

W#: 4084
C#: 203

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

MAILING ADDRESS:

DIVISION OF MINERAL RESOURCES

OFFICE ADDRESS:

Box 57
Charlottesville, VA 22903

JAMES L. CALVER, COMMISSIONER

McCormick Road
Charlottesville, Virginia

WATER WELL COMPLETION REPORT

OWNER: Daniel Construction Co. Mailing Address: P. O. Box 169, Hopewell, VA 23860

TENANT: Phillip Morris Whse. Mailing Address: Bermuda Hundred, VA

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

WELL LOCATION: County Chesterfield Approx. 6 miles north (direction) of
Intersection 697 and 827 and 1 mile west (direction) of James 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: 12-14-73 DATE COMPLETED: 1-23-74

TYPE OF DRILL RIG USED: Rotary TOTAL DEPTH 215 feet

WATER LEVEL: Stands 27'5" feet below surface OR
has NATURAL flow of _____ gallons per minute.

YIELD TEST: Method Submersible pump
Drawdown 31 feet
Rate 53 gal. per min.
Duration 24 hrs., _____ min.

HOLE SIZE: 8 inches from 0 to 215 feet
_____ inches from _____ to _____ feet
_____ inches from _____ to _____ feet
SCREEN SIZE: 4 inches from 130 to 170 feet

WATER ZONES: from 130 to 170 feet
from _____ to _____ feet
from _____ to _____ feet

_____ inches from _____ to _____ feet
_____ inches from _____ to _____ feet
CASE SIZE: 4 inches from +2 to 130 feet
4 inches from 170 to 191'9" feet
_____ inches from _____ to _____ feet

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

GROUTING: Method Pressure
Material Cement & Water Depth 50 feet

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

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

WATER ANALYSIS AVAILABLE: Yes No _____

DRILL CUTTINGS SAVED: 22 Yes No _____

(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: Hole filled in 215-191'9".

COMMONWEALTH OF VIRGINIA

LOG

DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

FURNISHED BY: _____

DATE: _____

DEPTH (feet)		TYPE OF ROCK OR SOIL PENETRATED (gravel, clay, etc., hardness, color, etc.)	REMARKS (water, caving, shot, screen, sample, etc.)
FROM	TO		
0	14	Stiff yellow clay	
14	20	Fine ground sand	
20	26	Coarse brown sand	
26	41	Blue clay	
41	47	Fine brown sand	
47	77	Sand and gravel	
77	110	Hard rough gravel	
110	125	Light green hard sand clay	
125	155	Hard white sand clay	
155	215	Hard gravel	

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

INTERVAL SHEET

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Well Repository No: W#: 4084
 C#: 203

Date rec'd: 2/25/74 Date Processed:

Sample Interval: from: / to: /
 10 215'

PROPERTY: Daniel Construction Co.
 (Phillip Morris Whse.)

Number of samples: 22

COMPANY: Sydnor Hydrodynamics

Total Depth: 215'

COUNTY: Chesterfield (Bermuda Hundred)

Oil or Gas: Water: Exploratory:

From-To	From-To	From-To	From-To
10- 14	-	-	-
14- 20	-	-	-
20- 26	-	-	-
26- 41	-	-	-
41- 52	-	-	-
52- 62	-	-	-
62- 69	-	-	-
69- 77	-	-	-
77- 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- 215	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Unwashed only

OWNER: Daniel Const. Co.
(Phillip Morris Whse.)
DRILLER: Sydnor Hydrodynamics
COUNTY: Chesterfield (Bermuda Hundred)

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TOTAL DEPTH: 215'
QUAD.: Hopewell
ELEV.: 22'

GEOLOGIC LOG

Depth
(feet)

- 0-10 No sample.
- 10-14 Clay — grayish orange; moderate sand; fine to medium grained, some coarse grains; subangular to subrounded; moderately well sorted; quartz; feldspar; few grains of glauconite.
- 14-20 Sand — dark yellowish orange; moderately stained; medium to coarse grained; subangular to subrounded; well sorted; quartz; feldspar; some opaques; few grains of glauconite.
- 20-26 As above except medium to very coarse grained; moderately sorted.
- 26-41 Sand — light olive gray; moderate clay; fine to coarse grained, some granules; subangular to subrounded; moderately sorted; quartz; some feldspar; some glauconite; few grains of muscovite.
- 41-52 Sand — grayish orange; moderately stained; medium to coarse grained; subangular to subrounded; well sorted; quartz; feldspar; 7% glauconite; few grains of garnet; few grains of jasper; muscovite.
- 52-62 Sand — pale orange; some grains slightly stained; medium to coarse grained; subangular to subrounded; moderately well sorted; quartz; feldspar; 3% glauconite; few grains of garnet.
- 62-69 As above except white; few flakes of muscovite.
- 69-77 Gravel — off white; 4-8 mm.; subangular to subrounded; moderately well sorted; quartz; feldspar.
- 77-90 As above except 4-15 mm.
- 90-100 Sand and gravel — light olive gray; slightly clayey; coarse grained to granular, some medium grains, 40% angular pebbles; angular to subangular; poorly sorted; quartz; feldspar; few grains of glauconite; muscovite.
- 100-110 Gravel — off white; slightly sandy; coarse grained to granular, 80% angular pebbles; angular to subangular; moderately well sorted; quartz; feldspar; few grains of garnet; muscovite.
- 110-120 As above.

OWNER: Daniel Const. Co.
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Depth
(feet)

- 120-130 As 100-110 except slightly clayey; abundant sand; 60% pebbles.
- 130-140 Sand and gravel — off white; slightly clayey; coarse grained to granular, 50% pebbles; subangular to subrounded; poorly sorted; quartz; feldspar; few grains of garnet.
- 140-150 As above.
- 150-160 As above except light olive gray.
- 160-170 As above.
- 170-180 As above plus some muscovite.
- 180-190 Gravel — light olive gray; slightly sandy; very coarse grained to granular, 85% pebbles; angular to subrounded; moderately well sorted; quartz; feldspar; few flakes of very weathered biotite.
- 190-200 Gravel — medium gray; moderate clay (clasts); moderate sand; coarse grained to granular, 60% pebbles; subangular to subrounded; moderately sorted; quartz; feldspar; few flakes of muscovite.
- 200-210 As above except olive light gray.
- 210-215 As above.

Note: All samples are unwashed.

Logged by: Michael T. Currie

OWNER: Daniel Const. Co.

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GEOLOGIC SUMMARY

<u>Depth</u> <u>(feet)</u>	<u>Thickness</u> <u>(feet)</u>	<u>Rock Unit</u>	<u>Time Rock Unit</u>
0-10	10	No Sample	
10-26	16	Norfolk Formation	Pleistocene
26-69	43	" "	Pleistocene
69-215	146	Patuxent Formation	Cretaceous

VIRGINIA DIVISION OF MINERAL RESOURCES
David A. Hubbard, Jr., Geologist
December 14, 1978

DOWST Type