

	British Geologica NATURAL ENVIRO		•	ıı		Site  M1 WIDENING JUNCTION 21 TO 30 PRELIMINARY GI- CONTRACT 2  Born Num RC1					
Machine: Casing Diameter Flush : 140mm cased to 7.50m						Ground Level (mOD 98.80		Client Highways Agency	Job Number WAL06009		
Core Dia: Method:	mm		Locatio		367735 N	Dates 28/11/2006- 30/11/2006		Engineer Arup	Sheet 1/3		
Depth (m)	TCR	SCR	RQD	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend Mater		
0.00	PIT O/H		0	0	Groundwater was not apparent during boring(1) at 0.00m.	(s	(1.20)	Inspection Pit.	Ψ1	3	
1.20			(h)			97.60	1.20	Open Hole. For likely material description, see cable percussion borehole CP1227.			
	67	16	0	0	28/11/2006: 28/11/2006: 28/11/2006: 29/11/2006:		(9.80)	(BGS)			
59)						(4					
Remarks Prior to bor to check for	ing a Cable / r services. S	Avoidanc Services v	e Tool (C were not l	AT) surv ocated.	ey was carried out. Ar The borehole was bad	n inspectio	n pit was hand completion w	d-dug to 1.20m depth and rescanned using the CAT    Scale (approx)     1:50     Figure N	Logged By TL Io.		



British Geological Survey NATURAL ENVIRONMENT RESSARCH COUNCIL							Site  M1 WIDENING JUNCTION 21 TO 30 PRELIMINARY GI- CONTRACT 2	Borehole Number RC1227			
				casing Diameter 140mm cased to 7.50m			<b>Level (mOD)</b> 98.80			Job Number	
Core Dia: m	m		Locatio	.n		Dates		Engineer		WAL060099	
Method:			<b>Location</b> 445417 E 367735 N			28/11/2006- 30/11/2006		Engineer Arup		Sheet 2/3	
Depth (m)	TCR	SCR	RQD	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	
5)						(s	(9.80)				
11.00				0		87.80	11.00	Assumed zone of core loss.			
			0	0			(0.50)				
1.50	100	51	29	0		87.30	11.50	Generally moderately weak (variably weak to moderately Between 11.50m and 12.00m; frequently non-intact, strong) grey brown and dark grey thinly colour laminated SILTSTONE. Grey brown discolouration penetrating throughout; frequent orange brown surface discolouration. Fractures: locally extremely closely spaced irregular fracturing; horizontal, extremely closely to closely spaced.	**************************************		
2.50 2.50-12.61			0	0	   /41,50   SPT 0*/0	86.15	12.65	smooth, planar, occasionally stepped; vertical, smooth, planar, others irregular, apparently random strike.	222222		
2.65			0	0	91/112 P1		(0.80)	Moderately strong to strong light blue grey SILTSTONE with frequent thin black wispy laminae. Fractures: horizontal, very closely to closely spaced, smooth, planar; rare vertical,	XXXXXXX		
2.90					[ ]			planar.	******* *******		
3.45	100	8	0	0	/29,47,50	85.35	13,45	Generally moderately weak (variably weak to moderately Between 13.45m and 14.70m; extremely closely fractured; generally weak to moderately weak, strong) grey MUDSTONE. Frequent orange brown	V V V V V V V		
4.00					29/11/2006:	-		discolouration penetrating up to 3mm on fracture surfaces throughout strata. Fractures: horizontal, extremely closely to			
4.00-14.18			0	0	29/11/2006: SPT 0*/0 126/179		(2.35)	closely spaced, smooth, planar; subvertical, closely spaced planar; others irregular, apparently random strike.			
4.70	91	57	12	0	29/11/2006: 30/11/2006:	-		At 14.80m; very thin bed of moderately strong ironstone.			
5.50 5.50-15.66			0	0	/25,48,27 SPT 0*/0		15.00				
5.80 6.10	97	74	46	0	100/160 P2	83.00	15.80	Weak to moderately weak grey and light grey thinly colour laminated MUDSTONE. Occasional orange brown discolouration on fracture surfaces. Fractures: horizontal to subhorizontal (0 degrees to 15 degrees), very closely to medium spaced, smooth, planar, tight, vertical rough, undulating to irregular.			
7.00 7.00-17.09 7.35					/47,50 SPT 0°/0 97/92 P3						
6)	87	67	32	0			(4.50)				
8.50 8.50-18.59					/41,50 SPT 0*/0 91/85						
9.15	80	25	17	0	P4						
20.00											
Remarks								Scale (approx		d	
								1:50 Figure	No.		



British Geological Survey NATURAL ENVIRONMENT RESEARCH COUNCIL								Site  M1 WIDENING JUNCTION 21 TO 30 PRELIMINARY GI- CONTRACT 2	Borehole Number RC1227	
Machine: Flush :			Casing Diameter 140mm cased to 7.50m			Ground Level (mOD) 98.80		Client Highways Agency	Job Number WAL060099	
Core Dia: mm Method :			Location 445417 E 367735 N			Dates 28/11/2006- 30/11/2006		Engineer Arup	Sheet 3/3	
Depth (m)	TCR	SCR	RQD	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	
20.00-20.04 20.10 20.30 20.65			0	0	SPT 0'/0 50/40 P5	78.50 77.30	(1.20)	Between 20.30m and 20.65m; non-intact, recovered as clay. Weak to moderately weak dark grey to black slightly carbonaceous MUDSTONE. Fractures: subhorizontal (5 degrees to 10 degrees), closely spaced, smooth, planar; subvertical (65 degrees), smooth, planar; others horizontal to vertical, irregular, apparently random strike.		
			(b)	5)	30/11/2006: 30/11/2006:	-		Complete at 21.50m		
									(2	
			(0)							
(6)						(8			(2	
Remarks				36)				Scal (appro 1:50 Figur	TL	