VDMR ( 1 No. 421

Company: United Fuel Gas Co.

Farm: National Shawmut Bank of Boston

Well No.: 8768

Elevation: 1234.22' Ground

Total Depth: 4992'

Location: Buchanan County

7200' S. of 37°30' 7400' W. of 82°00'

Drilling Commenced: 1/1/59 Well Completed: 11/12/59

Result: Gas Well

Geologic Log
Samples 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>	
0-2550	2550	No samples	
. 2550-2560	10	Siltstone, locally shaly, light to dark gray, moderately hard, brittle, no apparent bedding to poorly fissile, siliceous, argillaceous, with: common biotite, common muscovite, rare carbonaceous material, and stringers of Sandstone, white, light gray, moderately cemented, very fine-to fine-grained, well sorted, subrounded to angular, interstitially silty, siliceous, with common biotite, common muscovite and rare chlorite. Slightly porous.	
2560-2567	7	Shale, locally silty, medium to dark gray, moderately hard, brittle, poor to fair fissility, argillaceous, with muscovite, iron oxide stains, rare sandstone laminae.	
2567-2574	7	Siltstone, locally finely sandy, medium to dark gray, moderately hard, brittle, no apparent bedding, siliceous, argillaceous, with: rare biotite, rare muscovite, rare pyrite, rare carbonaceous material, and stringers of Sandstone, white, light gray, well cemented, very fine-grained, well sorted, subrounded to subangular, interstitially silty, siliceous with: rare biotite, rare muscovite, rare iron oxide stains. Nonporous.	
2574-2580	6 .	Shale, locally silty, medium to dark gray, moderately soft, flaky, fair to good fisility, argillaceous, with: rare muscovite, common pyrite, and rare carbonaceous material.	

•		
2580-2592	12	Limestone, shaly, light to dark gray, moderately hard, fossil fragmental (common), no apparent bedding to platy, cryptocrystalline with: common pyrite, common calcite and rare iron oxide staining.
2592-2600	8	Limestone, as in 2580-2592, with common pieces of light brown limestone.
2600-2639	39	Limestone, light to dark gray, light to dark brown, moderately soft, fossil fragmental (common), no apparent bedding, microcrystalline, with: common pyrite and common calcite.
2639-2649	10	Limestone, dolomitic, light to dark gray, green-gray, moderately hard, no apparent fossil, no apparent bedding, cryptocrystalline, with: rare mica and rare calcite.
2649-2698	49	Limestone, light gray, light to dark brown, moderately hard, oolitic structure (locally), fossil fragmental (common), no apparent bedding, microcrystalline, with: abundant calcite.
2698-2728	30	Limestone, light gray, light brown, tan, white, moderately hard, fossil fragmental (common), no apparent bedding, cryptocrystalline to microcrystalline, with: abundant calcite and rare iron oxide staining.
2728-2751	23	Limestone, light gray, light to dark brown, white, moderately hard, no apparent fossil, no apparent bedding, cryptocrystalline, with: common chert, rare calcite, and common iron oxide staining.
2751-2810	59	Limestone, dolomitic (?), light brown, tan, white, moderately soft, no apparent fossil, no apparent bedding, cryptocrystalline, with: rare calcite.
2810-2888	78	Limestone, shaly, light to dark brown, tan, white, moderately hard, fossil fragmental (rare), no apparent bedding, cryptocrystalline to microcrystalline, with: rare mica, rare calcite and rare iron oxide staining.
2888-2935	47	Limestone, light brown, white, moderately hard, no apparent fossil; no apparent bedding, cryptocrystalline with: common calcite.

2935-2956	21	Siltstone, interbedded, locally shaly, red, moderately hard, brittle, no apparent bedding to poorly fissile, ferruginous, with: rare biotite, rare muscovite, and rare pyrite. Limestones as in 2888-2935.	
2956-2984	28	Limestone, tan, white, moderately hard, no apparent fossil, no apparent bedding, cryptocrystalline with: rare chert and abundant calcite.	
2984-3041	57	Siltstone, locally shaly, red-brown, moderately hard, tough, no apparent bedding, calcareous (very slightly), ferruginous, with: rare biotite, rare muscovite, rare carbonaceous material, and rare iron oxide stains.	
3041-4992	1951	No samples	
4992' - TOTAL DE	PTH		

## GEOLOGIC SUMMARY

## Mississippian System

Bluefield Formation	in bo <b>t</b> tom	2550 2580
Greenbrier Limestone	top bottom	2580 2984
Maccrady Formation	top in	2984 3041 (deepest sample)