

COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

W#: 4495  
C#: 86

MAILING ADDRESS:

DIVISION OF MINERAL RESOURCES

OFFICE ADDRESS:

B 3667  
Charlottesville, VA 22903

JAMES L. CALVER, COMMISSIONER

McCormick Road  
Charlottesville, Virginia

WATER WELL COMPLETION REPORT

OWNER: Southern Properties, Inc. #1 Mailing Address: P. O. Box 13006, Roanoke, VA. 24030

TENANT: The Colonies Subdivision Mailing Address: \_\_\_\_\_

DRILLER: Sydnor Hydrodynamics, Inc. Mailing Address: P. O. Box 27186, Richmond, Va. 23261

WELL LOCATION: County New Kent Approx. 2 ~~xxxx~~ miles south (direction) of  
Rt. 60-1002 Intersection and 350 ~~xxxx~~ feet east (direction) of Chickahominy River

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

DATE STARTED: 9/8/75 DATE COMPLETED: 10/6/75

TYPE OF DRILL RIG USED: Rotary TOTAL DEPTH 280 feet

WATER LEVEL: Stands 91 feet below surface OR  
has NATURAL flow of \_\_\_\_\_ gallons per minute.

YIELD TEST: Method Pump HOLE SIZE: 16 inches from 0 to 280 feet  
Drawdown 5 feet \_\_\_\_\_ inches from \_\_\_\_\_ to \_\_\_\_\_ feet  
Rate 125 gal. per min. \_\_\_\_\_ inches from \_\_\_\_\_ to \_\_\_\_\_ feet  
Duration 48 hrs., \_\_\_\_\_ min. SCREEN SIZE: 6 inches from 198 to 238 feet

WATER ZONES: from \_\_\_\_\_ to \_\_\_\_\_ feet \_\_\_\_\_ inches from \_\_\_\_\_ to \_\_\_\_\_ feet  
from \_\_\_\_\_ to \_\_\_\_\_ feet \_\_\_\_\_ inches from \_\_\_\_\_ to \_\_\_\_\_ feet  
from \_\_\_\_\_ to \_\_\_\_\_ feet CASE SIZE: 6 inches from +2 to 198 feet

WATER: Color \_\_\_\_\_ Taste \_\_\_\_\_  
Odor \_\_\_\_\_ Temp. \_\_\_\_\_ °F \_\_\_\_\_ inches from \_\_\_\_\_ to \_\_\_\_\_ feet

WELL TO SUPPLY: (check one) Home \_\_\_\_\_  
Farm \_\_\_\_\_ Town \_\_\_\_\_ School \_\_\_\_\_  
Industry \_\_\_\_\_ Other Subdivision GROUTING: Method \_\_\_\_\_  
Material \_\_\_\_\_ Depth 50 feet

WATER ANALYSIS AVAILABLE: Yes X No \_\_\_\_\_ PUMP: Type \_\_\_\_\_  
Capacity \_\_\_\_\_ gal per min

DRILL CUTTINGS SAVED: 28 Yes X No \_\_\_\_\_ 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: E-Log and gamma



VIRGINIA DIVISION OF MINERAL RESOURCES  
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INTERVAL SHEET

Page 1 of 1

Well Repository No: W#: 4495  
C#: 86

Date rec'd: 11/18/75 Date Processed: 11/4/76

Sample Interval: from: 0 to: 280

PROPERTY: Southern Properties, Inc. #1

Number of samples: 28

COMPANY: Sydnor

Total Depth: 280'

COUNTY: New Kent (Lenexa)

Oil or Gas: Water: Exploratory:

From-To	From-To	From-To	From-To
0 - 10	250 - 260	-	-
10 - 20	260 - 270	-	-
20 - 30	270 - 280	-	-
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	-	-	-

Washed and unwashed samples.

OWNER: Southern Properties, Inc.  
DRILLER: Sydnor  
COUNTY: New Kent  
(Lanexa)

W#: 4495  
C#: 86  
TOTAL DEPTH: 280'  
QUAD.: Walkers

GEOLOGIC LOG

DEPTH  
(FEET)

- 0-10 Sand — dark yellowish orange; moderate clay; fine to medium grained, some coarse grains; subangular to subrounded; moderately well sorted; quartz; feldspar; few grains of glauconite; few opaques.
- 10-20 Sand — very pale yellowish orange; slightly clayey; fine to coarse grained; subangular to subrounded; moderately sorted; quartz; feldspar; some opaques; few grains of feldspar.
- 20-30 Sand — white; slightly clayey; medium to coarse grained, some very fine grains; subangular to subrounded; moderately sorted; quartz; feldspar; few opaques.
- 30-40 Sand — very dark yellowish orange; heavily stained; slightly clayey; medium to coarse grained; subangular, to subrounded; moderately well sorted; quartz; feldspar; few opaques.
- 40-50 Sand — dusky yellow; slightly clayey; fine to medium grained, some coarse grains, few granules; subangular to subrounded; moderately well sorted; quartz; some feldspar; some opaques; few grains of glauconite.
- 50-60 As above.
- 60-70 Sand — olive light gray; moderate clay; very fine to medium grained; subangular to subrounded; moderately sorted; quartz; some glauconite; few grains of feldspar; muscovite.
- 70-80 Sand — olive light gray; slightly clayey; very fine grained; subangular to subrounded; well sorted; quartz; some glauconite; muscovite.
- 80-90 As above except 2% glauconite; few grains of feldspar.
- 90-100 As above plus few spines.
- 100-110 Sand — olive light gray; moderate clay; very fine to fine grained, few heavily stained granules; subangular to subrounded; well sorted; quartz; some glauconite; muscovite.
- 110-120 As above plus some medium grains.
- 120-130 As above.
- 130-140 As above except slightly clayey; few moderately stained shell fragments.
- 140-150 As above except moderate clay; 2% glauconite.

DEPTH  
(FEET)

- 150-160 Sand — olive light gray; moderate clay; very fine to fine grained; subangular to subrounded; moderately well sorted; quartz; some glauconite; some shell fragments; muscovite.
- 160-170 Sand — olive light gray; slightly clayey; medium grained, some fine grains, some coarse grains; subangular to subrounded; moderately well sorted; quartz; 5% shell fragments; some black phosphatic material; few grains of glauconite, forams rare (inc. Bulimina).
- 170-180 As above except 7% shell fragments; few spines; no foram.
- 180-190 As above plus forams (inc. Buccella and Nonion).
- 190-200 Coquina — medium light gray; 98% sandy limestone and shell fragments; some glauconite; some quartz; pyrite; muscovite; forams rare (inc. Quinqueloculina).
- 200-210 As above except no muscovite and no Quinqueloculina.
- 210-220 Coquina — medium light gray; near 100% sandy limestone and shell fragments; glauconite; some quartz; pyrite.
- 220-230 Coquina — medium light gray; 98% sandy limestone and shell fragments; glauconite; 2% quartz; pyrite.
- 230-240 Coquina — medium light gray; glauconite; some quartz; few grains of pyrite.
- 240-250 Sand — light olive gray; slightly clayey; medium to coarse grained, some granules; subangular to subrounded; moderately sorted; quartz; 40% sandy limestone and shell fragments; 10% glauconite (brown, black); some spines; forams (inc. Robulus and Textularia).
- 250-260 Sand — olive light gray; abundant clay; medium to coarse grained; subrounded to rounded; moderately well sorted; 65% glauconite; quartz; 10% sandy limestone and shell fragments; muscovite; forams (inc. Globigerina and Robulus); ostracode.
- 260-270 As above except 7% sandy limestone and shell fragments; forams scarce (inc. Nodosaria and Pyrulina ?).
- 270-280 Sand and clay — olive light gray; moderate clay - olive light gray, light gray; abundant sand; medium to coarse grained; subrounded to rounded; moderately well sorted; 50% glauconite; 25% sandy limestone and shell fragments; quartz; muscovite.

- 3 -

GEOLOGIC SUMMARY

<u>Depth</u> (feet)	<u>Thickness</u> (feet)	<u>Rock Unit</u>	<u>Time Rock Unit</u>
0-40	40	Bacon's Castle Formation	Pleistocene
40-70	30	Moorings "Unit"	Pleistocene
70-190	120	Calvert Formation	Miocene-Eocene
190-280	90	Nanjemoys Formation	Eocene

VIRGINIA DIVISION OF MINERAL RESOURCES  
David A. Hubbard, Jr., Geologist  
November 6, 1978