

OWNER: Union Camp Company, well #14
DRILLER: Layne-Atlantic Company
COUNTY: Isle of Wight (Franklin)

VDMR: 1640
WWCR: 203
TOTAL DEPTH: 878'

GEOLOGIC LOG

Depth (feet)

COLUMBIA GROUP (0-25')

0 - 25 Clay — mottled-gray and orange-brown, slightly silty and sandy.

CHESAPEAKE GROUP (25-155')

25 - 68 Sand — buff, slightly silty and argillaceous; fine- to medium grained, well sorted, angular to subangular; slightly feldspathic; traces of muscovite, glauconite, and lignite.

68 - 95 Sand — gray, moderately argillaceous (buff clay); medium- to coarse-grained, fairly well-sorted, subangular to subrounded; slightly feldspathic; trace of glauconite.

95 - 155 Sand — gray, clean; medium grained, well-sorted, subangular; trace of phosphorite; about 5% shell fragments.

PAMUNKEY GROUP (155-312')

155 - 186 Limestone — gray to buff, contains abundant quartz-glauconite sand, and fine, rounded quartz gravel; both fresh and oxidized glauconite abundant; pyrite locally abundant; shell material moderately abundant (pelecypods, gastropods, bryozoans, corals, fish teeth, and a few foraminifers and ostracods).

186 - 202 Sand — black, silty and argillaceous ("dirty"); fine- to very fine-grained, well-sorted; 50% fresh glauconite, and 50% clear to green angular quartz; foraminifers, ostracods, fine shell fragments, and echinoid spines moderately abundant.

202 - 234 Sand and Limestone — sand (50%) is dark gray, moderately argillaceous (pinkish-brown clay); medium grained, fairly well-sorted; 60-70% fresh glauconite, and 30-40% poorly rounded quartz; a few foraminifers and ostracods. Limestone (50%) is gray to buff, sandy (glauconitic), contains abundant quartz granule gravel, pelecypods, gastropods, corals, bryozoans, pyrite concentrations, and a few phosphate nodules.

234 - 275 Sand — black, trace of clay; medium grained, well sorted; fresh glauconite with about 20% quartz and a very few large *Aquia* foraminifers.

275 - 312

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POTOMAC GROUP (312-812')

- 312 - 338 Sand — brownish gray (speckled) very slightly silty and argillaceous; medium- to coarse-grained, moderately sorted, subangular to subrounded; 80-85% quartz, and 15-20% fresh glauconite; slightly arkosic; trace of muscovite.
- 338 - 460 Sand — brown, very slightly-argillaceous; coarse- to very coarse-grained, well sorted, subangular to subrounded; slightly arkosic; 5-10% glauconite; traces of garnet and muscovite.
- 460 - 513 Sand and Gravel — reddish brown, moderately argillaceous (reddish clay), 20-30% granule gravel; medium to very coarse-grained, fairly well-sorted (skewed coarse), subangular to subrounded; moderately arkosic; very slightly glauconitic; a very few shell fragments.
- 513 - 600 Sand — brownish gray ("salt-and-pepper"), very silty; fine to coarse-grained, rather poorly-sorted; moderately arkosic and glauconitic.
- 600 - 700 Sand — brown; very slightly-argillaceous, 10-20% granule gravel; coarse to very coarse-grained, fairly well-sorted; moderately arkosic; slightly glauconitic.
- 700 - 722 Sand — brown, slightly argillaceous; medium to coarse-grained, well sorted, subangular to subrounded; moderately arkosic; very slightly glauconitic.
- 722 - 812 "
- 812 - ? "
- 812 - 878 No samples

	<u>ROCK UNIT</u>	<u>AGE</u>
0 - 25	Columbia Group	Pliocene-Pleistocene
25 - 155	Chesapeake Group	Miocene
155 - 312	Pamunkey Group	Eocene
312 - 812	Potomac Group	Early Cretaceous
812 - 878	No samples	

Virginia Division of Mineral Resources
 Robert H. Teifke - Geologist
 August 9, 1966