

WAY-193

Wilson Coal Land Company No. 25 (570) Well

Union District, Wayne County, W. Va.

By The Owens, Libbey-Owens Gas Dept., Charleston, W. Va.

Located 1.3 mi. S. of 38°00' and 1.12 mi. W. of 82°20' -MC- Maugatuok Quadrangle.

Elevation, 731.0' L.

Permit, Way-193.

Drilling commenced May 15, 1940; completed July 2, 1940.

Volume 582,000 cu. ft.; rock pressure 515 lbs.

Fresh water at 40 and salt water at 901'.

Coal at 301-304'.

8 1/2" casing, 307'; 6-5/8", 1311'; 3" tubing, 2786 1/2'.

Section based on samples from 392 to 2782' examined by J. H. C. Martens.

Depths on several samples are doubtful and some samples are missing. The top of the Mauch Chunk is not very accurately located.

Top Bottom Thickness

Pennsylvanian, 1044+ feet

Top	Bottom	Thickness	Description
0	392	392	Not sampled
392	430	38	Sandstone, gray, fine to very fine, shaly and micaceous; contains dark carbonaceous streaks
430	452	22	Siltstone, light-gray to brownish, shaly and micaceous
452	458	6	Siltstone, greenish-gray, shaly, micaceous
452	490	38	Sandstone, nearly white, medium-grained; considerable amount of siderite at top; small amounts of muscovite, chlorite and carbonaceous matter
490	523	33	Siltstone, gray, shaly, micaceous (exact depth of sample doubtful)
523	567	44	Sandstone, nearly white, medium-grained; contains a little mica and some siderite spherulites
567	594	27	Shale, black
594	618	24	Siltstone, dark-gray to black, shaly
618	626	8	Sandstone, light-gray, fine
626	635	9	Siltstone, gray, shaly
635	644	9	Shale, dark-gray
644	650	6	Sandstone, gray, fine, shaly

Top	Bottom	Thickness	
650	666	16	Sandstone, light-gray to white, fine, 50%; black shale, 50%
666	706	30	Shale, dark-gray to black
706	720	14	Sandstone, nearly white, medium-grained; contains small amounts of mica, chlorite, kaolin, siderite and carbonaceous matter
720	730	10	No sample
730	740	10	Sandstone, like that from 706 to 720'
740	750	10	No sample
750	781	31	Shale and siltstone, dark-gray
781	807	26	Sandstone, white, fine; some dark shaly streaks
807	840	33	Sandstone, light- to dark- gray, very fine, shaly; some siltstone is included; (depths uncertain on three out of four samples)
840	847	7	Sandstone, white, coarse, nearly all quartz
847	857	10	Siltstone, gray
845	850	5	Sandstone, white, fine, 50%; gray siltstone and shale, 50%
850	885	35	No sample
885	901	16	Sandstone, white, medium grained, nearly all quartz; crystal faces on many grains
901	924	23	No sample (reported as sand)
924	968	44	Sandstone, white, medium- to coarse-grained, nearly all quartz; crystal faces on many grains
968	976	8	No sample (reported as sand)
976	998	22	Sandstone, gray, very fine, shaly; also some dark-gray siltstone
998	1008	10	Siltstone, dark- gray, 70%; white, fine sandstone
1008	1033	25	Sandstone, white, medium-grained, nearly all quartz
1033	1044	11	No sample
<u>Mauch Chunk Group, 206 feet</u>			
1044	1050	6	Shale, dark-gray

Top	Bottom	Thickness	
1050	1058	8	Shale, dark-gray, 70%; nearly white silty shale with siderite spherulites, 30%
1058	1064	6	Shale, dark-gray; with siderite concretions
1064	1070	6	Shale, light-gray, silty, 90%; red clay or mudstone, 10%; many siderite spherulites
1070	1078	8	No sample
1078	1085	7	Shale, light-gray, silty, 90%; red clay or mudstone, 10%; many siderite spherulites
1085	1096	11	Sandstone, white, medium- to coarse-grained, 60%; gray and green shale, 40%
1096	1099	3	Shale, gray and green, soft, 60%; fine white sandstone, 40%
1099	1103	4	No sample
1103	1113	10	Sandstone, white, fine, 70%; soft gray and green shale, 30%
1113	1118	5	No sample
1118	1126	8	Sandstone, white, medium-grained, 50%; soft green shale, 50%
1126	1144	18	Limestone, very light-brown to gray, 70%; soft green and gray shale, 30%
1144	1149	5	Shale, gray, green and red, soft; a little sandstone and limestone
1149	1151	2	Sandstone, white, fine, 60%; shale of various colors, 40%
1151	1159	8	Shale, gray and green
1159	1162	3	Limestone, brown
1162	1176	14	No sample
1176	1181	5	Shale, red, 30%; gray and green shale, 40%; light-brown and gray fine-textured limestone, 30%
1181	1186	5	No sample
1186	1202	16	Shale, gray and green, soft
1202	1216	14	Sandstone, white to light-green, very fine, 50%; gray and green shale, 50%
1216	1221	5	Sandstone, white, very fine, 60%; gray and green shale, 40%
1221	1250	29	Limestone, brown with white spots, fossiliferous; large amounts of gray and green shale, probably mostly cavings

Top	Bottom	Thickness	
<u>Greenbrier Limestone, 231 feet</u>			
1250	1275	25	Limestone, very light brown to white, mostly very fine textured; some gray and green shale throughout and about 40% in sample from 1269 to 1271'
1275	1310	35	No sample
1310	1330	20	Limestone, very light brown to white
1330	1366	36	Limestone, light-brown
1366	1385	19	Limestone, very light brown; contains some oolites and a little sand
1385	1419	34	Limestone, white, oolitic; crystalline calcite in spaces between oolites
1419	1434	15	Limestone, white; partly dolomitic; a few oolites
1434	1456	22	Limestone, very light brown, very fine textured
1456	1460	4	Limestone, very light brown, oolitic
1460	1471	11	Limestone, gray and light-brown, dolomitic, sandy
1471	1481	10	Dolomite, gray, sandy; contains about 20% of white anhydrite
<u>Maerady Formation, 18 feet</u>			
1481	1499	18	Siltstone, red, sandy
<u>Pocano Formation, 627 feet</u>			
1499	1522	23	Sandstone, light-green to gray, very fine; much pyrite, 1516 to 1522'
1522	1535	13	Sandstone, gray, very fine, shaly, pyritic
1535	1598	63	Siltstone, gray, shaly; includes large amounts of very fine shaly sandstone in some samples
1598	1888	290	Shale, gray, silty, micaceous; upper part of interval contains much siltstone and some very fine sandstone
1888	1901	13	Siltstone, gray; contains a few fossil shell fragments
1901	1912	11	Shale, gray, silty; a few fossil shell fragments; the interval 1888 to 1912' is a little lighter gray than most of that from 1598 to 1888'
1912	1917	5	Sandstone, light-gray to white, fine, 70%; gray shale, 30% a few sandstone fragments have the grains mostly surrounded by pyrite
1917	2010	93	Shale, gray; distinct crystals of pyrite, 1917-1928'

Top	Bottom	Thickness	
2010	2052	42	Shale, very dark gray to black (Sumbury Shale)
2052	2083	31	Sandstone, light-gray, very fine; about 50% of gray shale, 2079-2083' (Serea Sandstone, 2052-2126')
2083	2126	43	Sandstone, light grayish yellow, very fine, slightly dolomitic
<u>Devonian Shales, 760$\frac{1}{2}$ feet</u>			
2126	2213	87	Shale, black; some silty and sandy streaks
2213	2272	59	Shale, gray
2272	2459	187	Shale, gray, interstratified with gray to grayish-green siltstone
2459	2526	67	Shale, gray; some very dark gray shale with brown spores of various appearance
2526	2538	12	Shale, brownish-black, with spores
2538	2647	109	Shale, medium- to dark-gray; most samples contain fragments of various shades of gray; some brown spores of resinous appearance present throughout; they are mostly in the very dark fragments
2647	2725	78	Shale, gray; more uniform than, and not quite so dark as the interval above (gas at 2687 and 2694')
2725	2782	57	Shale, dark-gray to brownish, containing spores; also some lighter gray to slightly greenish shale (gas at 2736')
	2786 $\frac{1}{2}$		Total depth