

Company: United Producing Co., Inc.
 Farm: YuKon Pocahontas Coal Co., et.al.
 Well No.: 17-1952
 Elevation: 1560.5
 Total Depth: 4823'
 Located: Buchanan County
 11,500' N. of 37°10'
 950' W. of 82°00'
 Drilling Commenced: 6/7/52
 Well Completed: 11/19/52
 Result: Dry hole

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

GEOLOGIC LOG

Depth	Interval	Description
0-1856	1856	No samples.
1856-1861	5	Siltstone, locally finely sandy, locally shaly, light to medium gray, moderately hard, brittle, no apparent bedding, calcareous (slightly), argillaceous with: rare biotite, common muscovite.
1861-1868	7	Siltstone, locally finely sandy, red, green, moderately soft, flaky, no apparent bedding, argillaceous, with: rare biotite, rare muscovite.
1868-1874	6	Siltstone, as in 1856-1861
1874-1884	10	Siltstone, locally finely sandy, red (rare), green, moderately soft, flaky, no apparent bedding, siliceous, argillaceous, with: rare biotite, rare muscovite, and rare carbonaceous material.
1884-1894	10	Shale, red, (rare), green, moderately hard, brittle, no apparent bedding, calcareous (very slightly), argillaceous, with: rare biotite, rare muscovite, rare carbonaceous material and rare iron oxide stains.
1894-1914	20	Siltstone, as in 1874-1884.
1914-1919	5	Siltstone, locally shaly, red, green, moderately hard, brittle, no apparent bedding to poorly fissile argillaceous, ferruginous, with: rare biotite, rare muscovite, and rare carbonaceous material.

1919-1946	27	Siltstone, locally finely sandy, light gray, red (rare), green, moderately soft, flaky, no apparent bedding, siliceous, argillaceous, with: rare biotite, common muscovite, and rare iron oxide stains.
1946-1993	47	Interbedded; Siltstone, as in 1919-1946, with; Sandstone, silty, light gray, moderately cemented, very fine-grained, well sorted, subrounded to angular, interstitially silty, siliceous, with: rare biotite, rare muscovite, and common iron oxide stains. Slightly porous.
1993-2018	25	Sandstone, white to clear, moderately cemented, very fine-grained, well sorted, subrounded to subangular, interstitially silty, siliceous, with: rare biotite, rare muscovite, and common carbonaceous material. Slightly porous. With stringers of Siltstone, locally shaly, medium to dark gray, moderately hard, brittle, no apparent bedding to poorly fissile, argillaceous, with: rare biotite, rare muscovite, and rare iron oxide stains.
2018-2030	12	Sandstone, silty, white to light gray, moderately cemented, very fine-grained, well sorted, subrounded to subangular, interstitially silty, calcareous (slightly), with: rare biotite, rare muscovite, and rare iron oxide stains. Nonporous to slightly porous. With minor stringers of Siltstone, as in 1993-2018.
2030-2059	29	Interbedded; Lithologies as in 2018-2030.
2059-2065	6	Sandstone, as in 2018-2030, with stringers of; Siltstone, locally finely sandy, locally shaly, light to medium gray, moderately hard, brittle, no apparent bedding to poorly fissile, siliceous, argillaceous, with: rare muscovite, rare carbonaceous material.
2065-2071	6	Sandstone, silty, white to clear, poorly cemented, very fine-grained, well sorted, subrounded to subangular, interstitially silty, siliceous, calcareous (slightly), with: rare biotite, rare muscovite, rare iron oxide stains and common silty-micaceous partings. Nonporous to slightly porous.
2071-2136	65	Siltstone, shaly, medium gray to dark gray, moderately hard, brittle, no apparent bedding to poorly fissile, argillaceous, with: rare muscovite, and carbonaceous material.
2136-2160	24	Shale, medium to dark gray, moderately soft, flaky, fair to good fissility, argillaceous, with: rare muscovite and rare iron oxide stains.

2160-2178	18	Siltstone, locally finely sandy, green-gray, moderately soft, flaky, no apparent bedding, calcareous (slightly), siliceous, argillaceous, with: rare muscovite, rare carbonaceous material, and rare iron oxide stains.
2178-2180	2	No samples.
2180-2197	17	Interbedded; Siltstone, locally shaly, medium gray, green, moderately hard, brittle, no apparent bedding to poorly fissile, argillaceous, with: rare muscovite, rare carbonaceous material, rare iron oxide stains; with Sandstone, white to clear, orange, moderately cemented, fine to coarse-grained, medium sorted, rounded to subangular, siliceous, with: rare biotite, common muscovite, and abundant iron oxide stains. Nonporous to slightly porous.
2197-2219	22	Siltstone, as in 2180-2197, calcareous.
2219-2237	18	Siltstone, locally finely sandy, locally shaly, red, green, moderately hard, brittle, no apparent bedding, to poorly fissile, calcareous, argillaceous, with: rare biotite, common muscovite, rare carbonaceous material, and rare iron oxide stains.
2237-2238	1	No samples.
2238-2251	13	Interbedded; Siltstone, as in 2219-2237, with; Sandstone, white to clear, well cemented, very fine to fine-grained, well sorted, subrounded to angular, interstitially silty, siliceous, with: rare biotite, common muscovite, rare carbonaceous material, and common iron oxide stains. Nonporous to slightly porous.
2251-2257	6	Siltstone, locally shaly, green, moderately hard, brittle, no apparent bedding to poorly fissile, argillaceous, with: rare muscovite and rare carbonaceous material.
2257-2270	13	Interbedded; Siltstone, as in 2251-2257, with; Sandstone, white, moderately cemented, very fine to fine-grained, well sorted, subrounded to angular, siliceous, with: common biotite, common muscovite, and common iron oxide stains. Slightly porous.
2270-2278	8	Sandstone, as in 2257-2270, with minor stringers of Siltstone, as in 2257-2270.
2278-2318	40	Siltstone, locally shaly, light to dark gray, moderately hard, brittle, fair to good fissility, calcareous, (slightly), with: common pyrite and common carbonaceous material.

2318-2362	44	Interbedded; Siltstone, as in 2278-2318, with; Sandstone, silty, white to light gray, poorly cemented, very fine to fine-grained, well sorted, subrounded to subangular, interstitially silty, siliceous, with: rare biotite, rare muscovite, rare carbonaceous material, and common iron oxide stains. Nonporous to slightly porous.
2362-2370	8	Sandstone, white to clear, moderately cemented, very fine to fine-grained, well sorted, subrounded to subangular, interstitially silty, siliceous, with: rare biotite, common muscovite, and rare carbonaceous material. Slightly porous; with stringers of Siltstone, dark gray, moderately hard, brittle, argillaceous.
2370-2383	13	Sandstone, as in 2362-2370.
2383-2410	27	Sandstone, as in 2362-2370, with stringers of Siltstone, locally shaly, medium to dark gray, moderately hard, brittle, no apparent bedding to poorly fissile, argillaceous, with: rare muscovite, rare carbonaceous material, and rare iron oxide stains.
2410-2437	27	Limestone, light to dark gray, moderately hard, fossil fragmental, rare, no apparent bedding, cryptocrystalline, to microcrystalline, with rare calcite.
2437-2736	299	No samples.
2736-2740	4	Sandstone, white to clear, moderately cemented, very fine to medium-grained, medium sorted, subrounded to angular, interstitially silty, siliceous, with: rare biotite, common muscovite, Nonporous to slightly porous; with stringers of Siltstone, locally shaly, dark gray, red, green, moderately soft, flaky, no apparent bedding to poorly fissile, argillaceous, ferruginous, with: rare biotite, common muscovite, and rare iron oxide stains.
2740-2745	5	Interbedded; Lithologies as in 2736-2740.
2745-2764	19	Siltstone, shaly, dark gray (rare), green, moderately hard, brittle, poor to fair fissility, argillaceous, with: rare biotite, common muscovite, rare pyrite, and rare carbonaceous material.
2764-2775	11	Siltstone, locally shaly, green, maroon-drab, moderately soft, flaky, poor to fair fissility, calcareous (slightly), argillaceous, ferruginous, with: rare biotite, common muscovite and rare carbonaceous material.

2775-2794	19	Siltstone, grades to a very fine-grained sandstone, locally finely sandy, light to medium gray, red (rare), moderately hard, brittle, no apparent bedding, siliceous, argillaceous, with: rare biotite, common muscovite, rare carbonaceous material, and rare iron oxide stains.
2794-2818	24	Sandstone, silty, white, poorly cemented, very fine-grained, well sorted, subrounded to subangular, interstitially silty, siliceous, with: common biotite, common muscovite, rare carbonaceous material, and rare iron oxide stains. Nonporous to slightly porous.
2818-2829	11	Siltstone, locally shaly, medium to dark gray, red, green, moderately hard, brittle, no apparent bedding to poorly fissile, argillaceous, with: rare biotite, common muscovite, rare carbonaceous material; with minor stringers of Sandstone, as in 2794-2818.
2829-2837	8	Shale, medium gray, red, moderately hard, brittle, poor to good fissility, argillaceous, with: rare muscovite and rare carbonaceous material.
2837-2859	22	Siltstone, locally shaly, light to medium gray, red (common), moderately hard, brittle, no apparent bedding to poorly fissile, argillaceous, ferruginous, with: common muscovite, rare carbonaceous material, and rare iron oxide stains.
2859-2866	7	No samples.
2866-2876	10	Siltstone, as in 2837-2859.
2876-2904	28	Siltstone, locally finely sandy, locally shaly, light to dark gray, moderately hard, brittle, no apparent bedding to poorly fissile, calcareous (locally), siliceous, argillaceous, with: rare biotite, rare muscovite, common pyrite and abundant carbonaceous material.
2904-2910	6	Siltstone, locally shaly, light to medium gray, red, green, moderately hard, brittle, no apparent bedding to poorly fissile, argillaceous, ferruginous, with: rare biotite; common muscovite, and rare carbonaceous material; with stringers (minor) of Dolomite, light brown, moderately hard, no apparent fossil content, no apparent bedding, cryptocrystalline to micro-crystalline, with: rare mica, common calcite, and rare iron oxide staining.
2910-2981	71	Siltstone, as in 2904-2910.

2981-3005	24	Siltstone, locally shaly, medium to dark gray, red (rare), green, moderately hard, brittle, no apparent bedding to poorly fissile, argillaceous, with: rare biotite, common muscovite, common pyrite, and rare iron oxide stains; with stringers of Sandstone, white to clear, poorly cemented, very fine to fine-grained, well sorted, subrounded to angular, interstitially silty, siliceous, with: rare biotite, common muscovite, and common iron oxide stains. Nonporous to slightly porous.
3005-3022	17	Sandstone, white to clear, moderately cemented, very fine to fine-grained, well sorted, subrounded to subangular, interstitially silty, siliceous, with: rare biotite, rare muscovite, rare carbonaceous material, common iron oxide stains, and abundant silty-micaceous partings (contamination?). Nonporous to slightly porous.
3022-3029	7	No samples.
3029-3034	5	Sandstone, as in 3005-3022.
3034-3041	7	No samples.
3041-3050	9	Sandstone, as in 3005-3022.
3050-3072	22	Siltstone, medium to dark gray, red, moderately hard, brittle, no apparent bedding, calcareous (slightly), argillaceous, with: rare biotite, rare muscovite, and rare iron oxide stains; with minor stringers of Sandstone, as in 3005-3022.
3072-3077	5	No samples.
3077-3091	14	Siltstone, locally finely sandy, locally shaly, medium to dark gray, green, moderately hard, brittle, no apparent bedding, siliceous, argillaceous, with: abundant muscovite, rare carbonaceous material, and rare iron oxide stains.
3091-3106	15	Siltstone, locally shaly, red, green, moderately soft, flaky, no apparent bedding to poorly fissile, argillaceous, with: rare muscovite and rare iron oxide stains.
3106-3128	22	Siltstone, locally finely sandy, medium gray, red (rare), green, moderately hard, brittle, no apparent bedding, siliceous, argillaceous, with: abundant biotite, abundant muscovite, common pyrite, rare carbonaceous material and rare iron oxide stains.

3128-3134	6	Sandstone, white to light gray, moderately cemented, very fine to fine-grained, well sorted, subrounded to subangular, interstitially silty, siliceous, with: common biotite, abundant muscovite, rare carbonaceous material and common iron oxide stains. Nonporous to slightly porous; with stringers of Siltstone, as in 3106-3128.
3134-4823	1689	No samples
4823'	Total Depth	

GEOLOGIC SUMMARY

Mississippian System

Bluestone Formation	in	1856 (?)
	bottom	2238
Princeton Sandstone	top	2238
	bottom	2410
Hinton Formation	top	2410
	in	3134 (deepest sample)

Correlations by: J. M. Wilson and R. C. Milici

September 1963