

INTERVAL SHEET

WWCR - 105

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VDMR Well No: 1948

Date rec'd: 8/29/67

Sample Interval: from 0' to: 306'

PROP: Sydnor Hydrodynamics

Number of samples: 31

COMP: Sydnor Hydrodynamics

Total Depth: 306'

COUNTY: Hanover (Ellerson)

Oil or Gas: Water~~X~~ Exploratory:

From-To	From-To	From-To	From-To
0 - 10	300 - 306	-	-
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	-	-	-
150 - 160	-	-	-
160 - 170	-	-	-
170 - 180	-	-	-
180 - 190	-	-	-
190 - 200	-	-	-
200 - 210	-	-	-
210 - 220	-	-	-
220 - 230	-	-	-
230 - 240	-	-	-
240 - 250	-	-	-
250 - 260	-	-	-
260 - 270	-	-	-
270 - 280	-	-	-
280 - 290	-	-	-
290 - 300	-	-	-

All intervals have both washed and unwashed samples.

OWNER: Sydnor Hydrodynamics, Inc.  
(Meadow Gate Subdivision)  
DRILLER: Sydnor Hydrodynamics, Inc.

VDMR: 1948  
WWCR: 105  
TOTAL DEPTH: 306'

GEOLOGIC LOG

Depth in feet

COLUMBIA GROUP (0-50')

- 0-10 Sand - moderately clayey (orange-red clay); medium-grained, fairly well-sorted, subangular; minor feldspar, muscovite, and magnetite
- 10-20 Sand - clean, 5% granule gravel; coarse- to very coarse-grained, fairly well-sorted, subangular to subrounded; feldspathic; abundant blue quartz
- 20-30 " "
- 30-40 Sand - grains coated with bright-orange clay; coarse- to very coarse-grained, fairly well-sorted, subangular to subrounded; feldspathic; some blue quartz
- 40-50 " "

CALVERT FORMATION (50-110')

- 50-60 Sand - 10-15% granule gravel; binder of orange-brown clay, grading into bluish-gray clay; fine-grained, well-sorted, angular
- 60-70 Sand - bluish-gray clay binder; fine- to very fine-grained, well-sorted, angular; locally limonitic; traces of glauconite and magnetite
- 70-80 " "
- 80-90 Sand - very clayey (gray clay); fine-grained, well-sorted, angular; minor muscovite
- 90-100 Clay - medium-gray, moderately sandy; sand is fine-grained, well-sorted, angular; trace of glauconite
- 100-110 " "

NANJEMOY FORMATION (110-201')

- 110-120 Sand - abundant matrix of medium-gray, micaceous clay; fine- to medium-grained, fairly well-sorted; 50-60% dark- to light-green autochthonous glauconite; 40-50% clear to greenish, angular to subangular quartz; small amount of phosphorite (bone fragments); traces of pyrite and garnet; a very few shell fragments and echinoid spines
- 120-130 " "
- 130-140 " "

- 140-150 Clay - grayish-brown, micaceous, sandy, subordinately white, sand-free; sand is fine, moderately sorted; dark-green glauconite and angular, clear to greenish quartz, in sub-equal amounts
- 150-160 " "
- 160-170 Sand - abundant matrix of brownish-gray, micaceous clay; fine-grained, fairly well-sorted; 80% angular, clear to greenish quartz, 20% glauconite; trace of phosphorite; a very few foraminifers
- 170-180 Clay - brownish-gray, micaceous, and very sandy, subordinately white and sand-free; sand is fine-grained, well-sorted; 90% angular quartz, 10% glauconite; shell fragments common; a few foraminifers (Robulus, Dentalina), and ostracods
- 180-190 " "
- 190-201 " "

MATTAPONI FORMATION (201-225') Top of formation defined on basis of other information.

- 201-210 Sand - dark-gray, very clayey, 20% pelecypod and gastropod shell fragments; fine-grained, fairly well-sorted; 75% of sand is angular, clear to greenish quartz, 25% is fresh glauconite; micaceous; a few bone fragments and foraminifers
- 210-225 Gravel - rounded pebbles and broken rounds up to 15 mm, of quartz and various rock fragments; a few coarse shell fragments; small amount of coarse, poorly-sorted, glauconitic sand

PATUXENT FORMATION (225-306') Top of formation defined on basis of other information.

- 225-230 Sand and Gravel - tan, very slightly clayey; coarse- to very coarse-grained, fairly well-sorted, subangular to subrounded sand; grades into fine-grained gravel (up to 8 mm); clear quartz; arkosic; slightly glauconitic, slightly lithic
- 230-240 " "
- 240-250 " "
- 250-260 " "
- 260-270 " "
- 270-280 " "
- 280-290 " "
- 290-306 Sand and Gravel - slightly clayey (brownish-gray clay); sand (40%)

290-300 is coarse- to very coarse-grained, fairly well-sorted, sub-  
 (cont.) angular to subrounded; gravel (60%) is fine-grained (10-20 mm),  
 well-sorted, rounded; sand is arkosic, slightly glauconitic;  
 gravel consists of quartz, feldspar, and rock fragments

300-306 " 80% gravel, 20% sand

GEOLOGIC SUMMARY

	<u>Rock Unit</u>	<u>Age</u>
0-50	Columbia Group	Pleistocene
50-110	Calvert Formation	Miocene
110-201	Nanjemoy Formation	Eocene
201-225	Mattaponi Formation	Paleocene - Late Cretaceous
225-306	Patuxent Formation	Early Cretaceous

Virginia Division of Mineral Resources  
 Robert H. Teifke, Geologist  
 November 8, 1967  
 Robert H. Teifke  
 March 3, 1972