

Minerals, Fry No. 1 (4848) Well

Stonewall District, Wayne County, W. Va.

By United Fuel Gas Company, Charleston, W. Va.

Located, 4.6 mi. W. of 32°15' and 2.15 mi. S. of 38°15' -EE- Wayne Quadrangle;

6 mi. E. of Wayne, on Lick Branch of Right Fork of Beech Creek.

Elevation, 950' (barometer).

Permit, Way-156.

Drilling commenced May 25, 1939; completed, July 13, 1939.

Shot July 15, 1939 at 2870'.

10" casing, 22'; 8 1/2", 145'; 6-5/8", 1553'; 3" tubing, 3231'.

Coal was encountered at 760-789'.

Samples were taken mostly at ten foot intervals in the drilling of this well, but there are several gaps where one to four samples are missing. The driller's record is not sufficiently detailed to supply such information in addition to that obtained from the samples.

Top	Bottom	Thickness	<u>Pennsylvanian, 1420+ feet</u>
0	40	40	Clay and soft shale, yellow; contains many small limestone nodules
40	90	50	Sandstone, light-brown, medium-grained; from 30 to 50' contains some clay and limestone nodules as above
90	110	20	Sandstone, gray and brownish, medium-to fine-grained, 30%; gray shale and siltstone, 20%
110	120	10	Shale, light-green, with many small limestone nodules
120	160	40	Sandstone, brown, coarse to very coarse
160	170	10	Shale, red, soft, calcareous
170	180	10	Sandstone, brown, medium-grained, 30%; light grayish green shale 20%
180	190	10	Clay, red and gray, calcareous, 60%; gray sandstone, 20%
190	230	40	Sandstone, white, medium- to fine-grained
230	240	10	Clay, gray, sandy, calcareous, pyritic; sample also contains many fragments of siderite concretions and a little impure coal
240	250	10	No sample
250	270	20	Clay, gray sandy, with large amount of pyrite and siderite and a little impure coal; presumably the pyrite and siderite occur as nodules in the clay; they make up at least half of the two samples from this

Top	Bottom	Thickness	
			interval as well as the sample from 230 to 240
270	290	10	Shale, gray, micaceous, 60%; sandstone, broken small, 40%
290	300	10	Shale, gray to brownish, 50%; sandstone, 50%
300	310	10	Shale, gray micaceous, with pieces of siderite nodules
310	320	10	Sandstone, gray, fine, highly micaceous, 95%; coal, 5%
320	330	10	Sandstone, light-gray, very fine, micaceous; both this and the preceding are broken small
330	360	40	Shale, gray, soft, with spherulites and nodules of siderite
360	370	10	Clay, gray, yellow, and red with nodules of siderite and impure limestone
370	400	30	Sandstone, white, medium-grained; contains a little mica, chlorite and kaolin
400	420	20	Clay, light-gray, 90%; green siltstone, and siderite nodules and spherulites, 10%
420	430	10	No sample
430	440	10	Clay, and shale, gray with black streaks, 70%; grayish-green siltstone with siderite spherulites, 30%
440	450	10	Siltstone, gray to grayish green, with many siderite spherulites
450	470	20	Sandstone, light-gray, fine; contains small amounts of muscovite, biotite and chlorite
470	560	90	Sandstone, white, fine; <del>not</del> broken mostly to individual grains; contains small amounts of muscovite
560	580	20	Sandstone, gray, very fine, shaly and micaceous
580	620	50	Sandstone, gray, fine to very fine; the two samples between 600 and 620 contain a little coal
620	660	40	Sandstone, light-gray, fine, 70%; coal, 30%
660	700	40	Sandstone, light-gray, fine; contains muscovite, biotite and chlorite
700	720	20	Sandstone, light-gray, fine, like that above, with 10 to 20% of darker gray shaly siltstone and very fine sandstone
720	750	30	Shale, gray, silty, micaceous
750	770	20	Sandstone, light-gray, very fine, slightly calcareous; contains some siderite, mica, and chlorite

Top	Bottom	Thickness	
770	780	10	Sandstone, light-gray, fine 80%, coal 20%
780	789	9	Coal
789	800	11	No sample
800	880	80	Siltstone, medium- to dark-gray, shaly, micaceous; also small amount of light-gray shale and siltstone with siderite spherulites
880	910	30	Sandstone, light-gray, fine, calcareous; contains mica, chlorite and siderite
910	920	10	Shale and siltstone, gray; contains siderite
920	930	10	No sample
930	970	40	Sandstone, light grayish green, fine, slightly calcareous; contains muscovite, biotite, chlorite and siderite
970	990	20	Sandstone, gray, fine, shaly, micaceous; contains siderite and carbonaceous matter
990	1000	10	Shale, dark-gray, silty, micaceous
1000	1010	10	No sample
1010	1080	50	Sandstone, light-gray, fine; contains mica, chlorite and siderite
1080	1370	310	Sandstone, white, fine- to medium-grained, nearly all quartz; contains very small amount of muscovite
1370	1420	50	Sandstone, white, medium- to coarse-grained, nearly all quartz
<u>Mauch Chunk Group, 122 feet</u>			
1420	1430	10	Shale, dark-gray; with small amount of light-gray limestone
1430	1450	20	Siltstone, gray, slightly calcareous
1450	1460	10	No sample
1460	1490	20	Shale, red, calcareous; samples contain much rusty steel from cable
1490	1500	20	Shale, gray, fine, calcareous; with pyrite cubes; a little nearly white limestone in lower part
1500	1539	39	Limestone, brownish-gray, fossiliferous ("Little Lane")
1539	1542	3	Shale, gray, soft ("Pencil Cave")

Top Bottom Thickness

Greenbrier Limestone, 168 feet

1642	1670	28	Limestone, very light gray, slightly brownish
1670	1640	70	Limestone, very light gray, oolitic, contains a little poorly sorted sand, with a few rounded and frosted grains, but hardly enough sand to be called sandy limestone
1640	1670	30	Limestone, very light gray, slightly dolomitic; contains oolites which are indistinct because of recrystallization; there is a little very fine sand and scarce specks of glauconite
1670	1690	20	Limestone, light-gray, somewhat dolomitic; has fine granular appearance different from that of limestone above
1690	1720	30	Limestone, light-gray to medium-brown, somewhat dolomitic and slightly sandy

1720 1730 10 Siltstone, gray, calcareous, highly pyritic

Maerady and Pocono Formations, 600 feet

1730	1740	10	Siltstone, bright-red and grayish-red, with traces of green
1740	1750	10	Siltstone, gray
1750	1770	20	Sandstone, gray, calcareous; more than half of it is very fine, but there are some grains up to 2 or 3 mm
1770	1780	10	Sandstone, gray, very fine, calcareous
1780	1790	10	Siltstone, gray, highly pyritic 60%; gray to brownish somewhat dolomitic, fine-textured limestone, 40%
1790	1800	10	Shale, gray
1800	1900	100	Siltstone, gray, shaly, micaceous; most samples contain abundant pyrite and numerous fragmentary plant remains; only small amounts of true shale are present although shaly structure is prominent
1900	2160	260	Shale, gray; with small amounts of siltstone; some siltstone fragments contain both biotite and muscovite
2160	2170	10	Siltstone, grayish-green
2170	2210	40	Shale, gray, with up to 30% of siltstone
2210	2220	10	Siltstone, lightgray, with some darker gray shale
2220	2260	40	Shale, gray, 50%; lighter gray siltstone, 50%; some of the siltstone is almost coarse enough to be sandstone

Top	Bottom	Thickness	
2280	2290	30	Shale, medium-to dark-gray, distinctly laminated
2290	2300	10	Siltstone, gray, partly shaly
2300	2318	18	Shale, gray
2318	2334	18	Sandstone, light-gray to yellowish, slightly calcareous, 70% gray shale with a little siltstone, 30% considerable pyrite in some fragments (Berea Sandstone)
<u>Devonian Shales, 1328 feet</u>			
2334	2340	<del>18</del> <sup>6</sup>	No sample
2340	2350	10	Shale, gray; with some siltstone and very fine sandstone
2350	2360	10	No sample
2360	2370	10	Shale, gray
2370	2490	120	Shale, very dark gray to black, mostly rather silty; contains considerable pyrite
2490	2890	400	Shale, gray; with up to 20 or 30% of siltstone in most samples
2890	2900	10	No sample
2900	2950	50	Shale, very dark gray
<del>2950</del> <sup>5</sup>	2970	<del>20</del> <sup>2</sup>	Shale, gray
2970	2980	10	No sample
2980	3020	40	Shale, gray; contains very small spherical pyrite concretions as well as disseminated crystals of pyrite
3020	3030	10	No sample
3030	3040	10	Shale, dark-gray (depth on sample doubtful)
3040	3080	40	No sample
3080	3130	50	Shale, about half medium-gray and half very dark gray
3130	3340	210	Shale, dark-gray to dark-brown and black; some fragments contain abundant spores (no samples for intervals 3290 to 3310' and 3320 to 3330')
3340	3580	240	Shale, gray, much lighter than that above; most samples contain some light grayish green shale (no samples for intervals 3440 to 3460' and 3520 to 3540')
3580	3630	50	Shale, black, pyritic, very slightly calcareous
3630	3662	32	Shale, dark-gray to black, calcareous; sample from 3655 to 3662' contains small amount of brown chert and somewhat dolomitic limestone; top of "Corniferous" reported at 3662'
	3662		Total depth