



OWNER: Sons Incorporated (Blue Star Estates)  
DRILLER: Matthews Well Drilling Company  
COUNTY: Hanover (Atlee)

VDMR #1300  
WWCR #80  
TOTAL DEPTH: 334'

GEOLOGIC LOG

0-145 No sample.

Chesapeake Group (145-181')

145-175 Shells and Sand — light-gray; about 90% shell fragments, mostly pelecypods, but a few gastropods and phosphatic fish teeth; about 10% fine- to medium-grained, moderately sorted quartz-glaucanite sand; small amounts pyrite and black to brown, nodular phosphorite; trace of garnet.

175-181 Sand and Shells — gray; moderately pebbly (quartz, 2-6 mm), medium- to very-coarse-grained, moderately sorted, sub-angular to subrounded quartz sand with small amounts of fresh gray feldspar, fresh glauconite, and brown to black, nodular phosphorite; trace of pyrite; shell material very abundant, mostly pelecypod shell fragments, but scattered phosphatic fish teeth, gastropods, and corals.

Potomac Group (181-290')

181-187 Sand — buff; medium- to very-coarse-grained, moderately sorted, angular to subangular; clear quartz; some pelecypod shell fragments.

187-200 Sand — buff; coarse- to very-coarse-grained, well-sorted, angular to subrounded; 90% angular to subangular clear quartz, many grains with opaque inclusions, and 10% subangular to subrounded, white to cream to yellow potassium feldspar; small amounts tourmaline, brown epidote, pyrite, garnet, and black chert.

200-205 As above.

205-230 Sand — buff; moderately pebbly (subangular to subrounded quartz, and some feldspar and chert, 2-10 mm); medium- to very-coarse-grained, moderately sorted; 90% angular to subangular quartz, mostly clear, but some yellowish grains and some with opaque inclusions; and 10% subangular to subrounded white to yellowish potassium feldspar; scattered fragments of dark, mottled chert; small amounts tourmaline, brown epidote, pink garnet; scattered plant remains.

230-260 As above.

260-277 Sand — buff; coarse-grained, moderately well-sorted, subangular to subrounded; clear to slightly frosted quartz.

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277-290 Sand — gray; very-fine- to very-coarse-grained, poorly sorted, subangular to subrounded; quartz, with small amount feldspar and trace of pyrite.

Petersburg Granite (290-334')

290-315 As above, but with admixture of biotite granite.

315-334 Biotite Granite — biotite, feldspar, quartz; relative abundance of pink garnet; some pyrite.

GEOLOGIC SUMMARY

	<u>ROCK UNIT</u>	<u>TIME ROCK UNIT</u>
0-145	No sample	
145-181	Chesapeake Group	Miocene
181-290	Potomac Group	Lower Cretaceous
290-334	Petersburg Granite	Paleozoic

Virginia Division of Mineral Resources  
Robert H. Teifke, Geologist  
May 6, 1965

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