

Brent Talbot, et. al. No. 1 (294) Well

Meade District, Upshur County, W. Va.

By Cumberland and Allegheny Gas Company, 800 Union Trust Building,  
Pittsburgh, Pennsylvania.

Located 1.03 mi. W. of 80°15' and 3.72 mi. S. of 38°55' -EC- Crawford  
Quadrangle, 2.5 mi. S. E. of French Creek.

Elevation, 1802' L.

Permit, (Up-73.)

Drilling commenced October 16, 1939; completed, December 31, 1939.

Shot January 2, 1940, at 4049-4062'.

Open flow 140,227 cu. ft. per day.

Rock pressure, 1050 lbs. in 72 hours.

Fresh water at 95'; salt water at 1058'.

Coal was encountered at 240-245 and 315-318'.

16" conductor, 16'; 10" casing, 300' 3"; 8 1/2", 1246' 7"; 6-5/8", 2210';  
4" tubing, 4174'; all left in.

O.W.S. packer, 6-5/8" x 4", set at 3718'.

Perf. top 4145; perf. bot. 4165'; perf. top 4012; perf. bot. 4034'

Top	Bottom	Thickness	
<u>Conemaugh Formation, 50+ feet</u>			
0	12	12	Mud yellow (no sample)
12	50	38	Sandstone, white, medium-grained, poorly sorted; apparently not affected by weathering (water at 95', 1/2 bailer per hour)
<u>Allegheny Formation, 195 feet</u>			
50	155	105	Shale and siltstone, gray to grayish-green, silty, micaceous; contains siderite concretions
155	205	50	Sandstone, white, medium- to coarse-grained; contains a little kaolin, mica and siderite
205	210	5	Shale, black, highly carbonaceous, 50%; white sandstone, 50%
210	220	10	Shale, dark-gray to black
220	240	20	Sandstone, white, medium-grained; contains some mica and chlorite

Top	Bottom	Thickness	
240	245	5	Coal (only a little shows in samples)
<u>Pottsville Formation, 840 feet</u>			
245	260	15	Sandstone, white, medium-grained, with some crystal faces on the quartz
260	315	<sup>5</sup> 45	Siltstone, dark-gray, shaly, micaceous; somewhat brownish from siderite between 280 and 290'
315	318	3	Coal (does not show in samples; probably Upper Mercer Coal)
318	345	27	Shale, black
345	424	79	Sandstone, light-gray, medium-grained; contains some mica, chlorite and kaolin; about 40% of dark-gray siltstone from 365 to 390'
424	435	11	Siltstone, gray, shaly
435	455	20	Shale, gray, mostly silty
455	500	45	Sandstone, light-gray, fine to medium-grained, micaceous
500	512	12	Shale, gray, soft, with siderite spherulites
512	550	38	Sandstone, light-gray, medium-grained; contains mica, chlorite and kaolin
550	570	20	Siltstone and shale, gray (gas show at 555')
570	612	42	Sandstone, light-gray, medium-grained; contains mica, chlorite and siderite
612	635	23	Sandstone, white, medium-grained, nearly all quartz (gas show at 620-625')
635	690	55	Shale, dark-gray, very silty (might be considered about 50% siltstone)
690	726	36	Siltstone, gray
726	750	24	Sandstone, white, fine
750	770	20	Shale, gray, very silty
770	795	25	Sandstone, white, medium-grained, poorly sorted
795	824	29	Conglomerate, white; composed of quartz pebbles and coarse sand
824	840	16	Sandstone, white very coarse, 60%; gray shale and siltstone, 40%; small amount of coal
840	974	134	Shale, dark-gray to black

Top	Bottom	Thickness	
974	1050	76	Sandstone, nearly white, medium-grained; is mostly quartz but contains a little kaolin
1050	1080	30	Sandstone, white, coarse to very coarse, nearly all quartz (water at 1058', 7 bailers in $1\frac{1}{2}$ hours)
1080	1085	5	Conglomerate, nearly white; composed of broken quartz pebbles and coarse sand
<u>Mauch Chunk Group, 315 feet</u>			
1085	1092	7	Shale, gray, soft; fragments break up when placed in water
1092	1105	13	Shale, red, 50%; light-green siltstone, 30%; impure brownish limestone, 20%
1105	1110	5	No sample
1110	1115	5	Shale, gray
1115	1168	53	Shale, red, soft, partly calcareous
1168	1192	24	Siltstone, gray, shaly, micaceous
1192	1220	28	Sandstone, light-gray to light-green, fine, micaceous; calcareous from 1215 to 1220'
1220	1258	38	Shale, red, with some gray toward bottom
1258	1286	28	Shale, gray to greenish, silty
1286	1310	24	Shale, red, soft
1310	1320	10	Limestone, brown
1320	1340	20	Shale, gray to greenish, mostly soft, 60%; brown limestone, 40%
1340	1348	8	Limestone, dark-brown, 70%; gray shale, 30%
1348	1366	18	Limestone, gray and brown, 70 to 80%; soft gray shale, 30 to 20%
1366	1384	18	Shale, red, 60%; highly calcareous, white to light-green siltstone, 40%
1384	1400	16	Shale, gray, soft
<u>Greenbrier Limestone, 245 feet</u>			
1400	1410	10	Limestone, gray and brown
1410	1435	25	Limestone, nearly white, with some brown; contains some oolites, mostly not very distinct
1435	1450	15	Limestone, light-brown

Top	Bottom	Thickness	
1450	1465	15	Limestone, light-brown, oolitic and sandy
1465	1492	27	Limestone, light-brown, fine textured
1492	1505	13	Limestone, light-brown, moderately sandy
1505	1524	19	Sandstone, light-brown, to gray, highly calcareous; contains a few oolites
1524	1542	18	Sandstone, light-green, very fine, somewhat calcareous, 50%; light-brown, highly calcareous, medium-grained sandstone with oolites, 50%
1542	1550	8	Limestone, light-brown to white, oolitic and partly sandy, 70%; red, highly calcareous siltstone, 30%
1550	1585	35	Limestone, light-brown, very sandy, oolitic; some fragments are more sandstone than limestone
1585	1645	60	Limestone, nearly white to light-brown; light-gray when dry; somewhat dolomitic

Hampshire ("Catskill") Formation, 505 feet

1645	1668	23	Shale, green, partly sandy, decreasing in amount from 80% at top of interval to 50% at base; the rest poorly sorted sandstone with white quartz pebbles in green matrix
1668	1700	32	Sandstone, light-green, poorly sorted, containing white quartz pebbles in decreasing amount toward the bottom; samples contain also about 20% of gray and green shale and a very few fragments of bright-red shale
1700	1720	20	Sandstone, light-gray, fine, poorly sorted, slightly calcareous
1720	1746	26	Sandstone, light-gray, fine, 70 to 60%; gray shale, 30 to 40%
1746	1765	19	Sandstone, light-gray and light-green, fine, slightly calcareous
1765	1798	33	Sandstone, light-grayish red, gray and green, fine
1798	1820	22	Shale, red, 70%; gray and green shale with some siltstone, 30%

Top	Bottom	Thickness	
1820	1830	10	Shale, red, 50%; gray and green shale with some fossil shells, 30%; siltstone and fine sandstone, 20%
1830	2000	170	Shale and siltstone, red with small amount of gray and green; no attempt was made to estimate the varying proportions of shale and siltstone in individual samples
2000	2020	20	Sandstone, grayish-red, very fine
2020	2050	30	Shale, red, 90%; gray and green shale 10%
2050	2060	10	Shale, gray
2060	2070	10	Sandstone, red, very fine
2070	2080	10	Shale, gray to grayish-green
2080	2121	41	Sandstone, fine to very fine, mostly red with some white and green, 60 to 70%; gray and green shale 40 to 30%; a few fossil shell fragments
2121	2150	29	Siltstone and shale, red (gas at 2148'; SIM 2158')
<u>Chemung, Portage, etc., 2242+ feet</u>			
2150	2168	18	Sandstone, light-gray with green specks, fine, micaceous (Jordan Sand recorded at 2140 to 2158')
2168	2186	18	Siltstone, gray, shaly
2186	2195	9	Sandstone, white, fine, 70%; gray shale, 30%
2195	2250	55	Shale, gray, 60%; gray to green siltstone and fine sandstone, 40%
2250	2280	30	Sandstone, light-brown, fine, poorly sorted; contains a little biotite, muscovite and pyrite
2280	2310	30	Shale, greenish-gray
2310	2370	60	Sandstone, grayish-green to nearly white, very fine, slightly calcareous, 60%; gray shale, 40%; toward bottom the sandstone becomes practically a siltstone
2370	2390	20	Shale, gray
2390	2550	160	Shale, gray, 50%; gray and green siltstone and very fine sandstone, 50%; some of siltstone is slightly calcareous
2550	2610	60	Siltstone, gray to green, 70 to 90%; gray shale, 30 to 10%
2610	2640	30	Shale, gray, 50%; gray and green siltstone, 50%

Top	Bottom	Thickness	
2640	2718	78	Siltstone, gray to greenish, 60 to 90%; gray shale 40 to 10%; siltstone is highly fossiliferous from 2708 to 2718' and contains a few shell fragments in some other samples
2718	2933	215	Shale, gray, 60 to 80%; siltstone, gray to grayish-green slightly calcareous, 40 to 20%; a few fossil shell fragments in some samples
2933	3015	82	Siltstone, gray, highly fossiliferous, 80 to 90%; gray shale, 20 to 10%; much of siltstone from 2965 to 2995' is dark-gray to brownish
3015	3326	311	Siltstone, light-gray to grayish-green, slightly to moderately calcareous; some fossil shell fragments in most samples but more from 3075 to 3135'; most samples contain about 10 to 20% of gray shale
3326	3407	81	Siltstone, gray, shaly, slightly calcareous; there is only a small proportion of true shale but most of the siltstone is a little darker and finer than in the interval above
3407	3605	198	Siltstone, gray to grayish-green, slightly calcareous, 50 to 70%; gray shale, 50 to 30%; perhaps a few samples in upper part of interval are more shale than siltstone; there is no sharp distinction between the two rocks
3605	3690	85	Siltstone, gray, slightly calcareous; considerable brown from 3605 to 3640', perhaps due to too much heat in drying samples
3690	3760	70	Siltstone, gray, shaly, slightly calcareous, 70%; gray shale, 30%
3760	4053	297	Shale, gray, silty; all samples contain some siltstone and a few have up to 50%, but on the whole the interval is mostly shale
4053	4068	15	Sandstone, brown, very fine, slightly calcareous; with some gray shale (gas at 4053-4057', 60/10 W. in 1")
4068	4090	22	Siltstone, gray and brown, shaly

Top	Bottom	Thickness	
4090	4363	273	Siltstone and shale, mostly gray; some brown siltstone near top; below 4170' shale is considerably in excess of siltstone in most samples; color is very dark from 4262 to 4272' and from 4292 to 4312'
	4363		Total depth; hole filled up to depth of 4165'