

OWNER: E. P. Wilkerson
DRILLER: Mitchell's Well & Pump Company
COUNTY: Dinwiddie

VDMR #1187
WWCR #24
TOTAL DEPTH: 126'

GEOLOGIC LOG

Columbia Group (0-20')

- 0-10 Sand - buff, very argillaceous, very fine to medium grained, fairly well sorted, angular to subangular, consists essentially of clear quartz, small amount of plant material.
- 10-20 Clay - brownish-red, sandy, clay predominantly brownish red, with small amounts of gray and red, sand predominantly quartz, small amounts feldspar, muscovite, and magnetite, ferruginous (ocherous hematite).

Chesapeake Group (20-100')

- 20-30 Sand - pale orange, argillaceous, fine grained, fairly well sorted, subangular, small amount of small gravel, sand is predominantly clear quartz, micaceous (muscovite), small amount weathered feldspar (gray to pink microcline), scattered plant material.
- 30-40 Sand - pale violet, very argillaceous, medium grained, fairly well sorted, subangular, sand predominantly clear quartz, micaceous (muscovite), small amount weathered feldspar, scattered plant material.
- 40-50 Sand - orangeish brown, slightly argillaceous, small amount small, subangular gravel, sand poorly sorted, angular to subangular and irregular in form, slightly to moderately arkosic (pinkish, weathered microcline), slightly micaceous (muscovite), trace of epidote.
- 50-60 Sand - orange, argillaceous, moderate amount small, subangular to subrounded quartz gravel (up to 10 mm), sand poorly sorted, angular to subangular and irregular, slightly to moderately arkosic (pink and white feldspar), slightly micaceous (muscovite), trace of epidote.
- 60-70 Sand - yellowish-brown, slightly argillaceous, very small amount of small quartz gravel and scattered larger pebbles (up to 20 mm), sand medium to very coarse grained, moderately well sorted, subangular and irregular in form, arkosic (relatively fresh, white feldspar), slightly micaceous (muscovite), traces of epidote, garnet.

- 70-80 Sand - gray, very argillaceous, sand fine to very coarse grained, poorly sorted, subangular, slightly arkosic (fresh gray feldspar), abundant magnetite, abundant biotite, much of which is altered to chlorite, small amounts muscovite and earthy aggregates of goethite-hematite.
- 80-90 Sand - gray, very argillaceous, very poorly sorted, subangular, slightly arkosic, abundant magnetite, micaceous (muscovite and biotite in subequal amounts), small amount iron oxides, trace of epidote.
- 90-100 Sand - gray, very argillaceous, poorly sorted, angular to subangular, slightly arkosic, micaceous (muscovite and biotite in subequal amounts), magnetite, traces of pyrite, pyrrhotite, epidote, graphite, and iron oxides.
- Petersburg Granite (100-126')
- 100-110 Granite or granitic gneiss - gray, clear quartz with randomly oriented inclusions of biotite and magnetite, acid feldspar, mostly microcline, with biotite and magnetite inclusions, feldspar shows varying degrees of decomposition and some has been completely altered to clay, accessories include pyrite, graphite, epidote and kyanite.
- 110-126 As above.

GEOLOGIC SUMMARY

	<u>ROCK UNIT</u>	<u>TIME ROCK UNIT</u>
0-20	Columbia group	Quaternary
20-100	Chesapeake group	Miocene
100-126	Petersburg granite	Paleozoic

Virginia Division of Mineral Resources
Robert H. Teifke, Geologist
December 18, 1964