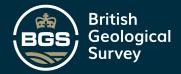


	British Geologica ATURAL ENVIRO		•	91				Site  M1 WIDENING JUNCTION 21 TO 30 PRELIMINARY GI- CONTRACT 2	Boreho Numbe RC11	r
Machine: Flush :		Casing Diameter 140mm cased to 3.00m			Ground Level (mOD) 141.35				• <b>r</b> 99A	
Core Dia: m	ım		Location			Dates		Fraince		
Method:			Location 444639 E 358215 N			Dates 12/09/2006		Engineer Arup	Sheet 1/2	
Depth (m)	TCR	SCR	RQD	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	·		Water
		SUR			Groundwater was		(Thickness)			≊ V1
0.00	PIT		0	0	not apparent during boring(1) at 0.00m.			OPEN HOLE		
	ОН		0	0			(1.90)			
20										
.90	100	82	0	0		139.45	1.90	Decreased new intent on used limbths were used fine to		
20			0	0		139.15	(0.30)	Recovered non-intact as weak light brown weathered fine to medium SANDSTONE, locally very clayey.  Very weak blue grey and orange brown thinly laminated very	******	
60	91	76	0	0	P1		-	weathered SILTSTONE. Frequent dark brown and orange discolouration, locally thinly laminated deposition. Fractures, where evident, subvertical and vertical, irregular, extremely closely to closely spaced.	X X X X X X X X X X X X X X X X X X X	
00 30			0	0			(2.00)	Between 2.20m and 2.30m; generally recovered as extremely closely and very closely fissured silt/clay.	X X X X X X X X X X X X X X X X X X X	
05			0	0	P2		-		* * * * * * * * * * * * * * * * * * *	
20	96	81	34	0	12	137.15	4.20	Weathered MUDSTONE recovered as stiff to very stiff blue grey friable thinly laminated extremely closely fissured	******	
70			0	0				silt/clay.  Between 4.75m and 4.85m; very thin beds of moderately		
05			0	0			(1.70)	strong brown ironstone (25mm-50mm).  Between 5.05m and 5.35m; medium bed of weak brittle black coal, Fractures, horizontal and vertical, extremely		
35			0	0				closely to very closely spaced, irregular.		
90  5	98	97	22	0	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.		
50-7.70					C4			irregular.	X X X X X X X X X X X X X X X X X X X	
70			0	0					* * * * * * * * * * * * * * * * * * *	
20					P5		(5.95)	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.		
	100	100	33	0				At 9.45m; discolouration vug (20mmx28mm).	X X X X X X X X X X X X X X X X X X X	
Remarks	1							Scale (approx)	Logge	tl
								1:50	TL	
								Figure	No.	



British Geological Survey NATURAL ENVIRONMENT RESEARCH COUNCIL								Site  M1 WIDENING JUNCTION 21 TO 30 PRELIMINARY GI CONTRACT 2	Numi	Borehole Number RC1195		
Machine: Flush : Core Dia: mm Method :			Casing Diameter 140mm cased to 3.00m  Location 444639 E 358215 N			Ground Level (mOD) 141.35  Dates 12/09/2006				Job Number WAL060099		
										Sheet 2/2		
Depth (m)	TCR	SCR	RQD	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legen	Water Dr		
0.10					P6			At 10.10m; thinly laminated ferrous mineralisation.	X X X X X X X X X X X X X X X X X X X	× × × × × × × × × × × × × × × × × × ×		
0.70 0.70-10.98 1.40-11.73			0	0	C10			Between 11.10m and 11.70m; locally speckled black.	X X X X X X X X X X X X X X X X X X X	× × × × × × × × × × × × × × × × × × ×		
1.85	91	70	12	0		129.50	11.85	Weak (variably very weak) dark grey thinly to thickly laminated MUDSTONE. Orange discolouration on fracture frequently penetrating up to 50mm. Fractures, horizontal (to 20 degrees) very closely and closely spaced (30/65/13 smooth, planar to irregular, vertical, smooth planar, others subvertical, irregular, apparently random strike.	s, 500)	×××		
3.40								At 13.20m; 50mm bed moderately strong ironstone.				
3.75					P8		(5.25)					
	100	77	0	0				At 15.05m; 45mm bed moderately strong ironstone.				
5.45					P9			At 15.40m; 55mm bed moderately strong ironstone.				
3.40			0	0				At 16.30m; 50mm bed moderately strong ironstone. Between 16.40m and 16.85m; recovered as grey clay.				
3.85 7.10			0	0		124.25	17.10	Between 16.85m and 17.10m; very weak, extremely closely fractured.				
			0	0		400.70	(0.55)	Weak brittle thinly laminated black COAL with occasional flecks of pyrite. Fractures, horizontal and vertical, extreme closely and very closely spaced.	у			
7.65						123.70	(0.50)	Very weak dark grey thinly laminated MUDSTONE with occasional black carbonised plant remains variably recovered as stiff extremely closely fissured silt/clay.				
					12/09/2006: 12/09/2006: 12/09/2006:	123.20	18.15	Complete at 18.15m				
Remarks				.61				Scal (appro				
								1:50	TL			