

R. Lemons  
Fitch, et al (DOH)  
Lee County, Va.  
(Samples examined by Louise B. Freeman)

- 1450-51 - Bentonite, with biotite=flakes; occasional fragments of fine-grained brown limestone.
- 1451-53'4" - Oil soaked lead wool plug
- 1453'4" - Limestone, dense brown, lithographic; no porosity evident  
-58
- 1458'6" -64 - Limestone, as above with little coarse calcite -- vein filling
- 1464-95 - Limestone, very fine-grained, lithographic, tan; rare fragments slightly argillaceous; trace translucent brown chert at 1490
- 1495-1513 - Limestone as above with occasional fragments slightly dolomitic
- 1513-21 - Limestone as above; little brown translucent chert.
- 1521-45 - Limestone, dense brown, fine-grained.
- 1545-95 - Limestone, fine-grained, brown; little slightly argillaceous
- 1595-06 - Limestone, more gray than brown, fine-grained, some finely streaked with calcite
- 1606-67 - Limestone, tan, fine-grained; few fragments slightly argillaceous (due to enclosed bentonite)
- 1667-69 - Logged 35,000 cubic feet gas. Limestone, dense and fine-grained as above with a little of it argillaceous; few fragments show coarse vein calcite. Best indication so far in this well of fracture accumulations.
- 1669-1705- Limestone, very fine-grained, grayish-tan.
- 1705-10 - Limestone, brown, fine-grained, dense, some densely crystalline
- 1710-59 - Limestone, brown, fine and sub-lithographic
- 1759-96 - Limestone, more fossiliferous, resulting in some more crystalline.
- 1796-1802 - Limestone, fine-grained to slightly crystalline; very finely broken; trace bentonite.
- 1802-1935 - Limestone, fine-grained, sub-lithographic, tan; very finely broken. Occasional slightly argillaceous streaks
- 1935-75 - Limestone as above; some very argillaceous and gray; bentonitic; streaks of very dark, sometimes biotitic bentonite in limestone
- 1975-18 - Limestone, fine-grain, light gray-tan
- 2018-24 - Limestone more gray, slightly argillaceous; bentonitic ??
- 2024-34 - Limestone, very fine-grained and very pale gray

- 2034-44 - Limestone, fine-grained, argillaceous; dark red and greenish-brown.
- 2044-50 - Limestone, fine-grained, pale greenish-tan, bentonitic
- 2050-56 - Limestone, fine-grained, dark brownish-red, argillaceous
- 2056-61 - Limestone, fine-grained, argillaceous, green and red
- 2061-85 - Limestone, fine-grained, light creamy gray, very smooth
- 2085-2108 - Limestone, fine-grained, lithographic, very pale tan
- 2108-13 - Limestone, tan, fine-grained, but not so fine as above; trace argillaceous.
- 2113-59 - Limestone, tan, lithographic, very finely broken
- 2159-64 - Limestone, tan, fine-grained, slightly bentonitic
- 2164-~~59~~ - Limestone, fine-grained, gray-tan, bentonitic at 2217  
-2235
- 2235-43 - Shatter zone? Limestone, some slightly argillaceous, mainly lithographic with calcite streaks thru it
- 2243-49 - Limestone, brown, fine-grained, some slightly argillaceous
- 2249-62 - Limestone, gray-brown, fine-grained
- 2262-73 - Limestone, very fine-grained, grayish-tan to tan (grayish-tan color due to bentonitic clays enclosed)
- 2273-89 - Limestone, nice clear brown, lithographic
- 2289-09 - Limestone, brown, lithographic
- 2309-13 - Limestone, cream, fine-grained lithographic
- 2313-46 - Limestone, lithographic, brownish-gray to clear brown; occasional traces dark bentonite
- 2346-64 - Limestone, darker and argillaceous; enclosed bentonitic clay limestone is less fine-grained than above.
- 2364-70 - Limestone, fine-grained, dark brown
- 2370-75 - Limestone, fine-grained, light gray with some translucent gray chert.
- 2375-85 - Limestone is less fine-grained than lithographic limestone above, mostly brown, traces slightly argillaceous; much brownish-gray translucent chert.
- 2385-98 - Limestone, brown lithographic, traces finely dolomitic at 2390-98
- 2398-2403 - Limestone, brown to gray, very fine-grained.

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- 2403-18 - Limestone, very fine-lithographic, brown; trace dark bentonitic
- 2418-28 - Limestone, fine-grained, light gray-tan
- 2428-53 - Limestone, very dark brown, very finely crystalline
- 2453-  
2507 - Limestone, very dark brown lithographic
- 2507-21 - Limestone, very fine-lithographic, light tan to grayish-tan
- 2521-33 - Limestone, dark brown lithographic to very slightly argillaceous
- 2533-45 - Limestone, lithographic, light brown, "birdseye"
- 2545-59 - Limestone, brown, very finely crystalline to slightly argillaceous.
- 2559-76 - Limestone, light tan, lithographic
- 2576-87 - Limestone, brown, lithographic with a little slightly dolomitic.
- 2587-92 - Limestone, less of the lithographic, lighter tan finely crystalline dolomitic limestone.
- 2592-2601 - Limestone, dark gray-brown, fine-grained, slightly argillaceous
- 2601-08 - Limestone, brown, fine-grained, some slightly argillaceous and dolomitic
- 2608-23 - Limestone, lithographic, brown.
- 2623-61 - Limestone, some as above, some more granular; trace brown translucent chert; chert is more common towards base.
- 2661-77 - Limestone, brown, lithographic, with some of it containing quantities of crystalline calcite.
- 2677-99 - Limestone, brown, lithographic, traces of crystalline calcite.
- 2709-26 - Limestone as above but finely broken as though drilled through water.
- 2726-28 - Same, but very finely pulverized.
- 2728-42 - Limestone, brown lithographic with traces of dolomite; very finely broken; traces of clear calcite.
- 2742-2838- Limestone, clear brown lithographic, very fine with free calcite.
- 2838-48 - Limestone as above; with some darker brown, granular limestone, very slightly argillaceous.
- 2848-55 - Limestone, brown as above with some translucent brown chert.

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- 2855-63 - Limestone, lighter and slightly argillaceous
- 2863-78 - Limestone, brown slightly argillaceous and granular
- 2878-86 - Limestone, very slightly dolomitic and argillaceous; light brown
- 2886-96 - Limestone, dark brown, some lithographic, some slightly argillaceous; brown translucent chert, and free calcite.
- 2896-06 - Limestone, slightly dolomitic and argillaceous as at 2878; with no chert.
- 2906- Chert, brown translucent, amber-like.
- 2906-12 - Limestone, dark brown, more argillaceous
- 2912-18 - Limestone, slightly dolomitic and argillaceous; gray-brown, like at 2878
- 2918-25 - Limestone, dark brown, fine-grained, some slightly argillaceous; some more gray-green, dolomitic and argillaceous.
- 2925-32 - Limestone, some as above, some fine lithographic, tan
- 2932-38 - Limestone, fine-grained tan; little slightly greenish and argillaceous (due to integrated bentonitic clay)
- 2938-44 - Limestone, brown, finely crystalline
- 2944-52 - Limestone, brown, dense and fine-grained
- 2952-89 - Limestone, very fine lithographic light tan
- 2989-98 - Limestone, almost white, lithographic
- 2998-3007 - Limestone, light, lithographic partially finely dolomitic.
- 3032-37 - Dolomite, cream, finely crystalline
- 3037-44 - Limestone, lithographic light tan; trace dark shale
- 3044-51 - Limestone, very dark brown, fine-grained to slightly dolomitic
- 3058-65 - Limestone, light cream, dolomitic with some very dark gray shale, fine-grained.
- 3073-79 - Dolomite, cream, finely crystalline (looks almost like limestone) some very dark gray, fine-grained shale
- 3079-86 - Limestone, tan, lithographic to dolomitic; some shale as above
- 3103-49 - Limestone, tan, lithographic; some shale as above occasional streaks slightly dolomitic.
- 3149- Shale, very fine-grained, dark gray (slightly greenish) and smooth.

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WELL NO. 0110

- 3149-57 - Shale, calcareous and dolomitic (looks like densely crystalline dolomite but includes much reworked clay)
- 3157-66 - Dolomite, very bentonitic and deep green
- 3166-70 - Sandstone, dolomitic, medium grained; much very dark clay-shale
- 3170-81 - Dolomite, finely silty with occasional large sand grains enclosed; much bentonite in the dolomite
- 3181-89 - Even more bentonitic with large biotite flakes in the bentonite.
- 3189-07 - Dolomite, finely crystalline, dense, cream; some bentonite as above
- 3207-15 - Dolomite, medium crystalline, cream, some porosity; some bentonite caving; trace fine silt.
- 3215-47 - Dolomite, finely crystalline, cream, little very fine silt; bentonite cave
- 3247-61 - Dolomite as above; little translucent chert; much cave

Total Depth 3261'