

BOREHOLE LOG				BOREHOLE No BH01	
Client: AMP Energy Services Ltd					
Project No: 404.V09695.00001	Date: 10/01/2023	Ground Level: 87.00m	Co-ordinates: E387377 N406110		
Project: Whitbrook Power Flexible Energy Facility				Sheet 1 of 4	

SAMPLES & TESTS									Water	STRATA				Instrument Backfill
Depth	Core Run	TCR (%)	SCR (%)	RQD (%)	Type No.	Test Type	Test Result	SPT N Value 10 20 30 40		Level	Legend	Depth	DESCRIPTION	
										86.70		0.30	MADE GROUND: Grey into reddish brown concrete	
1					B							(0.70)	MADE GROUND: Brownish grey mottled white clayey sandy gravelly SILT with low cobble content. Sand is medium to coarse. Gravel is sub-angular fine to coarse of brick, concrete, chalk and siltstone. Cobbles of chalk and brick	
					B	SPT	N=1	1		86.00		1.00	MADE GROUND: Very soft to firm white to light grey slightly gravelly SILT. Gravel is sub-rounded fine of coal.	
										85.55		1.45	MADE GROUND: Dark grey mottled dark brown slightly clayey silty gravelly coarse SAND. Gravel is sub-rounded fine to medium of brick, coal, siltstone and chalk.	
										85.33		1.67	MADE GROUND: Firm to stiff cream CLAY with infrequent gravel of sub-rounded fine coal.	
2					B	SPT	N=18	18		85.28		1.72	MADE GROUND: Medium dense brownish black slightly clayey silty very sandy GRAVEL with low cobble content. Sand is coarse. Gravel is sub-angular fine to coarse of coal, siltstone, brick. Cobbles are brick.	
					D					84.30		2.70	Very loose dark brown slightly gravelly clayey silty medium SAND. Gravel is sub-rounded fine to medium of siltstone.	
3					D							(1.50)	ALLUVIUM	
						SPT	N=0	0						
4					D					82.80		4.20	Medium dense to dense dark brown and reddish brown slightly gravelly slightly clayey silty medium SAND with fine organic material. Lenses of silt. Gravel is sub-angular fine of flint, siltstone and sandstone.	
						SPT	N=29	29					GLACIOFLUVIAL SHEET DEPOSITS	
5					B	SPT	N=17	17						
6														
					B	SPT	N=32	32						
7														

Boring Progress and Water Observations						Flushing			General Remarks	
Date	Time	Depth	Casing Dpt	Casing Dia	Water Dpt	From	To	Type		
10/01/2023	10:00	2.20	1.35		DRY	12.70	14.20	Water	1) CAT Scanned prior to breaking ground. 2) Hand dug pit to 1.2m bgl.	
10/01/2023	05:00	5.65	5.00		2.18	24.70	25.60	Water		
11/01/2023	05:00	24.70	12.70		3.22	25.60	27.10	Water		
12/01/2023	02:00	30.10	24.40		5.94	27.10	28.60	Water		
						28.60	31.10	Water		
All dimensions in metres Scale 1:53			Contractor: GEL Plant: Pioneer 305			Method: RC Hole Size: 150mm			Logged By: HN	Approved By: AK
SLR Consulting Ltd, 2nd and 3rd Floors, 15 Middle Pavement, Nottingham, NG1 7DX LOGGING HAS BEEN CARRIED OUT IN ACCORDANCE WITH BS5930:2015										

BOREHOLE LOG													BOREHOLE No BH01	
Client: AMP Energy Services Ltd														
Project No: 404.V09695.00001			Date: 10/01/2023		Ground Level: 87.00m			Co-ordinates: E387377 N406110						
Project: Whitbrook Power Flexible Energy Facility													Sheet 2 of 4	
SAMPLES & TESTS									STRATA				Instrument Backfill	
Depth	Core Run	TCR (%)	SCR (%)	RQD (%)	Type No.	Test Type	Test Result	SPT N Value 10 20 30 40	Water Level	Legend	Depth	DESCRIPTION		
9					B	SPT	N=38	38				Medium dense to dense dark brown and reddish brown slightly gravelly slightly clayey silty medium SAND with fine organic material. Lenses of silt. Gravel is sub-angular fine of flint, siltstone and sandstone. GLACIOFLUVIAL SHEET DEPOSITS		
10					B	SPT	N=50	50						
11					B	SPT	N=46	46						
12											(20.50)			
13						SPT	N=46	46						
14												14.20 - 24.70 Open hole drilling		
15														
Borehole Continued on Next Page														
Boring Progress and Water Observations						Flushing			General Remarks					
Date	Time	Depth	Casing Dpt	Casing Dia	Water Dpt	From	To	Type	1) CAT Scanned prior to breaking ground. 2) Hand dug pit to 1.2m bgl.					
All dimensions in metres Scale 1:53			Contractor: GEL Plant: Pioneer 305			Method: RC Hole Size: 150mm			Logged By: HN		Approved By: AK			
SLR Consulting Ltd, 2nd and 3rd Floors, 15 Middle Pavement, Nottingham, NG1 7DX LOGGING HAS BEEN CARRIED OUT IN ACCORDANCE WITH BS5930:2015														

BOREHOLE LOG													BOREHOLE No BH01	
Client: AMP Energy Services Ltd														
Project No: 404.V09695.00001			Date: 10/01/2023		Ground Level: 87.00m			Co-ordinates: E387377 N406110						
Project: Whitbrook Power Flexible Energy Facility													Sheet 3 of 4	
SAMPLES & TESTS									STRATA				Instrument Backfill	
Depth	Core Run	TCR (%)	SCR (%)	RQD (%)	Type No.	Test Type	Test Result	SPT N Value 10 20 30 40	Water	Level	Legend	Depth		DESCRIPTION
17													Medium dense to dense dark brown and reddish brown slightly gravelly slightly clayey silty medium SAND with fine organic material. Lenses of silt. Gravel is sub-angular fine of flint, siltstone and sandstone. GLACIOFLUVIAL SHEET DEPOSITS	
18														
19														
20														
21														
22														
23														
													Borehole Continued on Next Page	
Boring Progress and Water Observations						Flushing			General Remarks					
Date	Time	Depth	Casing Dpt	Casing Dia	Water Dpt	From	To	Type						
									1) CAT Scanned prior to breaking ground. 2) Hand dug pit to 1.2m bgl.					
All dimensions in metres Scale 1:53			Contractor: GEL Plant: Pioneer 305			Method: RC Hole Size: 150mm			Logged By: HN		Approved By: AK			
SLR Consulting Ltd, 2nd and 3rd Floors, 15 Middle Pavement, Nottingham, NG1 7DX LOGGING HAS BEEN CARRIED OUT IN ACCORDANCE WITH BS5930:2015														

BOREHOLE LOG				BOREHOLE No BH01	
Client: AMP Energy Services Ltd					
Project No: 404.V09695.00001		Date: 10/01/2023	Ground Level: 87.00m	Co-ordinates: E387377 N406110	
Project: Whitbrook Power Flexible Energy Facility					Sheet 4 of 4

SAMPLES & TESTS										Water	STRATA				Instrument Backfill		
Depth	Core Run	TCR (%)	SCR (%)	RQD (%)	Type No.	Test Type	Test Result	SPT N Value				Level	Legend	Depth		DESCRIPTION	
								10	20	30	40						
					C								62.30	24.70		Medium dense to dense dark brown and reddish brown slightly gravelly slightly clayey silty medium SAND with fine organic material. Lenses of silt. Gravel is sub-angular fine of flint, siltstone and sandstone.	
	↑												62.11	24.89		GLACIOFLUVIAL SHEET DEPOSITS	
25					D									(0.71)		Medium strong dark grey thinly laminated SILTSTONE.	
					C								61.40	25.60		PENNINE LOWER COAL MEASURES FORMATION	
														(0.53)		Firm to stiff brown sandy very gravelly CLAY. Sand is medium. Gravel is sub-angular to angular fine to coarse of siltstone and coal.	
24.70 - 27.10		96%	96%	25%									60.87	26.13		PENNINE LOWER COAL MEASURES FORMATION	
					D									(0.97)		26.00 - 26.08 Dark grey, very stiff sandy very gravelly CLAY	
	↓															Dark grey very stiff sandy very gravelly CLAY. Sand is medium. Gravel is sub-angular to angular fine to coarse of siltstone and coal.	
27	↓				D								59.90	27.10		PENNINE LOWER COAL MEASURES FORMATION	
														(1.36)		Dark grey stiff to very stiff silty very gravelly CLAY interbedded with thinly laminated SILTSTONE. Gravel is angular fine to coarse of mudstone.	
					C											27.52 - 27.59 Medium strong dark grey SILTSTONE	
																28.04 - 28.13 Medium strong dark grey SILTSTONE	
													58.54	28.46		28.17 - 28.25 Medium strong dark grey SILTSTONE	
27.10 - 30.10		97%	87%	37%										(1.64)		Medium strong dark grey thinly laminated SILTSTONE.	
					C											PENNINE LOWER COAL MEASURES FORMATION	
					C												
30	↓				C								56.90	30.10			
																Borehole Complete at 30.10m	
31																	

Boring Progress and Water Observations						Flushing			General Remarks
Date	Time	Depth	Casing Dpt	Casing Dia	Water Dpt	From	To	Type	
									1) CAT Scanned prior to breaking ground. 2) Hand dug pit to 1.2m bgl.

All dimensions in metres Scale 1:53	Contractor: GEL Plant: Pioneer 305	Method: RC Hole Size: 150mm	Logged By: HN	Approved By: AK
SLR Consulting Ltd, 2nd and 3rd Floors, 15 Middle Pavement, Nottingham, NG1 7DX LOGGING HAS BEEN CARRIED OUT IN ACCORDANCE WITH BS5930:2015				

BOREHOLE LOG				BOREHOLE No BH02	
Client: AMP Energy Services Ltd					
Project No: 404.V09695.00001	Date: 12/01/2023	Ground Level: 87.00m	Co-ordinates: E387361 N406096		
Project: Whitbrook Power Flexible Energy Facility				Sheet 1 of 4	

SAMPLES & TESTS									Water	STRATA				Instrument Backfill
Depth	Core Run	TCR (%)	SCR (%)	RQD (%)	Type No.	Test Type	Test Result	SPT N Value 10 20 30 40		Level	Legend	Depth	DESCRIPTION	
1					D	SPT	N=0		86.80		0.20	MADE GROUND: Grey to dark grey reinforced concrete.		
									86.60		0.40	MADE GROUND: Soft to firm dark brown sandy very gravelly CLAY. Sand is medium. Gravel is angular medium to coarse of concrete, brick and chalk.		
											(0.85)	MADE GROUND: Brownish black sandy very silty very gravelly CLAY with low cobble content. Sand is medium. Gravel is angular medium to coarse of concrete, brick, chalk(?). Cobbles are whole intact bricks. Silt is soft and white and appears frequently dispersed.		
									85.75		1.25	MADE GROUND: Very soft cream and dark grey mottled sandy gravelly SILT. Gravel is sub-angular fine of siltstone and coal.		
											(1.35)	1.70 - 1.75 Black clayey silty gravelly medium SAND		
									84.40		2.60			
						D			84.20		2.80	MADE GROUND: Dark grey clayey sandy very gravelly SILT. Sand is medium. Gravel is sub-angular fine to medium of coal and siltstone.		
									83.80		3.20	MADE GROUND: Soft light grey sandy gravelly SILT with organic material. Gravel is sub-angular fine to medium of siltstone, mudstone and coal. [possible material membrane at 3.2m]		
						D					(1.50)	Very loose dark grey and brown mottled clayey silty slightly organic medium SAND with rare gravel of fine to medium flint.		
						B	SPT	N=1					ALLUVIUM	
2					B				82.30		4.70			
						SPT	N=50					Medium dense to dense greyish brown mottled dark grey slightly clayey gravelly coarse SAND with low cobble content. Gravel is sub-rounded to sub-angular fine to coarse of flint, sandstone and quartzite. Cobbles of granite and sandstone.		
												GLACIOFLUVIAL SHEET DEPOSITS		
3					B	SPT	N=20				(3.55)			
4														
						SPT	N=18							
Borehole Continued on Next Page														

Boring Progress and Water Observations						Flushing			General Remarks	
Date	Time	Depth	Casing Dpt	Casing Dia	Water Dpt	From	To	Type		
13/01/2023	10:00	2.20	1.25		DRY	26.10	27.30	Water	1) CAT Scanned prior to breaking ground. 2) Hand dug pit to 1.2m bgl.	
13/01/2023	05:00	6.65	6.20		1.94	27.30	28.60	Water		
16/01/2023	05:00	18.65	18.20		5.35	28.60	30.10	Water		
17/01/2023	05:00	30.10	26.00		4.22					
All dimensions in metres Scale 1:53			Contractor: GEL Plant: Pioneer 305			Method: RC Hole Size: 150mm			Logged By: HN	Approved By: AK
SLR Consulting Ltd, 2nd and 3rd Floors, 15 Middle Pavement, Nottingham, NG1 7DX LOGGING HAS BEEN CARRIED OUT IN ACCORDANCE WITH BS5930:2015										

BOREHOLE LOG											BOREHOLE No BH02			
Client: AMP Energy Services Ltd														
Project No: 404.V09695.00001			Date: 12/01/2023		Ground Level: 87.00m		Co-ordinates: E387361 N406096							
Project: Whitbrook Power Flexible Energy Facility											Sheet 2 of 4			
SAMPLES & TESTS									Water	STRATA				Instrument Backfill
Depth	Core Run	TCR (%)	SCR (%)	RQD (%)	Type No.	Test Type	Test Result	SPT N Value 10 20 30 40		Level	Legend	Depth	DESCRIPTION	
9 10 11 12 13 14 15					D							8.25	Medium dense to dense greyish brown mottled dark grey slightly clayey gravelly coarse SAND with low cobble content. Gravel is sub-rounded to sub-angular fine to coarse of flint, sandstone and quartzite. Cobbles of granite and sandstone. GLACIOFLUVIAL SHEET DEPOSITS	
					B	SPT	N=50	50				(1.34)	Very stiff locally soft brown slightly gravelly CLAY. Gravel is angular fine flint and coal. GLACIOFLUVIAL SHEET DEPOSITS	
												9.60	9.50 - 9.60 Firm brown sandy CLAY	
												(1.10)	Dark grey to brown sandy GRAVEL with low cobble content. Sand is coarse. Gravel is rounded to sub-rounded fine to coarse of mudstone, siltstone, sandstone, flint and quartzite. GLACIOFLUVIAL SHEET DEPOSITS	
						D	SPT	N=15	15				10.70	Soft to firm brown slightly sandy slightly gravelly CLAY with low cobble content. Sand is medium. Gravel is angular fine of mudstone. Cobbles of flint and siltstone. GLACIOFLUVIAL SHEET DEPOSITS
												(4.90)		
					D	SPT	N=13	13						
					D	SPT	N=6	6						
					D	SPT	N=29	29						
					B							15.60	Medium dense to dense brown slightly organic coarse SAND.	
Boring Progress and Water Observations						Flushing			General Remarks					
Date	Time	Depth	Casing Dpt	Casing Dia	Water Dpt	From	To	Type						
									1) CAT Scanned prior to breaking ground. 2) Hand dug pit to 1.2m bgl.					

BOREHOLE LOG													BOREHOLE No BH02	
Client: AMP Energy Services Ltd														
Project No: 404.V09695.00001			Date: 12/01/2023		Ground Level: 87.00m			Co-ordinates: E387361 N406096						
Project: Whitbrook Power Flexible Energy Facility													Sheet 3 of 4	
SAMPLES & TESTS									STRATA				Instrument Backfill	
Depth	Core Run	TCR (%)	SCR (%)	RQD (%)	Type No.	Test Type	Test Result	SPT N Value 10 20 30 40	Water	Level	Legend	Depth		DESCRIPTION
17						SPT	N=25	25				(3.75)	Medium dense to dense brown slightly organic coarse SAND. GLACIOFLUVIAL SHEET DEPOSITS	
18					B	SPT	N=49	49						
19										67.65		19.35	Very stiff brown sandy very silty CLAY. Sand is fine. GLACIOFLUVIAL SHEET DEPOSITS 19.70 - 26.10 Open hole drilling	
20						SPT	N=44	44						
21												(6.75)		
22														
23														
Borehole Continued on Next Page														
Boring Progress and Water Observations						Flushing			General Remarks					
Date	Time	Depth	Casing Dpt	Casing Dia	Water Dpt	From	To	Type	1) CAT Scanned prior to breaking ground. 2) Hand dug pit to 1.2m bgl.					
All dimensions in metres Scale 1:53			Contractor: GEL Plant: Pioneer 305			Method: RC Hole Size: 150mm			Logged By: HN		Approved By: AK			
SLR Consulting Ltd, 2nd and 3rd Floors, 15 Middle Pavement, Nottingham, NG1 7DX LOGGING HAS BEEN CARRIED OUT IN ACCORDANCE WITH BS5930:2015														

BOREHOLE LOG													BOREHOLE No BH02	
Client: AMP Energy Services Ltd														
Project No: 404.V09695.00001			Date: 12/01/2023		Ground Level: 87.00m			Co-ordinates: E387361 N406096						
Project: Whitbrook Power Flexible Energy Facility													Sheet 4 of 4	
SAMPLES & TESTS									STRATA				Instrument Backfill	
Depth	Core Run	TCR (%)	SCR (%)	RQD (%)	Type No.	Test Type	Test Result	SPT N Value 10 20 30 40	Water Level	Legend	Depth	DESCRIPTION		
25												Very stiff brown sandy very silty CLAY. Sand is fine. GLACIOFLUVIAL SHEET DEPOSITS		
26					C				60.90		26.10	Brown clayey sandy GRAVEL with frequent cobbles. Sand is medium. Gravel is rounded to sub-angular fine to coarse of siltstone, sandstone and flint. Cobbles are sub-angular of siltstone. GLACIOFLUVIAL SHEET DEPOSITS		
27									59.70		27.30	Stiff to very stiff grey sandy very gravelly CLAY with occasional cobbles and organics. Sand is medium. Gravel is sub-rounded to sub-angular fine to medium of siltstone, sandstone, mudstone. PENNINE LOWER COAL MEASURES FORMATION		
28					D									
29					C				58.40		28.60	Stiff to very stiff dark grey gravelly CLAY. Gravel is angular to sub-angular fine to medium of mudstone. PENNINE LOWER COAL MEASURES FORMATION		
30					D									
31									56.90		30.10	Borehole Complete at 30.10m		
Boring Progress and Water Observations									Flushing			General Remarks		
Date	Time	Depth	Casing Dpt	Casing Dia	Water Dpt	From	To	Type						
									1) CAT Scanned prior to breaking ground. 2) Hand dug pit to 1.2m bgl.					
All dimensions in metres Scale 1:53			Contractor: GEL Plant: Pioneer 305			Method: RC Hole Size: 150mm			Logged By: HN		Approved By: AK			
SLR Consulting Ltd, 2nd and 3rd Floors, 15 Middle Pavement, Nottingham, NG1 7DX LOGGING HAS BEEN CARRIED OUT IN ACCORDANCE WITH BS5930:2015														