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 <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> <b>RC1219</b>	
<b>Machine:</b> <b>Flush :</b>		<b>Casing Diameter</b> 140mm cased to 18.00m		<b>Ground Level (mOD)</b> 103.70		<b>Client</b> Highways Agency		<b>Job Number</b> WAL060099			
<b>Core Dia: mm</b>		<b>Location</b> 445345 E 365122 N		<b>Dates</b> 24/10/2006- 30/10/2006		<b>Engineer</b> Arup		<b>Sheet</b> 2/4			
<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>	
							(12.80)	From 12.00m to 13.00m; driller notes wet void. No flush return.			
14.00						89.70	14.00	MADE GROUND. Grey very clayey angular to subangular fine to coarse gravel of mudstone and coal with frequent subangular mudstone cobbles and possibly boulders.			
	77	5	0	0							
16.00 16.00-16.17					/25,41,34 SPT 0°/0 100/168		(4.00)				
	80	11	11	0							
17.50					/49,51 24/10/2006:						
17.50-17.62					24/10/2006: SPT 0°/0 100/115 24/10/2006: 25/10/2006:	85.70	18.00	MADE GROUND. Light brown clayey angular to subangular fine to coarse gravel of mudstone and sandstone with occasional similar cobbles.			
	75	17	17	0							
19.00 19.00-19.18					/41,49,10 SPT 0°/0 100/180		(2.15)				
			0	0							
<b>Remarks</b>								<b>Scale (approx)</b> 1:50	<b>Logged By</b> TL		
								<b>Figure No.</b>			

 <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> RC1219			
<b>Machine:</b> <b>Flush :</b> <b>Core Dia: mm</b> <b>Method :</b>			<b>Casing Diameter</b> 140mm cased to 18.00m			<b>Ground Level (mOD)</b> 103.70		<b>Client</b> Highways Agency		<b>Job Number</b> WAL060099	
			<b>Location</b> 445345 E 365122 N			<b>Dates</b> 24/10/2006-30/10/2006		<b>Engineer</b> Arup		<b>Sheet</b> 3/4	
<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 (ft) (Thickness)</b>	<b>Description</b>	<b>Legend</b>	<b>Water</b>	
20.15 20.15-20.45	70	31	21	0	U1	83.55	(2.15) 20.15	Moderately weak to moderately strong light and dark grey thinly colour laminated SILTSTONE. Fractures: horizontal, closely and medium spaced, smooth, planar, moderately open to open; vertical, smooth, planar to irregular.			
20.50 20.50-20.66			0	0	/37,50,13 SPT 0°/0 100/162			Between 20.50m to 21.00m; non-intact.			
21.10	100	72	46	0			(3.50)	Between 21.10m and 22.00m; grading to mudstone.			
22.00 22.00-22.15 22.06-22.38	100	63	39	0	/62,38 SPT 0°/0 100/150 U2						
23.50 23.50-23.50	97	23	0	0	/100 SPT 0°/0 100/0	80.05	23.65	Generally weak (variably very weak to moderately weak) thinly laminated dark grey MUDSTONE with rare very thin beds of moderately strong light brown ironstone. Fractures where evident: horizontal, closely spaced, smooth, planar; subvertical, smooth, planar; occasionally others irregular, apparently random strike.			
24.30					P3						
25.00 25.00-25.00	100	14	0	0	/100 25/10/2006: 25/10/2006: SPT 0°/0 100/0 25/10/2006: 27/10/2006:		(4.00)				
26.40 26.50			0	0	P4			Between 26.50m and 27.20m; non-intact.			
27.95 28.00-28.42 28.00	87	53	39	0	U5	76.05 75.75	27.65 (0.30) 27.95	Weak brittle black COAL. Fractures are horizontal and vertical, extremely closely spaced, planar.			
28.90			0	0			(0.95)	Moderately weak to moderately strong light grey locally thinly colour laminated dark grey MUDSTONE with occasional subrounded medium to coarse gravel size ironstone nodules and occasional carbonised plant remains. Fractures: vertical, locally very closely spaced, smooth, planar, horizontal, medium spaced, smooth, undulating.			
29.15	100	86	67	0			(0.60)	Between 28.90m to 29.15m; non-intact. Weak to moderately weak thinly laminated dark grey MUDSTONE with occasional subrounded coarse gravel size ironstone nodules and rare thin laminations of weak black coal and black carbonaceous mudstone.			
29.50						74.20	29.50	Generally moderately strong variably moderately weak to strong light to dark grey SILTSTONE with rare very thin beds			
<b>Remarks</b>									<b>Scale (approx)</b> 1:50	<b>Logged By</b> TL	
									<b>Figure No.</b>		

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