
 British Geological Survey NATURAL ENVIRONMENT RESEARCH COUNCIL								Site M1 WIDENING JUNCTION 21 TO 30 PRELIMINARY GI-CONTRACT 2		Borehole Number RC1195	
Machine: Flush : Core Dia: mm Method :		Casing Diameter 140mm cased to 3.00m		Ground Level (mOD) 141.35		Client Highways Agency		Job Number WAL060099A			
		Location 444639 E 358215 N		Dates 12/09/2006		Engineer Arup		Sheet 1/2			
Depth (m)	TCR	SCR	RQD	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	
0.00	PIT		0	0	Groundwater was not apparent during boring(1) at 0.00m.			OPEN HOLE		▽1	
	OH		0	0			(1.90)				
1.20	100	82	0	0							
1.90			0	0		139.45	1.90 (0.30)	Recovered non-intact as weak light brown weathered fine to medium SANDSTONE, locally very clayey.			
2.20						139.15	2.20	Very weak blue grey and orange brown thinly laminated very weathered SILTSTONE. Frequent dark brown and orange discolouration, locally thinly laminated deposition. Fractures, where evident, subvertical and vertical, irregular, extremely closely to closely spaced. Between 2.20m and 2.30m; generally recovered as extremely closely and very closely fissured silt/clay.			
2.60	91	76	0	0	P1						
3.00			0	0			(2.00)				
3.30			0	0							
4.05					P2						
4.20	96	81	34	0		137.15	4.20	Weathered MUDSTONE recovered as stiff to very stiff blue grey friable thinly laminated extremely closely fissured silt/clay.			
4.70			0	0				Between 4.75m and 4.85m; very thin beds of moderately strong brown ironstone (25mm-50mm).			
5.05			0	0			(1.70)	Between 5.05m and 5.35m; medium bed of weak brittle black coal, Fractures, horizontal and vertical, extremely closely to very closely spaced, irregular.			
5.35			0	0							
5.90					P3	135.45	5.90	Generally weak (variably very weak and moderately weak) light and dark grey thinly colour laminated SILTSTONE closely to medium interbedded (thin and medium beds) with weak and moderately weak grey fine grained sandstone with occasional (locally very frequent) very thin brown and black wispy non-persistent laminae. Frequent orange discolouration throughout. Between 5.90m and 8.20m; fractures, horizontal (5 to 15 degrees), very closely and closely spaced, smooth, planar; subvertical and vertical, very closely spaced, irregular.			
6.15	98	97	22	0							
7.50-7.70					C4						
7.70			0	0							
8.20					P5			At 8.05m; discolouration vug (15mmx20mm). At 8.10m; 25mm bed moderately strong ironstone. Between 8.20m and 11.85m; fractures, horizontal and subhorizontal (5 to 30 degrees), closely and medium spaced, smooth, planar and undulating, very tight to open, vertical (75 to 85 degrees), smooth, planar and undulating, very tight to moderately open.			
8.60	100	100	33	0			(5.95)				
								At 9.45m; discolouration vug (20mmx28mm).			
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	
10.10					P6			At 10.10m; thinly laminated ferrous mineralisation.	XXXXXXXXXX		
10.70 10.70-10.98					C10				XXXXXXXXXX		
11.40-11.73			0	0	C7			Between 11.10m and 11.70m; locally speckled black.	XXXXXXXXXX		
11.85	91	70	12	0		129.50	11.85	Weak (variably very weak) dark grey thinly to thickly laminated MUDSTONE. Orange discolouration on fractures, frequently penetrating up to 50mm. Fractures, horizontal (5 to 20 degrees) very closely and closely spaced (30/65/130) smooth, planar to irregular, vertical, smooth planar, others subvertical, irregular, apparently random strike.	XXXXXXXXXX		
13.40								At 13.20m; 50mm bed moderately strong ironstone.	XXXXXXXXXX		
13.75					P8		(5.25)		XXXXXXXXXX		
	100	77	0	0				At 15.05m; 45mm bed moderately strong ironstone.	XXXXXXXXXX		
15.45					P9			At 15.40m; 55mm bed moderately strong ironstone.	XXXXXXXXXX		
16.40			0	0				At 16.30m; 50mm bed moderately strong ironstone. Between 16.40m and 16.85m; recovered as grey clay.	XXXXXXXXXX		
16.85			0	0				Between 16.85m and 17.10m; very weak, extremely closely fractured.	XXXXXXXXXX		
17.10			0	0		124.25	17.10 (0.55)	Weak brittle thinly laminated black COAL with occasional flecks of pyrite. Fractures, horizontal and vertical, extremely closely and very closely spaced.	XXXXXXXXXX		
17.65						123.70	17.65 (0.50)	Very weak dark grey thinly laminated MUDSTONE with occasional black carbonised plant remains variably recovered as stiff extremely closely fissured silt/clay.	XXXXXXXXXX		
					12/09/2006:	123.20	18.15	Complete at 18.15m	XXXXXXXXXX		
Remarks						12/09/2006: 12/09/2006: 12/09/2006:		Scale (approx) 1:50 Figure No.			Logged By TL