



OWNER: Canterbury Hills #2  
DRILLER: Mitchell's  
COUNTY: James City (Williamsburg)

W#: 583  
C#: 112  
TOTAL DEPTH: 280'

GEOLOGIC LOG

Depth  
(feet)

BACONS CASTLE FORMATION (0-54)

0-3 No Sample.

3-14 Sand - dark orange; abundant clay; very fine to fine grained; subangular to subrounded; well sorted; quartz; feldspar; opaques inc. ilmenite; few weathered shell fragments; few grains of glauconite.

14-27 Sand - cream; abundant clay; fine w/some medium grains; subangular to subrounded; moderately well sorted; quartz; feldspar; opaques inc. ilmenite; few weathered glauconite grains.

27-54 Sand - light brown; abundant clay; some gray clay blebs; fine w/some medium grains; subangular to subrounded; moderately well sorted; quartz; feldspar; 3% weathered glauconite; opaques inc. ilmenite; some muscovite.

YORKTOWN FORMATION (54-104)

54-62 Sand and clay - light gray; abundant clay; fine w/some medium and coarse grains; subangular; moderately well sorted; quartz; some feldspar; 3% weathered glauconite; opaques inc. ilmenite; some muscovite.

62-66 Sand - light gray; moderate clay; fine sand to pebbles; subrounded to rounded; poorly sorted; quartz; feldspar; few grains of glauconite.

66-75 Sand and pebbles - orangish brown; heavily iron stained; slightly clayey; medium sand to pebbles; subangular to rounded; poorly sorted; quartz; feldspar; fragments of ferricrete.

75-104 Sand and coquina - gray; moderately clayey; fine w/some medium sand to pebbles; subangular to rounded; moderately sorted; 40% shell and coquina fragments; quartz; some opaques; some black phosphatic material; forams (inc. Buccella); spines.

CALVERT FORMATION (104-272)

104-138 Sand - greenish gray; moderate clay; fine grained; subangular; well sorted; quartz; 3% shell fragments; some opaques; some black phosphatic material; trace of glauconite; muscovite; abundant diatoms; spines; ostracode.

Depth  
(feet)

- 138-172 As above except light gray; abundant clay; 2% glauconite; some shell fragments; forams (inc. Buccella).
- 172-222 Clay - light gray; 15% shell fragments; 5% gypsum crystal and needles; some phosphatic material.
- 222-272 Clay and sand - dark brownish gray; 30% medium to coarse sand; subangular to rounded; 20% shell fragments; some black phosphatic material; gypsum crystals; abundant forams (inc. Bolivina, Nonion, Uvigerina and Robulus).

## NANJEMOY FORMATION (272-280+)

- 272-280 Sand and limestone - gray; clean; medium to coarse grained; subangular to rounded; moderately well sorted; quartz; 30% limestone fragments; 15% shell fragments; some black phosphatic material; few grains of glauconite; pyrite; forams rare (inc. Loxostomum (sp)). ostracode.

Note: Sp - sample taken.

GEOLOGIC SUMMARY

<u>Thickness</u> <u>(feet)</u>	<u>Rock Unit</u>	<u>Time Rock Unit</u>
54	Bacons Castle Formation	Pleistocene
50	Yorktown Formation	Pliocene-Miocene
168+	Calvert Formation	Miocene-Eocene
8+	Nanjemoy Formation	Eocene

Virginia Division of Mineral Resources  
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