

Clay-174

D. W. Sirk No. 4 (7700) Well

Buffalo District, Clay County, W. Va.

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

Located 0.61 mi. W. of 80°58' and 1.15 mi. S. of 38°35' -SW- Gassaway Quadrangle; 1.2 mi. S.S.E. of Duck.

Elevation, 1060' L.

Permit, Clay-174

Drilling commenced Dec. 11, 1939; complete, Jan. 16, 1940.

Gas well; volume, 122,000 cu. ft. per day; rock pressure, 567 lbs. in 192 hrs.

8 1/2" casing, 404'; 6-5/8", 1688'; all left in.

Coal was encountered at 1229-1234'.

Section based on drillers' record above 1364' and samples below that depth.

Top	Bottom	Thickness	
<u>Conemaugh Formation, 18+ feet</u>			
0	8	8	Clay, yellow, soft
8	18	10	Slate, dark, soft
<u>Allegheny Formation, 297 feet</u>			
18	100	82	Sand, white, hard (Upper Freeport; water 65')
100	140	40	Slate, white, soft
140	152	12	Lime, dark, hard
152	315	163	Sand, white, hard (Upper East Lynn and East Lynn; water, 240', 12 bailers per hour)
<u>Pottsville Formation, 1112 feet</u>			
315	368	53	Lime, white, hard
368	372	4	Slate, dark, soft
372	425	53	Lime, white, hard
425	434	9	Slate, white, soft
434	455	21	Sand, white, hard
455	458	3	Slate, black, soft
458	470	12	Lime, white, hard
470	580	110	Sand, white, hard
580	592	12	Slate, dark, soft
592	615	23	Lime, dark, hard
615	630	15	Slate, black, soft

Top	Bottom	Thickness	
630	685	55	Lime, dark, hard
685	751	66	Slate, black, soft
751	801	50	Lime, dark, hard
801	918	117	Slate and shells, hard and soft
918	990	82	Sand, dark, hard
990	1040	50	Slate, dark, soft
1040	1110	70	Lime, dark, hard
1110	1229	119-	Slate and shells, dark, hard and soft
1229	1234	5	Coal, black, soft
1234	1265	31	Lime, dark, hard
1265	1286	21	Slate, dark, soft
1286	1312	26	Lime, dark, hard
1312	1336	24	Slate, dark, soft
1336	1356	20	Lime, dark, hard
1356	1414	58	Sandstone, white, coarse, hard (water, 1364', 1 bailer per hour; show gas, 1390-1393')
1414	1427	13	Shale, black, 30%; white, medium-grained sandstone, 70%
<u>Mauch Chunk Group, 296 feet</u>			
1427	1448	21	Shale, gray
1448	1464	16	Shale, red, soft
1464	1557	93	Sandstone, white, with brown rust stain, medium- to coarse-grained, nearly all quartz (gas, 1466'; water, 1555', two bailers; show oil, 1500')
1557	1586	29	Sandstone, white, fine, nearly all quartz
1586	1593	7	Shale, gray
1593	1600	7	Shale, gray and green; small amount of brown limestone
1600	1604	4	Shale, gray
1604	1612	8	Shale, red, soft, slightly calcareous
1612	1632	20	Shale, gray, soft, distinctly laminated
1632	1662	30	Limestone, dark-brown, fossiliferous ("Little Lime")
1662	1670	8	Sandstone, light-gray, very fine, highly calcareous
1670	1684	14	Shale, gray, soft, distinctly laminated
1684	1723	39	Sandstone, white, fine (gas, 1686', 20/10 W. in 1")

Top Bottom Thickness

Greenbrier Limestone, 205 feet

1723	1725	2	Limestone, dark-brown
1725	1741	16	No sample
1741	1811	70	Limestone, light-brown (neutral gray when dry); some green silty material 1741-1747'; a few green fragments and small amount of sand and oolites, 1774-1780'
1811	1817	6	Limestone, very light-brown, oolitic; contains a few rounded and frosted sand grains
1817	1850	33	Limestone, very light brown and gray, oolitic, very sandy; sand is most fine to very fine, but there are a few larger grains which are rounded and frosted
1850	1864	14	Limestone, very light-brown or grayish-yellow, oolitic, moderately sandy
1864	1870	6	Limestone, very light grayish-yellow, very sandy
1870	1880	10	Limestone, very light grayish-yellow
1880	1895	15	Limestone, very light brown (nearly white when dry), sandy and oolitic
1895	1900	5	Limestone, light-gray, fine-textured
1900	1905	5	Limestone, light-brown, with some oolites
1909	1916	7	Limestone, light-brown, sandy, somewhat dolomitic
1916	1924	8	Dolomite, light-gray, sandy
1924	1925	1	Shale, green, soft
1925	1928	3	Dolomite, brown

Maccrady and Poccano Formations, 56+ feet

1928	1964	36	Siltstone, red, with some green
1964	1976	12	Siltstone, gray
	1984		Total depth