

OWNER: Sunoco Oil Company
DRILLER: Mitchell's Well & Pump Company
COUNTY: Prince George

VDMR #1186
WWCR #149
TOTAL DEPTH: 100'

GEOLOGIC LOG

Columbia Group (0-20')

- 0-10 Sand - grayish-brown, very argillaceous, sand poorly sorted, subangular, moderately ferruginous (limonitic clay), abundant plant material.
- 10-20 Clay - yellow, mottled light gray, sandy, ferruginous (mostly limonite, some goethite and hematite), trace of garnet, trace of plant remains.

Chesapeake Group (20-100')

- 20-30 Sand - gray, medium to very coarse grained, fairly well sorted, subangular, slightly argillaceous, moderate amount small, subrounded gravel and scattered larger pebbles up to 20 mm, slightly arkosic (fresh, gray feldspar), small amounts muscovite, garnet, and nodular phosphate, scattered shell fragments (including pelecypods and echinoid spines), scattered plant remains.
- 30-60 Sand - gray, coarse to very coarse grained, well sorted, angular to subangular, very slightly argillaceous, abundant small gravel (subangular quartz and rock fragments up to 8 mm), small amounts garnet, muscovite, pyrite, and fresh, gray feldspar, sand consists of quartz (iron-stained in part, especially around iron inclusions), and abundant, fine-grained, angular to subangular, metamorphic rock fragments (dark gray quartzitic, red quartzitic, and gray gneissic types).
- 60-70 Clay - brownish-red, sandy, clay predominantly red, with small amounts of yellow and pale green, sand poorly sorted, intensely weathered, lithic and slightly arkosic, quartz weak and irregular, feldspar highly decomposed, intensely weathered rock fragments include red quartzitic, gray quartzitic, gneissic and schistose types, very abundant, weathered biotite, abundant magnetite, some kyanite, scattered plant remains.

OWNER: Sunoco Oil Company (Continued)

#1186

- 70-80 Sand - reddish brown, coarse to very coarse grained, fairly well sorted, subangular, slightly argillaceous (red clay), arkosic (fresh, gray, subrounded feldspar), small amounts of muscovite and garnet, traces of biotite and magnetite, small amounts abraded pelecypod fragments (some chitino-phosphatic).
- 80-99 As above.
- 99-100 Clay - reddish-brown, very coherent, sandy, sand is angular to subangular, poorly sorted, slightly arkosic, slightly ferruginous (limonitic), scattered, abraded shell fragments.

GEOLOGIC SUMMARY

	<u>ROCK UNIT</u>	<u>TIME ROCK UNIT</u>
0-20	Columbia group	Quaternary
20-100	Chesapeake group	Miocene

Virginia Division of Mineral Resources
Robert H. Teifke, Geologist
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