

P. F. Riggs et al No. 1 (GW-462) Well

Ravenswood District, Jackson County, W. Va.

By Columbian Carbon Company, Charleston, W. Va.

Located 2.67 mi. W. of 81°35' and 5.28 mi. S. of ^{39°00'} ~~A~~-NC- Ripley Quadrangle.

Elevation, 6344', L.

Permit, Jac-96.

Drilling commenced Aug. 19, 1940; completed, Dec. 15, 1940.

Shot Dec. 12, 1940, depth 4939-4985' SLM.

Volume 4,500,000 cu. ft. per day; pressure 1870 lbs. in 10 days.

Fresh water at 26', 2-11" bailers per hour; at 145', 2-11' bailers per hour.

Salt water at 510', 3-11" bailers per hour; at 1155', 2-10' bailers per hour; at 1236 to 1250', hole full.

18 5/8" casing, 19'6" (pulled); 16", 42'8"; 18 3/8", 215'5" (pulled); 10 1/2", 983'4"; 8 5/8", 1997'7"; 7", 4887'6"; 2 3/8", 5060'10"; 3 1/2", 119'4".

This section is based upon a nearly complete set of samples from 1630 to the total depth of 5042 feet. It is possible that the base of the Oriskany should be at 5017 feet rather than at 4996 as indicated.

Top Bottom Thickness

Pottsville Formation, 103+ feet

1630	1697	67	Sandstone, white, medium- to coarse-grained, nearly all quartz; crystal faces on many grains
1697	1708	11	Siltstone, dark-gray, shaly
1708	1713	5	Shale, black, silty
1713	1720	7	Shale, dark-gray, silty, 70%; siltstone, light-brown, sandy, 30%
1720	1723	3	Shale, dark-gray to black, with small amount of coal
1723	1733	10	Sandstone, nearly white, coarse

Greenbrier Limestone, 102 feet

1733	1751	18	Limestone, very light brown
1751	1762	11	Limestone, nearly white
1762	1777	15	Limestone, nearly white to light-brown, oolitic; contains about 20% sand
1777	1793	16	Sandstone, nearly white, fine, highly calcareous; larger quartz grains are rounded and frosted; contains a few oolites

Top	Bottom	Thickness	
1793	1803	10	Limestone, very light brown, oolitic; composed mostly of distinctly formed oolites, not very thoroughly cemented; contains some sand
1803	1835	32	Limestone, nearly white, very finely crystalline, dolomitic; contains small to moderate amount of sand

Pocahontas Formation, 482 feet

1835	1840	5	Sandstone, light greenish gray, very fine
1840	1845	5	Sandstone, nearly white, very coarse, 40%; gray, somewhat dolomitic siltstone and very fine sandstone, 60%
1845	1924	69	Sandstone, white, medium- to coarse-grained, nearly all quartz; many grains have crystal faces
1924	1964	40	Sandstone, light-gray, fine; contains a little dolomite
1964	1975	11	Siltstone, gray, shaly
1975	1992	17	Sandstone, light-gray, very fine; calcareous from 1982 to 1992'
1992	2010	18	Siltstone, gray, shaly
2010	2053	43	Sandstone, light-gray, very fine, slightly calcareous, 60 to 80%; gray shale and siltstone, 20 to 40%
2053	2063	10	Sandstone, light-gray, very fine
2063	2278	215	Siltstone and shale, gray; most of the samples have more siltstone than shale; structure is distinctly shaly
2278	2314	36	Shale, very dark brownish-gray (Sunbury Shale)
2314	2317	3	Sandstone, nearly white, fine, pyritic (Berea Sandstone)

Devonian Shales, 2510 feet

2317	2409	92	Siltstone, gray, shaly, fossiliferous, partly calcareous
2409	2420	11	No sample
2420	2433	11	Shale and siltstone, gray, 90%; shale, grayish-red, 10%
2433	2577	144	Shale and siltstone, gray to grayish-green; small amounts grayish-red to brown shale in several samples
2577	4827	2250	Shales and siltstones; samples not examined through this interval

Top Bottom Thickness

Huntersville Chert, 109 feet

4827	4850	23	Limestone, brown, cherty; samples contain large amounts of gray to black shale, probably oavings; small amounts of biotite-rich siltstone in three samples from 4829 to 4850' (SLM at 4827')
4850	4876	26	Limestone, light-brown, cherty, fossiliferous; contains a very little dolomite
4876	4936	60	Limestone, brown, cherty and silty; contains moderate to large amounts of silt or very fine sand; somewhat dolomitic (SLM at 4936')

Oriskany Sandstone, 60 feet

4936	4980	44	Sandstone, white, medium- to fine-grained, slightly calcareous; large amount of rust stain on most samples
4980	4996	16	Sandstone, light-gray, fine to very fine, calcareous

Helderberg Limestone, 46+ feet

4996	5002	6	Limestone, brownish-gray, very sandy; slight trace of light-gray chert, 4999-5002'
5002	5017	15	Sandstone, light-gray, fine, calcareous
5017	5042	35	Limestone, light-brown, cherty and silty
	5042		Total depth, SLM