

INTERVAL SHEET

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VDMR Well No: 2019

Date rec'd: 10-16-67

Sample Interval: from 0 to: 150

PROP: N & W RR. Well # 214

Number of samples: 15

COMP:

Total Depth: 150

COUNTY: Sussex

Oil or Gas: Water: Exploratory: X

From-To	From-To	From-To	From-To
0 - 10	-	-	-
10 - 20	-	-	-
20 - 30	-	-	-
30 - 40	-	-	-
40 - 50	-	-	-
50 - 60	-	-	-
60 - 70	-	-	-
70 - 80	-	-	-
80 - 90	-	-	-
90 - 100	-	-	-
100 - 110	-	-	-
110 - 120	-	-	-
120 - 130	-	-	-
130 - 140	-	-	-
140 - 150	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

All intervals have both washed and unwashed samples

VDMR Well No. 2019
County: Sussex

Well: N & W RR. Well # 214
Property: Norfolk and Western Railway
Driller: Norfolk and Western Railway
Location: Waverly station yard, on NW side of town;
77° 06' 00" W, 37° 02' 30" N
Elevation: 115 feet
Total Depth: 150 feet
Started drilling: October, 1966 Completed drilling: October, 1966
Sample description by: R. H. Teifke, Virginia Division of Mineral
Resources, September, 1968

GEOLOGIC LOG *

Depth in
feet

✓
COLUMBIA GROUP (0-^{30'}~~20'~~)

0-10 Sand — abundant matrix of orange-brown clay; fine- to medium-grained, well-sorted, angular; clear and iron-stained quartz, with small amounts of decomposed feldspar and glauconite; traces of magnetite and muscovite

10-20 Clay — light-gray and orange-brown, slightly to moderately sandy; sand consists of fine-grained, well-sorted, angular, clear and iron-stained quartz, with small amounts of decomposed feldspar and glauconite and a trace of muscovite

✓
YORKTOWN FORMATION (³⁰~~20~~-130')

20-30 Clay — light-gray, locally tan to orange-brown, silty, slightly sandy; sand is fine- to very fine-grained, well sorted, angular; clear quartz with abundant selenite; minor amounts of magnetite, muscovite, and glauconite

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- 30-40 Clay, shells and sand — dark greenish-gray; 45% silty clay; 35% pelecypod shells and shell fragments; 20% fine -to coarse-grained, poorly sorted quartz sand with small amounts of glauconite and selenite; a few Textularia, Cibicides, miliolids, and ostracods
- 40-50 " 30% clay, 60% shell material, 10% sand
- 50-60 Shell — relatively coarse pelecypod shells and shell fragments, and a few scaphopods, echinoid spines, bryozoans, gastropods and worm tubes; matrix consists of slightly clayey, poorly sorted, slightly glauconitic quartz sand; locally a calcitic sandstone; trace of gypsum; a very few textularids, miliolids, and planospiral foraminifers
- 60-70 "
- 70-80 "
- 80-90 Sand and shell — binder of dark greenish-gray clay; 50% coarse pelecypod shell fragments; 50% fine--to very fine-grained, very well-sorted, angular quartz sand; very slightly glauconitic; a few foraminifers and ostracods
- 90-100 " 65% slightly glauconitic sand, 35% shell
- 100-110 Sand — binder of greenish-gray clay, 20% small pelecypod and scaphopod shell fragments; fine--to very fine-grained, very well-sorted; sand consists of 80% angular, clear quartz, and 20% dark-green glauconite; small gastropods, echinoid spines, ostracods, and foraminifers (Nonion and Textularia) are common
- 110-120 Clay — greenish-gray, 20% molluscan shell fragments, moderately sandy; sand is fine--to coarse-grained, rather poorly sorted, angular to subangular; clear quartz, with abundant selenite and a trace of glauconite; Nonion common; a few ostracods
- 120-130 " slightly gypsiferous

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MATTAPONI FORMATION (130-150')

130-140 Sand -matrix of tan, dark-gray, and greenish-gray clays, a few shell fragments and phosphate nodules; very fine--to medium-grained, well-sorted; 60% clear, angular quartz, 35% dark--and light-green glauconite, 5% selenite; traces of pyrite, garnet, muscovite, and feldspar

140-150 " 60% dominantly dark-green glauconite, 40% quartz; minor selenite

GEOLOGIC SUMMARY

	<u>Rock Unit</u>	<u>Age</u>
✓ 0-2030	Columbia Group	Pleistocene
30 20-130	Yorktown Formation	Late Miocene
130-150	Mattaponi Formation	Paleocene - Late Cretaceous

* The use of the lithologic term, "clay" includes all size ranges of particles less than 1/32 mm.

R. H. Teifler
3/3/72

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