

F. F. Starcher et al. No. 1 (GW-466)

Ravenswood District, Jackson County, W. Va.

By Columbian Carbon Company, Charleston, W. Va.

Located 2.6 mi. W. of 81°35' and 3.8 mi. S. of 38°56' -C- Ripley Quadrangle.

Elevation, 954.5' L.

Permit, Jac-101.

Drilling commenced Oct. 5, 1940; completed Feb. 5, 1941.

Shot, Feb. 6, 1941 - depth 5316-5346' BLM.

Volume, 16,696,000 cu. ft.

Rock pressure, 1810 lbs. in 6 days.

Fresh water at 130',  $\frac{1}{2}$  - 16" bailer per hr.

at 829', 2 - 16" bailers per hr.

Salt water at 1326', 5-10" bailers per hr.

16" casing, 60'; 13-3/8", 1006'5"; 10 1/2", 1335'4"; pulled; 8-5/8", 2388'7"; 7", 5262'10".

Section based on samples from 1319 to 5414', examined by C. Apsouri.

Top	Bottom	Thickness	
<u>Pennsylvanian, 755+ feet</u>			
1319	1323	4	Clay, light-red and white; some siderite spherulites
1323	1330	7	Clay, grayish-green, soft, with siderite spherulites
1330	1344	14	Siltstone, green, 60%; medium- to fine-grained sandstone, 40%
1344	1350	6	Shale, green, with siderite spherulites
1350	1355	5	Siltstone, red
1355	1362	7	Siltstone, green
1362	1373	11	Clay, grayishred; also green siltstone, etc.
1373	1386	13	Siltstone, green and gray
1386	1400	14	Sandstone, white, fine, slightly calcareous
1400	1407	7	Clay, green and reddish, soft; with siderite spherulites
1407	1415	8	Clay and siltstone, gray
1415	1422	7	Sandstone, white, medium-grained, calcareous
1422	1430	8	Siltstone, gray
1430	1446	16	Shale, light-gray
1446	1454	8	Clay, gray
1454	1461	7	Shale, brown and greenish-gray
1461	1502	41	Siltstone, green to gray, shaly
1502	1509	7	Shale, gray

Top	Bottom	Thickness	
1509	1532	23	Clay, very light brown, with siderite spherulites, 70%; siltstone, light-gray, 30%
1532	1540	8	Siltstone, gray, 55%; clay, brown, with siderite spherulite, 45%
1540	1549	9	Sandstone, white, fine
1549	1559	10	Clay, white, 60%; light-brown shale, 40%
1559	1573	14	Siltstone, green and light-gray
1573	1612	39	Sandstone, white, very fine
1612	1621	9	Siltstone, gray
1621	1630	9	Sandstone, white, fine
1630	1636	6	Siltstone, gray
1636	1668	32	Sandstone, white, medium-grained
1668	1676	8	Shale, gray
1676	1685	9	Shale, very dark gray, 70%; siltstone, white, with many siderite spherulites
1685	1708	23	Siltstone, gray
1708	1715	7	Sandstone, white, very fine; 60%; micaceous siltstone, 40%
1715	1723	8	Sandstone, white, fine, with many siderite spherulites
1723	1743	20	Siltstone and shale, gray
1743	1776	43	Siltstone, gray to dark-gray
1776	1799	23	Sandstone, white, fine
1799	1834	35	Siltstone, gray to dark-gray
1834	1860	26	Shale, dark-gray to very dark gray
1860	1895	35	Siltstone, gray to very dark gray
1895	1904	9	Sandstone, white, very fine, 50%; gray sandy siltstone, 50%
1904	1912	8	Siltstone, dark-gray
1912	1929	17	Shale, dark-gray and brown
1929	1937	8	Sandstone, white, very fine, 70%; gray siltstone with siderite spherulites, 30%
1937	1947	10	Siltstone, brown
1947	1976	29	Sandstone, white, very fine; small amount of gray to black siltstone
1976	2017	41	Sandstone, white, medium-grained
2017	2024	7	Sandstone, white, fine (salt water at 2020', hole full)

Top	Bottom	Thickness	
2024	2034	10	Sandstone, white, medium- to coarse-grained
2034	2036	2	Shale, black
2036	2041	5	Sandstone, white, medium-grained
2041	2050	9	Sandstone (?), white, very fine; the samples actually consist mostly of light-gray and green calcareous clay, probably cavings, since this interval is recorded as lime
2050	2054	4	Sandstone, white, fine; some clay cavings as above
2054	2065	11	Siltstone, dark-gray, shaly and sandy; samples are mostly clay cavings as in interval 2041-2050'
2065	2072	7	Sandstone, white, very coarse; considerable amount of soft green shale, 2070-2072' (cavings?)

Greenbrier Limestone, 130 feet

2072	2080	8	Shale, gray to brownish, soft, not distinctly laminated; much siderite at top (possibly this should be assigned to the Mauch Chunk, or it may be residual clay from the Greenbrier)
2072	2132	60	Limestone, light-brown to nearly white; samples contain large amounts of shale cavings; mostly like that from 2072-2080'
2132	2144	12	No samples
2144	2202	58	Limestone, white to very light brown; mostly oolitic from 2156 to 2202'; sandy and dolomitic near bottom

Pecono Formation, 464 feet

2202	2234	32	Siltstone, nearly white to greenish; some very fine sandstone, 2216-2222'; samples contaminated by clay and shale cavings
2234	2269	25	Sandstone, white, very fine, containing a few coarse quartz grains; calcareous
2269	2276	7	Siltstone, gray to brownish
2276	2300	24	Sandstone, white, fine, slightly calcareous
2300	2642	342	Siltstone, gray to nearly white
2642	2664	22	Shale, very dark-gray, silty (Sunbury Shale)
2664	2666	2	Sandstone, white, very fine (Berea sandstone; thickness estimated; occurs in sample representing 7 foot interval and composed mostly of siltstone like that below)

Top	Bottom	Thickness	
2664	2666		<u>Devonian Shales, 2532 feet</u>
2666	3883	1217	Shale and siltstone, gray to light-gray; very dark shale first appears in considerable amount at 3883'; samples not described in detail
3883	5198	1415	Shale, gray, dark-gray and black; samples not described in detail (depth corrected from 5161 to 5198')
			<u>Huntersville Chert, 118 feet</u>
5198	5251	53	Limestone, brown, very cherty; thin streak of brown siltstone with biotite at top
5251	5257	6	Limestone, light-brown, very cherty; contains a little glauconite
5257	5279	22	Limestone, brown to light-brown, very cherty
5279	5292	13	Limestone, brown, cherty, glauconitic
5292	5297	5	Limestone, brown, cherty
5297	5316	19	Limestone, brown, cherty, glauconitic; very sandy, 5297-5302'; much glauconite at bottom
			<u>Oriskany Sandstone, 69 feet</u>
5316	5376	59	Sandstone, white, medium- to fine-grained, calcareous (gas pays: 5317-5320, 5330-5336, 5343-5344, 5360-5362')
5376	5381	6	Sandstone, white, fine to very fine, highly calcareous
5381	5383	2	Sandstone, white, medium- to coarse-grained, highly calcareous
5383	5385	2	Sandstone, white, fine- to medium-grained, highly calcareous
			<u>Helderberg Limestone, 39+ feet</u>
5385	5397	12	Limestone, dark-brown, sandy and cherty
5397	5409	12	Sandstone, white, fine, highly calcareous; some chert from 5408 to 5409'
5409	5414	5	Limestone, brown, cherty
	5424		Total depth