

T. L. Goddard et al No. 1 (1888) Well

Proctor District, Wetzel County, W. Va.

By Carnegie Natural Gas Company, Pittsburgh, Pa.

Located 2.68 mi. W. of 80°40' and 4.65 mi. S. of 39°45' - NW - Littleton

Quadrangle.

Elevation 1540' L.

Permit W-257

Drilling commenced June 10, 1941; completed August 20, 1941.

Gas well; volume 169,000 cu. ft.; rock pressure 560 lbs. in 47 hrs.

10" casing, 235'; 8 1/2", 1462'; 6 5/8", 2194.

Fresh water 85', 165', 1920'.

Coal at 985' and 1078'.

Sample description by C. H. Apsey from 0 to 1590' and by J. H. C. Martens

from 1590' to 2386'.

Top Bottom Thickness

Dunkard Group and Manongahela Formation, 1085 ft.

Top	Bottom	Thickness	Description
0	12	12	Siltstone, yellow, sandy
12	20	8	Shale, red, clayey
20	42	22	Siltstone, yellow, sandy
42	55	11	Siltstone, yellow, sandy, 50%; gray shale, 50%
55	64	11	Siltstone, yellow, sandy
64	75	11	Limestone, brown to light-gray, 60%; siltstone as above, 20%
75	105	30	Shale, red, with limy concretions
105	114	9	Siltstone, gray, with a little limestone
114	141	27	Siltstone, gray, 75%; gray shale, 25%
141	149	8	Limestone, light-brown
149	160	11	Shale, red, 50%; green shale, 50%
160	168	8	Shale, very light-grayish-green, 60%; red shale, 50%
168	174	6	Shale, light-gray, clayey calcareous, 70%; red shale, 30%
174	224	50	Siltstone, green, sandy, 60%; shale of various colors, 40%
224	242	18	Shale, red
242	250	8	Shale, gray, 70%; red shale, 30%
250	290	40	Shale, red, with limy concretions

Top	Bottom	Thickness	
290	315	25	Siltstone, green, sandy
315	390	75	Shale, red, 50%; gray shale, 50%; a few limestone fragments
370	379	9	Shale, red, with limy concretions
379	412	33	Sandstone, white, very fine, 60%; green sandy siltstone, 40%
412	421	9	Shale, yellow, calcareous
421	425	4	Siltstone, green sandy, with small pyrite and limestone concretions
425	430	5	Siltstone, white to green, sandy
430	440	10	Shale, red, with brown limestone concretions
460	500	40	Shale, green, with limy concretions
500	521	21	Shale, red, with limy concretions
521	550	29	Shale, red, 65%; green shale, 35%; many limestone concretions
550	618	68	Shale, grayish-green
618	628	10	Shale, light-gray, clayey calcareous
628	635	7	Shale, grayish-green
635	644	9	Shale, black, 60%; light-gray, clayey, calcareous shale, 40%
644	667	23	Shale, greenish-gray, 65%; very light-brown limestone, 35%
667	678	11	Siltstone, grayish-green, sandy
678	703	25	Sandstone, white, very fine, micaceous
703	710	7	Shale, gray, calcareous
710	720	10	Limestone, light-brown, 75%; white sandy siltstone, 25%
720	728	8	Siltstone, white, sandy
728	734	6	Shale, red, with limy concretions
734	743	9	Shale, grayish-green, 70%; light-brown limestone, 30%
743	750	7	Shale, red, with limy concretions
750	757	7	Shale, red and green, calcareous
757	770	13	Siltstone, green, sandy
770	781	11	Sandstone, white, very fine, angular, 60%; gray shale, 40%
781	785	4	Shale, gray to light-gray

Top	Bottom	Thickness	
793	804	11	Shale, red and gray
804	822	18	Shale, green, 70%; green sandy siltstone, 30%
822	830	8	Shale, gray, 60%; red shale, 40%
830	837	7	Shale, grayish-brown, 65%; gray shale, 35%
837	854	17	Shale, gray, 80%; brown limestone, 20%
854	870	16	Shale, green, 80%; green siltstone, 20%
870	875	5	Limestone, light-brown, 50%; green shale, 50%
875	883	8	Shale, green, 80%; soft dark-gray shale, 10%; limestone, 10%
883	890	7	Limestone, light-brown, 65%; green sandy siltstone, 25%; red shale, 10%
890	911	21	Shale, green, soft
911	924	13	Limestone, light-brown
924	932	8	Shale, green
932	938	6	Limestone, very light-brown
938	948	10	Shale, dark-gray, 60%; green shale, 40%
948	960	12	Shale, green
960	972	12	Shale, gray
972	985	13	Limestone, light-brown to brown, 70%; shale of various colors, 30%
985	987	2	Coal (Sewickley Coal)
987	1025	38	Limestone, brown (Sewickley Limestone)
1025	1032	7	Shale, green, 80%; red shale, 10%; limestone, 10%
1032	1045	13	Limestone, light-brown, 70%; green siltstone, 30%
1045	1055	10	Limestone, nearly white, 80%; light-gray shale, 20%
1055	1074	19	Shale, very light gray
1074	1078	4	No sample
1078	1083	5	Coal (Pittsburgh Coal)
<u>Conemaugh, Allegheny and Fetteville Formation, 978 ft.</u>			
1083	1094	11	Siltstone, green, sandy
1094	1104	10	Shale, gray
1104	1114	10	Siltstone, green, sandy
1114	1124	10	Shale, green, with some siderite
1124	1151	27	Shale, red and green, with limy concretions
1151	1160	9	Shale, green, 60%; green siltstone, 35%; red shale, 5%

Top	Bottom	Thickness	
1100	1200	40	Shale, grayish-green
1200	1235	35	Shale, red, clayey, with limestone concretions
1235	1286	51	Shale, red, 60%; green silty shale, 40%
1286	1294	8	Shale, brown, red, and green, soft
1294	1318	24	Shale, grayish-red, calcareous, soft
1318	1326	8	Shale, gray to grayish-green, soft; contains limy concretions
1326	1342	16	Shale, light-gray, soft, calcareous
1342	1350	8	Shale, red, with limy concretions
1350	1375	25	Shale, gray, soft
1375	1383	8	Shale, red
1383	1402	19	Shale, green, silty, 75%; soft red and gray shales, 25%
1402	1421	19	Shale, red, soft, calcareous, 75%; dark-gray silty shale, 25%
1421	1443	22	Shale, red, 60%; gray siltstone and shale, 40%
1443	1504	61	No sample
1504	1514	10	Shale, dark-gray
1514	1533	21	Shale, gray
1533	1540	7	Shale, red, with limy concretions
1540	1550	10	Shale, green, 60%; red shale, 25%; white sandy siltstone, 15%
1550	1560	10	Shale, gray
1560	1570	10	Sandstone, white
1570	1580	10	Shale, green, 65%; gray shale, 20%; red shale, 15%
1580	1585	5	Shale, light-gray, silty
1585	1590	5	Siltstone, gray, sandy
1590	1605	15	No sample; reported as "Big Dunkard Sand"
1605	1616	11	No sample; reported as slate
1616	1623	7	Shale, gray
1623	1635	12	Shale and siltstone, gray, 80%; white to light-gray fine sandstone, 20%
1635	1665	30	No sample; interval 1643-1665' is reported as "Gas Sand"
1665	1670	5	Shale and siltstone gray, 80%; fine white sandstone, 20%; trace of coal
1670	1684	14	Shale and siltstone, gray, 65%; brown limestone, 35%

Top	Bottom	Thickness	
1684	1700	16	Sandstone, nearly white, medium-grained
1700	1710	10	Shale, dark-gray to black, silty
1710	1720	10	Siltstone, light-gray, micaceous, 60%; dark-gray to black shale, 35%; coal, 5%
1720	1730	10	Siltstone, light-gray, micaceous
1730	1750	20	Shale, gray and light-brown
1750	1827	77	No sample, "First Salt Sand" reported at 1750-1827'
1827	1844	7	Shale, black and gray
1844	1852	8	Shale, dark-gray
1852	1867	15	Siltstone, gray, sandy, micaceous
1867	1875	8	Sandstone, white, medium-grained
1875	1919	44	No sample
1919	1925	6	Shale, dark-gray
1925	1934	9	Siltstone, gray, shaly
1934	1968	34	Sandstone, white, medium-grained; a little dark shale and siltstone and traces of coal
1968	1975	7	Shale, dark-gray
1975	1990	15	Siltstone, white, sandy
1990	2002	12	Sandstone, white, fine
2002	2024	22	No sample
2024	2035	11	Shale, dark-gray, silty
2035	2045	10	Sandstone, white, fine, 50%; siltstone, very light gray, with many siderite spherulites, 50%
2045	2054	9	Sandstone, nearly white, very fine, with siderite spherulites
2054	2061	7	Siltstone, light-gray, coarse, with dark carbonaceous streaks
<u>Mauch Chunk Group, 105 feet</u>			
2061	2070	9	Shale, very light green, with a few pieces of light brown siderite
2070	2080	10	Shale, light-green, micaceous, 60%; light-brown to yellow siderite, 40%
2080	2108	28	Shale, red and green; many fragments show a mixture of the two colors
2108	2118	10	Shale, gray
2118	2128	8	Shale, gray, calcareous and fossiliferous
2128	2132	4	Limestone, light-gray to brown ("Little Lime")

Top	Bottom	Thickness	
2152	2145	13	No sample
2145	2153	8	Sandstone, white, very fine, 70%; soft, gray, thinly laminated shale, 30%
2153	2165	12	Shale, gray, soft, thinly laminated ("Pencil Cave")
<u>Greenbrier Limestone, Lower Mississippian and Upper Devonian,</u>			
<u>1220+ Feet</u>			
2165			Top of "Big Line" from driller's record
2165	2486	321	No samples
2486	2522	36	Shale, gray, silty
2522	2616	94	Siltstone and shale, gray
2515	2624	8	Sandstone, light-gray, very fine, 60%; gray shale and siltstone, 40%
2624	2632	8	Siltstone, and shale, gray
2632	2674	42	Sandstone, light-gray, very fine, grading into siltstone
2674	2696	22	Siltstone, light-gray sandy; a little gray shale
2696	2744	48	Siltstone, light-gray, 70 to 80%; gray shale, 30 to 20%
2744	2820	76	Shale, gray, with some interbedded siltstone
2820	2829	9	Shale, gray, 70%; very fine with ^{white} sandstone, 30%
2829	2855	26	Sandstone, white, very fine, 60%; gray shale and siltstone, 40%
2855	2864	9	Shale, and siltstone, gray
2864	2874	10	Siltstone, gray
2874	2890	16	Shale and siltstone, gray, 80%; red shale, 20%
2890	2900	10	No sample
2900	2910	10	Shale and siltstone, gray
2910	2978	68	Shale, red, silty
2978	3021	43	Shale, gray with some red
3021	3042	21	No sample
3042	3046	4	Shale, gray, 50%; nearly white, very fine, sandstone 50%
3046	3066	20	Shale, gray to grayish-green
3066	3074	8	Siltstone, white to green, 70%; gray shale, 30%
3074	3085	11	Shale, gray, 50%; light-gray siltstone, enclosing a few grains of coarse sand

Top	Bottom	Thickness	
3083	3084	11	No sample; recorded as Garden Sand
3084	3121	37	Shale, gray, silty, 70 to 80% light-gray siltstone and very fine sandstone, 20 to 30%
3121	3141	20	Shale, gray
3141	3170	29	Shale, gray, 80% white to greenish very fine sandstone, 20%
3170	3190	20	Shale, gray
3190	3229	39	Shale, gray, 80% light-gray to green siltstone and very fine sandstone, 20% red shale, 10%
3229	3259	30	Shale, gray, silty, 70 to 80% gray to green siltstone, 20 to 30%
3259	3290	31	Shale, gray, with a little gray and green siltstone
3290	3310	20	Sandstone, very light grayish-green, 70% gray shale and siltstone, 30%
3310	3329	19	Sandstone, very light grayish-green
3329	3366	37	Shale, gray, silty, some interbedded gray and green siltstone
	3366		Total depth