









 <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> RC1222	
<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> 119.05		<b>Client</b> Highways Agency		<b>Job Number</b> WAL060099A			
		<b>Location</b> 445236 E 365986 N		<b>Dates</b> 08/09/2006		<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	Borehole was wet at 13.50m(1) at 0.00m.		(0.30)	TOPSOIL.		✓1	
	78	58	18	0		118.75	0.30	Very weak brown fine grained SANDSTONE.			
							(0.90)				
1.20			0	0		117.85	1.20	No recovery.			
1.40			0	0		117.65	(0.20)				
1.85					P1		(0.40)	Recovered non-intact as angular and subangular coarse gravel and cobble sized fragments of weak brown fine grained SANDSTONE.			
1.80						117.25	1.80	Weak and moderately weak light grey brown weathered fine grained SANDSTONE with frequent very thin black wispy laminae. Weathering: Occasional orange brown and dark brown discolouration. Fractures are horizontal (0 to 15 degrees) closely and medium spaced, planar and stepped, tight to open, and occasionally subvertical and irregular. Between 1.70m and 2.00m; non-intact due to vertical fracture convergence.			
2.48	88	82	24	0	P2						
3.00			0	0			(2.80)				
3.33-3.55					C3			Between 3.40m and 4.10m; light grey brown and black thinly colour-laminated and cross-laminated.			
3.25			0	0							
4.60	100	92	0	0		114.45	4.60	Very weak grey brown becoming brown grey thinly to thickly laminated weathered SILTSTONE with rare rounded coarse gravel size ironstone nodules.			
					P4		(1.10)	Between 5.30m and 5.70m; non-intact.			
5.65			0	0							
5.50						113.35	5.70	Very weak grey thinly to thickly laminated weathered MUDSTONE (variably recovered in closely spaced thin to medium spaced beds as firm to stiff friable gravelly clay). Fractures: extremely closely to very closely spaced and irregular.			
5.70			0	0							
7.40					P5						
7.50			0	0							
7.80	100	100	0	0			(4.80)	Between 7.50m and 7.67m; very weak black thinly laminated carbonaceous mudstone. Between 7.67m and 7.80m; very weak brittle black coal. Between 7.80m and 10.00m; variably grading to siltstone.			
8.50			0	0							
<b>Remarks</b>							<b>Scale (approx)</b> 1:50		<b>Logged By</b> TL		
							<b>Figure No.</b>				



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<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>
10.10					P6					
10.50			0	0		108.55	10.50 (0.40)	Very weak grey brown and brown thinly laminated weathered fine to grained SANDSTONE. Weathering: frequent brown and orange brown discolouration. Fractures: vertical to horizontal, extremely closely spaced and irregular.		
10.90	96	96	0	0		108.15	10.90 (0.60)	Weak brittle black COAL. Fractures are horizontal, extremely closely to very closely spaced, stepped; 1.No vertical stepped/irregular.		
11.50						107.55	11.50	Very weak dark grey MUDSTONE with frequent black carbonised plant remains (up to 5mmx15mm). Fractures: generally subvertical, extremely closely to very closely spaced, irregular and incipient.		
12.50			0	0	P7		(2.10)	Between 12.50m and 12.60m; thin bed of very weak black carbonaceous mudstone. Thinly interlaminated with black brittle coal.		
13.60						105.45	13.60	Generally very weak to weak (locally moderately strong) grey occasionally colour-laminated dark grey SILTSTONE. Fractures: horizontal (5 to 20 degrees) very closely and closely spaced, smooth, planar, moderately open, subvertical (60 to 70 degrees) smooth and planar.	xxxxxx	
13.75	64	0	0	0	P8		(1.40)	Between 13.70m and 13.85m; moderately strong grey and dark grey thinly colour laminated.	xxxxxx	
14.40					P9			Between 14.50m and 15.00m; non-intact.	xxxxxx	
14.50						104.05	15.00	Complete at 15.00m	xxxxxx	
<b>Remarks</b>								<b>Scale (approx)</b> 1:50		<b>Logged By</b> TL
								<b>Figure No.</b>		