

 <b>British Geological Survey</b> NATURAL ENVIRONMENT RESEARCH COUNCIL						Site M1 WIDENING JUNCTION 21 TO 30 PRELIMINARY GI- CONTRACT 2			Borehole Number RC1220A	
Machine: Flush : Core Dia: mm Method :		Casing Diameter 140mm cased to 24.00m		Ground Level (mOD) 100.05		Client Highways Agency			Job Number WAL060099	
		Location 445372 E 365414 N		Dates 29/01/2007- 31/01/2007		Engineer Arup			Sheet 1/4	
Depth (m)	TCR	SCR	RQD	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.00	OH		0	0				Open Hole		
	0	0	0	0			(9.00)			
9.00					29/01/2007: DRY 29/01/2007: 29/01/2007: 30/01/2007:	91.05	9.00	No Recovery		
	OH		0	0			(1.50)			
Remarks								Scale (approx) 1:50	Logged By OP	
								Figure No.		




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<b>Machine:</b> <b>Flush :</b> <b>Core Dia: mm</b> <b>Method :</b>		<b>Casing Diameter</b> 140mm cased to 24.00m		<b>Ground Level (mOD)</b> 100.05		<b>Client</b> Highways Agency		<b>Job Number</b> WAL060099		
		<b>Location</b> 445372 E 365414 N		<b>Dates</b> 29/01/2007- 31/01/2007		<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>
10.50						89.55	(1.50) 10.50	NO RECOVERY (as previous sheet) Open Hole		
	24	0	0	0			(4.50)			
15.00						85.05	15.00	MADE GROUND. Poor recovery. Soft to firm, grey, gravelly clay locally orange brown. Gravel is angular and subangular, fine to coarse of mudstone, siltstone and sandstone with some cobbles and boulders of mudstone and sandstone.		
16.50										
	43	0	0	0						
18.00										
	6	0	0	0						
19.50										
<b>Remarks</b>								<b>Scale (approx)</b> 1:50	<b>Logged By</b> OP	
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		<b>Location</b> 445372 E 365414 N		<b>Dates</b> 29/01/2007- 31/01/2007		<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 (m) (Thickness)</b>	<b>Description</b>	<b>Legend</b>	<b>Water</b>
21.00	54	0	0	0				MADE GROUND (as previous sheet)		
21.50	56	0	0	0	- driller noted very heavy strike(1) at 21.50m. VV8					
22.40							(10.40)			
24.00	73	15	7	0						
					30/01/2007:DRY 30/01/2007: 30/01/2007:DRY 31/01/2007:					
25.40	98	35	0	0		74.65	25.40	Moderately strong, light grey, fine grained SANDSTONE, with occasional wispy black laminae of carbonaceous material; thinly interbedded with weak grey mudstone. Discontinuities: sandstone - vertical, rough, clean; mudstone - extremely closely spaced, randomly orientated, rough, clean.		
25.95 26.00 26.00-26.09			0	0	P1 25/50 SPT 25'/75 50/11		(1.35)			
26.75	100	39	0	0		73.30	26.75	Moderately weak, grey SILTSTONE, with closely to medium spaced, very thin and thin beds of moderately weak grey MUDSTONE locally clay. Fractures are extremely closely to closely spaced, horizontal and subhorizontal, rough, clean; vertical, rough clean. In mudstone beds, extremely closely spaced, randomly orientated, clean, smooth and rough.		
27.45 27.50 27.50-27.60			0	0	P2 25/50 SPT 25'/75 50/21		(1.70)			
28.45	44	0	0	0		71.60	28.45	Weak grey MUDSTONE, with medium spaced, thin beds of SILTSTONE. Discontinuities: extremely closely to very closely spaced, randomly orientated, smooth, rough, clean, microfracturing; vertical, planar, smooth, apparent in siltstone beds. Between 29.10m and 30.60m; poor recovery.		
29.00 29.10	94	35	0	0	P3					
<b>Remarks</b>								<b>Scale (approx)</b> 1:50	<b>Logged By</b> OP	
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		Location 445372 E 365414 N		Dates 29/01/2007- 31/01/2007		Engineer Arup		Sheet 4/4			
Depth (m)	TCR	SCR	RQD	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	
30.60 30.80					P4		(3.33)	MUDSTONE and SILTSTONE (as previous sheet)			
			0	0							
31.78			0	0		68.27	31.78 (0.34)	Between 31.70m and 31.78m; ironstone with occasional fossil bivalve fragments.			
32.10 32.12 32.20 32.45			0 0 0	0 0 0	P5	67.83 67.85 67.60	32.12 (0.08) 32.20 (0.25) 32.45	Moderately weak, black, very carbonaceous MUDSTONE. Discontinuities: extremely closely to very closely spaced, subhorizontal, rough, clean.  Weak black vitreous COAL.  Soft to very weak, grey MUDSTONE, with occasional fossilised plant remains.			
	Sample / Tests		Casing Depth (m)	Water Depth (m)							
32.45	U6						(1.35)	Strong, light grey SILTSTONE, with rare fossilised plant remains. Discontinuities: very closely to medium spaced, subhorizontal to 45 degrees, rough, clean, locally vertical, planar and rough.			
33.65	P7				31/01/2007:15.60m 31/01/2007: 31/01/2007:6.75m	66.25	33.80	Complete at 33.80m			
Remarks									Scale (approx) 1:50	Logged By OP	
									Figure No.		