

	_	ritish eological Survey tural environment ressarch council						Site  Nottinghamshire/ Derbyshire COA NMCS2 Upgrade	Borehole Number M30
Machine: Flush :		Casing Diameter  Location  445286.81 E 366790.87 N			Ground Level (mOD) 112.67  Dates 09/09/1999		Client Highways Agency	Job Number F11451	
Core Dia: mm Method :							Engineer WSP Environmental Ltd	Sheet 1/2	
Depth (m)	TCR	SCR	RQD	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend Age
0.30-0.70	25	0	0	98	D01 0 blows	112.47	(0.20) - (0.20) - 0.20	TOPSOIL.  MADE GROUND: Grey and brown clayey sandy fine to coarse angular gravel sized fragments of sandstone.	(8)
0.70 1.50-1.95	100	0	0	98	3,2/3,3,3,3 SPT N=12	110.92	(1.55)	MADE GROUND: Brown very sandy clay with some to	
1.95 2.50-2.80	100	0	0	98	4,7/12,38,0,0 SPT 50/150	109.97	(0.95)	much fine to coarse angular to subangular gravel sized fragments of mudstone, quartz and sandstone.  Stiff orangish brown very sandy CLAY with some fine to	
2.80 3.50-3.90	100	27	0	98	2,3/3,7,12,28 SPT 50/250		(1.63)	coarse angular gravel sized fragments of sandstone. (Glacial Till)	
3.90 4.33 4.50-4.70	100	65	0 34	25 25	25,0/50,0,0,0 SPT 50/50	108.34	4.33	Grey and orange very thinly and thinly bedded subhorizontal moderately weathered medium grained SANDSTONE, moderately weak to moderately strong with extremely closely and very closely spaced subhorizontal	(8)
4.70 5.00 5.50 5.50-5.50	75	30	13	4	25,0/50,0,0,0 SPT 25*/0		(1.77)	and random fractures open rough irregular. (Coal Measures)	
6.10 6.50-6.65 6.65	100	18	0	25 25 98	19,6/50,0,0,0 SPT 25*/100 50/50	106.57	(0.75)	Grey and orangish brown thinly laminated subhorizontal very thinly bedded subhorizontal highly locally moderately weathered SILTSTONE, weak and moderately weak with extremely closely and very closely spaced subhorizontal fractures open smooth planar iron stained. (Coal Measures)	
7.30 7.50-7.60 7.60	100	0	0 0	99 25 99	25,0/50,0,0,0 SPT 25*/75 50/25	105.37	(0.45)	Stiff grey thinly laminated CLAY. (Completely Weathered Mudstone)  Grey indistinctly thinly laminated occasionally very thinly bedded subhorizontal highly weathered MUDSTONE, weak and very weak with extremely closely spaced random fractures tight smooth irregular. (Coal Measures)	
7.90 8.50	100	71	8	25 99			(2.00)	from 7.90m to 8.50m non intact	(35
9.00 9.14 9.30 9.50 9.80			0 0 0	25 19 10 25		103.37	9.30	from 9.00m to 9.14m grey thinly laminated siltstone, very weak, non intact  Grey and orangish brown thinly and thickly laminated subhorizontal thinly and medium bedded subhorizontal moderately to highly weathered fine and medium SANDSTONE, moderately weak and moderately strong with closely and very closely spaced subhorizontal	
Remarks 1. Inspect 228/4 N.		ated to 0	.70m. 2. E	Borehole	complete at 15.00m.	3. 50mm	diameter stan	dpipe installed to 15.00m. 4. Marker Post Ref  Scale (approx)  1:50  Figure I	NBR



	British Geological Survey NATURAL SEVIRONHENT RESEARCH COUNCIL							Site  Nottinghamshire/ Derbyshire COA NMCS2 Upgrade	Borehole Number M30
Machine: Flush : Core Dia: mm Method :			Casing Diameter  Location  445286.81 E 366790.87 N			Ground Level (mOD) 112.67 Dates 09/09/1999		Client Highways Agency	Job Number F11451
								Engineer WSP Environmental Ltd	Sheet 2/2
Depth (m)	TCR	SCR	RQD	FI	Field Records	Level (mOD)	Depth (m) (Thickness	Description	Legend Age
(5)	100	81	20	0				fractures open rough planar and medium spaced subvertical fractures open rough planar and irregular. (Coal Measures)	(8)
10.50			0	10			(3.15)	from 10.80m to 11.00m highly weathered with extremely closely and very closely spaced random fracturesfrom 11.00m fractures become closely and medium	
	90	54	15	8				spaced subhorizontal open rough planar	
12.00 12.55			0	25	-	100.22 100.12	2 12.45 2 12.55	Grey thinly laminated highly weathered MUDSTONE, weak with extremely closely spaced subhorizontal fractures tight smooth planar. (Coal Measures)	
13.00	60	25	0	97			(1.65)	Black moderately weathered COAL, weak with extremely closely spaced subhorizontal and subvertical fractures tight and open, smooth planar. (Coal Measures)	
13.50 14.00	80	70	0 52	25 5	_	98.47	7 14.20	Light and dayle grow think, interhooded a subhavinantel	
14.50					09/09/1999:13.30m	97.85 97.67	- (i) 18\	Light and dark grey thinly interbedded subhorizontal moderately weathered MUDSTONE and carbonaceous mudstone weak and moderately weak with extremely closely and very closely spaced subhorizontal and random fractures open and tight smooth planar clay smeared. (Coal Measures) from 14.00m moderately weathered, very thinly and thinly bedded mudstone, moderately weak with very	(8)
								closely and closely spaced subhorizontal fractures  Light grey thinly bedded subhorizontal slightly weathered fine SANDSTONE, moderately strong with extremely closely spaced subhorizontal fractures open rough planar. (Coal Measures)	
			D	55)				Complete at 15.00m	
Remarks			B	36)		1	1	Scale (approx)  1:50  Figure I	Logged By NBR