



GEOLOGICAL SURVEY OF GREAT BRITAIN

RECORD OF SHAFT OR BORE FOR MINERALS

Name of Shaft or Bore given by Geological Survey:

Mill Lane, Stainsby Borehole

Name and Number given by owner:

For whom made N.C.B. No 1 Area East Midlands Div

Town or Village. Stainsby nr. Knull County. Leicesters

Exact site 600 yards SE of Knull village (see attached map) Attach a tracing from a map, or a sketch-map, if possible.

Purpose for which made To prove the deep soft coal

Ground Level at shaft bore relative to O.D. 400+ If not ground level give O.D. of beginning of shaft bore

Made by Bayles Bros Ltd

Date of sinking OCT. 1969

Information from Core examination & shiller log

Date received

Examined by Donald V. Frost

(For Survey use only)

6-inch Map Registered No.

112/284

SK46NE/21

Nat. Grid Reference

SK 4510 6619

1" N.S. Map No.

1" O.S. Map No.

Confidential or not

SPECIMEN NUMBERS AND ADDITIONAL NOTES

(For Survey use only) GEOLOGICAL CLASSIFICATION	DESCRIPTION OF STRATA	THICKNESS		DEPTH	
		FT	in.	FT	in.
DRIFT UPPER CARBONIFEROUS WESTPHALIAN B	Open hole - Boremaster records				
	Clay with boulders	8	0	8	0
	Clay and shale with broken sandstone	6	0	14	0
	Coring commenced at			14	0
	Mudstone, grey with ironstone bands and plant fragments	1	0	15	0
	Core fragmentary				
	Sandstone, grey fine grained micaceous, finely laminated ripple drifted; stained yellow in parts and containing plant fragments				
	Limonic or sideritic cement at 24' for 1 ft.	12	0	27	0
	Striped beds	2	9	29	0
	Mudstone, grey, silty, with ironstone bands	1	6	30	6
	Mudstone, grey with thin ironstone bands	1	0	31	6
	Core missing	1	6	33	0
	Mudstone, grey	0	6	33	6
	Core fragmentary				
	Core missing	1	3	34	9

2/

Name of Shaft or Bore given by Geological Survey:

Mill Lane, Stainsby

2/

6-inch Map
Registered
No.

364

SK46NE21

GEOLOGICAL CLASSIFICATION	DESCRIPTION OF STRATA	THICKNESS		DEPTH	
		FT	IN.	FT	IN.
WESTPHALIAN B	Carried forward			34	9
	Mudstone, grey, with ironstone bands; becoming dark grey towards the base	6	9	41	6
	Core fragmentary				
	Mudstone, dark grey with coal fragments	1	0	42	6
	Coal (core fragmentary)	0	6	43	0
	Mudstone, grey with coal fragments.	0	6	43	6
	Seat earth; mudstone, grey with plant remains	1	9	45	3
	Mudstone, grey, silty with plants and irregularly shaped ironstone nodules	6	9	52	0
	Core fragmentary				
	Mudstone, grey silty with plants and ironstone nodules passing down to.	4	0	56	0
	Sandstone, grey, with current bedded units, slightly micaceous with plant fragments; passing down to.	3	0	59	0
	Mudstone, grey, silty	1	0	60	0
	Core missing	1	4	61	4
	Coal (core fragmentary)	2	8	64	0
DUNSIK	Seat earth; mudstone, grey with plant fragments	2	4	66	4
	Seat earth; with coaly streaks	1	0	67	4
	Mudstone, grey with irregular ironstone nodules	0	10	68	2
	Core fragmentary				
	passing down to				
	Mudstone, grey, silty with a few plant fragments and ironstone nodules	13	10	82	0
	Core fragmentary				
	passing down to				
	Sandstone, grey fine grained; ripple striped.	4	0	86	0
	Sandstone, grey with silty mudstone bands	5	2	91	2
	Mudstone grey, soft, somewhat disturbed & clayed.				
	Core fragmentary				
	Mudstone, grey with rare "muscles".	5	10	98	0

3

Name of Shaft or Bore given by Geological Survey:

Mill Lane, Stainsby B.H.

3

6-inch Map
Registered
No.

SK46NE21

GEOLOGICAL CLASSIFICATION	DESCRIPTION OF STRATA	THICKNESS		DEPTH	
		FT	IN.	FT	IN.
WESTPHALIAN B	Carried forward			98	0
H'n of 1" WATERLOO	Core missing	7	0	105	0
	Mudstone, grey, silty with ironstone nodules and plant fragments	1	0	106	0
	Siltstone, grey with plant fragments	1	6	107	6
	Sandstone, grey with plant fragments	2	0	109	6
	Mudstone, grey, with ironstone bands, becoming silty in basal few feet	10	0	119	6
	Mudstone, dark grey with ironstone bands and numerous "mussels."	2	0	121	6
	Shale, black bituminous with organic fragments	0	1	121	7
	Coal	0	6 $\frac{1}{2}$	122	1 $\frac{1}{2}$
	Silt	0	$\frac{1}{2}$	122	2
	Shale, dark grey with plant fragments	0	2	122	4
	Heat Earth; Mudstone grey with plants and sporadic irregular ironstone nodules.	1	0	123	4
	Mudstone, grey silty with plant fragments and ironstone bands	3	2	126	6
	Core missing	1	2	127	8
	Mudstone grey with ironstone nodules; predominantly silty	4	0	131	8
	Siltstone, grey with plant fragments	2	2	133	10
	Mudstone grey silty with plant fragments passing down to	7	2	141	0
	Sandstone, grey fine grained with striped beds at base	2	2	143	2
	passing down to				
	Siltstone, grey with rare plant fragments and sporadic ironstone nodules	5	2	147	4
	Mudstone, grey	0	4	147	8
	Mudstone, grey, predominantly silty with rare plant fragments and ironstone bands up to 3" thick	7	4	155	0
	Mudstone grey	5	0	160	0
	Mudstone grey with abundant				

WATERLOO
MARKER

4/

Name of Shaft or Bore given by Geological Survey:

Mill Lane, Stansby

4/

6-inch Map
Registered
No.

SK46NE21

GEOLOGICAL CLASSIFICATION	DESCRIPTION OF STRATA	THICKNESS		DEPTH	
		FT	IN.	FT	IN.
WESTPHALIAN B	Carried forward			160	0
	Mudst. and Sponges	0	9	160	9
	Mudstone, dark grey with Sponges and mudst.	1	2	161	11
	Carbonoid shale, dark grey	0	5	162	4
	Coal } core	2	0	164	4
	dirt } fragmentary 10in	0	4	164	8
	Coal } fragmentary	1	0	165	8
2nd WATERLOO	Seat Earth; mudstone grey with plant remains	2	2	167	16
	Mudstone, grey with mineralised 6" ironstone band; dark grey mudstone at base	2	2	170	0
	Shale, bituminous	0	3	170	3
	dirt } core 16in	0	4	170	7
	Coal } fragmentary	0	11	171	6
	Seat Earth; mudstone grey with plant fragments	1	0	172	6
	Sandstone, grey, fine grained micaceous with scattered plant fragments	9	11	182	5
	passing down to Mudstone, silty	3	3	185	8
	Mudstone, silty at top with nodules of ironstone "mudst." at 189ft.	4	4	190	0
	Mudstone, grey with Coaly streaks	0	5	190	5
	Ironstone	0	1	190	6
	Coal foot	0	2	190	8
	dirt	0	2	190	10
	Seat Earth; grey mudstone with plants	1	0	191	10
	Mudstone, grey with plants and ironstone bands	1	1	192	11
	Mudstone, grey with intercalations of sandstone	1	11	194	16
	Sandstone, grey, fine grained contacted and striped bedding with intercalations of mudstone	7	5	202	3
	passing down to Mudstone, dark grey, silty	2	11	205	2
	Mudstone, grey with ironstone bands up to 3" thick. Ironstone bands thin out towards base where shaly				

5

Name of Shaft or Bore given by Geological Survey:

Mill Lane, Stainsby

5

6-inch Map
Registered
No.

367
SK46NE/21

GEOLOGICAL CLASSIFICATION	DESCRIPTION OF STRATA	THICKNESS		DEPTH	
		FT	IN.	FT	IN.
WESTPHALIAN B	Continued from laminations occur. Basal 3" tough bituminous shale with pyrites.	5	10	205	2
3rd WATERLOO	Coal } 47in	0	4	211	4
	dirt	2	1	213	5
	Coal	6	6	214	11
	Seat Earth; Mudstone, grey with plants passing down to Mudstone, predominantly grey and silty with ironstone nodules and bands and sporadic plant debris. Coal streaks @ 218-7 Core missing (1ft) @ 219-5 Intercalations of sandstone and siltstone towards base	0	6	215	5
	Sandstone, grey, slightly micaceous with plant debris and contacted bedding units. Slight mineralisation of irregular vertical fissures	15	2	230	7
	Mudstone, grey, sporadically silty with ironstone bands	2	1	232	8
	Coal fragmentary	6	2	238	10
	dirt	0	6	239	4
	Core missing	0	7	239	11
	Seat Earth; Mudstone grey silty, passing down to Mudstone, grey, sporadically silty with plant fragments and ironstone nodules.	0	4	240	3
	Colitic? ironstone	0	6	240	9
	Mudstone, grey, predominantly silty with ironstone bands and plant debris. 6in ironstone band @ 247-0 9in ironstone band @ 252-10 11in sandstone band @ 260-2	4	4	245	1
	Below 263-2 numerous plants and ironstone nodules.	0	1	245	2
	Sandstone, grey, tough with contacted bedding units & possible iron-rich cement and mineralised irregular vertical joints	38	4	273	6
	Disturbed mudstone breccia	2	6	276	0
	Mudstone, grey, with ironstone	0	8	276	8
		3	0	279	8

? 4" W/oo
horizon

Name of Shaft or Bore given by Geological Survey:

Mill Lane, Stainby

6-inch Map
Registered
No.

368
SK46NE/21

GEOLOGICAL CLASSIFICATION	DESCRIPTION OF STRATA	THICKNESS		DEPTH	
		FT	IN.	FT	IN.
WESTPHALIAN B	<i>1</i> <i>Carried forward</i>			279	8
	Mudstone, grey, with numerous ironstone bands and "mussels" between 280' and 283' silty patches at 283'				
	Ironstone rare below 290'	25	7	305	3
	Mudstone, dark grey with mussels	0	2	305	5
	Mudstone, black with sporadic "mussels" and plants.	2	7	308	0
18' ELL	Coal 20 in.	1	8	309	8
	Staly Coal	0	3	309	11
	Mudstone, grey, silty with plant fragments, sporadic ironstone and grey sandstone bands	9	2	319	1
	Siltstone, grey, resistant with scattered plant debris	9	7	328	8
	Mudstone, grey, silty with siltstone bands, mussels and plant fragments	15 1		332	9
	Core missing	0	3	333	0
	Mudstone, grey, tough and silty with sporadic ironstone bands and rare plant debris.	10	0	343	0
	Mudstone, grey with sporadic plant remains and ironstone nodules. Becoming darker grey and with numerous badly preserved "mussels" near base	5	10	348	10
	Mudstone, grey, silty with many plant fragments and irregular ironstone nodules	0	8	349	6
	Siltstone, grey with intercalations of mudstone; extremely resistant; considerable distortion of bedding units; plant remains & sporadic ironstone bands	8	2	357	8
	Mudstone, grey silty with ironstone bands	4	4	362	0
	Mudstone, grey with numerous "mussels" imperfectly preserved. Becoming darker grey towards the base, platy and containing pyritised plant debris	4	8	366	8
2nd ELL	Coal 28 in.	2	7	369	5
		2	4	369	0

1/

Name of Shaft or Bore given by Geological Survey:

Mill Lane Stainby B.H.

1/

6-inch Map
Registered
No.

SK46NE21

GEOLOGICAL CLASSIFICATION	DESCRIPTION OF STRATA	THICKNESS		DEPTH	
		FT	IN.	FT	IN.
WESTPHALIAN B	<i>Carried forward</i>			369	0
	Seat fault; mudstone, grey, silty, with plant debris & rootlets	2	3	371	3
	Mudstone, grey, silty, with plant fragments and concretion bands	1	7	372	10
	Siltstone, grey, with mudstone intercalations & contorted bedding units	8	7	381	5
	Sandstone, grey, fine grained, micaceous with disturbed bedding units & containing intercalations of siltstone & silty mudstone giving an appearance of striped beds towards the base	4	8	386	1
	Mudstone, grey, silty, with concretion bands and sporadic "mussels"	1	8	391	6
	Mudstone, grey, silty, with sporadic "mussels" and plant fragments				
	Resistant siltstone band @ 394-0				
	" " " @ 396-10	5	4	396	10
	Striped beds; intercalations of siltstone and silty mudstone with concretion bands constituting an extremely tough and resistant rock	6	6	403	4
	Mudstone, grey, silty, with concretion bands decreasing in siltiness towards the base	4	8	408	0
	Mudstone, grey, ^{thin} thin concretion bands and numerous poorly preserved "mussels" very obvious from edge of core	16	10	424	10
	<i>Core missing</i>	2	5	427	3
	Mudstone, grey, slightly silty, with thin concretion bands containing sporadic "mussels" better preserved than in the mudstone				
	Spirorbis @ 428-0				
	Mussels not common below 431-0	9	2	436	5
	CLAY CROSS MARINE BAND				
	Mudstone, grey to dark grey, slightly silty, with thin concretion partings and containing Lingula, Spirorbis, ostracods and fish remains. Also mussels and Quenstedella sp.				
	Transverse parting @ 438-7				
	" " 439-6				
	" " 439-8				
	" " 440-4				

8/

Name of Shaft or Bore given by Geological Survey:

Mill Lane, Stainsby B.H.

8/

6-inch Map
Registered
No.

370

SK46NE21

GEOLOGICAL CLASSIFICATION	DESCRIPTION OF STRATA	THICKNESS		DEPTH	
		FT	IN.	FT	IN.
WESTPHALIAN B	<i>Carried forward</i>			436	5
	1" ironstone band @ 4.41 - 0				
	Basal 6" black mudstone, siluminous with coal streaks and containing <i>Lingula</i> and fish remains. (Maine band fauna also contains				
)	8	7	445	0
WESTPHALIAN A JOAN	Coal 2in.	0	2	445	2
	Shaly coal	0	2	445	4
	Seat earth; mudstone, light grey, very silty, Mudstone, grey silty with plant debris, ironstone nodules, rare "muscles", disseminated pyrites and pyritised plant fragments	0	3	445	7
	Mudstone, grey with ironstone bands containing sporadic "muscles"	5	5	451	0
	Mudstone, grey, predominantly silty with sporadic poorly preserved "muscles". Ironstone bands and siltstone intercalations towards base. Basal few inches black in colour	5	6	456	6
	Striped beds; with plant impressions	9	4	465	10
	Sandstone, grey fine grained, micaceous, well cemented.	3	8	469	6
	{ massive l. 2-8 siltstone & silty mudstone striping 1-11 contorted & disturbed bedding 3-3 mudstone and siltstone intercalations passing down to (1-11)	9	9	479	3
	Mudstone, grey silty with ironstone bands	3	0	482	3
	Mudstone, grey silty with ostracod and plant remains "muscles" evidence of movement.				
	Sporadic ironstone bands	3	1	485	4
	Seat earth; mudstone, grey silty with plant debris	2	5	487	9
	Siltstone, grey	0	8	488	5
	Mudstone, grey, silty, with siltstone bands, ironstone nodules and bands and sporadic plant remains	7	11	496	4
	Mudstone, grey with ironstone band				

9. Name of Shaft or Bore given by Geological Survey: Mill Lane Stainsby, B.H.		6-inch Map Registered No. 371 SK46NE/21			
GEOLOGICAL CLASSIFICATION	DESCRIPTION OF STRATA	THICKNESS		DEPTH	
		FT	in.	FT	in.
WESTPHALIAN A	Carried forward. and plant remains. Becoming dark grey towards base with "mussels" and ostracods.	3	11	496	4
	Coal coal 3 in. dirt 2 in. } 8 in. Coal 3 in. }	9	8	500	11
	Mudstone, dark grey, with coaly streaks near top; ironstone bands & nodules; listric surfaces common.	6	3	507	2
	Mudstone, dark grey with "mussels" and ironstone bands with "mussels"	5	2	512	4
	Mudstone, grey with "mussels" ? fish debris and ironstone bands	9	7	521	11
	Mudstone, dark grey with numerous "mussels" and ironstone bands with "mussels"; sporadic ostracods and plant fragments towards the base	14 17	5 2	536 539	4 +
	Coal coal 2 in. dirt 5 in. Mudstone, grey, listric dirt with concretions Bright coal coal 6 in. Coal, mudstone nodules 1 in. Bright coal 6 in. Light grey mudstone with occasional coal streaks 36 in.	7 4 56 in 89 in	5 8	543	9
	Seat Earth: Mudstone light grey with nodules passing down to Mudstone grey silty with ironstone nodules. 9 in ironstone band @ 547-2. Core fragmentary	2	0	545	9
	Core missing Siltstone, grey with silty mudstone intercalations & sporadic plant remains	15 3	1 2	560 564	10 0
	Mudstone, grey, silty with ironstone nodules & bands	5	2	569	2
Coal coal 6 in. dirt 9 in. } 18 in. Coal 3 in. }	8	1	577	3	
DEEP SOFT	Coal coal 6 in. dirt 9 in. } 18 in. Coal 3 in. }	1	6	578	9
	Seat Earth; Mudstone, grey silty				

Name of Shaft or Bore given by Geological Survey:

Mill Lane, Stainsby

6-inch Map
Registered
No.

SK 46NE/21

GEOLOGICAL CLASSIFICATION	DESCRIPTION OF STRATA	THICKNESS		DEPTH	
		FT	IN.	FT	IN.
WESTPHALIAN A	<i>Carried forward</i>			578	9
	<i>with rootlets and coalified plant remains</i>	1	2	579	11
	<i>Mudstone, grey, silty, with plant remains and ironstone bands</i>	3	1	583	0
	<i>Mudstone, dark grey with coaly partings</i>	3	9	586	9
	<i>Seat Earth, mudstone grey with bituic surfaces & plant remains</i>	2	0	588	9
	<i>Mudstone, grey, silty</i>	3	0	591	9
	<i>Mudstone, grey, with ironstone bands, core fragmentary</i>	5	7	597	4
	<i>Mudstone, grey with ironstone bands and "rare muscels"</i>	0	11	598	3
	<i>Mudstone, grey silty with ironstone bands and nodules</i>	2	9	601	0
	<i>Mudstone, grey with "muscels" and ostracods. Sporadic ironstone bands and nodules accompanied by many bituic surfaces</i>	3	4	604	4
	<i>Core fragmentary</i>				
	<i>Core missing</i>	1	0	605	4
	<i>Mudstone, dark grey, slightly silty, with ironstone bands. Ostracods and plant remains, the former being particularly abundant in the ironstone</i>	1	3	606	7
	<i>Mudstone, grey with ironstone bands and plant debris</i>				
	<i>Sporadic @ 608ft-0 in 2 feet?</i>	3	6	610	1
	<i>Coal (not seen) 10 1/2 in</i>		10 1/2	610	11 1/2
	<i>Seat Earth, mudstone grey with roots</i>	1	0 1/2	612	0
	<i>passing down to</i>				
	<i>Mudstone, grey with rootlets</i>	0	8	612	8
	<i>Sandstone, light grey with laminations & intercalations of siltstone and silty mudstone and ironstone nodules</i>	5	4	618	0
	<i>End of boring @</i>			618	0

BB
July 1981



Revision of 1914 with additions in 1938 & 1939.

CHESTERFIELD R.D.

HEATH PH.

DERBYSHIRE

CLAY CR

MILL LANE, STAINSBY, SURFACE BOREHOLE

SCALE: 6 INCHES TO A MILE

SITE OF PROPOSED
SURFACE BOREHOLE

BORINGS DEPT
NOTIFICATION
SN 6462
15/1/60

NATIONAL COAL BOARD

EAST MIDLANDS DIVISION, No. 1 AREA
BOLEVOYER, Near CHESTERFIELD.

AREA SURVEY OFFICE

Plan No.

Pl. O.S.
Sheet.

Derbyshire XXXI. N.W.

NATIONAL COAL BOARD, EAST MIDLANDS DIVISION
AREA 1, BOLEVOYER, NEAR CHESTERFIELD, CO. DERBY
REPRODUCED FROM BASED UPON THE ORDNANCE
SURVEY MAP, WITH THE SANCTION OF THE
CONTROLLER OF H.M. STATIONERY OFFICE
1939 DATE
COPYRIGHT RESERVED

AULT HUCKNALL



WATER RESOURCES BOARD WELL RECORD		W.R.B. REF. NO. SK46/8
SHEET 1		R.A. LICENCE NO.
1. WELL IDENTITY		NATIONAL GRID REFERENCE SK 4513 6622
Well at <u>mill house</u> <u>600 yd SE of Heath Village</u>		I.G.S. REF. No. <u>112/284</u>
Town <u>Stainby nr Heath</u>		RIVER AUTHORITY <u>Teaf</u>
County		HYDROMETRIC AREA <u>28</u>
Owner of well <u>NCR</u>		SUB-CATCHMENT
Well made by <u>Boyles Bros</u>		Date of sinking <u>Oct 1960</u>
Information from <u>IGS</u>		Date received <u>18.3.68 s.s.</u>
2. WELL DESCRIPTION		
Level of ground surface m. If well top is not at above* m. above sea level (O.D.) <u>4.00±</u> ft. ground level how far below ft.		
Shaft m. deep; Diameter at top m.; at bottom m. ft. ft. ft.		
Bore m. deep; Diameter at top m.; at bottom m. ft. ft. ft.		
Details of headings		
DETAILS OF PERMANENT LINING TUBES		
Length m.; Diam. m.; Plain m.; Slotted m.; Top m. above* surface ft. ft. ft. ft. ft. below surface		
Length m.; Diam. m.; Plain m.; Slotted m.; Top m. above* surface ft. ft. ft. ft. ft. below surface		
Length m.; Diam. m.; Plain m.; Slotted m.; Top m. above* surface ft. ft. ft. ft. ft. below surface		
Details of well screen		
DETAILS OF REST WATER LEVELS DURING CONSTRUCTION		
Water struck at depths of below well top		
Rest level of water m. above* O.D.* m. deep. Date ft. below well top when bore ft.		
Rest level of water m. above* O.D.* m. deep. Date ft. below well top when bore ft.		
Rest level of water m. above* O.D.* m. deep. Date on completion of bore ft. below well top when bore ft.		
Method of drilling		
Brief details of well development e.g. acid treatment etc.		

* delete as applicable

(46452-1) 1