

Wyo - 10

RAVENSCLIFF DEVELOPMENT COMPANY
Ravenscliff, West Virginia

CASING

Gulf Smokeless Coal Co. No. 1

13" 56'
13" 242'
10" 1049'
6-5/8" 2255'

Located 2.9 Mi. W. of 81° 20' and 5.1 Mi. S. of 37° 40'
-C- Mullens Quadrangle; 1 Mi. N. of Mullens

Coal at 80'

Elevation - 1508.65' L.
Permit Wyo. 10

Drilling commenced July 11, 1940; Completed Nov. 24, 1940
Gas Well - Volume 60,000 Cu. Ft.; Rock Pressure 490# in 48 Hrs.
Fresh Water - 90'
Salt Water 780'

The section given below is based on the driller's record from surface to 362' and on nearly complete samples from 362' to the total depth of 2802'. The well starts in the lower part of the Pottsville, about 65 feet below the Pocahontas No. 3. Coal and ends 275' below the base of the Greenbrier Limestones.

<u>TOP</u>	<u>BOTTOM</u>	<u>THICKNESS</u>	<u>FORMATION</u>	<u>POTTSVILLE FORMATION</u> <u>165 Feet</u>
0	65	65	Surface	
65	78	13	Lime dark	
78	80	2	Slate, dark	
80	85	5	Coal	
85	165	80	Slate, blue	
<u>Mauch Chunk Group 1919'</u>				
165	180	15	Red Rock	
180	195	15	Shale, blue	
195	210	15	Red Rock	
210	235	25	Slate, blue	
235	250	15	Lime shells	
250	260	10	Red Rock	
260	267	7	Lime shells, gray	
267	300	33	Pink Rock	
300	362	62	Lime, gritty, dark (probably Siltstone)	
362	386	24	Siltstone, gray, shaly; contains considerable amount of fragments coarse enough to be classed as very fine sandstone.	
386	400	14	Shale, dark-gray, silty	
400	421	21	Siltstone, dark-gray, shaly	
421	435	14	Siltstone and silty shale, dark-gray	
435	586	151	Shale, dark-gray, partly silty	
586	623	37	Sandstone, light-gray, very slightly calcareous; pyrite at top	
623	640	17	Sandstone, nearly white, fine	
640	658	18	Sandstone, light-gray, fine to very fine; 90 to 70%; gray shaly siltstone, 10 to 30% (show of gas at 640')	
658	700	42	Sandstone, white, fine, nearly all quartz; some rust stain on samples	
700	703	3	Shale, dark-gray to black, silty	
703	744	41	Sandstone, white with brown rust stain, medium grained, nearly all quartz; some coarse grains or pebbles near bottom	
744	763	19	Sandstone, gray, very fine	
763	800	37	Sandstone, nearly white with some rust stain, fine, nearly all quartz	
800	826	26	Limestone, gray, very fine, shaly, contains so much clayey material that it is about as much like calcareous shale as limestone	
826	840	14	Limestone, brownish-gray, very fine; not so shaly as limestone above; contains a few fossils	
840	848	8	Limestone, brownish-gray, fossiliferous, 80%; gray shale, 20%	

Mauch Chunk Group (cont'd.)

<u>TOP</u>	<u>BOTTOM</u>	<u>THICKNESS</u>	<u>FORMATION</u>
848	854	6	Shale, gray, highly calcareous
854	862	8	Shale, red, soft, highly calcareous
862	891	29	Sandstone, red, very fine, calcareous
891	988	97	Shale, red, calcareous, mostly not distinctly laminated
988	993	5	Shale, gray, slightly calcareous
993	1003	10	Shale, gray, 60%; light-gray to light-brown, very fine dolomitic limestone, 40%
1003	1010	7	Limestone, gray, very fine, dolomitic
1010	1034	24	Shale, red, calcareous
1034	1049	15	Siltstone, gray, 50%; red shale, 20%; gray shale, 20%; light brown, limestone, 10%
1049	1051	2	Limestone, brownish gray, silty
1051	1066	15	Siltstone, red, calcareous
1066	1071	5	Siltstone, dark-gray, shaly
1071	1076	5	Siltstone, gray, calcareous
1076	1084	8	Shale, red, silty
1084	1095	11	Shale, red, silty, dolomitic
1095	1114	19	Siltstone, red, dolomitic
1114	1125	11	Sandstone, red, very fine
1125	1138	13	Shale, red, dolomitic
1138	1143	5	Sandstone, white, very fine, 50%; gray shale and siltstone, 50%;
1143	1151	8	Siltstone, gray
1151	1165	14	Shale, gray and green, soft, 70%; light-gray, very fine dolomitic limestone, 30%
1165	1171	6	Shale and siltstone, gray
1171	1189	18	Shale, gray to grayish-red, very silty, somewhat dolomitic
1189	1200	11	Siltstone, gray, 70%; soft-grayish-green, 30%
1200	1211	11	Shale, gray, 60%; light-gray, very fine dolomitic limestone, 40%
1211	1221	10	Siltstone, gray
1221	1231	10	Shale, red, silty
1231	1256	25	Shale, gray, dolomitic, a little siltstone and very fine sandstone
1256	1270	14	Sandstone, light-gray, very fine
1270	1295	25	Shale, gray, calcareous, fossiliferous
1295	1304	9	Siltstone, light-gray, calcareous
1304	1312	8	Siltstone, dark-gray, shaly
1312	1322	10	Siltstone, gray, slightly calcareous; individual fragments show gradation from silty shale to very fine sandstone
1322	1355	33	Shale, grayish-red, with some neutral gray; contains large proportion of silty material
1355	1380	25	Shale, red, very silty, somewhat calcareous
1380	1397	17	Limestone, gray, very fine, dolomitic, also some red and gray shale, perhaps cavings
1397	1413	16	Siltstone, red, shaly, micaceous
1413	1420	7	Shale, gray, with silty streaks
1420	1425	5	Sandstone, nearly white, fine
1425	1439	14	Siltstone, grayish-red, shaly
1439	1510	71	Shale, red, mostly silty
1510	1538	28	Shale, gray, soft, dolomitic; samples contain some red shale, probably cavings
1538	1549	11	Siltstone, gray, slightly dolomitic, 60%; gray shale, 40%
1549	1558	9	Shale, dark-gray, partly calcareous
1558	1586	28	Shale and siltstone, gray
1593	1609	16	Shale, gray, calcareous, 80%; gray fossiliferous limestone, 20%

Mauch Chunk Group (Cont'd.)

<u>TOP</u>	<u>BOTTOM</u>	<u>THICKNESS</u>	<u>FORMATION</u>
1609	1628	19	Shale, gray, soft, somewhat calcareous
1628	1663	35	Shale, gray, soft, dolomitic, 90 to 70%; gray dolomitic limestone, 10 to 30% (more toward bottom); small amount of light-gray anhydrite, 1646-1653'
1663	1671	8	Limestone, gray, clayey, 60%; gray shale 40%
1671	1681	10	Shale, black, partly calcareous; small amount of impure coal.
1681	1691	10	Shale, dark-gray, 60%; gray siltstone and very fine sandstone; 30%; limestone, 10%
1691	1725	34	Sandstone, white, fine
1725	1778	53	Sandstone, gray, fine to very fine, thin bedded and partly shaly
1778	1794	16	Sandstone, white, fine
1794	1820	26	Shale, gray, soft, distinctly laminated
1820	1838	18	Shale, gray, soft, distinctly laminated, 90%; dark-gray limestone, 10%
1838	1854	16	Shale, gray, soft, distinctly laminated
1854	1895	41	Limestone, dark-gray, fossiliferous; samples contain much gray shale like that above
1895	1920	25	Limestone, dark-gray; contains small round objects resembling oolites
1925	1950	30	Shale, gray, soft, highly calcareous and fossiliferous
1950	1968	18	Shale, gray, soft, highly calcareous, 80%; clayey limestone, 20%, fossils very abundant; not much different from the interval above
1968	1985	17	Shale, gray, soft, calcareous
1985	2019	34	Limestone, gray to dark-brown, fossiliferous; some shale cavings
2019	2029	10	Siltstone, light-green, highly calcareous, 70%; light red siltstone, 10%; gray limestone, 10%; gray shale cavings 10%
2029	2040	11	Siltstone, gray, shaly, highly calcareous and fossiliferous
2040	2084	44	Shale, gray, highly calcareous and fossiliferous
			<u>Greenbrier Limestone, 443 Feet</u>
2084	2090	6	Limestone, dark-brownish gray, oolitic, oolites contain pyrite in concentric arrangement
2090	2108	18	Limestone, gray, oolitic
2108	2158	50	Limestone, brown, very fine textured
2158	2219	61	Limestone, dark-brown, fossiliferous, a few oolites, 2158-2188'
2219	2379	160	Limestone, brown to medium-gray; mostly very fine textured; contains a few fossil fragments
2379	2387	8	Limestone, grayish-red
2387	2402	15	Limestone, light-brown, partly oolitic
2402	2412	10	Limestone, light-brown, 50%; gray dolomitic siltstone, 50%
2412	2442	30	Limestone, light-brown, some oolites from 2412-2430'
2442	2448	6	Limestone, nearly white, oolitic
2448	2469	21	Limestone, light - to medium, very fine textured
2469	2490	21	Limestone, dark-brown, very fine textured

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Greenbrier Limestone (Cont'd.)

<u>TOP</u>	<u>BOTTOM</u>	<u>THICKNESS</u>	<u>FORMATION</u>
2490	2500	10	Limestone, brown
2500	2527	27	Limestone, light gray to somewhat brownish, highly dolomitic, very fine texture; 10% white anhydrite in sample from 2519 to 2527; a few pieces of green shale with anhydrite attached.
<u>LOWER MISSISSIPPIAN, 275 feet</u>			
2527	2547	20	Shale, red, dolomitic, 90 to 95%; white anhydrite, 10 to 5%; at least one fragment shows red shale with anhydrite attached; red shale is silty toward bottom
2547	2681	134	Siltstone, gray, mostly shaly and micaceous; includes considerable amount of very fine sandstone; slightly to moderately dolomitic
2681	2699	18	Siltstone, red, dolomitic
2699	2725	26	Sandstone, gray, very fine, slightly calcareous
2725	2775	50	Siltstone, gray, shaly
2775	2795	20	Sandstone, gray, very fine, slightly dolomitic
2795	2802	7	Sandstone, light-gray, coarse
2802'			TOTAL DEPTH, filled back to 2255'