



1063 Wt. 22438/0384 10m 7/45 (51) F.B.S.

112/245

(For Survey use only)

# RECORD OF SHAFT OR BORE FOR MINERALS

1-inch Map Registered No.

Name and Number of Shaft or Bore

PALTERTON COLLIERY BOREHOLE

SK46NE18

For Messrs. N.C.B., No 1 Area, East Midlands Division

Town or Village Palterton

County Duhyp.

Six-inch ~~quarter~~ sheet SK 46 NE

6-inch Map  
Registered  
No.

Exact site See attached plan

(c. 280 yd N. 70° W of Doe Lea Bridge)

Attach a tracing from  
a map, or a sketch-  
map, if possible.

Purpose for which made To prove quality of coals as recorded in Palterton Air Shaft

Level at which shaft commenced relative to O.D. +243.52

State if shaft is up, down, horizontal or

inclined; in latter cases give angle of inclination and direction down

Made by Boyles Bros Ltd.

Information from Core examination by E.G. Smith Date of Sinking 1958

Specimens

## Additional Notes in Space Overleaf

(For Survey use only)  
GEOLOGICAL  
CLASSIFICATION

### NATURE OF STRATA

### THICKNESS

### DEPTH

Ft in.

Ft in.

No core (open hole)

19 6

19 6

Sandstone, soft brown-grey micaceous  
(core fragmentary)

5 6

25 0

4 ft of core missing between 19 ft 6 in. and  
35 ft 6 in.

4 0

29 0

Mudstone, grey silty; plants above 35 ft 6 in.

14 6

43 6

Mudstone, fairly dark grey; 1-in. shell  
ironstone @ 46 ft 2 in. sporadic plant  
fragments; poor shells above 48 ft;

10 3

53 9

fish scale at base

Shales, dark grey, silty and micaceous below  
54 ft 10 in.; 2-in. ironstone band with  
poor "murel" fragments at 55 ft 6 in.

2 0

55 9

Sporadic plant fragments

Mudstone, grey silty, with plants

17 3

73 0

Mudstone, grey becoming darker downwards  
and dark grey below 82 ft; 2 1/2 in.

18 8

91 8

ironstone band at 88 ft 6 in.

Mudstone, grey, with ironstone bands and  
sporadic plant fragments

1 4

93 0

Coal 1 in. (Diller's Hazlet; fragments  
recovered)

- 1

94 1

Seatearth, dark grey mudstone

- 2

96 3

Seatearth, brown mudstone, with patches  
of sphaeroidite

8 4

101 7

Continued Overleaf

Geological Survey and Museum

South Kensington,

London, S.W.7.

Date  
received

Checked  
once File No.

1" B.S. Map  
No.

1" O.S. Map  
No.

Also marked (see symbol)  
on 1" Map on 6" Map

(3781) \*Dd0586/Wt64575 5,000 4/55 JC&S Gp689

Name and Number of Shaft or Bore given by Geological Survey:

Pallaton Colliery Borehole

**SK46NE18**

County

6" Quarter Sheet

GEOLOGICAL CLASSIFICATION	DESCRIPTION	THICKNESS		DEPTH	
		FT	in.	FT	in.
				from 101	7
	Seatearth, dark grey mudstone, with ironstone nodules in lower part	2	5	104	0
	Mudstone, dark grey, with rootlets; ironstone nodules above 109 ft 3 in. and in bottom 1 ft; still fragment at 111 ft 8 in.	9	9	113	9
	Coal 13 in.				
	Dirt 22 in.	3	2	116	11
	Coal 3 in.				
	Seatearth, grey mudstone	1	4	118	3
	Mudstone, grey silty, pyritised rootlets; top 1 ft; plant debris; numerous ironstone nodules below 120/9	4	9	123	0
	Interbedded grey mudstone or silty mudstone and light grey sandstone; plant debris	8	4	131	4
	Coal 8 in.	—	8	132	0
	Seatearth, hard grey silty	3	9	135	9
	Mudstone, grey silty, becoming darker grey below 134/-; 3-in. ironstone band @ 140/1	6	3	142	0
	<u>Houghton Marine Band</u>				
	Mudstone, dark grey, with ironstone bands, lenses and nodules; 10 1/2-in. ironstone band @ 149/3 (white oolites in top 4 in.)				
	Planolites; Tomaculites (preserved in ironstone) below 146/6; fusoids; Lingula @ 158/2, 162/3, 165/3, 167/4, 169/7, 171/11 and 175/4; Orthis-like @ 168/1; foraminifera, Nucleid lamellibranchs @ 163/4 and 164/-; gastropod @ 169/5; fish spine @ 172/11	34	6	176	6
	Mudstone, dark grey, with bands of pyrite in lower part; scattered plant debris and a few 'mussel' fragments	1	6	178	0
	Mudstone, grey, with ironstone bands; sandstone laminae above 180/9; plant debris	4	4	182	4
	Mudstone, dark grey, with ironstone bands; plant debris	1	7	183	11
	Staley coal 1 in.				
	Coal 2 1/2 in.				
	Dirt 0 1/2 in.				
	Coal 1 1/2 in.				
	Dirt 1 1/2 in.				
	Coal 0 1/2 in.				
	Dirt with coal bands 10 1/2 in.	1	6	185	5

(2781) \*Dd0586/Wt04575 5,000 4/55 JC&S Gp009

Name and Number of Shaft or Bore given by Geological Survey:

Palkerton Colliery Borehole

**SK46NE18**  
County

6" Quarter Sheet

GEOLOGICAL CLASSIFICATION	DESCRIPTION	THICKNESS		DEPTH	
		FT	in.	FT	in.
	Seatearth, dark grey mudstone	—	4	from 185	5
	Seatearth, brown to grey mudstone, becoming harder downwards; sphaeroidite below 189/6	6	9	185	9
	Interbedded light grey sandstone and grey mudstone or silty mudstone, sporadic ironstone nodules and bands; plant debris	5	1	192	6
	Seatearth, brown to grey mudstone; numerous large ironstone nodules below 201/6	7	4	197	7
	Mudstone, grey, becoming darker in bottom 6 in.; bands of light grey sandstone above 206/3; ironstone nodules; abundant plant debris	5	9	204	11
	Coal 16 in.	1	4	210	8
	Seatearth, grey mudstone, becoming sandy downwards	—	4	212	0
	Sandstone, light grey, with mudstone bands and partings below 217/7; rootlets in top 2 ft 9 in.	8	10	212	4
	Mudstone, grey, with sporadic 'mussel'; plant debris at top	12	6	221	2
	Shale, dark grey, with sporadic fish fragments; 2-in. ironstone band @ 236/1; bands & lenses of shelly ironstone below 237/3	4	4	233	8
	Ironstone with coal inclusions	—	3	238	0
	Coal 7 in. (6 in. recovered)	—	7	238	3
	Seatearth, grey silty mudstone with ironstone nodules in top 1 ft; passing down to —	3	11	238	10
	Mudstone, grey, silty in top half; a few rootlets	3	4	242	9
	Mudstone, grey, silty, with bands of light grey sandstone above 254/-; numerous sandstone laminae below 258/6; very abundant plant debris	21	1	246	1
	Mudstone, grey	7	0	267	2
	Ironstone	—	2	274	2
	Mudstone, dark grey, with thin ironstone bands; sporadic fish and 'mussel' fragments	2	0	274	4
	Seatearth, brown to grey mudstone, with numerous large ironstone nodules below 281/-; passing down to —	6	11	276	4
				283	3



(2781) \*D40884/W104075 5,000 4/85 JC&S Gp000

Name and Number of Shaft or Bore given by Geological Survey:

Pallerton Colliery Borehole

**SK46NE18**  
County

6" Quarter Sheet

GEOLOGICAL CLASSIFICATION	DESCRIPTION	THICKNESS		DEPTH	
		FT	in.	FT	in.
	Mudstone, grey, silty above 293/- ; numerous ironstone nodules and a few rootlets above 299/3	13	11	from 283	3
	Shale, dark grey, with 'murels'; abundant ostracods below 306/6	10	4	297	2
	Mudstone, grey, becoming gradually darker grey below c. 312/ft ; abundant 'murels' and ostracods ; a few fish fragments at bottom	9	0	307	6
	<u>CROWN</u>				
	Coal 45 in.	3	9	316	6
	Seatearlt, mudstone, passing from dark grey to brown to grey downwards ; silty in lower part ; a few scattered ironstone nodules below 321/9	5	3	320	3
	Mudstone, grey, silty, with sandstone bands and laminae (numerous above 329/- ; infrequent below)	12	4	325	6
	Mudstone, grey, with ironstone bands and lenses ; a 'murel' at 340/2	5	6	337	10
	Ironstone with contorted bands of dark shale	5	6	343	4
	Mudstone, dark grey, with 3-in. cany band @ 346/2 ; rare fish fragments	—	2	343	6
	Ironstone	3	6	347	0
	Manton Estheria Band	—	5	347	5
	Mudstone, dark grey, with <u>Estheria</u> and fish	2	4	349	9
	Mudstone, dark grey, slightly silty, with plant debris	1	7	349	9
	Seatearlt, brown mudstone ; ironstone nodules and particles of sphaeroidite below 353/3	6	2	351	4
	Mudstone, grey, <del>becoming</del> becoming fairly dark grey below 371/6 and dark grey below 382/3 ; silty in part in 5 ft. ironstone nodules and thin bands	26	10	357	6
	Coal 19 in.	1	7	384	4
	Seatearlt, grey mudstone ; ironstone nodules below 387/2 ; passing down to 5 in.	3	1	385	11
	Mudstone, grey, silty with ironstone nodules above 394/9 ; dark grey bands below 394/9 ; plants and rootlets	7	4	389	0
	Coal 0 1/2 in.	—	2	396	4
	Dirt 0 1/2 in.	—	2	396	4
	Coal 1 in.	—	2	396	6

(2701) \*D0600/W04070 8,000 4/55 JC&S Gp00

Name and Number of Shaft or Bore given by Geological Survey:

Pallerton Colliery Borehole

SK46NE18

County

6" Quarter Sheet

GEOLOGICAL CLASSIFICATION	DESCRIPTION	THICKNESS		DEPTH	
		FT	in.	FT	in.
	Seatearth, dark grey to grey mudstone	3	3	396	6
	Ironstone with rootlets	-	5	399	9
	Mudstone, grey, with ironstone nodules and abundant plants	1	3	400	2
	Ironstone	-	5	401	5
	Seatearth, grey mudstone	-	6	401	10
	Shale, dark grey carbonaceous, with coal streaks and abundant plant	-	5	402	4
	Coal, 2 in.	-	2	402	9
	Coaly shale	1	0	402	11
	Seatearth, grey mudstone	1	3	403	2
	Coal 0 1/2 in. } Dirt 1 1/2 in. } 3 in. Coal 1 in. }	-	3	405	5
	Seatearth, grey silty mudstone, with rootlets preserved in ironstone	2	3	407	8
	Mudstone, grey silty, with sporadic rootlets and plants; abundant ironstone nodules	2	2	409	10
	Seatearth, grey mudstone	1	3	411	1
	Mudstone, grey silty, with ironstone nodules and lenses; sporadic plants and, at top, rootlets	4	8	415	9
	Seatearth, grey mudstone, with sporadic coal streaks	1	2	416	11
	Mudstone, grey, silty, with sandstone laminae and bands, and ironstone nodules and bands; plants; rootlets at top	5	1	422	0
	Mudstone, grey, clunchy, with abundant plants; coal streaks	1	1	423	1
	Seatearth, grey mudstone	-	7	423	8
	Sandstone, light grey, with rootlets	1	4	425	7
	Mudstone, grey silty, with sandstone bands and laminae, and ironstone nodules; 3-in. ironstone band @ 434/-; plant debris; abundant 'mussels' from 432/3 to 433/9	10	5	436	0
	Mudstone, grey, with ironstone bands and lenses	6	7	442	7
	Mudstone, grey silty, with ironstone bands and abundant 'mussels'	1	10	444	5
	Clunch, grey, with poorly-preserved 'mussels'	2	0	446	5
	Mudstone, dark grey to grey; silty becoming less silty downwards and non-silty on only slightly silty below 456/-; 'mussels'; a few ostracods at 462/10	24	5	470	10

(2781) \*Dd0006/W164575 5,000 4/86 JCS Gp000

Name and Number of Shaft or Bore given by Geological Survey:

Pallerton Colliery Borehole

**SK46NE18**

County

6" Quarter Sheet

GEOLOGICAL CLASSIFICATION	DESCRIPTION	THICKNESS		DEPTH	
		FT	in.	FT	in.
				<u>From</u>	<u>470</u> 10
	<u>Two-foot Marine Band</u>				
	Mudstone, dark grey, with <u>lingula</u>	—	9	<u>471</u>	7
	<u>TWO-FOOT (Top leaf)</u>				
	<u>Coal</u> 20 in. (15 in. of fragment recovered)	1	8	<u>473</u>	<u>3.3</u>
	Seatearlt, dark grey mudstone, becoming silty downwards; ironstone nodules below 475/3	6	2	479	5
	<u>TWO-FOOT (Bottom leaf)</u>				
	<u>Coal</u> 23 in. (19 in. recovered)	1	11	<u>481</u>	4
	Seatearlt, grey mudstone	—	6	<u>481</u>	10
	Mudstone, grey, silty in part; ironstone nodules and bands below 485/7; sandy bands below 497/4; plant debris	16	11	498	9
	Mudstone, dark grey, with carbonaceous plant fragments	—	2	498	11
	<u>FURNACE</u>				
	<u>Coal</u> (core fragmentary in upper part) 24 in.	2	0	<u>500</u>	11
	Seatearlt, grey mudstone, with ironstone nodules in middle part	3	9	504	8
	Core missing	1	1	505	9
	Seatearlt, grey mudstone	—	11	506	8
	Mudstone, grey, very silty to silty; sandstone bands about 515/9; scattered ironstone nodules and <u>Griles</u> ; plant fragments	11	8	518	4
	Seatearlt, grey mudstone, passing down to:	2	5	520	9
	Mudstone, grey, with plant debris	1	11	522	8
	<u>Coal</u> 1 in.	—	1	<u>522</u>	9
	Seatearlt, grey mudstone, becoming silty at bottom; ironstone nodules below 523/9	2	9	525	6
	Mudstone, grey silty; abundant false-bedded bands of sandstone below 532/6; nodules at top; plant debris	11	6	537	0
	Sandstone, light grey, fine-grained, with numerous laminae and bands of carbonaceous matter in addition to scattered carbonaceous plant debris; ironstone pebbles between 565/9 - 567/9	34	9	571	9
	<u>Coal</u> (Drill records 17 in.; 10 in. of fragment recovered)	1	5	<u>573</u>	2
	Seatearlt, grey mudstone, with sandy bands in bottom part	2	0	575	2



(2781) \*D40586/W164575 5,000 4/55 JC&S Gp669

Name and Number of Shaft or Bore given by Geological Survey:

Pallerton Colliery Borehole

SK46NE18  
County

6" Quarter Sheet

GEOLOGICAL CLASSIFICATION	DESCRIPTION	THICKNESS		DEPTH	
		ft	in.	ft	in.
	Interbedded grey silty mudstone and light grey sandstone; rootlets in top 2 ft; passing down to:-	4	0	575	2
	Mudstone, grey, silty in parts with sporadic sandstone bands and laminae	4	4	579	2
	Mudstone, grey, with sporadic ironstone bands and lenses	1	9	583	6
	Mudstone, dark grey, with 'mussels' <del>interbedded</del> below 586/1;	<del>1</del>	<del>9</del>	<del>586</del>	<del>5</del>
	thin ironstone bands; sandstone bands in bottom part	3	6 1/2	588	9 1/2
	Coal 1 1/2 in. } Dirt 6 in. } 10 1/2 in. Coal 3 in. }	-	10 1/2	589	8
	Seatearth, grey silty mudstone, with ironstone nodules in bottom 1 ft.	3	0	592	8
	Mudstone, grey, silty, with sandy laminae; a few ironstone nodules; rootlets	3	4	596	0
	Mudstone, dark grey, with plant debris	1	2	597	2
	Interbedded dark grey mudstone and light grey sandstone	2	6	599	8
	Seatearth, grey mudstone, with large ironstone nodules below 600/9; silty in parts; passing down to:-	2	7	602	3
	Mudstone, grey silty; rootlets at top; plant debris	5	9	608	0
	Mudstone, grey silty, with sandstone bands, ironstone nodules and bands, and plant debris	19	8	627	8
	Mudstone, grey to dark grey, with 'mussels' and thin silty ironstone bands; carbonaceous with plants in bottom 2 in.	2	10	630	6
	Coal (borehole records 3 in; a few fragments recovered)	-	3	630	9
	Seatearth, grey mudstone	1	5	632	2
	Sandstone, light grey, fine-grained	3	1	635	3
	Mudstone, grey, silty above 662/5; sporadic ironstone bands (4 in. ironstone band @ 669/13)	36	5	671	8
	Mudstone, dark grey, with sporadic ironstone bands ('mussels' in ironstone band @ 672/13); bottom 5 in. has carbonaceous plant fragments, poor shells and numerous ironstone bands	10	4	682	0
	HIGH HAZLES				
	Coal 4 in.	3	5	685	5

(2781) \*Dd0586/Wt64575 5.000 4/55 IC&amp;S Gp669

Name and Number of Shaft or Bore given by Geological Survey:

Paltenton Colliery Borehole

# SLABNE 118

County

**6" Quarter Sheet.**

GEOLOGICAL CLASSIFICATION	DESCRIPTION	THICKNESS		DEPTH	
		ft.	in.	ft.	in.
	Seatearth, grey mudstone, with ironstone nodules in lower part			685	5
	Seatearth, grey silty mudstone	1	7	687	0
	Seatearth, dark grey mudstone, with coal streaks	-	6	687	6
	Core lost	-	9	688	3
		-	9	689	0
	<u>Base of Borehole at 689/-</u>				





1063 Wt. 22438/0384 10x 7/45 (51) F.S.S.

112/245

(For Survey use only)

# RECORD OF SHAFT OR BORE FOR MINERALS

1-inch Map Registered No.

112/245

Name and Number of Shaft or Bore

PALTERTON COLLIERY BOREHOLE

For Messrs. N.C.B., No 1 Area, East Midlands Division

Town or Village Palterton

County Derby.

Six-inch ~~quarter~~-sheet SK 46 NE

6-inch Map  
Registered  
No.

SK 46/77

Exact site See attached plan SK 46 NE 4594 69 20

(c. 280 yd N. 70° W of Doe Lea Bridge)

Attach a tracing from  
a map, or a sketch-  
map, if possible.

Purpose for which made To prove quality of coals as recorded in Palterton Air Shaft

Level at which shaft commenced relative to O.D. +243.52

State if shaft is up, down, horizontal or

inclined; in latter cases give angle of inclination and direction down

Made by Boyle Bros Ltd.

Information from Core examination by E.G. Smith Date of Sinking 1958

Specimens

Additional Notes in Space Overleaf

GEOLOGICAL CLASSIFICATION	NATURE OF STRATA	THICKNESS		DEPTH	
		Ft	in.	Ft	in.
UPPER CARBONIFEROUS  WESTPHALIAN B	No core (open hole)	19	6	19	6
	Sandstone, soft brown-grey micaceous (core fragmentary)	5	6	25	0
	4 ft of core missing between 19 ft 6 in. and 35 ft 6 in.	4	0	29	0
	Mudstone, grey silty; plants above 35 ft 6 in.	14	6	43	6
	Mudstone, fairly dark grey; 1-in. shell ironstone @ 46 ft 2 in.; sporadic plant fragments; poor shells above 48 ft; fish scale at base	10	3	53	9
	Shale, dark grey, silty and micaceous below 54 ft 10 in.; 2-in. ironstone band with poor "murex" fragments at 55 ft 6 in.; Sporadic plant fragments	2	0	55	9
	Mudstone, grey silty, with plants	17	3	73	0
	Mudstone, grey becoming darker downwards and dark grey below 82 ft; 2 1/2-in. ironstone band at 88 ft 6 in.	18	8	91	8
	Mudstone, grey, with ironstone bands and sporadic plant fragments	1	4	93	0
	Coal 1 in. (Driller's thickness; fragments recovered)	-	1	93	1
	Seatearth, dark grey mudstone	-	2	93	3
	Seatearth, brown mudstone, with patches of sphaeroidites	8	4	101	7

GEOLOGICAL SURVEY AND MUSEUM,  
SOUTH KENSINGTON,  
LONDON, S.W.7.

Date  
received

Correspond-  
ence File No.

1" N.S. Map  
No.

1" O.S. Map  
No.

Site marked (use symbol)  
on 1" Map on 6" Map

(2781) \*D40586/W164575 5,000 4/85 JC&S Gp689

Name and Number of Shaft or Bore given by Geological Survey:

Pallaton Colliery Borehole

1125/46/77  
County  
6" Quarter Sheet  
**245**

GEOLOGICAL CLASSIFICATION	DESCRIPTION	THICKNESS		DEPTH	
		FT	in.	FT	in.
WESTPHALIAN B	Seatearth, dark grey mudstone, with ironstone nodules in lower part	2	5	from 101	7
	Mudstone, dark grey, with rootlets; ironstone nodules above 109 ft 3 in. and in bottom 1 ft; shell fragment at 111 ft 8 in.	9	9	104	0
	Coal 13 in.) Dirt 22 in.) } 38 in. Coal 3 in.)	3	2	113	9
	Seatearth, grey mudstone	1	4	116	11
	Mudstone, grey silty; pyritised rootlets; 6p 1 ft; plant debris; numerous ironstone nodules below 120/9	4	9	118	3
	Interbedded grey mudstone or silty mudstone and light grey sandstone; plant debris	8	4	123	0
	Coal 8 in.	—	8	131	4
	Seatearth, hard grey silty	3	9	132	0
	Mudstone, grey silty, becoming darker grey below 134/-; 3-in. ironstone band @ 140/1	6	3	135	9
	<u>Haughton Marine Band</u> Mudstone, dark grey, with ironstone bands, lenses and nodules; 10 1/2-in. ironstone band @ 149/8 (white oolite in top 4 in.) Planolites; Tomaculum (preserved in ironstone) below 166/6; Fucoids; Lingula @ 158/2, 162/3, 165/3, 167/4, 169/7, 171/11 and 175/4; Ostaculoides @ 168/1; Foraminifera, Nucula lamellibranchs @ 163/4 and 164/-; gastropod @ 169/5; Fish spine @ 172/11	34	6	142	0
	Mudstone, dark grey, with bands of pyrite in lower part; scattered plant debris and a few 'mussel' fragments	1	6	176	6
	Mudstone, grey, with ironstone bands; sandstone laminae above 180/9; plant debris	4	4	178	0
	Mudstone, dark grey, with ironstone bands; plant debris	1	7	182	4
	Shaly coal 1 in.) Coal 2 1/2 in.) Dirt 0 1/2 in.) } 18 in. Coal 1 1/2 in.) Dirt 1 1/2 in.) Coal 0 1/2 in.)	1	6	183	11
	Dirt with coal bands 10 1/2 in.)			185	5

3

(2781) \*Dd0886/W164575 5,000 4/55 JCA5 Gp009

Name and Number of Shaft or Bore given by Geological Survey:

Palterton Colliery Borehole

1125/K46/32  
County  
6" Quarter Sheet  
245

GEOLOGICAL CLASSIFICATION	DESCRIPTION	THICKNESS		DEPTH	
		FT	in.	FT	in.
WESTPHALIAN B	Seatearth, dark grey mudstone	—	4	from 185	5
	Seatearth, brown to grey mudstone, becoming harder downwards; sphaerulid debris below 189/6	6	9	185	9
	Interbedded light grey sandstone and grey mudstone or silty mudstone; sporadic ironstone nodules and bands; plant debris	5	1	192	6
	Seatearth, brown to grey mudstone; numerous large ironstone nodules below 201/6	7	4	197	7
	Mudstone, grey, becoming darker in bottom 6 in.; bands of light grey sandstone above 206/3; ironstone nodules; abundant plant debris	5	9	204	11
	Coal 16 in.	1	4	210	8
	Seatearth, grey mudstone, becoming sandy downwards	—	4	212	0
	Sandstone, light grey, with mudstone bands and partings below 217/7; rootlets in top 2 ft 9 in.	8	10	212	4
	Mudstone, grey, with sporadic ironstone; plant debris at top	12	6	221	2
	Shale, dark grey, with sporadic fish fragments; 2-in. ironstone band @ 236/1; bands & lenses of stelly ironstone below 237/3	4	4	233	8
	Ironstone with coal inclusions	—	3	238	0
	Coal 7 in. (6 in. recovered)	—	7	238	3
	Seatearth, grey silty mudstone with ironstone nodules in top 1 ft; passing down to:—	3	11	238	10
	Mudstone, grey, silty in top half; a few rootlets	3	4	242	9
	Mudstone, grey, silty, with bands of light grey sandstone above 254/1; numerous sandstone laminae below 258/6; very abundant plant debris	21	1	246	1
	Mudstone, grey	7	0	267	2
	Ironstone	—	2	274	2
	Mudstone, dark grey, with thin ironstone bands; sporadic fish and insect fragments	2	0	274	4
	Seatearth, brown to grey mudstone, with numerous large ironstone nodules below 281/—; passing down to:—	6	11	276	4
				283	3



(2781) \*Dd0506/W164575 5,000 4/55 JC&S Gp600

Name and Number of Shaft or Bore given by Geological Survey:

Pallerton Colliery Borehole

112/5K46/32  
County  
6" Quarter Sheet  
**245**

GEOLOGICAL CLASSIFICATION	DESCRIPTION	THICKNESS		DEPTH	
		FT	in.	FT	in.
WESTPHALIAN B	Mudstone, grey, silty above 293/- ; numerous ironstone nodules and a few rootlets above 289/3	13	11	from 283	3
	Shale, dark grey, with 'mussels'; abundant ostracods below 306/6	10	4	297	2
	Mudstone, grey, becoming gradually darker grey below c. 312/6 ; abundant 'mussels' and ostracods ; a few fish fragments at bottom	9	0	307	6
	<u>CROWN</u> Coal 45 in.	3	9	316	6
	Seatons, mudstone, passing from dark grey to brown to grey downwards ; silty in lower part ; a few scattered ironstone nodules below 321/9	5	3	320	3
	Mudstone, grey silty, with sandstone bands and laminae (numerous above 329/- ; infrequent below)	12	4	325	6
	Mudstone, grey, with ironstone bands and lenses ; a 'mussel' at 340/2	5	6	337	10
	Ironstone with contorted bands of dark slate	—	2	343	4
	Mudstone, dark grey, with 3-in. conky band @ 346/2 ; rare fish fragments	3	6	343	6
	Ironstone	—	5	347	0
	<u>Manton Estheria Band</u> Mudstone, dark grey, with <u>Estheria</u> and fish	2	4	347	5
	Mudstone, dark grey, slightly silty, with plant debris	1	7	349	9
	Seatons, brown mudstone ; ironstone nodules and patches of spherosiderite below 353/3	6	2	351	4
	Mudstone, grey, <del>etc</del> becoming fairly dark grey below 371/6 and dark grey below 382/3 ; silty in parts in top 5 ft, ironstone nodules and thin bands	26	10	357	6
	Coal 19 in.	1	7	384	4
	Seatons, grey mudstone ; ironstone nodules below 387/2 ; passing down 5' -	3	1	385	11
	Mudstone, grey, silty with ironstone nodules above 394/9 ; dark grey bands below 394/9 ; plants and rootlets	7	4	399	0
	Coal 0 1/2 in. } Dirt 0 1/2 in. } 2 in. Coal 1 in. }	—	2	396	4
				396	6



(2781) \*Dd0586/W164575 5,000 4/55 JC&S Gp089

Name and Number of Shaft or Bore given by Geological Survey:

Pallerton Colliery Borehole

112SK46/77  
6' Quarter Mile  
245

GEOLOGICAL CLASSIFICATION	DESCRIPTION	THICKNESS		DEPTH	
		FT	in.	FT	in.
WESTPHALIAN B	Seatearth, dark grey to grey mudstone	3	3	396	6
	Ironstone with rootlets	—	5	399	9
	Mudstone, grey, with ironstone nodules and abundant plants	1	3	400	2
	Ironstone	—	5	401	5
	Seatearth, grey mudstone	—	6	401	10
	Shale, dark grey carbonaceous, with coal streaks and abundant plants	—	5	402	4
	Coal, 2 in.	—	2	402	9
	Coaly shale	1	0	402	11
	Seatearth, grey mudstone	1	3	403	11
	Coal 0 3/4 in. } Dirt 1 1/4 in. } 3 in. Coal 1 in. }	—	3	405	2
	Seatearth, grey silty mudstone, with rootlets preserved in ironstone	2	3	405	5
	Mudstone, grey silty, with sporadic rootlets and plants; abundant ironstone nodules	2	2	407	8
	Seatearth, grey mudstone	1	3	409	10
	Mudstone, grey silty, with ironstone nodules and lenses; sporadic plants and, at top, rootlets	4	8	411	1
	Seatearth, grey mudstone, with sporadic coal streaks	1	2	415	9
	Mudstone, grey, silty, with sandstone laminae and bands, and ironstone nodules and bands; plants; rootlets at top	5	1	416	11
	Mudstone, grey, chunky, with abundant plants; coal streaks	1	1	422	0
	Seatearth, grey mudstone	—	7	423	1
	Sandstone, light grey, with rootlets	1	11	423	8
	Mudstone, grey silty, with sandstone bands and laminae, and ironstone nodules; 3-in. ironstone band @ 434/-; plant debris; abundant 'mussels'	10	5	425	7
	From 432/3 to 433/9	10	5	436	0
	Mudstone, grey, with ironstone bands and lenses	6	7	442	7
	Mudstone, grey silty, with ironstone bands and abundant 'mussels'	1	10	444	5
	Conk, grey, with poorly-preserved 'mussels'	2	0	446	5
	Mudstone, dark grey to grey; silty becoming less silty downwards and non-silty on only slightly silty below 456/-; 'mussels'; a few ostracods at 467/10	4	5	470	10

(2781) \*D40506/W404575 5,000 4/55 JC&S Gp000

Name and Number of Shaft or Bore given by Geological Survey:

Pallaton Colliery Borehole

112S/K45/77  
245  
6" Quarter Sheet

GEOLOGICAL CLASSIFICATION	DESCRIPTION	THICKNESS		DEPTH	
		FT	in.	FT	in.
WESTPHALIAN B	Two-Foot Marine Band			from 470	10
	Mudstone, dark grey, with <u>lingula</u>	—	9	471	7
	Two-Foot (Top leaf)				
	Coal 20 in. (15 in. of fragment recovered)	1	8	473	3.3
	Seatearths, dark grey mudstone, becoming silty downwards; ironstone nodules below 475/3	6	2	479	5
	Two-Foot (Bottom leaf)				
	Coal 2 23 in. (19 in. recovered)	1	11	481	4
	Seatearths, grey mudstone	—	6	481	10
	Mudstone, grey, silty in part; ironstone nodules and bands below 485/7; sandy bands below 497/4; plant debris	16	11	498	9
	Mudstone, dark grey, with carbonaceous plant fragments	—	2	498	11
	FURNACE				
	Coal (core fragmentary in upper part) 24 in.	2	0	500	11
	Seatearths, grey mudstone, with ironstone nodules in middle part	3	9	504	8
	Core missing	1	1	505	9
	Seatearths, grey mudstone	—	11	506	8
	Mudstone, grey, very silty to silty; sandstone bands above 515/9; scattered ironstone nodules and lenses; plant fragments	11	8	518	4
	Seatearths, grey mudstone, passing down to	2	5	520	9
	Mudstone, grey, with plant debris	1	11	522	8
	Coal 1 in.	—	1	522	9
	Seatearths, grey mudstone, becoming silty at bottom; ironstone nodules below 523/9	2	9	525	6
	Mudstone, grey silty; abundant false-bedded bands of sandstone below 532/6; rootlets at top; plant debris	11	6	537	0
	Sandstone, light grey, fine-grained, with numerous laminae and bands of carbonaceous matter in addition to scattered carbonaceous plant debris; ironstone pebbles between 565/9 and 567/9	34	9	571	9
	Coal (Miller records 17 in.; 10 in. of fragments recovered)	1	5	573	2
	Seatearths, grey mudstone, with sandy bands in bottom part	2	0	575	2

(2781) \*D40596/W104575 5,000 4/85 JC&S Gp809

Name and Number of Shaft or Bore given by Geological Survey:

Pallaton Colliery Borehole

112 SK46/77  
245  
County  
6" Quarter Sheet

GEOLOGICAL CLASSIFICATION	DESCRIPTION	THICKNESS		DEPTH	
		ft	in	ft	in
WESTPHALIAN B	Interbedded grey silty mudstone and light grey sandstone; rootlets in top 2 ft; passing down to:-	4	0	575	2
	Mudstone, grey, silty in parts with sporadic sandstone bands and laminae	4	4	579	2
	Mudstone, grey, with sporadic ironstone bands and lenses	1	9	583	6
	Mudstone, dark grey, with 'mussels' <del>in bottom 1 in.</del> below 586/1;	<del>1</del> 9		<del>586</del> 5	
	Thin ironstone bands; sandstone bands in bottom part	3	6 1/2	588	9 1/2
	Coal 1 1/2 in. } Dirt 6 in. } 10 1/2 in. Coal 3 in. }	-	10 1/2	589	8
	Seatearth, grey, silty mudstone, with ironstone nodules in bottom 1 ft	3	0	592	8
	Mudstone, grey, silty, with sandy laminae; a few ironstone nodules; rootlets	3	4	596	0
	Mudstone, dark grey, with plant debris	1	2	597	2
	Interbedded dark grey mudstone and light grey sandstone	2	6	599	8
	Seatearth, grey mudstone, with large ironstone nodules below 600/9; silty in parts; passing down to:-	2	7	602	3
	Mudstone, grey silty; rootlets at top; plant debris	5	9	608	0
	Mudstone, grey silty, with sandstone bands, ironstone nodules and bands, and plant debris	19	8	627	8
	Mudstone, grey to dark grey, with 'mussels' and thin silty ironstone bands; carbonaceous with plants in bottom 2 in.	2	10	630	6
	Coal (Borehole records 3 in; a few fragments recovered)	-	3	630	9
HIGHT HAZLES	Seatearth, grey mudstone	1	5	632	2
	Sandstone, light grey, fine-grained	3	1	635	3
	Mudstone, grey, silty above 662/5; sporadic ironstone bands (4 in); ironstone band @ 669/3	36	5	671	8
	Mudstone, dark grey, with sporadic ironstone bands ('mussels' in ironstone band @ 672/3); bottom 5 in. has carbonaceous plant fragments, poor shells and numerous ironstone bands	10	4	682	0
	Coal 4 1/2 in.	3	5	685	5



(2781) \*Dd0686/Wt64575 5.000 4/55 JCA3 Gp689

**Name and Number of Shaft or Bore given by Geological Survey:**

Palteton Colliery Borehole

112 SKUS 173  
County  
6" Quarter She 245

GEOLOGICAL CLASSIFICATION	DESCRIPTION	THICKNESS		DEPTH	
		ft	in.	ft	in.
WESTPHALIAN B	Seatearth, grey mudstone, with ironstone nodules in lower part	1	7	685	5
	Seatearth, grey silty mudstone	-	6	687	6
	Seatearth, dark grey mudstone, with coal streaks	-	9	688	3
	Core lost	-	9	689	0
	Base of Borehole at		689/-		



