

HOPE NATURAL GAS COMPANY #8552
 Clarksburg, W. Va.

Federal Coal Company

Sherman District, Boone County, W. Va.

Located 1.3 Mi. W. of 81 35' and 2.2 Mi. S. of 38 00' - NC - Bald Knob Quadrangle

Elevation - 1704'

Permit No-496

Drilling commenced - May 11, 1941; Completed - Sept. 12, 1941

Shot Aug. 15, 1941, depth 2404 to 2411'

Volume - 234,000 Cu. Ft.

Rock Pressure - 150# in 24 Hrs.

Fresh Water - 82'; 408'

Salt Water - 1460'; 1788'

CASING RECORD

10"	31'
8 1/4"	986'
6-5/8"	2263'

Section based on examination of samples from 38' to 2450' by G. N. Apsouri. Position and thickness of coal seams taken from driller's record. According to the Geologic Map of Boone County the well starts about 150 feet below the top of the Pottsville, which would make the total Pottsville thickness approximately 2385 feet.

<u>TOP</u>	<u>BOTTOM</u>	<u>THICKNESS</u>	<u>FORMATION</u>	<u>POTTSVILLE FORMATION</u>
0	22	22	Surface	2235 Feet
22	30	8	Sand	
30	35	5	Clay	
35	40	5	Sandstone, white	
40	44	4	Coal	
44	69	25	Sandstone, white, fine to very fine	
69	82	13	Shale, dark to light gray	
82	85	3	Coal	
85	91	6	Shale, gray, silty	
91	150	59	Sandstone, white, very fine	
150	164	14	Shale, gray to black	
164	178	14	Coal	
178	205	27	No samples	
205	215	10	Sandstone, white, very fine	
215	232	17	Shale, gray	
232	236	4	Coal	
236	250	14	Sandstone	
250	256	6	Coal	
256	290	34	Sandstone, white, fine to very fine	
290	300	10	No samples	
300	305	5	Shale, gray, carbonaceous	
305	317	12	Sandstone, white, medium-grained	
317	328	11	Sandstone, white, fine	
328	370	42	Shale, gray	
370	375	5	Coal	
375	390	15	Siltstone, gray and white, carbonaceous	
390	460	70	Sandstone, white, medium-grained, contains mica, chlorite, siderite, and carbonaceous matter	
460	470	10	Shale, gray to dark-gray	
470	480	10	Sandstone, white, very fine	
480	490	10	Siltstone, gray, sandy	
490	530	40	Sandstone, white, fine	
530	540	10	Siltstone, white, sandy, 50%; gray shale, 50%	
540	591	51	Sandstone, white, very fine	
591	594	3	Coal	
594	600	6	Sandstone, white, very fine	
600	660	60	Siltstone, gray to light-gray, mostly sandy	
660	677	17	Shale, gray, silty	
677	685	8	Shale, light - to dark-gray	
685	694	9	Siltstone, gray, sandy	
694	758	64	Sandstone, white, fine	
758	769	11	Siltstone, gray, sandy	
769	818	49	Sandstone, white, very fine	
818	831	13	Shale, gray to dark-gray	
831	879	48	Sandstone, white, very fine	

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Pottsville Formation

<u>TOP</u>	<u>BOTTOM</u>	<u>THICKNESS</u>	<u>FORMATION</u>
879	889	10	Siltstone, gray
889	926	37	Sandstone, white, very fine
926	931	5	Shale, gray
931	979	48	Sandstone, white, fine
979	1009	30	Shale and siltstone, gray
1009	1016	7	Sandstone, white, very fine, micaceous
1016	1024	8	Siltstone, dark-gray, sandy
1024	1039	15	Shale, gray, silty
1039	1065	26	Siltstone, white, sandy
1065	1136	71	Shale, gray to dark-gray
1136	1138	2	Sandstone, white, very fine
1138	1225	87	Shale, gray to dark-gray
1225	1292	67	Shale, and Siltstone, gray
1292	1343	51	Sandstone, light-gray, fine, contains some mica and siderite
1343	1350	7	Sandstone, light-gray, fine, 70%; gray shale and siltstone, 30%
1350	1363	13	Sandstone, light-gray, fine; contains mica and siderite
1363	1378	15	Sandstone, light-gray, fine, 60%; dark-gray shale, 40%
1378	1417	39	Sandstone, white to light-gray, fine to medium-grained
1417	1476	59	Sandstone, white with some rust stain, fine; more nearly pure quartz than sandstones above
1476	1481	5	Sandstone, white, fine, 70%; dark-gray, shaly siltstone, 30%
1481	1491	10	Sandstone, light-gray, fine; few pieces of coal and a few coarse quartz grains
1491	1642	151	Sandstone, white, with varying amounts of rust stain; fine to medium-grained
1642	1646	4	Siltstone, dark-gray
1646	1658	12	Shale, dark-gray
1658	1668	10	Sandstone, white, very fine, 50%; gray shale, 50%
1668	1764	96	Sandstone, white, fine
1764	1769	5	Shale, gray
1769	1896	127	Sandstone, white, fine
1896	1910	14	Sandstone, white, coarse
1910	1928	18	Sandstone, white, very fine
1928	1938	10	Sandstone, white, coarse
1938	1971	33	Sandstone, white, very fine
1971	1977	6	Siltstone, gray shaly
1977	2121	144	Sandstone, white, fine, medium-grained; individual samples show considerable variation in texture
2121	2132	11	Shale, gray, silty
2132	2144	12	Siltstone, light-gray, sandy
2144	2180	36	Sandstone, white, fine to very fine
2180	2186	6	No sample
2186	2202	16	Sandstone, light-gray, fine, mostly broken into small chips
2202	2235	33	Sandstone, white, fine to medium-grained; mostly broken up into individual grains, many of which have crystal faces
<u>Mauch Chunk Group</u>			
2235	2245	10	Shale, gray, soft, thinly laminated
2245	2250	5	Shale, gray, 70%; gray shaly limestone 30%
2250	2261	11	No Sample
2261	2280	19	Limestone gray
2280	2285	5	Shale, red

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Mauch Chunk Group

<u>TOP</u>	<u>BOTTOM</u>	<u>THICKNESS</u>	<u>FORMATION</u>
2285	2287	2	Shale, grayish-green, 75%; gray limestone, 25%
2287	2295	8	Shale, red
2295	2307	12	Shale, red, 50%; green siltstone, 50%
2307	2317	10	Siltstone, green, sandy
2317	2358	41	Sandstone, white
2358	2365	7	Shale, gray, silty
2365	2379	14	Shale, red
2379	2384	5	Shale, red and green
2384	2391	7	Siltstone, light-gray
2391	2409	18	Sandstone, white, very fine, (gas at 2404, 2409, 2413, 2417, 2423, 2425, 2436, 2440, and 2450)
2409	2414	5	Shale, red
2414	2436	22	Sandstone, white, fine
2436	2442	6	Limestone, light-brown
2442	2450	8	Sandstone, white, very fine
	2450		TOTAL DEPTH