

Robert Chalfant No. 1 Well

Walker District, Wood County, W. Va.

By South Penn Natural Gas Company, Parkersburg, W. Va.

Located 3.29 mi. W. of 81°15' and 4.44 mi. S. of 39°15' - ME- Elizabeth
Quadrangle.

Elevation, 913.19' L.

Permit W00-128.

Commenced Feb. 24, 1943; completed June 7, 1943.

Dry hole.

10" casing 502'; 8 1/2", 945'; 6 5/8", 1841'; 5 3/16, 2089'.

Section based on samples from 300 to 3002', examined by J.H.C. Hartens.

According to the structure map the elevation of the Washington Coal horizon is about 700 feet at the locality of this well.

Dunkard Group, Monongahela, and Conemaugh

Formations, 1359 feet

Top	Bottom	Thickness	(including top 300 feet not sampled)
300	320	20	Sandstone, light-green, very fine, silty
320	330	10	No sample
330	360	30	Siltstone, light-green, calcareous
360	365	25	Sandstone, nearly white, fine- to medium-grained
365	400	15	Shale, green and grayish-red
400	420	20	Shale, red
420	448	28	Siltstone, light-green, shaly; also various kinds of shale, probably cavings
448	460	12	Shale, red, soft, calcareous
460	468	8	Siltstone, light-green
468	485	15	Sandstone, light-gray to greenish, fine, micaceous
485	507	24	Shale, red, soft, with small limy concretions
507	538	31	Shale, red, soft, with small limy concretions, 70%; light-green micaceous siltstone, 30%
538	548	10	Shale, red, soft with small limy concretions
548	625	76	Siltstone, light-green, calcareous, micaceous
625	632	9	Shale, red, 70%; light-green siltstone, 30%
632	640	8	Clay, gray, soft
632	680	48	Siltstone, light-green, micaceous
680	702	22	Shale, red, soft, calcareous
702	730	28	Siltstone, light-green, fine, shaly
730	745	15	Sandstone, light-green, very fine, micaceous

Top	Bottom	Thickness	
745	780	35	Shale, red
780	790	10	Siltstone, light-gray
790	795	5	Shale, light-gray, soft, 50%; greenish-gray siltstone, 50%
795	798	3	Limestone, light-brown, 95%; coal, 5%
798	801	3	Limestone, very light brown, 80%; light-green clay, 20%
801	808	7	Limestone, very light brown
808	816	8	Limestone, very light brown, 60%; yellow, green, and gray clay, 40%
816	904	88	Clay, red and yellow, with many small limy concretions
904	912	8	Siltstone, green, shaly, 50%; white, medium-grained sandstone, 50%
912	913	6	Sandstone, white, medium-grained
913	924	8	Shale, red
924	932	8	No sample
932	935	3	Clay, red, gray, and yellow
935	945	10	No sample
945	960	15	Shale, red, micaceous
960	967	7	Siltstone and shale, green
967	974	7	Siltstone, ^{grayish} greenish-green, very sandy
974	1000	26	Clay, gray and red, soft, with small limy concretions
1000	1019	19	Clay, red, yellow, and gray, soft, with small limy concretions
1019	1045	26	Siltstone, light-green micaceous
1045	1060	15	Clay, yellow and red, soft, with many small limy concretions
1060	1070	10	Siltstone, green, micaceous
1070	1083	13	Shale, green, very silty
1083	1090	7	Siltstone, green, micaceous
1090	1106	16	Sandstone, light-green, fine, calcareous; also some green siltstone
1106	1112	6	Siltstone, gray, shaly, micaceous
1112	1117	5	Limestone, black, very silty; contains a few fossil shells
1117	1125	8	Limestone, nearly black, silty and very cherty; contains some fairly pure bluish-gray chert

Top	Bottom	Thickness	
1125	1131	6	No sample
1131	1137	6	Shale, black, highly calcareous
1137	1145	8	Limestone, nearly black, silty and very cherty; contains some bluish-gray chert; same as 1117-1125' (sample probably belongs at 1125-1131')
1145	1160	15	Sandstone, nearly white, fine; also some white micaceous siltstone; siderite spherulites in both siltstone and sandstone
1160	1168	8	Shale, light-gray to red, soft, very sandy
1168	1200	32	Clay and soft shale, gray; also considerable amount of sand, probably indicating some sandstone layers in this interval
1200	1210	10	Sandstone, green, coarse; large amounts of gray clay, probably cavings
1210	1232	22	Siltstone and silty shale, gray
1232	1240	8	Sandstone, light-gray to light-brown, very fine
1240	1245	5	Shale, light-green, silty, with small specks of siderite
1245	1255	10	Siltstone, gray, micaceous, shaly
1255	1271	16	Siltstone, gray, micaceous, coarse and sandy; mostly gray clay cavings 1263-1271'.
1271	1280	9	Siltstone, gray, with about 10% of siderite
1280	1325	45	Sandstone, white, medium-grained; calcareous near top, becoming less so toward bottom
1325	1335	10	Siltstone and shale, gray
1335	1351	16	Sandstone, light-gray, fine to very fine; contains many specks of siderite
1351	1369	8	Clay, gray
<u>Allegheny Formation, 193 feet</u>			
1369	1367	8	Shale, very light gray, ^{with} siderite spherulites, 60%; with fine sandstone, 40%; traces of coal and black shale (Upper Freeport Coal)
1367	1450	83	Sandstone, white, medium-grained; contains a little mica, chlorite and clayey material
1450	1455	5	Shale, dark-gray, silty, 50%; white sandstone, 50%
1455	1550	95	Sandstone, white, medium-grained, similar to that from 1367 to 1450'

Top	Bottom	Thickness	
1560	1557	7	Coal and black shale (Lower Kittanning Coal) <u>Pottsville Formation, 369 feet</u>
1567	1565	8	Shale, black, highly carbonaceous, 70%; light-brown sandy siltstone, 30%
1565	1583	18	Sandstone, white, medium-grained
1583	1595	12	Siltstone, gray, shaly
1595	1600	5	Shale, black, silty
1600	1624	24	Sandstone, nearly white, fine
1624	1636	12	Sandstone, light-gray, fine, calcareous
1636	1663	27	Shale and siltstone, gray
1663	1710	47	Siltstone, gray, shaly
1710	1768	58	Sandstone, white, medium-grained; some brown stain on grains
1768	1787	19	Sandstone, white with some brown stain; medium-grained, nearly all quartz; crystal faces on many grains (salt water at 1775', 7 bailers per hr.)
1787	1797	10	Shale, dark-gray
1797	1824	27	Shale, black, silty
1824	1832	8	No sample
1832	1837	5	Siltstone, gray, shaly; 80%; coarse sandstone, 20%
1837	1841	4	Siltstone, gray, shaly
1841	1856	15	Sandstone, white with some brown stain, medium- to coarse-grained
1856	1862	6	Sandstone, white, coarse, 70%; gray shaly siltstone, 30%
1862	1870	8	Sandstone, white, fine to coarse, poorly sorted; contains some siderite; crystal faces on a few of the quartz grains; also about 20% of gray silty shale
1870	1905	35	Sandstone, white, coarse; crystal faces on many grains (salt water, 1895' H.F.)
1905	1924	19	Sandstone, white, with brown rust stain, medium-grained; crystal faces on many grains
1924	1928	4	Sandstone, white, coarse

Top Bottom Thickness

Greenbrier Limestone (?), 6 feet

1920	1932	6	Sandstone, white, medium-grained, dolomitic
<u>Pocono Formation</u> , 528 feet			
1932	1938	6	Shale and siltstone, gray, with many siderite spherulites
1938	1949	11	Sandstone, white, coarse
1949	2005	56	Sandstone, white, medium-to fine-grained; some grains with crystal faces
2005	2008	3	Sandstone, white, fine, 60%; gray silty shale, 40%
2008	2014	6	Sandstone, white, medium-grained, 70%; gray silty shale, 30%
2014	2019	5	Sandstone, nearly white, medium-grained, 80 to 90%; gray shale, 20 to 10%
2019	2025	6	Sandstone, white, medium-grained
2025	2031	6	Sandstone, white, fine
2031	2043	12	Sandstone, white, medium-to coarse-grained
2043	2048	5	Sandstone, white, fine
2048	2052	4	Sandstone, white, medium-grained
2052	2056	4	Siltstone, light-gray, sandy
2056	2060	4	Shale, gray, silty
2060	2062	2	Sandstone, light-gray, very fine, 80%; gray silty shale, 20%
2062	2072	10	Shale and siltstone, gray; some fragments colored brown by siderite
2072	2082	10	Siltstone, gray
2082	2085	3	Sandstone, light-gray, very fine, 80%; gray silty shale, 20%
2085	2086	1	Sandstone, light-brown, very fine, highly calcareous, 80%; gray silty shale, 20%
2086	2092	6	Sandstone, light-gray, very fine, 70%; gray silty shale, 30%
2092	2117	25	Shale and siltstone, gray
2117	2127	10	Shale, dark-gray, silty
2127	2152	25	Shale and siltstone, gray
2152	2153	6	Siltstone, light-gray, sandy
2158	2177	19	Shale and siltstone, gray
2177	2189	12	Siltstone, light-gray, 90%; gray shale, 10%

Top	Bottom	Thickness	
2189	2203	14	Shale and siltstone, gray
2203	2219	16	Shale, gray, silty
2219	2272	53	Shale, and siltstone, gray
2272	2276	4	Siltstone, light-gray, slightly calcareous
2276	2384	108	Shale and siltstone, gray
2384	2420	36	Shale, gray, with rather small amount of lighter gray siltstone
2420	2441	21	Shale, gray, silty, 30%; very dark gray shale, 20%
2441	2459	18	Shale, very dark gray to black
2459	2460	1	Sandstone, gray, fine, pyritic (Berea Sandstone)
<u>Devonian Shales, 542+ feet</u>			
2460	2505	45	Siltstone, light-gray, with a few shell fragments near top
2505	2512	7	Shale and siltstone, gray
2512	2599	87	Siltstone, light-gray, partly shaly
2599	2635	36	Shale and siltstone, gray
2635	2642	7	Shale, red, 40%; gray to greenish shale and silt- stone, 60%
2642	2647	5	Siltstone, light-gray to greenish, 70%; gray and red shale, 30%
2647	2655	8	Siltstone and shale, gray to grayish-green
2655	2661	6	Siltstone and shale, gray, 80%; grayish-red silty shale, 20%
2661	2680	19	Shale and siltstone, gray
2680	2706	26	Siltstone, grayish-green, gray and nearly white, partly sandy
2706	2712	6	Shale and siltstone, gray, 70%; grayish-red shale, 30%
2712	2720	8	Shale, grayish-red, very silty, micaceous, 80%; gray siltstone and shale, 20%
2720	2744	24	Siltstone, gray, white and green, 80 to 90%; gray shale, 20 to 10%
2744	2757	13	Siltstone, green, 70%; gray shale, 30%
2757	2793	36	Shale and siltstone, gray to grayish-green
2793	2816	23	Shale, dark-gray, silty
2816	2831	15	Shale and siltstone, gray

Top	Bottom	Thickness	
2831	2842	11	Shale, gray
2842	2861	19	Shale and siltstone, gray
2861	2867	6	Siltstone, gray, with a few fossil shell fragments
2867	2896	29	Siltstone and silty shale, gray
2896	2938	42	Siltstone, gray; small amounts of gray shale
2938	3002	64	Shale and siltstone, gray
	3002		Total depth