INTERVAL SHEET

WWCR: 115

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VDMR Well No: 1923

Date rec'd:

Sample Interval: from 20' to: 500'

PROP: Virginia Electric and Power Co. Well "D"

Number of samples: 25

COMP: R. L. Magette

Total Depth: 500'

COUNTY: Surry (Bacon's Castle)

Oil or Gas: Water: X Exploratory:

From-To	From-To	From-To	From-To
20 -	-	-	-
40 -	-	-	-
60 -	-	-	-
80 -	-	-	-
100 -	-	-	-
120 -	-	-	-
140 -	-	-	-
160 -	-	-	-
180 -	-	-	-
200 -	-	-	-
220 -	-	-	-
240 -	-	-	-
260 -	-	-	-
280 -	-	-	-
300 -	-	-	-
320 -	-	-	-
340 -	-	-	-
360 -	-	-	-
380 -	-	-	-
400 -	-	-	-
420 -	-	-	-
440 -	-	-	-
460 -	-	-	-
480 -	-	-	-
500 -	-	-	-
		used blender	
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

All intervals have both washed and unwashed samples

OWNER: Virginia Electric and Power Company, Well "D" VDMR: 1923
DRILLER: R. L. Maggette Company WWCR: 115
COUNTY: Surry (Bacon's Castle) TOTAL DEPTH: 400'

GEOLOGIC LOG

Depth in feet

COLUMBIA GROUP

20 Clay - mottled tan and gray, very sandy, 15% very fine-grained gravel (2-6 mm); sand is fine- to coarse-grained, rather poorly-sorted, angular to subangular; abundant white, partially decomposed feldspar; goethite and ferricrete common; sand grains commonly iron-oxide stained; minor constituents include fresh hornblende, green epidote, muscovite, magnetite, garnet, kyanite, decomposed glauconite, pyrite, and various rock fragments

40 Sand - brownish-gray, very clayey; very fine-grained, well sorted, angular; abundant hornblende, mica, vivianite, and organic material

60 Sand - trace of clay; medium- to coarse-grained, moderately sorted, angular to subangular; clear quartz, feldspar, green hornblende, green epidote; minor garnet and yellow phosphorite

80 Sand - gray, mottled tan, very clayey; fine- to very fine-grained, well sorted, angular; abundant hornblende, mica, and vivianite; minor feldspar, garnet, and green epidote

100 " "

YORKTOWN FORMATION

120 Clay - greenish-gray, sandy, 25% pelecypod shell fragments; fine- to very fine-grained, well sorted, angular; moderately micaceous; abundant fragments of black pyritic mud; foraminifers common (miliolids, Nonion) but not abundant

CALVERT FORMATION

140 Clay - bluish-gray, very slightly sandy, 5% pelecypod shell fragments; abundant pyrite microconcretions, and foraminifers moderately abundant (Nonion dominant)

160 " "

OWNER: Virginia Electric and Power Co., Well "D" #1923

180 Clay - greenish-gray, silty; a few shell fragments, bone fragment, pyrite microconcretions, and foraminifers

200 Clay - gray and compact to greenish-gray and silty; a few pyrite microconcretions

CHICKAHOMINY FORMATION

220 Sand - gray-clay matrix; medium- to coarse-grained, moderately sorted, subangular to rounded; clear quartz, with 15% pelecypod and gastropod shell fragments, and 10% brown phosphatic bone fragments; foraminifers common (broken forms dominant); fragments of glauconite and pyritic, fossiliferous white limestone are common

240 Sand - sparse binder of drab clay, a few fragments of glauconitic limestone; coarse grained, well sorted; 75% goethite after glauconite, 25% subrounded to rounded, clear-to-yellowish quartz, a few shell fragments; allocthonous

MATTAPONI FORMATION

260 Sand - black, sparse binder of drab clay; a few shell fragments; medium- to coarse-grained, fairly well-sorted, blackish-green to medium-green lobate glauconite with minor quartz; autocthonous

280 Clay - pink, compact, sandy; sand is medium- to coarse-grained, fairly well-sorted, blackish- to medium-green lobate glauconite; authocthonous; shell fragments and echinoid spines common; abundant foraminifers (small forms)

300 Sand - black, trace of clay; coarse-grained, well-sorted, grass-green, lobate glauconite

320 " "

340 Sand - abundant matrix of tan-gray clay, trace of fine gravel; fine- to coarse-grained, moderately sorted; 65% dark- to medium-green lobate glauconite, and 35% clear, angular quartz; minor feldspar, pyrite, garnet, phosphorite, and shell; a few fragments of glauconitic limestone

OWNER: Virginia Electric and Power Company, Well "D" #1923

PATUXENT FORMATION

360	Sand - gray, speckled, clean; coarse-grained, well sorted, subangular to subrounded; clear quartz (70%), blackish-green lobate glauconite (15%), and partially decomposed potassic feldspar (15%); minor garnet, pyrite
380	Sand - gray, very slightly clayey; very coarse-grained, well sorted, subangular; feldspathic (fresh potassic feldspar); minor garnet; slightly glauconitic
400	" "
420	" coarse- to very coarse-grained, well-sorted
440	" "
460	Sand - gray, very slightly clayey, 10% granule gravel; coarse- to very coarse-grained, fairly well-sorted, subangular to rounded; very feldspathic (fresh potassic feldspar; slightly glauconitic; minor garnet and pyrite; traces of epidote and kyanite
480	" "
500	" "

GEOLOGIC SUMMARY

*Approximate Thickness	Rock Unit	Age
0-100'	Columbia Group	~~Pleistocene~~ Post Miocene
100-120'	Yorktown Formation	~~Late~~ Miocene
120-200'	Calvert Formation	~~Middle~~ Miocene
~~200-220'~~	~~Chickahominy Formation~~	~~Late Eocene~~
200-240'?	Nanjemoy Formation	~~Middle~~ Eocene
240-340'	Mattaponi Formation	Paleocene - Late Cretaceous
340-500'	Patuxent Formation	Early Cretaceous

* Depths of formation contacts cannot be accurately assigned as samples were unfortunately collected only at 20-foot intervals.

Virginia Division of Mineral Resources
Robert H. Teifke, Geologist
October 31, 1967

Revised March 3, 1972 ? (see 1923)

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