

GEOLOGICAL SURVEY OF GREAT BRITAIN RECORD OF SHAFT OR BORE FOR MINERALS	(For Survey use only) 6-inch Map Registered No.			
Name of Shafe of Bore given by Sadagha Servey: 598	SKI	46NE 7	7	
Name and Number given by Chapter: TORWAY	Nat. Grid I			
For whom made	1'N.S. Map	17O.S. Map	Confidential	
Exact site Attach a tracing from a map, or a sketchmap, if possible.	No.	No.	or not	
Purpose for which made				
Ground Level at shaft relative to O.D	D. of beginn	ing of shaft bore		
Made by	Date of a	inking 9	(3	
Information from	Date rec	eived	(>	
Examined by DI took (& Bosoly			***************************************	
SPECIMEN NUMBERS AND ADDITIONAL N	OTES			

(For Survey use only)	DESCRIPTION OF STRATA	Тис	IN 1884	DEF	TH -
GEOLOGICAL CLASSIFICATION	DESCRIPTION OF STRATA	Fr	in.	Fr	in.
(Clay boom sawy with sandston				
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V-LA.	Cod		<u> </u>	8	C
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(80)				\5	
	Sand stone, gray time granis with		-		
	sparedu carbonavan maran	1	0	١٤	0
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Bady.	A Real Property of the Control of th	19	2	35	9
l	Some bakes, contraction filled	33	6	3 <i>9</i>	3
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	Plat fragente I touston while				
	Morton and with comb one coul				
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	3-2-4	Hope			
	A STATE OF THE STA				
(6)					
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			44	L	



RECORD OF BOREHOLE NO. 588

Ground level: 316.8ft. above 0.0. Newlyn (2.4.63)

Dia. of boring: 8X (18in.core) to 45ft.

Shall and finance and

Plaile	Care Recove or Semple	(F)	Ch	ange of S	itrets	SCHENE T	,
Pally	Depth	Person to age or Type	Lagend	Depth	O.D. Level	Description of Strats 4527 6532	
are the state of t			1/2	2107	314.8	TOPSOIL	~~~
	2'0" - 3'6" 3'6" "'6"	U(4)					
	3'6"	D	鼲	1		Stiff friable mottled brown sandy and silty CLAY	NE.
	6'0" - 7'6"	u(a)		6'0"	310.8		RECENT
	7'6" 8'6"	0	瞳			Yery soft grey silty CLAY	ALLUVIUM
			対		908.		NIAG
2.3.63	11'6" - 13'0" 13'0"	U(#)		13'0"	305.3 303.8	Soft grey organic allty CLAY with pockets	Ī
		80			77,63		
3.3.63	13'0" - 17'0" 17'0"	80		17'0'	ا ا	Park grey laminated SANDSTONE	
,,,,,,,	18'0"	100%		19'0'	299.8	Pale grey fine shaly SANDSTONE	
				74.8	297.8		
		435					
			41				
4.63	25101						
			100				8
						Broken grey SHALE, scapy near base	TVCS
<u> </u>		1005					MEASURES
							288
							-
	36°0° 37°0°	1005		37.404	279.8		1
	7/3/		821293°	*	87.74.9		
4.63	40,04	501		#0'9"	226	COAL	
	10,6,	705		** T	276.1		
	85°0°	60%	- 			Grey sendy SHALE	
4.63	A3 V		433	45'0'	271.8		
1.5							
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			1			회 원인 그는 이렇게 끊으면 되었다.	
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et produce de la constante de					$\otimes \lambda$		
. International contractions of the contraction of	ŀ		- 1				
y to type	of sample :		Rema	rks : (C)bservatio	ens on ground-water, etc.)	-
(11) - 1	in, dia, undisturbed in, dia. "	sample.	25 - 12			encountered during boring.	
- 0	isturbed sample. ulk disturbed sampl	is.		. 04 H 0 - W		with the second	
() \$1	reter sample. tandard penetration						
ž.	ynamic cone penetr sst.	stion	•				ją.
. in brack . of blow	tets gives s/12 in. penetration.	. 1					
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			LONG	10 Y-MO	rksh i re	MOTORWAY 9/9847	·nian
			TROW	ELL TO	BARLBORO	UGH SECTION	
						FIG. 2	29



SK 46 HE 1. RECORD OF BOREHOLE NO. 45988

Depth Depth	Daily	Core Recove er Semple	ry s	Ch	ange of S	itrata	· SKYGK	77
1'6' - 3'0' 10'	rogress		Parmate	Legend	Depth	O.D. Level	Description of Strata	
### Story of sample: 1.			Туре	17.65	1.0.	313.4	TOPSCIL	
The type of sample: (1) General Surple Surp		1'6" - 3'0"	Ω(#)					RE
10 f = 12 to				談		BA .	sandy silty CLAY	CENT
10 f = 12 to				3	3.67	308.9	Very soft grey silty CLAY with pockets	1
10 f = 12 to	* :				8*0*	306.4	of grey clayey peat	V
reo type of sample: (4) — 4 in. dis, undisturbed sample, — but disturbed sample, — but disturbed sample, — water sample — organization sast. (2) — sandard poseerstion sast. — organization sast. (3) — sandard poseerstion sast. (4) — 4 in. dis, undisturbed sample, — sandard poseerstion sast. (5) — sandard poseerstion sast. (6) — sandard poseerstion sast. (7) — sandard poseerstion sast. (8) — sandard poseerstion sast. (9) — sandard poseerstion sast. (1) — sandard poseerstion sast. (1) — sandard poseerstion sast. (1) — sandard poseerstion sast. (2) — sandard poseerstion sast. (3) — sandard poseerstion sast. (4) — sandard poseerstion sast. (5) — sandard poseerstion sast. (6) — sandard poseerstion sast. (7) — sandard poseerstion sast. (8) — sandard poseerstion sast. (9) — sandard poseerstion sast. (1) — sandard poseerstion sast. (1) — sandard poseerstion sast. (1) — sandard poseerstion sast. (2) — sandard poseerstion sast. (3) — sandard poseerstion sast. (4) — sandard poseerstion sast. (5) — sandard poseerstion sast. (6) — sandard poseerstion sast. (7) — sandard poseerstion sast. (8) — sandard poseerstion sast. (9) — sandard poseerstion sast. (1) — sandard poseerstion sast. (1) — sandard poseerstion sast. (1) — sandard poseerstion sast. (2) — sandard poseerstion sast. (3) — sandard poseerstion sast. (4) — sandard poseerstion sast. (5) — sandard poseerstion sast. (6) — sandard poseerstion sast. (7) — sandard poseerstion sast. (8) — sandard poseerstion sast. (9) — sandard poseerstion sast. (1) — sandard poseerstion sast. (1) — sandard poseerstion sast. (1) — sandard poseerstion sast. (2) — sandard poseerstion sast. (3) — sandard poseerstion sast. (4) — sandard poseerstion sast. (5) — sandard poseerstion sast. (6) — sandard poseerstion sast. (7) — sandard poseerstion sast. (8) — sandard poseerstion sast. (9) — sandard poseerstion sast. (1) — s		9.0.	810	囊	10.0.	304.4	Dark brown clayey PEAT	_ =
Co type of sample :	.5.63		U(#)	部	12'0"			
Remarks : (Observations on ground-water, etc.)	•					302.7	CURL	T SOAL
Remarks : (Observations on ground-water, etc.)								ME A
Remarks : (Observations on ground-water, etc.)								SURE
(4) — 4 in. dia. undisturbed sample. (1½) — 1½ in. dia. — disturbed sample. — bulk disturbed sample. — water sample. (2) — standard penetration test. (3) — dynamic cone penetration test. (4) — dynamic cone penetration test. (5) — dynamic cone penetration test. (6) — in brackets gives of blows/12 in, penetration. MINISTRY OF TRANSPORT LONDON-YORKSHIRE MOTORWAY Soils No: 3/3587								S
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(4) — 4 in. dia. undisturbed sample.								
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(4) — 4 in. dia. undisturbed sample. (1) — 1 in. dia. " — disturbed sample. — bulk disturbed sample. — water sample. (2) — standard penetration test. (3) — dynamic cone penetration test. (4) — in brackets gives of blows/12 in. penetration. MINISTRY OF TRANSPORT LONDON-YORKSHIRE MOTORWAY Solis No: 3/3547								
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(4) — 4 in. dia. undisturbed sample.	Pasticonner, married and an article and article article and article article and article article and article article and article article article article and article ar	n de la composition della comp						
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in brackets gives of blows/12 in, penetration. MINISTRY OF TRANSPORT LONDON-YORKSHIRE MOTORWAY Soils No: 3/3587	(4) - 4 (1½) - 1 - 6 - 8 () - 8 () - 6	in. dia. undisturbed in. dia. sturbed sample. lik disturbed sampl ster sample. andard penetration rnamic cone penetri	e. test.	Groun	d-water and ro	was firs	t encountered at depth of 12ft. below groun th of lift. within 15 minutes.	e d
LONDON-YORKSHIRE MOTORWAY S/3547	in brack	ets gives	***************************************					
							MATABLIAN	
				~0 N D	en~iVř	ANDINE	3/35I	17



se of bo	Core R	ecove	ole Aug ry	1	ange of S	trata	Lining tubes: Not used SK46ME 77	
Daily rogress	er Se Depth		Percent age or		Depth	O.D. Level	Description of Strata	<i>.</i>
				IIR	3'0'		TOPSOIL	
	3*0* -	7*0*	8 D) v	311.4	Soft grey silty CLAY	
				基	7'0"	307.4		ALLUVIUM
	7°0" - 9°6"	9*6*	80 0		9'6"	304.9	PEAT Soft grey silty CLAY	[₹
.7.63					11.6.	909.4		
		÷						
			edi.					
							바람 강하는 그 그는 얼마 그 그를	
							불렀다. 전 모하는 얼굴하다는 건물	
							에 취임 경기 - 1982년 - 1985년 - 1985	
	-							
							않 는 하는 보고 등 경쟁 선생들이 되다.	
		9						
						-1.45		Ļ.,
(4) 4	of sample : in, dia, undis		sample.	-			ons on ground-water, etc.)	
~~ (in, dis. listurbed sam oulk disturbed	pie.	le.	Groun	id -wa ter	was fir	at encountered at depth of 3ft. below ground)	461°
()-s	vater sample tandard pene	tration	test.					
() (lynamic cone est, kets gives	peneti	ation					
o. of blow	/s/12 in, pener	tration		<u></u>		····		
						RY OF TR	ANSPORT Soils N	



Ground lev	6				BOR 84.7.63)	SK 46 NE EHOLE NO. H598B/2	
Type of bo	ring: Post-ho	le Auger	•			Lining tubesNot used	
	Core Reco	very es	G	hange of :	Strata	SK46ME 17	
Progress	Depth	Percent- age or Type		Depth	0.D. Level	Description of Strata	
•	1'0" - 3'8"	80		1'0"	313.4 311.4	TOPSOIL SANDSTONE fragments (presumed fill)	FE
	9°0° - 9°0°,	BD		8*0*	306.4	Soft grey silty CLAY	RECENT ALLUVIUM
2,7.63	8'0" - 10'0" 10'0" - 11'0"	80 80 -	5.2	10'0"	304.4 303.4	PEAT Soft grey-brown very slity CLAY with some fine sand	TUVIUM
Ground lev						HOLE NO. H598B/3 Dia. of boring: Bin.	
Type of bo	ring: Post-ho	le Auge	C			Lining tubes : Not used	
	1'0" - 3'0"	90		1'0" 3'0"	313.6	TOPSOIL SANDSTONE fragments (presumed fill)	٦ <u>۽</u>
				10'0'	311.6 304.6	Soft gray CLAY	REGENT
3.7.63	10%*	0	2	10'6'	304.1	Snaly COAL	HE X80hE'S

FIG.232 GEORGE WIMPEY & CO., LTD. CENTRAL LABORATORY HAYES

Ground-water was first encountered at depth of 9ft, below ground level.

Remarks: (Observations on ground-water, etc.)

8.H*s H598B/2 and H598B/3

MINISTRY OF TRANSPORT

LONDON-YORKSHIRE MOTORWAY

TROWELL TO BARLBOROUGH SECTION

Key to type of sample :

Soils No:

5/3547



RECORD	ogical survey of great br of Shaft or Bore for N		(For Su 6-inch Map	rvey use on Registere	-	
Name of Shaft of Bo	IUNAOHINE	598 C	SKYE	NE 7	רו	
Name and Number g	iven by symetin DIMAY		Nat. Grid I		- '	
	<u> </u>	***************************************				
	County		1"N.S.Map	1'O.S.M	1ap C	onfidentis
Exact site	(At	tach a tracing from map, or a sketch-	No.	No.		or not
	ft relative to O.D		L	: sha	aft	
Made by	e relative to U.D	ot ground level give O	Dote of	ing or bor	ر 1943	
Information from	Ler Sarah		Date or			
	4.001.					******************
	(26 ⁶)		- 1(C
(For Survey use only) GEOLOGICAL CLASSIFICATION	DESCRIPTION OF		Тніс			
-		STRATA	FT	in.	FT	epth in
		STRATA	FT	 		
	Clay opy brown sulf.	STRATA	Fr	 		in
			Fr	 	FT	in
	Clay on bone, ch	معالات العنب		 	FT 5	in O
	See			 	Fr	o o
	Clay	معالات العنب		 	FT 5	o o
000	Clay and a second	معالات العنب		 	FT	0 0
BGS)	Cal	معالات العنب		 	FT	in o
ags)	Cod.			 	5 8 9 13 5 19	in o
	Cod.			 	5 8 9 13 15 19 19	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
BGS)	Cod.			 	FT 8 8 9 13 15 19 22 24 24	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
ags)	Cod			 	FT 8 8 9 13 15 19 22 24 24 24	0 0 0 0 0
ags)	Cod.			 	FT 8 8 9 13 15 19 22 24 24	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
ags)	Cod			 	FT 8 8 9 13 15 19 22 24 24 24	0 0 0 0 0
BGS)	Cod			 	FT 8 8 9 13 15 19 22 24 24 24	0 0 0 0 0
ags)	Cod			 	FT 8 8 9 13 15 19 22 24 24 24	0 0 0 0 0
BGS)	Cod			 	FT 8 8 9 13 15 19 22 24 24 24	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
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	Cod			 	FT 8 8 9 13 15 19 22 24 24 24	0 0 0 0 0



RECORD OF BOREHOLE NO. 5980

Ground level: 312.1ft. above 0.0.Hewlyn (24.7.63.) Dia. of boring: 8in.

Daily	Core Recove or Supple	67 6	C.	ange of S	itrats	SK46METT Description of Strata		
rogress	Depth	Percent age or	Logend	Depth	O.D. Level	Description of Strats		
		Type	28	1,04	311.1	TOPSOIL		
	1'6" - 3'0"	ព(#)		3'0"	309.1	Yellow slightly clayey SAND		
	5*0*	D ED					ALLUVIUM	
	5'0+	0	34			Soft to firm grey-brown alightly organic clayey SILT	Y U	
	6'6" - 8'0" 8'0"	B(#) D	鼯	9'0"	303.1		*	
	9'0" - 11'0" 9'0"	D 80						
	11'6" - 13'0"	V(4)				firm mottled grey and brown sandy CLAY with fragments of sandstone		
	13'0'	D 80		14'6"	297.6			
	15.0.	Ď				Stiff to very stiff fissured gray shaly		
	16'6" - 18'0" 18'0"	U(a) D	10 mg/s	18'0"	294.1	wilty CLAY	2	
	19.0.	80				COAL	À	
	19.0* - 22.0*	80		22"0"	290.1		75.	
Ŋ	22'6" - 24'0"	0(4)					CUAL MEASUMES	
- 1	24.0. 24.0.	0				Weathered grey SHALE	4	
3-8	25'0"	80		27'6"	284.6			
	29'0"	BD 0	1					
			1 X X 1					
	34'0*	8 D		e e e e e e e e e e e e e e e e e e e		Weathered grey shaly SANOSTONE		
5.63.	94.0.	Ď		36'0"	276.1			
				100				
1								
							•	
1								
1								
					400			
r to type	of sample :		9	obs · If		ons on ground-water, etc.)	1 1-	
AND ADDRESS OF THE PARTY OF	in. dia, undisturbed	eample,	VAIL		- Date LATIC	me an Bronna usper seri	3.	
d	into our. Inturbed sample, Lik discurbed samp	. "	Grou	nd-water	r was fir	st encountered at depth of 18ft, and rose to b	ft.	
	ater sample. andard penetration		ompt.	n in 15	minutes.	Sample of ground-water taken.		
()—d	rnamic cone penetr st.	ation						
in brack								
			7	MINIST	RY OF TR	ANSPORT Soils No	· :	
			LONG			MOTORWAY 8/3547		
			TONE	C11 TA	BIDI BADA	NIGH SECTION FLO.		
14 8 8		- Company	1000	566 1W	BANL BUNG	I FIG.2:		



DS98293/1 PS85 4m 11/61XL

RECORD	OGICAL SURVEY OF GREAT BRITAIN OF SHAFT OR BORE FOR MINERALS OF SIMPLE BY GOOD BY GO	6-inch Map	Registe	ered No.	
and the state of t	TURKSHIRE 528 D	SK46	Compression	AND DESCRIPTION OF THE PROPERTY OF THE PROPERT	
Name and Number gi	ven by owner TORWAY	Nat. Grid F	Referenc	ce	
	County	1"N.S.Map	1°0.S	.Map Co	nfidential
4.0	Attach a tracing from a map, or a sketch-	No.	No	١.	or not
	map, if possible.	No. and control an	American establishment in the second	er i mode "Lina elgidos	
Purpose for which mad Ground Level at shaft	relative to O.D. If not ground level give O	.D. of beginn	ing of s	haft	
Made by	потительного потит	Date of	sinking	1963	immunda lina qe ça nestdana i s
Information from	so sayle Coas	Date rec	ceived		MP-01-1771-1711-171-1
Examined by	SPECIMEN NUMBERS AND ADDITIONAL N		*********************	***************************************	
(For Survey use only)		Thic	KNESS	DE	PTH
(For Survey use only) GEOLOGICAL CLASSIFICATION	DESCRIPTION OF STRATA	THIC	KNESS ÎN.	Dr. Fr	
GEOLOGICAL	DESCRIPTION OF STRATA	FT	1	Fr 3	in
GEOLOGICAL	Chy bon sony will said the for	FT	1		in
GEOLOGICAL	" Sty born song will said the forg	FT	1	Fr 3	in o
GEOLOGICAL	Clay brown sondy, will smither from	FT	1	Fr 3	in
GEOLOGICAL	Chy bon some ill cartter for cher	FT	1	Fr 3	in o
GEOLOGICAL	Chy bon some ill cartter for cher	FT	1	Fr 3	in o
GEOLOGICAL	Chy bon some ill cartter for cher	FT	1	Fr 3	in o
GEOLOGICAL	Chy bon some ill cartter for cher	FT	1	Fr 3	in o
GEOLOGICAL	Chy bon some ill cartter for cher	FT	1	Fr 3	in o
GEOLOGICAL	Chy bon some ill cartter for cher	FT	1	Fr 3	in o
GEOLOGICAL	Chy bon some ill cartter for cher	FT	1	Fr 3	in o
GEOLOGICAL	Chy bon some ill cartter for cher	FT	1	Fr 3. 3. 5. 6. 10. 15. 15. 15. 15. 15. 15. 15. 15. 15. 15	in o
GEOLOGICAL	Chy bon some side souther for	FT	1	Fr 3	in o
GEOLOGICAL	Chy bon some side souther for	FT	1	Fr 3. 3. 5. 6. 10. 15. 15. 15. 15. 15. 15. 15. 15. 15. 15	in o
GEOLOGICAL	Chy bon some side souther for	FT	1	Fr 3. 3. 5. 6. 10. 15. 15. 15. 15. 15. 15. 15. 15. 15. 15	in 0
GEOLOGICAL	Chy bon some side souther for	FT	1	Fr 3. 3. 5. 6. 10. 15. 15. 15. 15. 15. 15. 15. 15. 15. 15	in o



RECORD OF BOREHOLE NO. H598D

Ground level: 322.8ft. above 0.D. Newlyn (28.7.63) Dia. of boring: 8in-Type of boring: Post-hole Auger Lining tubes: Core Recovery er Samples SKYGNE 77 Change of Strata Daily Description of Strata Percent age or Type Progress Depth Depth O.D. Level TOPSOIL 2.0. 320.8 Grey-brown silty CLAY BD #.0. 318.8 MUTATION 4.0. - 10.0. 80 Grey slightly organic clayey SILT 10"0" 312.8 Grey clayey SILT with traces of abaly coal MEASURES 10'0" - 12'6" 12"6" 1.7.63 310.3 Key to type of sample : Key to type of sample:

U (4) — 4 in. dia. undisturbed sample.
U (14) — 14 in. dia.
D — disturbed sample.
BD — bulk disturbed sample.
W — water sample.
S () — standard penetration test.
C () — dynamic cone penetration test.
No. in brackets gives.
No. of blows/12 in. penetration. Remarks: (Observations on ground-water, etc.) Ground-water was first encountered at depth of 3ft. below ground level MINISTRY OF TRANSPORT Soils No: LONDON-YORKSHIRE MOTORWAY 3/3587 TROWELL TO BARLBOROUGH SECTION FIG. 234

CENTRAL LABORATORY

GEORGE WIMPEY & CO., LTD.

HAYE



RECORD OF BOREHOLE NO. 5980/ II

Dia. of boring: HX (28in.core) 322.8ft. above O.D. Newlyn (24.7.63.) Ground level: Rotary Core Orilling H (Min.) to MOft. Type of boring: Lining tubes : SF46NE77 Core Recovery or Sumples Change of Strata Daily Description of Strats Progress Depth O.D. Leve Depth 0.0. Non FILL (broken sandstone, shale and mudstone with sandy clay and silt) $\label{eq:fill}$ FILL 28.6.63. 30'0" 39'0" 39'0" 283.8 41'0" 29.6.63. Weathered and proken grey MUDSTONE (Probable Fill) 99% 46'0" 276.8 49"0" Green fine SANDSTONE, laminated at top, with incipient and open vertical fissures and becoming muddy with depth MEASURES 100% 54'6" 54'5" 260.3 Vertically fissured grey MUDSTONE 67% 56'0" 265.8 1.7.63. 36'0" Key to type of sample : Remarks: (Observations on ground-water, etc.) Key to type of sample:

U (4) — 4 in. dia. undisturbed sample.
U (1½) — 1½ in. dia.
D — disturbed sample.
BD — bulk disturbed sample.
W — water sample.
6 () — standard penetration test.
C () — dynamic cone penetration test.
No. in brackets gives
No. of blows/12 in. penetration. Ground-water was first encountered at depth of 13ft. below ground level. MINISTRY OF TRANSPORT Solis No: LONDON-YORKSHIRE MOTORWAY 3/3547 TROWELL TO BARLBOROUGH SECTION FIG.236 GEORGE WIMPEY & CO., LTD. CENTRAL LABORATORY HAYES



RECORD OF BOREHOLE NO. H598E

Ground level: 314.4ft. above 0.0. Newlyn (24.7.63) Sin. Dia. of boring :.. Post-hole Auger Not used Type of boring: Lining tubes : Core Recovery or Samples Change of Strata Daily Description of Strata ercont-age or Type Progress O.D. Leve SK46NE TOPSOIL 2*0" 312.4 RECENT ALLUVIUM P 2*0" - 5*0" BD Grey-brown sandy CLAY 309.4 5.0% - 11.04 80 Grey clayey SILT 11*0* 303.4 30 12"0" 302.4 Shaly COAL JAO. 12'0" - 14'0" 80 Brown sandy CLAY with black shale fragments 300.4 1.7.63 14.0" MEASURES Key to type of sample : Remarks: (Observations on ground-water, etc.) Key to type of sample:

U (4) — 4 in. dia. undisturbed sample.

D — disturbed sample.

BD — bulk disturbed sample.

W — water sample.

G () — standard penetration test.

C () — dynamic cone penetration test.

No. in brackets gives

No. of blows/12 in. penetration. Ground-water was first encountered at depth of 3ft. below ground level. MINISTRY OF TRANSPORT Soils No: LONDON-YORKSHIRE MOTORWAY 3/3547 TROWELL TO BARLBOROUGH SECTION FIG.237 GEORGE WIMPEY & CO., LTD. CENTRAL LABORATORY HAYES



RECORD OF BOREHOLE NO. H598 F/1 Ground level: 313.5ft. above 0.D. Newlyn (24.7.63) Dia. of boring: Bin. Lining tubes : Not used Post-hole Auger Type of boring:..... Core Recovery SK46NET Change of Strata Daily Descripsion of Strata Progress Depth Q.D. Leve Depth age or 312.5 Soft brown CLAY 3'0" 310.5 RECENT Soft grey silty CLAY with traces of peat 3"0" - 7"6" 80 7'6" 306.0 80 PEAT 9.0. 304.5 3.7.63 80 Soft grey clayer SHT with some pockets of fine sand, occasional mudstone fragments 10.0. 303.5 MEASURES ? RECORD OF BOREHOLE NO. H598F/2 SKYGNE 11 Ground level: 313.7ft. *bove O.D. Newlyn (24.7.63) Dia. of boring : 8in... Post-hole Auger Not used Type of boring:.... Lining tubes :..... 1'0" 312.7 1'0" - 3'6 80 SANDSTONE fragments (presumed fill) 310.2 5*0* BD 5*0* 308.7 Soft grey-brown silty CLAY WILLALIA Soft grey CLAY with traces of peat 7'6" 306.2 7'6" - 9'6" BD PEAT 916" 304.2 9.6. - 11.0. 80 Soft grey clayey SILT 4.7.63 会到11.0. 302.7 Key to type of sample : Remarks: (Observations on ground-water, etc.) Key to type of sample: U (4) — 4 in. dia. undisturbed sample. U (1½) — 1½ in. dia. — disturbed sample. BD — bulk disturbed sample. W — water sample. S () — standard penetration test. C () — dynamic cone penetration test. No. in brackets gives No. of blows/12 in. penetration. B.H's H598F/1 and H598F/2 Ground-water was first encountered at depth of 3ft. below ground level. MINISTRY OF TRANSPORT Soils No: LONDON-YORKSHIRE MOTORWAY \$/3547 TROWELL TO BARLBOROUGH SECTION FIG.23 GEORGE WIMPEY & CO., LTD.

CENTRAL LABORATORY

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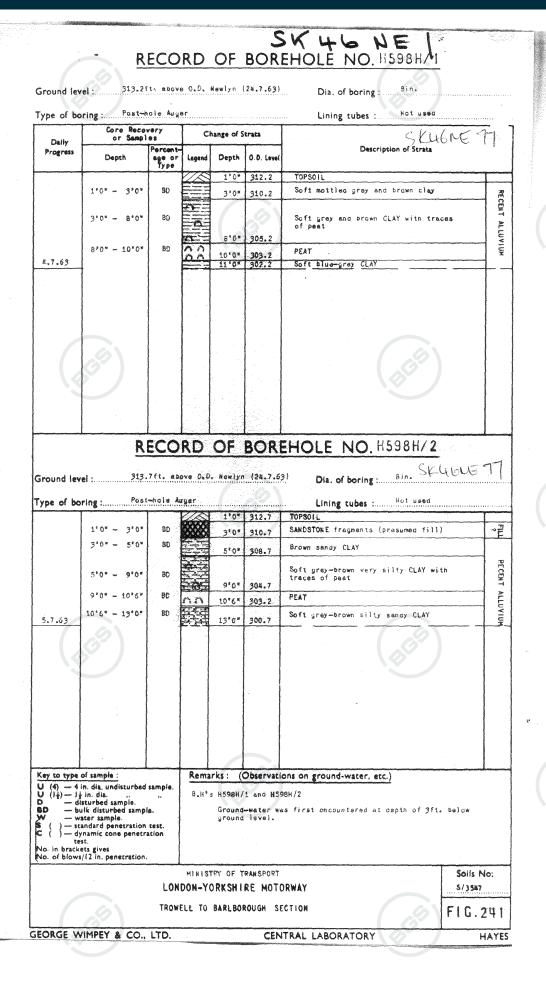
SK 46 NE

pe or o	Oring : Post-	ery	T	ange of S	diana.	Lining tubes: Not used
Daily Progress	or Somple	Percent				Description of Strata
	Depth	age or	Legend		Q.D. Level	
	1.0 3.0.	80		1.0.		TOPSOIL Soft brown silty sandy CLAY
				3.0.	310.1	
	3.0 8.0.	BD.				Soft grey clayey SILT, with traces of pea
	8'0" - 10"0"	BD.		8.0.		PEAT
4.7.63	10'0" - 11'0"	80	5 23	11'0"	303.1 302.1	Soft grey clayey SILT
		-				
						현실 기계 기계 기계 사용하다 생활하다면 보다 보다 보다. 기계 기계 기
av to tva	e of sample :					
J (4) —	4 in. dia, undisturbe	d sample.				ens on ground-water, etc.)
0 -	disturbed sample. bulk disturbed sam	ple.	Groun	d-water	was firs	t encountered at depth of 3ft. below ground
v ()-	water sample. standard penetratic	n test.				
	dynamic cone pene test. :kets gives	tration				
lo. of blov	ws/12 in. penetratio	n.		-		
			I UNI		RY OF TRA	140 70 01/11/
			F-9-14 8	70N-19	MADILIAE	MUTUKWAY 8/3



	ring: Post-hola Au Care Recovery or Samples	-	ange of	itrata	Lining tubes:	平 韓	77
Daily Progress	Or Depth Rge 9	r Lagend	Depth	O.D. Level	Description of Strata	· POL	. * 1
			1.6.	312.8	TOPSOIL SANDSTONE		
4.7.63	1'0" - 2'6" 80	FFF	2*6*	311.3	SARUSTONE		COAL
							MEASURES?
					• 2.		RES?
Helen							
84-minos							and a second
							disenso
NA CO-CAMPAGE AND A CO-		1					Danistopermaya
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161							
					(A) #		-
							and and a second second
Management of the second							- Constitution
	e of sample : f in. dia. undisturbed sample	Rem	narks : (Observati	ions on ground-water, etc.)		
0 (4)=	f in: dia. undisturbed sample in: dia	No	ground-	water was	s encountered during boring.		
(\$ ()-	water sample. standard penetration test.						
()-	dynamic cone penetration test.						
No. in brac No. of blov	kets gives vs/12 in. penetration.			yangayan ang ga aa maan			market in the second
-		IVE	arren	TRY OF TRA	ANSPORT E MOTORWAY	Soils N 3/3847	
9		ww.ff	- w 25.25 1 /	ween witten	······································	e/)34/	







RECORD OF BOREHOLE NO.5980/1

| Sin. to 19ft., | Shell and Auger and | Shell argument |

Daily	Core Recove or Semple	ery 6	Chi	ange of S	trata	SK46NET7	
Progress	Depth	Percent- age or Type	Legend	Depth	O.D. Level	Description of Strata	
kata ka shiring tahularna Tiqabka	1'6" ~ 3'0" 3'0"	D (#)		1'0"	321.6	TOP SOIL	
	5'0" 6'6" - 8'0" 8'0"	80 U(#) D					
31.5.63.	10'0° 10'0° - 11'0° 11'6° - 13'0°	D BD U(%)				•	
,	15'0" 15'0"	D BD		- - - -		Fill (broken sendstone, shale and mudstone with sandy clay and silt)	١١٤٤
1.6.63.	19*0*						
	2010	48%		30*0*	292.8	(BGS)	vertroers/restrictions-quindens/strategicons/strategicons/strategicons/strategicons/strategicons/strategicons/
11.6.63.	30"0"		3000	30.0-	272.0	*	
	** ₁						
					The state of the s		
							1
					organismi gibriindomolem disklobilitivalnia. di		
					Day and the second seco		
							populari di salah pana
					Liannes and a second		
(au to tur-	of sample :	<u></u>	0	antes: "		ons on ground-water, etc.)	<u>L</u>
U (4) - 1 U (11) -	in. dia. undisturbe	d sample.		- promogramoj			
80 - W - S () - C () -	disturbed sample, bulk disturbed sam water sample, standard penetratio dynamic cone penet sest.	n test. tration	leve Wash	il duria	y boring.	st encountered at depth of 13ft, below ground s lost below 21ft, depth: Cavity from 27ft.6	
			LONI		TRY OF TR	ANSPORT Soils N MOTORWAY \$/9547	
				10		FIG.	135



RECORD OF BOREHOLE NO. H598 J/ 1

Daily Progress	Core Recovery or Samples		Change of Strata			SK46NE7	
	Depth	Percent- age or Type		Depth	O.D. Level	Description of Strata	*
and and and and and and and and and and 	200 Photo - 200 Ph	 		1'0"	-312.2	TOPSOIL	T
	1.0 3.0.	BD	屋等	3'0"	310.2	Soft prown silty CLAY	
			靐				
	3'0" - 8'0"	BD	盎			Soft gray silty CLAY, with traces of peat	
	8*0" - 10*0"	80		8'0"	305.2		
1.7.63	90 - 100		202	10.0.	303.2	PEAT-	L
							and the same of th
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							magarithmo.
							NAME OF THE PARTY
							Quaranti (const
Ž	7						-
							To September 1
							eecillessed
e of bo	ring: Post-ho				3.7.63)	Lining tubes : Not used	
e of bo				1'0' 2'6'	312.6 311.1		
e of bo	ring: Post-ho	le Auger		1'0"	312.6	Lining tubes : Not used TOPSOIL Soft grey-prown silty CLAY with some sand pockets	
e of bo	ring : Post-ho	le Auger		1'0' 2'6'	312.6 311.1	Lining tubes : Not used TOPSOIL Soft grey-prown silty CLAY with some sand	
e of bo	ring : Post-ho	le Auger		1*0* 2*6* 8*0*	312.6 311.1 305.6	TOPSOIL Soft grey-prown silty CLAY with some sand packets Soft grey organic silty CLAY.	
	ring: Post-ho 1*0* - 2*6* 2*6* - 8*0*	BD BD		1*0* 2*6* 6*0*	312.6 311.1 305.6 303.6	Lining tubes: Not used TOPSOIL Soft grey-brown silty CLAY with some sand pockets Soft grey organic silty CLAY. PEAT	
	ring: Post-ho 1'0" - 2'6" 2'6" - 8'0" 8'0" - 10'0"	BD BD BD		1"0" 2"6"	312.6 311.1 305.6	TOPSOIL Soft grey-prown silty CLAY with some sand packets Soft grey organic silty CLAY.	
	ring: Post-ho 1'0" - 2'6" 2'6" - 8'0" 8'0" - 10'0"	BD BD BD		1*0* 2*6* 6*0*	312.6 311.1 305.6 303.6	Lining tubes: Not used TOPSOIL Soft grey-brown silty CLAY with some sand pockets Soft grey organic silty CLAY. PEAT	
	ring: Post-ho 1'0" - 2'6" 2'6" - 8'0" 8'0" - 10'0"	BD BD BD		1*0* 2*6* 6*0*	312.6 311.1 305.6 303.6	Lining tubes: Not used TOPSOIL Soft grey-brown silty CLAY with some sand pockets Soft grey organic silty CLAY. PEAT	
	ring: Post-ho 1'0" - 2'6" 2'6" - 8'0" 8'0" - 10'0"	BD BD BD		1*0* 2*6* 6*0*	312.6 311.1 305.6 303.6	Lining tubes: Not used TOPSOIL Soft grey-brown silty CLAY with some sand pockets Soft grey organic silty CLAY. PEAT	
	ring: Post-ho 1'0" - 2'6" 2'6" - 8'0" 8'0" - 10'0"	BD BD BD		1*0* 2*6* 6*0*	312.6 311.1 305.6 303.6	Lining tubes: Not used TOPSOIL Soft grey-brown silty CLAY with some sand pockets Soft grey organic silty CLAY. PEAT	
	ring: Post-ho 1'0" - 2'6" 2'6" - 8'0" 8'0" - 10'0"	BD BD BD		1*0* 2*6* 6*0*	312.6 311.1 305.6 303.6	Lining tubes: Not used TOPSOIL Soft grey-brown silty CLAY with some sand pockets Soft grey organic silty CLAY. PEAT	
	ring: Post-ho 1'0" - 2'6" 2'6" - 8'0" 8'0" - 10'0"	BD BD BD		1*0* 2*6* 6*0*	312.6 311.1 305.6 303.6	Lining tubes: Not used TOPSOIL Soft grey-brown silty CLAY with some sand pockets Soft grey organic silty CLAY. PEAT	
	ring: Post-ho 1'0" - 2'6" 2'6" - 8'0" 8'0" - 10'0"	BD BD BD		1*0* 2*6* 6*0*	312.6 311.1 305.6 303.6	Lining tubes: Not used TOPSOIL Soft grey-brown silty CLAY with some sand pockets Soft grey organic silty CLAY. PEAT	
	ring: Post-ho 1'0" - 2'6" 2'6" - 8'0" 8'0" - 10'0"	BD BD BD		1*0* 2*6* 6*0*	312.6 311.1 305.6 303.6	Lining tubes: Not used TOPSOIL Soft grey-brown silty CLAY with some sand pockets Soft grey organic silty CLAY. PEAT	
7.63	ring: Post-ho 1'0" - 2'6" 2'6" - 8'0" 8'0" - 10'0"	BD BD BD		1'0° 2'6° 8'0° 10'0° 12'0°	305.6 303.6 301.6	Lining tubes: Not used TOPSOIL Soft grey-brown silty CLAY with some sand pockets Soft grey organic silty CLAY. PEAT	
7.63 y to type (4) — 4	Post-ho 1*0* - 2*6* 2*6* - 8*0* 8*0* - 10*0* 10*0* - 12*0*	BD BD BD BD	Rem	8°0° 10°0° 12°0° 12°0°	305.6 303.6 301.6	Topsoit Soft grey-brown silty CLAY with some sand pockets Soft grey organic silty CLAY. PEAT Soft blue-grey silty sandy CLAY.	
y to type (4) — 4 (1) — 1 — d	1*0* - 2*6* 2*6* - 8*0* 8*0* - 10*0* 10*0* - 12*0* of sample: in. dia. undisturbed in. dia. sturbed sample. ulk disturbed sample.	BD BD BD Sample.	Rem	1°0° 2°6° 10°0° 10°0° 12°0° arks: (312.6 311.1 305.6 303.6 301.6	Topsoit Soft grey-brown silty CLAY with some sand pockets Soft grey organic silty CLAY. PEAT Soft blue-grey silty sandy CLAY.	
y to type (4) - 4 (i +) - i - d - w () - s	of sample: in. dia. undisturbed sample. uik disturbed sample. uik disturbed sample. andard penetration	BD BD BD sample.	Rem	1°0° 2°6° 10°0° 10°0° 12°0° arks: (305.6 305.6 309.6 309.6	Topsoit Soft grey-brown silty CLAY with some sand pockets Soft grey organic silty CLAY. PEAT Soft blue-grey silty sandy CLAY. Ons on ground-water, etc.)	
y to type (4) — 4 (14) — 1 (14) — 1 (15) — 1 (16) — 4 (17) — 4 (18) — 4 (18) — 4	of sample: I*0* - 2*6* 2*6* - 8*0* 8*0* - 10*0* 10*0* - 12*0* In. dia. undisturbed in. dia. usturbed sample. uik disturbed sample andard penetration ynamic cone penetrs.	BD BD BD sample.	Rem	1°0° 2°6° 10°0° 10°0° 12°0° arks: (312.6 311.1 305.6 303.6 301.6	Topsoit Soft grey-brown silty CLAY with some sand pockets Soft grey organic silty CLAY. PEAT Soft blue-grey silty sandy CLAY. Ons on ground-water, etc.)	
y to type (4) — 4 (11) — 1 — w () — st () — st in brack	of sample: I*0* - 2*6* 2*6* - 8*0* 8*0* - 10*0* 10*0* - 12*0* In. dia. undisturbed in. dia. usturbed sample. uik disturbed sample andard penetration ynamic cone penetrs.	BD BD BD test.	Rem	1°0° 2°6° 10°0° 10°0° 12°0° arks: (312.6 311.1 305.6 303.6 301.6	Topsoit Soft grey-brown silty CLAY with some sand pockets Soft grey organic silty CLAY. PEAT Soft blue-grey silty sandy CLAY. Ons on ground-water, etc.)	
7.63 y to type (4) - 4 (11) - 1 - w () - st to in brack	of sample: in. dia. undisturbed in. dia. undisturbed sample. andard penetration ynamic cone penetr st. ees gives	sample.	Rem. B.H':	1*0* 2*6* 10*0* 10*0* 12*0* Ground	312.6 211.1 305.6 303.6 301.6 301.6	Topsoil Soft grey-brown silty CLAY with some sand pockets Soft grey organic silty CLAY. PEAT Soft blue-grey silty sandy CLAY. Ons on ground-water, etc.) 8J/2 s first encountered at cepth of 3ft. below Soils N	
7.63 7.63 7.63 7.63 7.63 7.63 7.63 7.63	of sample: in. dia. undisturbed in. dia. undisturbed sample. andard penetration ynamic cone penetr st. ees gives	sample.	Rem. B.H':	1*0* 2*6* 10*0* 10*0* 12*0* Ground	305.6 303.6 301.6 301.6	Topsoil Soft grey-brown silty CLAY with some sand pockets Soft grey organic silty CLAY. PEAT Soft blue-grey silty sandy CLAY. Ons on ground-water, etc.) 8J/2 s first encountered at cepth of 3ft. below Soils N	