

OWNER: Petersburg Country Club, Inc.  
DRILLER: Sydnor Hydrodynamics, Inc.  
COUNTY: Dinwiddie (Petersburg)

VDMR: 1753  
WWCR: 28  
TOTAL DEPTH: 400'

GEOLOGIC LOG

Depth in feet

0- 10 No sample.

COLUMBIA GROUP (10-30')

10- 20 Gravel and Sand — tan, slightly clayey; 50% fine-grained sub-  
rounded gravel (up to 6 mm), and 50% poorly-sorted  
sand; arkosic (white and gray potassic feldspar).

20- 30 "

YORKTOWN FORMATION (30-124')

30- 40 Gravel and Sand — gray, moderately clayey; 40% fine-grained  
gravel, 40% poorly-sorted sand, and 10-15% shell  
fragments (pelecypods, and a few gastropods and  
echinoderms).

40- 50 Shell marl — gray; 50% shell, 30% sand and granules, and 20%  
gray clay.

50- 60 " 40% shell, 50% sand, and 10%  
gray clay.

60- 70 " 40% shell, 30% sand, and 30%  
gray clay; a few foraminifers  
and ostracods.

70- 80 " "

80- 90 " "

90-100 " "

100-110 " "

110-118 Sand — gray, moderately clayey; coarse- to very coarse-grained,  
moderately sorted, subangular to subrounded; a few  
shell fragments.

118-124 " slightly clayey, coarse-grained  
sand to granules.

## PATUXENT FORMATION (124-175')

#1753

- 124-135 Gravel and Sand — gray, very slightly clayey; 80% granule gravel, 20% sand; arkosic; much of quartz has greenish cast; small amount of garnet, traces of pyrite, glauconite and carbonophosphorite; scattered shell fragments and fish teeth.
- 135-145 "
- 145-155 "
- 155-165 " about 15% saprolite.
- 165-175 Gravel, Sand, and Granite — very slightly clayey; 50% granule gravel, 20% sand; arkosic (potassic feldspar and perthite); small amounts of garnet and black to brown phosphorite; traces of pyrite and glauconite; shell fragments moderately abundant; about 30% granitic rock fragments.

## PETERSBURG GRANITE (175-400')

- 175-185 Biotite-microcline granite — white and pink, mottled; 65% potassic feldspar, 25% quartz, 10% biotite, traces of pyrite and magnetite.
- 185-195 "
- 195-205 "
- 205-215 "
- 215-225 Pegmatite-biotite gneiss — pyrrhotite, chalcopyrite, specular hematite, garnet, acicular pink-rubellite?.
- 225-235 Biotite-microcline granite — mottled white and pink; potassic feldspar, quartz, biotite, and traces of pyrite and magnetite.
- 235-245 "
- 245-255 "
- 255-265 "
- 265-275 "
- 275-285 "
- 285-295 "

295-305	Biotite-microcline granite — mottled white and pink; potassic feldspar, quartz, biotite, and traces of pyrite and magnetite.
305-315	"
315-325	"
325-335	"
335-345	"
345-355	"
355-365	"
365-375	"
375-385	"
385-395	"
395-400	"

#### GEOLOGIC SUMMARY

	<u>Rock Unit</u>	<u>Age</u>
0-10	No sample	
10-30	Columbia Group	Pleistocene
30-124	Yorktown Formation	Miocene
124-175 (?)	Patuxent Formation	Early Cretaceous
175 (?) -400	Petersburg Granite	Late Paleozoic

Note: Detrital material is dominant in the 155-165' and 165-175' intervals. The gravel-granite contact is probably in the 165-175' interval, the granitic material in the 155-165' interval being saprolite and fragments of granite float. Granite samples in the 295-302' and 310-320' intervals were pulverized by the drill, making complete identification difficult.

Virginia Division of Mineral Resources  
R. A. Teifke and R. S. Good, Geologists  
January 27, 1967