



Well: DVL (Drewryville)  
 Property: State road right-of-way  
 Driller: Froehling and Robertson  
 Location: near Drewryville, on Rte. 659 and 0.4 mile N of  
 Rte. 652  
 Elevation: 50 feet  
 Total Depth: 50 feet  
 Started drilling: June 1968 Completed drilling: June 1968  
 Sample description by: R. H. Teifke, Virginia Division of Mineral  
 Resources, November 8, 1968

GEOLOGIC LOG

Depth in feet

0-3	No sample
COLUMBIA GROUP (3-13')	
3-5	Sand — pale orange-brown, trace of clay; fine, well-sorted, angular; clear and yellowish quartz, very slightly feldspathic; magnetite common
5-8	No sample
8-10	Sand — bright-orange, trace of clay, 15% poorly rounded granule gravel; medium to very coarse, moderately sorted, subangular; slightly feldspathic; yellow-brown, iron-stained grains abundant; a few rock fragments
10-13	No sample; contact at 13', according to drilling characteristics
YORKTOWN FORMATION (13-23')	
13-13.5	Clay — gray, sandy, a few shell fragments, bone fragments, and echinoid spines; sand is fine to medium, well-sorted, subangular; clear to pale-green quartz, with 5% black phosphatic fragments
13.5-15	Sand and Shell — greenish-gray, slightly to moderately clayey; 35% pelecypod, gastropod, and scaphopod shells; 60% medium, fairly well-sorted, subangular, clear to pale green quartz sand with minor black fragmental phosphorite and trace of magnetite; abundant echinoid spines and plates
15-18	No sample
18-20	Sand and Shell — greenish-gray, slightly to moderately clayey; 15% pelecypod shells and shell fragments, and a few gastropods, scaphopods, and corals; 75% fine to medium, fairly well-sorted, subangular, clear to pale-green quartz sand

Depth in Feet

	with minor black fragmental phosphorite and a trace of glauconite; a few echinoid spines
20-23	No sample; contact at 23%, according to drilling characteristics
MATTAPONI FORMATION (20-43')	
23-24	Sand — dark-green, slightly clayey, a few pelecypod shells; fine to medium, well-sorted, angular to subangular; clear to pale-green quartz with minor glauconite and small fragments of phosphorite; echinoid spines common
24-25	" a few foraminifers
25-28	No sample
28-30	Sand — dark-green, slightly clayey, trace of shell; fine to very fine, well-sorted, angular; clear and greenish quartz, with minor glauconite and fragmental phosphorite; a few echinoid spines
30-33	No sample
33-35	Sand — dark-green, slightly clayey, a few large pelecypod shells; fine to medium, well-sorted, angular; clear and greenish quartz, with minor glauconite and fragmental phosphorite; abundant aragonite needles and a few echinoid spines
35-38	No sample
38-40	Sand — dark-green, very slightly clayey, small amount of shell; 10% glauconite-pigmented, quartzo-feldspathic very coarse sand and granule gravel, and a few phosphate nodules; 80% fine to very fine, well-sorted, angular clear to green-tinted quartz sand, with 5% combined glauconite and fragmental phosphorite; trace of coarse garnet
40-43	No sample
43-43.5	Sand and Gravel — dark-green, slightly clayey, a few pelecypod shell fragments; 40% fine, rather poorly sorted (2-20 mm) rounded quartz gravel with a few phosphorite nodules; 50% fine to medium sand with trace of glauconite
PATUXENT FORMATION (43-50')	
43.5-43.75	Sand — gray to white, slightly clayey; medium to coarse fairly well-sorted, subangular to subrounded; coarse muscovite and intensely weathered feldspar abundant
43.75-44	"
44-45	"
45-48	No sample

Depth in feet

48-50

Sand — white, slightly clayey, 5% granule gravel and a few pebbles up to 10 mm; medium to very coarse, rather poorly sorted, angular to subrounded; feldspathic

GEOLOGIC SUMMARY

	<u>Rock Unit</u>	<u>Age</u>
0-3	No sample	
3-13	Columbia Group	Pleistocene
13-23	Yorktown Formation	Late Miocene
23-43.5	Mattaponi Formation	Paleocene
43.5-50	Patuxent Formation	Early Cretaceous

INTERVAL SHEET

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VDMR Well No: 2214

Date rec'd: 6/68

Sample Interval: from 0 to: 50

PROP: State road right-of-way

Number of samples: 10

COMP: Froehling and Robertson


Total Depth: 50

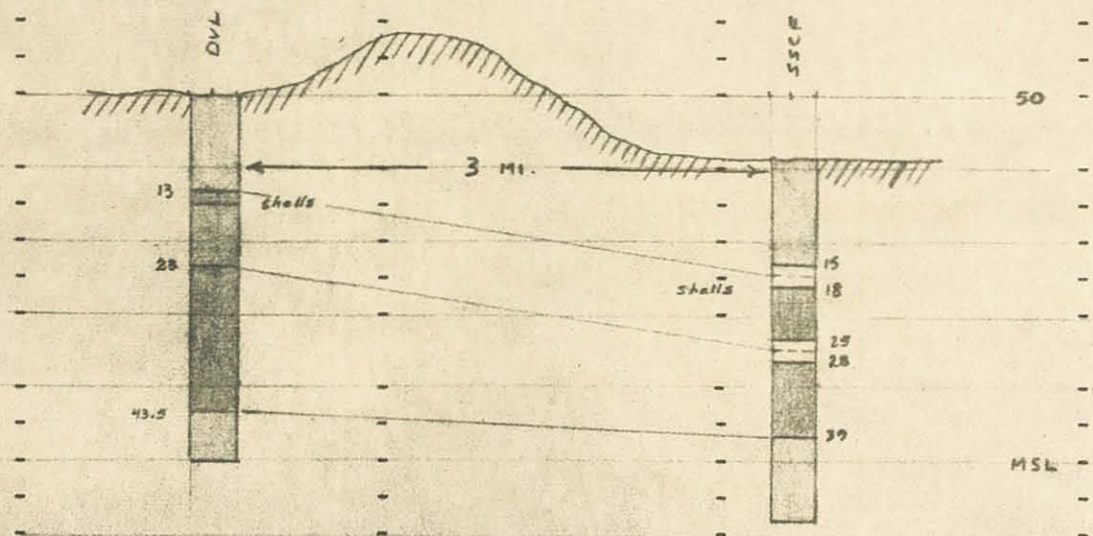
COUNTY: Southampton (Drewryville)  
Drewryville Road.

Oil or Gas: Water: Exploratory: X

UNWASHED

WASHED

UNWASHED				WASHED			
From-To		From-To		From-To		From-To	
3 - 5		-		3 - 5		-	
8 - 10		-		8 - 10		-	
-		-		13 - 13.5		-	
13 - 15 core		-		13.5 - 15		-	
-		-		-		-	
18 - 20 core		-		18 - 20		-	
-		-		23 - 24		-	
23 - 25 core		-		24 - 25		-	
28 - 30 core		-		28 - 30		-	
33 - 35 core		-		33 - 35		-	
-		-		-		-	
38 - 40		-		38 - 40		-	
43 - 43.5	} core and unwashed samples	-		-		-	
43.5 - 43.75		-		-		-	
43.75 - 44		-		-		-	
44 - 45		-		-		-	
-		-		-		-	
48 - 50		-		48 - 50		-	



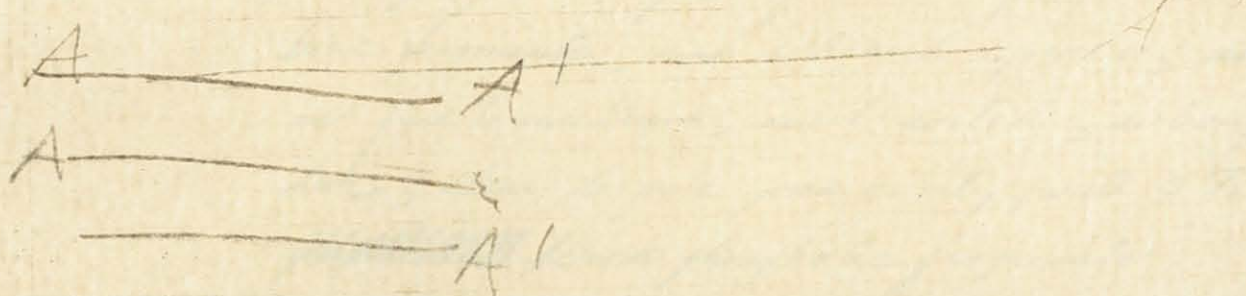
County: Southampton

UOIR Well No. 2214

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Total Depth : 50 feet  
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Sample description by : R. H. Teifke, Virginia Division of  
Mineral Resources, November 8, 1968

#### GEOLOGIC SUMMARY

Depth (feet)	Thickness (feet)	Formation (and remarks)
0-13	13	Columbia Group
13-23	10	Yorktown Formation
23-43.5	20.5	Mattaponi Formation
43.5-50	6.5	Potuxent Formation



County: Southampton

VDMR Well No. 2214

GEOLOGIC LOG

Depth in feet

COLUMBIA GROUP (0<sup>3</sup> - 13')

0-3 No sample

3-5 Sand - pale orange-brown, trace of clay; fine, well-sorted, angular; clear and yellowish quartz, very slightly feldspathic, magnetite common

5-8 No sample

8-10 Sand - bright-orange, trace of clay, 15% poorly rounded coarse gravel; medium to very coarse, moderately sorted, subangular; slightly feldspathic; yellow-brown, iron-stained grains abundant; a few rock fragments

10-13 No sample; contact at 13', according to <sup>drilling</sup> ~~field notes~~ characteristics

YORKTOWN FORMATION (13-23')

13-13.5 Clay - gray, sandy, a few shell fragments, bone fragments, and echinoid spines; sand is fine to medium, well-sorted, subangular; clear to pale-pearl quartz, with 5% ~~black phosphatic~~ black phosphatic fragments

15-15

Hard and shell - greenish-grey, slightly to

moderately clayey; 40% palygorskite, partly

poor, and palygorskite shells; 60% maximum,

partly with orthite, and augurite, clear to

partly sand with minor black fragments

and trace of magnetite

phosphite; abundant columnar apertures and

plates

15-18

No sample

18-20

Hard and shell - greenish-grey, slightly

to moderately clayey; 25% palygorskite

shells and shell fragments, and a few

quartzite, orthopods, and orthite;

80% fine to medium, fairly well sorted,

subangular, clear to pale green quartz

sand with minor black fragments

phosphite and a trace of glauconite;

a few columnar apertures

20-23

No sample; contact at ~~23~~, according to field notes

disturbance

MATTAPONI FORMATION (23-43.5')

25-24

Hard - dark-green, slightly clayey, a few

palygorskite shells; fine to medium, well-

sorted, angular to subangular; clear to

pale-green quartz with minor glauconite

and small fragments of phosphite; columnar

apertures common

24-25

a few fragments



25-28

No sample

28-30

Sand - dark-green, slightly clayey, trace of shell; fine to very fine, well-sorted, angular; clear and greenish quartz, with minor glauconite and fragmental phosphite; a few echinoid spines

30-33

No sample

33-35

Sand - dark-green, slightly clayey, a few large pelecypod shells; fine to medium, well-sorted, angular; clear and greenish quartz, with minor glauconite and fragmental phosphite; abundant aragonite needles and a few echinoid spines

35-38

No sample

38-40

Sand - dark-green, very slightly clayey, small amount of shell; 10% glauconite - <sup>very coarse sand and</sup> pigmented, quartz, feldspar, granule gravel, and a few phosphate nodules; <sup>80% 96%</sup> fine to very fine, well-sorted, angular clear to green-tinted quartz sand, with 5% combined glauconite and fragmental phosphite; trace of coarse garnet

40-43

No sample

43-43.5

Sand and Gravel - dark green, slightly clayey, a few pelecypod shell fragments; 40% fine, rather poorly sorted (2-20mm) rounded quartz gravel with a few phosphate nodules; 60% fine to medium sand with trace of glauconite.

PATUXENT FORMATION (43.5 - 50')

43.5-43.75 Sand - light-gray, <sup>to white</sup> slightly clayey; medium to coarse fairly well sorted, subangular to subrounded; <sup>coarse</sup> calcareous and calcareous weathered feldspar abundant

43.75-44 //

44-45 //

45-48 No sample

48-50 Sand - white, slightly clayey; 5% granular gravel and a few pebbles up to 10 mm; medium to very coarse, rather poorly sorted, angular to subrounded; feldspathic

GEOLOGIC SUMMARY

	Rock Unit	Age
0-3	No sample	
3-13	Columbia Group	Pleistocene
13-23	Yokton Formation	Late Miocene
23-43.5	Matoponi Formation	Paleocene
43.5-50 A	Patuxent Formation	Early Cretaceous