



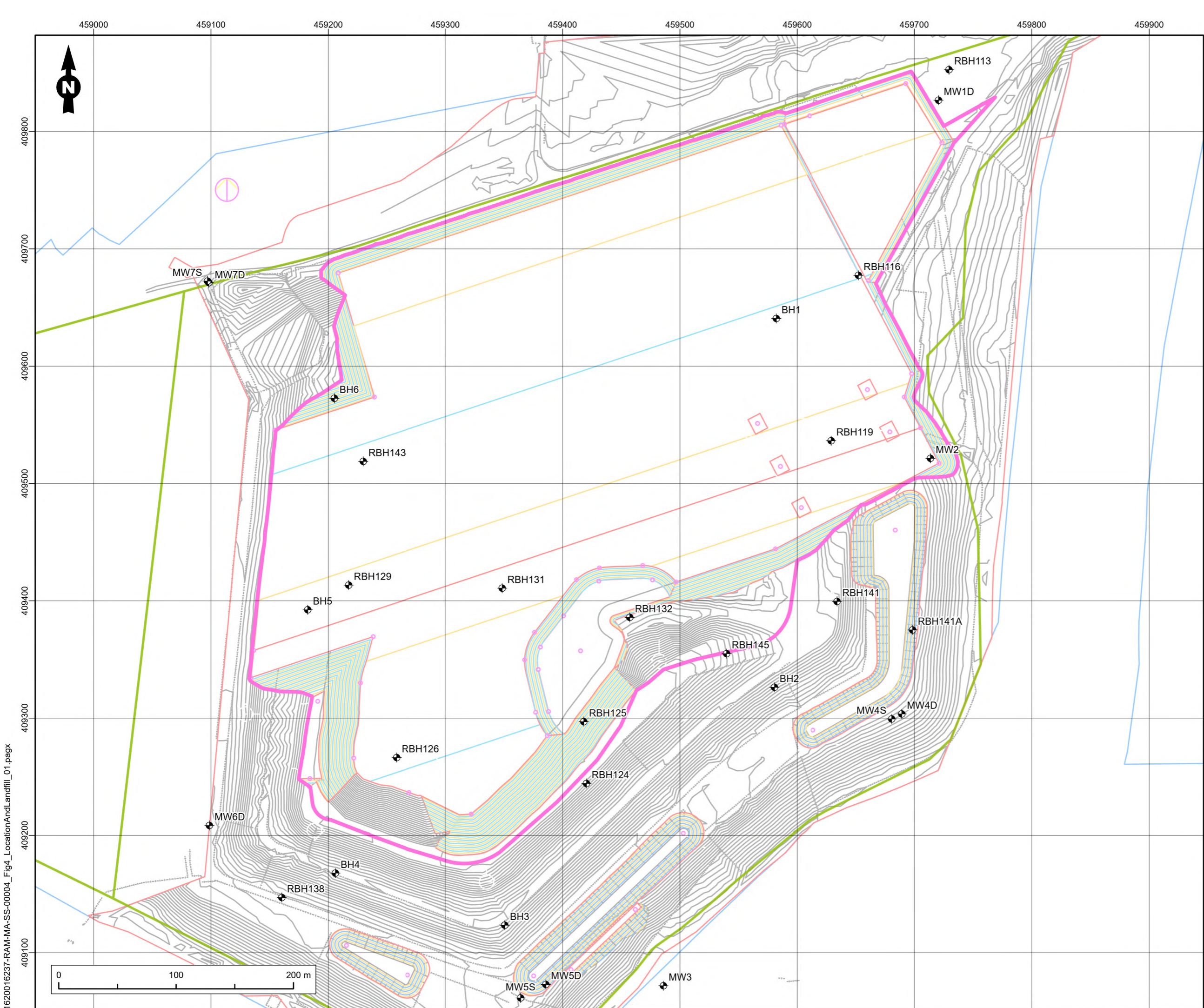
Legend

- Environmental Permit Boundary
- Surveied Contour (m AOD)

Surface Elevation (m AOD)

Name and Address of Operator		
Thorpe Marsh Green Energy Hub Limited 20 St. James's Street, 7th Floor, London, England, SW1A 1ES		
Figure Title		
Ground Elevation		
Project Name		
Thorpe Marsh Landfill (EPR/CP3091SC/V002)		
Project No./Filey ID		
1620016237 / REH2023N03018		
Date	Figure No.	Revision
May 2024	3	1.0
Prepared By	Scale	
PH	1:5,000 @A3	
Client	Thorpe Marsh Green Energy Hub Limited	

1620016237-RAM-MA-SS-000003_Fig3Topography_01.pagx



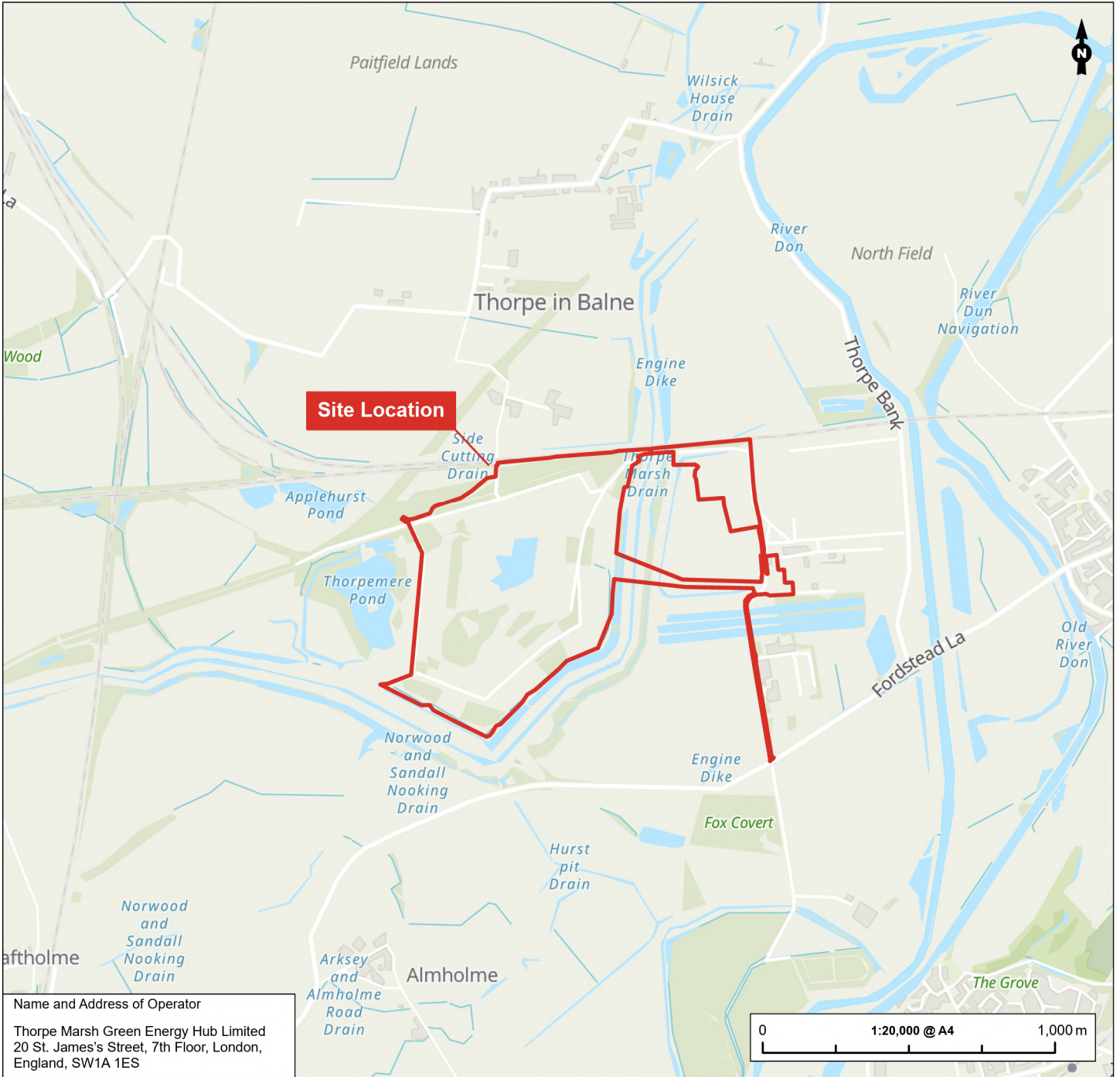
Legend

- Landfill Cell Boundary
- Environmental Permit Boundary
- Monitoring Location


Name and Address of Operator		
Thorpe Marsh Green Energy Hub Limited 20 St. James's Street, 7th Floor, London, England, SW1A 1ES		
Figure Title		
Borehole Location Plan and Landfill Cell Design		
Project Name		
Thorpe Marsh Landfill (EPR/CP3091SC/V002)		
Project No./Filey ID		
1620016237 / REH2023N03018		
Date	Figure No.	Revision
June 2024	4	1.0
Prepared By	Scale	
PH	1:3,000 @A3	
Client	Thorpe Marsh Green Energy Hub Limited	



1620016237-RAM-MA-SS-00004_Fig4_LocationAndLandfill_01.pagx



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

	Figure Title Site Location	Project Name Thorpe Marsh Landfill (EPR/CP3091SC/V002)	Date May 2024	
	Client Thorpe Marsh Green Energy Hub Limited	Project No./Filey ID 1620016237 / REH2023N03018	Prepared By PH	Figure No. 1
			Scale As Shown	Revision 1.0



Legend

- Planning Boundary
- Environmental Permit Boundary
- New PFA Cell Boundary

Name and Address of Operator

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

Figure Title

Site Layout

Project Name
Thorpe Marsh Landfill
 (EPR/CP3091SC/V002)

Project No./Filey ID
 1620016237 / REH2023N03018

Date	Figure No.	Revision
May 2024	2	1.0

Prepared By PH	Scale 1:10,000 @A4
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Client
**Thorpe Marsh Green
 Energy Hub Limited**



Monitoring Well ID:	Location (GR):
The following measurements/observations 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/seal material:	
Type and quantity of backfilling materials:	
Changes made to the borehole/well during the abandonment (e.g. casing removal).	
Problems encountered in the decommissioning procedure:	

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



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

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

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

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

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

Sample Summary			
Environmental Samples			
Soil	1	Water	0
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	

(NR) Indicates sample undertaken but with 0% Recovery

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

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.

SPT Hammer Ref.	Energy Ratio (%)

No Standard Penetration Tests Undertaken

Applicable to Cable Percussion Only			
Chiselling		Water Added	
Depth (m)	Duration (mins)	Depth (m)	Litres

Applicable to Rotary Only			
Drilling Flush			
Depth (m)	Flush Type	Flush Colour	Return %

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



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Log Type

**Cable
Percussion**

Sheet 1 of 2

Exploratory Hole Number

BH1
DRAFT



CENTRAL ALLIANCE
GEO

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

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Chiselling (mins)	Water Added (Litres)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation/ Backfill	Samples & Testing		
										Depth (m)	Ref	Test Results
MADE GROUND: Light grey slightly gravelly silty fine to medium SAND. Gravel is angular to subangular fine to coarse mixed lithologies. [PFA]												
		(15.00)								5.00 - 5.50	1 B	
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)	Diameter
		22/04	00:00	15.00	15.00	-	0.00	0.20	Grout	Standpipe		1.00 - 15.00	15.00	75
							0.20	1.00	Bentonite					
					1.00	15.00	Gravel							
									Groundwater Strikes					
									Strike (m)	Rises To (m)	Time (min)	Remarks		
									12.00	11.40	20			

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



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Log Type

Cable Percussion

Sheet 2 of 2

Exploratory Hole Number

BH1

DRAFT



CENTRAL ALLIANCE
GEO

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

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (m AOD)	Chiselling (mins)	Water Added (Litres)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Samples & Testing		
										Depth (m)	Ref	Test Results
MADE GROUND: Light grey slightly gravelly silty fine to medium SAND. Gravel is angular to subangular fine to coarse mixed lithologies. [PFA]										12.00 - 12.50 12.00 - 12.50	2 B 3 ES	
EOH at 15.00m - Scheduled depth		15.00	3.54			200 15.00	200 15.00					

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)	Diameter
		22/04	00:00	15.00	15.00	-	0.00 0.20 1.00	0.20 1.00 15.00	Grout Bentonite Gravel	Standpipe		1.00 - 15.00	15.00	75
		Groundwater Strikes												
		Strike (m)	Rises To (m)	Time (min)	Remarks									
		12.00	11.40	20										

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



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Log Type

Header Sheet

Exploratory Hole Number

BH2
DRAFT



CENTRAL ALLIANCE
GEO

Project No: 2371077	Location Details		Methodology & Plant		Scale: 1:50		
Name: Thorpe Marsh	Easting: 459538.35	Northing: 409285.76	From (m): 0.00 - 1.20 1.20 - 15.00	Method: Inspection Pit Cable Percussion	Plant Used: Hand Tools Dando 2000	Checked: BJ	
Location: Thorpe-in-Balne	Elevation: 19.58m AOD	Final Depth: 15.00m	Logger: JP	Grid System: OSGB	Orientation: N/A	Inclination: 90°	Approved: NH
Client: Egniol						Start Date: 22/04/2021	End Date: 22/04/2021

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

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

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

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

Sample Summary			
Environmental Samples			
Soil	1	Water	0
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	

(NR) Indicates sample undertaken but with 0% Recovery

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

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.

SPT Hammer Ref.	Energy Ratio (%)

No Standard Penetration Tests Undertaken

Applicable to Cable Percussion Only			
Chiselling		Water Added	
Depth (m)	Duration (mins)	Depth (m)	Litres

Applicable to Rotary Only			
Drilling Flush			
Depth (m)	Flush Type	Flush Colour	Return %

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



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Log Type

**Cable
Percussion**

Sheet 1 of 2

Exploratory Hole Number

BH2
DRAFT



CENTRAL ALLIANCE
GEO

Project No: 2371077	Location Details:		Methodology & Plant			Scale: 1:50
Name: Thorpe Marsh	Easting: 459538.35	Northing: 409285.76	Depth (m) 0.00 - 1.20 1.20 - 15.00	Method Inspection Pit Cable Percussion	Plant Used Hand Tools Dando 2000	Checked By: BJ
Location: Thorpe-in-Balne	Elevation: 19.58mAOD	Final Depth: 15.00m				Approved By: NH
Client: Egniol	Logged By: JP	Grid System: OSGB				Start Date: 22/04/2021
	Orientation: N/A	Inclination: 90°				Finish Date: 22/04/2021

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Chiselling (mins)	Water Added (Litres)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation/ Backfill	Samples & Testing		
										Depth (m)	Ref	Test Results
MADE GROUND: Light grey slightly gravelly silty fine to medium SAND. Gravel is angular to subangular fine to coarse mixed lithologies. [PFA]										3.00 3.00 - 3.50	3 ES 1 B	
		(15.00)								8.00 - 8.50	2 B	
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)	Diameter
							0.00	0.20	Concrete	Standpipe	1.00 - 15.00	15.00	75
							0.20	1.00	Bentonite				
					1.00	15.00	Gravel						
Groundwater Strikes													
Strike (m)		Rises To (m)		Time (min)		Remarks							

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

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Log Type

Cable Percussion

Sheet 2 of 2

Exploratory Hole Number

BH2

DRAFT



CENTRAL ALLIANCE
GEO

Project No: 2371077	Location Details:		Methodology & Plant			Scale: 1:50
Name: Thorpe Marsh	Easting: 459538.35	Northing: 409285.76	Depth (m) 0.00 - 1.20 1.20 - 15.00	Method Inspection Pit Cable Percussion	Plant Used Hand Tools Dando 2000	Checked By: BJ
Location: Thorpe-in-Balne	Elevation: 19.58m AOD	Final Depth: 15.00m				Approved By: NH
Client: Egniol	Logged By: JP	Grid System: OSGB				Start Date: 22/04/2021
	Orientation: N/A	Inclination: 90°				Finish Date: 22/04/2021

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (m AOD)	Chiselling (mins)	Water Added (Litres)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Samples & Testing		
										Depth (m)	Ref	Test Results
MADE GROUND: Light grey slightly gravelly silty fine to medium SAND. Gravel is angular to subangular fine to coarse mixed lithologies. [PFA]												
EOH at 15.00m - Scheduled depth		15.00	4.58			200 15.00	200 15.00					

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)	Diameter
							0.00 0.20 1.00	0.20 1.00 15.00	Concrete Bentonite Gravel	Standpipe	1.00 - 15.00	15.00	75
		Groundwater Strikes											
		Strike (m)	Rises To (m)	Time (min)	Remarks								

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

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Log Type

**Header
Sheet**

Exploratory Hole Number

BH3
DRAFT



CENTRAL ALLIANCE
GEO

Project No: 2371077	Location Details		Methodology & Plant		Scale: 1:50	
Name: Thorpe Marsh	Easting: 459347.94	Northing: 409112.18	From (m) 0.00 - 1.20 1.20 - 15.00	Method Inspection Pit Cable Percussion	Plant Used Hand Tools Dando 3000	Checked: BJ
Location: Thorpe-in-Balne	Elevation: 16.10m AOD	Final Depth: 15.00m	Logger: HI	Grid System: OSGB		Approved: NH
Client: Egniol	Orientation: N/A	Inclination: 90°				Start Date: 22/04/2021 End Date: 23/04/2021

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

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

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

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

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

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

(NR) Indicates sample undertaken but with 0% Recovery

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

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

SPT Hammer Ref.	Energy Ratio (%)

No Standard Penetration Tests Undertaken

Applicable to Cable Percussion Only			
Chiselling		Water Added	
Depth (m)	Duration (mins)	Depth (m)	Litres

Applicable to Rotary Only			
Drilling Flush			
Depth (m)	Flush Type	Flush Colour	Return %

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



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Log Type

Cable Percussion

Sheet 1 of 2

Exploratory Hole Number

BH3
DRAFT



CENTRAL ALLIANCE
GEO

Project No: 2371077	Location Details:		Methodology & Plant			Scale: 1:50
Name: Thorpe Marsh	Easting: 459347.94	Northing: 409112.18	Depth (m) 0.00 - 1.20 1.20 - 15.00	Method Inspection Pit Cable Percussion	Plant Used Hand Tools Dando 3000	Checked By: BJ
Location: Thorpe-in-Balne	Elevation: 16.10m AOD	Final Depth: 15.00m				Approved By: NH
Client: Egniol	Logged By: HI	Grid System: OSGB				Start Date: 22/04/2021
	Orientation: N/A	Inclination: 90°				Finish Date: 23/04/2021

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (m AOD)	Chiselling (mins)	Water Added (Litres)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Samples & Testing		
										Depth (m)	Ref	Test Results
MADE GROUND: Light grey slightly gravelly silty fine to medium SAND. Gravel is angular to subangular fine to coarse mixed lithologies. [PFA]										2.00 - 2.50	1 B	
		(15.00)								8.00 8.00 - 8.50	3 ES 2 B	
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)	Diameter
		22/04	00:00	15.00	15.00	-	0.00	0.20	Grout	Standpipe		1.00 - 15.00	15.00	75
							0.20	1.00	Bentonite					
					1.00	15.00	Gravel							
Groundwater Strikes														
		Strike (m)	Rises To (m)	Time (min)	Remarks									

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



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Log Type

**Cable
Percussion**

Sheet 2 of 2

Exploratory Hole Number

BH3

DRAFT



CENTRAL ALLIANCE
GEO

Project No: 2371077	Location Details:		Methodology & Plant			Scale: 1:50
Name: Thorpe Marsh	Easting: 459347.94	Northing: 409112.18	Depth (m) 0.00 - 1.20 1.20 - 15.00	Method Inspection Pit Cable Percussion	Plant Used Hand Tools Dando 3000	Checked By: BJ
Location: Thorpe-in-Balne	Elevation: 16.10m AOD	Final Depth: 15.00m				Approved By: NH
Client: Egniol	Logged By: HI	Grid System: OSGB				Start Date: 22/04/2021
	Orientation: N/A	Inclination: 90°				Finish Date: 23/04/2021

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (m AOD)	Chiselling (mins)	Water Added (Litres)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation/ Backfill	Samples & Testing		
										Depth (m)	Ref	Test Results
MADE GROUND: Light grey slightly gravelly silty fine to medium SAND. Gravel is angular to subangular fine to coarse mixed lithologies. [PFA]												
EOH at 15.00m - Scheduled depth		15.00	1.10			200 15.00	200 15.00					

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)	Diameter
		22/04	00:00	15.00	15.00	-	0.00 0.20 1.00	0.20 1.00 15.00	Grout Bentonite Gravel	Standpipe		1.00 - 15.00	15.00	75
		Groundwater Strikes												
		Strike (m)	Rises To (m)	Time (min)	Remarks									

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

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CENTRAL ALLIANCE

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Log Type

**Header
Sheet**

Exploratory Hole Number

BH4
DRAFT



CENTRAL ALLIANCE
GEO

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

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

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

(NR) Indicates sample undertaken but with 0% Recovery

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

In-Situ Tests	
Test	Count
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.

SPT Hammer Ref.	Energy Ratio (%)

No Standard Penetration Tests Undertaken

Applicable to Cable Percussion Only			
Chiselling		Water Added	
Depth (m)	Duration (mins)	Depth (m)	Litres

Applicable to Rotary Only			
Drilling Flush			
Depth (m)	Flush Type	Flush Colour	Return %

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



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Log Type

**Cable
Percussion**

Sheet 1 of 2

Exploratory Hole Number

BH4

DRAFT



CENTRAL ALLIANCE
GEO

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

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Chiselling (mins)	Water Added (Litres)	Hole ϕ (mm) Depth (m)	Casing ϕ (mm) Depth (m)	Water Level (m)	Installation/ Backfill	Samples & Testing		
										Depth (m)	Ref	Test Results
MADE GROUND: Light grey slightly gravelly silty fine to medium SAND. Gravel is angular to subangular fine to coarse mixed lithologies. [PFA]												
		(15.00)								5.00 5.00 - 5.50	3 ES 1 B	
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)	Diameter
		26/04	00:00	15.00	15.00	-	0.00 0.20 1.00	0.20 1.00 15.00	Grout Bentonite Gravel	Standpipe	1.00 - 15.00	15.00	75
		Groundwater Strikes											
		Strike (m)	Rises To (m)	Time (min)	Remarks								

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



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Log Type

**Cable
Percussion**

Sheet 2 of 2

Exploratory Hole Number

BH4

DRAFT



CENTRAL ALLIANCE
GEO

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

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (m AOD)	Chiselling (mins)	Water Added (Litres)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation/ Backfill	Samples & Testing		
										Depth (m)	Ref	Test Results
MADE GROUND: Light grey slightly gravelly silty fine to medium SAND. Gravel is angular to subangular fine to coarse mixed lithologies. [PFA]												
										12.00 - 12.50	2 B	
EOH at 15.00m - Scheduled depth		15.00	1.71			200	200	15.00	15.00			

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)	Diameter
		26/04	00:00	15.00	15.00	-	0.00	0.20	Grout	Standpipe		1.00 - 15.00	15.00	75
							0.20	1.00	Bentonite					
					1.00	15.00	Gravel							
Groundwater Strikes														
		Strike (m)	Rises To (m)	Time (min)	Remarks									

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



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Log Type

Header Sheet

Exploratory Hole Number

BH5
DRAFT



CENTRAL ALLIANCE
GEO

Project No: 2371077	Location Details		Methodology & Plant			Scale: 1:50
Name: Thorpe Marsh	Easting: 459179.40	Northing: 409413.21	From (m)	Method	Plant Used	Checked: BJ
Location: Thorpe-in-Balne	Elevation: 18.42mAOD	Final Depth: 15.00m	0.00 - 1.20 1.20 - 15.00	Inspection Pit Cable Percussion	Hand Tools Dando 2000	Approved: NH
Client: Egniol	Logger: HI	Grid System: OSGB				Start Date: 27/04/2021
	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

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

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.

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

Sample Summary			
Environmental Samples			
Soil	1	Water	0
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	

(NR) Indicates sample undertaken but with 0% Recovery

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

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.

SPT Hammer Ref.	Energy Ratio (%)

No Standard Penetration Tests Undertaken

Applicable to Cable Percussion Only			
Chiselling		Water Added	
Depth (m)	Duration (mins)	Depth (m)	Litres

Applicable to Rotary Only			
Drilling Flush			
Depth (m)	Flush Type	Flush Colour	Return %

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



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Log Type
Cable Percussion
Sheet 1 of 2

Exploratory Hole Number
BH5
DRAFT



Project No: 2371077	Location Details:		Methodology & Plant			Scale: 1:50
Name: Thorpe Marsh	Easting: 459179.40	Northing: 409413.21	Depth (m) 0.00 - 1.20 1.20 - 15.00	Method Inspection Pit Cable Percussion	Plant Used Hand Tools Dando 2000	Checked By: BJ
Location: Thorpe-in-Balne	Elevation: 18.42mAOD	Final Depth: 15.00m				Approved By: NH
Client: Egniol	Logged By: HI	Grid System: OSGB				Start Date: 27/04/2021
	Orientation: N/A	Inclination: 90°				Finish Date: 27/04/2021

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Chiselling (mins)	Water Added (Litres)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Samples & Testing		
										Depth (m)	Ref	Test Results
MADE GROUND: Light grey slightly gravelly silty fine to medium SAND. Gravel is angular to subangular fine to coarse mixed lithologies. [PFA]										2.00 - 2.50	1 B	
		(15.00)								8.00 8.00 - 8.50	3 ES 2 B	
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)	Diameter
							0.00 0.20 1.00	0.20 1.00 15.00	Concrete Bentonite Gravel	Standpipe	1.00 - 15.00	15.00	75
		Groundwater Strikes											
		Strike (m)	Rises To (m)	Time (min)	Remarks								
		9.00	8.50	20									

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



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Log Type

Cable Percussion

Sheet 2 of 2

Exploratory Hole Number

BH5

DRAFT



CENTRAL ALLIANCE
GEO

Project No: 2371077	Location Details:		Methodology & Plant			Scale: 1:50
Name: Thorpe Marsh	Easting: 459179.40	Northing: 409413.21	Depth (m) 0.00 - 1.20 1.20 - 15.00	Method Inspection Pit Cable Percussion	Plant Used Hand Tools Dando 2000	Checked By: BJ
Location: Thorpe-in-Balne	Elevation: 18.42m AOD	Final Depth: 15.00m				Approved By: NH
Client: Egniol	Logged By: HI	Grid System: OSGB				Start Date: 27/04/2021
	Orientation: N/A	Inclination: 90°				Finish Date: 27/04/2021

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (m AOD)	Chiselling (mins)	Water Added (Litres)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation/ Backfill	Samples & Testing		
										Depth (m)	Ref	Test Results
MADE GROUND: Light grey slightly gravelly silty fine to medium SAND. Gravel is angular to subangular fine to coarse mixed lithologies. [PFA]												
EOH at 15.00m - Scheduled depth		15.00	3.42			200 15.00	200 15.00					

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)	Diameter
							0.00	0.20	Concrete	Standpipe		1.00 - 15.00	15.00	75
							0.20	1.00	Bentonite					
					1.00	15.00	Gravel							
									Groundwater Strikes					
									Strike (m)	Rises To (m)	Time (min)	Remarks		
									9.00	8.50	20			

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



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Log Type

Header Sheet

Exploratory Hole Number

BH6

DRAFT



CENTRAL ALLIANCE
GEO

Project No: 2371077	Location Details		Methodology & Plant			Scale: 1:50
Name: Thorpe Marsh	Easting: 459203.28	Northing: 409586.45	From (m)	Method	Plant Used	Checked: BJ
Location: Thorpe-in-Balne	Elevation: 18.47mAOD	Final Depth: 15.00m	0.00 - 1.20 1.20 - 15.00	Inspection Pit Cable Percussion	Hand Tools Dando 3000	Approved: NH
Client: Egniol	Logger: HI	Grid System: OSGB				Start Date: 27/04/2021
	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

Groundwater Strikes					
Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (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	Concrete
0.20 - 1.00	Bentonite
1.00 - 15.00	Gravel

Sample Summary			
Environmental Samples			
Soil	1	Water	0
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	

(NR) Indicates sample undertaken but with 0% Recovery

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

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.

SPT Hammer Ref.	Energy Ratio (%)

No Standard Penetration Tests Undertaken

Applicable to Cable Percussion Only			
Chiselling		Water Added	
Depth (m)	Duration (mins)	Depth (m)	Litres

Applicable to Rotary Only			
Drilling Flush			
Depth (m)	Flush Type	Flush Colour	Return %

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



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Log Type

**Cable
Percussion**

Sheet 1 of 2

Exploratory Hole Number

BH6

DRAFT



CENTRAL ALLIANCE
GEO

Project No: 2371077	Location Details:		Methodology & Plant			Scale: 1:50
Name: Thorpe Marsh	Easting: 459203.28	Northing: 409586.45	Depth (m) 0.00 - 1.20 1.20 - 15.00	Method Inspection Pit Cable Percussion	Plant Used Hand Tools Dando 3000	Checked By: BJ
Location: Thorpe-in-Balne	Elevation: 18.47mAOD	Final Depth: 15.00m				Approved By: NH
Client: Egniol	Logged By: HI	Grid System: OSGB				Start Date: 27/04/2021
	Orientation: N/A	Inclination: 90°				Finish Date: 27/04/2021

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Chiselling (mins)	Water Added (Litres)	Hole ϕ (mm) Depth (m)	Casing ϕ (mm) Depth (m)	Water Level (m)	Installation/ Backfill	Samples & Testing		
										Depth (m)	Ref	Test Results
MADE GROUND: Light grey slightly gravelly silty fine to medium SAND. Gravel is angular to subangular fine to coarse mixed lithologies. [PFA]												
		(15.00)								5.00 - 5.50	1 B	
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)	Diameter
							0.00	0.20	Concrete	Standpipe	1.00 - 15.00	15.00	75
							0.20	1.00	Bentonite				
					1.00	15.00	Gravel						
Groundwater Strikes													
		Strike (m)	Rises To (m)	Time (min)	Remarks								

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

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**Cable
Percussion**

Sheet 2 of 2

Exploratory Hole Number

BH6

DRAFT



CENTRAL ALLIANCE
GEO

Project No: 2371077	Location Details:		Methodology & Plant			Scale: 1:50
Name: Thorpe Marsh	Easting: 459203.28	Northing: 409586.45	Depth (m) 0.00 - 1.20 1.20 - 15.00	Method Inspection Pit Cable Percussion	Plant Used Hand Tools Dando 3000	Checked By: BJ
Location: Thorpe-in-Balne	Elevation: 18.47m AOD	Final Depth: 15.00m				Approved By: NH
Client: Egniol	Logged By: HI	Grid System: OSGB				Start Date: 27/04/2021
	Orientation: N/A	Inclination: 90°				Finish Date: 27/04/2021

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (m AOD)	Chiselling (mins)	Water Added (Litres)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation/ Backfill	Samples & Testing		
										Depth (m)	Ref	Test Results
MADE GROUND: Light grey slightly gravelly silty fine to medium SAND. Gravel is angular to subangular fine to coarse mixed lithologies. [PFA]										12.00 12.00 - 12.50	3 ES 2 B	
EOH at 15.00m - Scheduled depth		15.00	3.47			200 15.00	200 15.00					

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)	Diameter
							0.00	0.20	Concrete	Standpipe		1.00 - 15.00	15.00	75
							0.20	1.00	Bentonite					
					1.00	15.00	Gravel							
Groundwater Strikes														
Strike (m)		Rises To (m)		Time (min)		Remarks								

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

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Log Type

**Header
Sheet**

Exploratory Hole Number

MW1D

DRAFT



CENTRAL ALLIANCE
GEO

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

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

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

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

Sample Summary			
Environmental Samples			
Soil	4	Water	0
Geotechnical Samples			
Bulk	12	Large Bulk	0
Disturbed	17	Disturbed (NR)	0
Piston	0	Piston (NR)	0
Undisturbed	3	Undisturbed (NR)	0
Undisturbed Thin Wall		0	
Undisturbed Thin Wall (NR)		0	
Core Sample		0	

Standard Penetration Test Summary									
Test Type	Depth (m)	Casing (m)	Water (m)	Seating Blows	Main Blows	Penetration Total (mm)	N	Reported Result	Hammer Ref
Split Spoon	1.20	-	-	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

(NR) Indicates sample undertaken but with 0% Recovery

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.

SPT Hammer Ref.	Energy Ratio (%)
JB03	97

Applicable to Cable Percussion Only			
Chiselling		Water Added	
Depth (m)	Duration (mins)	Depth (m)	Litres

Applicable to Rotary Only			
Drilling Flush			
Depth (m)	Flush Type	Flush Colour	Return %

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



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Log Type

Cable Percussion

Sheet 1 of 2

Exploratory Hole Number

MW1D

DRAFT



CENTRAL ALLIANCE
GEO

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

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Chiselling (mins)	Water Added (Litres)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Samples & Testing	
										Depth (m)	Ref
MADE GROUND: Light grey CONCRETE.		(0.50)									
MADE GROUND: Light grey slightly gravelly silty fine to medium SAND. Gravel is angular to subangular fine to coarse mixed lithologies. [PFA]		0.50	8.43								
		(2.30)									
Dark brown PEAT with strong hydrocarbon odour. [Hemingbrough Formation]		2.80 (0.20)	6.12								
Blackish brown slightly clayey gravelly SAND. Gravel is angular to subangular fine to coarse sandstone. [Hemingbrough Formation]		3.00	5.92								
From 3.90m, medium high cobble content. Boulders are subangular to subrounded fine to coarse sandstone.		(2.00)									
Greyish brown slightly sandy silty CLAY with medium boulder content. Sand is fine to coarse. Boulders are angular to subangular fine to coarse sandstone. [Hemingbrough Formation]		5.00	3.92								
		(7.50)									

Observations / Remarks	Misc.	Shift Information				Backfill				Installations			
Groundwater Encountered Casing Used No Monitoring Point Installed Hammer Ref. & Energy Ratio (%) JB03 (97%)		Date	Time	Depth (m)	Casing (m)	Water (m)	From (m)	To (m)	Material	Instrument Details	Resp. Zone	Depth (m)	Diameter
		27/04	00:00	3.00	3.00	-	0.00	0.20	Concrete	Standpipe	5.00 - 15.00	15.00	75
		28/04	00:00	15.00	15.00	-	0.20	5.00	Bentonite Gravel				
Groundwater Strikes													
		Strike (m)	Rises To (m)	Time (min)	Remarks								
		1.80	1.80	0									
		3.90	3.90	0									
		7.70	7.70	0									



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Log Type

Cable Percussion

Sheet 2 of 2

Exploratory Hole Number

MW1D

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CENTRAL ALLIANCE
GEO

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

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Chiselling (mins)	Water Added (Litres)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Samples & Testing		
										Depth (m)	Ref	Test Results
Greyish brown slightly sandy silty CLAY with medium boulder content. Sand is fine to coarse. Boulders are angular to subangular fine to coarse sandstone. [Hemingbrough Formation]										10.50 - 10.95	23 U	
										10.50 - 11.00	24 B	
										11.50	25 D	
										12.00 - 12.45	26 D	SPT(S) 12.00m, N=28 (4,4/6,6,7,9)
										12.00 - 12.50	27 B	
										12.00 - 12.50	36 ES	
Greyish brown fine to coarse SAND. [Hemingbrough Formation]		12.50	-3.58							13.00	28 D	
										13.50 - 13.95	29 D	
		(2.50)								13.50 - 14.00	30 B	
										14.50	31 D	
EOH at 15.00m - Scheduled depth		15.00	-6.08			200	200			15.00 - 15.45	32 D	

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)	Diameter
		27/04	00:00	3.00	3.00	-	0.00	0.20	Concrete	Standpipe		5.00 - 15.00	15.00	75
		28/04	00:00	15.00	15.00	-	0.20	5.00	Bentonite					
								Gravel						
									Groundwater Strikes					
									Strike (m)	Rises To (m)	Time (min)	Remarks		
									1.80	1.80	0			
									3.90	3.90	0			
									7.70	7.70	0			

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Groundwater Encountered
Casing Used
No Monitoring Point Installed
Hammer Ref. & Energy Ratio (%)
JB03 (97%)



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Header Sheet

Exploratory Hole Number

MW2

DRAFT



CENTRAL ALLIANCE
GEO

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

Hole Diameter	
Depth (m)	Diam (mm)
18.00	200

Casing Diameter	
Depth (m)	Diam (mm)
18.00	200

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

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

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

(NR) Indicates sample undertaken but with 0% Recovery
No Samples Taken

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.

SPT Hammer Ref.	Energy Ratio (%)

No Standard Penetration Tests Undertaken

Applicable to Cable Percussion Only			
Chiselling		Water Added	
Depth (m)	Duration (mins)	Depth (m)	Litres

Applicable to Rotary Only			
Drilling Flush			
Depth (m)	Flush Type	Flush Colour	Return %

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



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Log Type

Cable Percussion

Sheet 1 of 2

Exploratory Hole Number

MW2

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CENTRAL ALLIANCE
GEO

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

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Chiselling (mins)	Water Added (Litres)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Samples & Testing	
										Depth (m)	Ref
MADE GROUND: Light grey slightly gravelly silty fine to medium SAND. Gravel is angular to subangular fine to coarse mixed lithologies. (PFA)											
		(7.20)									
Brown slightly gravelly slightly sandy silty CLAY. Gravel is subangular to angular fine to coarse sandstone siltstone. Sand is fine to coarse. [Hemingbrough Formation]		7.20	3.59								
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)	Diameter
							0.00	0.20	Concrete	Standpipe		10.00 - 18.00	18.00	75
							0.20	10.00	Bentonite					
					10.00	18.00	Gravel							
		Groundwater Strikes												
		Strike (m)	Rises To (m)	Time (min)	Remarks									
		4.20	0.00	0										
		10.90	0.00	0										
		14.90	0.00	0										

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Log Type

Cable Percussion

Sheet 2 of 2

Exploratory Hole Number

MW2
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CENTRAL ALLIANCE
GEO

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

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (m AOD)	Chiselling (mins)	Water Added (Litres)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Samples & Testing	
										Depth (m)	Ref
Brown slightly gravelly slightly sandy silty CLAY. Gravel is subangular to angular fine to coarse sandstone siltstone. Sand is fine to coarse. [Hemingbrough Formation]		(7.30)						10.90			
Brown slightly gravelly silty fine to coarse SAND. Gravel is angular to subangular fine to medium sandstone siltstone. [Hemingbrough Formation]		(3.50)	14.50	3.71				14.90			
At 16.50m, 1No. subangular sandstone cobble.											
EOH at 18.00m - Scheduled depth		18.00	-7.21			200 18.00	200 18.00				

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)	Diameter
							0.00	0.20	Concrete	Standpipe	10.00 - 18.00	18.00	75
							0.20	10.00	Bentonite				
					10.00	18.00	Gravel	Groundwater Strikes					
									Strike (m)	Rises To (m)	Time (min)	Remarks	
									4.20	0.00	0		
									10.90	0.00	0		
									14.90	0.00	0		

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



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Log Type

Header Sheet

Exploratory Hole Number

MW3

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CENTRAL ALLIANCE
GEO

Project No: 2371077	Location Details		Methodology & Plant			Scale: 1:50
Name: Thorpe Marsh	Easting: 459502.83	Northing: 409076.59	From (m)	Method	Plant Used	Checked: BJ
Location: Thorpe-in-Balne	Elevation: 2.24mAOD	Final Depth: 13.00m	0.00 - 1.20 1.20 - 13.00	Inspection Pit Cable Percussion	Hand Tools Dando 2000	Approved: NH
Client: Egniol	Logger: JP	Grid System: OSGB				Start Date: 23/04/2021
	Orientation: N/A	Inclination: 90°				End Date: 26/04/2021

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

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

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

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

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

(NR) Indicates sample undertaken but with 0% Recovery
No Samples Taken

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.

SPT Hammer Ref.	Energy Ratio (%)

No Standard Penetration Tests Undertaken

Applicable to Cable Percussion Only			
Chiselling		Water Added	
Depth (m)	Duration (mins)	Depth (m)	Litres

Applicable to Rotary Only			
Drilling Flush			
Depth (m)	Flush Type	Flush Colour	Return %

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



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Cable Percussion

Sheet 1 of 2

Exploratory Hole Number

MW3

DRAFT



CENTRAL ALLIANCE
GEO

Project No: 2371077	Location Details:		Methodology & Plant			Scale: 1:50
Name: Thorpe Marsh	Easting: 459502.83	Northing: 409076.59	Depth (m)	Method	Plant Used	Checked By: BJ
Location: Thorpe-in-Balne	Elevation: 2.24mAOD	Final Depth: 13.00m	0.00 - 1.20 1.20 - 13.00	Inspection Pit Cable Percussion	Hand Tools Dando 2000	Approved By: NH
Client: Egniol	Logged By: JP	Grid System: OSGB				Start Date: 23/04/2021
	Orientation: N/A	Inclination: 90°				Finish Date: 26/04/2021

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Chiselling (mins)	Water Added (Litres)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation/ Backfill	Samples & Testing	
										Depth (m)	Ref
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]		5.70 (0.50)	-3.46								
MADE GROUND: Light grey slightly gravelly silty fine to medium SAND. Gravel is angular to subangular fine to coarse mixed lithologies. [PFA]		6.20	-3.96								
		(2.20)									
Light greyish brown slightly gravelly silty SAND. Gravel is angular to subangular fine to medium sandstone. [Hemingbrough Formation]		8.40	-6.16								
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)	Diameter
							0.00	0.20	Concrete	Standpipe	8.50 - 13.00	13.00	75
							0.20	8.50	Bentonite				
					8.50	13.00	Gravel						
Groundwater Strikes													
Strike (m)		Rises To (m)	Time (min)	Remarks									

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

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Cable Percussion

Sheet 2 of 2

Exploratory Hole Number

MW3

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CENTRAL ALLIANCE
GEO

Project No: 2371077	Location Details:		Methodology & Plant			Scale: 1:50
Name: Thorpe Marsh	Easting: 459502.83	Northing: 409076.59	Depth (m)	Method	Plant Used	Checked By: BJ
Location: Thorpe-in-Balne	Elevation: 2.24m AOD	Final Depth: 13.00m	0.00 - 1.20 1.20 - 13.00	Inspection Pit Cable Percussion	Hand Tools Dando 2000	Approved By: NH
Client: Egniol	Logged By: JP	Grid System: OSGB				Start Date: 23/04/2021
	Orientation: N/A	Inclination: 90°				Finish Date: 26/04/2021

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (m AOD)	Chiselling (mins)	Water Added (Litres)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation/ Backfill	Samples & Testing		
										Depth (m)	Ref	Test Results
Between 11.40m and 13.00m gravel is fine to coarse.		(4.60)										
EOH at 13.00m - Scheduled depth		13.00	-10.76			200 13.00	200 13.00					

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Observations / Remarks	Misc.	Shift Information				Backfill			Installations				
	<i>No Groundwater Encountered</i> <i>Casing Used</i> <i>No Monitoring Point Installed</i> <i>Hammer Ref. & Energy Ratio (%)</i>	Date	Time	Depth (m)	Casing (m)	Water (m)	From (m)	To (m)	Material	Instrument Details	Resp. Zone	Depth (m)	Diameter
							0.00	0.20	Concrete	Standpipe	8.50 - 13.00	13.00	75
							0.20	8.50	Bentonite				
						8.50	13.00	Gravel					
Groundwater Strikes													
Strike (m)		Rises To (m)		Time (min)		Remarks							



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Header Sheet

Exploratory Hole Number

MW4D

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CENTRAL ALLIANCE
GEO

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

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

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

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

Installation / Instrument Details				
Date	Instrument Details	To (m)	Resp. Zone (m)	Diam (mm)
21/04/2021	Standpipe	15.00	11.20 - 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 - 11.20	Bentonite
11.20 - 15.00	Gravel

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			
0			

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

(NR) Indicates sample undertaken but with 0% Recovery
No Samples Taken

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.

SPT Hammer Ref.	Energy Ratio (%)

No Standard Penetration Tests Undertaken

Applicable to Cable Percussion Only			
Chiselling		Water Added	
Depth (m)	Duration (mins)	Depth (m)	Litres

Applicable to Rotary Only			
Drilling Flush			
Depth (m)	Flush Type	Flush Colour	Return %

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



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Log Type
Cable Percussion
Sheet 1 of 2

Exploratory Hole Number
MW4D
DRAFT



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

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (m AOD)	Chiselling (mins)	Water Added (Litres)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Samples & Testing		
										Depth (m)	Ref	Test Results
MADE GROUND: Light grey slightly gravelly silty fine to medium SAND. Gravel is angular to subangular fine to coarse mixed lithologies. [PFA]	[Cross-hatched pattern]											
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]	[Horizontal line pattern]	8.80	2.18					4.70				
Continued on Next Page												

Observations / Remarks <i>Groundwater encountered</i> <i>Casing Used</i> <i>No Monitoring Point Installed</i> <i>Hammer Ref. & Energy Ratio (%)</i>	Misc.		Shift Information				Backfill			Installations			
	Date	Time	Depth (m)	Casing (m)	Water (m)	From (m)	To (m)	Material	Instrument Details		Resp. Zone	Depth (m)	Diameter
						0.00 0.20 11.20	0.20 11.20 15.00	Grout Bentonite Gravel	Standpipe		11.20 - 15.00	15.00	75
	Groundwater Strikes												
Strike (m)		Rises To (m)	Time (min)	Remarks									
4.70 11.20		0.00 0.00	0 0										

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Log Type

**Cable
Percussion**

Sheet 2 of 2

Exploratory Hole Number

MW4D

DRAFT



CENTRAL ALLIANCE
GEO

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

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (m AOD)	Chiselling (mins)	Water Added (Litres)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Samples & Testing	
										Depth (m)	Ref
From 11.20m, greyish brown sandy partings. Sand is medium to coarse.		(6.20)						11.20			
EOH at 15.00m - Scheduled depth		15.00	4.02			200 15.00	200 15.00				

Groundwater Encountered Casing Used No Monitoring Point Installed Hammer Ref. & Energy Ratio (%)	Shift Information					Backfill			Installations				
	Date	Time	Depth (m)	Casing (m)	Water (m)	From (m)	To (m)	Material	Instrument Details		Resp. Zone	Depth (m)	Diameter
						0.00	0.20	Grout	Standpipe		11.20 - 15.00	15.00	75
						0.20	11.20	Bentonite					
					11.20	15.00	Gravel						
Groundwater Strikes													
Strike (m)		Rises To (m)		Time (min)		Remarks							
4.70		0.00		0									
11.20		0.00		0									

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Log Type

Header Sheet

Exploratory Hole Number

MW4S

DRAFT



CENTRAL ALLIANCE
GEO

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

Hole Diameter	
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

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	
Depth (m)	Legend Code
0.00 - 73.00	Bentonite
73.00 - 83.00	Gravel

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

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

(NR) Indicates sample undertaken but with 0% Recovery
No Samples Taken

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.

SPT Hammer Ref.	Energy Ratio (%)

No Standard Penetration Tests Undertaken

Applicable to Cable Percussion Only			
Chiselling		Water Added	
Depth (m)	Duration (mins)	Depth (m)	Litres

Applicable to Rotary Only			
Drilling Flush			
Depth (m)	Flush Type	Flush Colour	Return %

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



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Log Type

**Rotary
Borehole**

Sheet 1 of 9

Exploratory Hole Number

MW4S

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CENTRAL ALLIANCE
GEO

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

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (m AOD)	Hole ϕ (mm) Depth (m)	Casing ϕ (mm) Depth (m)	Water Level (m)	Installation / Backfill	Samples & Testing			
								Depth (m)	Ref	Test Results	
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]											
		(4.00)									
Brown silty slightly gravelly fine to coarse SAND. Gravel is angular to subangular fine to medium sandstone and siltstone. [Hemingbrough Formation]											
		4.00	6.59								
		(4.70)									
Brown CLAY (Drillers description) [Hemingbrough Formation]											
		8.70	1.89								
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)	Diameter											
		03/06	08:00	0.00	-	-	0.00	73.00	Bentonite	Standpipe		78.00 - 83.00	83.00	75											
		03/06	17:00	58.00	58.00	-	73.00	83.00	Gravel																
		04/06	08:00	58.00	58.00	-																			
<div style="display: flex; justify-content: space-between;"> <div style="width: 20%;"> <p style="color: red; font-size: small;">No Groundwater Encountered Casing Used No Monitoring Point Installed Hammer Ref. & Energy Ratio (%)</p> </div> <div style="width: 80%;"> <table border="1"> <thead> <tr> <th colspan="4">Drilling Fluid</th> </tr> <tr> <th>Depth (m)</th> <th>Type</th> <th>Colour</th> <th>Return %</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table> </div> </div>														Drilling Fluid				Depth (m)	Type	Colour	Return %				
Drilling Fluid																									
Depth (m)	Type	Colour	Return %																						



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Log Type

**Rotary
Borehole**

Sheet 2 of 9

Exploratory Hole Number

MW4S

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CENTRAL ALLIANCE
GEO

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

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (m AOD)	Hole ϕ (mm) Depth (m)	Casing ϕ (mm) Depth (m)	Water Level (m)	Installation / Backfill	Samples & Testing			
								Depth (m)	Ref	Test Results	
Brown CLAY (Drillers description) [Hemingbrough Formation]		4.80									
Fine to coarse GRAVEL (Drillers description). [Hemingbrough Formation]		13.50 (0.70)	-2.91								
Brown gravelly CLAY (Drillers description) [Hemingbrough Formation]		14.20	-3.61								
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)	Diameter
		03/06	08:00	0.00	-	-	0.00	73.00	Bentonite	Standpipe	78.00 - 83.00	83.00	75
		03/06	17:00	58.00	58.00	-	73.00	83.00	Gravel				
		04/06	08:00	58.00	58.00	-							
Drilling Fluid													
		Depth (m)	Type	Colour	Return %								

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

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Log Type
**Rotary
Borehole**
Sheet 3 of 9

Exploratory Hole Number
MW4S
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Project No: 2371077 Name: Thorpe Marsh Location: Thorpe-in-Balne Client: Egniol	Location Details Easting: 459663.10 Northing: 409311.32 Elevation: 10.59mAOD Final Depth: 83.00m Logged By: MN Grid System: OSGB Orientation: N/A Inclination: 90°	Methodology & Plant From (m): 0.00 - 1.20 1.20 - 83.00 Method: Inspection Pit Rotary Open Holing Plant Used: Hand Tools MC900GT	Scale: 1:50 Checked By: BJ Approved By: NH Start Date: 03/06/2021 Finish Date: 10/05/2021
--	---	--	---

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Samples & Testing			
								Depth (m)	Ref	Test Results	
Brown gravelly CLAY (Drillers description) [Hemingbrough Formation]	[Symbolic representation of clay]										
Continued on Next Page											

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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)	Diameter
	03/06	08:00	0.00	-	-	0.00	73.00	Bentonite	Standpipe		78.00 - 83.00	83.00	75
	03/06	17:00	58.00	58.00	-	73.00	83.00	Gravel					
	04/06	08:00	58.00	58.00	-								
	Drilling Fluid												
	Depth (m)	Type	Colour	Return %									

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



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Log Type

**Rotary
Borehole**

Sheet 4 of 9

Exploratory Hole Number

MW4S

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CENTRAL ALLIANCE
GEO

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

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (m AOD)	Hole ϕ (mm) Depth (m)	Casing ϕ (mm) Depth (m)	Water Level (m)	Installation / Backfill	Samples & Testing			
								Depth (m)	Ref	Test Results	
Brown gravelly CLAY (Drillers description) [Hemingbrough Formation]											
Brown very sandy gravelly CLAY (Drillers description) [Hemingbrough Formation]		38.90	-28.31								
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)	Diameter
		03/06	08:00	0.00	-	-	0.00	73.00	Bentonite	Standpipe	78.00 - 83.00	83.00	75
		03/06	17:00	58.00	58.00	-	73.00	83.00	Gravel				
		04/06	08:00	58.00	58.00	-							
Drilling Fluid													
		Depth (m)	Type	Colour	Return %								

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

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Log Type

**Rotary
Borehole**

Sheet 5 of 9

Exploratory Hole Number

MW4S

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CENTRAL ALLIANCE
GEO

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

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (m AOD)	Hole ϕ (mm) Depth (m)	Casing ϕ (mm) Depth (m)	Water Level (m)	Installation / Backfill	Samples & Testing			
								Depth (m)	Ref	Test Results	
Brown very sandy gravelly CLAY (Drillers description) [Hemingbrough Formation]											
		(19.10)									
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)	Diameter
		03/06	08:00	0.00	-	-	0.00	73.00	Bentonite	Standpipe	78.00 - 83.00	83.00	75
		03/06	17:00	58.00	58.00	-	73.00	83.00	Gravel				
		04/06	08:00	58.00	58.00	-							
Drilling Fluid													
		Depth (m)	Type	Colour	Return %								

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

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Log Type

**Rotary
Borehole**

Sheet 6 of 9

Exploratory Hole Number

MW4S

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CENTRAL ALLIANCE
GEO

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

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (m AOD)	Hole ϕ (mm) Depth (m)	Casing ϕ (mm) Depth (m)	Water Level (m)	Installation / Backfill	Samples & Testing			
								Depth (m)	Ref	Test Results	
Brown very sandy gravelly CLAY (Drillers description) [Hemingbrough Formation]											
Very soft sandy gravelly CLAY. (Drillers description). [Hemingbrough Formation]		58.00	-47.41								
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)	Diameter
		03/06	08:00	0.00	-	-	0.00	73.00	Bentonite	Standpipe	78.00 - 83.00	83.00	75
		03/06	17:00	58.00	58.00	58.00	73.00	83.00	Gravel				
						Drilling Fluid							
		Depth (m)	Type	Colour	Return %								

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

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Log Type

Rotary Borehole

Sheet 7 of 9

Exploratory Hole Number

MW4S

DRAFT



CENTRAL ALLIANCE GEO

Table with project details: Project No: 2371077, Name: Thorpe Marsh, Location: Thorpe-in-Balne, Client: Egniol. Includes Location Details (Easting, Northing, Elevation, etc.) and Methodology & Plant (Method, Plant Used).

Main log table with columns: Strata Description, Legend, Depth (m), Reduced Level (m), Hole ø (mm), Casing ø (mm), Water Level (m), Installation / Backfill, Depth (m), Ref, Test Results. Contains a large vertical column of data with a watermark.

Observations / Remarks table with columns: Misc., Shift Information, Backfill, Installations. Includes a table for shift logs and drilling fluid details.



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Log Type

**Rotary
Borehole**

Sheet 8 of 9

Exploratory Hole Number

MW4S

DRAFT



CENTRAL ALLIANCE
GEO

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

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (m AOD)	Hole ϕ (mm) Depth (m)	Casing ϕ (mm) Depth (m)	Water Level (m)	Installation / Backfill	Samples & Testing			
								Depth (m)	Ref	Test Results	
Very soft sandy gravelly CLAY. (Drillers description). [Hemingbrough Formation]											
GRAVEL. (Drillers description) [Chester Formation]		71.50	-60.91								
		(2.50)									
Brown SAND and GRAVEL. (Drillers description). [Chester Formation]		74.00	-63.41								
		(4.00)									
SANDSTONE (Drillers description). [Chester Formation]		78.00	-67.41								
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)	Diameter
		03/06	08:00	0.00	-	-	0.00	73.00	Bentonite	Standpipe	78.00 - 83.00	83.00	75
		03/06	17:00	58.00	58.00	-	73.00	83.00	Gravel				
		04/06	08:00	58.00	58.00	-							
Drilling Fluid													
		Depth (m)	Type	Colour	Return %								

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

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Log Type

**Rotary
Borehole**

Sheet 9 of 9

Exploratory Hole Number

MW4S

DRAFT



CENTRAL ALLIANCE
GEO

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

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (m AOD)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Samples & Testing		
								Depth (m)	Ref	Test Results
SANDSTONE (Drillers description). [Chester Formation]	[Dotted pattern]	(5.00)					[Diagram]			
EOH at 83.00m - Scheduled Depth		83.00	-72.41	155 83.00	155 83.00					

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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)	Diameter
		03/06	08:00	0.00	-	-	0.00	73.00	Bentonite	Standpipe	78.00 - 83.00	83.00	75
		03/06	17:00	58.00	58.00	58.00	73.00	83.00	Gravel				
		04/06	08:00	58.00	58.00	-							
		Drilling Fluid											
		Depth (m)	Type	Colour	Return %								

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



Project No: 2371077	Location Details		Methodology & Plant			Scale: 1:50
Name: Thorpe Marsh	Easting: 459343.37	Northing: 409070.05	From (m)	Method	Plant Used	Checked: BJ
Location: Thorpe-in-Balne	Elevation: 10.93mAOD	Final Depth: 45.00m	0.00 - 1.20 1.20 - 45.00	Inspection Pit Rotary Open Holing	Hand Tools MC900GT	Approved: NH
Client: Egniol	Logger: NE	Grid System: OSGB				Start Date: 26/04/2021
	Orientation: N/A	Inclination: 90°				End Date: 29/04/2021

Hole Diameter	
Depth (m)	Diam (mm)
45.00	155

Casing Diameter	
Depth (m)	Diam (mm)
45.00	155

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

Installation / Instrument Details				
Date	Instrument Details	To (m)	Resp. Zone (m)	Diam (mm)
29/04/2021	Standpipe	45.00	35.00 - 45.00	75

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

No Groundwater Encountered

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

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

(NR) Indicates sample undertaken but with 0% Recovery

No Samples Taken

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

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.

SPT Hammer Ref.	Energy Ratio (%)

No Standard Penetration Tests Undertaken

Applicable to Cable Percussion Only			
Chiselling		Water Added	
Depth (m)	Duration (mins)	Depth (m)	Litres

Applicable to Rotary Only			
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
29.80 - 31.30	Air/Mist	Brown	80
31.30 - 35.00	Air/Mist	Brown	50
35.00 - 36.30	Air/Mist	Brown	90
36.30 - 37.80	Air/Mist	Reddish Brown	90
37.80 - 39.30	Air/Mist	Red	90
39.30 - 40.80	Air/Mist	Red	90
40.80 - 45.00	Air/Mist	Red	90

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



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Log Type

**Rotary
Borehole**

Sheet 1 of 5

Exploratory Hole Number

MW55

DRAFT



CENTRAL ALLIANCE
GEO

Project No: 2371077	Location Details		Methodology & Plant			Scale: 1:50
Name: Thorpe Marsh	Easting: 459343.37	Northing: 409070.05	From (m) 0.00 - 1.20	Method Inspection Pit Rotary Open Holing	Plant Used Hand Tools MC900GT	Checked By: BJ
Location: Thorpe-in-Balne	Elevation: 10.93m AOD	Final Depth: 45.00m	1.20 - 45.00			Approved By: NH
Client: Egniol	Logged By: NE	Grid System: OSGB				Start Date: 26/04/2021
	Orientation: N/A	Inclination: 90°				Finish Date: 29/04/2021

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (m AOD)	Hole ϕ (mm) Depth (m)	Casing ϕ (mm) Depth (m)	Water Level (m)	Installation / Backfill	Samples & Testing	
								Depth (m)	Ref
MADE GROUND: Light grey slightly gravelly silty fine to medium SAND. Gravel is angular to subangular fine to coarse mixed lithologies. [PFA]									
		(10.50)							
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)	Diameter
		26/04	17:00	19.40	19.40	-	0.00	0.50	Concrete	Standpipe	35.00 - 45.00	45.00	75
		27/04	17:00	35.00	31.40	-	0.50	35.00	Bentonite				
28/04	00:00	45.00	35.00	-	35.00	45.00	Gravel						
29/04	11:00												
						Drilling Fluid							
		Depth (m)	Type	Colour	Return %								
		19.40 - 25.00	Air/Mist	Brown	90								
		25.00 - 29.80	Air/Mist	Brown	90								
		29.80 - 31.30	Air/Mist	Brown	80								

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**Rotary
Borehole**

Sheet 2 of 5

Exploratory Hole Number

MW55

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CENTRAL ALLIANCE
GEO

Project No: 2371077	Location Details		Methodology & Plant			Scale: 1:50
Name: Thorpe Marsh	Easting: 459343.37	Northing: 409070.05	From (m) 0.00 - 1.20 1.20 - 45.00	Method Inspection Pit Rotary Open Holing	Plant Used Hand Tools MC900GT	Checked By: BJ
Location: Thorpe-in-Balne	Elevation: 10.93m AOD	Final Depth: 45.00m				Approved By: NH
Client: Egniol	Logged By: NE	Grid System: OSGB				Start Date: 26/04/2021
	Orientation: N/A	Inclination: 90°				Finish Date: 29/04/2021

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (m AOD)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Samples & Testing	
								Depth (m)	Ref
MADE GROUND: Light grey slightly gravelly silty fine to medium SAND. Gravel is angular to subangular fine to coarse mixed lithologies. [PFA]		10.50	0.43						
Light brownish grey slightly sandy slightly gravelly silty CLAY. Gravel is angular to subangular fine to coarse mudstone siltstone. [Hemingbrough Formation]		(6.50)							
Light brown slightly gravelly slightly clayey fine to coarse SAND. Gravel is angular to subangular fine to coarse sandstone. [Hemingbrough Formation]		17.00	-6.07						
Continued on Next Page		(3.00)							
		20.00	-9.07						

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)	Diameter
		26/04	17:00	19.40	19.40	-	0.00	0.50	Concrete	Standpipe	35.00 - 45.00	45.00	75
		27/04	17:00	35.00	31.40	-	0.50	35.00	Bentonite				
28/04	00:00	45.00	35.00	-	35.00	45.00	Gravel						
29/04	11:00												
Drilling Fluid													
Depth (m)	Type	Colour	Return %										
19.40 - 25.00	Air/Mist	Brown	90										
25.00 - 29.80	Air/Mist	Brown	90										
29.80 - 31.30	Air/Mist	Brown	80										

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Log Type

**Rotary
Borehole**

Sheet 3 of 5

Exploratory Hole Number

MW55

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CENTRAL ALLIANCE
GEO

Project No: 2371077	Location Details		Methodology & Plant			Scale: 1:50
Name: Thorpe Marsh	Easting: 459343.37	Northing: 409070.05	From (m) 0.00 - 1.20 1.20 - 45.00	Method Inspection Pit Rotary Open Holing	Plant Used Hand Tools MC900GT	Checked By: BJ
Location: Thorpe-in-Balne	Elevation: 10.93m AOD	Final Depth: 45.00m				Approved By: NH
Client: Egniol	Logged By: NE	Grid System: OSGB				Start Date: 26/04/2021
	Orientation: N/A	Inclination: 90°				Finish Date: 29/04/2021

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (m AOD)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Samples & Testing	
								Depth (m)	Ref
Brown SAND and GRAVEL with high cobble content (Drillers description) [Hemingbrough Formation]		(5.00)							
Brown CLAY (Drillers description) [Hemingbrough Formation]		(4.80)	-14.07						
Soft brown SAND (Drillers description) [Chester Formation]		(4.80)	-18.87						
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)	Diameter
		26/04	17:00	19.40	19.40	-	0.00	0.50	Concrete	Standpipe	35.00 - 45.00	45.00	75
		27/04	17:00	35.00	31.40	-	0.50	35.00	Bentonite				
28/04	00:00	45.00	35.00	-	-	35.00	Gravel						
29/04	11:00												
No Groundwater Encountered Casing Used No Monitoring Point Installed Hammer Ref. & Energy Ratio (%)													
Drilling Fluid													
Depth (m)	Type	Colour	Return %										
19.40 - 25.00	Air/Mist	Brown	90										
25.00 - 29.80	Air/Mist	Brown	90										
29.80 - 31.30	Air/Mist	Brown	80										



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Log Type

**Rotary
Borehole**

Sheet 4 of 5

Exploratory Hole Number

MW55

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CENTRAL ALLIANCE
GEO

Project No: 2371077	Location Details		Methodology & Plant			Scale: 1:50
Name: Thorpe Marsh	Easting: 459343.37	Northing: 409070.05	From (m) 0.00 - 1.20 1.20 - 45.00	Method Inspection Pit Rotary Open Holing	Plant Used Hand Tools MC900GT	Checked By: BJ
Location: Thorpe-in-Balne	Elevation: 10.93m AOD	Final Depth: 45.00m				Approved By: NH
Client: Egniol	Logged By: NE	Grid System: OSGB				Start Date: 26/04/2021
	Orientation: N/A	Inclination: 90°				Finish Date: 29/04/2021

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (m AOD)	Hole ϕ (mm) Depth (m)	Casing ϕ (mm) Depth (m)	Water Level (m)	Installation / Backfill	Samples & Testing			
								Depth (m)	Ref	Test Results	
Soft brown SAND (Drillers description) [Chester Formation]											
		(6.50)									
Red weathered SANDSTONE. [Chester Formation]		36.30	-25.37								
Continued on Next Page											

Observations / Remarks <i>No Groundwater Encountered</i> <i>Casing Used</i> <i>No Monitoring Point Installed</i> <i>Hammer Ref. & Energy Ratio (%)</i>	Misc.	Shift Information					Backfill			Installations			
		Date	Time	Depth (m)	Casing (m)	Water (m)	From (m)	To (m)	Material	Instrument Details	Resp. Zone	Depth (m)	Diameter
		26/04	17:00	19.40	19.40	-	0.00	0.50	Concrete	Standpipe	35.00 - 45.00	45.00	75
		27/04	17:00	35.00	31.40	-	0.50	35.00	Bentonite				
		28/04	00:00	45.00	35.00	-	35.00	45.00	Gravel				
	29/04	11:00											
Drilling Fluid													
	Depth (m)	Type	Colour	Return %									
	19.40 - 25.00	Air/Mist	Brown	90									
	25.00 - 29.80	Air/Mist	Brown	90									
	29.80 - 31.30	Air/Mist	Brown	80									

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**Rotary
Borehole**

Sheet 5 of 5

Exploratory Hole Number

MW55

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CENTRAL ALLIANCE
GEO

Project No: 2371077	Location Details		Methodology & Plant			Scale: 1:50
Name: Thorpe Marsh	Easting: 459343.37	Northing: 409070.05	From (m) 0.00 - 1.20 1.20 - 45.00	Method Inspection Pit Rotary Open Holing	Plant Used Hand Tools MC900GT	Checked By: BJ
Location: Thorpe-in-Balne	Elevation: 10.93m AOD	Final Depth: 45.00m				Approved By: NH
Client: Egniol	Logged By: NE	Grid System: OSGB				Start Date: 26/04/2021
	Orientation: N/A	Inclination: 90°				Finish Date: 29/04/2021

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (m AOD)	Hole ϕ (mm) Depth (m)	Casing ϕ (mm) Depth (m)	Water Level (m)	Installation / Backfill	Samples & Testing		
								Depth (m)	Ref	Test Results
Red weathered SANDSTONE. [Chester Formation]	[Dotted pattern]	(8.70)					[Diagram]			
EOH at 45.00m - 5m into rockhead		45.00	-34.07	155 45.00	155 45.00					

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)	Diameter
		26/04	17:00	19.40	19.40	-	0.00	0.50	Concrete	Standpipe	35.00 - 45.00	45.00	75
		27/04	17:00	35.00	31.40	-	0.50	35.00	Bentonite				
28/04	00:00	45.00	35.00	-	35.00	45.00	Gravel						
29/04	11:00												
Drilling Fluid													
Depth (m)	Type	Colour	Return %										
19.40 - 25.00	Air/Mist	Brown	90										
25.00 - 29.80	Air/Mist	Brown	90										
29.80 - 31.30	Air/Mist	Brown	80										

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Log Type

Header Sheet

Exploratory Hole Number

MW6D

DRAFT



CENTRAL ALLIANCE
GEO

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

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

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

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

Sample Summary			
Environmental Samples			
Soil	1	Water	0
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

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

(NR) Indicates sample undertaken but with 0% Recovery

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.

SPT Hammer Ref.	Energy Ratio (%)

No Standard Penetration Tests Undertaken

Applicable to Cable Percussion Only			
Chiselling		Water Added	
Depth (m)	Duration (mins)	Depth (m)	Litres

Applicable to Rotary Only			
Drilling Flush			
Depth (m)	Flush Type	Flush Colour	Return %

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



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Log Type

Cable Percussion

Sheet 1 of 2

Exploratory Hole Number

MW6D

DRAFT



CENTRAL ALLIANCE
GEO

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

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Chiselling (mins)	Water Added (Litres)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Samples & Testing	
										Depth (m)	Ref
MADE GROUND: Light grey slightly gravelly silty fine to medium SAND. Gravel is angular to subangular fine to coarse mixed lithologies. [PFA]											
										2.00 2.00 - 2.50	3 ES 1 B
								4.00 4.20 4.60 5.00			
		9.50	0.33							8.00 - 8.50	2 B
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]											

Continued on Next Page

Observations / Remarks <i>Groundwater Encountered Casing Used No Monitoring Point Installed Hammer Ref. & Energy Ratio (%)</i>	Misc.	Shift Information				Backfill			Installations				
		Date	Time	Depth (m)	Casing (m)	Water (m)	From (m)	To (m)	Material	Instrument Details	Resp. Zone	Depth (m)	Diameter
							0.00 0.20 10.00	0.20 10.00 15.00	Concrete Bentonite Gravel	Standpipe	10.00 - 15.00	15.00	75
		Groundwater Strikes											
		Strike (m)	Rises To (m)	Time (min)	Remarks								
	5.00 12.00	4.00 11.00	20 20										

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Log Type

Cable Percussion

Sheet 2 of 2

Exploratory Hole Number

MW6D

DRAFT



CENTRAL ALLIANCE
GEO

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

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Chiselling (mins)	Water Added (Litres)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation/ Backfill	Samples & Testing		
										Depth (m)	Ref	Test Results
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]												
		(5.50)										
EOH at 15.00m - Scheduled depth		15.00	5.27			200 15.00	200 15.00					

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)	Diameter
							0.00	0.20	Concrete	Standpipe		10.00 - 15.00	15.00	75
							0.20	10.00	Bentonite					
					10.00	15.00	Gravel							
									Groundwater Strikes					
									Strike (m)	Rises To (m)	Time (min)	Remarks		
									5.00	4.00	20			
									12.00	11.00	20			

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



CENTRAL ALLIANCE

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Log Type

Header Sheet

Exploratory Hole Number

MW7S

DRAFT



CENTRAL ALLIANCE
GEO

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

Hole Diameter	
Depth (m)	Diam (mm)
50.00	155

Casing Diameter	
Depth (m)	Diam (mm)
50.00	152

Groundwater Strikes					
Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks
42.50	-	-	0	0.00	

Installation / Instrument Details				
Date	Instrument Details	To (m)	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	
Depth (m)	Legend Code
0.00 - 45.00	Bentonite
45.00 - 50.00	Gravel

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

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

(NR) Indicates sample undertaken but with 0% Recovery
No Samples Taken

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.

SPT Hammer Ref.	Energy Ratio (%)

No Standard Penetration Tests Undertaken

Applicable to Cable Percussion Only			
Chiselling		Water Added	
Depth (m)	Duration (mins)	Depth (m)	Litres

Applicable to Rotary Only			
Drilling Flush			
Depth (m)	Flush Type	Flush Colour	Return %

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



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Log Type

**Rotary
Borehole**

Sheet 1 of 5

Exploratory Hole Number

MW7S

DRAFT



CENTRAL ALLIANCE
GEO

Project No: 2371077	Location Details		Methodology & Plant			Scale: 1:50
Name: Thorpe Marsh	Easting: 459097.00	Northing: 409672.60	From (m) 0.00 - 1.20	Method Inspection Pit Rotary Open Holing	Plant Used Hand Tools Fraste PLG	Checked By: BJ
Location: Thorpe-in-Balne	Elevation: 12.15m AOD	Final Depth: 50.00m	1.20 - 50.00			Approved By: NH
Client: Egniol	Logged By: MN	Grid System: OSGB				Start Date: 01/06/2021
	Orientation: N/A	Inclination: 90°				Finish Date: 02/06/2021

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (m AOD)	Hole ϕ (mm) Depth (m)	Casing ϕ (mm) Depth (m)	Water Level (m)	Installation / Backfill	Samples & Testing			
								Depth (m)	Ref	Test Results	
MADE GROUND: CONCRETE.		(0.20)									
MADE GROUND: CRUSHED STONE.		0.20 (0.30)	11.95								
MADE GROUND: Light grey slightly gravelly silty fine to medium SAND. Gravel is angular to subangular fine to coarse mixed lithologies. [PFA]		0.50 (0.70)	11.65								
Soft brown sandy gravel CLAY. (Drillers description). [Hemingbrough Formation]		1.20	10.95								
		(4.30)									
		5.50	6.65								
Soft brownish grey CLAY (Drillers description). [Hemingbrough Formation]		(4.50)									
		10.00	2.15								

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)	Diameter
		01/06	08:00	0.00	-	-	0.00	45.00	Bentonite	Standpipe	45.00 - 50.00	50.00	75
		01/06	17:00	1.20	-	-	45.00	50.00	Gravel				
		02/06	08:00	1.20	-	-							
		Drilling Fluid											
		Depth (m)	Type	Colour	Return %								

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

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Log Type
Rotary Borehole
Sheet 2 of 5

Exploratory Hole Number
MW7S
DRAFT



Project No: 2371077	Location Details		Methodology & Plant			Scale: 1:50
Name: Thorpe Marsh	Easting: 459097.00	Northing: 409672.60	From (m)	Method	Plant Used	Checked By: BJ
Location: Thorpe-in-Balne	Elevation: 12.15m AOD	Final Depth: 50.00m	0.00 - 1.20 1.20 - 50.00	Inspection Pit Rotary Open Holing	Hand Tools Fraste PLG	Approved By: NH
Client: Egniol	Logged By: MN	Grid System: OSGB				Start Date: 01/06/2021
	Orientation: N/A	Inclination: 90°				Finish Date: 02/06/2021

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (m AOD)	Hole ϕ (mm) Depth (m)	Casing ϕ (mm) Depth (m)	Water Level (m)	Installation / Backfill	Samples & Testing	
								Depth (m)	Ref
Brown SAND and GRAVEL (Drillers description). [Hemingbrough Formation]									
		(9.00)							
Firm reddish brown CLAY (Drillers description). [Hemingbrough Formation]		19.00	-6.85						
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)	Diameter
		01/06	08:00	0.00	-	-	0.00	45.00	Bentonite	Standpipe	45.00 - 50.00	50.00	75
		01/06	17:00	1.20	-	-	45.00	50.00	Gravel				
		02/06	08:00	1.20	-	-							
										Drilling Fluid			
										Depth (m)	Type	Colour	Return %

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



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Log Type

**Rotary
Borehole**

Sheet 3 of 5

Exploratory Hole Number

MW7S

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CENTRAL ALLIANCE
GEO

Project No: 2371077	Location Details		Methodology & Plant			Scale: 1:50
Name: Thorpe Marsh	Easting: 459097.00	Northing: 409672.60	From (m) 0.00 - 1.20	Method Inspection Pit Rotary Open Holing	Plant Used Hand Tools Fraste PLG	Checked By: BJ
Location: Thorpe-in-Balne	Elevation: 12.15m AOD	Final Depth: 50.00m	1.20 - 50.00			Approved By: NH
Client: Egniol	Logged By: MN	Grid System: OSGB				Start Date: 01/06/2021
	Orientation: N/A	Inclination: 90°				Finish Date: 02/06/2021

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (m AOD)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Samples & Testing			
								Depth (m)	Ref	Test Results	
Firm reddish brown CLAY (Drillers description). [Hemingbrough Formation]											
		(12.50)									
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)	Diameter
		01/06	08:00	0.00	-	-	0.00	45.00	Bentonite	Standpipe	45.00 - 50.00	50.00	75
		01/06	17:00	1.20	-	-	45.00	50.00	Gravel				
		02/06	08:00	1.20	-	-							
Drilling Fluid													
		Depth (m)	Type	Colour	Return %								

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

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Log Type

**Rotary
Borehole**

Sheet 4 of 5

Exploratory Hole Number

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CENTRAL ALLIANCE
GEO

Project No: 2371077	Location Details		Methodology & Plant			Scale: 1:50
Name: Thorpe Marsh	Easting: 459097.00	Northing: 409672.60	From (m) 0.00 - 1.20	Method Inspection Pit Rotary Open Holing	Plant Used Hand Tools Fraste PLG	Checked By: BJ
Location: Thorpe-in-Balne	Elevation: 12.15m AOD	Final Depth: 50.00m	1.20 - 50.00			Approved By: NH
Client: Egniol	Logged By: MN	Grid System: OSGB				Start Date: 01/06/2021
	Orientation: N/A	Inclination: 90°				Finish Date: 02/06/2021

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (m AOD)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Samples & Testing			
								Depth (m)	Ref	Test Results	
Firm reddish brown CLAY (Drillers description). [Hemingbrough Formation]	[Symbol]										
Soft brown silty CLAY (Drillers description). [Hemingbrough Formation]	[Symbol]	31.50	-19.35								
		(4.30)									
Firm brown CLAY (Drillers description) [Hemingbrough Formation]	[Symbol]	35.80	-23.65								
		(4.92)									
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)	Diameter
		01/06	08:00	0.00	-	-	0.00	45.00	Bentonite	Standpipe	45.00 - 50.00	50.00	75
		01/06	17:00	1.20	-	-	45.00	50.00	Gravel				
		02/06	08:00	1.20	-	-							
Drilling Fluid													
		Depth (m)	Type	Colour	Return %								

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

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Log Type

Rotary Borehole

Sheet 5 of 5

Exploratory Hole Number

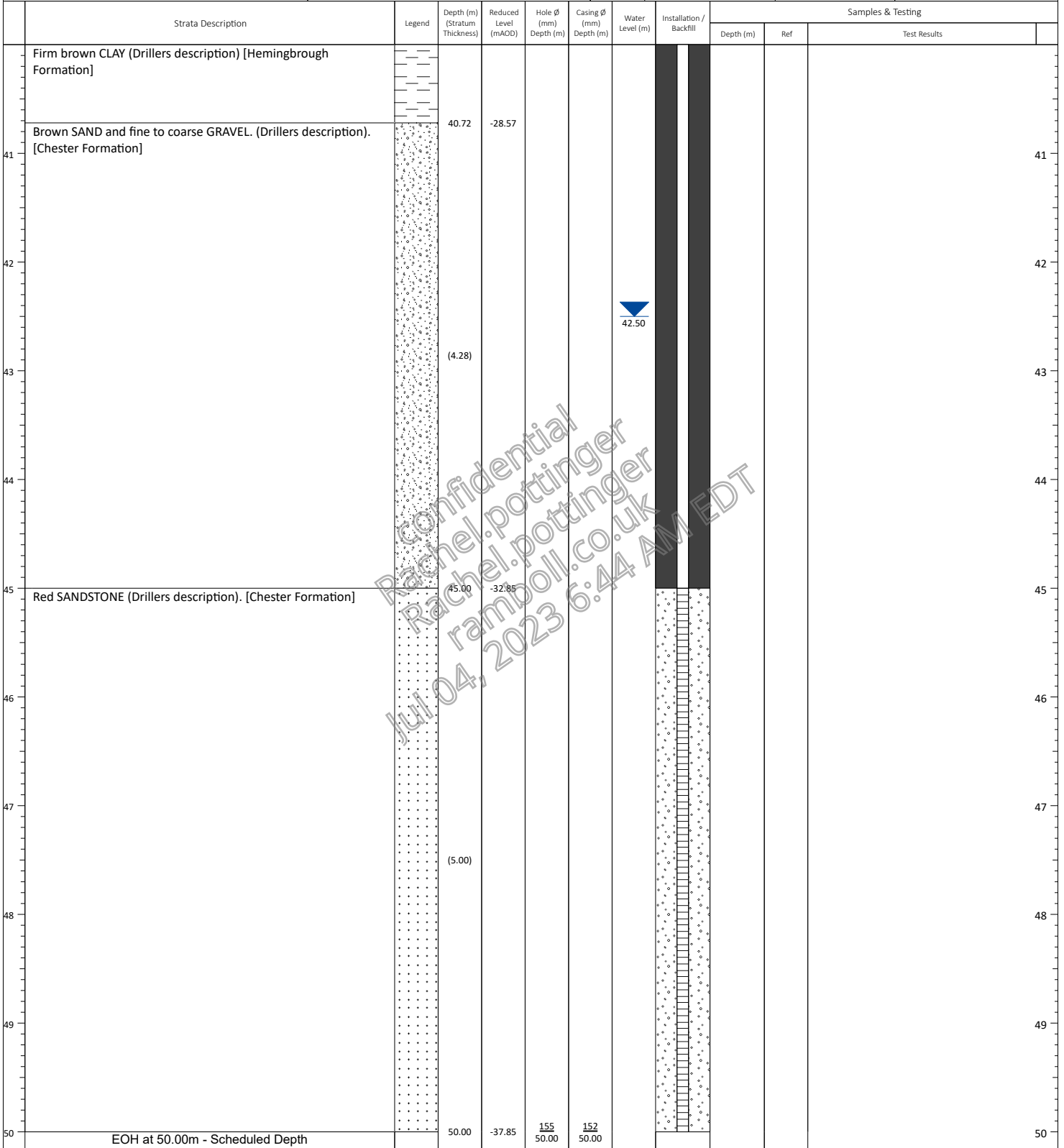
MW7S

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CENTRAL ALLIANCE
GEO

Project No: 2371077	Location Details		Methodology & Plant			Scale: 1:50
Name: Thorpe Marsh	Easting: 459097.00	Northing: 409672.60	From (m) 0.00 - 1.20	Method Inspection Pit Rotary Open Holing	Plant Used Hand Tools Fraste PLG	Checked By: BJ
Location: Thorpe-in-Balne	Elevation: 12.15m AOD	Final Depth: 50.00m	1.20 - 50.00			Approved By: NH
Client: Egniol	Logged By: MN	Grid System: OSGB				Start Date: 01/06/2021
	Orientation: N/A	Inclination: 90°				Finish Date: 02/06/2021



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)	Diameter
		01/06	08:00	0.00	-	-	0.00	45.00	Bentonite	Standpipe		45.00 - 50.00	50.00	75
		01/06	17:00	1.20	-	-	45.00	50.00	Gravel					
		02/06	08:00	1.20	-	-								
		Drilling Fluid												
		Depth (m)	Type	Colour	Return %									

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

BOREHOLE LOG



RBH141

CLIENT WEST BURTON B LTD

SITE THORPE MARSH GREEN ENERGY HUB: BATTERY ENERGY STORAGE SYSTEM (BESS)

Sheet 1 of 2

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 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
1B	0.10 - 0.30						Vo 0.0	Grass over firm dark brown mottled greyish brown slightly sandy slightly gravelly silty CLAY with a medium subangular sandstone cobble content.	0.30	16.97	
1ES	0.10 - 0.20										
2D	0.10 - 0.20						Vo 0.0	Gravel is angular and subangular fine to coarse concrete, sandstone and siltstone. (MADE GROUND)			
2ES	0.40 - 0.50										
3B	0.40 - 0.90										
4D	0.90							Dark grey slightly sandy slightly gravelly SILT. Gravel is angular and subangular fine to coarse concrete and sandstone. (MADE GROUND) (PULVERISED FUELASH)			
5B	0.90 - 1.20										
6D	1.00										
3ES	1.40 - 1.50	1.50					Vo 0.0	2.50 - 7.45m: Medium dense.			
7UT	1.50 - 1.95										
8D	1.95 - 2.00										
10B	2.00 - 2.30							2.50 - 7.45m: Medium dense.			
9D	2.00										
4ES	2.40 - 2.50	2.50					Vo 0.0	2.50 - 7.45m: Medium dense.			
11D	2.50 - 2.95						S 17				
12D	3.00							2.50 - 7.45m: Medium dense.			
13B	3.00 - 3.30										
5ES	3.40 - 3.50	3.50					Vo 0.0	2.50 - 7.45m: Medium dense.			
14UT	3.50 - 3.95										
15D	3.95 - 4.00							2.50 - 7.45m: Medium dense.			
16D	4.00 - 4.10										
17B	4.00 - 4.30							2.50 - 7.45m: Medium dense.			
6ES	4.40 - 4.50	4.50					Vo 0.0				
18D	4.50 - 4.95						S 12	2.50 - 7.45m: Medium dense.			
19D	5.00 - 5.10										
20B	5.00 - 5.30							2.50 - 7.45m: Medium dense.			
7ES	5.40 - 5.50	5.50					Vo 0.0				
21UT	5.50 - 5.95							2.50 - 7.45m: Medium dense.			
22D	5.95 - 6.00										
23B	6.00 - 6.30							2.50 - 7.45m: Medium dense.			
24D	6.00 - 6.10										
8ES	6.40 - 6.50						Vo 0.0	2.50 - 7.45m: Medium dense.			
25D	7.00 - 7.45	7.00					S 18				
9ES	7.50 - 7.60						Vo 0.0	2.50 - 7.45m: Medium dense.			
26B	8.00 - 8.30										

Continued Next Page

HOLE CONSTRUCTION				WATER STRIKE Groundwater not encountered prior to adding water			
TOP (m)	BASE (m)	TYPE	PLANT USED	DEPTH (m)	CASING (m)	ROSE TO (m)	AFTER (min) REMARKS
0.00	1.20	Inspection Pit	Hand Tools				
1.20	13.50	Cable Percussion	Dando 2000				

CASING DEPTH		HOLE DIAMETER		BACKFILL			INSTRUMENTATION	
DIAM (mm)	BASE (m)	DIAM (mm)	BASE (m)	TOP (m)	BASE (m)	MATERIAL	DEPTH (m)	TYPE
250	13.50	250	13.50	0.00	0.50	Concrete	13.50	Standpipe (50mm) with geosock
				0.50	9.00	Bentonite		
				9.00	13.50	Gravel		

HOLE PROGRESS				REMARKS			
DATE TIME	DEPTH (m)	CASING (m)	WATER (m)	Borehole terminated at 13.20m due to the presence of hydrocarbons.			
05-02-2024 11:30	0.00	Nil					
05-02-2024 17:00	10.00	10.00	9.90				
06-02-2024 08:00	10.00	10.00	9.90				
06-02-2024 10:15	13.50	13.50	9.50				

CONTRACT	CHECKED
38004	

BOREHOLE LOG



RBH141

CLIENT WEST BURTON B LTD

SITE THORPE MARSH GREEN ENERGY HUB: BATTERY ENERGY STORAGE SYSTEM (BESS)

Sheet 2 of 2

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 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	8.00 - 8.10										
28UT 10ES	8.50 - 8.95 8.60 - 8.70	8.50					Vo 0.0	Very soft dark greenish grey slightly gravelly slightly sandy CLAY. Gravel is angular to subounded fine to coarse concrete, brick, coal and siltstone with occasional fragments of plastic and metal. (MADE GROUND)	8.50	8.77	
29D 11ES	8.95 - 9.00 9.10 - 9.20					Vo 0.0	9.00		8.27		
30B	9.50 - 9.80							Very soft dark greenish grey slightly gravelly slightly sandy clayey SILT. Gravel is angular coarse coal with rare wire and occasional fragments of cloth, metal and plastic. (MADE GROUND) 9.00m: Standing groundwater level.			
31D 32B 12ES	9.90 - 10.00 10.00 - 10.45 10.10 - 10.20	10.00				S 1 Vo 0.8					
33B	10.70 - 11.00										
13ES 34D	11.10 - 11.20 11.10						Vo 2.2	Dark greenish grey silty sandy angular and subangular fine to coarse concrete and tarmacadam GRAVEL with a medium tarmacadam and concrete cobble content. (MADE GROUND) 11.00m: Very loose.	11.00	6.27	
35D	11.50 - 11.95	11.50				S 1					
14ES	12.10 - 12.20						Vo 1.8				
36B	12.50 - 12.80										
37D 38D 15ES	12.90 - 13.00 13.00 - 13.45 13.10 - 13.20	13.00					S 14 Vo 6.0	13.00 - 13.50m: Medium dense, oily sheen with a strong sweet hydrocarbon odour.			
16ES	13.50 - 13.60						Vo 986.0			13.50	3.77
Borehole Completed at 13.50m											

HOLE CONSTRUCTION				WATER STRIKE			
TOP (m)	BASE (m)	TYPE	PLANT USED	DEPTH (m)	CASING (m)	ROSE TO (m)	AFTER (min) REMARKS

CASING DEPTH		HOLE DIAMETER		BACKFILL			INSTRUMENTATION	
DIAM (mm)	BASE (m)	DIAM (mm)	BASE (m)	TOP (m)	BASE (m)	MATERIAL	DEPTH (m)	TYPE

HOLE PROGRESS				REMARKS
DATE TIME	DEPTH (m)	CASING (m)	WATER (m)	
CONTRACT			CHECKED	
38004				

BOREHOLE LOG



RBH141A

CLIENT WEST BURTON B LTD

SITE THORPE MARSH GREEN ENERGY HUB: BATTERY ENERGY STORAGE SYSTEM (BESS)

Sheet 1 of 5

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

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
1ES	0.10 - 0.20						Vo 0.3	Grass over firm brown slightly sandy silty CLAY with occasional roots (<10mm diam). (MADE GROUND)	0.20	10.67	[Cross-hatched pattern]
1B 2ES	0.40 - 0.90 0.40 - 0.50					Vo 0.5	Stiff orangish brown mottled light grey silty CLAY. (MADE GROUND)		0.30	10.57	
2B	0.90 - 1.20							Dark grey sandy SILT. (MADE GROUND) (PULVERISED FUEL ASH)			[Cross-hatched pattern]
3ES	1.40 - 1.50					Vo 0.6					
3B	1.90 - 2.20										
4B 4ES	2.90 - 3.20 3.00 - 3.10					Vo 0.7					
5B 5ES	3.90 - 4.20 4.00 - 4.10					Vo 0.3					
6B 6ES	4.90 - 5.20 5.00 - 5.10					Vo 0.6	5.00 - 9.00m: Slightly gravelly. Gravel is angular coarse charcoal.				
7B 7ES	5.90 - 6.20 6.00 - 6.10					Vo 0.8					
8ES	7.00 - 7.10					Vo 0.5					
9ES	7.50						7.50m: Frequent fragments of yellow foam material with possible asbestos fibres.				

Continued Next Page

HOLE CONSTRUCTION				WATER STRIKE Groundwater not encountered prior to adding water			
TOP (m)	BASE (m)	TYPE	PLANT USED	DEPTH (m)	CASING (m)	ROSE TO (m)	AFTER (min) REMARKS
0.00	1.20	Inspection Pit	Hand Tools				
1.20	38.00	Cable Percussion	Dando 2000				

CASING DEPTH		HOLE DIAMETER		BACKFILL			INSTRUMENTATION	
DIAM (mm)	BASE (m)	DIAM (mm)	BASE (m)	TOP (m)	BASE (m)	MATERIAL	DEPTH (m)	TYPE
250	10.50	250	11.00	0.00	0.50	Concrete	9.00	Standpipe (50mm) with geosock
200	11.00	150	38.00	0.50	2.00	Bentonite	38.00	Standpipe (50mm) with geosock
150	19.50			2.00	9.00	Gravel		
				9.00	12.00	Bentonite		

HOLE PROGRESS				REMARKS			
DATE TIME	DEPTH (m)	CASING (m)	WATER (m)	Bentonite seal for aquifer protection installed 9.50-11.00m. Seal cured for 1hr prior to progressing hole through seal at reduced casing diameter. Target depth of 40m not achieved due to reaching rope limit.			
07-02-2024 11:00	0.00	Nil					
07-02-2024 17:00	11.20	10.50	Dry				
08-02-2024 08:00	11.20	10.50	10.50				
08-02-2024 17:30	38.00	19.50	37.00				
09-02-2024 08:00	38.00	19.50	33.00				

AGS	CONTRACT	CHECKED
	38004	

BOREHOLE LOG



RBH141A

CLIENT WEST BURTON B LTD

SITE THORPE MARSH GREEN ENERGY HUB: BATTERY ENERGY STORAGE SYSTEM (BESS)

Sheet 2 of 5

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

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
10ES	8.50 - 8.60						Vo 0.9				
11ES	9.10 - 9.20						Vo 0.6				
8B	9.90 - 10.20							Firm dark greenish grey mottled black silty CLAY with a slight organic odour.	9.90	0.97	
9B	10.20 - 10.50							Stiff thinly laminated light brown mottled dark grey silty CLAY with a slight organic odour.	10.50	0.37	
10B	15.10 - 15.50						Vo 0.2	Brown silty sandy angular and subangular fine to coarse mudstone, siltstone and sandstone GRAVEL.	15.00	-4.13	
12ES	15.10 - 15.20										

Continued Next Page

HOLE CONSTRUCTION				WATER STRIKE			
TOP (m)	BASE (m)	TYPE	PLANT USED	DEPTH (m)	CASING (m)	ROSE TO (m)	AFTER (min) REMARKS

CASING DEPTH		HOLE DIAMETER		BACKFILL		INSTRUMENTATION	
DIAM (mm)	BASE (m)	DIAM (mm)	BASE (m)	TOP (m)	BASE (m)	MATERIAL	DEPTH (m) TYPE
				12.00	38.00	Gravel	

HOLE PROGRESS				REMARKS			
DATE	TIME	DEPTH (m)	CASING (m)	WATER (m)			

CONTRACT	CHECKED
38004	

BOREHOLE LOG



RBH141A

CLIENT WEST BURTON B LTD

SITE THORPE MARSH GREEN ENERGY HUB: BATTERY ENERGY STORAGE SYSTEM (BESS)

Sheet 3 of 5

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

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
11B	16.60 - 17.00							Stiff dark brown slightly sandy slightly gravelly silty CLAY. Gravel is angular fine to coarse mudstone, siltstone, sandstone and rare coal.	16.50	-5.63	
Continued Next Page											

HOLE CONSTRUCTION				WATER STRIKE			
TOP (m)	BASE (m)	TYPE	PLANT USED	DEPTH (m)	CASING (m)	ROSE TO (m)	AFTER (min) REMARKS

CASING DEPTH		HOLE DIAMETER		BACKFILL		INSTRUMENTATION	
DIAM (mm)	BASE (m)	DIAM (mm)	BASE (m)	TOP (m)	BASE (m)	MATERIAL	DEPTH (m) TYPE

HOLE PROGRESS				REMARKS			
DATE	TIME	DEPTH (m)	CASING (m)	WATER (m)			
				CONTRACT 38004		CHECKED	

BOREHOLE LOG



RBH141A

CLIENT WEST BURTON B LTD

SITE THORPE MARSH GREEN ENERGY HUB: BATTERY ENERGY STORAGE SYSTEM (BESS)

Sheet 4 of 5

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

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

Continued Next Page

HOLE CONSTRUCTION				WATER STRIKE			
TOP (m)	BASE (m)	TYPE	PLANT USED	DEPTH (m)	CASING (m)	ROSE TO (m)	AFTER (min) REMARKS

CASING DEPTH		HOLE DIAMETER		BACKFILL		INSTRUMENTATION	
DIAM (mm)	BASE (m)	DIAM (mm)	BASE (m)	TOP (m)	BASE (m)	MATERIAL	DEPTH (m) TYPE

HOLE PROGRESS				REMARKS
DATE TIME	DEPTH (m)	CASING (m)	WATER (m)	

CONTRACT	CHECKED
38004	



BOREHOLE LOG



RBH141A

CLIENT WEST BURTON B LTD

SITE THORPE MARSH GREEN ENERGY HUB: BATTERY ENERGY STORAGE SYSTEM (BESS)

Sheet 5 of 5

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

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
								Stiff dark greyish brown slightly sandy slightly gravelly silty CLAY. Gravel is angular fine to coarse mudstone, siltstone, sandstone and rare coal.	33.50	-22.63	
								Borehole Completed at 38.00m	38.00	-27.13	

HOLE CONSTRUCTION				WATER STRIKE Groundwater not encountered prior to adding water			
TOP (m)	BASE (m)	TYPE	PLANT USED	DEPTH (m)	CASING (m)	ROSE TO (m)	AFTER (min) REMARKS

CASING DEPTH		HOLE DIAMETER		BACKFILL		INSTRUMENTATION	
DIAM (mm)	BASE (m)	DIAM (mm)	BASE (m)	TOP (m)	BASE (m)	MATERIAL	DEPTH (m) TYPE

HOLE PROGRESS				REMARKS
DATE TIME	DEPTH (m)	CASING (m)	WATER (m)	
				 CONTRACT CHECKED 38004



Percussion Drilling Log

Project Name: Thorpe Marsh Environmental Monitoring	Client: HJ Banks & Company Limited	Date: 24/08/2023 - 25/08/2023
Location: Thorpe Marsh Former Waste Disposal Site, Doncaster DN6 0DZ	Contractor: ADS Drilling Ltd	Co-ords: E459389.76 N409077.92
Project No. : 7991	Crew Name: MM & SM	Drilling Equipment: Dando 150

Borehole Number MW5DA	Hole Type CP	Level 10.86m AoD	Logged By NS	Scale 1:50	Page Number Sheet 1 of 2
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Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					0.20	10.66		Grass over dark brown slightly gravelly silty CLAY with rare rootlets present. Gravel is medium subangular of concrete.. (MADE GROUND - Anthropogenic Topsoil) Dark grey fine ashy SAND. (MADE GROUND - PFA)	1
									2
									3
									4
									5
									6
									7
									8
									9
									10

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Hole Diameter		Casing Diameter		Chiselling			Inclination and Orientation				
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
15.00	200	17.00	200								
17.00	150	17.00	150								

Remarks
 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.





Percussion Drilling Log

Project Name: Thorpe Marsh Environmental Monitoring		Client: HJ Banks & Company Limited	Date: 24/08/2023 - 25/08/2023		
Location: Thorpe Marsh Former Waste Disposal Site, Doncaster DN6 0DZ		Contractor: ADS Drilling Ltd	Co-ords: E459389.76 N409077.92		
Project No. : 7991		Crew Name: MM & SM	Drilling Equipment: Dando 150		
Borehole Number MW5DA	Hole Type CP	Level 10.86m AoD	Logged By NS	Scale 1:50	Page Number Sheet 2 of 2

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
[Well Diagram]	[Water Strikes]				11.50	-0.64	[Cross-hatch pattern]	Dark grey fine ashy SAND. (MADE GROUND - PFA)	11
							[X-pattern]	Soft grey brown silty CLAY with closely spaced grey brown silty sand bands. (HEMINGBROUGH GLACIOLACUSTRINE FORMATION)	12
									13
								14	
								15	
								16	
					17.00	-6.14		End of Borehole at 17.000m	17
									18
									19
									20

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Hole Diameter		Casing Diameter		Chiselling			Inclination and Orientation				
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
15.00	200	17.00	200								
17.00	150	17.00	150								

Remarks
 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.





Percussion Drilling Log

Project Name: Thorpe Marsh Environmental Monitoring	Client: HJ Banks & Company Limited	Date: 22/08/2023 - 23/08/2023
Location: Thorpe Marsh Former Waste Disposal Site, Doncaster DN6 0DZ	Contractor: ADS Drilling Ltd	Co-ords: E459094.28 N409668.86
Project No. : 7991	Crew Name: MM & SM	Drilling Equipment: Dando 150

Borehole Number MW7DA	Hole Type CP	Level 11.22m AoD	Logged By NS	Scale 1:50	Page Number Sheet 1 of 2
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Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					0.20	11.02		Black asphalt concrete. (MADE GROUND)	
					0.30	10.92		Light grey SAND and GRAVEL. Sand is fine. Gravel is medium to coarse of subangular concrete. (MADE GROUND - Sub-base)	
								Firm becoming stiff dark grey mottled yellow brown silty CLAY. (HEMINGBROUGH GLACIOLACUSTRINE FORMATION)	1
									2
									3
									4
									5
									6
									7
						7.50	3.72		Wet soft grey brown slightly sandy SILT. Sand is fine to coarse. (HEMINGBROUGH GLACIOLACUSTRINE FORMATION)
					8.00	3.22		Stiff grey CLAY. (HEMINGBROUGH GLACIOLACUSTRINE FORMATION)	9
					8.80	2.42		Wet soft grey brown sandy SILT. Sand is fine to coarse. Frequent coal fragments present. (HEMINGBROUGH GLACIOLACUSTRINE FORMATION)	10

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Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
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.





Percussion Drilling Log

Project Name: Thorpe Marsh Environmental Monitoring		Client: HJ Banks & Company Limited	Date: 22/08/2023 - 23/08/2023	
Location: Thorpe Marsh Former Waste Disposal Site, Doncaster DN6 0DZ		Contractor: ADS Drilling Ltd	Co-ords: E459094.28 N409668.86	
Project No. : 7991		Crew Name: MM & SM	Drilling Equipment: Dando 150	
Borehole Number MW7DA	Hole Type CP	Level 11.22m AoD	Logged By NS	Scale 1:50
				Page Number Sheet 2 of 2

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
								Wet soft grey brown sandy SILT. Sand is fine to coarse. Frequent coal fragments present. (HEMINGBROUGH GLACIOLACUSTRINE FORMATION)	11
					14.50	-3.28		Wet grey brown SAND and GRAVEL. Sand is fine to medium. Gravel is rounded fine to medium of flint and chert. (HEMINGBROUGH GLACIOLACUSTRINE FORMATION) End of Borehole at 15.000m	13
					15.00	-3.78			14
									15
									16
									17
									18
									19
									20

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Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
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.

