

SK46NW13.6" Derby 51 NW.

1" 112 V

Heath No I

SK 4452 6674

Commences above the Top Hard Coal -  
at Hardwick Colliery one mile SW of Heath the  
distance between Top Hard & Limestone = 1166 ft.  
Middle Coal Measures at Heath No 1 = 1200 ft approx  
Taking same measurements as at Hardwick No 1 for  
Lower Coal Measures, Limestone Grits & Limestone  
shales depth to Limestone would be

Depth to top of Limestone at Heath No 1

	feet
Middle Coal Measures - - - - -	1200
Lower Coal Measures - - - - -	<del>1200</del>
Limestone Grits - - - - -	<del>1000</del>
Limestone Shales - - - - -	400
Total	<u><u>3600</u></u> feet.

Amended values published in Chesterfield Memoirs:

Base of Coal Measures 2155 ft  
Top of Carboniferous List 3920 ft.  
Bottom at 4009 ft

SK46NW 1  
13

Moor Lane Quarry

Guisley Ganister Company

one Inch Geological Map 92 SE (Old Ser.); Plain Ordnance 202 NW  
69 (New Ser.); Six Inch Geological & Ordnance ~~201 NE~~  
Yorks.

Lat 53° 51' 50"; Long 1° 43' 50"

The situation is one mile SW of Guiseley station near a by-road off the main road from Guiseley to Hawkstone. It is locally known as Whitakers Quarry after the name of the owner.

The quarry is situated on an outcrop of the Rough Rock of the Mellsstone Grit Series on the Geological Map. It ~~has~~ <sup>but</sup> in character ~~the same~~ <sup>it</sup> is closely resembles that of ~~Mellstone~~ <sup>Mellstone (p.) and the 32 yd</sup> ~~and~~ <sup>rock of</sup> Top, Horsforth, and is very unlike the ~~Rough Rock~~ <sup>flinty</sup> of the Aire Valley.

owing to the northerly dip the bearing of yellowish grey shale increases from two feet on the south side of the quarry to ~~about~~ 15 feet on the north side. Beneath this cover ~~about~~ about 15 feet of sandstone is quarried in three lifts made up of a top lift, 6 feet thick, a middle lift from 1 ft 9 in to 2 feet thick and a bottom lift averaging 2 feet in thickness. The bedding is irregular and the ~~stratification~~ <sup>three beds occur in</sup> wedges. ~~the~~ Numerous slickensided joints filled with a grey clay traverse the rock. <sup>The quarry</sup> ~~which~~ is also <sup>crossed</sup> broken in two places by small faults. On the south side of the quarry a coal, 9 inches thick, rises from under the sandstone and rests on a grey shale.

The rock quarried is essentially <sup>only</sup> a highly siliceous sandstone, varying slightly in colour

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6" Derby 31 NW.  
1" 112.

Description of samples.

Heath

- 60ft. medium grained buff sandstone, little ironstone, trace coal.
- 65 " " & hard sandy shale
- 75 shale, sandy shale, sandstone little ironstone trace coal.
- 80 " " much " " "
- 85 " " " " " "
- 90 " " " " " "
- 95 " " " " " "
- 110 Soft shale & some ironstone.
- 120 soft sandy shale " "
- 130 grey shaly sandstone " "
- 135 coal
- 140 coal
- 145 Coal, sandstone, ironstone, & little shale
- 150 grey shaly sandstone, ironstone, trace coal.
- 155 " sandy shale " " "
- 168 grey shale " " "
- 174 " " " " "
- 178 " " " " "
- 185 shaly sandstone " "
- 190 " " little " & little shale
- 194 " " " " "
- 204 " " " " "
- 209 sandy shale " "
- 214 black shale " " sandstone & coal.
- 219 Bituminous Coal
- 224 shaly sandstone, shale, " " & coal
- 230 sandy shale & trace of coal
- 235 sandy shale, little ironstone, trace of coal
- 238 " " " " " "
- 240 " " " " & shale
- 250 shaly sandstone, little grey shale & ironstone
- 255 " " " " " "
- 260 " " " " " "

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265	Shaly sandstone, fine sand, & ironstone	[Gas]
270	Grey shale, shaly sandstone, fine poor coal & ironstone	
280	" sandy " " " " 10% " "	
290	Shaly sandstone, grey shale, & ironstone	
295	" " " " " " "	
300	" " " " " " "	
305	grey shale & ironstone	
315	" " " " " " "	
320	" " " " " " "	
325	" " " " " " "	
330	" " " " " " "	
335	" " " " " " "	
340	" " " " " " "	
345	" " " " " " & little coal	
350	" " " " " " "	
355	" " " " " " & little brown sandstone	
360	" " " " " " "	
370	grey & black shale	
375	" " " " " " "	
380	" " " " " " "	
385	grey & brown shaly sandstone, grey shale & ironstone	
390	" " " " " " "	
400	grey shale, partly sandy, & shaly sandstone [little ironstone in all]	
405	grey & brown shaly sandstone & sandy shale	sample b666
410	grey shale, sandy in part	
415	" " " " " " "	
420	" " " " " " & sandy shale	
425	" " " " " " "	
430	" " " " " " & sandstone	
435	light dash grey shale	
440	grey shale & shaly sandstone	
445	" " " " " " "	
450	" " " " " " "	
455	" " " " " " "	

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460	grey shale, sandy in part	large pieces of iron stone
465	"	"
470	"	"
475	shaly sandstone	
480	grey shale	
485	"	"
490	"	"
500	"	"
510	"	"
515	"	"
520	"	"
525	"	and shaly sandstone
630	"	"
635	"	"
540	grey shaly sandstone & little	<u>coal</u>
545	grey shale, sandy in part	
550	"	"
565	"	"
560	"	"
570	"	"
575	grey & brown shale	
580	"	"
585	"	"
590	black shale	
595	Grey shale & <u>coal</u>	(? D. H.)
610	"	"
615	"	"
626	grey sandy micaceous shale	
631	"	"
636	grey shale sandy in part	
641	"	"
648	"	& shaly sandstone
654	"	"
659	"	sandy in part & 10% <u>coal</u>
666	"	shaly sandstone little "

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675	grey shaly sandstone, much ironstone, pyrites
680	grey shale less " trace <u>coal</u>
685	grey sandy shale still less "
690	hard grey & brown shaly sandstone
695	" "
700	" "
710	" "
715	" " & buff argillaceous sand
720	" "
725	" "
730	grey shaly sandstone & sandy shale
735	" "
740	" "
745	" "
750	" "
760	" "
770	" "
775	medium grained grey shaly sandstone trace <u>coal</u>
780	" " & sandy shale
785	" "
795	grey shaly sandstone & sandy shale & ironstone
800	medium grained pale buff sandstone & sandy shale
805	black shale, shaly sandstone & ironstone
810	dark grey shale, " "
815	" " "
820	black shale & little ironstone
825	" "
830	dark grey shale, sandy shale, "
835	micaceous sandy shale & shaly sandstone, ironstone, trace <u>coal</u>
840	" " "
855	light grey shale, shaly sandstone, little ironstone
855	" " "
859	" sandy shale " pyrites
865	sandy shale & 30 % <u>coal</u> "

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870	dark grey shale, sandy shale, little ironstone	
875	"	"
880	grey sandy shale	"
885	" , shaly sandstone	"
890	"	"
895	"	"
900	"	"
905	"	"
910	"	"
915	grey shaly sandstone, sandy shale	"
925	"	"
930	"	"
935	"	"
940	"	"
945	grey shale, shaly sandstone	"
950	"	"
960	" black shale	"
965	" " shaly sandstone	"
970	grey shale sandy in part	"
975	pale grey shaly sandstone, grey shale, & coal	"
980	"	"
985	grey shale, shaly sandstone, little ironstone	"
990	" micaceous in part	"
1000	"	"
1005	"	"
1015	" mostly sandy	"
1025	pale grey shaly sandstone & coal	"
1030	"	"
1035	grey sandy shale & shaly sandstone	"
1040	"	"
1045	"	"
1050	grey shale	10% ironstone
1055	" sandy in part	"
1060	"	"
1065	" shaly sandstone	"

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1070	grey shale, sandy shale, & sandstone
1075	grey shale, sandy in part
1080	" "
1085	" "
1090	" "
1095	grey sandy shale, black shale, & shaly sandstone
1100	" "
1105	" "
1110	" "
1115	" " little coal
1120	" "
1125	" "
1135	grey shaly sandstone, " trace coal & ironstone
1140	" sandy shale "
1145	grey shaly sandstone " "
1150	" " & sandy shale
1155	" "
1160	grey sandy shale
1165	grey shale, sandy in part
1170	" "
1175	" "
1180	" " & some low quartzitic sandstone
1190	" " & shaly sandstone
1195	fine grey shaly sandstone, dark grey shale, trace coal
1200	" "
1205	grey shale, sandy in part. trace ironstone
1210	" "
1215	" "
1225	" " & little ironstone
1230	" "
1235	" "
1240	" "
1245	" "
1250	" "



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1255 grey shaley sandstone & grey shale  
1260 " "  
1270 " "  
1275 " "

Aug 2nd

1285-90 grey shale (with cement)  
1295 fine pale grey mic. sandstone & dark grey shale  
1300-05 grey shale trace ironstone  
1310 fine grey sand & grey shale  
1315 grey shale, sandy in part ironstone  
1320-1340 grey shaley sandstone & sandy shale ironstone  
1345-50 v. fine grey sand shaley sandstone grey shale & "  
1355-60 grey shale "  
1365 grey shaley sandstone & sandy shale "  
1370 hard grey shale  
1375-1415 grey shaley sandstone & sandy shale "  
1420 grey shale "  
1425 " " & silty sandstone "  
1430-1455 grey shale "  
1460 " & shaley sandstone  
1465 grey shaley sandstone  
1470-75 pale grey fine mic. sandstone grey shale little coal  
1485 grey mic shaley sandstone & sandy shale calcit  
1490 grey mic sandy shale  
1495 " & shaley sandstone  
1500-1510 grey shale, slightly micaceous & calcit  
1535 grey mic. sandy shale & ironstone  
1540-1560 " " shaley sandstone, "  
1565 pale grey shaley sandstone & dark grey sandy shale

# SK46NW/13

Heath

- 1570 dark grey sandy shale 40% pale grey shaly sandstone  
1575-1615 pale grey shaly sandstone & grey sandy shale  
1616-15 dark grey shaly sandstone, slightly mic. little ironstone  
1628-1640 grey shale, sandy in part. " "  
1645 dark grey shaly sandstone " "  
1655-1795 dark grey shale " "  
1800 pale grey shaly sandstone, grey shale " "  
1805-20 " "  
1825-30 dark grey shale, fine brown sandstone, fine clay, ironstone  
1835 medium-grained buff mic. sandstone & grey shale  
1840-50 dark grey shale, sandy & mic. little ironstone  
1855, 60 grey shale " "  
1865 " slightly sandy " "  
1870, 75 " " mic in part & shaly sandstone  
1880 fine buff mic sandstone & grey shale  
1885 grey shale, sandy & mic in part, & sandstone coarse  
1890-1940 " " " little ironstone  
1945-55 dark " " slightly sandy & mic and little coal pyrites  
1960, 65 " " & fine buff sandstone  
1970, 75 " " little " garnierite  
1980 " " little garnierite & trace coal  
1985-2020 fine buff sand. (some shaleavings)  
2025, 30 dark grey mic. shaly sandstone & sandy shale ironstone  
2035 " " sandy shale, 30% fine buff sandstone & coal & shaly sandstone  
2040 " " " little ironstone  
2045-2085 medium-grained pale grey sand (of grey sand) & little mica  
2080 coarse detrit 2085 medium 90-2/100 fine  
2105-2135 medium buff sand  
2140-55 dark grey shale  
2160 " & 40% fine pale grey mic. sandstone  
2165, 70 fine pale grey mic sandstone little dark grey shale  
2175 " buff mic. sand  
2180-2220 fine grey mic sand & sandstone  
2225, 30 dark grey mic sandy shale & grey shaly sandstone  
2235 " fine grey mic sand & dark grey shale

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- 2240-2305 dark grey shale, sandy & mic. in part.  
2310 " & fine buff mic. sandstone  
2315-2350 "  
2355 " & fine pale grey mic. sandstone.  
2360 v fine grey mic. sand & dark sandy mic. shale  
2365, 70 dark grey mic. sandy shale  
2375, 50 fine buff mic. sandstone & dark grey shale  
2385, 90 med. grained buff mic. sand "  
2395, 1400 dark grey shale & little sand as above.  
2405-2470 " " sandy mic. shale  
2475-2505 fine grey mic. shaly sandstone & dark grey shale  
2510, 15 dark grey sandy mic. shale & little shaly sandstone.  
2520-2560 dark grey shale, sandy & mic. in part.  
2565 dark grey sandy mic. shale & 1090 fine pale grey sandstone  
2590, 75 " & v fine. calc. & ferrug. grit.  
2580-2675 " (little fine sand at 2620, 2650-55, 2690)  
2680 v fine grey mic. sand  
2685-2700 dark grey sandy mic. shale & fine buff mic. sandstone  
2705-2730 dark grey shale trace pyrites  
2735-2765 dark grey sandy mic. shale  
2770-2795 dark grey shale  
2800, 05 dark grey sandy mic. shale  
2870 dark grey shale & some fine buff mic. sandstone  
2815-28300 fine drab mic. sand (light colour with (S.) & dark grey shale  
2840 fine buff sand (qty little mica & ferromag.) & dark grey shale  
2845, 50 fine buff mic. sandstone  
2855-80 same & shale sandstone  
2885-90 hard grey shale & little sand Lingulella common. formicite  
2892-97 medium buff sand  
2900-05 hard grey sandy mic. shale glauconite  
2910-20 dark brown sand  
2925-35 hard grey sandy mic. shale  
2940-60 fine brown sand & sandstone  
2965-2990 grey mic. sandy shale  
2995 shale today

8/10/17

# SK 46NW/13

- 3000 slightly sandy mic. shale  
3005-3250 grey mic. sandy shale, some ironstained  
3255-75 soft grey shale  
3280-3325 grey mic. shale  
3330-3545 soft grey shale, sometimes slightly mic. calc. thin  
3550 dark. v. with Lingula + ? fish remains  
traces of bitumen.  
-3650 dark grey shale  
3665-3758 Hard grey shale, traces bitumen, pyrites, & calcite veins  
and at 3695 earthy limonite. (offic Oct 1960)  
3760-70 Grey calcareous shale (checked 8/60)  
3775.7 mostly cement  
3780.5 Black carbonaceous shale & much pyrites (all hand-sampled)  
3790-3880 Black shale, little pyrites  
3885 dark grey shale trace bitumen  
3890-3907 " " "  
3910-3920 " " " calcite veins  
3922-3943 " " " fragmentary grey limonite  
3945 grey calcareous mud  
3948 brown  
3950-3981 grey & brown crystalline limonite  
3981-3991 v. dark. "  
3994-3998 pale " "  
4000 very pyritic  
4009 " " greenish limonite & appearing a road

by  
me  
24/12/60

