

Mike Barr No. 4 (1650)

Grant District, Wetzel County, West Virginia.

By Carnegie Natural Gas Company, Pittsburgh, Pa.

Located 3.4 mi. W. of 80°30' and 1.03 mi. S. of 39°35' - SE - Littleton Quad.

Elevation 1170' B.

Permit Wet - 248

Drilling commenced January 8, 1941; completed Feb. 27, 1941.

Shot March 19, 1941, depth 1980-1990'.

Gas 84,000 to 119,000 cu. ft. per day.

Rock pressure 450 lbs. 48 hours.

Oil - filled up 6" hole 200' in 1 hour; 425' in 6 hours.

Fresh water 180'; salt water 1440'.

Coal at 505' and 603'.

15" casing 59'; 10", 520'; 8", 1112'; 20", 1860'; 2" tubing, 1906'.

Section based on samples from 0 to 1503' examined by C. H. Apscuri and

samples from 1503 to 1889' examined by J. H. S. Martens.

Top Bottom Thickness

<u>Dunkard Group, 262+ feet</u>			
Top	Bottom	Thickness	
0	30	30	Shale and siltstone, grayish-green
30	38	8	Shale, red
38	50	12	Shale, grayish-green
50	76	26	Sandstone, white
76	81	5	Siltstone, gray
81	125	44	Shale, gray
125	135	10	Siltstone, light-gray
135	180	45	Sandstone, white; also some gray shale (hole full of water at 180')
180	216	36	Shale, gray
216	234	18	Sandstone, white
234	239	5	Shale, gray
239	262	23	Sandstone, white
<u>Monongahela Formation, 350 feet</u>			
262	265	3	Coal (Waynesburg Coal?)
265	278	13	Shale and clay, gray
278	283	5	Siltstone, white
283	290	7	Shale, light-gray, silty
290	294	4	Siltstone, white, sandy

Top	Bottom	Thickness	
294	300	6	Shale, gray
300	312	12	Siltstone, very light gray
312	325	13	Shale, red
325	337	12	Siltstone, light-green
337	370	33	Shale, gray to light-gray
370	381	11	Limestone, light-brown
381	400	19	Limestone, light-brown, 40 to 60%; shale and siltstone, 60 to 40%
400	425	25	Limestone, light-brown; also some soft gray to green shale
425	431	6	Shale, grayish-green, clayey
431	449	18	Limestone, brown to gray, shaly
449	454	5	Shale, gray and green, 75%; limestone, 25%
454	501	47	Limestone, light-brown; also some shale
501	505	4	No sample
505	506	1	Coal (Sewickley Coal)
506	542	36	Limestone, brown to very light brown
542	555	13	Shale, gray
555	539	34	Limestone, light-brown; also some shale
539	603	19	Shale, gray to dark-brown, pyritic
603	612	4	Coal (Pittsburgh Coal; gas at 612', 2633 cu. ft.)
<u>Conemaugh Formation, 571 feet</u>			
612	627	15	Siltstone and shale, gray
627	640	13	Siltstone, light-gray
640	650	10	Sandstone, white
650	660	10	Shale, gray and red
660	680	20	Limestone, brown
680	697	17	Siltstone, light-green
697	713	16	Shale, red and yellow
713	740	27	Siltstone and silty shale
740	762	22	Sandstone, white (gas at 738-747', 42,100 cu. ft.)
762	801	39	Siltstone, green; also red and gray shale
801	825	24	Limestone, light-brown, 60%; shale of various colors, 40%
825	850	25	Shale, red
850	857	7	Sandstone, green; very fine
857	892	35	Shale and siltstone, green; also a little limestone (probably mass limestone and shale)

Top	Bottom	Thickness	
892	940	48	Siltstone, green sandy; also some red and gray shale
940	950	10	Shale, green, with specks of siderite
950	968	18	Siltstone, green, with siderite
968	975	7	Sandstone, white
975	1007	32	Shale, gray, with some red
1007	1022	15	Shale, green and gray
1022	1050	28	Siltstone, green to light-green
1050	1056	6	Sandstone, white
1056	1073	17	Shale, dark-gray
1073	1110	37	Shale, light-gray to light-green
1110	1117	7	Siltstone, white, sandy
1117	1124	7	No samples
1124	1138	14	Siltstone, green, with siderite spherulites (5% of coal in sample 1131-1138')
1138	1159	21	Sandstone, white, micaceous; also some gray shale
1159	1183	24	Siltstone, light-gray sandy; a little coal in top 6 feet
<u>Allegheny and Pottsville Formations, 482 feet</u>			
1183	1220	37	Shale, gray, with small amount of limestone
1220	1230	10	Shale, gray
1230	1240	10	Siltstone, very light gray, sandy, with specks of siderite
1240	1320	80	Sandstone, white
1320	1335	15	Siltstone, gray, shaly
1335	1350	15	Shale, dark-gray
1350	1375	25	Sandstone, white; also some gray shale
1375	1385	10	Shale and siltstone, gray
1385	1454	69	Sandstone, white (SW at 1440', HF)
1454	1503	49	Shale and siltstone, gray
1503	1565	62	Sandstone, white, medium-grained, with traces of coal
1565	1573	8	Sandstone, white, medium-grained, 60%; gray shaly siltstone, 40%
1573	1665	92	Sandstone, white, medium - to fine-grained
<u>Mauch Chunk Group, 170 feet</u>			
1665	1695	30	Siltstone, very light gray, coarse, sandy, slightly calcareous
1695	1702	7	Shale, red and green
1702	1712	10	Sandstone, light-green, fine
1712	1738	26	Siltstone, light-green, highly calcareous; also much red

Top Bottom Thickness

shale

1738	1772	34	Shale, red, soft, calcareous
1772	1790	18	Shale, gray, soft; also some brown and gray limestone
1790	1806	13	Limestone, brown, 80%; soft gray and red shale, 80%
1806	1828	25	Shale, gray, soft, thinly laminated, 60 to 70%; brown to light brown limestone, 40 to 30%; a little red and green shale
1828	1835	7	Shale, gray, soft, thinly laminated; also a little limestone and red and green shale ("Pencil Cave", 1830-1835' in driller's record)

Greenbrier Limestone, 64+ feet

1835	1874	39	Limestone, very light brown
1874	1889	15	Limestone, brown
1889	1999	110	No samples (gas at 1880-1885'; oil and gas at 1884-1892')
	1999		Total depth