

	-	British Geological Survey IATURAL BRYIRONHENT RESEARCH COUNCIL						Site  Nottinghamshire/ Derbyshire COA NMCS2 Upgrade	Borehole Number M22	
Machine:			Casing	Diamet	er		Level (mOD) 33.57	Client Highways Agency	Job Number F11451	
Core Dia: mm Method :			Locatio		£ 356069.19 N	Dates 03/09/1999- 04/09/1999		Engineer WSP Environmental Ltd	Sheet 1/2	
Depth (m)	TCR	SCR	RQD	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend Mater	
0.10-0.70 0.70-0.80 0.80-1.25	73	23	0	12	D01 0 blows 2,2/8,12,13,14 D02 0 blows SPT N=47	133.47 132.87	(0.60)	TOPSOIL.  MADE GROUND: Light brownish grey slightly sandy medium and coarse angular gravel sized fragments of limestone.  Grey thinly laminated subhorizontal very thinly bedded subhorizontal moderately weathered MUDSTONE, weak and very weak with very closely spaced subhorizontal fractures open smooth planar and medium spaced inclined	(8)	
1.25 2.15 2.20	47	0	0	99 3 25	6,19/50,0,0,0 03/09/1999:0.00m 04/09/1999:	-		fractures tight smooth irregular. (Coal Measures)		
2.00-2.15 2.40 2.45 3.00-3.13 3.13	100	0	0	97 25	SPT 25*/105 50/45 10,15/50,0,0,0 SPT 25*/100 50/30		(4.40)	from 2.60m to 3.00m moderately weathered with extremely closely spaced random fractures tight smooth irregular clay smeared		
4.15 4.20-4.54 4.53	100	36	22	98 25 6	4,9/14,20,16,0 SPT 50/185			from 4.15m to 4.20m firm grey clay with some fine to coarse angular gravel of mudstonefrom 4.20m with extremely closely spaced random fractures tight smooth irregular clay smeared	(8)	
5.10 5.45 5.50 5.60 5.75	96	52	0 0 25 0	98 97 9		128.47	(0.80)	Dark grey thinly laminated subhorizontal thinly bedded subhorizontal slightly weathered carbonaceous MUDSTONE, weak and moderately weak with closely spaced subhorizontal fractures open smooth planar. (Coal Measures)  —-from 5 45m to 5.50m black clay with much fine and medium angular and subangular gravel of coal and mudstone  —-from 5.60m to 5.70m subvertical fracture open rough		
6.60 6.95 7.30	80	52	27	99		126.97 126.62 126.27	6.60 (0.35) 6.95 (0.35)	irregular  Grey thinly and medium bedded subhorizontal slightly weathered fossiliferous MUDSTONE, weak and very weak with closely spaced subhorizontal to inclined fractures open rough irregular. (Seatearth?) (Coal Measures) from 6.20m to 6.60m with some medium and coarse rounded quartz gravel inclusions  Grey thinly laminated subhorizontal thinly bedded subhorizontal highly weathered MUDSTONE, very weak		
7.95 8.31			0	6 98	-	125.26	(1.01)	with extremely closely spaced random fractures open smooth irregular clay smeared. (Coal Measures)  Dark grey and black slightly clayey fine to coarse angular GRAVEL of mudstone and coal. (Workings?) (Coal Measures)		
8.53			0	97	_		(0.99)	Light grey thinly laminated subhorizontal medium bedded subhorizontal slightly weathered fine grained SANDSTONE, moderately weak with closely and medium spaced subvertical fractures open rough planar and medium spaced subhorizontal fractures open rough planar. (Coal Measures)	(3)	
9.30 9.35	97	93	43	0 4	=	124.27	9.30	Soft grey CLAY with much fine to coarse angular and subangular gravel of sandstone. (Possible Workings) (Coal Measures)from 8.53m to 9.30m no recovery Light grey thinly and medium bedded subhorizontal to		
Remarks 1. Inspect		ated to 0.	80m. 2. E	Borehole	complete at 12.30m.	3. Boreho	ble backfilled v	vith arisings. 4. Marker Post Ref 217/4 +50N.  Scale (approx)  1:50  Figure I	Logged By NBR	



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			Locatio		E 356069.19 N			Engineer WSP Environmental Ltd	Sheet 2/2	_
Depth (m)	TCR	SCR	RQD	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.30			0	7		(@	(2.45)	inclined (5° to 20°) slightly weathered SILTSTONE, weak and moderately weak with medium spaced subhorizontal to inclined fractures open smooth planar and widely spaced subvertical fractures open rough planar. (Coal Measures)		
11.25				55)	04/09/1999:0.00m	121.82 121.27	(0.55)	from 11.55m to 11.75m becomes dark grey thinly laminated subhorizontal  Light grey medium bedded subhorizontal slightly weathered SANDSTONE, moderately strong with fine and medium spaced subhorizontal fractures open smooth planar and closely spaced subvertical fractures open rough irregular. (Coal Measures)		
				35						
						(			(	
Remarks				36)				Scale (approx) 1:50 Figure	NBR	t