
 British Geological Survey NATURAL ENVIRONMENT RESEARCH COUNCIL						Site M1 WIDENING JUNCTION 21 TO 30 PRELIMINARY GI- CONTRACT 2			Borehole Number RC1215	
Machine: Flush : Core Dia: mm Method :		Casing Diameter 140mm cased to 2.90m		Ground Level (mOD) 123.50		Client Highways Agency		Job Number WAL060099		
		Location 445224 E 363678 N		Dates 18/09/2006		Engineer Arup		Sheet 1/2		
Depth (m)	TCR	SCR	RQD	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.00			0	0	Groundwater was not apparent during boring(1) at 0.00m.			Inspection Pit.		▽1
			0	0			(1.20)			
1.20					5.10/9.8,7,11 SPT N=35 P1	122.30	1.20	Open hole.		
	100	16	0	0			(1.70)			
2.90-3.35 2.90 3.10						120.60	2.90	Recovered non-intact as brown slightly clayey angular fine to coarse gravel of weak very weathered fine to grained SANDSTONE and SILTSTONE with occasional similar cobbles.		
	95	85	3	0			(0.80)			
3.45			0	0		119.80	3.70	Completely weathered SILTSTONE. Recovered as firm to very stiff grey thickly laminated friable silt/clay with occasional thin interlaminae of very weak carbonaceous mudstone and very weak black coal.		
3.70			0	0		(1.70)				
5.40					P2	118.10	5.40	Generally weak (variably very weak) dark grey thinly laminated MUDSTONE with rare subrounded ironstone nodules with medium spaced thin beds of moderately weak light and dark grey thinly colour laminated siltstone (locally fine grained sandstone). Weathering: frequent orange brown discolouration penetrating up to 8mm. Fractures are subhorizontal to subvertical (15 to 60 degrees), very closely to closely spaced, smooth planar, frequently becoming Between 6.55m and 6.65m; thinly laminated. Red brown ferrous mineralisation up to 3mm. Between 6.65m and 6.80m; fine grained sandstone generally non-intact due to vertical fracturing irregular, other fractures irregular, apparently random strike; vertical fractures predominantly within siltstone/sandstone, smooth, planar and open.		
5.80	97	84	17	0						
6.45			0	0						
6.65			0	0						
6.80					P3		(3.85)			
7.95	95	92	47	0						
9.25-9.45					C4	114.25	9.25	Generally moderately strong (variably strong) light grey fine and medium grained SANDSTONE with frequent very narrow black non persistent wispy interlaminae. Medium spaced medium interbedded with moderately weak light and dark grey thinly colour laminated siltstone. Weathering: Between 9.25m and 9.80m; moderately weak siltstone.		
9.45										
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
10.63-11.02	100	97	74	0	C5			frequent orange brown discolouration penetrating up to 80mm locally heavily stained on vertical fractures. Sandstone fracturing: horizontal (0 to 10 degrees), medium spaced, smooth, planar and undulating, occasionally with very clayey fine sand infill up to 4mm; subvertical and vertical fractures (75 to 90 degrees), smooth and undulating. Siltstone fracturing: horizontal (5 to 10 degrees), very closely and closely spaced, smooth, undulating; subvertical fractures smooth planar and tight. Between 10.30m and 10.60m; moderately weak siltstone.				
11.85					P6			Between 11.75m and 12.35m; moderately weak siltstone.				
12.45	Sample / Tests		Casing Depth (m)	Water Depth (m)			(6.20)	Between 12.75m and 13.05m; moderately weak siltstone.				
13.45-13.90	C7											
14.65-15.13	C8							Between 14.40m and 14.65m; sandstone contains frequent very narrow lenses and rounded coarse gravel size nodules of ironstone.				
					18/09/2006: 18/09/2006:	108.05	15.45	Complete at 15.45m				
Remarks								Scale (approx) 1:50		Logged By TL		
								Figure No.				