








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 British Geological Survey NATURAL ENVIRONMENT RESEARCH COUNCIL							Site M1 WIDENING JUNCTION 21 TO 30 PRELIMINARY GI- CONTRACT 2		Borehole Number RC1241	
Machine: Flush : Core Dia: mm Method :			Casing Diameter 140mm cased to 15.00m		Ground Level (mOD) 63.85		Client Highways Agency		Job Number WAL060099A	
			Location 445054 E 372985 N		Dates 29/01/2007- 30/01/2007		Engineer Arup		Sheet 2/3	
Depth (m)	TCR	SCR	RQD	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
15.00						48.85	15.00 (0.25)	Very weak, black, thinly laminated very carbonaceous MUDSTONE. Discontinuities: extremely closely spaced, rough, clean. Generally recovered as 4mm to 8mm thick discs.		
15.25			0	0		48.60	15.25			
	88	23	8	0			(1.55)	Moderately weak, black, vitreous COAL. Discontinuities: extremely closely and very closely spaced, horizontal and vertical, rough and smooth. From 15.25m to 15.65m; generally recovered non-intact.		
16.50					/18,24,30,29 SPT 0*/0 101/240			From 16.50m to 16.68m; assumed zone of core loss.		
16.50-16.74 16.80			0	0		47.05	16.80	From 16.68m to 16.80m; non-intact.		
			0	0			(0.85)	Stiff variably very weak light grey MUDSTONE, with occasional fossilised plant remains. Discontinuities: extremely closely spaced, randomly orientated, smooth and rough fissures.		
17.65 17.75	83	33	7	0	P1	46.20	17.65	Moderately weak to moderately strong grey (locally dark grey thinly colour laminated) SILTSTONE thinly interbedded with very weak grey mudstone with occasional rounded coarse gravel size ironstone nodules. Fractures: (where evident) horizontal, extremely closely to very closely spaced, smooth, planar. Frequent irregular discontinuities in mudstone, apparently random strike.		
18.00 18.00-18.18			0	0	/30,38,32 SPT 0*/0 100/179		(1.30)			
18.85 18.95	100	51	9	0	P2	44.90	18.95	Generally weak (variably very weak to moderately weak) grey MUDSTONE with rare very thin beds of strong brown ironstone. Discontinuities: horizontal, very closely to closely spaced, smooth planar and undulating; vertical and subvertical, smooth, planar.		
19.50 19.50-19.73					/28,32,39,1 SPT 0*/0 100/225					
Remarks								Scale (approx) 1:50	Logged By OP/TL Figure No.	



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Depth (m)	TCR	SCR	RQD	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
20.40	63	23	0	0	P3			MUDSTONE (as previous sheet)		
21.00 21.00-21.18			0	0	/31,36,33 SPT 0°/0 100/180		(4.25)	At 21.40m; very thin bed of strong brown ironstone.		
21.95	72	7	0	0				From 21.95m to 22.50m; assumed zone of core loss.		
22.50			0	0	/33,38,29 29/01/2007:					
22.80 22.50-22.68			0	0	29/01/2007: SPT 0°/0 100/175 29/01/2007:	40.65	23.20	From 22.80m and 23.20m; recovered as firm to stiff thinly laminated grey clay very thinly interbedded with very weak grey mudstone.		
23.20 23.35	98	57	21	0	30/01/2007: P4			Generally moderately weak (variably weak to moderately strong) black carbonaceous MUDSTONE. Fractures: horizontal, very closely to closely spaced, smooth planar; subvertical and vertical, smooth planar.		
24.00 24.00-24.16	100	32	0	0	/29,39,32 SPT 0°/0 100/162			From 24.30m to 24.50m; thin bed of strong dark grey black siltstone.		
25.30					P5					
25.50 25.50-25.66			0	0	/31,42,27 SPT 0°/0 100/159			Between 25.50m to 25.60m; thin bed of soft light grey slightly gravelly clay. Gravel is subangular fine to coarse of mudstone (probably fallen from above). Between 25.60m to 26.00m; thickly colour laminated black and light brown. Between 26.00m and 26.25m; thin bed of weak light grey mudstone with occasional carbonised plant remains. At 26.50m; rare thin laminations of weak brittle black coal.		
26.60 26.70	100	0	0	0	P6	37.25	26.60	Generally moderately strong (variably weak to strong) light grey locally medium and coarse sandy MUDSTONE. Fractures: subhorizontal and subvertical, closely and medium spaced, rough to irregular.		
27.00 27.00-27.23			0	0	/21,29,37,13 SPT 0°/0 100/229		(1.60)			
27.70-27.97					U7					
28.20 28.45					P8 30/01/2007: 30/01/2007:	35.65 35.35	28.20 (0.30) 28.50	Weak grey MUDSTONE. Fractures: subhorizontal (30 degrees to 40 degrees), smooth, planar; subvertical, smooth, planar to irregular.		
								Complete at 28.50m		
Remarks								Scale (approx) 1:50	Logged By OP/TL	
								Figure No.		