



VDMR Well No. 2014  
County: Sussex

Well: N. & W. RR. Well # 215  
Property: Norfolk and Western Railway  
Driller: Norfolk and Western Railway  
Location: 1.8 miles SE of Prince George Co. line on NWRR  
right-of-way;  $77^{\circ} 09' 30''$  W,  $37^{\circ} 04' 45''$  N  
Elevation: 120 feet  
Total Depth: 140 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 Sand — yellowish-brown, clear; coarse--to very coarse-grained, well-sorted, angular; clear and iron-stained quartz, with appreciable intensely decomposed feldspar and some blue quartz; traces of garnet and chert

10-20 Sand and gravel — brown, clayey; 50% fine (2-12 mm) rounded, quartzo-feldspathic gravel; 50% fine--to very coarse-grained, poorly sorted, angular to rounded sand; clear and iron-stained quartz, with subordinate decomposed feldspar, minor decomposed glauconite, and traces of magnetite and chert

✓  
YORKTOWN FORMATION ( 20-100')

20-30 Shell and sand — binder of gray clay, locally orange-brown; 60% coarse abraded shells and shell fragments of pelecypods, gastropods, echinoderms and bryozoans; 40% fine--to coarse-grained, rather poorly sorted sand composed of quartz, rounded bioclasts and a small amount of glauconite; a few foraminifers and ostracods

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- 30-40 " 70% shell, 30% sand; foraminifers and ostracods common; a few bone fragments
- 40-50 " 60% shell, 40% medium- to coarse-grained angular quartz sand; ostracods common; a very few foraminifers
- 50-60 Sand - abundant matrix of dark greenish-gray clay; 5% pelecypod shell fragments; fine- to medium-grained, well-sorted, angular; clear and greenish quartz, with 5% dark-green glauconite and relatively abundant selenite; Cibicides and ostracods common, but not abundant
- 60-70 "
- 70-80 "
- 80-90 " with 10% shell fragments
- 90-100 Sand - abundant matrix of greenish-gray clay, a few shell fragments and phosphate nodules; very fine- to medium-grained, fairly well-sorted; 80% angular quartz, 15% dark-green glauconite, 5% selenite; a very few foraminifers and ostracods

✓ MATTAPONI FORMATION ( 100-130' )

- 100-110 Sand - binder of brown and dark-gray clays, a very few shell fragments and phosphate nodules; medium-grained, fairly well-sorted; 65% dark- and medium-green glauconite, 30% clear, angular quartz, and 5% selenite
- 110-120 " fine- to coarse-grained, moderately sorted; 85% dark-green glauconite, 15% clear, angular quartz; minor selenite; a very few foraminifers
- 120-130 Sand and gravel - binder of dark brownish-gray clay; gravel fraction (30% ) consists of small (2-8mm) rounded pebbles of greenish quartz, and a few of feldspar; sand is predominantly fine-grained, well-sorted, glauconitic, and subordinately bioclastic and micaceous, with a subordinate admixture of coarse, poorly rounded quartz sand; a few foraminifers and ostracods; trace of garnet

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✓ PATUXENT FORMATION ( 130-140')

130-140 Gravel and sand — gray, slightly clayey; 70% fine (2-20 mm), subangular to subrounded gravel, 30% coarse--to very coarse-grained, angular to subangular sand; clear and greenish-quartz, fresh feldspar, and a few fragments of quartzitic rock; minor garnet

GEOLOGIC SUMMARY

	<u>Rock Unit</u>	<u>Age</u>
0-20	Columbia Group	Pleistocene
20-100	Yorktown Formation	<u>Late</u> Miocene
100-130	Mattaponi Formation	Paleocene - <i>Late Cretaceous</i>
130-140	Patuxent Formation	Early Cretaceous

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

R. H. Terfhe  
3/3/72

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County : Sussex

VDMP- Well No. 2014

Well : SUS-T-4 (USGS)

Property : Norfolk and Western Railroad <sup>W24</sup>

Driller : ~~Continental Oil Co.~~ Norfolk and Western Railway

Location : 1.8 miles SE of Prince George Co. line, on  
NWR right-of-way;  $77^{\circ}09'30''$  W,  $37^{\circ}04'45''$  N.

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References : no specific reference

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Depth (feet)	Thickness (feet)	Formation (and remarks)
0-20	20	Columbia Group
+100- 20-100	80	Yorktown Formation
+20 100-130	30	Mattaponi Formation
-10 130-140	10	Potuxent Formation