

Owner: John E. Rose, Jr.
Driller: Mitchell's
County: Isle of Wight (Carrsville)

W# 3092
C# 213
Total Depth: 372'
Quad: Holland
Elev: 72

Depth
(feet)

WELL LOG

- 0-10 Sand - dark yellowish orange (10YR 6/4); sparse clay; fine to very coarse, angular and subangular, moderately well sorted; rare fine phosphate fragments.
- 10-20 Sand - yellow orange (10YR 7/6); sparse clay; fine to medium, mostly coarse, angular and subangular, well sorted; rare fine phosphate fragments; clay clasts are white.
- 20-30 Sand - moderate yellowish brown (10YR 5/4); abundant clay; fine to medium, mostly coarse, angular and subangular, well sorted; rare fine phosphate fragments; mica; iron-oxide crusts.
- 30-40 Sand, Shelly - light olive gray (5Y 6/1); 50% shell fragments; abundant clay; very fine to fine, subangular, well sorted; 8% phosphate fragments; large fossil fragment - Mulina Congesta; echinoid spines; forams - Nonion, Textularia, Bulimina; ostracods; mica.
- 40-50 Sand - light olive gray (5Y 6/1); abundant clay; very fine to fine, subangular, well sorted; 8% phosphate/glaucanite fragments; 40% shell fragments - Mulina, oyster "spat," Yoldia sp., Crepidula; echinoid spines; forams; mica.
- 50-60 Sand, Shelly - light olive gray (5Y 6/1); 60% shell fragments - Mulinias (large); very fine to fine, subangular, well sorted; very few glaucanite; echinoderm spines; forams; iron oxide; mica.
- 60-70 Sand - light olive gray (5Y 6/1); abundant clay in clasts; very fine to fine, subangular, well sorted; very few glaucanite; 20% shell fragments - Mulinias, Oliva (gastropod); forams; mica.
- 70-80 Sand, Shelly - light olive gray (5Y 6/1); 50% shell fragments - Nucula proxima, Mulinia, Uzita (gastropod); abundant clay in clasts; very fine to fine, subangular, well sorted; rare glaucanite; forams; mica.
- 80-90 Gravel, Shell, Sandy - light and dark gray; 70+% shell fragments - Mulinia, Turritella; abundant sand; very fine to medium, subangular, moderate sorting; 10% glaucanite; otolith.

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- 90-110 Sand - light olive gray (5Y 5/2); sparse clay; very fine to medium, subangular, moderate sorting; 10% glauconite; 5% fine shell fragments; 3 kinds of echinoderm spines.
- 110-120 Clay - light olive gray (5Y 6/1); abundant sand; very fine to medium, subangular, moderate sorting; some glauconite.
- 120-140 Clay - light olive gray (5Y 6/1); moderate sand; very fine; subangular, well sorted.
- 140-150 Sand - light olive gray (5Y 6/1); moderate clay clasts; very fine to medium, subangular, moderate sorting; very rare fine shell fragments; bone/tooth fragments.
- 150-160 Clay - light olive gray (5Y 6/1); abundant sand; very fine to medium, subangular, moderate sorting; mica.
- 160-170 Sand - light olive gray (5Y 5/2); sparse clay; fine to very coarse, subangular, moderate sorting; few large phosphate fragments; 5% shell fragments.
- 170-180 Sand, Glauconitic - dusky green (5G 2/2); 99% green, medium glauconite; very sparse clay; few grains, fine to very coarse, subangular; quartz sand; pyrite.
- 180-190 Sand, Glauconitic - grayish olive green (5GY 3/2); 99% weathered glauconite; fine to very coarse, subangular, few grains; iron oxide ochre.
- 190-200 Sand, Glauconitic - dusky yellowish green (10GY 2/2); 99% yellow brown and dark green glauconite; sparse clay clasts; fine to very coarse, subangular, few grains.
- 200-210 Sand, Glauconitic - dusky yellow green (5GY 5/2); 99% glauconite; sparse (yellow-green) calcium carbonate clasts with glauconite/sand; fine to very coarse, subangular, few grains; 20% fine shell fragments; forams.
- 210-230 Sand, Glauconitic - light and dark gray; 50% glauconite; very sparse clay at 220-230; medium to very coarse, subangular, moderate sorting; 4 large phosphate nodules at 210-220 and fragments at 220-230; 10% shell fragments; forams - Nodosaria, Robulus; ostracod, shark tooth at 220-230; garnet.

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(feet)

- 230-240 Sand - light olive gray (5Y 4/1); moderate clay in sand clasts; fine and coarse, subangular, poorly sorted; 10% glauconite; rare shell fragments; forams; garnet.
- 240-250 Clay - light olive gray (5Y 5/1); abundant sand; very fine, subangular, well sorted; large fragment quartz; brown (heating - from preparation) stains on clay; mica.
- 250-270 Sand - light olive gray (5Y 6/1); very fine with some larger grains, subangular, well sorted; 10-5% glauconite; mica at 250-260 and 10% mica at 260-270.
- 270-330 Sand - light olive gray (5Y 5/1); abundant clay; very fine with some larger grains, subangular, well sorted; stains on clay clasts; 10% mica until 280-290 and then - mica; white and yellow phosphate fragments at 290-300.
- 330-350 Sand - light and dark brown; fine to very coarse, to granule at 340-350; subangular, poor sorting; 20% glauconite; feldspar; mica; 1 clay clast at 340-350 and some white phosphate deposits on clast.
- 350-372 Sand - yellowish gray (5Y 8/1); fine to granule, subangular and angular, moderate to poor sorting; feldspar; mica.

Logged by: J. K. Polzin
October 3/6, 1980

OWNER: John E. Rose, Jr.

VDMR # 3092

DRILLER: Mitchell's Well & Pump Co.

WWCR # 213

COUNTY: Isle of Wight (Carrsville)

TOTAL DEPTH: 372'

GEOLOGIC SUMMARY

<u>Depth (feet)</u>	<u>Rock Unit</u>	<u>Age</u>
0-30	Columbia Group	Pleistocene
30-190	Yorktown Formation	Late Miocene
190-225	Calvert Formation	Middle Miocene
225-270	Mattaponi Formation	Paleocene
270-372	Tuscaloosa(?) Formation	Late Cretaceous

Virginia Division of Mineral Resources
Robert H. Teifke - Geologist
April 15, 1971

VIRGINIA DIVISION OF MINERAL RESOURCES
Box 3667, Charlottesville, VA 22903

INTERVAL SHEET

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Date rec'd: 2/16/71 ; processed 3/2/71
PROPERTY: John E. Rose, Jr.
COMPANY: Mitchell's Well & Pump Co.
COUNTY: Isle of Wight (Carrsville)

C-213
Well Repository No: 3092
Sample Interval; from 0 to:372'
Number of samples: 37
Total Depth: 372'
Oil or Gas: Water: xExploratory:

From-To	From-To	From-To	From-To
0 - 10	250 - 260	-	-
10 - 20	260 - 270	-	-
20 - 30	270 - 280	-	-
30 - 40	280 - 290	-	-
40 - 50	290 - 300	-	-
50 - 60	300 - 310	-	-
60 - 70	310 - 320	-	-
70 - 80	320 - 330	-	-
80 - 90	330 - 340	-	-
90 - 100	340 - 350	-	-
100 - 110	350 - 360	-	-
110 - 120	360 - 372	-	-
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	-	-	-

All intervals have both washed and unwashed samples

