

OWNER: Petersburg State Colony # 2
DRILLER: Sydnor
COUNTY: Charles City

W#: 586
C#: 108
TOTAL DEPTH: 364'

GEOLOGIC LOG

Depth
(feet)

MOORINGS "UNIT" (0-35)

- 0-14 Clay-dark yellowish orange; moderate sand; fine to medium grained; subangular to subrounded; moderately well sorted; quartz; feldspar; some opaques.
- 14-18 Clay-white; abundant sand; fine to medium grained; subangular to subrounded; moderately well sorted; quartz; feldspar; 2% opaques; some muscovite.
- 18-20 As above
- 20-35 Sand and clay - dark orange; heavily stained; moderate clay; abundant sand; coarse grained to granular, 10% pebbles; subrounded; moderately sorted; quartz; feldspar.

YORKTOWN FORMATION (35'-55')

- 35-45 Sand-olive light gray; abundant clay; coarse grained with some medium grains; subrounded; well sorted; quartz; some feldspar; few black phosphatic fragments.
- 45-55 Sand-olive light gray; abundant clay; medium to coarse grained; subangular to subrounded; moderately well sorted; quartz; feldspar; 2% shell fragments; black phosphatic material; few spines.

CALVERT FORMATION (55' - 100')

- 55-70 Clay-light olive gray; moderate sand; very fine grained; subangular to subrounded; well sorted; quartz; spines; few shell fragments; forams (inc. Buccella).
- 70-100 Clay-light olive gray; sandy; coarse to very coarse grained with some medium grains, some granules; subrounded to rounded; poorly sorted; quartz; 7% glauconite; 3% shell fragments; forams (inc. Robulus and Buccella); ostracodes.

Depth
(feet)

NANJEMOY FORMATION (100'-190')

- 100-140 Clay-light olive gray; moderate sand; fine to coarse grained, some granules; subangular to rounded; poorly sorted; quartz (some green); 35% glauconite; 10% shell fragments; forams (inc. Robulus, Dentalina, Discorbis, and Bolvina); garnet; Ostracodes; black phosphatic bone fragment.
- 140-155 No sample.
- 155-160 Clay-grayish orange, red; sandy; medium to coarse grained, few granules; subrounded; moderately sorted; quartz; 10% glauconite; forams (inc. Robulus); ostracode.
- 160-190 Clay-light olive gray; abundant sand; fine grained; subangular; well sorted; quartz; 3% glauconite; shell fragments inc. gastropods; few spines; forams scarce (inc. Globulina).

MATTAPONI FORMATION (190'-213')

- 190-209 Clay-olive gray; abundant sand; fine to medium grained with some coarse grains; few granules; few pebbles; subangular to rounded; poorly sorted; 50% glauconite; 25% quartz; 25% shell fragments; 3% gypsum crystals and aggregates; forams (inc. Buccella); ostracodes; sandy limestone fragments; bone fragment.
- 209-213 Gravel-greenish gray; sandy; coarse grained to gravel; subrounded to rounded; moderately sorted; quartz; glauconite 50% of sand-sized fraction; feldspar; sandy limestone fragments; garnet.
- 211-213 Gravel-white; 30% granules; subangular to subrounded; moderately well sorted; quartz; feldspar; 10% sandy limestone fragments.

PATUXENT FORMATION (213'-364')

- 213-233 Clay-dark yellowish orange, red, yellow; moderate sand; very fine grained to fine grained with some medium grains, some granules, 15% pebbles; subangular to subrounded; poorly sorted; quartz; feldspar; 2% muscovite.
- 233-250 Sand-white; slightly clayey-yellow, red; coarse to very coarse grained with some medium grains, some granules; subangular to subrounded; moderately well sorted; quartz; feldspar; few black phosphatic fragments.
- 250-261 No sample.

Depth
(feet)

- 261-267 Sand-white; very slightly clayey; coarse grained to granular, few pebbles; subrounded; moderately well sorted; quartz; feldspar; sandy limestone fragment.
- 267-280 No sample.
- 280-283 Sand-white; very slightly clayey; granular with some very coarse grains, some pebbles; subrounded; moderately well sorted; quartz-various colors; feldspar.
- 283-285 Sand-white; slightly clayey; coarse grained to granular, some pebbles; subrounded; moderately sorted; quartz; feldspar; few grains of garnet.
- 285-360 No sample
- 360-364 Sand and gravel-white; very slightly clayey; very coarse grained to gravel; subrounded; moderately sorted; quartz; feldspar.

Logged by: Michael T. Currie

Thickness
(feet)GEOLOGIC SUMMARY

	<u>ROCK UNIT</u>	<u>TIME ROCK UNIT</u>
35	Moorings "Unit"	Pleistocene
20	Yorktown Formation	Pliocene - Miocene
45	Calvert Formation	Miocene - Eocene
90	Nanjemoy Formation	Eocene
23	Mattaponi Formation	Eocene-Cretaceous
151 +	Patuxent Formation	Cretaceous

VIRGINIA DIVISION OF MINERAL RESOURCES
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