


British Geological Survey NATURAL ENVIRONMENT RESEARCH COUNCIL						Site M1 WIDENING JUNCTION 21 TO 30 PRELIMINARY GI - CONTRACT 2		Borehole Number RC1288			
Machine: Flush : Core Dia: mm Method :			Casing Diameter 140mm cased to 4.20m			Ground Level (mOD) 105.25		Client Highways Agency		Job Number WAL060099	
			Location 445248 E 364832 N			Dates 13/11/2006		Engineer Arup		Sheet 1/2	
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. B			MADE GROUND. Grey brown, grey and black gravelly clay. Gravel is angular to subangular medium to coarse of mudstone and coal.		✓	
0.50-1.20	O/H		0	0			(1.20)				
1.20						104.05	1.20	Open Hole.			
	96	68	0	0			(3.05)				
4.25			0	0		101.00	4.25	Very weak to weak grey thinly colour laminated black weathered SILTSTONE with grey brown discolouration throughout; structure locally lost; orange brown discolouration on fracture surfaces. Fractures: where Between 4.75m and 5.00m; clayey. evident horizontal (5 degrees to 10 degrees), very closely spaced, smooth, planar. Generally weak (variably very weak) thinly and thickly laminated grey MUDSTONE, locally weathered in thin beds to stiff clay; structure frequently lost. Below 6.00m; assumed zone of core loss.			
4.75	67	44	0	0	6.8/7.9.11.15 SPT(C) N=42	(0.75)					
5.00-5.45			0	0		100.25	5.00				
5.00			0	0			(1.50)				
5.75			0	0							
6.00	0	0	0	0	8.10/12.14.14.17 SPT(C) N=57						
6.50-6.95			0	0		98.75	6.50	No recovery. Possible fissure.			
6.50	43	9	0	0			(1.50)				
8.00-8.45			0	0	9.9/11.12.14.14 SPT(C) N=51						
8.00			0	0		97.25	8.00	Between 8.00m and 8.35m; recovered as firm to stiff gravelly clay; structure lost. Between 8.35m and 8.65m; recovered as firm to stiff gravelly clay; structure lost. Generally weak (variably very weak) thinly and thickly laminated grey MUDSTONE, locally weathered in thin beds to stiff clay; structure frequently lost. Fractures: where evident horizontal (5 degrees), extremely closely to very closely spaced, smooth, planar; vertical, smooth, planar.			
8.35			0	0		(0.65)					
8.65	67	22	0	0		96.60	8.65				
9.50-9.95			0	0	6.12/16.17.21.31 SPT(C) N=85			No recovery.			
9.50			0	0			(1.35)				
10.00						95.25	10.00				
Remarks									Scale (approx) 1:50		Logged By TL
									Figure No.		

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Depth (m)	TCR	SCR	RQD	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
			0	0			(0.65)	Generally weak (variably very weak) thin and thickly laminated grey MUDSTONE, locally weathered in thin beds to stiff clay; structure frequently lost.		
10.65	41	5	0	0		94.60	10.65 (0.35)	At 10.45m; occasional subrounded coarse gravel size ironstone nodules.		
11.00			0	0		94.25	11.00	Weak to moderately weak brittle black COAL. Fractures: horizontal and vertical, extremely closely to very closely spaced, planar.		
11.40			0	0			(1.50)	Poor recovery. Recovered as fragments of coal and firm grey CLAY with frequent black carbonised fossil plant remains.		
11.90	67	52	24	0						
12.50			0	0	25/50 SPT(C) 25'/44 50/62	92.75	12.50 (0.50)	Assumed zone of core loss.		
12.50-12.61						92.25	13.00	Generally moderately weak (variably weak to moderately strong) light and dark grey thinly colour laminated SILTSTONE. Fractures: horizontal, closely spaced, smooth, planar and undulating, occasionally infilled with soft sandy clay up to 4mm; others generally vertical, irregular.		
13.00	67	67	16	0	P1		(1.30)			
13.90			0	0	P2					
14.00						90.95	14.30	Weak to moderately weak light and dark grey thinly cross		
14.30			0	0	P3		(1.20)	At 14.45m: very thin bed of moderately strong ironstone. colour laminated MUDSTONE. Fractures: horizontal, very closely to closely spaced, smooth, planar; vertical, generally irregular.		
14.55					P4			Between 15.00m and 15.50m; no recovery.		
14.95						89.75	15.50	Complete at 15.50m		
15.00					13/11/2006:15.21m 13/11/2006:					
Remarks										
									Scale (approx) 1:50	Logged By TL
									Figure No.	