

INTERVAL SHEET

WWCR 81

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VDMR Well No.: Well No. 1301

Date 4/21/65

Sample Interval: from 0 to 320

PROP: Sydnor Pump & Well Co.
Spring Meadow #3

Total depth 320

COMP: Sydnor Pump & Well Co.

Oil Gas Water Exploratory

COUNTY: Hanover (Mechanicsville)

Cuttings Core Other

VDMR Well No: W-1301

From-To	From-To	From-To	From-To	From-To
0 - 10	300 - 310	-	-	-
10 - 20	310 - 320	-	-	-
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	-	-	-	-

OWNER: Sydnor Pump & Well Co., Inc. (Spring Meadow # 3)
DRILLER: Sydnor Pump & Well Co., Inc.
COUNTY: Hanover (Mechanicsville)

W-1301
C-81
TOTAL DEPTH: 320'

GEOLOGIC LOG

Columbia Group (0-50')

- 0-10 Sand - orange, argillaceous, medium-grained, well-sorted, subangular to subrounded quartz with scattered carbonaceous fragments and "heavy" minerals
- 10-20 Sand - buff, medium- to coarse-grained, well-sorted, subangular to subrounded quartz with small amounts of glauconite and fresh feldspar; "heavy" minerals moderately abundant, mostly rounded magnetite, some muscovite; traces of tourmaline and garnet; an occasional chalky shell fragments, and some plant remains, (leaves, twigs, and spores (?)).
- 20-30 As above
- 30-40 As above
- 40-50 As above

CALVERT, NANJEMOY AND MATTAPONI FORMATIONS (50-258')

- 50-60 Sand - gray, argillaceous and silty, slightly pebbly, very fine to very coarse-grained, poorly sorted, angular to subangular; micaceous (muscovite); glauconitic, and slightly arkosic (white, weathered alkaline feldspar) quartz sand; traces of brown epidote, pyrite, garnet, and chlorite; small amount chalky and phosphatic shell fragments
- 60-70 As above - but without gravel
- 70-80 Sand - gray, moderately argillaceous and silty, a few small pebbles very fine to very coarse-grained (skewed fine), poorly sorted, angular to subangular; slightly glauconitic and micaceous (muscovite and chlorite) quartz sand; small amount fine-grained pyrite; traces of garnet and brown epidote; abundant chalky shell "hash", including some recognizable pelecypod fragments
- 80-90 As above - but without pebbles and shell "hash"
- 90-100 Sand - dark-gray, argillaceous and silty, a few small pebbles, very fine to coarse-grained, poorly sorted, angular to subangular; slightly glauconitic and micaceous (muscovite) quartz sand; small amounts pyrite and chlorite; some chalky pelecypod shell fragments and shell "hash"
- 100-110 As above

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- 110-120 Sand - brownish gray, argillaceous, a few small pebbles, very fine to very coarse-grained (skewed fine), poorly sorted, subangular; slightly glauconitic and micaceous (muscovite) quartz sand; small amounts fine-grained pyrite, gray phosphorite, and chlorite; some yellow limonitic clay and some white, non-calcareous clay; small amount of chalky shell debris
- 120-130 As above
- 130-140 As above - with foraminifera (Robulus)
- 140-150 Sand - brownish-gray, argillaceous, a few small pebbles, poorly sorted, subangular; slightly glauconitic and micaceous quartz sand; small amounts limonite; chlorite, and nodular gray phosphorite; some white, non-calcareous clay; a few chalky shell fragments
- 150-160 As above
- 160-170 As above
- 170-180 As above
- 180-190 Sand - gray, argillaceous (some white, non-calcareous clay); slightly pebbly; fine to very coarse-grained, poorly sorted, angular to subrounded; slightly glauconitic quartz sand; small amounts muscovite, fine-grained pyrite, feldspar, and chlorite; a few shell fragments, some phosphatic
- 190-200 As above
- 200-210 As above
- 210-220 As above
- 220-230 As above - but more argillaceous
- 230-240 Sand - gray, slightly argillaceous, moderately pebbly (mostly granules), coarse- to very coarse-grained, moderately sorted, subangular to subrounded; slightly glauconitic and arkosic (fresh, gray to white microcline and microperthite); small amount gray to yellow-brown phosphorite; traces of pyrite, garnet and chert; moderate amount chalky shell fragments of pelecypod and gastropods.
- 240-250 Sand - blue-gray, very argillaceous, a few small pebbles, very fine to fine-grained, well-sorted, angular to subangular, slightly glauconitic quartz sand with small amounts phosphorite and mica; abundant chalky shell material, including pelecypods and gastropods (Turritella) and a few foraminifers

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PATUXENT FORMATION (258-320') Top of formation defined on basis of other information.

- 250-260 Sand - gray, slightly argillaceous, slightly pebbly, coarse-grained, poorly sorted, subangular to subrounded, slightly glauconitic quartz sand with trace of phosphorite; scattered, chalky pelecypod shell fragments; arkosic
- 260-270 As above
- 270-280 Gravel and Sand - buff, subrounded to rounded pebbles (2-10 mm) of quartz, and a few of feldspar (about 50 % of sediment); coarse- to very coarse-grained, moderately sorted, subangular to subrounded quartz sand; small amounts glauconite and feldspar; scattered shell fragments
- 280-290 As above
- 290-300 As above - but more arkosic
- 300-310 Sand - brownish-gray, very slightly argillaceous, a few small rounded pebbles, very fine- to very coarse-grained, poorly sorted, angular to subangular; slightly glauconitic and moderately arkosic.
- 310-320 As above

GEOLOGIC SUMMARY

	<u>Rock Unit</u>	<u>Age</u>
0-50	Columbia Group	post Miocene
50-258	Calvert, Nanjemoy and Mattaponi Fm.	Miocene-Paleocene
258-320	Patuxent Formation	Early Cretaceous

Virginia Division of Mineral Resources
Robert H. Teifke, Geologist
May 26, 1965

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March 7, 1973