

RECORD OF BOREHOLE NO. EG (sheet 1) ^{revised SE HOU 11 23 110/10} TR23NW10
2454.3892

Ground level: +154.20m. N.G.F.

Dia. of boring: 0.25m. to 17.10m.;
0.20m. to 47.24m.;
0.14m. to 91.74m.;
0.11m. core to 129.39m.

Type of boring: Percussion to 47.20m.,
Rotary to 129.40m.

Lining tubes: 0.25m. to 7.30m.;
0.20m. to 23.50m.

Daily Progress	Core Recovery or Samples		Change of Strata		Description of Strata
	Depth (metres)	Percentage or Type	Legend	Depth (metres) N.G.F. Level	
				0.15 +154.15	TOP SOIL
	0.61	D			Firm brown sandy CLAY, becoming stiff to hard below 2.74m.
	2.13	D			
13.7.65.	3.66	D		4.27 +150.01	
	5.18	D			
	6.71	D		7.01 +147.21	Stiff brown sandy CLAY with flints and a few chalk fragments
	8.23	D		8.84 +145.44	Brown and grey CLAY with bands of weathered chalk
	9.75	D			Shale in upper part New Pit
	11.28	D			White CHALK, without flints
	12.75	D			
	14.33	D			
14.7.65.	15.65	D			
	17.37	D			
	19.90	D			
	20.42	D			

Key
R indicates undrilled rotary drilling.
D indicates disturbed sample.
■ indicates waxed core sample.
Scale 1cm = 1 metre

Remarks
Ground-water stood at a depth of 75.70m. below ground level, i.e. at +78.60m. N.G.F. Permeability and verticality tests carried out, and borehole sealed with cement grout on completion.
Base HCK at 59.74
No discernable lithological break for base New Pit nor Zigzag Chalk. Borehole terminates in low West Melbury Mainly Chalk Formation

Soils No.: S 4289



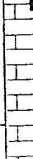
LAND BOREHOLES
IN ENGLAND FOR THE PROPOSED CHANNEL TUNNEL

FIG. 6




RECORD OF BOREHOLE NO E67 (sheet 2)

Daily Progress	Core Recovery or Samples		Change of Strata			Description of Strata	
	Depth (metres)	Percentage or Type	Legend	Depth (metres)	M. G. F. Level		
	21.95	D				MIDDLE CHALK	
	23.47	D					
	24.99	D					
	26.52	D					
	28.04	D					
	29.57	D					
	31.09	D					
15.7.65.	32.61	D					see previous sheet
	34.14	D					
	35.66	D					
	37.19	D					← average thickness would suggest top Holywell at about this level.
	38.71	D					
	40.23	D					
	40.76	D					
	43.28	D					
<p>Key</p> <p>D indicates undered rotary sample.</p> <p>D indicates disturbed sample.</p> <p>■ indicates waxed core sample.</p> <p>Scale 1cm = 1 metre</p>			<p>Remarks</p>				
<p>LAND BOREHOLES IN ENGLAND FOR THE PROPOSED CHANNEL TUNNEL</p>						<p>Soils No : S 4289</p> <p>FIG. 6 (contd.)</p>	

RECORD OF BOREHOLE NO E6 ⁴⁷ (sheet 3)

Daily Progress	Core Recovery or Samples		Change of Strata			Description of Strata
	Depth (metres)	Percentage or Type	Legend	Depth (metres)	N. G. F. Level	
16.7.65.	44.81	D		47.24	+107.04	see last description
	46.33	D				
	47.24					
3.8.65.	48.77	100%		56.90	+97.38	<p>Rather hard creamy-white 'nodular' CHALK, with numerous irregular wisps and streaks of greyish marly chalk. Greyish wisps less frequent below 51.80m., and chalk distinctly hard. Polished vertical joint about 48.80m. Cores broken irregularly (due to nodular structure) in lengths from 0.20m. to 0.40m.</p> <p>Base Max 97.3m</p>
	51.82	100%				
	53.65	100%				
	56.69	100%				
	59.74	100%				
	59.74	100%				
3.8.65.	62.79	100%		59.74	+94.54	<p>Pale grey-white marly CHALK, with group of greenish-grey marl bands in upper 0.40m. Whiter chalk from 57.86m. to 58.42m. Steep, curving black-stained joint at 57.76m.</p> <p>Base Holwell Chalk 94.46m</p>
	65.04	100%				
	65.04	100%				

Key

-  indicates uncured rotary drillings.
-  indicates disturbed sample
-  indicates waxed core sample.

Scale 1cm = 1 metre

Remarks

MELBOURN ROCK
MIDDLE CHALK

PLENUM MARL










WHITE CHALK
LOWER CHALK

LAND BOREHOLES
IN ENGLAND FOR THE PROPOSED CHANNEL TUNNEL

Soils No :
S 4289

FIG. 6
(contd.)

RECORD OF BOREHOLE NO E6 (sheet 4)

Daily Progress	Core Recovery or Samples		Change of Strata			Description of Strata
	Depth (metres)	Percentage or Type	Legend	Depth (metres)	N. G. F. Level	
	68.88	100%				see previous sheet
		100%		70.03	+82.25	
	71.32			71.32	+82.96	Pale grey-white CHALK, but harder and grey-streaked. Cores rather broken, mainly lengths of 0.15m. to 0.20m. No clear natural fractures.
						CHALK, not sampled
						
4.9.65	(90.50)					
<p>Key</p> <ul style="list-style-type: none">  indicates uncored rotary sample.  indicates disturbed sample.  indicates waxed core sample. <p>Scale 1cm = 1 metre</p>			Remarks			
LAND BOREHOLES IN ENGLAND FOR THE PROPOSED CHANNEL TUNNEL						Soils No : S 4289
						FIG. 6 (contd.)

IN 23 NW/10

RECORD OF BOREHOLE NO E6 (sheet 5)

Daily Progress	Core Recovery of Samples		Change of Strata		Description of Strata
	Depth (metres)	Percentage or Type	Legend	Depth (metres) N. G. F. Level	
4.8.65.	91.74			91.74 +62.54	see previous sheet
	94.70	90%			Massive grey streaky CHALK showing cyclic alternation from pale hard chalk downwards to dark marly chalk. Cycle bases noted at 95.76m., 96.87m., 97.69m., 98.04m., 100.05m., but other vaguer cycles present. No clear natural fractures; cores intact in lengths to 0.53m.
	97.85	100%			
	99.36	100%			
5.8.65.	100.05	100%		100.05 +54.23	
	102.41	100%			Grey marly CHALK with vague cycles of paler harder chalk; latter noted at 100.05m., 103.71m., 104.85m., 106.43m., 107.34m., 107.90m., 109.30m., 109.89m., and 110.67m. Smooth joints noted at following depths and inclinations to horizontal:- 101.09m., dip 35°; 102.13m., dip 20°; 102.62m., dip 15°; 106.17m., dip 10°; 106.17m. to 106.36m., dip 80°. Cores generally intact in lengths to 0.84m., but broken, with much drilling disturbance, from 103.94m. to 105.46m.
	105.46	100%			
6.8.65.	100.51	100%			
	110.67	100%		110.67 +43.61	
	111.56				see next sheet
<p>Key</p> <p>F indicates uncored rotary drilling.</p> <p>D indicates distorted sample</p> <p> indicates waxed core sample.</p> <p>Scale 1cm = 1 metre</p>			<p>Remarks</p>		
<p>LAND BOREHOLES IN ENGLAND FOR THE PROPOSED CHANNEL TUNNEL</p>					<p>Soils No : S/4289</p> <p>FIG. 6 (contd.)</p>

LOWER CHALK
GREY CHALK

RECORD OF BOREHOLE NO E6 (sheet 6) 23 NW 10

Daily Progress	Core Recovery or Samples		Change of Strata			Description of Strata
	Depth (metres)	Percentage or Type	Legend	Depth (metres)	N. G. F. Level	
7.8.65.	114.30	100%				Relatively hard, paler, streaky grey CHALK, in thick cycles separated by subordinate developments of dark marly chalk. Tops of hard beds noted at 112.12m., 113.94m., 115.72m., 117.25m. and (vague) 118.82m. Below 111.52m. no clear cycles visible and chalk predominantly hard and pale, but dark, marly, from 123.04m. to 123.44m. Smooth joints seen at: 114.88m., dip 15°; 120.09m. to 120.40m. dip 60°; 123.14m., dip 30°; otherwise no clear natural fractures and cores mainly intact in lengths to 0.56m.
	117.35	100%				
	120.40	100%				
	123.44	100%		123.44	+30.04	
9.8.65.	126.34	100%				Relatively hard, pale grey streaky CHALK without marly cycles. <u>Sponge bed</u> at 124.92m. Joints noted as follows:- rough, dipping 40° at 123.94m., rough, dipping 15° at 124.62m., smooth, dipping 45° at 125.27m., smooth, dipping 45° at 127.18m., smooth, dipping 35° at 127.25m., smooth, dip horizontal at 127.86m., rough, dip irregular about 45° at 128.02m. Cores intact in lengths to 0.51m.
	129.27	100%		129.27	+24.89	
10.8.65.						<i>Sponge beds suggest lowest part of West Melbury Marly Chalk.</i>
Key R indicates uncored rotary drilling. D indicates distorted sample indicates waxed core sample. Scale 1cm = 1 metre			Remarks			
LAND BOREHOLES IN ENGLAND FOR THE PROPOSED CHANNEL TUNNEL						Soils No: S 4289
						FIG. 6 (contd.)

GREY CHALK
LOWER CHALK