

BRAX-17

No. A-4 Summary No. 7579 Well 1

Birch District, Braxton County, West Virginia.

By Pittsburgh and West Virginia Gas Company, Pittsburgh, Pa.

Located, 1.72 mi. W. of 80°58' and 5.14 mi. S. of 80°45' -32°- Cassaway Quadrangle;

0.8 mi. S. of Slatyfork and 4.8 mi. S. of Roedale

Elevation, 856.8' L.

Permit, Brax-17

Drilling commenced Feb. 5, 1937; completed March 24, 1937.

Shot March 24, 1937 at 1448 to 1885 feet.

Open flow, 70,000 cu. ft.

Rock pressure, 875 lbs in 60 hrs.

Fresh water at 18, 24, 65, and 227 feet; salt water at 435, 459, and 1483 feet.

16" wood conductor, 10"; 15" casing, 48'; 10", 397'; 8 1/2", 641'; 8 5/8", 1725'.

Coal was encountered at 642-658, and 1155-1166 feet.

Gas well.

Samples are continuous below 1885; above that there are many gaps which were filled in as well as possible ~~by the writer~~ ^{with help} and of the driller's record but it is quite possible that there are some errors, or at least omission of important details.

Top Bottom Thickness

Recent Alluvium, 24 feet

0	6	6	Clay, brown, sandy
6	24	18	Sand and gravel (water at 18 and 24 feet)
			<u>Pennsylvanian, 1500 feet</u>
24	40	16	Clay, red, highly calcareous
40	45	5	Sandstone, gray, coarse
45	50	5	Clay, red and gray, calcareous (show of gas at 49)
50	147	97	Clay, red, calcareous (only two samples; water at 65)
147	157	10	Clay, gray; with some green siltstone
157	174	17	Clay, red and gray, calcareous
174	217	43	Shale, gray; with some limestone and siltstone (only one sample)
217	227	10	Clay and shale, gray, highly calcareous (show of oil and gas 220 to 221; water, 227)
227	245	18	Sandstone, light-gray, fine, soft
245	257	12	Shale, black, soft; a little coal between 248 and 252
	276	19	Shale, gray, soft, partly calcareous

Top	Bottom	Thickness	
270	283	7	Sandstone, white, poorly sorted; is mostly fine but contains some very coarse sand
283	294	11	Shale, gray
294	303	37	Sandstone, light-gray; interval is reported as "blue line"; of the two samples available the one from 301 to 306 is very fine and non-calcareous and the one from 306 to 308 is fine and highly calcareous
303	445	112	Sandstone, white; contains considerable amount of kaolin and a little mica; varies in texture from fine to coarse, but samples are not complete enough for detailed description (water at 425 and 435)
445	506	60	Shale, gray, mostly silty; contains siderite concretions
506	512	7	Sandstone, gray, fine, micaceous
512	525	13	Sandstone, white, fine; contains a little mica and kaolin
525	526	1	Shale, black
526	549	23	Sandstone, gray, medium- to fine-grained; many siderite spherulites from 536 to 541
549	562	3	Coal
562	573	20	Sandstone, gray, fine, grading into siltstone toward bottom
573	584	16	Shale, dark-gray to black
584	620	36	Sandstone, white, fine, containing a little mica and kaolin
620	636	17	Siltstone, dark-gray; micaceous
636	655	20	Sandstone, white, medium-grained
655	681	26	Shale, black, with a little coal; some light-gray siltstone and fine sandstone toward bottom
681	703	17	Siltstone, gray
703	726	23	Shale, dark-gray
726	749	23	Siltstone, gray; contains mica, siderite and carbonaceous material
749	753	5	Shale, black
753	826	73	Shale, and siltstone, dark-gray
826	865	39	Sandstone, white, fine
865	878	10	Sandstone, gray, fine; a little coal, 868 to 872
878	906	28	Siltstone, gray, micaceous
906	920	15	Sandstone, gray, fine; contains siderite, mica, and thin streaks of coal

Top	Bottom	Thickness	
920	958	38	Shale, dark-gray, silty
958	967	9	No samples; recorded as "dark, soft lime"
967	981	14	Shale, dark-gray, silty, containing siderite concretions
981	1000	19	No samples; recorded as "dark, soft lime"
1000	1016	16	Sandstone, gray, very fine, shaly, micaceous
1016	1021	5	Coal
1021	1031	10	No samples; recorded as "dark, soft lime"
1031	1042	11	Shale, black; with considerable coal
1042	1052	10	No samples; all of interval from 920 to 1052 is recorded by driller as "dark, soft lime"
1052	1092	40	Sandstone, light-gray, medium to fine-grained; contains dark streaks of carbonaceous material as well as considerable mica and limonite
1092	1100	8	Shale, dark-gray; with a little coal
1100	1155	55	Shale and siltstone, gray, mostly very dark
1155	1156	1	Coal
1156	1172	16	Shale, dark-gray; with some light-gray very fine sandstone in lower part
1172	1188	16	Sandstone, gray, very fine, almost a siltstone (no samples 1172 to 1181, reported as "dark lime")
1188	1206	20	Sandstone, white, fine
1206	1273	66	Shale, dark-gray to black; with a few thin streaks of siltstone and probably at least two thin coals
1273	1286	13	Siltstone, gray, shaly
1286	1330	45	Shale and siltstone; dark-gray; a little coal, 1334 to 1331
1330	1372	52	Sandstone, light-gray, fine; with some darker shale and siltstone (gas at 1372)
1372	1390	18	Sandstone, white, medium-grained
1390	1470	80	Shale, dark-gray
1470	1500	22	Sandstone, white, coarse to very coarse
<u>Brown Creek Group, 100 feet</u>			
1500	1507	7	Shale, red and green, slightly calcareous
1507	1517	10	Shale, red, calcareous
1517	1561	44	Shale, red, green, and yellow; a considerable part of sample from 1573 to 1561 is a fairly dark gray with only slight greenish tinges; some calcareous material throughout

Top	Bottom	Thickness	
1691	1694	13	Siltstone, green, calcareous
1694	1700	6	No sample
1700	1707	7	Shale, red and gray, dolomitic
1707	1716	9	No sample
1716	1735	19	Shale, gray and green, highly calcareous
1735	1769	34	Limestone, mixed brown and light-gray, fossiliferous; samples also contain up to 30 or 40% of soft gray and green shale, at least part of which may be interbedded with the limestone
1769	1782	13	Sandstone, light-gray, very fine, calcareous, with about 40% of gray shale (gas at 1777, 30/10 water in 4")
1782	1799	17	Shale, dark-gray, soft, fissile (Pencil Cave; steel line measurement, 1726 feet at bottom)
<u>Greenbrier Limestone, 135 feet</u>			
1699	1710	11	Limestone, light-gray to brown; contains some indistinct and thoroughly cemented oolites
1710	1758	48	Limestone, brown, mostly very fine textured, not sandy or oolitic; nearly neutral-gray when dry
1758	1763	5	Limestone, dark brownish gray, sandy
1763	1778	15	Limestone, light-gray, slightly brownish, very fine textured
1778	1783	5	Limestone, brownish-gray, sandy; sand is mostly very fine
1783	1848	52	Limestone, very light gray to slightly brownish, sandy oolitic; top six feet is a little darker than the rest, larger sand grains well rounded
1848	1866	21	Limestone, brownish-gray, fine-textured, not sandy or oolitic; somewhat dolomitic from 1848 to 1856; contains a few cubes of pyrite (gas at 1850 to 1851, 4/10 water in 4")
1866	1892	16	Limestone, very light grayish-yellow, sandy; sand is poorly sorted and larger grains are well rounded; contains a few cubes of pyrite
<u>Poceno and Chatfield Formations, 756 feet</u>			
1882	1888	6	Shale, grayish-green, with a little red; very silty
1888	1898	6	Shale, dark-gray to grayish-green, with a little red; very silty

Top Bottom Thickness

1996	1974	18	Shale, gray, silty
1974	1956	81	siltstone, gray to grayish-green; with considerable amount of shale
1995	2039	44	Shale, gray to grayish-green, silty
2039	2172	133	Shale and siltstone, gray to grayish-green; some of siltstone calcareous; in some samples siltstone is distinctly lighter colored than shale
2172	2196	24	Shale, grayish-red, with considerable amount of gray shale and some gray, calcareous siltstone
2196	2221	25	Shale, gray, and lighter gray, slightly calcareous siltstone
2221	2281	60	Shale, grayish-red, mixed with considerable amount of gray and green; mostly very silty
2281	2299	12	Siltstone, gray, containing fossil shells; with considerable amount of gray shale and a little red shale
2299	2351	52	Shale, gray
2351	2402	51	Shale, grayish-red; with nearly equal amount of gray to grayish-green shale and siltstone
2402	2549	147	Shale and siltstone, gray to grayish-green; several samples contain some red shale, probably corings; siltstone is calcareous from 2526 to 2549
2549	2568	19	Shale, gray, silty; with considerable amount of grayish-red shale
2568	2630	62	Shale and siltstone, gray to grayish-green; siltstone is calcareous
2630	2689	5	Siltstone, light grayish green, calcareous
	2689		Total depth