

OWNER: A. W. Flipppo (Flipppo Trailer Park)
DRILLER: Sydnor Pump & Well Co., Inc.
COUNTY: Chesterfield (Richmond)

VDMR #1297
WWCR #148
TOTAL DEPTH: 234'

GEOLOGIC LOG

Columbia Group (0-40')

- 0-10 Clay — orange-brown; very sandy; sand very-fine- to medium-grained, moderately sorted, subangular to subrounded; quartz and small amounts of white, weathered chert, and magnetite; traces of alkaline feldspar (microperthite observed), and muscovite; much of pigment appears to be hematitic.
- 10-20 As above.
- 20-40 Sand — orange-brown; medium- to very-coarse-grained, moderately sorted, subangular to subrounded; quartz, including some smoky and hyacinth grains, with subordinate (5-10%) dull white, somewhat abraded cleavage fragments of alkaline feldspar; small amounts magnetite, muscovite, and nodular hematite; trace of tourmaline.

Potomac Group (40-161')

- 40-50 Sand — gray; very argillaceous (gray clay); coarse-grained, poorly sorted with variable roundness; some feldspar and magnetite; trace of pyrite.
- 50-60 No sample.
- 60-80 Sand — gray; trace of clay; abundant subangular to rounded quartz gravel (2-8 mm); coarse- to very-coarse-grained (skewed coarse), moderately sorted, subrounded; quartz, with subordinate (about 5%) gray and white feldspar; and fresh, medium- to coarse-grained glauconite; traces of garnet, muscovite, nodular pyrite, and black, nodular to platy phosphorite.
- 80-90 As above — but less glauconitic.
- 87-97 Sand and Gravel — gray and yellow-brown; gravel (2-8 mm in diameter) consists of subangular to rounded quartz, and a subordinate amount of subrounded to rounded, dull-white to yellowish, highly decomposed microcline and microperthite (35-40% of sample, by volume); sand medium- to very-coarse-grained, moderately sorted, subangular to rounded; iron-stained quartz and hyacinth quartz are common; feldspar common and varies from gray and relatively fresh to white or yellow and highly decomposed microcline and microperthite; small amount fresh glauconite, finer grained than major components; brown chert, traces of muscovite and red and pink garnet.

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- 90-100 Sand — gray; slightly argillaceous (coatings on sand grains); coarse- to very-coarse-grained, moderately sorted, sub-angular to subrounded; quartz, with small amount feldspar; minor garnet, and trace of pyrite.
- 100-110 Sand and Gravel — gray; slightly argillaceous; gravel (2-10 mm in diameter), consists of subrounded quartz, much of it yellow stained, and a few pebbles of feldspar and brown chert (45-50% of sample by volume); sand very-fine- to very-coarse-grained, poorly sorted, angular to subrounded; quartz, and small amounts of feldspar, brown chert, muscovite, glauconite, phosphorite, magnetite, pyrite, and garnet; trace of chloritized biotite.
- 110-120 As above.
- 120-130 As above.
- 127-140 As above — but with a much lower gravel content consisting of scattered pebbles (10-15 mm) of quartz and a few of brown chert.
- 140-150 Sand — gray; very-coarse-grained, moderately sorted, subangular to subrounded; quartz (90%), feldspar (10%); small amounts garnet and muscovite.
- 150-159 Clay and Sand — grayish-green clay containing abundant very-coarse-grained sand and granules of subrounded quartz and gray potassium feldspar; small amounts of garnet, muscovite, pyrite, and woody-textured carbonaceous fragments infilled with pyrite.
- 159-161 No sample.
- Petersburg Granite (161-234')
- 161-175 Saprolite — bluish-green; derived from fine-grained phaneritic rock consisting of feldspar, ferromagnesian silicate, and minor quartz; only recognizable minerals are pyrite and magnetite.
- 175-185 As above.
- 185-200 As above.
- 200-215 As above.
- 215-234 As above.

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GEOLOGIC SUMMARY

	<u>ROCK UNIT</u>	<u>TIME ROCK UNIT</u>
0-40	Columbia Group	Quaternary
40-161	Potomac Group	Lower Cretaceous
161-234	Petersburg Granite	Paleozoic

Virginia Division of Mineral Resources
Robert H. Teifke, Geologist
May 5, 1965

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