



VDMR Well No. 2020  
County: Prince George

Well: N. & W. RR. Well # 216  
Property: Norfolk and Western Railway  
Driller: Norfolk and Western Railway  
Location: 1.0 mile NW of Disputanta on NWRR right-of-way;  
77° 14' 45" W, 37° 08' 00" N  
Elevation: 110 feet  
Total Depth: 110 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 ( 0-20' )

0-10 Clay -- variegated, with orange-brown aspect, very sandy; sand is fine-grained, well-sorted, angular; clear and iron-stained quartz, with minor amounts of carbonaceous material, decomposed glauconite, and magnetite; traces of muscovite and decomposed feldspar and shell fragments

10-20 Sand -- matrix of bright, variegated clay; very fine--to medium-grained, fairly well-sorted, angular; slightly feldspathic; very slightly micaceous; trace of decomposed glauconite

✓ YORKTOWN FORMATION ( 20-<sup>52'</sup>~~100'~~ )

20-30 Sand and shell -- binder of orange-brown clay; 30% pelecypod (-gastropod,-bryozoan-echinoderm ) shell fragments; 70% fine--to medium-grained, fairly well-sorted sand; sand consists of 85 % angular to subrounded, clear and iron-stained quartz, and 15% partially decomposed glauconite; trace of selenite; a few foraminifers and ostracods

- 30-40 Shell — gray, slightly sandy and clayey; pelecypod shells and shell fragments, and a few gastropods, bryozoans, and echinoderms; sand matrix is fine--to coarse-grained, rather poorly sorted, slightly glauconitic; foraminifers and ostracods moderately abundant
- 40-~~50~~<sup>52</sup> Clay — gray, compact, slightly sandy, 5% pelecypod shell fragments, abundant anhydrite pseudomorphs after selenite; sand fraction is fine-grained, fairly well-sorted, angular, slightly glauconitic; minor muscovite; ostracods common; a very few foraminifers
- MATTAPONI FORMATION (52-108')*
- ~~50~~-60 Shell and sand — gray, moderately clayey; 65% pelecypod shell fragments and echinoid plates, and a few gastropods and bryozoans; 35% medium-grained, fairly well-sorted, angular to subangular, slightly glauconitic, clear quartz sand; numerous fragments of calcitic sandstone; ostracods common; a few foraminifers
- 52
- 60-70 Shell — sparse matrix of sand and brownish gray clay; very abraded blue-gray shell fragments weakly cemented by carbonate; sand matrix is fine--to medium-grained, well-sorted, angular, slightly glauconitic; ostracods and foraminifers common, but not abundant
- 70-80 Shell — sparse matrix of sandy gray clay; relatively coarse pelecypod shells and shell fragments, and a few gastropods, echinoid spines, and bryozoans; a very few ostracods and foraminifers
- 80-90 Shell and sand — moderately abundant matrix of dark, greenish-gray clay; 60% coarse pelecypod shell fragments; 40% fine--to medium-grained, well-sorted, angular to subangular clear quartz sand; locally a calcitic, fossiliferous sandstone; small amount of nodular and bone phosphorite

<sup>108</sup>  
 90-100 Sand — abundant matrix of drab-green silty clay, a few coarse pelecypod shell fragments; fine-grained, well-sorted, angular, clear and pale-green quartz; abundant small fragments and a few large nodules of phosphorite; trace of glauconite

PATUXENT FORMATION ( <sup>108</sup>100-110')

<sup>108</sup>  
 100-110 Gravel —slightly sandy, trace of clay, a few large, abraded shell fragments; fine-grained (2-20 mm), subrounded to rounded; composed of green-stained quartz, and subordinately, of feldspar and quartzite; accessory coarse garnet

GEOLOGIC SUMMARY

	<u>Rock Unit</u>	<u>Age</u>
0-20	Columbia Group	Pleistocene
20-100 <sup>52</sup>	Yorktown Formation	<del>Early</del> Miocene
<sup>52-108</sup> 100-110	<del>Mattaponi Formation</del> Patuxent Formation	<del>Paleocene - Late Cretaceous</del> Early Cretaceous
<sup>108</sup>		

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

R. H. Tarpe  
 3/3/72

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GILBERT BOND