

Project
ASC C2 & C3 Controlled Data
HS2

Project No.
C2-C3-CONT-ASC
Easting (OSGB)
464696.40




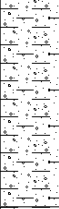
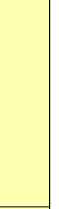

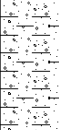
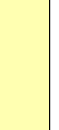

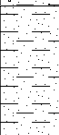


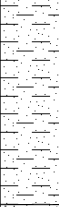

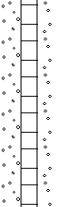


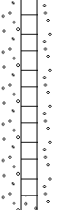


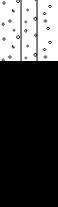


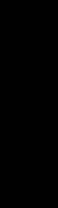




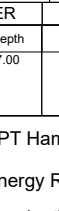
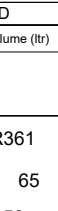

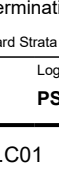
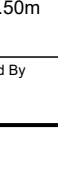
Ground Level (mAOD)
87.14
Northing (SnakeGrid)
228436.98

GI Phase
HS2 Main GI
Asset Group
Chetwode Embankment Group

Chainage (SG Grid)
4 m

Start Date
11/09/2017
End Date
12/09/2017

Scale
1:50
Sheet 1 of 1

SAMPLES		TESTS			PROGRESS		STRATA				Depth (Thickness)	Level	Install/ Backfill					
Type + Depth	Type + Depth	Results	PI	Water Depth	Date & Time	Casing & Water Depth	Description	Legend	Geol Code1									
(D1) 0.50 (LB2) 0.50-1.00							TOPSOIL: Brown sandy clay. Factual Geolcode [TOP] Factual Geolcode 2 [C] Geology Code 3 [TOP-C Z]			(0.20) 0.20	86.94							
(D3) 1.00							Soft to firm brown slightly sandy gravelly CLAY. Sand is fine. Gravel is angular and subrounded fine to coarse of flint (Reworked). Factual Geolcode [OXC] Factual Geolcode 2 [C] Geology Code 3 [ALV-C Z]			(1.40)								
(B5) 1.50-2.00 (D4) 1.50 (UT-NR) 1.50-1.95		UT-NR 20 blows 0% rec.					Soft to firm brownish grey sandy gravelly CLAY. Sand fine to medium. Gravel is angular to subrounded of flint and quartzite. (Reworked). Factual Geolcode [OXC] Factual Geolcode 2 [C] Geology Code 3 [ALV-C Z]			1.60	85.54							
(B7) 2.00-2.50 (D6) 2.00-2.45	SPT(S) 2.00	N=7 (1,1,2,2,1,2)								(0.90)								
(D8) 2.50 (UT9) 2.50-2.95		UT9 28 blows 100% rec.					Stiff to very stiff thinly laminated grey slightly sandy CLAY with occasional shell fragments (up to 10mm). Sand is fine to medium. Fissures are 65 to 90 degrees closely spaced undulating rough. Factual Geolcode [OXC] Factual Geolcode 2 [C] Geology Code 3 [OXC-C Z]			2.50	84.64							
(D10) 2.95 (B12) 3.00-3.50 (D11) 3.00-3.45	SPT(S) 3.00	N=28 (3,4,6,7,7,8)								(2.20)								
(D13) 3.50 (UT14) 3.50-3.95		UT14 30 blows 100% rec.																
(D15) 3.95 (B17) 4.00-4.50 (D16) 4.00-4.45	SPT(S) 4.00	N=26 (3,5,5,7,7,7)								4.70	82.44							
(D20) 4.95 (B22) 5.00-5.50 (D21) 5.00-5.45	SPT(S) 5.00	N=12 (1,1,2,2,3,5)		3.50			Medium dense grey fine to medium clayey SAND. Factual Geolcode [KLB] Factual Geolcode 2 [S] Geology Code 3 [KLB-S V SV]											
(D23) 5.50 (UT24) 5.50-5.95		UT24 80 blows 100% rec.																
(D25) 5.95 (D26) 6.00-6.45	SPT(S) 6.00	N=41 (4,7,9,10,10, 12)		3.80						(3.10)								
(D27) 7.00-7.44	SPT(S) 7.00	50/290mm (5,9,9,12,15, 14/65)		4.00														
					11/09/2017 17:30 12/09/2017 07:30	7.00 3.50 7.00 3.50												
							Very stiff thinly laminated dark grey micaceous CLAY with some shell fragments (up to 10mm). Factual Geolcode [KLB] Factual Geolcode 2 [C] Geology Code 3 [KLB-C Z]			7.80	79.34							
										(1.70)								
					12/09/2017 16:15	7.00 4.50				9.50	77.64							
Type	Type	Results		Water	Date Time	Casing Water	Description	Legend		Depth (Thickness)	Level	Install/Backfill						
DRILLING TECHNIQUE			CHISELLING			WATER OBSERVATIONS				HOLE/CASING DIAMETER		WATER ADDED						
From	To	Type	From	To	Duration	Date/Time	Strike At	Time Elapsed (mins)	Rise To	Casing	Sealed	Hole Dia.	Depth	Casing Dia.	Depth	From	To	Volume (ltr)
0.00	1.20	Inspection Pit Cable Percussion				11/09/2017 12:40:00	4.50	20	4.00	4.00		200	9.50	200	7.00			
								15	4.00									
								10	4.10									
Remarks										SPT Hammer: AR361								
1. PAS 128 Type B survey conducted over position. 2. Where structure is not described, such features were not observed in the available samples.										Energy Ratio (%): 65								
THIS LOG HAS BEEN REPRODUCED FROM FACTUAL AGS DATA. CHANGES TO GEOLOGY CODES WILL NOT BE REFLECTED ON THIS LOG.										Termination Depth: 9.50m								
										Hard Strata								



Unless otherwise stated:
Depth (m), Diameter (mm), Time (hhmm),
Thickness (m), Level (mOD).

Equipment Used
Insulated Hand tools

Contractor

Logged By
PS
Checked By

Project
ASC C2 & C3 Controlled
Data
HS2

Project No.
C2-C3-CONT-ASC
Easting (OSGB)
464822.31

Ground Level (mAOD)
89.00
Northing (SnakeGrid)
228487.89

GI Phase
HS2 Main GI
Asset Group
Chetwode Embankment Group

Chainage (SG Grid)
130 m

Start Date
16/08/2017
End Date
18/08/2017

Scale
1:50
Sheet 1 of 1

SAMPLES		TESTS			PROGRESS		STRATA										Depth (Thickness)	Level	Install/ Backfill
Type + Depth	Type + Depth	Results	PI	Water Depth	Date & Time	Casing & Water Depth	Description	Legend	Geol Code1										
(D1) 0.50 (LB2) 0.50-1.00			NMC 12				TOPSOIL: Brown clay. Factual Geolcode [TOP] Factual Geolcode 2 [C] Geology Code 3 [TOP-C Z]			(0.35)									
(D3) 1.00							Medium dense orangish brown slightly gravelly clayey fine to coarse SAND. Gravel is subangular to rounded fine to coarse of flint and quartzite. Factual Geolcode [RTD1] Factual Geolcode 2 [S] Geology Code 3 [RTD1-S V SV]			0.35	88.65								
(B5) 1.50-2.00 (D4) 1.50	SPT(C) 1.50	N=21 (2,4,4,5,6,6)								(2.85)									
(B7) 2.50-3.00 (D6) 2.50	SPT(C) 2.50	N=24 (3,3,4,6,7,7)		1.90															
(D8) 3.50 (UT9) 3.50-3.95		UT9 35 blows 100% rec.			16/08/2017 17:30 17/08/2017 07:30	3.00 Dry 3.00 Dry	Stiff to very stiff fissured dark grey slightly sandy CLAY. Sand is fine to medium. Fissures are 70 to 90 degrees closely spaced planar smooth. Factual Geolcode [OXC] Factual Geolcode 2 [C] Geology Code 3 [OXC-C Z]			3.20	85.80								
(D10) 3.95 (B12) 4.00-4.50 (D11) 4.00-4.45	SPT(S) 4.00	N=19 (2,3,3,4,6,6)								(1.40)									
(D13) 4.50 (UT14) 4.50-4.95		UT14 28 blows 100% rec.	PL 15 LL 41 PI 26 NMC 21				Medium dense dark grey clayey fine to medium SAND. Factual Geolcode [KLB] Factual Geolcode 2 [S] Geology Code 3 [KLB-S V SV]			4.60	84.40								
(D15) 4.95 (B17) 5.00-5.50 (D16) 5.00-5.45	SPT(S) 5.00	N=19 (2,3,4,4,5,6)	NMC 6							(1.90)									
(D18) 5.50 (UT-NR) 5.50-5.95		UT-NR 31 blows 0% rec.			17/08/2017 18:00 18/08/2017 07:30	6.00 1.50 6.00 1.50													
(D19) 6.50-6.55	SPT(S) 6.50	50/30mm (25/20,50/30 mm)		1.50	18/08/2017 12:05	6.50 1.50	Medium strong light grey LIMESTONE. Factual Geolcode [CB] Factual Geolcode 2 [LMST] Geology Code 3 [CB-LMST]			6.50 6.60	82.50 82.40								
Type	Type	Results		Water	Date Time	Casing Water	Description	Legend		Depth (Thickness)	Level	Install/Backfill							
DRILLING TECHNIQUE			CHISELLING			WATER OBSERVATIONS				HOLE/CASING DIAMETER			WATER ADDED						
From	To	Type	From	To	Duration	Date/Time	Strike At	Time Elapsed (mins)	Rise To	Casing	Sealed	Hole Dia.	Depth	Casing Dia.	Depth	From	To	Volume (ltr)	
0.00	1.20	Inspection Pit Cable Percussion	6.50	6.60	01:00	16/08/2017 16:50:00	2.00	20	1.90	2.00	2.90	200	3.00	200	3.00				
	6.60							10	1.90			150	6.60	150	6.50				
								5	1.90										
Remarks											SPT Hammer:			AR361					
1. PAS 128 Type B survey conducted over position. 2. Where structure is not described, such features were not observed in the available samples.											Energy Ratio (%):			65					
THIS LOG HAS BEEN REPRODUCED FROM FACTUAL AGS DATA. CHANGES TO GEOLOGY CODES WILL NOT BE REFLECTED ON THIS LOG.											Termination Depth:			6.60m					
											Hard Strata								

Project
ASC C2 & C3 Controlled Data
HS2

Project No.
C2-C3-CONT-ASC
Easting (OSGB)
464688.68


















Ground Level (mAOD)
87.05
Northing (SnakeGrid)
228386.29

GI Phase
ASC Detailed GI
Asset Group
Chetwode Embankment Group

Chainage (SG Grid)
-37 m

Start Date
14/12/2020
End Date
15/12/2020

Scale
1:50
Sheet 1 of 2

SAMPLES		TESTS				PROGRESS		STRATA				Depth (Thickness)	Level	Install/ Backfill				
Type + Depth	Type + Depth	Results	PI	Water Depth	Date & Time	Casing & Water Depth	Description	Legend	Geol Code1									
(B2) 0.10-0.30 (D1) 0.10			NMC 23				TOPSOIL: Dark brown slightly sandy slightly gravelly clay. Sand is fine to coarse. Gravel is subangular to subrounded fine to coarse of flint. Frequent rootlets. Factual Geolcode [TOP] Factual Geolcode 2 [C] Geology Code 3 [TOP-C Z]			(0.40)								
(D3) 0.40 (B4) 0.50-1.00							Soft orangish brown slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is subangular to subrounded fine to medium of flint. Factual Geolcode [ALV] Factual Geolcode 2 [C] Geology Code 3 [ALV-C Z]			0.40	86.65							
(D5) 1.20			PL 19 LL 52 PI 33 NMC 14							(1.30)								
(U6) 1.70-2.15		U6 14 blows 100%rec.					Firm grey and brown slightly sandy CLAY. Sand is fine to coarse. Factual Geolcode [OXC] Factual Geolcode 2 [C] Geology Code 3 [OXC-C Z]			1.70	85.35							
(B9) 2.20-2.70 (D7) 2.20 (D8) 2.20-2.65	SPT(S) 2.20	N=11 (1,1,2,2,3,4)	PL 21 LL 63 PI 42 NMC 19 NMC 32							(1.00)								
(D10) 3.00 (U11) 3.20-3.65		U11 20 blows 100% rec.					Firm to stiff dark grey slightly sandy CLAY. Sand is fine to medium. Factual Geolcode [OXC] Factual Geolcode 2 [C] Geology Code 3 [OXC-C Z]			2.70	84.35							
(D12) 3.70 (D13) 4.00			PL 25 LL 64 PI 39 NMC 30 NMC 21				from 3.00m to 3.30m slightly sandy.			(2.40)								
(B15) 4.20-4.70 (D14) 4.20-4.65	SPT(S) 4.20	N=18 (2,2,3,4,5,6)	PL 19 LL 46 PI 27 NMC 24															
(D16) 5.00 (B18) 5.20-5.70 (D17) 5.20-5.65	SPT(S) 5.20	N=35 (3,4,5,8,10,12)	LL 27 NMC 16	0.50	14/12/2020 17:30 15/12/2020 07:30	3.00 0.05 3.00 0.05	Very dense brownish grey clayey fine SAND with some bands of sandy clay and occasional fragments of shell to fine gravel size. Factual Geolcode [KLB] Factual Geolcode 2 [S] Geology Code 3 [KLB-S V SV]			5.10	81.95							
(D19) 6.00 (B21) 6.20-6.70 (D20) 6.20-6.65	SPT(S) 6.20	N=47 (4,5,9,11,12,15)	PL 14 LL 27 PI 13 NMC 16	3.10			at 6.20m band of sandy clay.											
(D22) 7.20 (B24) 7.70-8.20 (D23) 7.70-8.15	SPT(S) 7.70	N=53 (3,5,10,12,15,16)	LL 27 NMC 19	4.00						(3.80)								
(B26) 8.90-9.20 (D25) 8.90 (U27) 9.20-9.65		U27 41 blows 100% rec.	PL 22 LL 66 PI 44 NMC 31				Stiff dark grey CLAY. Factual Geolcode [KLB] Factual Geolcode 2 [C] Geology Code 3 [KLB-C Z]			8.90	78.15							
(D28) 9.70			PL 20 LL 69 PI 49 NMC 26							(1.90)								
Type	Type	Results		Water	Date Time	Casing Water	Description	Legend		Depth (Thickness)	Level	Install/Backfill						
DRILLING TECHNIQUE			CHISELLING			WATER OBSERVATIONS				HOLE/CASING DIAMETER		WATER ADDED						
From	To	Type	From	To	Duration	Date/Time	Strike At	Time Elapsed (mins)	Rise To	Casing	Sealed	Hole Dia.	Depth	Casing Dia.	Depth	From	To	Volume (ltr)
0.00 1.20	1.20 11.05	Inspection Pit Cable Percussion	10.80	11.00	01:00							200	11.05	200	3.00			
Remarks															SPT Hammer: AR881			
1. PAS 128 Type B survey conducted over position.															Energy Ratio (%): 70			
THIS LOG HAS BEEN REPRODUCED FROM FACTUAL AGS DATA. CHANGES TO GEOLOGY CODES WILL NOT BE REFLECTED ON THIS LOG.															Termination Depth: 11.05m			
															Achieved Scheduled Depth			



Cable Percussive Borehole Log

Final data

ML084-CP439

Project
ASC C2 & C3 Controlled Data
HS2

Project No.
C2-C3-CONT-ASC
Easting (OSGB)
464688.68

Ground Level (mAOD)
87.05
Northing (SnakeGrid)
228386.29






GI Phase
ASC Detailed GI
Asset Group
Chetwode Embankment Group

Chainage (SG Grid)
-37 m

Start Date
14/12/2020
End Date
15/12/2020

Scale
1:50

Sheet 2 of 2

SAMPLES		TESTS			PROGRESS		STRATA				Depth (Thickness)	Level	Install/ Backfill
Type + Depth	Type + Depth	Results	PI	Water Depth	Date & Time	Casing & Water Depth	Description	Legend	Geol Code1				
(D29) 10.20							Stiff dark grey CLAY. Factual Geolcode [OXC] Factual Geolcode 2 [C] Geology Code 3 [OXC-C Z]			10.80 (0.25) 11.05	76.25 76.00		
(B31) 10.70-10.80 (D30) 10.70-10.82	SPT(S) 10.70 SPT(C) 11.00	100/25mm (4,21/20,100/ 25mm) 100/25mm (25/25,100/2 5mm)			15/12/2020	3.00	Very stiff dark grey slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is angular to subrounded fine to coarse of limestone. Factual Geolcode [CB] Factual Geolcode 2 [C] Geology Code 3 [CB-C Z]						



Unless otherwise stated:
Depth (m), Diameter (mm), Time (hhmm),
Thickness (m), Level (mOD).

Equipment Used
Insulated Hand Tools

Contractor

Logged By
EC
Checked By

Project
ASC C2 & C3 Controlled Data
HS2

Project No.
C2-C3-CONT-ASC
Easting (OSGB)
464624.90

Ground Level (mAOD)
88.24
Northing (SnakeGrid)
228511.08

GI Phase
ASC Detailed GI
Asset Group
Chetwode Embankment Group

Chainage (SG Grid)
4 m
Offset

Start Date
16/03/2021
End Date
17/03/2021

Scale
1:50
Sheet 1 of 2

SAMPLES		TESTS			PROGRESS		STRATA				Depth (Thickness)	Level	Install/Backfill					
Type + Depth	Type + Depth	Results	PI	Water Depth	Date & Time	Casing & Water Depth	Description	Legend	Geol Code1									
(B2) 0.10-0.30 (D1) 0.10			PL 27 LL 57 PI 30 NMC 38 NMC 10				Dark brown slightly gravelly sandy CLAY. Sand is fine to coarse. Gravel is subangular fine to medium of mudstone. Factual Geolcode [TOP] Factual Geolcode 2 [C] Geology Code 3 [TOP-C Z]			(0.30)	87.94							
(B4) 0.40-0.60 (D3) 0.40							Firm brown slightly sandy slightly gravelly CLAY. Sand is fine to medium. Gravel is subangular to subrounded fine to coarse of flint. Factual Geolcode [TILMP] Factual Geolcode 2 [C] Geology Code 3 [TILMP-C Z]			(0.30)								
(D5) 0.70 (B6) 0.80-1.00							Firm light brown mottled grey CLAY. Factual Geolcode [TILMP] Factual Geolcode 2 [C] Geology Code 3 [TILMP-C Z]			(0.40)								
(B7) 1.00-1.20 (D8) 1.20							Firm grey mottled light brown slightly sandy CLAY with occasional light grey silty fine sand pockets. Sand is fine. Factual Geolcode [TILMP] Factual Geolcode 2 [C] Geology Code 3 [TILMP-C Z]			(0.70)								
(U9) 1.70-2.15							Firm dark greyish brown slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is subangular fine to medium of mudstone. Factual Geolcode [OXC] Factual Geolcode 2 [C] Geology Code 3 [OXC-C Z]			1.70								
(B12) 2.20-2.70 (D10) 2.20 (D11) 2.20-2.65							from 2.20m to 2.70m rare shell fragments (<1x5x10mm) and rare off white silty fine to coarse sand pockets.			(1.30)								
(D13) 3.00 (U14) 3.20-3.65							Firm to stiff grey slightly sandy CLAY. Sand is fine to medium. Factual Geolcode [OXC] Factual Geolcode 2 [C] Geology Code 3 [OXC-C Z]			3.00								
(D15) 3.70 (D16) 4.00							at 3.20m, firm. from 3.20m to 4.90m locally sandy clay. Sand is fine. from 3.70m to 4.90m with rare shell fragments (<1x5x10mm).			(1.90)								
(B18) 4.20-4.70 (D17) 4.20-4.65							from 4.20m to 4.90m becomes stiff.											
(D19) 5.00 (U20) 5.20-5.65							Stiff dark grey sandy CLAY with occasional shell fragments. Factual Geolcode [OXC] Factual Geolcode 2 [C] Geology Code 3 [OXC-C Z]			4.90								
(D21) 5.70	at 5.20m, very stiff. from 5.20m to 6.00m frequent shell fragments (<1x5x10mm).	(1.10)																
(B23) 6.00-6.50 (D22) 6.00	from 5.65m to 6.00m locally abundant shell fragments (<1x5x10mm).																	
(B24) 6.70-7.20	from 5.70m to 6.00m very sandy.	6.00																
(D25) 7.70	Very stiff grey slightly gravelly sandy CLAY. Sand is fine. Gravel is subangular fine of mudstone. Factual Geolcode [KLB] Factual Geolcode 2 [S] Geology Code 3 [KLB-S V SV]	(2.50)																
(B27) 8.20-8.70 (D26) 8.20-8.65							Very stiff grey CLAY with occasional pockets of brownish grey silty fine sand Factual Geolcode [KLB] Factual Geolcode 2 [C] Geology Code 3 [KLB-C Z]			8.50	79.74							
(D28) 9.20					16/03/2021 18:00 17/03/2021 07:30	8.70 4.10 8.70 5.00				(2.15)								
(U29) 9.70-10.15		U29 41 blows 100% rec.	NMC 26															
Type	Type	Results		Water	Date Time	Casing Water	Description	Legend		Depth (Thickness)	Level	Install/Backfill						
DRILLING TECHNIQUE			CHISELLING			WATER OBSERVATIONS				HOLE/CASING DIAMETER		WATER ADDED						
From	To	Type	From	To	Duration	Date/Time	Strike At	Time Elapsed (mins)	Rise To	Casing	Sealed	Hole Dia.	Depth	Casing Dia.	Depth	From	To	Volume (ltr)
0.00	1.20	Inspection Pit Cable Percussion	10.65	10.75	01:00	16/03/2021 14:15:00	6.00	20	5.48	4.00		200	10.78	200	8.70			
								15	5.51									
								10	5.55									
Remarks										SPT Hammer: AR359								
1. PAS 128 Type B survey conducted over position.										Energy Ratio (%): 60								
THIS LOG HAS BEEN REPRODUCED FROM FACTUAL AGS DATA. CHANGES TO GEOLOGY CODES WILL NOT BE REFLECTED ON THIS LOG.										Termination Depth: 10.78m								
										Refusal on Rock Head								

Project
ASC C2 & C3 Controlled Data
HS2

Project No.
C2-C3-CONT-ASC
Easting (OSGB)
464624.90

Ground Level (mAOD)
88.24
Northing (SnakeGrid)
228511.08

GI Phase
ASC Detailed GI
Asset Group
Chetwode Embankment Group

Chainage (SG Grid)
4 m
Offset

Start Date
16/03/2021
End Date
17/03/2021

Scale
1:50
Sheet 2 of 2

SAMPLES		TESTS			PROGRESS		STRATA					Depth (Thickness)		Level	Install/Backfill
Type + Depth	Type + Depth	Results	PI	Water Depth	Date & Time	Casing & Water Depth	Description	Legend	Geol Code1						
(D30) 10.20							Very stiff grey CLAY with occasional pockets of brownish grey silty fine sand .Factual Geolcode [KLB] Factual Geolcode 2 [C] Geology Code 3 [KLB-C Z]	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></di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Project
ASC C2 & C3 Controlled Data
HS2

Project No.
C2-C3-CONT-ASC
Easting (OSGB)
464564.43



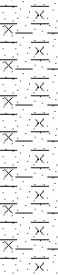



Ground Level (mAOD)
90.06
Northing (SnakeGrid)
228575.13

GI Phase
ASC Detailed GI
Asset Group
Chetwode Embankment Group

Chainage (SG Grid)
3 m

Start Date
28/01/2021
End Date
28/01/2021

Scale
1:50
Sheet 1 of 1

SAMPLES		TESTS			PROGRESS		STRATA				Depth (Thickness)	Level	Install/ Backfill
Type + Depth	Type + Depth	Results	PI	Water Depth	Date & Time	Casing & Water Depth	Description	Legend	Geol Code1				
	HV(1) 0.40 HV(2) 0.40 HV(3) 0.40	100(45)kPa 77(42)kPa 83(36)kPa					TOPSOIL: Grass over brown slightly sandy silty clay with frequent roots (<5mm) and rootlets. Sand is fine to coarse. Factual Geolcode [TOP] Factual Geolcode 2 [C] Geology Code 3 [TOP-C Z] Firm orangish brown mottled grey slightly sandy silty CLAY. Sand is fine to medium. Factual Geolcode [TILMP] Factual Geolcode 2 [C] Geology Code 3 [TILMP-C Z] from 0.55m to 1.00m becoming grey mottled orangish brown.			(0.30) 0.30	89.76		
	SPT(S) 2.20	N=10 (1,1,2,2,3,3)					Firm thinly laminated grey slightly sandy CLAY with occasional medium to coarse sand sized selenite crystals. Factual Geolcode [OXC] Factual Geolcode 2 [C] Geology Code 3 [OXC-C Z]			(1.90) 2.20			
							Stiff thinly laminated grey slightly sandy CLAY with occasional shell fragments (<10x10mm). Factual Geolcode [OXC] Factual Geolcode 2 [C] Geology Code 3 [OXC-C Z] from 4.00m to 4.40m becoming very stiff with frequent shell fragments (<10x10mm).			(1.30) 3.50 (0.90)			
	SPT(S) 4.20 SPT(C) 4.35	100/35mm (25/70,100/3 5mm) 100/25mm (25/25,100/2 5mm)				28/01/2021 18:00	3.00 [TextStyle]			4.40			

Type	Type	Results	Water	Date Time	Casing Water	Description	Legend	Depth (Thickness)	Level	Install/Backfill								
DRILLING TECHNIQUE			CHISELLING			WATER OBSERVATIONS				HOLE/CASING DIAMETER				WATER ADDED				
From	To	Type	From	To	Duration	Date/Time	Strike At	Time Elapsed (mins)	Rise To	Casing	Sealed	Hole Dia.	Depth	Casing Dia.	Depth	From	To	Volume (ltr)
0.00	1.20	Inspection Pit Cable Percussion	4.25	4.35	01:00							200	4.40	200	3.00			

Remarks 1. PAS 128 Type B survey conducted over position.														SPT Hammer: AR359			
														Energy Ratio (%): 60			
THIS LOG HAS BEEN REPRODUCED FROM FACTUAL AGS DATA. CHANGES TO GEOLOGY CODES WILL NOT BE REFLECTED ON THIS LOG.														Termination Depth: 4.40m			
														Hard Strata			

Project
ASC C2 & C3 Controlled Data
HS2

Project No.
C2-C3-CONT-ASC
Easting (OSGB)
464565.25













































Ground Level (mAOD)
90.36
Northing (SnakeGrid)
228573.84

GI Phase
ASC Detailed GI
Asset Group
Chetwode Embankment Group

Chainage (SG Grid)
3 m

Start Date
29/01/2021
End Date
01/02/2021

Scale
1:50
Sheet 1 of 2

SAMPLES		TESTS				PROGRESS		STRATA				Depth (Thickness)	Level	Install/Backfill				
Type + Depth	Type + Depth	Results	PI	Water Depth	Date & Time	Casing & Water Depth	Description	Legend	Geol Code1									
(B2) 0.10-0.30 (D1) 0.10	HV(1) 0.45 HV(2) 0.45 HV(3) 0.45	86(36)kPa 88(45)kPa 97(42)kPa	PL 26 LL 55 PI 29 NMC 33				TOPSOIL: Grass over brown slightly sandy clay with frequent roots and rootlets. Sand is fine to coarse. Factual Geolcode [TOP] Factual Geolcode 2 [C] Geology Code 3 [TOP-C Z]			(0.30)	90.06							
(D3) 0.40 (B4) 0.50-1.00							Firm orangish brown mottled grey slightly sandy CLAY. Sand is fine to medium .Factual Geolcode [TILMP] Factual Geolcode 2 [C] Geology Code 3 [TILMP-C Z] from 0.50m to 1.00m locally grey mottled orangish brown.			0.30								
(D5) 1.20										(1.90)								
(U6) 1.70-2.15							U6 15 blows 100%rec.											
(B9) 2.20-2.70 (D7) 2.20 (D8) 2.20-2.65	SPT(S) 2.20	N=10 (1,1,2,2,3,3)	PL 31 LL 64 PI 33 NMC 34				Firm thinly laminated greyish brown slightly sandy CLAY locally with occasional fine to coarse gravel sized selenite crystals. Sand is fine to coarse. Factual Geolcode [OXC] Factual Geolcode 2 [C] Geology Code 3 [OXC-C Z] from 2.65m to 3.20m becoming grey.			2.20	88.16							
(D10) 3.00							at 3.00m 2 No, selenite crystals (<10x25mm).			(1.00)								
(U11) 3.20-3.65	U11 25 blows 100% rec.						Stiff thinly laminated grey slightly sandy CLAY with occasional shell fragments (<10x15mm). Sand is fine to medium. Factual Geolcode [OXC] Factual Geolcode 2 [C] Geology Code 3 [OXC-C Z] from 3.20m to 3.65m rare fine to coarse sand sized selenite crystals.			3.20	87.16							
(D12) 3.70							from 3.70m to 5.65m rare shell fragments and occasional parting of fine sand.											
(D13) 4.00							at 4.00m pyrite nodules (<15x25mm).			(2.45)								
(B15) 4.20-4.70 (D14) 4.20-4.65	SPT(S) 4.20	N=17 (2,2,3,4,5,5)		from 4.20m to 5.00m occasional white speckling.														
(D16) 5.00							at 5.20m very stiff.											
(U17) 5.20-5.65	U17 24 blows 100% rec.			from 5.20m to 5.65m becoming sandy														
(D18) 5.70							Stiff to very stiff thinly laminated grey CLAY with rare shell fragments (<5x15mm). Factual Geolcode [OXC] Factual Geolcode 2 [C] Geology Code 3 [OXC-C Z]			5.65	84.71							
(D19) 6.20																		
(B21) 6.70-7.20 (D20) 6.70-7.15	SPT(S) 6.70	N=26 (2,3,5,5,7,9)								(2.05)								
(B23) 7.70-8.20 (D22) 7.70							Dense becoming very dense grey silty fine to medium SAND. Factual Geolcode [KLB] Factual Geolcode 2 [S] Geology Code 3 [KLB-S V SV]			7.70	82.66							
(B25) 8.20-8.70 (D24) 8.20-8.65	SPT(S) 8.20	N=40 (4,5,6,7,12,15)			01/02/2021 07:30 29/01/2021 15:30	4.50 1.50 4.50 7.70	from 8.20m to 10.60m dense.			(2.90)								
(D26) 9.20																		
(B28) 9.70-10.20 (D27) 9.70-10.15	SPT(S) 9.70	N=85 (8,12,15,21,25,24)		3.70														
																		
Type	Type	Results		Water	Date Time	Casing Water	Description	Legend		Depth (Thickness)	Level	Install/Backfill						
DRILLING TECHNIQUE			CHISELLING			WATER OBSERVATIONS				HOLE/CASING DIAMETER			WATER ADDED					
From	To	Type	From	To	Duration	Date/Time	Strike At	Time Elapsed (mins)	Rise To	Casing	Sealed	Hole Dia.	Depth	Casing Dia.	Depth	From	To	Volume (ltr)
0.00	1.20	Inspection Pit Cable Percussion	13.00	13.14	01:00	29/01/2021 12:10:00	8.20	20	7.70	4.50		200	13.15	200	11.00			
								15	7.72									
								10	7.81									
Remarks										SPT Hammer: AR359								
1. PAS 128 Type B survey conducted over position.										Energy Ratio (%): 60								
THIS LOG HAS BEEN REPRODUCED FROM FACTUAL AGS DATA. CHANGES TO GEOLOGY CODES WILL NOT BE REFLECTED ON THIS LOG.										Termination Depth: 13.15m								
										Hard Strata								

Project
ASC C2 & C3 Controlled Data
HS2

Project No.
C2-C3-CONT-ASC
Easting (OSGB)
464565.25




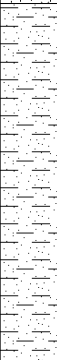



Ground Level (mAOD)
90.36
Northing (SnakeGrid)
228573.84

GI Phase
ASC Detailed GI
Asset Group
Chetwode Embankment Group

Chainage (SG Grid)
3 m

Start Date
29/01/2021
End Date
01/02/2021

Scale
1:50
Sheet 2 of 2

SAMPLES		TESTS			PROGRESS		STRATA						Depth (Thickness)	Level	Install/ Backfill			
Type + Depth	Type + Depth	Results	PI	Water Depth	Date & Time	Casing & Water Depth	Description	Legend	Geol Code1									
(D29) 10.70							Dense becoming very dense grey silty fine to medium SAND. Factual Geolcode [KLB] Factual Geolcode 2 [S] Geology Code 3 [KLB-S V SV]			10.60	79.76							
(U30) 11.20-11.65		U30 45 blows 100% rec.					Very stiff fissured grey CLAY with rare pockets of silty fine sand. Fissures are randomly orientated planar and smooth. Factual Geolcode [KLB] Factual Geolcode 2 [C] Geology Code 3 [KLB-C Z]											
(D31) 11.70							from 11.30m to 12.70m rare brownish grey subangular fine to coarse gravel of mudstone.			(2.40)								
(D32) 12.20																		
(B34) 12.70-13.00 (D33) 12.70-13.00	SPT(S) 12.70	100/145mm (9,12,19,81/7 0)																
(D35) 13.00-13.10	SPT(C) 13.10	100/25mm (25/20,100/2 5mm)			01/02/2021 17:30	11.00 [TextStyle]	Grey angular medium to coarse GRAVEL of limestone. Factual Geolcode [CB] Factual Geolcode 2 [V] Geology Code 3 [CB-V]			13.00 (0.15) 13.15	77.36 77.21							
Type	Type	Results		Water	Date Time	Casing Water	Description	Legend		Depth (Thickness)	Level	Install/Backfill						
DRILLING TECHNIQUE			CHISELLING			WATER OBSERVATIONS					HOLE/CASING DIAMETER			WATER ADDED				
From	To	Type	From	To	Duration	Date/Time	Strike At	Time Elapsed (mins)	Rise To	Casing	Sealed	Hole Dia.	Depth	Casing Dia.	Depth	From	To	Volume (ltr)
0.00	1.20	13.15	13.00	13.14	01:00	29/01/2021 12:10:00	8.20	20	7.70	4.50		200	13.15	200	11.00			
		Inspection Pit Cable Percussion						15	7.72									
								10	7.81									
Remarks															SPT Hammer: AR359			
1. PAS 128 Type B survey conducted over position.															Energy Ratio (%): 60			
THIS LOG HAS BEEN REPRODUCED FROM FACTUAL AGS DATA. CHANGES TO GEOLOGY CODES WILL NOT BE REFLECTED ON THIS LOG.															Termination Depth: 13.15m			
															Hard Strata			



Unless otherwise stated:
Depth (m), Diameter (mm), Time (hhmm),
Thickness (m), Level (mOD).

Equipment Used
Insulated Hand Tools

Contractor

Logged By
EA
Checked By

Project ASC C2 & C3 Controlled Data Client HS2	Project No. C2-C3-CONT-ASC Easting (SnakeGrid) 464459.49	Ground Level (mAOD) 93.77 Northing (SankeGrid) 228665.74	GI Phase HS2 Main GI Asset Group Chetwode Cutting Group	Chainage (SG Grid) 84962.000 Offset (m) -14	Start Date 05/09/2017 End Date 13/09/2017	Scale 1:50 Sheet 1 of 3
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Samples	TCR SCR RQD	FI	PI	Results	Water	Progress		Strata				Depth (Thick- ness)	Level	Install/ Backfill
						Date & Time	Casing & Water	Description	Legend	Geol Code1				
(D1) 0.50 (LB2) 0.50-1.00 (D3) 1.00 (D4) 1.50 (UT5) 1.50-1.95 (D6) 1.95 (B8) 2.00-2.50 (D7) 2.00-2.45 (D9) 2.50 (UT10) 2.50-2.95 (D11) 2.95 (B13) 3.00-3.50 (D12) 3.00-3.45 (D14) 3.50 (UT15) 3.50-3.95 (D16) 3.95 (B18) 4.00-4.50 (D17) 4.00-4.45 (D19) 4.50 (UT20) 4.50-4.95 (D21) 4.95 (B23) 5.00-5.50 (D22) 5.00-5.45 (D24) 5.50 (UT25) 5.50-5.95 (D26) 6.00			PL 21 LL 67 PI 46 NMC 26				TOPSOIL: Brown clay. Factual Geolcode [TOP] Factual Geolcode 2 [C] Geology Code 3 [TOP-C Z] Firm brownish grey slightly gravelly CLAY. Gravel is angular to subrounded fine to medium of flint, quartzite and limestone. Factual Geolcode [TILMP] Factual Geolcode 2 [C] Geology Code 3 [TILMP-C Z] Firm brown slightly sandy slightly gravelly CLAY. Sand fine to medium. Gravel is angular to subrounded fine of flint, quartzite and limestone. Factual Geolcode [TILMP] Factual Geolcode 2 [C] Geology Code 3 [TILMP-C Z]					0.10 (0.40) 0.50 		

Remarks
1. PAS 128 Type B survey conducted over position. 2. Where structure is not described, such features were not observed in the available samples. 3. No groundwater observed.

THIS LOG HAS BEEN REPRODUCED FROM AGS DATA. FOR THE ORIGINAL LOG PLEASE CHECK THE RELEVANT FACTUAL REPORT.	Termination Depth: 30.00m Achieved Scheduled Depth
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	Unless otherwise stated: Depth (m), Diameter (mm), Time (hhmm), Thickness (m), Level (mOD).	Equipment Used SOILMEC SM8	Contractor	Logged By Olivia Benbow	Checked By
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Project ASC C2 & C3 Controlled Data Client HS2	Project No. C2-C3-CONT-ASC Easting (SnakeGrid) 464459.49	Ground Level (mAOD) 93.77 Northing (SankeGrid) 228665.74	GI Phase HS2 Main GI Asset Group Chetwode Cutting Group	Chainage (SG Grid) 84962.000 Offset (m) -14	Start Date 05/09/2017 End Date 13/09/2017	Scale 1:50 Sheet 2 of 3
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Samples	TCR SCR RQD	FI	PI	Results	Water	Progress		Strata				Depth (Thick- ness)	Level	Install/ Backfill						
						Date & Time	Casing & Water	Description	Legend	Geol Code1										
(C31) 10.23-10.58								Very stiff fissured thinly laminated dark grey slightly sandy CLAY. Sand is fine. Fissures are randomly orientated extremely closely spaced planar smooth. Factual Geolcode [KLB] Factual Geolcode 2 [C] Geology Code 3 [KLB-C Z]			10.58	83.19								
(C32) 11.03-11.37								Very stiff dark grey sandy CLAY with rare shell fragments (up to 10mm). Sand is fine. Factual Geolcode [KLB] Factual Geolcode 2 [C] Geology Code 3 [KLB-C Z]												
(C33) 12.00-12.35			LL 27 NMC 5					from 10.58m to 10.82m slightly sandy			(2.36)									
(C34) 12.99-13.30								from 12.76m to 12.94m slightly sandy			12.94	80.83								
(C35) 14.11-14.44								Very stiff fissured thinly laminated dark grey locally sandy CLAY with rare shell fragments (up to 8mm). Sand is fine. Fissures are randomly orientated extremely closely spaced planar smooth. Factual Geolcode [KLB] Factual Geolcode 2 [C] Geology Code 3 [KLB-C Z]												
(C36) 15.12-15.46			PL 27 LL 68 PI 41 NMC 27					from 13.43m to 13.49m some pockets of pyrite speckling (up to 27mm) from 13.50m to 13.57m soft to firm (probable drilling induced) from 13.51m to 13.53m 1 No shell fragment (8x62mm)												
(C37) 16.16-16.47	TCR: 97 SCR: 96 RQD: 86							from 14.43m to 14.52m some pockets of pyrite speckling (up to 24mm)												
(C38) 16.98-17.33	TCR: 97 SCR: 95 RQD: 91	NI 320 440						from 14.88m to 14.99m some pockets of pyrite speckling (up to 14mm)												
(C39) 18.34-18.76	TCR: 95 SCR: 85 RQD: 85							from 15.53m to 15.56m abundant shell fragments (up to 6mm) some are pyritised			15.59	78.18								
(C40) 19.39-19.71	TCR: 97 SCR: 95 RQD: 85							Medium strong grey to dark grey fossiliferous argillaceous LIMESTONE. Moderately Weathered. Discontinuities 1) 0 to 10 degrees medium spaced undulating rough clean. Factual Geolcode [CB] Factual Geolcode 2 [LMST] Geology Code 3 [CB-LMST]												
(C41) 19.80-20.17								from 16.24m to 16.44m some cavities infilled with clay (up to 9mm)			(1.64)									
								from 16.76m to 16.95m some cavities infilled with clay (up to 24mm) from 17.02m to 17.08m some cavities infilled with clay (up to 18mm) from 17.16m to 17.34m some cavities infilled with clay (up to 43mm)												
								Extremely weak to weak indistinctly thinly laminated dark grey MUDSTONE with abundant shell fragments (up to 9mm). Distinctly Weathered. Factual Geolcode [FMB] Factual Geolcode 2 [MDST] Geology Code 3 [CB-MDST]			17.23	76.54								
								at 17.82m 1 No discontinuity 0 degrees undulating rough clean												
								Medium strong to strong dark grey mottled grey argillaceous LIMESTONE. Slightly Weathered. Discontinuities 1) 0 to 10 degrees widely spaced undulating rough, locally coarse sand infill (up to 5mm). Factual Geolcode [FMB] Factual Geolcode 2 [LMST] Geology Code 3 [FMB-LMST]												
								from 18.03m to 18.12m clay with abundant shell fragments (up to 2mm) (acts like a sand)			17.98	75.79								
								from 18.12m to 18.42m mottled orangish brown			(0.91)									
						12/09/2017 6.00 17:30 6.00 13/09/2017 10.60 07:30 18.00		Extremely weak to weak thinly laminated dark grey MUDSTONE with many shell fragments (up to 7mm). Distinctly Weathered. Factual Geolcode [FMB] Factual Geolcode 2 [MDST] Geology Code 3 [FMB-MDST]												
								at 18.95m 1 No discontinuity 0 degrees undulating rough clean			18.89	74.88								
								from 19.06m to 19.18m medium strong light greenish grey fossiliferous siltstone												
								from 19.18m to 19.33m abundant shell fragments (up to 22mm)												
								from 19.80m to 19.98m dark grey medium strong fossiliferous limestone												
								from 19.83m to 19.84m 1 No vug infilled with calcite (11x13mm)												
								from 19.98m to 20.08m weak dark greenish grey siltstone with abundant shell fragments (up to 6mm)			(1.19)									
								Medium strong greyish brown argillaceous LIMESTONE. Moderately Weathered. Discontinuities 1) 0 to 10 degrees closely to medium spaced undulating rough clean. Factual Geolcode [FMB] Factual Geolcode 2 [LMST] Geology Code 3 [FMB-LMST]			20.08	73.69								
SAMPLES	TCR SCR RQD	Fracture Index		RESULTS	Water	Date/Time	Casing Water	Description	Legend		Depth (Thickness)	Level	Install/Backfill							
DRILLING TECHNIQUE				FLUSH DETAILS				WATER OBSERVATIONS				WATER ADDED								
From	To	Type		From	To	Rtn%	Flush Type	Date/Time	Strike At	Time (mins)	Rise To	Casing	Sealed	Hole Dia.	Depth	Casing Dia.	Depth	From	To	Volume (ltr)
0.00	1.20	Inspection Pit		6.00	30.00	100	Air/Mist							200	6.00	200	2.00			
1.20	6.00	Cable Percussion												146	30.00	125	30.00			
6.00	30.00	Rotary Core																		

THIS LOG HAS BEEN REPRODUCED FROM AGS DATA. FOR THE ORIGINAL LOG PLEASE CHECK THE RELEVANT FACTUAL REPORT.														Termination Depth: 30.00m Achieved Scheduled Depth
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	Unless otherwise stated: Depth (m), Diameter (mm), Time (hhmm), Thickness (m), Level (mOD).	Equipment Used SOILMEC SM8	Contractor Olivia Benbow	Logged By Olivia Benbow	Checked By
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Project ASC C2 & C3 Controlled Data Client HS2	Project No. C2-C3-CONT-ASC Easting (SnakeGrid) 464459.49	Ground Level (mAOD) 93.77 Northing (SankeGrid) 228665.74	GI Phase HS2 Main GI Asset Group Chetwode Cutting Group	Chainage (SG Grid) 84962.000 Offset (m) -14	Start Date 05/09/2017 End Date 13/09/2017	Scale 1:50 Sheet 3 of 3
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Samples	TCR SCR RQD	FI	PI	Results	Water	Progress		Strata				Legend	Geol Code1	Depth (Thick- ness)	Level	Install/ Backfill			
						Date & Time	Casing & Water	Description											
(C42) 21.10-21.41	TCR: 100 SCR: 99 RQD: 84	80 280 370						Medium strong greyish brown argillaceous LIMESTONE. Moderately Weathered. Discontinuities 1) 0 to 10 degrees closely to medium spaced undulating rough clean. Factual Geolcode [FMB] Factual Geolcode 2 [LMST] Geology Code 3 [FMB-LMST] from 20.20m to 20.23m soft dark green clay with abundant shell fragments (up to 7mm)					(1.06)						
								from 20.99m to 21.14m dark grey from 21.04m to 21.14m weak											
(C43) 22.01-22.33	TCR: 95 SCR: 91 RQD: 64							Extremely weak indistinctly thinly laminated dark greenish grey SILTSTONE with rare shell fragments (up to 4mm) and rare black carbonaceous fragments (up to 8mm). Distinctly Weathered. Factual Geolcode [WHL-BLAD] Factual Geolcode 2 [SLST] Geology Code 3 [WHL-BLAD-SLST] at 21.47m 1 No discontinuity 0 degrees undulating rough clean from 21.50m to 21.54m abundant shell fragments (up to 4mm) from 21.56m to 21.59m some black carbonaceous fragments (up to 8mm) from 21.93m to 22.29m mottled dark bluish green and black (possible carbonaceous)					(1.21)	21.14	72.63				
from 21.50m to 21.54m abundant shell fragments (up to 4mm) from 21.56m to 21.59m some black carbonaceous fragments (up to 8mm)																			
(C44) 23.00-23.34		NI 480 740						Extremely weak indistinctly thinly laminated dark grey to black carbonaceous MUDSTONE with some black carbonaceous root structures (up to 45mm). Distinctly Weathered. Discontinuities 1) 0 to 10 degrees closely spaced undulating rough clean. Factual Geolcode [WHL-BLAD] Factual Geolcode 2 [MDST] Geology Code 3 [WHL-BLAD-MDST] Medium strong to strong grey mottled light brownish grey mottled greenish grey locally fossiliferous LIMESTONE. Slightly Weathered. Discontinuities 1) 0 to 10 degrees closely to medium spaced rarely widely spaced undulating rough clean. Factual Geolcode [WHL] Factual Geolcode 2 [LMST] Geology Code 3 [WHL-LMST] from 22.67m to 22.73m weak from 22.70m to 22.74m 1 No discontinuity 20 degrees stepped rough clean from 22.83m to 22.86m 1 No discontinuity 20 degrees undulating rough clean from 23.19m to 23.24m some cavities infilled with green clay (up to 26mm) at 23.50m to 24.50m rare vugs infilled with calcite (up to 17mm) from 24.50m to 24.67m recovered as non intact core (clayey sandy subangular to subrounded fine to coarse gravel and cobble sized fragments. Occasionally with striations) from 24.66m to 24.82m 1 No discontinuity 70 degrees undulating rough cl					(2.61)	22.35	71.42				
from 22.70m to 22.74m 1 No discontinuity 20 degrees stepped rough clean from 22.83m to 22.86m 1 No discontinuity 20 degrees undulating rough clean from 23.19m to 23.24m some cavities infilled with green clay (up to 26mm) at 23.50m to 24.50m rare vugs infilled with calcite (up to 17mm) from 24.50m to 24.67m recovered as non intact core (clayey sandy subangular to subrounded fine to coarse gravel and cobble sized fragments. Occasionally with striations) from 24.66m to 24.82m 1 No discontinuity 70 degrees undulating rough cl																			
(C45) 24.10-24.50	TCR: 97 SCR: 96 RQD: 89							from 24.85m to 24.94m some vugs (up to 39mm)					(2.58)	22.67	71.10				
(C46) 24.50-24.81	TCR: 95 SCR: 83 RQD: 75							Medium strong light grey mottled greyish brown oolitic argillaceous LIMESTONE. Slightly weathered. Discontinuities 1) 0 to 10 degrees closely to medium spaced undulating rough clean locally clay infilled. Factual Geolcode [WHL] Factual Geolcode 2 [LMST] Geology Code 3 [WHL-LMST] from 26.16m to 26.49m fossiliferous from 26.17m to 26.23m some cavities infilled with clay (up to 13mm)											
(C47) 26.00-26.37		NI 320 650						from 26.75m to 26.78m 1 No discontinuity 45 degrees undulating rough with clay smear and striations from 26.84m to 26.85m 1 No vug infilled with calcite (2x7mm) from 27.05m to 29.06m 1 No discontinuity 15 degrees undulating rough with striations from 27.16m to 27.33m 1 No discontinuity 90 degrees undulating rough with striations from 27.48m to 27.49m 1 No vug infilled with calcite (4x8mm)					(2.14)	27.86	65.91				
(C48) 26.75-27.05	TCR: 97 SCR: 93 RQD: 87								Medium strong grey mottled light greyish brown argillaceous fossiliferous LIMESTONE. Slightly Weathered. Discontinuities 1) 0 to 10 degrees closely to medium locally widely spaced planar to undulating rough clean. Factual Geolcode [WHL] Factual Geolcode 2 [LMST] Geology Code 3 [WHL-LMST] from 28.50m to 29.00m 1 No discontinuity 80 degrees undulating and planar rough clean from 28.81m to 28.89m some vugs infilled with calcite (up to 8mm) from 28.91m to 28.96m some cavities infilled with silt (up to 18mm) from 29.00m to 29.07m dark grey from 29.43m to 29.49m dark grey from 29.45m to 29.88m 1 No discontinuity 90 degrees curved and planar rough from 29.60m to 29.61m 1 No vug infilled with calcite (7x7mm) from 29.85m to 29.92m 1 No discontinuity 45 degrees undulating rough clean from 29.98m to 30.00m dark grey										
(C49) 27.95-28.28	TCR: 100 SCR: 100 RQD: 92												(2.14)	30.00	63.77				
(C50) 29.07-29.44																			
(C51) 29.45-29.88	TCR: 100 SCR: 98 RQD: 81					13/09/2017 17:30	6.00 17.40						(2.14)	30.00	63.77				
SAMPLES		TCR SCR RQD	Fracture Index	RESULTS	Water	Date Time	Casing Water	Description				Legend		Depth (Thickness)	Level	Install/Backfill			
DRILLING TECHNIQUE				FLUSH DETAILS			WATER OBSERVATIONS				HOLE/CASING DIAMETER			WATER ADDED					
From	To	Type	From	To	Rtn%	Flush Type	Date/Time	Strike At	Time (mins)	Rise To	Casing	Sealed	Hole Dia.	Depth	Casing Dia.	Depth	From	To	Volume (ltr)
0.00	1.20	Inspection Pit	6.00	30.00	100	Air/Mist							200	6.00	200	30.00			
1.20	6.00	Cable Percussion											146	30.00	125				
6.00	30.00	Rotary Core																	

Remarks
1. PAS 128 Type B survey conducted over position. 2. Where structure is not described, such features were not observed in the available samples. 3. No groundwater observed.

THIS LOG HAS BEEN REPRODUCED FROM AGS DATA. FOR THE ORIGINAL LOG PLEASE CHECK THE RELEVANT FACTUAL REPORT.	Termination Depth: 30.00m Achieved Scheduled Depth
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AGS	Unless otherwise stated: Depth (m), Diameter (mm), Time (hhmm), Thickness (m), Level (mOD).	Equipment Used SOILMEC SM8	Contractor	Logged By Olivia Benbow	Checked By
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Sheet 1 of 1

	Unless otherwise stated:	Equipment Used	Contractor	Logged By	Checked By
	Depth (m), Diameter (mm), Time (hhmm),	Fraste ML R6	BAM Ritchies	MM	
	Thickness (m), Level (mOD).				

Project
ASC C2 & C3 Controlled Data
Client
HS2

Project No.
C2-C3-CONT-ASC
Easting (OSGB)
464449.89

Ground Level (mAOD)
95.32
Northing (OSGB)
228720.87

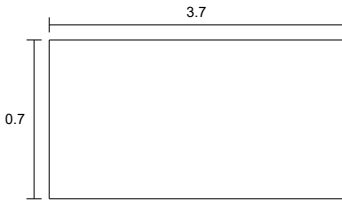
GI Phase
HS2 Main GI
Asset Group
Chetwode Cutting Group

Chainage (SG Grid)
Offset
15

Start Date
05/10/2017
End Date
05/10/2017

Scale
1:25
Sheet 1 of 1

SAMPLES		TESTS				Water Strikes	STRATA			Depth (Thickness)	Level	Install/ Backfill
Depth	Type/ No.	Depth	Type/ No.	Results	PI		Description	Legend	Geol Code1			
							TOPSOIL: Dark brown slightly sandy slightly gravelly clay with abundant rootlets (up to 50mm). Factual Geolcode [TOP] Factual Geolcode 2 [C] Geology Code 3 [TOP-C Z]			(0.30)		
0.50 0.50	D2 LB1	0.50 0.50 0.50 0.50	HV(1) HV(2) HV(3) HV(4)	32()kPa 32()kPa 34()kPa 34()kPa	PL 18 LL 55 PI 37 NMC 20		Firm light brown slightly gravelly sandy CLAY. Sand is fine to coarse. Gravel is subangular to subrounded fine to coarse of limestone, chalk and flint. Factual Geolcode [TILMP] Factual Geolcode 2 [C] Geology Code 3 [TILMP-C Z]			0.30 (0.60)	95.02	
1.00 1.00	D4 LB3	1.00 1.00 1.00 1.00	HV(1) HV(2) HV(3) HV(4)	64()kPa 68()kPa 70()kPa 74()kPa			Stiff fissured light brown locally mottled bluish grey sandy gravelly CLAY with low cobble content and occasional lenses of pale yellow fine sand (up to 30mm). Sand is fine to coarse. Gravel is subangular to rounded fine to coarse of flint, chalk and limestone. Cobbles are subangular of chalk and rare limestone. Fissures are randomly orientated very closely spaced planar smooth with rare polished surfaces. (Reworked) Factual Geolcode [OXC] Factual Geolcode 2 [C] Geology Code 3 [TILMP-C Z]			0.90	94.42	
2.00 2.00	B5 D6	2.00 2.00 2.00 2.00	HV(1) HV(2) HV(3) HV(4)	76()kPa 80()kPa 82()kPa 84()kPa	PL 15 LL 34 PI 19 NMC 16		at 2.00m fissures becoming rare			(2.50)		
3.00 3.00	B7 D8	3.00 3.00 3.00 3.00	HV(1) HV(2) HV(3) HV(4)	76()kPa 80()kPa 82()kPa 84()kPa			at 2.80m occasional very closely spaced very thin beds of clayey fine to coarse mudstone lithorelicts					
3.50 3.50	B9 D10				PL 14 LL 38 PI 24 NMC 14		Stiff thinly laminated occasionally fissured dark bluish grey slightly gravelly CLAY. Gravel is subangular fine to coarse of mudstone lithorelicts. Fissures are 0 to 10 degrees very closely spaced planar smooth with rare polished surfaces. Factual Geolcode [OXC] Factual Geolcode 2 [C] Geology Code 3 [OXC-C Z]			3.40 (0.60)	91.92	
		4.00 4.00 4.00 4.00	HV(1) HV(2) HV(3) HV(4)	74()kPa 76()kPa 78()kPa 82()kPa						4.00	91.32	

PLAN DETAILS				Remarks
				<p>1. PAS 128 Type B survey conducted over position. 2. All faces similar. 3. Photographs taken of sides A, B and spoil. 4. Trial pit backfilled upon completion. 5. No groundwater encountered during excavation.</p> <p>THIS LOG HAS BEEN REPRODUCED FROM FACTUAL AGS DATA. CHANGES TO GEOLOGY CODES WILL NOT BE REFLECTED ON THIS LOG.</p>
				<p>Termination Depth: 4.00m Achieved Scheduled Depth</p>

Project ASC C2 & C3 Controlled Data	Project No. C2-C3-CONT-ASC	Ground Level (mAOD) 92.60	GI Phase HS2 Main GI	Chainage (SG Grid) 51	Start Date 05/10/2017	Scale 1:25
Client HS2	Easting (OSGB) 464544.32	Northing (OSGB) 228669.15	Asset Group Chetwode Cutting Group	Offset 51	End Date 05/10/2017	Sheet 1 of 1

SAMPLES		TESTS				Water Strikes	STRATA			Depth (Thickness)	Level	Install/ Backfill
Depth	Type/ No.	Depth	Type/ No.	Results	PI		Description	Legend	Geol Code1			
0.50 0.50	D2 LB1	0.50 0.50 0.50	HV(1) HV(2) HV(3)	18()kPa 24()kPa 24()kPa			TOPSOIL: Dark brown slightly gravelly sandy clay with abundant plant rootlets (up to 50mm). Factual Geolcode [TOP] Factual Geolcode 2 [C] Geology Code 3 [TOP-C Z]			0.30	92.30	
1.00 1.00	D4 LB3	1.00 1.00 1.00	HV(1) HV(2) HV(3)	12()kPa 12()kPa 16()kPa	PL 25 LL 54 PI 29 NMC 29		Soft locally firm fissured light brown locally yellowish brown slightly sandy very gravelly CLAY with closely to medium spaced thin beds of very clayey gravel. Sand is fine to coarse. Gravel is subangular fine to coarse of mudstone lithorelicts. Fissures are randomly orientated very closely spaced planar smooth with abundant polished surfaces. (Reworked) Factual Geolcode [OXC] Factual Geolcode 2 [C] Geology Code 3 [TILMP-C Z]			(2.40)		
2.00 2.00	B5 D6	2.00 2.00 2.00	HV(1) HV(2) HV(3)	14()kPa 16()kPa 20()kPa	PL 25 LL 57 PI 32 NMC 32		at 1.20m becoming locally dark brown					
2.70	D8	2.70 2.70 2.70	HV(1) HV(2) HV(3)	16()kPa 22()kPa 24()kPa			Stiff locally firm friable thinly laminated occasionally fissured light brown very gravelly CLAY with closely to medium spaced beds of very clayey gravel with abundant pockets of colourless gypsum crystals (up to 40mm) and occasional indistinct thin laminations of yellowish brown sulfur. Gravel is subangular fine to coarse of mudstone lithorelicts. Fissures are 0 to 10 degrees very closely spaced planar smooth (strong organic odour, noted sulphurous) (Reworked) Factual Geolcode [OXC] Factual Geolcode 2 [C] Geology Code 3 [OXC-C Z]			2.70	89.90	
3.20 3.20	B9 D10	3.20 3.20 3.20	HV(1) HV(2) HV(3)	28()kPa 30()kPa 32()kPa	PL 20 LL 51 PI 31 NMC 23		Firm fissured thinly laminated bluish grey gravelly CLAY. Gravel is subangular fine to coarse of mudstone lithorelicts. Fissures are 0 to 10 degrees very closely spaced planar smooth with abundant polished surfaces. Factual Geolcode [OXC] Factual Geolcode 2 [C] Geology Code 3 [OXC-C Z] at 3.40m with occasional shell fragments (10mm to 20mm)			3.20	89.40	
										4.00	88.60	

PLAN DETAILS						Remarks
						<p>1. PAS 128 Type B survey conducted over position. 2. All faces similar. 3. Photographs taken of sides A, B and spoil. 4. Trial pit backfilled upon completion. 5. No groundwater encountered during excavation.</p> <p>THIS LOG HAS BEEN REPRODUCED FROM FACTUAL AGS DATA. CHANGES TO GEOLOGY CODES WILL NOT BE REFLECTED ON THIS LOG.</p> <p>Termination Depth: 4.00m Achieved Scheduled Depth</p>

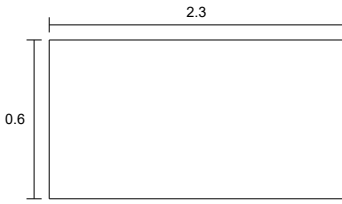
Project ASC C2 & C3 Controlled Data	Project No. C2-C3-CONT-ASC	Ground Level (mAOD) 87.10	GI Phase ASC Scheme GI	Chainage (SG Grid) Offset 8	Start Date 14/02/2019	Scale 1:25
Client HS2	Easting (OSGB) 464693.06	Northing (OSGB) 228446.05	Asset Group Chetwode Embankment Group		End Date 14/02/2019	Sheet 1 of 1

SAMPLES		TESTS				Water Strikes	STRATA			Depth (Thickness)	Level	Install/ Backfill
Depth	Type/ No.	Depth	Type/ No.	Results	PI		Description	Legend	Geol Code1			
0.00 - 0.25	LB2						TOPSOIL: Grass over dark brown and brown slightly sandy slightly gravelly clay with abundant rootlets (<1mm x 35mm). Sand is fine. Gravel is subangular to rounded fine to medium of mudstone and chalk. Factual Geolcode [TOP] Factual Geolcode 2 [C] Geology Code 3 [TOP-C Z]			(0.25)		
0.10 - 0.15	ES1	0.10	PID	<1ppm						0.25	86.85	
0.10 - 0.20	D3											
0.35 - 0.40	ES4	0.35	PID	<1ppm								
0.40 - 0.50	D5					PL 24 LL 83 PI 59 NMC 42	Soft to firm light grey and brown mottled greyish brown and orangish brown slightly sandy slightly gravelly CLAY. Sand is fine. Gravel is subangular to rounded fine to medium of mudstone chalk and limestone. Factual Geolcode [ALV] Factual Geolcode 2 [C] Geology Code 3 [ALV-C Z]					
0.50 - 0.80	LB6	0.50	HV(1)	44(20)kPa								
		0.50	HV(2)	46(18)kPa								
		0.50	HV(3)	48(20)kPa								
										(1.35)		
1.00 - 1.10	D7	1.00	HV(1)	48(22)kPa								
		1.00	HV(2)	50(20)kPa								
		1.00	HV(3)	52(20)kPa								
1.40 - 1.50	D8					PL 22 LL 66 PI 44 NMC 30						
1.60 - 1.80	LB9	1.50	HV(1)	48(24)kPa						1.60	85.50	
		1.50	HV(2)	50(22)kPa			Soft grey and orangish brown speckled white sandy locally slightly gravelly very sandy CLAY. Sand is fine to coarse. Gravel is subangular to rounded fine of limestone. Factual Geolcode [ALV] Factual Geolcode 2 [C] Geology Code 3 [TILMP-C Z]					
		1.50	HV(3)	52(22)kPa								
2.00 - 2.10	D10	2.00	HV(1)	40(18)kPa						(1.00)		
		2.00	HV(2)	42(20)kPa								
		2.00	HV(3)	42(24)kPa								
2.40 - 2.50	D11						from 2.40m to 2.60m slightly sandy and locally sandy					
2.60 - 2.90	LB12	2.50	HV(1)	44(20)kPa						2.60	84.50	
		2.50	HV(2)	44(22)kPa			Firm to stiff grey and greyish brown mottled yellowish brown slightly sandy slightly gravelly CLAY. Sand is fine to medium. Gravel is subangular to rounded fine to medium of mudstone and limestone. Factual Geolcode [TILMP] Factual Geolcode 2 [C] Geology Code 3 [OXC-C Z]					
		2.50	HV(3)	48(20)kPa								
3.00 - 3.10	D13	3.00	HV(1)	58(30)kPa						(1.40)		
		3.00	HV(2)	66(28)kPa			from 3.00m to 4.00m stiff					
		3.00	HV(3)	72(32)kPa								
3.40 - 3.50	D14						from 3.40m to 4.00m grey and bluish grey indistinctly fissured					
3.50 - 3.90	LB15	3.50	HV(1)	82(28)kPa		PL 21 LL 56 PI 35 NMC 25						
		3.50	HV(2)	84(30)kPa								
		3.50	HV(3)	88(34)kPa								
3.90 - 4.00	D16						from 3.90m to 4.00m very stiff			4.00	83.10	

PLAN DETAILS						Remarks	
						1. PAS 128 Type B survey conducted over position. 2. No groundwater encountered.	
						THIS LOG HAS BEEN REPRODUCED FROM FACTUAL AGS DATA. CHANGES TO GEOLOGY CODES WILL NOT BE REFLECTED ON THIS LOG.	
						Termination Depth: 4.00m Achieved Scheduled Depth.	

Project ASC C2 & C3 Controlled Data	Project No. C2-C3-CONT-ASC	Ground Level (mAOD) 93.27	GI Phase ASC Scheme GI	Chainage (SG Grid) Offset 4	Start Date 05/11/2018	Scale 1:25
Client HS2	Easting (OSGB) 464489.16	Northing (OSGB) 228659.84	Asset Group Chetwode Cutting Group	End Date 05/11/2018	Sheet 1 of 1	

SAMPLES		TESTS				Water Strikes	STRATA			Depth (Thickness)	Level	Install/ Backfill
Depth	Type/ No.	Depth	Type/ No.	Results	PI		Description	Legend	Geol Code1			
0.00 - 0.30	B2						TOPSOIL: Dark brown slightly sandy slightly gravelly clay with occasional rootlets (<2mm). Factual Geolcode [TOP] Factual Geolcode 2 [C] Geology Code 3 [TOP-C Z]			(0.30)	92.97	
0.10 - 0.30	D1											
							Firm to stiff fissured light orangish brown mottled greyish blue CLAY with occasional lenses of calcareous silt and gypsum crystals (<2mm). Fissures are very closely spaced randomly orientated stepped rough. Factual Geolcode [OXC] Factual Geolcode 2 [C] Geology Code 3 [TILMP-C Z] from 0.50m to 0.60m occasional rootlets up to 1mm diameter. from 0.60m to 1.20m light greyish blue mottled orangish brown.			0.30		
0.50 - 0.60	D3											
0.60 - 1.00	B4	0.60 0.60 0.60	HV(1) HV(2) HV(3)	102(25)kPa 104(26)kPa 92(22)kPa						(0.90)		
1.00 - 1.20	D5	1.00 1.00 1.00	HV(1) HV(2) HV(3)	100(28)kPa 74(12)kPa 98(22)kPa						1.20	92.07	
1.30 - 1.50	D6						Firm to stiff fissured dark reddish brown mottled greyish blue slightly sandy CLAY with frequent gypsum crystals (<5mm). Sand is fine. Fissures are very closely spaced randomly orientated planar rough. Factual Geolcode [OXC] Factual Geolcode 2 [C] Geology Code 3 [TILMP-C Z]					
1.50 - 2.00	B7	1.50 1.50 1.50	HV(1) HV(2) HV(3)	62(12)kPa 65(14)kPa 68(18)kPa	PL 31 LL 69 PI 38					(1.00)		
2.00 - 2.20	D8	2.00 2.00 2.00	HV(1) HV(2) HV(3)	36(11)kPa 38(16)kPa 42(12)kPa	NMC 37		from 2.00m to 2.20m soft to firm clay with frequent gypsum crystals.			2.20	91.07	
2.50 - 2.60	D9	2.50	HV(1)	46(10)kPa			Firm to stiff fissured dark bluish grey mottled dark brown slightly sandy CLAY. Sand is fine. Fissures are extremely closely spaced randomly orientated rough smooth rarely polished. Frequent to abundant gypsum crystals (up to 20mm) Factual Geolcode [OXC] Factual Geolcode 2 [C] Geology Code 3 [OXC-C Z] from 2.50m to 2.60m frequent fine gravel size gypsum crystals. from 2.60m to 3.00m abundant fine gravel size gypsum crystals.					
2.60 - 3.00	LB10	2.50 2.50 2.50	HV(2) HV(3)	48(12)kPa 51(13)kPa								
3.00 - 3.10	D11	3.00 3.00 3.00	HV(1) HV(2) HV(3)	46(8)kPa 54(14)kPa 55(12)kPa						(1.80)		
3.50 - 3.60	D12	3.50 3.50 3.50	HV(1) HV(2) HV(3)	52(11)kPa 68(12)kPa 72(21)kPa	NMC 57							
3.70 - 4.00	B13				PL 22 LL 53 PI 31		from 3.70m to 4.00m stiff with frequent fine to medium gravel size gypsum crystals. Mild decayed organic matter odour.					
3.90 - 4.00	D14											
		4.00 4.00 4.00	HV(1) HV(2) HV(3)	120(24)kPa 78(13)kPa 90(8)kPa						4.00	89.27	

PLAN DETAILS						Remarks	
 <p>Long Axis Orientation: 2.3</p> <p>Short Axis Orientation: 0.6</p> <p>Shoring / Support: None</p> <p>Stability: All faces stable</p> <p>Groundwater (description):</p>						<p>1. PAS 128 Type B survey conducted over position. 2. No groundwater encountered.</p> <p>THIS LOG HAS BEEN REPRODUCED FROM FACTUAL AGS DATA. CHANGES TO GEOLOGY CODES WILL NOT BE REFLECTED ON THIS LOG.</p> <p>Termination Depth: 4.00m Achieved Scheduled Depth:</p>	

Project ASC C2 & C3 Controlled Data	Project No. C2-C3-CONT-ASC	Ground Level (mAOD) 94.84	GI Phase ASC Scheme GI	Chainage (SG Grid) -17	Start Date 05/11/2018	Scale 1:25
Client HS2	Easting (OSGB) 464430.90	Northing (OSGB) 228693.83	Asset Group Chetwode Cutting Group	Offset -17	End Date 05/11/2018	Sheet 1 of 1

SAMPLES		TESTS				Water Strikes	STRATA			Depth (Thickness)	Level	Install/ Backfill
Depth	Type/ No.	Depth	Type/ No.	Results	PI		Description	Legend	Geol Code1			
0.00 - 0.20	D1						TOPSOIL: Desiccated dark greyish brown slightly sandy slightly gravelly clay with occasional rootlets (<1mm). Factual Geolcode [TOP] Factual Geolcode 2 [C] Geology Code 3 [TOP-C Z]			(0.30)	94.54	
0.00 - 0.30	LB2											
0.40 - 0.50	D3						Firm to stiff fissured dark greyish brown mottled greyish blue CLAY. Fissures are very closely spaced randomly orientated planar smooth. Factual Geolcode [TILMP] Factual Geolcode 2 [C] Geology Code 3 [TILMP-C Z]			0.30		
0.50 - 1.00	LB4	0.50 0.50 0.50	HV(1) HV(2) HV(3)	45(5)kPa 46(10)kPa 68(8)kPa						(0.90)		
		1.00 1.00 1.00	HV(1) HV(2) HV(3)	16(28)kPa 85(26)kPa 98(35)kPa						1.20	93.64	
1.20 - 1.40	D5						Orange slightly clayey fine to coarse SAND. Factual Geolcode [TILMP] Factual Geolcode 2 [S] Geology Code 3 [TILMP-S V SV]					
1.50 - 2.00	LB6									(0.80)		
		2.00 2.00 2.00	HV(1) HV(2) HV(3)	78(22)kPa 82(22)kPa 83(27)kPa			Stiff fissured dark grey mottled orangish brown slightly gravelly CLAY. Gravel is angular to subrounded fine to coarse of flint. Factual Geolcode [TILMP] Factual Geolcode 2 [C] Geology Code 3 [TILMP-C Z]			2.00	92.84	
2.10 - 2.30	D7											
2.30 - 3.00	LB8	2.50 2.50 2.50	HV(1) HV(2) HV(3)	68(50)kPa 80(30)kPa 81(20)kPa						(1.00)		
		3.00 3.00 3.00	HV(1) HV(2) HV(3)	30(12)kPa 44(20)kPa 70(15)kPa			Stiff fissured dark bluish grey slightly gravelly CLAY. Gravel is subangular to subrounded predominantly of fine flint. Fissures are extremely closely spaced randomly orientated stepped rough with frequent flat shell fragments 1-3mm diameter. Factual Geolcode [TILMP] Factual Geolcode 2 [C] Geology Code 3 [TILMP-C Z]			3.00	91.84	
3.00 - 3.20	D9											
3.50 - 4.00	LB10	3.50 3.50 3.50	HV(1) HV(2) HV(3)	58(18)kPa 62(17)kPa 65(12)kPa						(1.00)		
		4.00 4.00 4.00	HV(1) HV(2) HV(3)	82(6)kPa 87(10)kPa 91(10)kPa						4.00	90.84	

PLAN DETAILS						Remarks	
<p>Long Axis Orientation: 340</p> <p>Shoring / Support: None</p> <p>Stability: All faces stable</p> <p>Groundwater (description): Slow ingress</p>						<p>1. PAS 128 Type B survey conducted over position.</p> <p>THIS LOG HAS BEEN REPRODUCED FROM FACTUAL AGS DATA. CHANGES TO GEOLOGY CODES WILL NOT BE REFLECTED ON THIS LOG.</p> <p>Termination Depth: 4.00m Achieved Scheduled Depth.</p>	

Project ASC C2 & C3 Controlled Data	Project No. C2-C3-CONT-ASC	Ground Level (mAOD) 87.91	GI Phase ASC Detailed GI	Chainage (SG Grid) 67	Start Date 27/11/2020	Scale 1:25
Client HS2	Easting (OSGB) 464669.84	Northing (OSGB) 228555.25	Asset Group Chetwode Embankment Group	Offset 67	End Date 27/11/2020	Sheet 1 of 1

SAMPLES		TESTS				Water Strikes	STRATA			Depth (Thickness)	Level	Install/ Backfill
Depth	Type/ No.	Depth	Type/ No.	Results	PI		Description	Legend	Geol Code1			
0.20	D1						TOPSOIL: Brown slightly sandy slightly gravelly clay with frequent rootlets. Sand is fine to coarse. Gravel is subangular to rounded fine to coarse of limestone and chert. Factual Geolcode [TOP] Factual Geolcode 2 [C] Geology Code 3 [TOP-C Z]			(0.30)		
0.30 - 0.80	B2				PL 29 LL 73 PI 44 NMC 33		Soft to firm light brown mottled orangish brown and bluish grey slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is subangular to subrounded fine to coarse of limestone and chert. Factual Geolcode [TILMP] Factual Geolcode 2 [C] Geology Code 3 [TILMP-C Z]			0.30	87.61	
		0.50	HV(1)	88(38)kPa						(0.70)		
		0.50	HV(2)	88(45)kPa								
		0.50	HV(3)	96(52)kPa								
0.90	D3				NMC 22							
1.00 - 1.50	B4	1.00	HV(1)	67(45)kPa	PL 25 LL 65 PI 40 NMC 32		Soft to firm grey mottled orangish brown slightly sandy clayey SILT with occasional orangish brown sand lenses. Sand is fine to coarse. Factual Geolcode [OXC] Factual Geolcode 2 [Z] Geology Code 3 [TILMP-C Z]			1.00	86.91	
		1.00	HV(2)	74(38)kPa						(1.10)		
		1.00	HV(3)	74(38)kPa								
2.00	D5				NMC 22							
2.10 - 2.60	B6	2.10	HV(1)	103(31)kPa	PL 24 LL 65 PI 41 NMC 25		Stiff dark bluish grey locally slightly sandy locally slightly gravelly laminated silty CLAY. Factual Geolcode [OXC] Factual Geolcode 2 [C] Geology Code 3 [OXC-C Z]			2.10	85.81	
		2.10	HV(2)	117(52)kPa								
		2.10	HV(3)	96(38)kPa								
3.00	D7				NMC 21							
3.10 - 3.60	B8				PL 22 LL 60 PI 38 NMC 25					(1.90)		
4.00	D9				NMC 21					4.00	83.91	

PLAN DETAILS						Remarks
						<p>1. PAS 128 Type B survey conducted over position. 2. No groundwater encountered. 3. Trial pit backfilled upon completion.</p>
						<p>THIS LOG HAS BEEN REPRODUCED FROM FACTUAL AGS DATA. CHANGES TO GEOLOGY CODES WILL NOT BE REFLECTED ON THIS LOG.</p>
						<p>Termination Depth: 4.00m Achieved Scheduled Depth</p>

Project ASC C2 & C3 Controlled Data	Project No. C2-C3-CONT-ASC	Ground Level (mAOD) 91.06	GI Phase ASC Detailed GI	Chainage (SG Grid) -	Start Date 30/11/2020	Scale 1:25
Client HS2	Easting (OSGB) 464465.47	Northing (OSGB) 228536.07	Asset Group Chetwode Embankment Group	Offset -96	End Date 30/11/2020	Sheet 1 of 1

SAMPLES		TESTS				Water Strikes	STRATA			Depth (Thickness)	Level	Install/ Backfill
Depth	Type/ No.	Depth	Type/ No.	Results	PI		Description	Legend	Geol Code1			
0.20 0.20	D2 ES1	0.20	PID	<1ppm	NMC 23		TOPSOIL: Brown slightly sandy slightly gravelly clay. Sand is fine to coarse. Gravel is subangular to subrounded fine to coarse of limestone. Factual Geolcode [TOP] Factual Geolcode 2 [C] Geology Code 3 [TOP-C Z]			(0.40)		
0.40 - 1.00	B3	0.50 0.50 0.50	HV(1) HV(2) HV(3)	74(31)kPa 74(38)kPa 74(45)kPa	PL 24 LL 61 PI 37 NMC 38		Soft to firm light brown mottled bluish grey and orangish brown slightly sandy CLAY. Sand is fine. Factual Geolcode [TILMP] Factual Geolcode 2 [C] Geology Code 3 [TILMP-C Z]			0.40	90.66	
1.00	D4				NMC 22					(1.40)		
1.40 1.40 - 1.80	ES5 B6	1.40 1.50 1.50	PID HV(1) HV(2) HV(3)	<1ppm 74(45)kPa 81(31)kPa 81(38)kPa								
1.80 1.80 - 2.20	D7 B8	2.00 2.00 2.00	HV(1) HV(2) HV(3)	81(31)kPa 88(38)kPa 96(23)kPa	PL 25 LL 56 PI 31 NMC 22 NMC 32		Firm laminated light greyish brown mottled reddish brown slightly sandy slightly gravelly CLAY with fine sand laminae. Sand is fine to coarse. Gravel is angular to subangular fine to medium of mudstone. Factual Geolcode [OXC] Factual Geolcode 2 [C] Geology Code 3 [OXC-C Z]			1.80	89.26	
2.40 2.50 - 3.10	D9 B10									(1.30)		
3.10	D11	3.00 3.00 3.00	HV(1) HV(2) HV(3)	81(31)kPa 81(38)kPa 88(45)kPa	NMC 18		Stiff greyish blue slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is subangular fine to coarse of calcite crystals. Factual Geolcode [OXC] Factual Geolcode 2 [C] Geology Code 3 [OXC-C Z]			3.10	87.96	
3.50 - 4.00	B12	3.50 3.50	HV(1) HV(3)	117(45)kPa 125(45)kPa	PL 25 LL 57 PI 32 NMC 24					(0.90)		
										4.00	87.06	

PLAN DETAILS						Remarks	
						1. PAS 128 Type B survey conducted over position. 2. No groundwater encountered. 3. Trial pit backfilled upon completion.	
						THIS LOG HAS BEEN REPRODUCED FROM FACTUAL AGS DATA. CHANGES TO GEOLOGY CODES WILL NOT BE REFLECTED ON THIS LOG.	Termination Depth: 4.00m Achieved Scheduled Depth

Project ASC C2 & C3 Controlled Data	Project No. C2-C3-CONT-ASC	Ground Level (mAOD) 93.55	GI Phase ASC Detailed GI	Chainage (SG Grid) 85	Start Date 27/11/2020	Scale 1:25
Client HS2	Easting (OSGB) 464549.69	Northing (OSGB) 228713.99	Asset Group Chetwode Cutting Group	Offset 85	End Date 27/11/2020	Sheet 1 of 1

SAMPLES		TESTS				Water Strikes	STRATA			Depth (Thickness)	Level	Install/ Backfill
Depth	Type/ No.	Depth	Type/ No.	Results	PI		Description	Legend	Geol Code1			
0.20	D1						TOPSOIL: Brown slightly sandy slightly gravelly clay with occasional roots (<5mm). Sand is fine to coarse. Gravel is subangular to rounded fine to coarse of limestone. Factual Geolcode [TOP] Factual Geolcode 2 [C] Geology Code 3 [TOP-C Z]			(0.30)		
0.30 - 0.80	B2				PL 20 LL 62 PI 42 NMC 43		Firm greenish brown slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is subangular to rounded fine to coarse of limestone. Factual Geolcode [TILMP] Factual Geolcode 2 [C] Geology Code 3 [TILMP-C Z]			0.30	93.25	
		0.50	HV(1)	74(31)kPa						(0.50)		
		0.50	HV(2)	88(45)kPa								
		0.50	HV(3)	96(38)kPa								
0.80 - 2.00	B4				PL 22 LL 55 PI 33 NMC 30 NMC 17		Firm bluish grey mottled orangish brown slightly sandy silty CLAY with occasional lenses of sand. Factual Geolcode [TILMP] Factual Geolcode 2 [C] Geology Code 3 [TILMP-C Z]			0.80	92.75	
0.90	D3											
		1.50	HV(1)	60(31)kPa						(1.20)		
		1.50	HV(2)	88(38)kPa								
		1.50	HV(3)	96(60)kPa								
1.90	D5				NMC 19							
2.00 - 2.50	B6				PL 32 LL 61 PI 29 NMC 29		Stiff dark brown locally mottled orangish brown locally laminated slightly sandy slightly gravelly CLAY with occasional orangish brown fine sand laminae. Sand is fine to coarse. Gravel is subangular fine to coarse of mudstone. Factual Geolcode [TILMP] Factual Geolcode 2 [C] Geology Code 3 [TILMP-C Z]			2.00	91.55	
		2.50	HV(1)	132(45)kPa						(1.00)		
		2.50	HV(2)	146(38)kPa								
		2.50	HV(3)	88(45)kPa								
2.90	D7				NMC 18							
3.00 - 3.50	B8				PL 25 LL 57 PI 32 NMC 25		Stiff laminated dark bluish grey slightly gravelly clayey SILT. Sand is fine to coarse. Gravel is subangular fine to coarse of mudstone. Factual Geolcode [OXC] Factual Geolcode 2 [C] Geology Code 3 [OXC-C Z]			3.00	90.55	
		3.50	HV(1)	117(67)kPa						(1.00)		
		3.50	HV(2)	125(67)kPa								
		3.50	HV(3)	125(67)kPa								
4.00	D9				NMC 16					4.00	89.55	

PLAN DETAILS						Remarks
						<p>1. PAS 128 Type B survey conducted over position. 2. No groundwater encountered. 3. Trial pit backfilled upon completion.</p>
						<p>THIS LOG HAS BEEN REPRODUCED FROM FACTUAL AGS DATA. CHANGES TO GEOLOGY CODES WILL NOT BE REFLECTED ON THIS LOG.</p>
						<p>Termination Depth: 4.00m Achieved Scheduled Depth</p>

Project ASC C2 & C3 Controlled Data	Project No. C2-C3-CONT-ASC	Ground Level (mAOD) 87.49	GI Phase ASC Detailed GI	Chainage (SG Grid) -138	Start Date 17/06/2021	Scale 1:25
Client HS2	Easting (OSGB) 464590.02	Northing (OSGB) 228341.82	Asset Group Chetwode Embankment Group	Offset -138	End Date 17/06/2021	Sheet 1 of 1

SAMPLES		TESTS				Water Strikes	STRATA			Depth (Thickness)	Level	Install/ Backfill
Depth	Type/ No.	Depth	Type/ No.	Results	PI		Description	Legend	Geol Code1			
0.00 - 0.10	D1						TOPSOIL: Grass over dark brown slightly sandy slightly gravelly clay with some rootlets. Sand is fine to medium. Gravel is subangular to rounded fine to medium of mudstone and chert. Factual Geolcode [TOP] Factual Geolcode 2 [C] Geology Code 3 [TOP-C Z]			(0.25)		
0.10 - 0.15	ES2	0.10	PID	<1ppm						0.25	87.24	
0.10 - 0.25	B3	0.15	PID	<1ppm								
0.40 - 0.50	D4						Soft to firm brown and greyish brown slightly sandy silty CLAY with rare rootlets to 0.5m. Sand is fine to medium. Factual Geolcode [ALV] Factual Geolcode 2 [C] Geology Code 3 [ALV-C Z]			(0.90)		
0.50 - 0.55	ES5	0.50	PID	<1ppm	NMC 20							
0.50 - 0.55		0.50	HV(1)	63(15)kPa								
0.50 - 0.55		0.50	HV(2)	68(15)kPa								
0.60 - 0.90	B6	0.50	HV(3)	71(18)kPa								
0.60 - 0.90		0.55	PID	<1ppm								
1.00 - 1.10	D7	1.00	HV(1)	74(15)kPa	PL 12		from 1.00m to 1.15m recovered as 150mm lenses of reddish brown very sandy clay. Sand is fine to medium.			1.15	86.34	
1.00 - 1.10		1.00	HV(2)	74(18)kPa	LL 28							
1.00 - 1.10		1.00	HV(3)	74(18)kPa	PI 16							
1.40 - 1.50	D8						Firm orangish brown slightly gravelly sandy CLAY. Sand is fine to medium gravel is subangular to rounded fine to medium of limestone and mudstone. Factual Geolcode [TILMP] Factual Geolcode 2 [C] Geology Code 3 [TILMP-C Z]			(0.75)		
1.40 - 1.50		1.50	HV(1)	100(25)kPa								
1.60 - 1.90	B9	1.50	HV(2)	91(21)kPa								
1.60 - 1.90		1.50	HV(3)	94(21)kPa								
1.90 - 2.00	D10						Firm to stiff bluish grey locally mottled orangish brown slightly sandy CLAY. Sand is fine. Factual Geolcode [OXC] Factual Geolcode 2 [C] Geology Code 3 [OXC-C Z]			1.90	85.59	
1.90 - 2.00		2.00	HV(1)	100(21)kPa								
1.90 - 2.00		2.00	HV(2)	103(28)kPa								
1.90 - 2.00		2.00	HV(3)	109(21)kPa								
2.40 - 2.50	D11				PL 22		at 2.30m 1 No. septarian nodule boulder (300x300mm).			(1.00)		
2.40 - 2.50		2.50	HV(1)	100(31)kPa	LL 60							
2.60 - 2.90	B12	2.50	HV(2)	109(25)kPa	PI 38							
2.60 - 2.90		2.50	HV(3)	97(31)kPa	NMC 22							
2.90 - 3.00	D13						at 2.80m 1 No. septarian nodule boulder (500x700mm).			2.90	84.59	
2.90 - 3.00		3.00	HV(1)	112(28)kPa			Firm to stiff dark brownish grey and brown slightly gravelly sandy CLAY. Sand is fine to medium. Gravel is subangular fin to coarse of mudstone. Factual Geolcode [OXC] Factual Geolcode 2 [C] Geology Code 3 [OXC-C Z]					
2.90 - 3.00		3.00	HV(2)	115(31)kPa								
2.90 - 3.00		3.00	HV(3)	132(36)kPa								
3.40 - 3.50	D14						from 3.50m to 4.00m rare grey fine to medium sand lenses (20x30mm) and rare to occasional fossilised shell fragments (5x5mm).			(1.10)		
3.40 - 3.50		3.50	HV(1)	123(31)kPa								
3.60 - 3.90	B15	3.50	HV(2)	126(28)kPa								
3.60 - 3.90		3.50	HV(3)	126(34)kPa								
3.90 - 4.00	D16						from 3.90m to 4.00m stiff bluish grey.			4.00	83.49	
3.90 - 4.00		4.00	HV(1)	143(31)kPa								
3.90 - 4.00		4.00	HV(2)	158(36)kPa								
3.90 - 4.00		4.00	HV(3)	161(39)kPa								

PLAN DETAILS						Remarks	
<p>Long Axis Orientation: 220</p> <p>Shoring / Support: None used</p> <p>Stability: All faces stable</p> <p>Groundwater (description):</p>						<p>1. PAS 128 Type B survey conducted over position. 2. Cat and Genny serial numbers 10/ C4EN61-7647, 10/G4EN-37848</p> <p>THIS LOG HAS BEEN REPRODUCED FROM FACTUAL AGS DATA. CHANGES TO GEOLOGY CODES WILL NOT BE REFLECTED ON THIS LOG.</p>	
						Termination Depth: 4.00m	Achieved Scheduled Depth

Project	Project No.	Ground Level (mAOD)	GI Phase	Chainage (Snake grid)	Start Date	Scale
ASC C2 & C3 Controlled Data	C2-C3-CONT-ASC	88.62	HS2 Main GI		07/08/2017	1:50
Client	Easting (OSGB)	Northing (SnakeGrid)	Asset Group	Offset	End Date	
HS2	464786.21	228457.86	Chetwode Embankment Group	83	07/08/2017	Sheet 1 of 1

SAMPLES		TESTS			PROGRESS		STRATA				Depth (Thickness)	Level	Install/ Backfill
Type + Depth	Type + Depth	Results	PI	Water Depth	Date & Time	Casing & Water Depth	Description	Legend	Geol Code1				
(D1) 0.40 (B2) 0.50-0.70							TOPSOIL: Brown sandy clay. Factual Geolcode [TOP] Factual Geolcode 2 [C] Geology Code 3 [TOP-C Z]			(0.40)	88.22		
(D3) 0.80 (B4) 1.00-1.20							Brown gravelly clayey fine to coarse SAND. Gravel is fine to coarse of flint, quartzite and limestone. Factual Geolcode [RTD1] Factual Geolcode 2 [S] Geology Code 3 [RTD1-S V SV]			(0.40)	87.82		
(D5) 1.20-1.25 (B6) 1.30-2.20							Soft orangish brown slightly gravelly sandy CLAY. Gravel is fine to coarse angular to subrounded of flint, quartzite and limestone. Factual Geolcode [TILMP] Factual Geolcode 2 [C] Geology Code 3 [TILMP-C Z]			(0.90)	86.92		
(B8) 2.20-3.20 (D7) 2.40-2.45							Firm brownish dark grey slightly gravelly CLAY. Gravel is fine to coarse angular to subrounded of flint, quartzite and limestone. Factual Geolcode [TILMP] Factual Geolcode 2 [C] Geology Code 3 [TILMP-C Z]			1.70 (1.60)			
(D9) 3.20-3.25 (B10) 3.30-4.20							Stiff dark grey slightly gravelly CLAY. Gravel is fine to coarse angular to rounded of quartzite and limestone. (Reworked) Factual Geolcode [OXC] Factual Geolcode 2 [C] Geology Code 3 [OXC-C Z]			3.30 (1.70)	85.32		
(D11) 4.40-4.45 (B12) 4.45-5.00					07/08/2017 15:05	0.00 Dry				5.00	83.62		










Unless otherwise stated:
Depth (m), Diameter (mm), Time (hhmm),
Thickness (m), Level (mOD).

Equipment Used
Dando Terrier

Contractor

Logged By Checked By
Phil Smith

Project ASC C2 & C3 Controlled Data Client HS2	Project No. C2-C3-CONT-ASC Easting (OSGB) 464849.81	Ground Level (mAOD) 89.19 Northing (SnakeGrid) 228534.87	GI Phase HS2 Main GI Asset Group Chetwode Embankment Group	Chainage (Snake grid) Offset 183	Start Date 07/08/2017 End Date 07/08/2017	Scale 1:50 Sheet 1 of 1
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SAMPLES		TESTS			PROGRESS		STRATA				Depth (Thickness)	Level	Install/ Backfill					
Type + Depth	Type + Depth	Results	PI	Water Depth	Date & Time	Casing & Water Depth	Description	Legend	Geol Code1									
(D1) 0.30 (B2) 0.50-0.70			NMC 12				TOPSOIL: Soft brown clay. Factual Geolcode [TOP] Factual Geolcode 2 [C] Geology Code 3 [TOP-C Z] Firm orangish brown gravelly medium to coarse SAND. Gravel is angular to subrounded fine to coarse of flint, quartzite and limestone. Factual Geolcode [RTD1] Factual Geolcode 2 [S] Geology Code 3 [RTD1-S V SV]			(0.20) 0.20	88.99							
(B3) 1.00-1.20 (B5) 1.20-2.00 (D4) 1.20										(1.80)								
(D6) 2.00-2.05 (B7) 2.20-3.00							Firm dark grey slightly gravelly CLAY. Gravel is subangular to subrounded fine to coarse of flint and limestone. Factual Geolcode [TILMP] Factual Geolcode 2 [C] Geology Code 3 [TILMP-C Z]			2.00 (0.70)	87.19							
(D8) 3.00-3.05 (B9) 3.20-3.70			PL 21 LL 55 PI 34 NMC 28				Stiff dark grey slightly gravelly CLAY. Gravel is subangular to subrounded fine to coarse of flint and limestone. Factual Geolcode [TILMP] Factual Geolcode 2 [C] Geology Code 3 [TILMP-C Z]			2.70 (1.00)	86.49							
							No recovery. Grey silty CLAY. (Driller's description) Factual Geolcode 2 [NCR] Geology Code 3 [OXC-NCR]			3.70 (1.30)	85.49							
					07/08/2017 17:30	0.00 4.80				5.00	84.19							
Type	Type	Results		Water	Date Time	Casing Water	Description	Legend		Depth (Thickness)	Level	Install/Backfill						
DRILLING TECHNIQUE			CHISELLING			WATER OBSERVATIONS				HOLE/CASING DIAMETER			WATER ADDED					
From	To	Type	From	To	Duration	Date/Time	Depth Strike	Duration (min)	Rise To	Casing	Sealed	Hole Dia.	Depth	Casing Dia.	Depth	From	To	Volume (ltr)
0.00 1.20	1.20 5.00	Inspection Pit Dynamic Sample										95 90 70	2.20 3.20 5.00					
Remarks																Termination Depth: 5.00m		
1. PAS 128 Type B survey conducted over position. 2. Where structure is not described, such features were not observed in the available samples. 3. No groundwater observed.																Achieved Scheduled Depth		
THIS LOG HAS BEEN REPRODUCED FROM FACTUAL AGS DATA. CHANGES TO GEOLOGY CODES WILL NOT BE REFLECTED ON THIS LOG.																		



Unless otherwise stated:
Depth (m), Diameter (mm), Time (hhmm),
Thickness (m), Level (mOD).






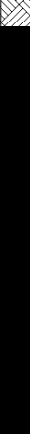
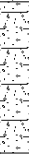


Equipment Used
Dando Terrier

Contractor

Logged By
Phil Smith

Checked By

Project ASC C2 & C3 Controlled Data Client HS2	Project No. C2-C3-CONT-ASC Easting (OSGB) 464565.64	Ground Level (mAOD) 94.73 Northing (SnakeGrid) 228792.72	GI Phase HS2 Main GI Asset Group Chetwode Cutting Group	Chainage (Snake grid) Offset 150	Start Date 08/08/2017 End Date 08/08/2017	Scale 1:50 Sheet 1 of 1
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SAMPLES	TESTS				PROGRESS		STRATA			Depth (Thickness)	Level	Install/ Backfill
Type + Depth	Type + Depth	Results	PI	Water Depth	Date & Time	Casing & Water Depth	Description	Legend	Geol Code1			
(D1) 0.30			PL 17 LL 45 PI 28 NMC 19				TOPSOIL: Soft brown clay. Factual Geolcode [TOP] Factual Geolcode 2 [C] Geology Code 3 [TOP-C Z]			(0.30)	94.43	
(B2) 0.50-0.70							Firm brown slightly sandy slightly gravelly CLAY. Sand is fine to medium. Gravel is angular to subrounded fine to coarse of flint, quartzite and limestone. Factual Geolcode [TILMP] Factual Geolcode 2 [C] Geology Code 3 [TILMP-C Z]			0.30		
(B3) 1.00-1.20												
(B5) 1.20-2.00												
(D4) 1.20												
(D6) 2.00-2.05			LL 24 NMC 22		08/08/2017 11:05	0.00 2.70	Firm orangish brown slightly gravelly clayey fine to medium SAND. Gravel is subangular to subrounded fine to medium of flint, quartzite and limestone. Factual Geolcode [TILMP] Factual Geolcode 2 [S] Geology Code 3 [TILMP-S V SV]			3.20	91.53	
(B7) 2.20-3.00												
(D8) 2.70-2.75												
(B9) 3.00-4.20												
(D10) 3.70-3.75												
(D11) 4.20										4.20	90.53	
												</

Type		Type	Results	Water		Date Time	Casing Water	Description						Legend	Depth (Thickness)	Level	Install/Backfill	
DRILLING TECHNIQUE			CHISELLING			WATER OBSERVATIONS						HOLE/CASING DIAMETER				WATER ADDED		
From	To	Type	<small>Hard Strata</small> From	To	Duration	Date/Time	Depth Strike	Duration (min)	Rise To	Casing	Sealed	Hole Dia.	Depth	Casing Dia.	Depth	From	To	Volume (ltr)
0.00	1.20	Inspection Pit										95	2.20					
1.20	4.20	Dynamic Sample										90	4.20					




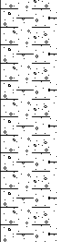
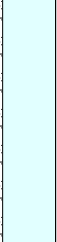
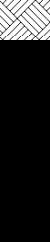



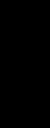






Remarks
1. PAS 128 Type B survey conducted over position. 2. Where structure is not described, such features were not observed in the available samples. 3. No groundwater observed.

THIS LOG HAS BEEN REPRODUCED FROM FACTUAL AGS DATA. CHANGES TO GEOLOGY CODES WILL NOT BE REFLECTED ON THIS LOG.

Termination Depth: 4.20m
Borehole Collapse

	Unless otherwise stated: Depth (m), Diameter (mm), Time (hhmm), Thickness (m), Level (mOD).	Equipment Used Dando Terrier	Contractor	Logged By Phil Smith	Checked By
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Project ASC C2 & C3 Controlled Data Client HS2	Project No. C2-C3-CONT-ASC Easting (OSGB) 464564.57	Ground Level (mAOD) 89.57 Northing (SnakeGrid) 228538.13	GI Phase HS2 Main GI Asset Group Chetwode Embankment Group	Chainage (Snake grid) Offset -22	Start Date 19/09/2017 End Date 19/09/2017	Scale 1:50 Sheet 1 of 1
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SAMPLES		TESTS			PROGRESS		STRATA					Depth (Thickness)	Level	Install/ Backfill		
Type + Depth	Type + Depth	Results	PI	Water Depth	Date & Time	Casing & Water Depth	Description	Legend	Geol Code1							
(B2) 0.05-0.20 (D1) 0.05 (D3) 0.20							TOPSOIL: Brown sandy clay with rootlets. Factual Geolcode [TOP] Factual Geolcode 2 [C] Geology Code 3 [TOP-C Z]			(0.20) 0.20	89.37					
(LB4) 0.50-0.80							Firm grey mottled brown slightly gravelly sandy CLAY. Sand is fine to coarse. Gravel is angular to rounded fine to coarse of flint, quartzite, limestone and mudstone. Factual Geolcode [TILMP] Factual Geolcode 2 [C] Geology Code 3 [TILMP-C Z]			(1.80)						
(LB5) 1.00-1.20 (D6) 1.20-1.30 (B7) 1.30-2.00																
(D8) 2.00-2.10 (B9) 2.10-2.80							Firm fissured indistinctly thinly laminated grey mottled brown sandy CLAY with abundant rootlets. Sand is fine to coarse. Fissures are randomly orientated very closely spaced planar rough. (Reworked) Factual Geolcode [OXC] Factual Geolcode 2 [C] Geology Code 3 [OXC-C Z]			2.00 (0.80)	87.57					
(D10) 2.80-2.90 (B11) 2.90-3.50							from 2.15m to 2.20m mudstone lithorelicts Firm fissured thinly laminated grey slightly sandy CLAY with occasional shell fragments (up to 15mm). Fissures are 60 to 90 degrees very closely spaced planar rough. Factual Geolcode [OXC] Factual Geolcode 2 [C] Geology Code 3 [OXC-C Z]			2.80 (0.70)	86.77					
(D12) 3.50-3.60 (B13) 3.60-4.80							from 2.80m to 2.90m calcite mineralisation from 3.40m to 3.50m abundant gravel sized fragments of carbonaceous material and abundant shell fragments (up to 14mm) Stiff fissured thinly laminated dark grey CLAY with abundant shell fragments (up to 20mm) with pyrite minerals. Fissures are 60 to 90 degrees very closely spaced planar rough. Factual Geolcode [OXC] Factual Geolcode 2 [C] Geology Code 3 [OXC-C Z]			3.50 (1.50)	86.07					
(D14) 4.80-5.00					19/09/2017 18:00	0.00 Dry				5.00	84.57	