

UNITED PRODUCING COMPANY

5-1647 YUKON-POCAHONTAS COAL COMPANY WELL

Buchanan County, Virginia

Location: 1.65 miles east of 82° 00',
2.06 miles south of 37° 15'

Ground elevation: 1826.4 Total depth: 4358

Drilling commenced: September 1, 1949

Drilling completed: January 11, 1950

Water: 94, 1 BPH; 173, 2 BPH; 250, HFW; 1260, 1/6 BPH

Gas: 1767, show

Oil: None

Casing record: 13 3/8 at 23, 10 3/4 at 436, 8 5/8 at 2231, 7 at 3824

Depth corrections: None

Samples examined by David G. Bowen, 1958

POST-LEE FORMATION BEDS UNDIVIDED (PENNSYLVANIAK)

- 0 - 10 Siltstone, gray, quartzose; some sandstone, gray, medium-to fine-grained, subangular, quartzose, micaceous
- 10 - 20 Sandstone, same as above; some siltstone, dark-gray, quartzose
- 20 - 26 Sandstone, yellowish, coarse-to medium-to fine-grained, angular to subangular, quartzose, micaceous, chloritic; and siltstone, dark-gray, quartzose, argillaceous
- 26 - 40 Shale, gray, slightly silty, micaceous
- 40 - 48 Siltstone, dark-gray, quartzose; some interbedded shale, same as above, but dark-gray and silty
- 48 - 56 Shale, same as above; a little siltstone, white, quartzose
- 56 - 61 Siltstone, dark-gray, quartzose
- 61 - 68 Siltstone, same as above; and interbedded shale, same as above
- 68 - 77 Siltstone, dark-gray, quartzose, moderately micaceous, much carbonaceous and coaly material
- 77 - 82 Siltstone, same as above; and shale, dark-gray, plant fossils
- 82 - 99 Siltstone, grayish-brown, quartzose, moderately micaceous and chloritic; and interbedded shale, gray

- 99 - 108 Sandstone, white, medium-to fine-grained, subangular, quartzose, moderately chloritic and micaceous, moderately glauconitic; a little coal; a little shale, gray to dark-gray
- 108 - 172 Sandstone, same as above, but at 151-156 some grains are rounded, at 116-122 and 138-172 carbonaceous material on some bedding surfaces, at 116-128 some included coal grains
- 172 - 178 Shale, dark-gray
- 178 - 190 Siltstone, gray, quartzose, micaceous; and interbedded shale, gray to dark-gray; at 184-190 a little coal
- 190 - 200 Sandstone, gray, fine-grained, subangular, quartzose, moderately micaceous and chloritic, moderately glauconitic
- 200 - 210 Sandstone, same as above, but fine-grained to silt
- 210 - 289 Sandstone, white, medium-to fine-grained, subangular, quartzose, moderately chloritic and micaceous, moderately glauconitic, at 243-248 moderate amount of interstitial carbonaceous material
- 289 - 295 Sandstone, same as above, but moderate amount of interstitial carbonaceous material; some shale, dark-gray to gray, moderately micaceous; a little coal
- 295 - 311 Sandstone, grayish-white, medium-to fine-grained, angular to subangular, quartzose, moderately micaceous and glauconitic, at 307-311 moderate amount of carbonaceous material and a moderate amount of milky-white pebble fragments of vein quartz
- 311 - 319 Sandstone, white, fine-grained, subangular, quartzose, moderately micaceous and chloritic
- 319 - 327 Siltstone, gray, quartzose, micaceous, carbonaceous laminations
- 327 - 342 Shale, dark-gray
- 342 - 353 Siltstone, light-gray, quartzose, micaceous; a little interbedded shale, dark-gray to gray, moderately micaceous
- 353 - 359 Siltstone, same as above, but in part grading to sandstone, very fine grained, few included coal grains

- 359 - 361 Siltstone, gray, quartzose, micaceous
- 361 - 381 Shale, dark-gray to gray; interbedded with a little siltstone, same as above
- 381 - 405 Shale, gray, at 400-405 moderately micaceous
- 405 - 415 Shale, same as lower part above; some interbedded siltstone, gray, quartzose
- 415 - 433 Siltstone, gray to dark-gray, quartzose; some interbedded shale, gray to dark-gray
- 433 - 458 Sandstone, white, medium-to fine-grained, subangular, quartzose, micaceous, chloritic, glauconitic, few coal grains
- 458 - 463 Shale, gray, a few chips are dark-gray and contain angular medium grains of quartz; some siltstone, gray, quartzose, micaceous
- 463 - 471 Shale, same as above
- 471 - 478 Sandstone, light-tan, medium-to fine-grained, subangular, quartzose, moderately micaceous
- 478 - 500 Sandstone, same as above, but white, at 495-500 slightly glauconitic; at 488-500 some apparently interbedded shale, dark-gray, slightly micaceous
- 500 - 507 No sample
- 507 - 510 Coal
- 510 - 521 Siltstone, gray, quartzose, micaceous, moderate amount of carbonaceous material
- 521 - 562 Siltstone, gray to dark-gray, quartzose, micaceous, chloritic; at 547-562 some interbedded shale, gray to dark-gray
- 562 - 595 Sandstone, white, medium-to fine-grained, subangular, quartzose, moderately micaceous and glauconitic, slightly chloritic, few coal grains, small amount of carbonaceous material
- 595 - 650 Siltstone, gray to dark-gray, quartzose, moderately micaceous

and chloritic, moderate amount of carbonaceous material; at 605-623 interbedded with a little shale, gray, micaceous

650 - 669 Shale, dark-gray

TOP LEE FORMATION 669

669 - 722 Sandstone, white, medium-to fine-grained, subangular, quartzose, micaceous, chloritic, glauconitic, coal grains, at 688-722 considerable carbonaceous material

722 - 738 Sandstone, gray, fine-grained, subangular, quartzose, moderately micaceous, carbonaceous material on bedding surfaces

738 - 830 Shale, dark-gray

830 - 847 Siltstone, light-gray to brown, quartzose, moderately micaceous, slightly chloritic, small amount of carbonaceous material

847 - 859 No sample

859 - 865 Sandstone, light-gray, fine-grained, subangular, quartzose, moderately micaceous, slightly chloritic and glauconitic, moderate amount of carbonaceous material

865 - 883 Sandstone, same as above, but no carbonaceous material; interbedded apparently with shale, dark-gray

883 - 900 Sandstone, same as above, but dirtier; and shale, same as above, but in part brown

900 - 912 Sandstone, same as above, but with a moderate amount of carbonaceous material, siderite nodules

912 - 932 Sandstone, same as above, but no siderite; a little interbedded shale, gray to dark-gray

932 - 937 Sandstone, same as above, but with coal grains

937 - 993 Siltstone, dark-gray, quartzose, at 960-980 suggestion of siderite nodules

993 -1001 Shale, dark-gray to reddish-brown, slightly silty

1001-1011 Siltstone, gray, quartzose, micaceous; a little shale, gray

- 1011-1019 Sandstone, white to light-tan, medium-to fine-grained, subangular, quartzose, slightly micaceous and chloritic; a little shale, gray, micaceous
- 1019-1033 Shale, gray, 40%; coal, 40%, sandstone, same as above, and siltstone, gray, quartzose, 20%
- 1033-1054 Shale, dark-gray to gray, silty, micaceous; and interbedded siltstone, gray to dark-gray, quartzose, micaceous
- 1054-1071 Sandstone, white to light-tan, medium-to fine-grained, subangular, quartzose, moderately micaceous and chloritic, slightly glauconitic, becomes rather dirty toward the base
- 1071-1109 Siltstone, white to light-gray, quartzose, moderately micaceous, very chloritic, at 1071-1082 in part with a faint greenish cast
- 1109-1119 Shale, dark-gray
- 1119-1134 Shale, dark-gray, silty; some interbedded siltstone, gray, quartzose, moderately chloritic
- 1134-1187 Shale, dark-gray, silty; at 1145-1176 interbedded with a little siltstone, light-gray, quartzose
- 1187-1197 Shale, dark-gray to brown, slightly pyritic, in part with floating mica flakes and floating clear to milky, fine to coarse, angular to subrounded, quartz grains, 70%; sandstone, gray to dark-gray, medium-to fine-grained, subangular, quartzose, slightly micaceous and chloritic, in part cemented with dark argillaceous material, 30%
- 1197-1203 Sandstone, same as above, but in part grading to siltstone
- 1203-1219 Coal, 80%; sandstone, white, medium-to fine-grained, subangular, quartzose, 20%
- 1219-1229 No sample
- 1229-1231 Siltstone, light-tan to gray, quartzose, micaceous; and shale, gray, micaceous
- 1231-1245 Sandstone, white, fine-grained, quartzose, micaceous, chloritic; and interbedded siltstone, gray, quartzose, micaceous, chloritic

- 1245-1252 Sandstone, white, fine-grained, subangular, quartzose, moderately micaceous and chloritic, moderately glauconitic, small amount of carbonaceous material
- 1252-1272 Sandstone, same as above, but medium-to fine-grained, moderate amount of coaly material; at 1257-1272 some interbedded shale, light-gray to dark-gray, in part silty, in part very micaceous
- 1272-1281 Shale, gray, silty, micaceous; some siltstone, gray to light-gray, quartzose, micaceous
- 1281-1291 Siltstone, same as above; and shale, dark-gray to gray
- 1291-1299 Sandstone, white with a little gray, fine-grained to silt, subangular, quartzose, moderately micaceous and chloritic, moderately glauconitic, moderate amount of carbonaceous material
- 1299-1340 Sandstone, white, fine-grained, subangular, quartzose, moderately micaceous, moderate amount of carbonaceous material, at 1324-1330 a few chips are dark-brown
- 1340-1350 Shale, gray
- 1350-1360 Shale, gray, slightly silty, moderately micaceous
- 1360-1383 Shale, same as above; and interbedded shale, dark-gray, carbonaceous
- 1383-1391 No sample
- 1391-1405 Sandstone, white, medium-to fine-grained, subangular, quartzose, micaceous, chloritic; some interbedded shale, gray, locally with a carbonaceous film
- 1405-1417 Siltstone, light-gray to gray, quartzose, feldspathic, interstitial carbonaceous material; and interbedded shale, same as above
- 1417-1430 Siltstone, same as above, but at 1425-1430 moderately micaceous
- 1430-1440 No sample
- 1440-1454 Shale, gray, silty, micaceous; interbedded in the top half with some siltstone, same as lower part of 1417-1430

- 1454-1485 Shale, gray to grayish-tan, slightly silty, at 1475-1485 plant fossils
- 1485-1492 Shale, gray to dark-gray, in part micaceous, in part carbonaceous; some siltstone, gray, quartzose
- 1492-1513 Sandstone, white, fine-grained, subangular, quartzose, slightly feldspathic, slightly chloritic; locally grading to siltstone, same as above; and interbedded with shale, gray, silty, micaceous
- 1513-1539 Sandstone, white, medium-to fine-grained, subangular, quartzose, at 1527-1533 one coaly plant fossil
- 1539-1551 Sandstone, white, coarse-to fine-grained, subangular to rounded, moderate amount of pebble fragments of white quartz
- 1551-1555 Siltstone, white, quartzose
- 1555-1565 Sandstone, white, coarse-to fine-grained, subangular, quartzose
- 1565-1570 Sandstone, same as above, but medium-to fine-grained
- 1570-1581 Sandstone, same as above, but fine-grained
- 1581-1584 No sample
- 1584-1591 Sandstone, same as 1570-1581, but medium-to fine-grained
- 1591-1594 Sandstone, same as above, but coarse-to fine-grained
- 1594-1597 Sandstone, same as above, but medium-to fine-grained
- 1597-1608 Sandstone, same as above, but coarse-to fine-grained
- 1608-1616 Conglomerate, milky-white, pebble fragments of vein quartz
- 1616-1621 Conglomerate, same as above, matrix of clear, medium to fine, angular, quartz grains, considerable interstitial carbonaceous material
- 1621-1636 Conglomerate, same as above, but at 1621-1626 apparently a little reddish-brown siderite (?) cement; some interbedded shale, dark-gray to gray to light-tannish gray, in part micaceous, siderite nodules
- 1636-1650 Sandstone, white, in part brown, medium-to fine-grained,

subangular, quartzose, very slightly feldspathic, micaceous, chloritic

- 1650-1662 Sandstone, same as above, but no brown, not feldspathic
- 1662-1679 Siltstone, gray, quartzose; and interbedded shale, gray, silty, micaceous
- 1679-1687 Sandstone, white, medium-to fine-grained, subangular, quartzose, micaceous, chloritic, coal grains, small amount of interstitial carbonaceous material; and siltstone, same as above
- 1687-1697 Sandstone, same as above; some siltstone, in part same as above, but mostly light-tannish gray
- 1697-1704 Sandstone, same as above; and shale, gray to dark-gray, very silty, very micaceous, considerable carbonaceous material
- 1704-1717 Sandstone, same as above, but below 1709 decrease of accessory minerals
- 1717-1722 Shale, gray, a little is dark-gray and light-tannish gray, in part silty
- 1722-1730 Shale, mostly greenish-gray, some is dark-gray to gray to light-tannish gray, in part with siderite nodules
- 1730-1739 Shale, same as above, but predominantly gray
- 1739-1746 Sandstone, gray, some is white, fine-grained, subangular, quartzose, micaceous, chloritic, moderate amount of carbonaceous material on bedding surfaces; some shale, same as above
- 1746-1755 Sandstone, same as above, but white
- 1755-1763 Siltstone, gray, quartzose, micaceous; some sandstone, same as above
- 1763-1773 Coal
- 1773-1783 Coal, 70%; siltstone, same as above, but a small amount is brown, 30%
- 1783-1790 No sample
- 1790-1800 Sandstone, white to light-tan, medium-to fine-grained, subangular, quartzose, moderately micaceous and chloritic

- 1800-1816 Shale, gray to dark-gray, in part silty, some siderite (?) lenses or beds
- 1816-1840 Shale, gray to light-gray, at 1816-1824 siderite nodules; interbedded with a little siltstone, light-greenish gray, quartzose
- 1840-1854 Sandstone, grayish-brown, medium-to fine-grained, sub-angular, quartzose, moderately micaceous, slightly glauconitic, considerable interstitial carbonaceous material, at 1846-1854 coal grains
- 1854-1864 Siltstone, dark-gray, a little is light-gray, quartzose
- 1864-1873 Siltstone, dark-gray, quartzose; and shale, gray
- 1873-1883 Siltstone, dark-gray, quartzose, micaceous, 45%; shale, gray to greenish-gray, 45%; sandstone, brown, fine-grained, subangular, quartzose, 10%
- 1883-1885 Sandstone, white to light-gray, medium-to fine-grained, subangular, quartzose, slightly feldspathic, moderately micaceous and chloritic, 50%; siltstone, gray, quartzose, 20%; shale, gray, 20%; coal, 10%
- 1885-1889 Sandstone and siltstone, both same as above, 70%; shale, gray, very micaceous, 20%; coal, moderately pyritic, 10%
- 1889-1896 Sandstone, same as above, but in part with a greenish cast, 50%; shale, gray to dark-gray, silty, very micaceous, trace of red and light-green
- 1896-1941 Sandstone, white, medium-to fine-grained, subangular, quartzose, moderately micaceous and chloritic, moderately glauconitic, few coal grains, at 1909-1932 mostly fine-grained and very slightly feldspathic; at 1932-1941 some shale, dark-gray, moderately micaceous
- 1941-1957 Sandstone, white, medium-grained, subangular, quartzose, at 1950-1957 medium-to fine-grained
- 1957-1969 Sandstone, same as lower part above, but moderately micaceous and chloritic, moderately glauconitic
- 1969-2014 Sandstone, same as above, but in part light-gray, at 1978-2014 some carbonaceous material on bedding surfaces

- 2014-2024 Sandstone, same as above, but decrease of accessory minerals and carbonaceous material
- 2024-2034 Shale, gray, in part silty and micaceous; and sandstone, same as above, but increase of accessory minerals
- 2034-2053 Sandstone, same as above; a little interbedded shale, gray to light-gray
- 2053-2058 Sandstone, same as above, but considerable carbonaceous material; a little shale, gray, much coaly material
- 2058-2063 Sandstone, same as above, but much less carbonaceous material
- 2063-2070 Sandstone, same as above; some shale, gray, micaceous
- 2070-2082 Sandstone, same as above, but decrease of accessory minerals
- TOP BLUESTONE FORMATION (MISSISSIPPIAN) 2082
- 2082-2099 Shale, light-green to red; at 2092-2099 a little siltstone, greenish-gray, quartzose
- 2099-2104 Shale, red with some green
- 2104-2112 Shale, red, a little is green
- 2112-2122 Sandstone, brown, medium-to fine-grained, subangular, quartzose, slightly feldspathic, moderately micaceous, carbonaceous material
- 2122-2127 Siltstone, light-green, quartzose, feldspathic, micaceous; a little shale, greenish-gray to gray
- 2127-2140 Siltstone, same as above, but slightly feldspathic
- 2140-2150 Shale, brick-red, to maroon to light-green to light-gray, silty; some siltstone, same as above
- 2150-2159 Siltstone, olive, quartzose, feldspathic, micaceous
- 2159-2169 Sandstone, brown, fine-grained, subangular, quartzose, slightly feldspathic, slightly micaceous; and siltstone, same as above, but gray; a little shale, gray, silty

- 2169-2179 Siltstone, dark-brownish gray, quartzose, slightly feldspathic; a little shale, light-gray to light-brownish gray, unctuous, carbonaceous material
- 2179-2188 Siltstone to sandstone, very fine grained, same as above
- 2188-2198 Siltstone, same as above, but pyritic, small amount of coaly material
- 2198-2209 Siltstone, same as above, but more feldspathic; a little sandstone, gray, very fine grained, subangular, quartzose, feldspathic; a little shale, dark-brownish gray, silty, carbonaceous
- 2209-2227 Sandstone, same as above; laminated with siltstone, same as above
- 2227-2231 No sample
- 2231-2244 Sandstone, same as 2209-2227
- 2244-2252 Shale, dark-brownish gray, silty, carbonaceous
- 2252-2313 Shale, same as above; and interbedded siltstone to sandstone, very fine grained, dark-brownish gray, quartzose, slightly feldspathic, at 2261-2313 slightly pyritic
- 2313-2361 Shale, same as above, but at 2351-2361 not silty
- 2361-2371 Shale, same as above, but pyritic, some chips contain fine to silt-size subangular grains of quartz; a little sandstone, white, fine-grained to silt, subangular, quartzose, slightly feldspathic, a very small amount of chlorite and accessory minerals, nearly clean
- 2371-2387 Sandstone, same as above
- 2387-2404 Sandstone, same as above; some interbedded siltstone, light-gray, quartzose, feldspathic, very micaceous
- 2404-2421 Siltstone, same as above, at 2416-2421 considerable coaly material scattered throughout
- 2421-2431 Shale, gray, silty, slightly micaceous
- 2431-2440 Shale, same as above; some sandstone, same as 2387-2404, but gray with a little white

- 2440-2449 Shale, same as above, but pyritic
- 2449-2458 Sandstone, same as above, but gray, faintly laminated with coaly to argillaceous material; some shale, same as above
- 2458-2472 Shale, gray, slightly silty, slightly pyritic, small amount of coaly to argillaceous material
- 2472-2482 Shale, gray with a faint greenish cast; and shale, light-gray, contains medium-to fine, subangular grains of clear quartz; a little limestone, yellowish-tan to brown and white, fine-crystalline, in part indistinctly oolitic, argillaceous
- 2482-2492 Shale, light-greenish gray to gray to dark-brown; some sandstone, light-greenish gray, fine-grained, subangular, quartzose, slightly micaceous; a little limestone, same as above

TOP PRINCETON SANDSTONE 2492