


 British Geological Survey NATURAL ENVIRONMENT RESEARCH COUNCIL						Site M1 WIDENING JUNCTION 21 TO 30 PRELIMINARY GI - CONTRACT 2			Borehole Number RC1217	
Machine: Flush : Core Dia: mm Method :		Casing Diameter 140mm cased to 1.20m		Ground Level (mOD) 115.30		Client Highways Agency			Job Number WAL060099	
		Location 445220 E 364011 N		Dates 25/10/2006- 27/10/2006		Engineer Arup			Sheet 1/3	
Depth (m)	TCR	SCR	RQD	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.00	PIT		0	0	Groundwater was not apparent during boring(1) at 0.00m.			Inspection Pit		▽1
	100	0	0	0			(1.20)			
1.20	100	0	0	0		114.10	1.20	MADE GROUND. Stiff mottled grey and brown, slightly sandy gravelly clay. Sand is fine to coarse. Gravel is angular to subangular, fine to coarse sandstone, siltstone, mudstone and coal		
1.50	100	0	0	0						
2.70-3.08					25/9,7,5,7 SPT 25'/75 N=28		(3.00)	At 2.40m; sandstone cobble (80 x 80 x 75mm)		
2.70	30	0	0	0				At 3.00m; band of angular coarse gravel sized fragments of coal. Below 3.30m becoming very gravelly At 3.40m; sandstone cobble (150 x 80 x 80mm)		
4.20-4.58					25/4,4,5,5 SPT 25'/75 N=18	111.10	4.20	MADE GROUND. Medium dense grey and yellow brown sandy, angular to subrounded, fine to coarse gravel and cobbles of sandstone, siltstone and coal with pockets of soft to firm grey brown sandy gravelly clay. Possible		
4.20	30	0	0	0						
5.70					25/4,5,7,8 SPT 25'/75 25/10/2006:DRY		(3.30)	Between 5.70 and 6.00m; open hole drilling - reaming.		
5.70-6.08	0	0	0	0	25/10/2006: N=24 25/10/2006:					
					26/10/2006:					
7.50-7.88					25/1,2,2,3 SPT 25'/75 N=8	107.80	7.50	OPEN HOLE. Possible Opencast Backfill		
7.50	81	81	63	0			(2.00)			
9.50-9.73					25/18,37 SPT 25'/75 55/150 U1	105.80	9.50	Weak to moderately weak thinly bedded grey MUDSTONE with abundant carbonised plant remains. Fractures are horizontal, closely to medium spaced, open, irregular and		
9.50	100	24	24	0			(0.80)			
9.80										
Remarks								Scale (approx) 1:50	Logged By SM	
								Figure No.		



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Machine: Flush :		Casing Diameter 140mm cased to 1.20m		Ground Level (mOD) 115.30		Client Highways Agency		Job Number WAL060099		
Core Dia: mm		Location 445220 E 364011 N		Dates 25/10/2006- 27/10/2006		Engineer Arup		Sheet 2/3		
Depth (m)	TCR	SCR	RQD	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
10.30			0	0			(0.80) 10.30	smooth. MUDSTONE (as previous sheet)		
10.70	70	50	25	0			(0.40) 10.70	Moderately strong black COAL recovered as angular to subangular medium and coarse gravel sized fragments.		
11.00 11.00-11.18			0	0	25/28.22 SPT 25'/75 50/109			Weak to moderately weak laminated to very thinly bedded grey MUDSTONE with carbonised plant remains. With occasional angular coarse gravel sized fragments of ironstone. Fractures are horizontal, very closely to medium spaced, generally open, planar and smooth.		
11.60	100	74	46	0				At 11.73m; 40mm band of strong light brown ironstone. At 12.00m; 50mm band of strong light brown ironstone.		
12.50 12.50-12.65	100	87	73	0	25/57 SPT 25'/75 57/75		(4.10)			
13.20 13.55	100	93	47	0	P2			Between 13.25 and 13.35m; coal recovered as black angular to subangular, medium to coarse gravel sized fragments.		
14.70					25/50 26/10/2006:10.40m	100.50	14.80			
14.70-14.81	100	83	27	0	26/10/2006: SPT 25'/75 50/35 V6 26/10/2006:			Moderately strong laminated to very thinly bedded grey MUDSTONE, with occasional medium spaced thin beds of moderately weak grey mudstone. Occasional bands up to 80mm of strong light brown ironstone. Fractures are horizontal, very closely to medium spaced, open irregular and smooth. 60 degree fractures are medium spaced, generally tight, planar and smooth. At 15.60m; 50mm ironstone band. Between 15.70 and 15.95m; moderately weak.		
14.80 16.20	100	100	81	0	27/10/2006: P3					
17.70 17.90	100	91	35	0	U4		(5.50)	Between 17.50 and 18.30m; cross laminated.		
19.20										
Remarks								Scale (approx) 1:50	Logged By SM	Figure No.



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Boring Method Cable Percussion		Casing Diameter 140mm cased to 1.20m		Ground Level (mOD) 115.30		Client Highways Agency		Job Number WAL060099	
		Location 445220 E 364011 N		Dates 25/10/2006- 27/10/2006		Engineer Arup		Sheet 3/3	
Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
19.20	P5			27/10/2006:10.40m 27/10/2006: 27/10/2006:	95.00	(5.50) 20.30	Between 19.60 and 20.30m; very closely to closely spaced fractures. Moderately weak. Complete at 20.30m MUDSTONE (as previous sheet) Complete at 20.30m		
Remarks							Scale (approx) 1:50	Logged By SM	
							Figure No.		