

LEW-49

Alfred Woelfter No. 8555

Freemans Creek District, Lewis County, W. Va.

By Hope Natural Gas Company, Clarksburg, W. Va.

Located 1.65 mi. W. of 80°30' and 0.29 mi. S. of 39°05' -SE- Vadis Quadrangle.

Elevation, 1222' L.

Permit, Lew-49.

Drilled with rotary tools.

Drilling contractor Falcon-Seaboard Drilling Co.

Drilling commenced June 5, 1941; completed October 20, 1941.

Shot in Oriskany November, 1941.

Volume 474,000 cu. ft. after shot.

Rock pressure 2185 lbs. in 24 hrs.

No coal recorded.

10" casing 1393'; 7", 6710'; 2 1/2" tubing 6993'.

Well starts about 100 feet below Pittsburgh Coal, according to geologic map.

Section based on examination of samples from 490 to 1410' by

of Hope Natural Gas Company and from 1410 to 7325' by J. H. C. Martens.

Top	Bottom	Thickness	
0	490	490	Not sampled
490	520	30	Shale, gray
520	528	8	Siltstone, gray
528	650	122	Sandstone, white
650	660	10	Shale, black
660	721	61	Sandstone, gray to white, fine
721	780	59	Shale, gray
780	810	30	Sandstone, gray to white
810	840	30	Shale, gray
840	880	40	Sandstone, gray
880	891	11	Shale, sandy
891	929	38	Sandstone, gray, fine
929	1021	92	Shale, black to gray
1021	1030	9	Sandstone, gray to white

Top	Bottom	Thickness	
1030	1083	53	Shale, gray, sandy
1083	1114	31	Sandstone, white, fine
1114	1190	76	Siltstone, brown to green
1190	1255	65	Sandstone, gray to green, fine
1255	1334	79	Shale, red to green, limy
1334	1345	11	Limestone, brown-gray (Little Line)
1345	1358	13	Shale, gray, green, red, limy
<u>Greenbrier Limestone, 202 feet</u>			
1358	1410	52	Limestone, brown, gray, sandy
1410	1440	30	Limestone, light-brown; gray when dry
1440	1450	10	Limestone, brown and gray, sandy
1450	1490	40	Limestone, light-brown; a little white sandstone, 1470-1480'
1490	1500	10	Limestone, nearly white, sandy and oolitic
1500	1520	20	Sandstone, white, fine, highly calcareous; also some brown limestone
1520	1560	40	Limestone, nearly white, sandy, somewhat dolomitic
<u>Lower Mississippian and Upper Devonian, 4943 feet</u>			
1560	1570	10	Sandstone, very light grayish-green, very fine, 70% gray to grayish-green shale, 30%
1560	1630	70	Sandstone, very light-grayish-green; almost a siltstone as is the sandstone in the interval above
1630	1640	10	Siltstone and shale, gray
1640	1690	50	Siltstone, gray, shaly, micaceous
1690	1740	50	Shale, gray
1740	1770	30	Shale and siltstone, gray
1770	1780	10	Siltstone, gray and light-brown
1780	1830	50	Siltstone and shale, gray
1830	1840	10	Shale, gray
1840	1870	30	Siltstone, and silty shale, gray
1870	1880	10	Sandstone, white, very fine, somewhat dolomitic
1880	1900	20	Sandstone, white, fine, 50%; gray shale, 50%
1900	1970	70	Shale, gray
1970	1980	10	Sandstone, white with some yellow and green, very coarse, pebbly

Top	Bottom	Thickness	
1980	2030	50	Shale, gray, 70%; white to light-green very fine sandstone, 30%
2030	2040	10	Shale, gray to grayish-green, silty, 50%; white to light-green very fine sandstone, 50%
2040	2060	20	Sandstone, white, coarse, poorly sorted; also some gray and green shale
2060	2070	10	Shale, gray
2070	2090	20	Shale, gray, 60%; fine to coarse, poorly sorted, white sandstone, 40%
2090	2110	20	Sandstone, white; mostly fine but contains some coarse to very coarse grains
2110	2120	10	Shale, gray
2120	2130	10	Shale, gray, 50%; white to light-green, very fine sandstone, 50%
2130	2150	20	Shale, gray; also some siltstone and very fine sandstone
2150	2210	60	Shale and siltstone, gray to grayish-green; also white to green fine sandstone up to about 20%
2210	2220	10	Shale, gray
2220	2264	44	Shale and siltstone, gray to grayish-green
2264	2288	24	Sandstone, brown with some white, fine to coarse; some fragments highly pyritic
2288	2320	32	Shale, gray, silty
2320	2330	10	Sandstone, light-green, fine
2330	2340	10	Shale, gray, silty
2340	2371	31	Sandstone, light grayish green, fine to very fine; also some gray shale
2371	2390	19	Shale and siltstone, gray to grayish-green
2390	2490	100	Sandstone, light-green, very fine, grading into siltstone, 50 to 80%; gray shale, 50 to 20%
2490	2500	10	Sandstone, red and green, very fine, silty
2500	2560	60	Shale and siltstone, gray to grayish-green; a few fossil shells are present; the siltstone grades into very fine sandstone

Top	Bottom	Thickness	
2580	2590	30	Siltstone, red, micaceous
2590	2660	70	Siltstone, light-green with some red, 70%; gray shale, 30%
2660	2670	10	Sandstone, white, very fine, 50%; gray shale, 40%; red shale, 10%
2670	2690	20	Shale, gray
2690	2730	20	Sandstone, white to light-green, very fine, calcareous
2710	2720	10	Sandstone, grayish-red and light-brown, very fine
2720	2730	10	Sandstone, light-gray to green, very fine, 60%; gray shale, 40%
2730	2740	10	Shale and siltstone, gray
2740	2760	20	Sandstone, light grayish green, slightly calcareous
2760	2840	80	Siltstone, light-grayish green, sandy, 70%; gray shale, 30%; the siltstone in this interval is only slightly finer than the sandstone above
2840	2860	20	Siltstone, brown and light-green; contains a few fossil shells
2860	2870	10	Siltstone and shale, gray to grayish-green
2870	2880	10	Sandstone, light-green, very fine, calcareous
2880	2900	20	Shale and siltstone, gray to grayish-green
2900	2940	40	Siltstone, light-gray, 70%; gray shale, 30%
2940	2960	20	Siltstone, light-gray, 50%; gray shale, 50%
2960	2980	20	Siltstone, brown; also some gray shale
2980	3220	240	Siltstone and shale, gray; most of the samples contain more siltstone than shale, but the two kinds of rocks are not clearly distinguished since individual fragments show every gradation from one to the other; the siltstone varies in color from light-gray and grayish-green to white
3220	3250	30	Siltstone, brown; also some gray shale and siltstone
3250	4100	850	Siltstone and shale, gray; siltstone varies in color from brown, light-gray and grayish-green to nearly white; no attempt was made to describe in detail the variations in color and texture of individual samples
4100	4120	20	Siltstone, brown and gray, 60%; gray shale, 40%
4120	4170	50	Shale and siltstone, gray

Top	Bottom	Thickness	
4170	4200	30	Siltstone, brown; also some gray shale and siltstone
4200	4310	110-	Shale and siltstone, gray to dark-gray
4310	4330	20	Siltstone, brown, 60%; gray shale and siltstone, 40%
4330	4420	90	Shale and siltstone, gray
4420	4430	10	Siltstone, gray to white, partly sandy, calcareous, 80%; gray shale, 20%
4430	5360	930	Shale and siltstone, gray; siltstone is lighter colored than shale much of it is slightly to moderately calcareous; most of the samples are predominantly shale and the texture of the siltstone is fine; most samples from 5140 to 5360' contain some very dark shale
5360	5370	10	Shale, very dark gray, silty
5370	5440	70	Shale, dark-gray, with small amount of lighter gray siltstone
5440	5460	20	Siltstone, brown; also some dark-gray shale
5460	6040	580-	Shale, dark-gray to very dark gray, interstratified with a little lighter gray fine siltstone, which decreases in amount toward bottom of interval
6040	6290	250	Shale, dark-gray to black
6290	6410	120	Shale, black and very dark-gray
6410	6478	68	Shale, black, calcareous
6478	6503	25	Limestone, gray, very fine textured (Tully Limestone)
<u>Hamilton Shales (including Marcellus), 177 feet</u>			
6503	6620	117	Shale, dark-gray, with small amounts of gray limestone ("lime shells" reported)
6620	6670	50	Shale, dark-gray to black, with small amount of gray to brown limestone
6670	6680	10	Shale, black, calcareous
<u>Huntersville Chert, 260 feet</u>			
6680	6710	30	Limestone, gray, cherty fossiliferous, slightly dolomitic; impure chert is left as porous masses after acid treatment; contains a few specks of glauconite
6710	6720	10	Chert, gray and brown, slightly dolomitic
6720	6760	40	Chert and cherty limestone, gray and brown
6760	6795	35	Chert and cherty limestone, gray, white and brown; small proportion of silty and glauconitic material

6680
1222
5458

Top	Bottom	Thickness	
6795	6855	60	Chert, dark-brown, silty, glauconitic; contains only small amount of carbonate, most of which is dolomite; very little pure chert in this interval
6855	6880	25	Chert, gray to brown, silty; contains some dolomite and glauconite
6880	6885	5	Chert, gray to light-brown, slightly calcareous; purer than the chert above; contains many cracks with thin quartz veins
6885	6910	25	Chert, brown to dark-brown and gray, mostly silty and glauconitic, slightly to moderately calcareous
6910	6935	25	Chert and cherty limestones, gray to brown; contains some silt and traces of glauconite
6935	6940	5	Limestone, light-gray, cherty
			<u>Oriskany Sandstone, 100 feet</u>
6940	7020	80	Sandstone, light-gray to white, fine- to medium-grained, calcareous
7020	7035	15	Sandstone, light-brown, fine to very fine, highly calcareous
7035	7040	5	Sandstone, light-brown, medium-grained, highly calcareous
			<u>Helderberg Group, 285+ feet</u>
7040	7080	40	Limestone, brown, silty and cherty; contains a few fossil shells; very large insoluble residues; some parts could be called siltstone rather than limestone
7080	7100	20	Limestone, light-brown to nearly white, highly fossiliferous; much less silt and chert than in interval above
7100	7125	25	Limestone, gray to white, very sandy, fossiliferous
7125	7190	65	Limestone, brown, cherty; only small amounts of pure chert; large insoluble residues consisting of porous chert and shaly and silty material
7190	7200	10	Limestone, brown, silty and cherty
7200	7215	15	Limestone, gray to light-brown, silty, fossiliferous
7215	7275	60	Limestone, brown, cherty; mostly contains some silt or very fine sand, and a little glauconite

6940
122
5718

Top Bottom Thickness

7275	7325	50	Limestone, light-gray to light-brown, sandy, fossiliferous, a little chert in some samples
	7325		Total depth