


 <b>British Geological Survey</b> NATURAL ENVIRONMENT RESEARCH COUNCIL						Site M1 WIDENING JUNCTION 21 TO 30 PRELIMINARY GI- CONTRACT 2			Borehole Number <b>RC1260</b>	
Machine: Flush : Core Dia: mm Method :		Casing Diameter 140mm cased to 28.60m		Ground Level (mOD) 103.95		Client Highways Agency		Job Number WAL060099A		
		Location 445334 E 364980 N		Dates 01/11/2006- 02/11/2006		Engineer Arup		Sheet 1/5		
Depth (m)	TCR	SCR	RQD	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.00	OH		0	0	Groundwater was not apparent during boring(1) at 0.00m.			OPEN HOLE		▽1
Remarks									Scale (approx)	Logged By
									1:50	TL
									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 28.60m  <b>Location</b> 445334 E 364980 N			<b>Ground Level (mOD)</b> 103.95  <b>Dates</b> 01/11/2006-02/11/2006		<b>Client</b> Highways Agency  <b>Engineer</b> Arup		<b>Job Number</b> WAL060099A  <b>Sheet</b> 2/5
Depth (m)	TCR	SCR	RQD	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
								OPEN HOLE (as previous sheet)		
	100	72	56	0			(28.60)			
<b>Remarks</b>									<b>Scale (approx)</b> 1:50  <b>Figure No.</b>	<b>Logged By</b> TL





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			Location 445334 E 364980 N		Dates 01/11/2006-02/11/2006		Engineer Arup			Sheet 3/5	
Depth (m)	TCR	SCR	RQD	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	
								OPEN HOLE (as previous sheet)			
28.60			0	0		75.35	28.60 (0.30)	Recovered non intact as soft to firm grey CLAY with gravel sized fragments of mudstone.			
28.90						75.05	28.90	Moderately weak to moderately strong light and dark grey thinly colour laminated SILTSTONE. Fractures; horizontal, closely spaced (160/170/230), smooth and planar.			
29.20			0	0	P1		(0.90)				
29.80	96	73	32	0		74.15	29.80	Weak to moderately weak thinly laminated dark grey			
Remarks								Scale (approx) 1:50	Logged By TL		
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Machine: Flush : Core Dia: mm Method :		Casing Diameter 140mm cased to 28.60m		Ground Level (mOD) 103.95		Client Highways Agency		Job Number WAL060099A		
		Location 445334 E 364980 N		Dates 01/11/2006- 02/11/2006		Engineer Arup		Sheet 4/5		
Depth (m)	TCR	SCR	RQD	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
30.00 30.10 30.10-30.20 30.10	100	73	22	0	P2 25/50 SPT 25'/75 50/28 D9			MUDSTONE with rare very thin beds of moderately strong to strong, light brown ironstone (locally grading to siltstone). Fractures; horizontal (0-10 degrees), very closely to closely spaced (generally becoming closely spaced), smooth, planar tight to open. Other fractures irregular, apparently random strike.		
31.60										
32.50			0	0	P3		(4.80)			
33.00 33.10 33.10-33.22 33.30	90	74	15	0	25/50 SPT 25'/75 50/47			Between 33.00 and 33.30m fractures are subhorizontal (35 deg), very closely spaced, smooth and planar		
34.10	51	27	0	0	P4					
34.60 34.60-34.71 34.60	100	77	63	0	25/50 SPT 25'/75 50/33 D10	69.35 69.05	34.60 (0.30) 34.90	At 34.55m very thin bed of strong ironstone  Approximate boundary. Weak brittle black COAL with occasional flecks of pyrite. At top; approximate boundary. Strong dark brown black ironstone with frequent fossil shell fragments recovered as angular cobble sized fragments.		
36.10 36.10-36.26 36.10 36.30-36.79					25/40,10 SPT 25'/75 50/83 D11 U5	67.85	36.10 (0.90)	Approximate boundary. Generally very weak (variably stiff to very stiff) dark grey MUDSTONE with occasional carbonised plant remains and very thin laminations of black brittle coal.  Moderately strong light and dark grey thinly cross colour laminated SILTSTONE. Fractures are horizontal, closely to medium spaced, smooth, planar and open.		
37.00	100	75	33	0		66.95	37.00	Generally moderately weak (variably weak to moderately strong) dark grey MUDSTONE thinly interbedded with moderately weak to moderately strong light and dark grey colour laminated SILTSTONE. Rare very thin beds of strong light brown ironstone. Fractures are horizontal, very closely to medium spaced, smooth, planar, occasionally with soft grey clay infill (up to 8mm). Subhorizontal fractures (50 degrees), apparently widely spaced, smooth, planar and undulating. Other fractures generally subvertical to vertical and irregular		
37.60	97	69	26	0	01/11/2006:22.90m 01/11/2006: DRY 02/11/2006: U6			Between 38.90 and 39.10m moderately weak siltstone		
38.10-38.32										
39.10								At 39.60 very thin bed of strong ironstone		
Remarks								Scale (approx) 1:50	Logged By TL	
								Figure No.		



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<b>Boring Method</b> Cable Percussion		<b>Casing Diameter</b> 140mm cased to 28.60m		<b>Ground Level (mOD)</b> 103.95		<b>Client</b> Highways Agency		<b>Job Number</b> WAL060099A	
		<b>Location</b> 445334 E 364980 N		<b>Dates</b> 01/11/2006- 02/11/2006		<b>Engineer</b> Arup		<b>Sheet</b> 5/5	
<b>Depth (m)</b>	<b>Sample / Tests</b>	<b>Casing Depth (m)</b>	<b>Water Depth (m)</b>	<b>Field Records</b>	<b>Level (mOD)</b>	<b>Depth (m) (Thickness)</b>	<b>Description</b>	<b>Legend</b>	<b>Water</b>
39.30 39.85-40.05	P7 U8			02/11/2006: 02/11/2006: 02/11/2006:21.00m	63.35	40.60	MUDSTONE (as previous sheet)  Complete at 40.60m		
<b>Remarks</b>							<b>Scale (approx)</b> 1:50	<b>Logged By</b> TL	<b>Figure No.</b>