Farm	John E. Whitesel Unit No. 1
Company	Royal Oil & Gas Corp., Indiana, Pa.
Permit	Braxton 965
District	Otter, Braxton Co., West Virginia
Quadrangle	Glenville SE
Location	4.4 mi W of 80°45'; 2.15 mi S of 38°50' Flat Run
Elevation	939 feet
Commence drilling	3/16/71, Complete drilling 4/10/71
Well type	Gas, Volume: 370 MCFGPD, 300# 48 hrs.

Well not completely examined.
Examined descriptively by Tom W. Carpenter
All percentages are visual estimates; all depths are feet.

Top	Bottom	Thickness	
			POTTSVILLE GROUP, 74+ feet
1652	1658	6	Shale, 100%, black, gray
1658	1667	9	Shale 78%, black, pyrite; Sandstone, 15%, white, Fine to Medium, pyrite; Siltstone, 7%, gray, siderite
1667	1675	8	Sandstone, 50%, white, Fine to Medium, some Coarse grains; Siltstone, 25%, gray, pyrite; Shale, 25%, black to gray, siderite
1675	1684	9	Sandstone, 70%, white, Fine to Medium and Coarse grains, pyrite; Shale, 20%, black; Siltstone, 10%, gray
1684	1695	11	Sandstone, 80%, white, as above; Shale, 15%, black, pyrite; Siltstone, 5%, gray
1695	1706	11	Sandstone, 80%, white, Fine to Very Coarse grains, pyrite; Shale, 20%, black to dark gray
1706	1714	8	Sandstone, 95%, white, as above, pyrite; Shale, 5%, black
1714	1721	7	Sandstone, 99%, white, friable, pyrite; Shale, 1%
1721	1728	7	Sandstone, 70%, white, as above; Shale, 25%, pyrite; Limestone, 5%, brown, micrite

Top	Bottom	Thickness	
			MAUCH CHUNK GROUP, 103 feet
1728	1736	8	Shale, 90%, black to gray, pyrite; Siltstone, 10%, gray
1736	1745	9	As above
1745	1748	3	Shale, 90%, black to gray; Siltstone, 10%, gray
1748	1756	8	Shale, 95%, gray, black, calcareous; Limestone, 3%, tan, gray; Siltstone, 2%, gray
1756	1764	8	Limestone, 50%, tan, gray, white, fossil fragments, micritic, pyrite; Shale, 50%, black
1764	1770	6	Limestone, 75%, tan, white, oolitic, fossiliferous, some micrite; Shale, 20%, black to gray, pyrite; Siltstone, 3%, gray
1770	1775	5	Limestone, 95%, white, tan, fossiliferous, oolitic; Shale, 5%
1775	1783	8	Limestone, 85%, tan, white, oosparite, fossil fragments, some chips have slight amount of quartz; Shale 15%, black
1783	1788	5	Sandstone, 47%, white, VF, angular to subrounded, well sorted, clay coatings (illite); Siltstone, 25%, gray, pyrite; Shale 25%, gray to black, slightly calcareous; Limestone, 3%, tan, echinoderm fragment, some quartz
1788	1793	5	Sandstone, 70%, white, pyrite; Shale, 15%, black; Siltstone, 10%, gray, pyrite; Limestone, 5%, fossiliferous
1793	1800	7	Sandstone, 78%, white, gray, VF, angular, orthoquartzite; Siltstone, 15%, gray; Shale, 5%, gray; Limestone, 2%, sparite
1800	1804	4	Sandstone, 80%, white, VF, angular, tightly packed, some clay coatings, some greenish sand; Siltstone, 10%, black; Shale, 10%, black, pyrite

Top	Bottom	Thickness	
1804	1810	6	Sandstone, 85%, as above; Siltstone, 8%, black to dark gray; Shale, 7%, black, pyrite
1810	1815	5	Sandstone, 90%, white, VF, angular, iron stained; Shale, 5%, black; Siltstone, 5%, dark gray
1815	1821	6	No samples
1821	1825	4	Sandstone, 82%, white, VF, angular, iron stained, calcareous cement, clay coatings; Siltstone, 5%, black; Shale, 5%, black; Limestone, 3%, white to tan, pellets or pseudooids
			GREENBRIER LIMESTONE, 175 feet
1825	1830	5	Limestone, 89%, tan to white, oosparite, some quartz, pyrite; Sandstone, 5%, white, VF, calcareous, clay
1830	1842	12	Limestone, 97%, tan to white, oosparite and biosparite to biomicrite, echinoderm, bryozoan, and mollusc fragments, forams, ostracods, and gastropods; Shale, 3%, black
1842	1852	10	Limestone, 100%, oosparite, fossiliferous, little or no quartz; Shale, trace
1852	1860	8	Limestone, 100%, tan, fossiliferous, gastropods, brachiopods, echinoderms and molluscs, pelletal biomicrite; Shale, trace
1860	1868	8	As above
1868	1872	4	Limestone, 95%, as above; Shale, 5%, black
1872	1876	4	Limestone, 91%, tan, biopelmicrite, some quartz; Sandstone, 3%, VF, calcareous; Shale, 3%, black; Siltstone, 3%, black
1876	1881	5	Limestone, 100%, tan, very quartzose, echinoderm fragments Calcite/quartz = 85/15
1881	1893	12	No samples

Top	Bottom	Thickness	Braxton 965
1893	1901	8	Limestone, 72%, tan, fossiliferous; Limestone, 25%, tan, very quartzose; Shale, 3%, black
1901	1909	8	Limestone, 85%, tan, biopelmicrite to biopelsparite, much quartz; Shale, 15%, black, fossiliferous Calcite/quartz = 60/40
1909	1920	11	Limestone, 95%, tan, oolitic, pelletal, fossils, much quartz; Siltstone, 5%, tan, calcareous
1920	1931	11	Limestone, 92%, tan, white, oosparite, much quartz; Quartz, 8%, loose, Coarse, rounded, frosted
1931	1938	7	Limestone, 15%, very quartzose to nearly a calcareous sandstone; Limestone, 70%, biopelsparite; Quartz, 10%, loose, Coarse; Shale, 5%, black
1938	1950	12	Limestone, 50%, tan, micritic and sparitic, Dolomite, 49%, tan to white, sucrosic, calcareous; Shale, 1%, black
1950	1959	9	Limestone, 99%, tan to white, dolomitic, VF to silt sized quartz, some chips are calcareous dolomite Calcite/dolomite/quartz = 50/25/25 Shale, 1%, black
1959	1967	8	Limestone, 69%, tan to white, dolomitic; Dolomite, 15%, white, calcareous; Siltstone, 15%, white, calcareous; Shale, 1%, black
1967	1976	9	Limestone, 47%, tan, pseudoolitic, some quartz; Limestone, 47%, white, highly dolomitic; Quartz, 5%, loose, rounded, frosted, medium and coarse; Shale, 1%, black
1976	1985	9	Limestone, 48%, tan, oolitic; Limestone, 48%, white, dolomitic Calcite/dolomite/quartz = 80/12/8 Quartz, 4, loose, Fine to Coarse, rounded and frosted
1985	1992	7	No samples

Top	Bottom	Thickness	
1992	2000	8	Dolomite, 83%, white, porous, much VF and Coarse quartz; Quartz, 13%, loose, rounded and frosted; Shale, 3%, black; Limestone, 1%, tan
			POCONO GROUP, 21+ feet
2000	2007	7	Shale, 80%, gray; Siltstone, 20%, gray, white, white is slightly dolomitic
2007	2014	7	Shale, 50%; Siltstone, 50%
2014	2021	7	Siltstone, 70%, gray; Shale, 30%, gray