



 <b>British Geological Survey</b> NATURAL ENVIRONMENT RESEARCH COUNCIL							<b>Site</b> M1 WIDENING JUNCTION 21 TO 30 PRELIMINARY GI-CONTRACT 2		<b>Borehole Number</b> RC1230	
<b>Machine:</b> <b>Flush :</b> <b>Core Dia: mm</b> <b>Method :</b>		<b>Casing Diameter</b> 140mm cased to 3.00m		<b>Ground Level (mOD)</b> 107.30		<b>Client</b> Highways Agency		<b>Job Number</b> WAL060099A		
		<b>Location</b> 445158 E 368689 N		<b>Dates</b> 06/09/2006		<b>Engineer</b> Arup		<b>Sheet</b> 1/2		
<b>Depth (m)</b>	<b>TCR</b>	<b>SCR</b>	<b>RQD</b>	<b>FI</b>	<b>Field Records</b>	<b>Level (mOD)</b>	<b>Depth (m) (Thickness)</b>	<b>Description</b>	<b>Legend</b>	<b>Water</b>
0.00			0	0	Groundwater was not apparent during boring(1) at 0.00m.			Open Hole.		▽1
			0	0						
1.20							(3.00)			
	96	66	0	0						
3.00			0	0		104.30	3.00	Very weak black carbonaceous MUDSTONE. Thinly interlaminated with very weak brittle black coal. Apparently extremely closely fractured. Generally recovered non-intact as clayey angular to subangular fine to coarse gravel.		
3.45			0	0		103.85	(0.45)			
4.05					P1 12/16.35 SPT 12'/75 51/95			Generally weak (variably very weak) grey SILTSTONE with occasional (locally frequent) black carbonised plant remains (up to 8mmx15mm). Weathering: Yellow brown discolouration penetrating up to 2mm. Fractures: Horizontal (0 degrees to 15 degrees) closely spaced, smooth, undulating, frequently irregular, others very closely spaced and irregular. Apparently random strike. Between 3.45m and 4.00m; recovered as very stiff very closely fissured silt/clay. Fissures infilled up to 2mm with yellow brown silt.		
4.00	96	73	0	0						
4.50-4.67										
4.50										
	83	73	26	0						
5.60					P2 8/35 SPT 8'/75 35/30		(4.15)			
6.00-6.11										
6.00					P3					
6.35	98	87	39	0						
					11/35 SPT 11'/75 35/40					
7.50-7.62			0	0		99.70	7.60	Generally moderately weak (variably weak) light grey frequently colour laminated dark grey SILTSTONE. Variably grading in thin and medium beds to moderately weak fine to grained sandstone. Fractures are horizontal (0 to 15 degrees) closely and medium spaced, smooth, planar, undulating and moderately open. Between 7.60m and 9.00m occasional orange brown discolouration on fracture surfaces.		
7.50										
7.60	97	97	51	0						
8.45-8.65					C4 /35 SPT 0'/0 35/40 C5					
8.80-8.84										
8.80										
9.00-9.22	97	84	36	0				Between 9.40m and 9.65m; convergence of subvertical fractures at 100 degrees.		
<b>Remarks</b>								<b>Scale (approx)</b>	<b>Logged By</b>	
								1:50	TL	
								<b>Figure No.</b>		

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Depth (m)	TCR	SCR	RQD	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	
10.30 10.30-10.39 10.30			0	0	4/35 SPT 4'/75 35/10 P6				XXXXXXXXXX XXXXXXXX		