



OWNER: Union Camp Company, well #12  
DRILLER: Layne-Atlantic Company  
COUNTY: Isle of Wight (Franklin)

VDMR: 1638  
WWCR: 201  
TOTAL DEPTH: 878'

### GEOLOGIC LOG

Depth (feet)

#### COLUMBIA GROUP ( 0-25' )

0 - 25 Clay — gray, with orange-brown mottles; slightly silty and sandy.

#### CHESAPEAKE GROUP ( 25-155' )

25 - 68 Sand — brown, slightly silty and argillaceous; fine- to medium-grained, well-sorted, subangular; traces of muscovite, decomposed feldspar, light-green glauconite, and lignite.

68 - 95 Sand — brownish-gray, moderately argillaceous; medium- to coarse-grained, fairly well-sorted, subangular to slightly sub-rounded; limpid quartz, with traces of glauconite, phosphorite, and feldspar.

95 - 155 Sand — brownish-gray, very slightly argillaceous; medium- to coarse-grained, fairly well-sorted, angular to subangular; limpid quartz, with traces of phosphorite and glauconite; about 5% shell fragments and a few foraminifers and ostracods.

#### PAMUNKEY GROUP ( 155-321' )

155 - 186 Limestone — gray to buff, contains abundant quartz-glauconite sand and fine, rounded quartz gravel; glauconite is both green and brown; gravel contains a few phosphorite nodules; pyrite locally abundant; shells moderately abundant (pelecypods, gastropods, bryozoa, corals, and fish teeth).

186 - 202 Sand — dark-gray, silty and argillaceous ("dirty"); fine- to very fine-grained, well-sorted; 60-70% fresh glauconite, and 30-40% clear to greenish angular quartz; abundant foraminifers, ostracods, fine shell fragments, and echinoid spines.

202 - 234 Sand and Limestone — sand (40-50%) is grayish-brown, moderately argillaceous (dull-brown clay); medium grained, well sorted; about 65% fresh glauconite, and 35% angular to subangular clear quartz, with a very few foraminifers and ostracods. Limestone (60-50%) is gray to buff, contains abundant quartz-glauconite and quartzose-granule gravel, fossils (pelecypods, gastropods, corals, and bryozoans) a few phosphate nodules, and localized pyrite accumulations

234 - 275 Sand - black, very slightly argillaceous; medium-grained; well-sorted; fresh glauconite with about 20% quartz, a trace of mica, and a very few foraminifera.

275 - 312 "

POTOMAC GROUP ( 312-812')

312 - 338 Sand - brownish-gray, slightly silty; medium- to coarse-grained, moderately sorted, subangular; 85% quartz, 15% glauconite.

338 - 460 Sand - brown, very slightly argillaceous; coarse- to very coarse-grained, well-sorted, subangular to subrounded; moderately arkosic; 5% glauconite; traces of garnet and muscovite.

460 - 513 Sand and Gravel - grayish-brown; 50% granule gravel, and 50% poorly-sorted sand; arkosic; very slightly glauconitic; scattered chunks of tight red clay; a few shell fragments.

513 - 600 Sand - brown ("salt-and-pepper"), very silty; fine-to coarse-grained, rather poorly-sorted; moderately arkosic and glauconitic; a few foraminifera.

600 - 700 Sand and Gravel - buff, very slightly argillaceous; sand (70%) is coarse- to very coarse-grained; gravel (30%) consists of granules; moderately arkosic; trace of glauconite.

700 - 722 Sand - buff, slightly argillaceous; medium- to coarse-grained, well-sorted, subangular to subrounded; moderately arkosic; very slightly glauconitic.

722 - 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	