

OWNER: Richard Bland College  
DRILLER: Sydnor Hydrodynamics, Inc.  
COUNTY: Dinwiddie (Petersburg)

VDMR: 1894  
WWCR: 29  
TOTAL DEPTH: 170'

GEOLOGIC LOG

Depth in feet

COLUMBIA GROUP (0-30')

- 0-10 Sand - abundant matrix of yellowish-brown clay; fine- to very-coarse grained, poorly sorted, angular; slightly feldspathic; trace of hematite
- 10-20 Clay - variegated pink, purple, and pale green; about 25% poorly-sorted quartzo-feldspathic sand
- 20-30 Sand and Gravel - abundant matrix of yellow clay; 30% granule gravel (quartz and feldspar); medium- to very-coarse grained, rather poorly-sorted, angular to subangular; feldspathic (weathered); minor epidote, hematite, garnet, kyanite, and pyrolusite or quartz

YORKTOWN FORMATION (30-120')

- 30-40 Clay - gray, locally tan; trace of sand
- 40-50 Shell - non-abraded pelecypod shell fragments up to 4 mm; subordinate amount (about 20%) of poorly-sorted quartz sand; interclastic medium-gray clay; a few foraminifers, mostly miliolids
- 50-60 Shell - non-abraded pelecypod shells and shell fragments, and a few echinoid spines and worm borings; about 20% medium- to coarse-grained, angular quartz sand; interclastic grayish-brown clay
- 60-70 Sand and Shell - 50% medium- to coarse-grained, angular to subangular quartz sand; 50% pelecypod shell fragments, and a few gastropod shells, echinoid spines, and worm borings; minor feldspar, green epidote, platey black phosphorite, garnet, magnetite, and kyanite
- 70-80 "
- 80-90 Shell - slightly-clayey; pelecypod shells and coarse shell fragments, with some gastropods, including Turritella, corals, echinoid spines, worm tubes, miliolid foraminifers, and ostracods; 10-15% medium-grained quartz sand
- 90-100 " 25-30% poorly-sorted, angular quartz sand

100-110 Shell and Sand - tan clay binders; 50% shell fragments, mostly pelecypod; 50% medium-grained angular to subangular quartz sand; garnet, and green epidote present

110-120 "

PATUXENT FORMATION (120-170')

120-130 Sand and Gravel - grayish-brown, slightly clayey, 5% shell fragments; 30% granule gravel, poorly-rounded quartz, feldspar, and various rock fragments; 65% fine- to very-coarse grained, poorly-sorted, poorly-rounded sand; moderately feldspathic; minor garnet, epidote, glauconite, and magnetite; black plates and irregular fragments of phosphatic material common

130-140 " 40% very-fine-grained (2-10 mm), poorly-rounded, lithic gravel; 55% coarse, poorly-rounded quartz sand; feldspathic; 5% shell

140-150 " 65% gravel, 30% sand, 5% shell

150-160 " 75% gravel, 20% sand, 5% shell

160-170 " 55% gravel, 40% sand, 5% shell

170-173 No sample

GEOLOGIC SUMMARY

	<u>Rock Unit</u>	<u>Age</u>
0-30'	Columbia Group	Pleistocene
30-120'	Yorktown Formation	Late Miocene
120-170'	Patuxent Formation	Early Cretaceous
170-173	No sample	

Virginia Division of Mineral Resources  
Robert H. Teifke - Geologist  
October 18, 1967