

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

W-5424
C-417

MAILING ADDRESS:
Box 3667
Charlottesville, VA 22903

DIVISION OF MINERAL RESOURCES
JAMES L. CALVER, COMMISSIONER
WATER WELL COMPLETION REPORT

OFFICE ADDRESS:
McCormick Road
Charlottesville, Virginia

Commonwealth of Virginia
OWNER: Dept. of Agriculture Mailing Address: P. O. Box 1163
Richmond, Virginia 23209

TENANT: Mailing Address: 2111 Magnolia Street

DRILLER: Sydnor Hydrodynamics, Inc. Mailing Address: Richmond, Virginia 23223

WELL LOCATION: County South Hampton (Ivor) Approx. 90 feet miles north (direction) of
Rt. 460 and 1 1/2 miles west (direction) of Ivor

(GIVE DIRECTION AND DISTANCE IN FEET OR MILES FROM TWO REFERENCE POINTS - ROADS, TOWNS, RIVERS, ETC. - ON COUNTY HIGHWAY OR OTHER MAP.)

DATE STARTED: 8/25/78 DATE COMPLETED: 9/26/78

TYPE OF DRILL RIG USED: Rotary TOTAL DEPTH 450 feet

WATER LEVEL: Stands 130 feet below surface OR
has NATURAL flow of _____ gallons per minute.

YIELD TEST: Method Pump
Drawdown _____ feet
Rate _____ gal. per min.
Duration _____ hrs., _____ min.

HOLE SIZE: 10 inches from 0 to 450 feet
_____ inches from _____ to _____ feet
_____ inches from _____ to _____ feet
SCREEN SIZE: _____ inches from _____ to _____ feet

WATER ZONES: from _____ to _____ feet
from _____ to _____ feet
from _____ to _____ feet

_____ inches from _____ to _____ feet
_____ inches from _____ to _____ feet
CASE SIZE: 4 inches from +2 to 290 feet

WATER: Color _____ Taste _____
Odor _____ Temp. _____ °F

4 inches from 300 to 385 feet
4 inches from 390 to 428 feet

WELL TO SUPPLY: (check one) Home _____
Farm _____ Town _____ School _____
Industry _____ Other _____

GROUTING: Method 4 433 438
Material _____ Depth _____ feet

WATER ANALYSIS AVAILABLE: Yes No _____
DRILL CUTTINGS SAVED: Yes No _____

PUMP: Type _____
Capacity _____ gal per min
Depth of intake _____ feet

(DRILL CUTTINGS SHOULD BE COLLECTED AT 10 FOOT INTERVALS. THESE SAMPLES MAY BE SHIPPED TO THIS OFFICE EXPRESS COLLECT. SAMPLE BAGS ARE FURNISHED FREE OF CHARGE UPON REQUEST.)

REMARKS: _____

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

INTERVAL SHEET

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Well Repository No.: W- 5424
 C-417

Date rec'd: 11/1/78 Date Processed: 2/27/79

Sample Interval: from 0 to:450'

PROPERTY: Comm. of Virginia
 (Dept. of Agriculture)

Number of samples: 44

COMPANY: Sydnor Hydrodynamics

Total Depth: 450'

COUNTY: Southampton (Ivor)

Oil or Gas: Water: x Exploratory:

From-To	From-To	From-To	From-To	From-To
0-10	300-310	-	-	-
10-20	310-320	-	-	-
20-30	320-330	-	-	-
30-40	330-340	-	-	-
40-50	340-350	-	-	-
50-60	350-360	-	-	-
60-70	360-370	-	-	-
70-80	370-380	-	-	-
80-90	380-390	-	-	-
90-100	390-400	-	-	-
100-110	400-410	-	-	-
110-120	410-420	-	-	-
120-130	420-430	-	-	-
130-140	430-440	-	-	-
140-150	440-450	-	-	-
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: Dept. of Agriculture, Va.
Driller: Sydnor Hydrodynamics, Inc.
County: Southhampton

W# 5424
C# 417
Total depth: 450'
Quad: Ivor
Elev: 73'

Depth
(feet)

WELL LOG

- 0-20 Sand - grayish orange (10yr 7/4); fine to granule, subangular, moderate sorting.
- 20-30 Sand - grayish orange (10yr 7/4); moderate clay, (10hr 6/2) pale yellow brown; very fine to pebble, subangular, some round; poor sorting.
- 30-40 Gravel, Shell - pale yellowish brown (10yr 6/2); moderate clay-pale yellowish brown and light olive gray; 50% shell fragments; very fine to pebble, subangular, some rounded; poorly sorted; siltstone clast.
- 40-50 Gravel, Shell - light olive gray (5y 5/1); sparse clay; 50% shell fragments; very fine to pebble, subangular, poor sorting; 50% glauconite; shell fragment - oyster, barnacle, Mulina, Turritella, Policines, Pecten.
- 50-60 Gravel, Shell - light olive gray (5y 5/1); 80% shell fragments; 20% sand; very sparse clay; very fine to pebble, subangular, some rounded, poorly sorted; 20% Glauconite; bryozoa; Dentalium.
- 60-70 No Sample.
- 70-80 Gravel, Shell - light olive gray (5y 5/1); 80% shell fragments; 20% sand; very sparse clay; very fine to pebble, subangular, some rounded, poorly sorted; 10% Glauconite; Dentalium; 1% mica.
- 80-90 Gravel, Shell - light olive gray (5y 5/1); 50% shell fragments; very sparse clay; very fine to very coarse, subangular, some rounded, poorly sorted; 10% glauconite; 1% mica.
- 90-100 Sand - light olive gray (5y 5/1); moderate clay; very fine to very coarse, subangular, some rounded, poorly sorted; 10% glauconite; 25% shell fragments.
- 100-110 Sand - light olive gray (5y 5/1); very sparse clay; very fine to very coarse, subangular, some rounded, poorly sorted; 20% glauconite; 20% shell fragments.
- 110-120 Sand - light olive gray (5y 6/1); medium, subangular, some round, well sorted; 10% glauconite; 1% shell fragments.

<u>Depth</u> <u>(feet)</u>	
120-130	Sand - light olive gray (5y 6/1); sparse clay; medium to very coarse, subangular some rounded, moderate sorting; 20% glauconite; 1% shell fragments; phosphate fragments.
130-140	Sand - light olive gray (5y 6/1); very sparse clay; fine to <u>coarse</u> , subangular, some round, moderate sorting; 10% glauconite; 5% shell fragments; bone fragments.
140-150	Sand - moderate olive gray (5y 5/1); abundant clay dark yellow orange and moderate olive gray clasts; fine to coarse, subangular, some rounded, poor sorting; 10% glauconite/phosphatic fragments; 5% shell fragments.
150-160	Clay - light olive gray (5y 5/2); abundant sand; fine to very coarse with some granules subangular, poor sorting; 10% glauconite/phosphatic fragments; 25% <u>large</u> shell fragments.
160-170	Sand - moderate olive gray (5y 5/1); moderate clay; medium to coarse, subangular, moderate sorting; 25% glauconite; 3% small shell fragments.
170-180	Sand, Glauconite - olive gray (5y 3/1); abundant clay; sparse sand; medium to very coarse, subangular, modiscernable sorting; 70%+ glauconite; 1% shell fragments; <u>foram-Nonion</u> ; pyrite in clay clasts.
180-210	Sand, Glauconite - olive black (5y 2/1); very sparse clay; very sparse sand; medium to very coarse, subangular, no sorting; 95%+ glauconite; sparse shell fragments; pyrite; shark tooth at 200-210.
210-220	Sand - light and dark gray - abundant clay; fine to very coarse, angular, poor sorting; 45% glauconite; sparse shell fragments; mica; shark tooth.
220-230	Sand - yellowish gray (5y 8/1); moderate clay; fine to very coarse, angular, subangular, poor sorting; 30% glauconite; (1) shell fragments.
230-240	Sand, Glauconitic - light and dark gray; moderate clay; fine to very coarse, angular, poor; 50% glauconite; few sand clasts; pebble; mica.
240-250	Gravel - light olive gray (5y 6/1); granules, angular, subangular; well sorted (1) shell fragment; feldspar, garnet.

Depth
(feet)

- 250-260 Sand - light olive gray (5y 6/1); medium to very coarse, some granules, angular and subangular, moderate sorting; 15% glauconite; fine; mica; garnet, feldspar.
- 260-280 Sand - light olive gray - (5y 6/1); medium to granule, subangular, moderate sorting; garnet, feldspar; 260-270. Few grains of glauconite; 270-280 8% glauconite.
- 280-320 Sand - light olive gray (5y 6/1); medium to very coarse, subangular, angular, moderate sorting; 280-90-8% glauconite; 290-320-few glauconite grains; garnet; feldspar.
- 320-330 Sand - light olive gray (5y 6/1); medium to granule angular, subangular, poor sorting; 20% glauconite, rare shell fragments; garnet, feldspar.
- 330-350 Sand - light olive gray (5y 5/2); abundant clay; very fine to granule, angular, subangular, poor sorting; 20% glauconite; very rare shell fragments; iron oxide; phosphate nodules garnet; mica; phosphate fragments.
- 350-370 Sand - light olive gray (5y 6/1); sparse clay; very fine to very coarse, some granules, poor sorting; 3% glauconite; 1% mica; garnet; 360-370 very sparse clay and 10% glauconite.
- 370-400 Sand - light olive gray (5y 6/1); very sparse clay; very fine to very coarse, angular, subangular, poor sorting; few glauconite grains; shell fragments; feldspar; iron oxide staining; 390-400 to granule size.
- 400-410 Sand - light olive gray (5y 6/1); very sparse clay; coarse grained with some very fine and some granules, angular **and** subangular, poor sorting; feldspar, garnet.
- 410-430 Sand - light olive gray (5y 6/1); very sparse clay; very fine to granule, angular and subangular, poor sorting; 20% glauconite; shell fragments; feldspar; garnet.
- 430-440 Sand - light olive gray (5y 6/1); no clay; medium to granule, subangular and angular, moderate sorting; feldspar; garnet.
- 440-450 Sand - light olive gray (5y 6/1); no clay; very fine to granule subangular and angular; poor sorting; 15% glauconite; shell fragments; feldspar; garnet.

Logged by: J. K. Polzin
August 7, 1980