

G101
~~W401~~



**British
Geological Survey**

NATURAL ENVIRONMENT RESEARCH COUNCIL

Site	
------	--

M1 WIDENING JUNCTION 21 TO 30 PRELIMINARY GI -
CONTRACT 2

Borehole

RC1242

Boring Method
Cable Percussio

Casing Diameter	
------------------------	--

Ground Level (mOD)	
--------------------	--

Client	
--------	--

Highways Agency

Job Number	
------------	--

WAL060099

Location

445155 E 373213 N

Dates	Amount	Particulars
1999		
1998		
1997		
1996		
1995		
1994		
1993		
1992		
1991		
1990		
1989		
1988		
1987		
1986		
1985		
1984		
1983		
1982		
1981		
1980		
1979		
1978		
1977		
1976		
1975		
1974		
1973		
1972		
1971		
1970		
1969		
1968		
1967		
1966		
1965		
1964		
1963		
1962		
1961		
1960		
1959		
1958		
1957		
1956		
1955		
1954		
1953		
1952		
1951		
1950		
1949		
1948		
1947		
1946		
1945		
1944		
1943		
1942		
1941		
1940		
1939		
1938		
1937		
1936		
1935		
1934		
1933		
1932		
1931		
1930		
1929		
1928		
1927		
1926		
1925		
1924		
1923		
1922		
1921		
1920		
1919		
1918		
1917		
1916		
1915		
1914		
1913		
1912		
1911		
1910		
1909		
1908		
1907		
1906		
1905		
1904		
1903		
1902		
1901		
1900		
1899		
1898		
1897		
1896		
1895		
1894		
1893		
1892		
1891		
1890		
1889		
1888		
1887		
1886		
1885		
1884		
1883		
1882		
1881		
1880		
1879		
1878		
1877		
1876		
1875		
1874		
1873		
1872		
1871		
1870		
1869		
1868		
1867		
1866		
1865		
1864		
1863		
1862		
1861		
1860		
1859		
1858		
1857		
1856		
1855		
1854		
1853		
1852		
1851		
1850		

Dates	14/11/2006- 16/11/2006
-------	---------------------------

Engineer

Агуд

Sheet

1/3

Depth (m)	Sample / Tests		Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend
					Groundwater was not apparent during boring(1) at 0.00m.			For likely material description see CP1242.	
	41	41	35	0			(7.70)		
	TCR	SCR	RQD	FI					
7.70	61	0	0	0		54.80	7.70 (0.41)	MADE GROUND. Boulder of moderately strong light grey fine grained sandstone, with extremely closely spaced thin laminae of grey siltstone.	
						54.39	8.11 (0.59)	Assumed zone of core loss.	
8.70-9.15 8.70					4, 5/5, 6, 7, 8 SPT N=26	53.80	8.70 (0.50)	MADE GROUND. Firm mottled grey and light brown gravelly clay. Gravel is subangular to subrounded, fine to coarse of mudstone and siltstone.	
	20	0	0	0		53.30	9.20	Very poor recovery. Recovered as light grey brown with some grey and orange mottling, slightly sandy, very gravelly clay. Gravel is subangular to subrounded, fine to coarse of siltstone and sandstone, with occasional cobbles of fine grained sandstone. Possible	

Remarks

Rotary follow on from CP1242.;No visual or olfactory indication of contamination was observed.;Driller notes borehole unstable when coring. Casing installed to 13.20m. Difficult reaming through boulders.;

Scale (approx)

1:50


Logged
By

OP

Figure No.

[illegible]



 British Geological Survey NATURAL ENVIRONMENT RESEARCH COUNCIL							Site M1 WIDENING JUNCTION 21 TO 30 PRELIMINARY GI- CONTRACT 2			Borehole Number RC1242	
Machine: Flush : Core Dia: mm Method :		Casing Diameter 140mm cased to 18.00m		Ground Level (mOD) 62.50		Client Highways Agency		Job Number WAL060099			
		Location 445155 E 373213 N		Dates 14/11/2006- 16/11/2006		Engineer Arup		Sheet 3/3			
Depth (m)	TCR	SCR	RQD	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	
20.25					P3						
20.50					25/50						
20.50-20.60					SPT 25'/75						
					50/29		(3.20)				
	100	41	14	0				From 21.50m; occasional gravel sized nodules of ironstone.			
22.00					15/11/2006:14.10m	40.30	22.20				
					15/11/2006:		(0.72)	Moderately weak (variably stiff clay/very weak) dark grey MUDSTONE with extremely closely to very closely spaced thick laminae of coal, with many fossilised plant remains. Discontinuities: extremely closely to closely spaced.			
					16/11/2006:						
22.92						39.58	22.92				
23.03					P4		(0.38)	Weak black very carbonaceous MUDSTONE with extremely closely spaced thin and thick laminae of vitreous coal. With occasional gravel sized pockets of pyrites. Discontinuities: intact.			
23.30						39.20	23.30				
23.50	95	53	32	0			(1.16)	Weak and moderately weak (variably clay/very weak) dark grey and light grey MUDSTONE, with closely to medium spaced thin beds of carbonaceous mudstone and coal. With some fossilised plant remains. Discontinuities: extremely closely spaced, randomly orientated, with some clay infill microfractures. Very closely spaced, horizontal and subhorizontal, rough, clean.			
						38.04	24.46				
24.46	96	78	42	0				Moderately strong, grey and light grey thinly interlaminated to thinly interbedded MUDSTONE and siltstone. Discontinuities: occasionally non-intact, extremely closely to			
25.00					P5			At 25.05m; coarse gravel sized nodule of ironstone, medium spaced, horizontal, smooth, clean. Vertical and subvertical, undulating, rough, clean.			
25.00											
25.81-26.17	100	69	39	0	U6		(3.54)				
26.50											
	Sample / Tests		Casing Depth (m)	Water Depth (m)							
26.70-27.12	U7										
27.26	P8										
					16/11/2006:	34.50	28.00	From 27.08m to 27.14m; ironstone.			
					16/11/2006:			From 27.83m to 27.88m; ironstone.			
								Complete at 28.00m			
Remarks								Scale (approx) 1:50	Logged By OP		
								Figure No.			