BATTERY

ENERGY STORAGE SYSTEM (BESS)

Start Date 05 February 2024 Easting 459634 Scale 1:50 End Date 06 February 2024 Northing 409399 Ground Level 17.27mOD Depth 13.50 m

sample depth casing chiselling reduced legend sample depth samp. water strike/ instru test (m) depth type & no & range added description from type to (m) value (m) (m) 0.10 - 0.30 Grass over firm dark brown mottled greyish brown Vo 0.0 1FS 0.10 - 0.20slightly sandy slightly gravelly silty CLAY with a 0.30 16.97 0.10 - 0.20 Vo 0.0 medium subangular sandstone cobble content. 2FS 0.40 - 0.503B Gravel is angular and subangular fine to coarse 0.40 - 0.90 concrete, sandstone and siltstone. (MADE 0.90 4D GROUND) 0.90 - 1.205B Dark grey slightly sandy slightly gravelly SILT. 6D 1.00 Gravel is angular and subangular fine to coarse 1.40 - 1.50 concrete and sandstone. (MADE GROUND) 3ES 1.50 7UT 1.50 - 1.95(PULVERISED FUEL ASH) 1.95 - 2.00 10B 2.00 - 2.30 2.00 9D 4ES 2.40 - 2.50 Vo 0.0 2.50 11D 2.50 - 2.95S 17 2.50 - 7.45m: Medium dense. 12D 3.00 13B 3.00 - 3.305ES 3.40 - 3.50 Vo 0.0 3.50 3.50 - 3.95 15D 3.95 - 4.00 17B 4.00 - 4.30 6ES 4.40 - 4.50 Vo 0.0 4.50 - 4.95 4 50 18D S 12 19D 5.00 - 5.10 5.00 - 5.30 20B 7FS 5 40 - 5 50 Vo 0.0 5.50 21UT 5.50 - 5.95 22D 5.95 - 6.00 5.95 - 8.50m: Slightly sandy. Sand is fine to medium. 6.00 - 6.30 23B 6.00 - 6.10 8ES 6.40 - 6.50 Vo 0.0 25D 7.00 - 7.45 7.00 S 18 9ES 7.50 - 7.60 Vo 0.0 7.50 - 8.50m: Dark grey mottled black. Hydrocarbon odour. 26B 8.00 - 8.30 Continued Next Page HOLE CONSTRUCTION WATER STRIKE Groundwater not encountered prior to adding water TOP (m) BASE (m) PLANT USED DEPTH (m) CASING (m) ROSE TO (m) AFTER (min) 0.00 1.20 Inspection Pit Hand Tools 1.20 13.50 Cable Percussion Dando 2000 **CASING DEPTH** HOLE DIAMETER BACKFILL INSTRUMENTATION BASE (m) DEPTH (m) BASE (m) TOP (m) BASE (m) **MATERIAL** DIAM (mm) DIAM (mm) 13.50 Standpipe (50mm) with geosock 250 13.50 250 13.50 0.00 0.50 Concrete 0.50 9.00 Bentonite 9.00 13.50 Gravel **HOLE PROGRESS** REMARKS DEPTH (m) DATE TIME CASING (m) WATER (m) Borehole terminated at 13.20m due to the presence of 05-02-2024 11:30 0.00 Nil hydrocarbons 10.00 05-02-2024 17:00 10.00 9.90 CONTRACT **CHECKED** 06-02-2024 08:00 10.00 10.00 9.90 06-02-2024 10:15 13.50 13.50 9.50 38004



CLIENT WEST BURTON B LTD

RBH141

2 of 2

Sheet

SITE THORPE MARSH GREEN ENERGY HUB: BATTERY

ENERGY STORAGE SYSTEM (BESS)

Start Date 05 February 2024 Easting 459634 Scale 1:50

End Date 06 February 2024 Northing 409399 Ground Level 17.27mOD Depth 13.50 m

	Date 00	1 0010	idiy 2	-02-1	NOIL	9	40938	9 Glound Level 17.27111		pui		.50 11
sample no & type	sample depth (m) from to	casing depth (m)	samp. range	chiselling details	water strike/ added (m)	instru -ment	test type & value	description		depth (m)	reduced level (m)	legend
27D 28UT 10ES 29D 11ES	8.50 - 8.95 8.60 - 8.70 8.95 - 9.00 9.10 - 9.20	- - - - - - - - - - - - -					Vo 0.0 -	Very soft dark greenish grey slightly gra sandy CLAY. Gravel is angular to subou coarse concrete, brick, coal and siltston occasional fragments of plastic and met	nded fine to e with	8.50 <u>-</u> 8.50 <u>-</u> - 9.00 <u>-</u>	8.77 8.27	
30B 31D 32B 2ES	9.50 - 9.80 9.90 - 10.00 10.00 - 10.45 10.10 - 10.20	 10.00					S1 — Vo 0.8 —	\((MADE GROUND)\) Very soft dark greenish grey slightly grasndy clayey SILT. Gravel is angular cowith rare wire and occasional fragments metal and plastic. (MADE GROUND) 9.00m: Standing groundwater level.	arse coal	- - - - - - - - - - - - - - - - - - -		
3B 3ES 4D 5D	10.70 - 11.00 11.10 - 11.20 11.10 11.50 - 11.95	- - - - - - - - 11.50					Vo 2.2 -	Dark greenish grey silty sandy angular a subangular fine to coarse concrete and GRAVEL with a medium tarmacadam at cobble content. (MADE GROUND) 11.00m: Very loose.	tarmacadam	11.00	6.27	
4ES 6B 7D 8D 5ES	12.10 - 12.20 12.50 - 12.80 12.90 - 13.00 13.00 - 13.45 13.10 - 13.20	- - - - - - - - - - - - - - - - - - -					Vo 1.8 -	13.00 - 13.50m: Medium dense, oily shee strong sweet hydrocarbon odour.	n with a	- - - - - - - - - -		
SES	13.50 - 13.60	- - - - - - - - - - - - - - - - - - -					Vo 986.0-	Borehole Completed at 13.50m		13.50	3.77	
DLE DP (m	CONSTRUCTI				PLANT US	SED	- - - - - -	WATER STRIKE Groundwater not encour DEPTH (m) CASING (m) ROSE TO (m)				
•	G DEPTH	E (m)	Н	OLE DIAM IAM (mm)	IETER	BAC	KFILL (m) BASE	(m) MATERIAL INSTRUMEN DEPTH (m)	,			
OLE ATE T	PROGRESS IME	DEPTH	(m)	CASING (r	n) WATER	(m)	REMARK	s				A
	ical Engineering Ltd								3800		CHEC	KE



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Sheet

CLIENT WEST BURTON B LTD

SITE

09-02-2024 08:00

38.00

19.50

33.00

THORPE MARSH GREEN ENERGY HUB: BATTERY

ENERGY STORAGE SYSTEM (BESS)

Start Date 07 February 2024 Easting 459698 Scale 1:50

End Date 09 February 2024 Northing 409375 Ground Level 10.87mOD Depth 38.00 m

=na	Date 09	rebru	iary z	2024	Nort	ning	40937	5 Ground Level	10.87mOD	De	pın	38	.00 m
sample no & type	sample depth (m) from to	casing depth (m)	samp. range	chiselling details	water strike/ added (m)	instru -ment	test type & value	descri	ption		depth (m)	reduced level (m)	legend
1ES	0.10 - 0.20	_						Grass over firm brown sligh occasional roots (<10mm d			0.20 <u> </u>	10.67 10.57	
1B 2ES	0.40 - 0.90 0.40 - 0.50						Vo 0.5	Stiff orangish brown mottle (MADE GROUND)	d light grey silty C	LAY.	0.30 _	10.57	
2B	0.90 - 1.20	_					- - -	Dark grey sandy SILT. (MA (PULVERISED FUEL ASH)	ADE GROUND)		-		
BES	1.40 - 1.50	- - - -					Vo 0.6 -				-		
ВВ	1.90 - 2.20	- - -					- - -				-		
		- - - -					- - - - -				- - -		
4B 4ES	2.90 - 3.20 3.00 - 3.10	_ _ _ _					Vo 0.7 —				-		
		- - - -									- - -		
SB SES	3.90 - 4.20 4.00 - 4.10	- - - -					Vo 0.3				- - -	-	
		- - -					-				=		
B BES	4.90 - 5.20 5.00 - 5.10	- - - -					Vo 0.6 —	5.00 - 9.00m: Slightly gravel coarse charcoal.	lly. Gravel is angula	r	- - -		
		- - - -											
'B 'ES	5.90 - 6.20 6.00 - 6.10	- - - -					Vo 0.8 —				-		
		- - -											
BES	7.00 - 7.10	- - -					Vo 0.5 —				-		
9ES	7.50	- - -						7.50m: Frequent fragments with possible asbestos fibre		erial			
		_				Ш	1 1	Continued	Novt Dago		_		****
	CONSTRUCTI							WATER STRIKE Groundwa	ter not encountered		_		
OP (n .00 .20	n) BASE (m) 1.20 38.00	Inspe	ction Pi		PLANT US Hand Tool Dando 20	s		DEPTH (m) CASING (m)	ROSE IO (m) AFI	ER (min)	REMA	ARKS	
	IG DEPTH			OLE DIAM		- 1	KFILL	1	INSTRUMENTATIO				
IAM (50	mm) BAS 10.5	E (m) 0	D 25	IAM (mm) 50	BASE (m 11.00) TOP 0.00	(m) BASE 0.50	(m) MATERIAL Concrete	DEPTH (m) TY 9.00 Sta	PE Indpipe (50	mm) w	ith geos	ock
00 50	11.0 19.5	0	15		38.00	0.50 2.00 9.00	2.00 9.00	Bentonite Gravel Bentonite		indpipe (50			
	PROGRESS	DEDTU	/m)	CACINO (a) \\\ATED	/m)	REMARKS		lad 0 50 44 00				
	2024 11:00	DEPTH 0.00	` ,	CASING (n Nil	•	(m)	Seal cured	eal for aquifer protection instal for 1hr prior to progressing hol	e through seal at				AG
	2024 17:00 2024 08:00	11.20 11.20		10.50 10.50	Dry 10.50			sing diameter. Target depth of hing rope limit.	40m not achieved	CONTRA	ACT	CHEC	
8-02-2	2024 17:30 2024 08:00	38.00 38.00		19.50 19.50	37.00 33.00			- •		3800			



CLIENT WEST BURTON B LTD

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Sheet

SITE THORPE MARSH GREEN ENERGY HUB: BATTERY

ENERGY STORAGE SYSTEM (BESS)

Start Date 07 February 2024 Easting 459698 Scale 1:50

End Date 09 February 2024 Northing 409375 Ground Level 10.87mOD Depth 38.00 m

_IIU I	Date 09	Febru	iaiy z	2024	Nort	ming	4093	75 Ground Level 10.87mOD De	ptn	30	.00 r
ample no & type	sample depth (m) from to	casing depth (m)	samp. range	chiselling details	water strike/ added (m)	instru -ment	test type & value	description	depth (m)	reduced level (m)	leger
0ES 1ES	8.50 - 8.60 9.10 - 9.20						Vo 0.9 -				
В	9.90 - 10.20 10.20 - 10.50							Firm dark greenish grey mottled black silty CLAY with a slight organic odour. Stiff thinly laminated light brown mottled dark grey silty CLAY with a slight organic odour.	9.90	0.97	x - 1 x - 1
10B 12ES	15.10 - 15.50 15.10 - 15.20						Vo 0.2	Brown silty sandy angular and subangular fine to coarse mudstone, siltstone and sandstone GRAVEL.	15.00	-4.13	×
OP (m	G DEPTH		Н	OLE DIAM AM (mm)	PLANT US ETER BASE (m	BAC	EKFILL (m) BASE 0 38.00		Iding wa		
ATE T			` '	CASING (n	,		REMARK	CONTRA 3800 TERY ENERGY STORAGE SYSTEM (BESS) 30/04/2024 10:58:29 Logged b)4		



CLIENT WEST BURTON B LTD **RBH141A**

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Sheet

SITE THORPE MARSH GREEN ENERGY HUB: BATTERY

ENERGY STORAGE SYSTEM (BESS)

Start Date 07 February 2024 Easting 459698 Scale 1:50

09 February 2024 End Date Northing 409375 Ground Level 10.87mOD Depth 38.00 m

End I	Date 09	Febru	iary 2	2024	Norti	nıng	40937	5 Ground Level	10.87mO	D De _l	pth	38	.00 m
sample no & type	sample depth (m) from to	casing depth (m)	samp. range	chiselling details	water strike/ added (m)	instru -ment	test type & value	desc	ription		depth (m)	reduced level (m)	legend
11B	16.60 - 17.00							Stiff dark brown slightly sa CLAY. Gravel is angular fil siltstone, sandstone and r	indy slightly gravine to coarse mulare coal.	velly silty dstone,	16.50	-5.63	
HOLE TOP (m	CONSTRUCTI				PLANT US	SED	- - - -	Continued WATER STRIKE Groundw DEPTH (m) CASING (m)	d Next Page ater not encounter ROSE TO (m)	red prior to ad AFTER (min)	ding wa		
CASIN DIAM (I	G DEPTH mm) BAS	SE (m)		OLE DIAM IAM (mm)	ETER BASE (m		CKFILL (m) BASE	(m) MATERIAL	INSTRUMENTA DEPTH (m)	ATION TYPE			
DATE 1		DEPTH		CASING (n		` ,	REMARK	S TERY ENERGY STORAGE SYSTEM (RESS) 30/04/2024 10	CONTRA 3800	4		



CLIENT WEST BURTON B LTD

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Sheet

SITE THORPE MARSH GREEN ENERGY HUB: BATTERY

ENERGY STORAGE SYSTEM (BESS)

Start Date 07 February 2024 Easting 459698 Scale 1:50

End Date 09 February 2024 Northing 409375 Ground Level 10.87mOD Depth 38.00 m

	Jaic 05	CDIG										
ample no & type	sample depth (m) from to	casing depth (m)	samp. range	chiselling details	water strike/ added (m)	instru -ment	test type & value	description		depth (m)	reduced level (m)	legen
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		-]			-		0 0 0 0 0 0 0 0 0 0
		<u> </u>					‡] =	1	A 0.0
F	CONSTRUCTION	 ON						Continued Next Page WATER STRIKE Groundwater not er	acountered prior to a	dding wa	 ater	
(m		TYPE			PLANT US	SED		DEPTH (m) CASING (m) ROSE TO	(m) AFTER (min)	REM/		
SIN	G DEPTH		Н	OLE DIAM	IETER	BAC	KFILL	INSTRI	IMENTATION			
M (r	nm) BAS	E (m)		IAM (mm)	BASE (m)	TOP	(m) BASE	m) MATERIAL DEPTH				
	PROGRESS	DEPTH	(m)	CASING (n	n) WATER	(m)	REMARKS	<u> </u>				_
	IIVIE											
	IIVI⊏								CONTR	ACT	CHEC	
re T	IIVIE								CONTR 380		CHEC	A CKEI



CLIENT WEST BURTON B LTD

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Sheet

SITE THORPE MARSH GREEN ENERGY HUB: BATTERY

ENERGY STORAGE SYSTEM (BESS)

Start Date 07 February 2024 Easting 459698 Scale 1:50

End Date 09 February 2024 Northing 409375 Ground Level 10.87mOD Depth 38.00 m

End Date 09 Fe	bruary :	2024	North	ning	40937	5 Ground Level	10.87mO	D De	pth	38	.00 m
no & (m) de	sing samp. pth range	chiselling details	water strike/ added (m)	instru -ment	test type & value	dese	cription		depth (m)	reduced level (m)	legend
						Stiff dark greyish brown s gravelly silty CLAY. Grave mudstone, siltstone, sand	el is angular fine	to coarse	33.50	-22.63	
				. 1			pleted at 38.00m				
HOLE CONSTRUCTION TOP (m) BASE (m) T	YPE		PLANT US	ED		WATER STRIKE Groundw DEPTH (m) CASING (m)	ROSE TO (m)	red prior to ac AFTER (min)	REM		
CASING DEPTH DIAM (mm) BASE (m		HOLE DIAM HAM (mm)	ETER BASE (m)		KFILL (m) BASE	(m) MATERIAL	INSTRUMENTA DEPTH (m)	ATION TYPE			
HOLE PROGRESS DATE TIME DE	PTH (m)	CASING (n	n) WATER (m)	REMARK	5					AG
						TERY ENERGY STORAGE SYSTEM.		3800)4		KED

egniol		Percu	ıssi	on [Orill	ing Log				
	pe Marsh Environmental	Client: HJ Banks &	Compar	ny Limited		Date: 24/08/2023 - 25	5/08/2023			
Location: Thorpe Ma Disposal Site, Donca		Contractor: ADS D	rilling Ltd	<u> </u>		Co-ords: E459389.76 N409077.92				
Project No. : 7991	actor Bitto OBE	Crew Name: MM 8	SM			Drilling Equipment: D	ando 150			
Borehole Number MW5DA	Level 10.86m AoD		Logged NS	Ву	Scale 1:50	_	e Number eet 1 of 2			
vveii Otalia a	Sample and In Situ Test th (m) Type Res		Level (m)	Legend		Stratum Descrip	otion			
					with rare subangu (MADE Dark gre (MADE	ver dark brown slightly ge rootlets present. Grave alar of concrete GROUND - Anthropoger by fine ashy SAND. GROUND - PFA)	l is medium nic Topsoil)	1		
Hole Diameter Depth Base Diameter		Depth Top Depth Ba	Chiselling se Dura	tion	Tool	Inclination Depth Top Depth Base	and Orientation Inclination	Orientation		
15.00 200 17.00 150	17.00 200 17.00 150		_ = == 0					1221		
Remarks						1				

Groundwater strike at 7.50mbgl. Monitoring well installed with 3.00m response zone in superficial deposits. Borehole terminated at 17.00mbgl to obtain sufficient response zone.



	egni	ol)			Р	ercu	ıssi	on [Orill	ing l	_og					
	ct Name oring	: Thorpe	Marsh En	vironmental	Client: I	HJ Banks &	& Compar	ny Limited		Date: 24/08/2023 - 25/08/2023						
Locat	ion: Tho	rpe Marsl	h Former er DN6 0[Waste	Contrac	ctor: ADS D	rilling Ltd	l		Co-ords: E459389.76 N409077.92						
	ct No. : 7		01 1010 01	<i></i>	Crew N	ame: MM &	& SM			Drilling Equipment: Dando 150						
Во	Borehole Number Hole Type MW5DA CP			Level 10.86m AoD			Logged NS	By Scale 1:50		_	Page Number Sheet 2 of 2					
Well Chaire -			le and In Situ Testi		Depth (m)	Level (m)	Legend		Strat	um Descrip	tion					
		Depth ((m) Typ	e Resu	ilts				Dark gr (MADE	ey fine ashy GROUND -	SAND. PFA)			11 —		
						11.50	-0.64		grey br	ey brown silty own silty san NGBROUGH ATION)	d bands.		ed	12 —		
					Rac					EDT				14 —		
					Sel	17.00	-6.14			End of E	Borehole at 17	7.000m		16		
														18 —		
	Hole Diam			g Diameter			Chiselling					and Orientation		20 —		
Depth 15. 17.	00	200 150	Depth Base 17.00 17.00	Diameter 200 150	Depth To	op Depth B		ition	Tool	Depth Top	Depth Base	Inclination	Orienta	ition		

Groundwater strike at 7.50mbgl. Monitoring well installed with 3.00m response zone in superficial deposits. Borehole terminated at 17.00mbgl to obtain sufficient response zone.



ee	niol			Р	ercu	ussi	on [Orill	ing l	_og				
Project Nar Monitoring	me: Thorpe	Marsh Envi	ronmental	Client: H	HJ Banks 8	& Compar	ny Limited		Date: 22/08/2023 - 23/08/2023					
Location: T	horpe Mars ite, Doncast			Contrac	tor: ADS D	rilling Ltd			Co-ords: E459094.28 N409668.86					
Project No.		.01 2110 022	_	Crew Na	ame: MM &	& SM			Drilling Eq	uipment: D	ando 15	0		
Borehole Number Hole Type MW7DA CP				11.	Level .22m AoD		Logged NS	Ву		cale 1:50	Page Number Sheet 1 of 2			
Well Children L.			n Situ Testi		Depth (m)	Level (m)	Legend		Strat	tum Descrip	tion			
			Resu	lits CO	Depth (m) 0.20 0.30 7.50 8.00 8.80	Level (m) 11.02 10.92 3.72 3.22 2.42	Legend	Wet soffine to co (HEMIN FORMA) Wet soffine to co (HEMIN FORMA) Wet soff coarse.	t grey brown oarse. IGBROUGH. ITION) It grey brown to the triple of triple of the triple of triple of the triple of triple	ete. nd GRAVEL. So coarse of su	Sand is filibangular ottled yello CUSTRIN CUSTRIN CUSTRIN	Sand is E E fine to	1	
							$\times \times $						=	
·H.*									1				10 —	
Depth Base	iameter Diameter	Depth Base	Diameter Diameter	Depth To	p Depth Ba	Chiselling ase Dura	tion	Tool	Depth Top	Inclination Depth Base	and Orienta Inclination		ntation	
15.00	200	15.00	200											
Remarks			•	-		· · · · · · · · · · · · · · · · · · ·	,		•	•				

Groundwater strike at 7.50mbgl and 12.50mbgl. Monitoring well installed with 5.50m response zone in superficial deposits. Borehole terminated at target depth of 15.00mbgl.



	egni					Р	ercu	JS	ssi	on [Orill	ing l	_og				
Project Name: Thorpe Marsh Environmental Monitoring						Client: HJ Banks & Company Limited						Date: 22/08/2023 - 23/08/2023					
Locati	on: Tho	rpe Marsi				Contrac	tor: ADS D	rilli	ng Ltd			Co-ords: E459094.28 N409668.86					
Disposal Site, Doncaster DN6 0DZ Project No. : 7991						Crew Name: MM & SM						Drilling Ed	quipment: Da	ando 150)		
Bor	ehole N				Туре		Level			Logged	Ву		cale		ge Numb		
	MW7D				-	.22m AoD	1		NS		1	1:50	Sheet 2 of		2		
Well	Water Strikes	Depth (mple and In Situ Testion (m) Type Resul		/m\			.evel (m)	Legend		Strat	tum Descrip	tion				
	Hole Diame	eter		Casing C	Diameter	Rac	14.50	Ch	iselling		Wet or to medifinit and (HEMI) FORM.	Frequent or NGBROUGH ATION) By brown SA lum. Gravel i d chert. NGBROUGH ATION)	ND and GRA s rounded fin GLACIOLAC Borehole at 15	present. CUSTRINE	d is fine um of	11 12 13 14 15 16 17 18 19 19 19 19 10 10 10 10	
Depth 15.0	Base [Diameter 200	Depth E	Base	Diameter 200	Depth To	op Depth Ba		Dura	tion	Tool	Depth Top	Depth Base	Inclination		ation	
10.0	-		13.0		200												
De-	nde-																
Rema	ırks																

Groundwater strike at 7.50mbgl and 12.50mbgl. Monitoring well installed with 5.50m response zone in superficial deposits. Borehole terminated at target depth of 15.00mbgl.

