

Boone County Coal Corporation No. 15 Well

Logan District, Logan County, W. Va.

By Boone County Coal Corporation, Sharples, W. Va.

Located 2.31 mi. W. of 81°50' and 5.6 mi. S. of 38°00' -NC- Logan Quadrangle,
2½ mi. W. of Sharples.-

Elevation, 1549.39'.

Permit, Log-60.

Drilling commenced July 18, 1939; completed, Sept. 20, 1939.

Shot in Berea Sand September 21, 1939.

Gas well; rock pressure 282 lbs. in 24 hours.

Casing, 10", 24'04"; 8½", 1256'11"; 6-5/8", 2421'5"; 3" tubing, 3126'1".

Drillers record from 0 to 1795'; nearly complete samples from 1795 to 3126'.

Top Bottom Thickness

Pottsville Formation, 1872+ feet

Top	Bottom	Thickness	
0	25	25	Sand, yellow, soft
25	50	25	Slate, black, soft
50	100	50	Slate, white, soft
100	150	50	Sand, white, hard
150	233	83	Slate and shells, dark, soft
233	236	3	Coal, black, soft (Winifrede)
236	245	9	Slate and shells, dark, soft
245	344	99	Sand, white, hard
344	347½	3½	Coal, black, soft (Chilton; SIM)
347½	393	45½	Sand, white, hard
393	395	2	Coal, black, soft (Little Chilton)
395	461	66	Sand, white, hard
461	478	17	Slate, dark, soft
478	549	71	Sand, white, hard
549	568	19	Slate, dark, soft
568	570	2	Coal, black, soft (Williamson)
570	577	7	Slate, dark, soft
577	604	27	Sand, light, hard
604	607	3	Coal (Upper Cedar Grove)
607	697½	90½	Slate and shells, dark, soft

Top	Bottom	Thickness	
697½	700½	3	Coal, black, soft (Alma)
700½	836	135½	Sand, white, hard
836	854	18	Slate, dark, soft
854	915	61	Sand, light, hard
915	1125	210	Slate and shells, dark, soft
1125	1213	88	Sand, white, hard
1213	1237	24	Slate, dark, soft
1237	1380	143	Sand, white, hard (First Salt Sand)
1380	1404	24	Lime, dark, hard
1404	1452	48	Slate, dark, soft
1452	1470	18	Lime, dark, hard
1470	1795	325	Sand, light, hard (Second Salt Sand; salt water 223 gal. per hour at 1610', salt water 158 gal. per hour increase at 1648')
1795	1830	35	Sandstone, white, medium-grained, with considerable amount of iron-rust stain; some of quartz shows crystal faces
1830	1842	12	Shale, gray, silty, micaceous
1842	1872	30	Sandstone, white, fine-to medium-grained, with some iron-rust stain
<u>Mauch Chunk Group, 473 feet</u>			
1872	1885	13	Shale, gray, highly calcareous; small amounts of red shale and gray limestone are present
1885	1900	15	Shale, red, very soft, calcareous; dried fragments break up on addition of water
1900	1915	15	Shale, red, and gray, soft, calcareous; some light-brown dolomitic limestone between 1905 and 1910'
1915	1995	80	Shale, red, soft, calcareous; partly green from 1925 to 1935; slow effervescence indicates presence of some dolomite (drillers record gives "dark hard lime" from 1955 to 1967')
1995	2000	5	Shale, red, 50%; gray to reddish dolomitic limestone, 20%
2000	2015	15	Shale, grayish-red, somewhat dolomitic
2015	2025	10	Limestone, gray, with a few fossil fragments; samples also contain some gray shale
2025	2035	10	Shale, gray, soft, with some fossil shells
2035	2040	5	No sample
2040	2045	5	Shale, gray, yellow and red, not laminated; contains dolomite and lumps of pyrite
2045	2055	10	Clay and soft shale, light- to dark-gray, slightly calcareous, with some pyrite

Top	Bottom	Thickness	
2055	2075	20	Shale, grayish-red, soft, dolomitic
2075	2080	5	Shale, light-to dark-gray
2080	2090	10	Siltstone, gray, calcareous; with some darker gray and reddish shale
2090	2100	10	Shale, gray to reddish, silty, 60%; light-green, calcareous siltstone and very fine sandstone, 20%
2100	2125	25	Shale, red; some light-brown, fine-textured dolomitic limestone in lower part
2125	2150	25	Shale, grayish-red and gray
2150	2170	20	Shale, gray with nearly equal amount of gray, shaly siltstone; moderately calcareous
2170	2190	20	Siltstone, light-gray to light-green, 60%; red shale, 40%
2190	2195	5	Shale, gray and green, 60%; gray, fine-textured, dolomitic limestone, 40%
2195	2200	5	Shale, gray, soft, 80%; gray siltstone, 30%
2200	2280	80	Sandstone, white, fine, nearly all quartz; iron-rust stain on most samples
2280	2300	20	Dolomite, brownish-gray, pyritic; samples also contain some gray shale and some fine sand
2300	2320	20	Limestone, dark-gray, with small proportion of nearly white; many of dark fragments are shaly and pyritic; there are a few fragments of nearly white chalcedony
2320	2340	20	Limestone, dark brownish-gray, silty, samples contain considerable sand which is probably from interbedded sandstone layers, since it does not seem to be embedded in the limestone
2340	2345	5	Shale, gray, soft, with a few streaks of bright green glauconite
<u>Greenbrier Limestone, 220 feet</u>			
2345	2375	30	Limestone, dark brownish gray
2375	2380	5	Limestone, gray, a little lighter than last
2380	2410	30	Limestone, light-gray to somewhat brownish, very fine textured; a little sand from 2400 to 2405' (show of gas at 2397'; salt water 2409 to 2415')
2410	2415	5	Limestone, light-gray; somewhat sandy; contains a few oolites
2415	2565	150	Limestone, light-gray, mostly very fine textured, not sandy or oolitic

Top	Bottom	Thickness	
			<u>Maocrady Formation, 35 feet</u>
2565	2600	35	Siltstone, red; with thin streaks of brighter red shale
			<u>Pocono Formation, 506 feet</u>
2600	2725	125	Shale, gray, silty, micaceous; with about equal amount of lighter gray siltstone and very fine sandstone; the shale and siltstone contain both biotite and muscovite and small fragments of carbonaceous matter; in a general way texture seems coarser toward bottom (show of gas at 2694')
2725	2870	145	Siltstone, gray, micaceous; with smaller amounts of gray silty shale and very fine sandstone; not at all sharply separated from the interval last described, but most of it is a little coarser in texture
2870	3059	189	Siltstone, gray, shaly, micaceous; some samples in this interval are incorrectly labelled but siltstone is probably the predominant material with some gray shale and from 2995 to 3040' some very fine sandstone
3059	3079	20	Shale, dark-gray to black, pyritic, distinctly laminated (Sunbury Shale, top is based on driller's record, since samples appear to be mixed)
3079	3106	27	Sandstone, light-gray, very fine, slightly calcareous; top 5 feet is brownish and pyritic
3106	3126	20	<u>Devonian Shales, 20+ feet</u> Shale, gray
	3126		Total depth, 3126.