

**D. W. Sirk et al. No. 1 (7667) Well.**

Buffalo District, Clay County, W. Va. (015-00145)  
 By Pittsburgh and W. Va. Gas Company, Pittsburgh, Pa.  
 Located 0.8 mi. W. of 80° 55' and 0.6 mi. S. of 38° 35'—SW—Gassaway  
 Quadrangle; 0.75 mi. S. of Duck.  
 Elevation, 950' L.  
 Permit Clay-145.

Drilling commenced, Jan. 16, 1939; completed Feb. 17, 1939.  
 Shot, Feb. 21, 1939, at 1832 to 1855'.  
 Gas well; volume, 615,000 cu. ft. per day; rock pressure, 530 lbs. in  
 30 hours.

Fresh water at 240'; salt water at 1249, 1325, and 1470'.  
 13" wood conductor, 16'; 10" casing, 388'; 8¼", 1571'; all left in.

According to the geologic map of Clay County this well appears to  
 start about 50 to 100 feet below the Upper Freeport Coal. Coal is  
 reported at 108-110', 240-242', 363-371' in portion of the well above  
 where the samples start. Samples are missing for the interval from  
 1566 to 1709' for which information is taken from the driller's record.  
 Samples from 393 to 1566' and 1709 to 1856', examined by J. H. C.  
 Martens.

**Pottsville Formation, 944+ feet**

Top.	Bottom.	Thickness.	
393	503	110	Sandstone, light-gray, fine; contains a little mica, chlorite, kaolin, and scattered specks of carbonaceous material
503	506	3	Shale, gray
506	523	17	Sandstone, gray, very fine, shaly, micaceous
	523		Coal (probably less than one foot)
523	535	12	Shale, light-gray; with a little very fine sandstone
535	567	32	Siltstone, dark-gray, shaly, micaceous; a little coal between 550 and 555'
	567		Coal (probably less than one foot)
567	600	33	Siltstone, gray, shaly, micaceous
600	626	26	Shale, dark-gray
626	633	7	Siltstone, gray
633	659	26	Shale, black
659	691	32	Sandstone, light-gray
691	701	10	Shale, mixed light- and dark-gray
701	759	58	Shale and siltstone, gray
	759		Coal
759	775	16	Shale and siltstone, gray
775	842	67	Shale, dark-gray to black; with a few streaks of siltstone (show of gas at 840'; SLM, 841')
842	898	56	Sandstone, white, fine; contains a little mica, chlorite, and kaolin
898	960	62	Shale, dark-gray; with a little siltstone and some fragments of siderite concretions
960	968	8	Sandstone, gray, fine, somewhat calcareous; contains siderite concretions
968	975	7	No sample
975	1038	63	Shale, dark-gray, containing siderite concretions
1038	1047	9	Sandstone, white, fine
1047	1059	12	Siltstone, gray
	1059		Coal
1059	1082	23	Shale, gray; a little coal at about 1082'
1082	1097	15	Sandstone, light-gray, fine; stained brown with iron rust
1097	1170	73	Shale, mixed light- and dark-gray, partly silty; contains siderite in concretions and spherulites

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Top.	Bottom.	Thickness.	
1170	1196	26	Shale, dark-gray, silty, containing siderite concretions
1196	1208	12	Sandstone, light-gray, very fine (Rosedale Gas Sand; show of gas, 1196-1198'; SLM, 1196')
1208	1223	15	Shale, gray
1223	1234	11	Siltstone, gray
1234	1253	19	Sandstone, light-gray to white, very fine; shaly at top (salt water at 1248')
1253	1283	30	Sandstone, white, medium-grained, nearly all quartz; broken up more into individual grains than the sandstone above
1283	1300	17	Sandstone, light-gray, poorly sorted, with some coarse grains; contains some streaks of darker gray shale
1300	1337	37	Sandstone, white, coarse to very coarse; contains some quartz pebbles (salt water at 1325')

**Mauch Chunk Group, 310 feet**

1337	1406	69	Sandstone, white, partly rust-stained, medium-grained; not much different from the sandstone above but average texture is finer (show of oil, 1397 to 1398')
1406	1417	11	Shale, gray, very silty
1417	1479	62	Sandstone, white, rust-stained, very fine, nearly all quartz
1479	1498	19	Sandstone, gray, very fine; contains many small specks of pyrite (show of oil, 1397-1398'; water at 1470')
1498	1513	15	Sandstone, gray, very fine; with nearly equal amount of darker gray siltstone
1513	1524	11	Sandstone, white, fine; stained brown with iron rust
1524	1528	4	Shale, gray, calcareous, with some gray limestone
1528	1532	4	Shale, red and grayish-green
1532	1559	27	Shale, red, gray, and green; samples contain only a very few calcareous fragments
1559	1566	7	Limestone, dark-gray, with a few small white spots
1566	1598	32	Limestone (no samples)
1598	1635	37	Shale, gray (no samples)
1635	1647	12	Sandstone (no samples)

**Greenbrier Limestone, 209 feet**

1647	1709	62	Limestone (no samples)
1709	1744	35	Limestone, light-gray to brownish
1744	1749	5	Limestone, gray, sandy, slightly dolomitic; contains many small cubes of pyrite
1749	1783	34	Limestone, light-brown (nearly neutral-gray when dry), sandy and oolitic; large sand grains are well rounded; oolites more abundant and distinct and more sand from 1749 to 1766' than in lower part of interval
1783	1809	26	Limestone, light brownish gray, very fine textured, not sandy or oolitic
1809	1856	47	Limestone, light brownish gray, sandy; larger sand grains are well rounded; somewhat dolomitic below 1830'; last sample contains some green shale and siltstone, which is probably below the Greenbrier Limestone, indicating that the entire thickness of this formation has been penetrated (gas, 1832-1837'; SLM, 1834'; gas, 1841-1855'; 26/10 W. in 1 1/2")
	1856		Total depth