

Operator: United Fuel Gas Company
 Farm: National Shawmut Bank of Boston
 Well No.: 8431
 Location: Buchanan County
 9950' N. of 37°30'
 6650' E. of 82°00'
 Elevation: 1465.15' Ground
 Total Depth: 3227'
 Drilling Commenced: 7/26/56
 Well Completed: 12/31/56
 Result: Dry hole, P & A

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

GEOLOGIC LOG

<u>Depth</u>	<u>Interval</u>	<u>Description</u>
0-2991	2991	No samples
<u>Greenbriar limestone (Top samples - 3201)</u>		
2991-3024	33	Limestone, silty, tan, white, moderately hard, oolitic, fossil fragmental, no apparent bedding, microcrystalline, with: rare calcite, and rare carbonaceous material.
3024-3045	21	Limestone, light to dark gray, tan, white, moderately hard, no apparent fossil content, no apparent bedding, microcrystalline, with: rare mica, rare calcite, and rare carbonaceous material.
3045-3065	20	Limestone, light gray, tan, white, moderately hard, oolitic, fossil fragmental, no apparent bedding, cryptocrystalline to microcrystalline, with: rare calcite and rare iron oxide staining.
3065-3071	6	Limestone, locally silty, tan, white, moderately hard, oolitic (rare), no apparent fossil content, no apparent bedding, cryptocrystalline to microcrystalline, with: rare calcite and rare iron oxide staining.
3071-3096	25	Limestone, locally silty, light gray, tan, white, moderately hard, oolitic, fossils (crinoid stems), no apparent bedding, microcrystalline, with: rare calcite, and rare iron oxide staining.

3096-3110	14	Limestone, light brown, tan, white, moderately hard, oolitic, fossil fragmental, no apparent bedding, cryptocrystalline to microcrystalline, with: abundant calcite.
3110-3158	48	Limestone, light brown, tan, white, moderately soft, oolitic (rare), fragmental fossil content (rare), no apparent bedding, cryptocrystalline, with: abundant calcite, and rare iron oxide staining.
3158-3186	28	Limestone, silty, light brown, tan, white, moderately hard, no apparent fossil content, no apparent bedding, cryptocrystalline to microcrystalline, with: abundant calcite, and rare iron oxide staining.
3186-3201	15	Limestone, locally silty, light brown, white, moderately soft, no apparent fossil content, no apparent bedding, cryptocrystalline to microcrystalline, with: common calcite, common carbonaceous material, and rare iron oxide staining.
<u>Maccrady formation (3201- ?)</u>		
3201-3214	13	Siltstone, locally finely sandy, light gray, red, green, tan, moderately hard, tough, no apparent bedding, calcareous, argillaceous, with: rare biotite, rare muscovite, rare carbonaceous material, and rare iron oxide stains.
3214-3219	5	Siltstone, locally finely sandy, light to dark gray, white, olive, moderately hard, brittle, no apparent bedding, calcareous, argillaceous, with: rare biotite, rare muscovite, and common carbonaceous material.
3219-3227	8	Siltstone, variegated, locally finely sandy, dark gray, red, green, tan, moderately hard, brittle, no apparent bedding, calcareous, argillaceous, ferruginous, with: common biotite, abundant muscovite, rare carbonaceous material and rare iron oxide stains.
3227 - T. D.		No samples.