

COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

W#: 2841

C#: 139

MAILING ADDRESS:

Box 3667  
Charlottesville, VA 22903

DIVISION OF MINERAL RESOURCES

JAMES L. CALVER, COMMISSIONER

OFFICE ADDRESS:

McCormick Road  
Charlottesville, Virginia

WATER WELL COMPLETION REPORT

P.O. Box 1476

OWNER: Sydnor Hydrodynamics, (Operations Div.) Mailing Address: Richmond, VA 23212

TENANT: Swannanoa Estates #1

Mailing Address: \_\_\_\_\_

DRILLER: Sydnor Hydrodynamics, Inc.

Mailing Address: \_\_\_\_\_

WELL LOCATION: County Hanover

Approx. 2,000 <sup>feet</sup>/<sub>miles</sub> North (direction) of \_\_\_\_\_

St. Rd. 606

and 3/4

<sup>feet</sup>/<sub>miles</sub>

East

(direction) of St. Rd 640

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

DATE STARTED: 4/13/70

DATE COMPLETED: 4/30/70

TYPE OF DRILL RIG USED: Rotary

TOTAL DEPTH 451 feet

WATER LEVEL: Stands 146 feet below surface OR

has NATURAL flow of \_\_\_\_\_ gallons per minute

YIELD TEST: Method Submersible pump

Drawdown 26'7" feet

Rate 110 gal. per min.

Duration 8 hrs., \_\_\_\_\_ min.

WATER ZONES: from 230 to 260 feet

302 312

from 330 to 331 feet

447 448

from 449 to 450 feet

WATER: Color Clear Taste \_\_\_\_\_

Odor \_\_\_\_\_ Temp. \_\_\_\_\_ °F

WELL TO SUPPLY: (check one) Home \_\_\_\_\_

Farm \_\_\_\_\_ Town \_\_\_\_\_ School \_\_\_\_\_

Industry \_\_\_\_\_ Other Subdivision

WATER ANALYSIS AVAILABLE: Yes XX No \_\_\_\_\_

DRILL CUTTINGS SAVED: 45  
Yes XX 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: Estimate 30 gpm from screen zones - Electric log ran by driller to 324'

HOLE SIZE: 12 inches from 0 to 324 feet

6 inches from 324 to 451 feet

\_\_\_\_\_ inches from \_\_\_\_\_ to \_\_\_\_\_ feet

SCREEN SIZE: 6 inches from 230 to 260 feet

6 inches from 302 to 312 feet

\_\_\_\_\_ inches from \_\_\_\_\_ to \_\_\_\_\_ feet

CASE SIZE: 6 inches from +2 to 230 feet

6 inches from 260 to 302 feet

6 inches from 312 to 324 feet

GROUTING: Method Pressure

Material Cement-water Depth 50 feet

PUMP: Type \_\_\_\_\_

Capacity \_\_\_\_\_ gal. per min

Depth of intake \_\_\_\_\_ feet

# LOG

FURNISHED BY: Sydnor Hydrodynamics, Inc.

DATE: 5/4/70

DEPTH (feet)		TYPE OF ROCK OR SOIL PENETRATED (gravel, clay, etc., hardness, color, etc.)	REMARKS (water, caving, shot, screen, sample, etc.)
FROM	TO		
0	1	Top soil	
1	3	Brown Sand	
3	11	Red and yellow clay	
11	21	Sand, clay and gravel	
21	31	Large gravel	
31	34	Red clay	
34	70	Blue clay	
70	84	Blue clay and shells mixed	
84	119	Blue clay	
119	120	Shell streak	
120	163	Blue and white clay - some shells mixed	
163	164	Shells	
164	180	Sandy clay	
180	181	Shells	
181	190	Sandy clay	
190	198	Shells, hard coarse sand	
198	203	Clay and sand mixed	
203	221	Shells, coarse sand, streaks	
221	252	Coarse sand (water)	
252	255	Sand - clay mixed (water)	
255	281	Gray clay	
281	306	Sand and clay (water)	
306	330	Dark gray granite	
330	331	Broken rock - water (30gpm)	
331	445	Soft dark gray granite mixed with white quartz	
445	447	Gray granite	
447	448	Broken rock - water	
448	449	Gray granite	
449	450	Broken rock - water	
450	451	granite	

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

INTERVAL SHEET

Page 1 of 1

Well Repository No: W: 2841

Date rec'd: 5/18/70 Date Processed: 5/26/70

C#: 139  
 Sample Interval: from: 0 to: 450

PROPERTY: Sydnor Hydrodynamics  
 (Swannanoa Est. #1)

Number of samples: 45

COMPANY: Sydnor Hydrodynamics

Total Depth: 451'

COUNTY: Hanover  
 (Atlee)

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	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 - 370	-	-
120 - 130	370 - 380	-	-
130 - 140	380 - 390	-	-
140 - 150	390 - 400	-	-
150 - 160	400 - 410	-	-
160 - 170	410 - 420	-	-
170 - 180	420 - 430	-	-
180 - 190	430 - 440	-	-
190 - 200	440 - 450	-	-
200 - 210	-	-	-
210 - 220	-	-	-
220 - 230	-	-	-
230 - 240	-	-	-
240 - 250	-	-	-

All intervals have both washed and unwashed samples.

OWNER: Sydnor Hydrodynamics  
(Swannanoa Est. #1)  
DRILLER: Sydnor Hydrodynamics  
COUNTY: Hanover

W#: 2841  
C#: 139  
TOTAL DEPTH: 451'  
QUAD: Yellow Tavern

GEOLOGIC LOG

Depth  
(feet)

- 0 - 10 Sand -- dark yellow orange; 50% moderately stained grains; slightly clayey; medium to coarse grained, some granules, some pebbles; subangular to subrounded; moderately well sorted; quartz; feldspar; few flakes of muscovite; few opaques.
- 10 - 20 Gravel -- dark yellowish orange; slightly clayey; abundant sand; coarse grained to granular; subangular to subrounded; poorly sorted; quartz; feldspar.
- 20 - 30 Sand and gravel -- grayish orange; medium to coarse grained, some granules, 40% pebbles (4-16mm); subangular to subrounded; poorly sorted; quartz; feldspar; few opaques.
- 30 - 40 Sand -- olive light gray; abundant clay - olive light gray, dark yellowish orange; medium to coarse grained, some fine grains, some granules, few pebbles; subangular to subrounded; moderately sorted; quartz; some feldspar; few opaques; few black phosphatic fragments.
- 40 - 50 Clay -- olive light gray; moderate sand; fine grained; subangular to subrounded; well sorted; quartz; 2% black phosphatic material; some muscovite; few grains of glauconite.
- 50 - 60 As above plus some medium grains; some black phosphatic material.
- 60 - 70 Clay -- olive light gray; moderate sand; very fine to fine grained; Subangular to subrounded; well sorted; quartz; 3% shell fragments; some black phosphatic material; few flakes of biotite; muscovite; glauconite.
- 70 - 80 As above except 10% shell fragments.
- 80 - 90 As above except 5% black phosphatic material; 3% shell fragments; no biotite.
- 90 - 100 As above except 7% black phosphatic material; some shell fragments.
- 100 - 110 Clay -- light olive gray; slightly sandy; fine to medium grained, few granules; subangular to subrounded; moderately well sorted; quartz; 5% black phosphatic material; some shell fragments; few grains of glauconite; feldspar.
- 110 - 120 Clay -- light olive gray; moderate sand; fine to medium grained; subangular to subrounded; moderately well sorted; quartz; 10% limestone and shell fragments; 2% black phosphatic material; few flakes of muscovite; glauconite.

Depth  
(feet)

- 120 - 130 Sand -- olive light gray; abundant clay; fine grained to granular; subangular to rounded; poorly sorted; quartz; 5% black phosphatic material; 3% glauconite; some limestone and shell fragments; some garnet; few flakes of muscovite.
- 130 - 140 Clay -- olive gray; abundant sand; fine to medium grained; subangular to subrounded; moderately well sorted; quartz; 10% glauconite; some black phosphatic material; some muscovite; few shell fragments.
- 140 - 150 Sand -- olive gray; moderate clay -- olive gray, very light gray; fine to medium grained, some granules, few pebbles; subangular to subrounded; moderately sorted; quartz; 5% limestone and shell fragments; 5% black phosphatic material; 5% glauconite; few flakes of muscovite; forams (inc. Robulus); ostrocode; bone fragment.
- 150 - 160 Sand -- olive gray; moderate clay; very fine to fine grained, some granules; subangular to subrounded; moderately well sorted; quartz; 10% glauconite; 3% black phosphatic material; 2% limestone and shell fragments; some muscovite; forams (inc. Robulus and Nodosaria).
- 160 - 170 Sand - olive gray; moderate clay; fine to coarse grained, 5% granules; subangular to rounded; moderately sorted; quartz; 25% glauconite; some shell fragments; muscovite; few black phosphatic fragments; forams rare (inc. Nodosaria).
- 170 - 180 Sand -- olive gray; abundant clay; fine to medium grained, few granules; subangular to rounded; moderately sorted; quartz; 20% shell fragments; 15% glauconite; few flakes of muscovite.
- 180 - 190 As above except 35% shell fragments.
- 190 - 200 Gravel -- multicolored; some very coarse grains, some granules; angular; moderately well sorted; quartz; 10% shell fragments; few grains of glauconite; muscovite.
- 200 - 210 Granules -- white; moderate very coarse grained sand, some pebbles; angular to subrounded; moderately well sorted; quartz; feldspar; few shell fragments; few flakes of muscovite.
- 210 - 220 Sand and gravel -- white; coarse grained to granular, 50% pebbles; angular to subrounded; poorly sorted; quartz; feldspar.
- 220 - 230 Granules -- off white; slightly sandy; coarse to very coarse grains, 3% pebbles; angular to subrounded; moderately well sorted; quartz; feldspar; some quartz grains consolidated with a ferridolomite cement; few flakes of muscovite.

Depth  
(feet)

- 230 - 240 Sand and granules - white; coarse to very coarse grained, 40% granules, 7% pebbles; angular to subrounded; moderately sorted; quartz; feldspar; few shell fragments.
- 240 - 250 Sand and gravel -- white; coarse grained to granular, 50% pebbles; angular to subrounded; poorly sorted; quartz; feldspar; few grains of garnet.
- 250 - 260 Sand -- off white; slightly clayey; coarse grained to gravel (30%), some medium grains; subangular to subrounded; poorly sorted; quartz; feldspar.
- 260 - 270 As above except moderate clay; 20% pebbles; some muscovite.
- 270 - 280 As above.
- 280 - 290 Sand -- off white; slightly clayey; coarse grained to granular, some pebbles; subangular to subrounded; moderately sorted; quartz; feldspar.
- 290 - 300 Sand -- off white; very coarse grained to granular; subrounded; well sorted; quartz; feldspar; few grains of muscovite.
- 300 - 310 Sand -- off white; coarse grained to granular; subrounded; moderately sorted; quartz; feldspar; few grains of muscovite; biotite.
- 310 - 320 Granite (weathered) - off white; quartz; white potassic feldspar; 10% biotite; some muscovite.
- 320 - 330 Granite -- salt and pepper; quartz; white potassic feldspar; 35% biotite; few flakes of muscovite; few grains of pyrite.
- 330 - 340 As above except 30% biotite; some muscovite.
- 340 - 350 As above except 40% biotite; no pyrite.
- 350 - 360 As above.
- 360 - 370 Granite -- salt and pepper; quartz; white potassic feldspar; 45% biotite; some muscovite; few grains of pyrite.
- 370 - 380 As above except 40% biotite; 2% muscovite.
- 380 - 390 As above except some muscovite; no pyrite.
- 390 - 400 As above.
- 400 - 410 Granite -- white, black, medium dark gray; equigranular; quartz; white potassic feldspar; 30% biotite; few grains of garnet; muscovite.

Depth  
(feet)

- 410 - 420 As above except 40% biotite.
- 420 - 430 Granite -- white, black; quartz; white potassic feldspar; 35% biotite; some garnet; muscovite; few grains of pyrite.
- 430 - 440 Granite -- salt and pepper; white potassic feldspar; 50% biotite; few flakes of muscovite; garnet.
- 440 - 450 Granite -- pale pink, white; pink microcline, quartz; 5% biotite; 2% muscovite; few grains of garnet.
- 450 - 451 No sample.

Logged by: Michael T. Currie  
Jan. 17, 1979