

Company: United Producing Company, Inc.  
 Farm: Slocum Land Corporation, et al  
 Well No.: 3-1835  
 Elevation: 1596.6' Ground  
 Total Depth: 2300'  
 Located: Buchanan County  
           2150' N. of 37°15'  
           7825' E. of 82°00'  
 Drilling Commenced: 8/19/51  
 Well Completed: 10/25/51  
 Result: Gas Well

Geologic Log  
 Sample studied and  
 described by:  
 John M. Wilson  
 Virginia Division of  
 Mineral Resources  
 May, 1963

## GEOLOGIC LOG

<u>Sample</u>	<u>Interval</u>	<u>Description</u>
0-1906	1906	No samples
1906-1932	26	Siltstone, locally finely sandy, light gray-green, moderately hard, brittle, no apparent bedding, argillaceous, with: common biotite, abundant muscovite, and rare carbonaceous material.
1932-1962	30	Sandstone, white, light gray, poorly cemented, very fine-to fine-grained, well sorted, rounded to subangular, interstitially silty, siliceous, with: abundant biotite, abundant muscovite, abundant pyrite, common carbonaceous material. Nonporous to slightly porous. With stringers of Siltstone, locally shaly, medium to dark gray, moderately soft, flaky, no apparent bedding to poorly fissile, argillaceous, with: abundant biotite, abundant muscovite, common pyrite, and common carbonaceous material.
1962-1984	22	Sandstone, silty, white, light gray, moderately cemented, very fine-grained, well sorted, subrounded to subangular, interstitially silty, siliceous, with: common biotite, common muscovite, rare carbonaceous material, common iron oxidê stains. Nonporous. With minor stringers of Siltstone, locally shaly, medium to dark gray, moderately soft, flaky, fair to good fissility, argillaceous, with: rare muscovite, and common carbonaceous material.

1984-1991	7	Interbedded; Siltstone, locally finely sandy, locally shaly, light to dark gray, moderately hard, brittle, no apparent bedding to poorly fissile, siliceous, argillaceous, with: abundant biotite, abundant muscovite, and rare carbonaceous material, rare iron oxide stains. Sandstone, white, well cemented, very fine-grained, well sorted, subrounded to subangular, interstitially silty, siliceous, with: abundant biotite, common muscovite, Nonporous to slightly porous.
1991-1998	7	Siltstone, shaly, medium to dark gray, moderately soft, brittle, fair fissility, argillaceous, with: rare muscovite,
1998-2083	85	Shale, locally silty, dark gray, moderately soft, flaky, fair to good fissility, argillaceous, with: common muscovite, and rare carbonaceous material.
2083-2013	30	Shale, carbonaceous, black, moderately soft, flaky, good fissility, argillaceous, with: abundant carbonaceous material.
2013-2128	15	Shale, carbonaceous, silty, dark gray, black, moderately hard, brittle, fair to good fissility, calcareous (locally), argillaceous, with: common muscovite, common pyrite, rare calcite, and abundant carbonaceous material.
2128-2138	10	Siltstone, grades locally to a very fine-grained Sandstone, locally finely sandy, locally shaly, light to dark gray, moderately hard, brittle, no apparent bedding to poorly fissile, siliceous, argillaceous, with: abundant biotite, abundant muscovite, and common carbonaceous material.
2138-2142	4	Sandstone, very silty, white, light gray, well cemented, very fine-grained, well sorted, subrounded to subangular, interstitially silty, siliceous, calcareous (slightly), with: common biotite, common muscovite, rare carbonaceous material, rare iron oxide stains. Nonporous to slightly porous. With stringers of Siltstone, as in 2128-2138.

2142-2149	7	Siltstone, shaly, medium gray, red (rare), green-gray, moderately hard, brittle, no apparent bedding to poorly fissile, argillaceous, with: rare biotite, rare muscovite, and rare carbonaceous material.
2149-2162	13	Shale, carbonaceous (locally), light to dark gray, moderately hard, brittle, no apparent bedding to fair fissility, locally silty, argillaceous, with: common biotite, common muscovite, and rare coal fragments.
2162-2200	38	Shale, locally finely sandy, locally shaly, light to dark gray, moderately hard, brittle, no apparent bedding to poorly fissile, argillaceous, with: rare biotite, rare muscovite, rare pyrite, and rare carbonaceous material.
2200-2203	3	Sandstone, white, light gray, moderately cemented, very fine-to medium-grained, medium sorted, subrounded to angular, interstitially silty, siliceous, with: rare biotite, rare muscovite, rare pyrite, and rare iron oxide stains. Nonporous to slightly porous.
2203-2254	51	No samples.
2254-2271	17	Sandstone, white, clear, well cemented, very fine-to fine-grained, well sorted, rounded to subangular, interstitially silty, calcareous, with: rare biotite, rare muscovite, rare pyrite, common carbonaceous material, rare iron oxide stains. Nonporous to slightly porous. With minor stringers of Siltstone; locally shaly, light to dark gray, moderately hard, brittle, no apparent bedding to poorly fissile, argillaceous, with: rare biotite, rare muscovite.
2271-2283	12	Sandstone, as in 2254-2271, with: abundant iron oxide staining.
2283-2300	17	No samples.