

OWNER: Glenwood Golf Course
DRILLER: Sydnor Pump & Well Company
COUNTY: Henrico (Richmond)

VDMR #1477
WWCR #184
TOTAL DEPTH: 227'

GEOLOGIC LOG

Columbia Group (0-30')

- 0-10 Sand — buff, argillaceous; fine- to medium-grained, fairly well sorted, angular to subangular; moderate amount weathered feldspar; small amounts magnetite, muscovite,
- 10-20 Sand and Gravel — buff; medium- to very-coarse-grained, subangular to subrounded sand (about 50%), and subrounded to rounded gravel up to 15 mm (about 50%), small amount weathered white feldspar in both fractions; scattered flakes
- 20-30 slightly argillaceous.

Calvert Formation (30-70')

- 30-40 Sand — gray, moderately argillaceous, fine-grained with scattered rounded pebbles up to 20 mm; angular, well-sorted; limonitic zone present somewhere within interval.
- 40-50 Clay — gray, silty, small amount coarse-sand; trace of glauconite.
- 50-60 "
- 60-70 "

Pamunkey Group (70-140')

- 70-80 Sand — gray, very argillaceous; very-fine- to fine-grained, well-sorted, angular; about 5% fine-grained, black carbonophosphorite; small amounts of microcline, glauconite, muscovite, and yellow-brown epidote.
- 80-90 Sand — dark-gray, very argillaceous; very-fine-grained, well-sorted, angular; 2-5% fine-grained, black carbonophosphorite; small amounts muscovite, glauconite, epidote.
- 90-100 Clay — light-gray, virtually sand-free.
- 100-110 Clay — pinkish to orangish-gray; virtually sand-free.
- 110-120 Sand — dark-gray, moderately argillaceous; fine-grained, moderately sorted, subangular; about 15% glauconite; small amounts pyrite, muscovite, biotite, epidote, and phosphorite; a very few foraminifers.

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- 120-130 Sand and Gravel — broken rounded fragments of quartz and quartzite (about 50%) and fine-grained, moderately sorted, argillaceous sand (about 50%); sand glauconitic (30-40%) and contains small amounts of phosphorite, micas, and epidote; a few shell fragments.
- 130-140 Sand and Gravel — slightly argillaceous; fine- to very-coarse-grained, rather poorly sorted, angular to subrounded sand (70-75%), and broken rounded fragments of quartz (25-30%); abundant greenish quartz; slightly glauconitic, feldspathic, and pyritic; small amount pelecypod shell fragments.

Potomac Group (140-190')

- 140-150 Clay — brownish-gray, very sandy, about 10% broken pebbles of quartz and quartzite; sand medium-grained, moderately sorted, poorly rounded; slightly glauconitic, feldspathic, and micaceous (muscovite and biotite).
- 150-160 Sand — gray; coarse- to very-coarse-grained, fairly well sorted, subangular to subrounded; about 5% potassic feldspar.
- 160-170 Gravel and Sand — broken rounded fragments (up to 30 mm) of quartz and quartzites (about 70%), and coarse, rather poorly sorted, argillaceous sand (about 30%); considerable amount of highly decomposed feldspar in sand fraction.
- 170-180 approximately 20% gravel and 80% sand-clay.
- 180-190 Sand — gray, slightly argillaceous; coarse- to very-coarse-grained, well-sorted, subangular to subrounded; slightly arkosic (white, weathered potassic feldspar).

Granitic residuum (190-220')

- 190-200 Residuum — quartz and tan clay; no other minerals distinguishable.
- 200-210 Residuum — quartz and gray clay; some potassic feldspar and biotite.
- 210-220 Residuum — quartz, potassic feldspar, biotite, a little hornblende, and drab gray clay.
- 220-227 No sample.

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GEOLOGIC SUMMARY

	<u>ROCK UNIT</u>	<u>AGE</u>
0-30	Columbia Group	Pliocene-Pleistocene
30-70	Calvert Formation	Miocene
70-140	Pamunkey Group	Eocene
140-190	Potomac Group	Lower Cretaceous
190-220	Granitic residuum (Petersburg ?)	Paleozoic
220-227	No sample	

Virginia Division of Mineral Resources
Robert H. Teifke, Geologist
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