OWNER: Windsor Improvement Co. (Robinson) VDMR: 2109
DRILLER: R. L. Magette Well Drilling Co. WWCR: 207
COUNTY: Isle of Wight (Windsor) TOTAL DEPTH: 460'

GEOLOGIC LOG

Depth in feet	
	COLUMBIA GROUP (0-60') Top of formation defined on basis of other information.
20	Sand - tan, slightly clayey; medium-grained, fairly well-sorted, angular to subrounded; moderately feldspathic
40	Sand - gray, trace of clay; medium- to very coarse-grained, moderately sorted, subangular; moderately feldspathic; traces of muscovite, chlorite, epidote, and chert
	YORKTOWN FORMATION (60-212')
60	Sand - brownish-gray, moderately clayey; fine- to very coarse-grained, poorly sorted; quartz-bioclastic with minor feldspar; foraminifers moderately abundant, ostracods common
80	Sand and Gravel - abundant matrix of greenish-gray clay, 5 percent coarse pelecypod shell fragments; 40 percent granule gravel; 60 percent fine- to medium-grained, fairly well-sorted quartzo-bioclastic with minor feldspar; foraminifers moderately abundant, ostracods common
100	Sand - very abundant matrix of greenish-gray clay, 5 percent coarse shell fragments; very fine- to medium-grained, moderately sorted; angular to subangular quartz with 30 percent bioclasts and trace of glauconite; foraminifers common
120	Shells and Sand - matrix of greenish-gray clay; 70 percent large pelecypod shell fragments; 30 percent coarse- to very coarse-grained, subangular to subrounded, slightly feldspathic sand
140	" 50 percent shell, 50 percent sand
160	Sand - greenish-gray, slightly clayey, a few large shell fragments; fine-grained, well-sorted, angular, small amounts of fine-grained glauconite and bone phosphorite; foraminifers common (Nonion) but not abundant
180	Sand - greenish-gray, slightly clayey, a few large shell fragments; fine-grained, well-sorted, angular; small amounts of fine-grained glauconite and bone phosphorite; foraminifers common (Nonion) but not abundant, 5 percent shell fragments

OWNER: Windsor Improvement Co. (Robinson) #2109

200 As 180, but with 10-20 percent shell fragments

CALVERT FORMATION (212-260') Top of formation defined on basis of other information.

220 Clay and Shell - 60 percent greenish-gray, silty, slightly sandy clay; 40 percent coarse pelecypod (gastropod) shell material; sand fraction is fine- to coarse-grained, rather poorly sorted clear quartz with minor phosphorite and trace of glauconite; a few foraminifers

240 Sand - gray, slightly clayey, a few shell fragments and small pebbles up to 6 mm; coarse-grained, fairly well-sorted, subrounded clear quartz with 10 percent bone and nodular phosphorite

MATTAPONI FORMATION (260-310')

260 Sand - grayish-green, very slightly clayey; medium- to coarse-grained, fairly well-sorted, dark- to light-green glauconite; less than 5 percent quartz; pyrite common

280 " medium-green to bluish-green glauconite; with some replacement of glauconite by pyrite; about 10 percent quartz

300 " medium- to very coarse-grained, dominantly blackish-green glauconite; 20 percent quartz

TRANSITIONAL BEDS (310-415') Top of formation defined on basis of other information.

320 Clay - great, moderately sandy; sand is fine- to very coarse-grained, poorly sorted; 60 percent dominantly fine, angular quartz, and 40 percent dominantly medium- to very coarse-grained, dark- to light-green glauconite; micaceous; pyrite common; phosphorite rare; accessory garnet; a very few foraminifers; trace of glauconitic limestone

340 " clay is brightly variegated with reddish-brown aspect

360 Sand - reddish-brown clay binder; coarse- to very coarse-grained, well-sorted, poorly rounded; clear and yellow-stained quartz with 10 percent weathered feldspar

380 " very coarse-grained, poorly rounded; abundant, chalky-white, partially decomposed potassic feldspar

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400 Gravel - brown, moderately clayey (variegated clay), 25 percent very fine- to medium-grained, moderately sorted, angular sand; 75 percent well-sorted, subangular to rounded granule gravel; sand is moderately micaceous, slightly glauconitic; gravel is quartzo-feldspathic; garnet common

PATUXENT FORMATION (415-460') Top of formation defined on basis of other information.

420 Sand - brown, moderately clayey; fine- to coarse-grained, poorly sorted, angular; slightly to moderately feldspathic; slightly micaceous and glauconitic

440 Sand - brown, very slightly clayey; coarse- to very coarse-grained, well-sorted, subangular to subrounded; slightly to moderately feldspathic

460 " very coarse-grained, feldspathic

GEOLOGIC SUMMARY

	Rock Unit	Age
0-60	Columbia Group	Pleistocene
60-212	Yorktown Formation	Miocene
212-260	Calvert Formation	Miocene
260-310	Mattaponi Formation	Paleocene - Late Cretaceous
310-415	Transitional beds	Late Cretaceous
415-460	Patuxent Formation	Early Cretaceous

Virginia Division of Mineral Resources
Robert H. Teifke, Geologist
March 15, 1968

Robert H, Teifke
March 6, 1972