

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

W#: 4828

C#: 79

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

OWNER: Commonwealth of Virginia Well #3 Mailing Address: 22 East Cary St. Richmond, VA 23219

TENANT: Correctional Unit #21 Mailing Address:

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

WELL LOCATION: County Stafford Approx. 2 1/2 miles East (direction) of U.S. Hwy. 1 and 860 feet miles South (direction) of St. Rd. 628

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

DATE STARTED: 2/7/77 DATE COMPLETED: 3/4/77

TYPE OF DRILL RIG USED: Rotary TOTAL DEPTH 300' feet

WATER LEVEL: Stands 85' 2" feet below surface OR (Completed at 190') has NATURAL flow of _____ gallons per minute.

YIELD TEST: Method pump
Drawdown 36' 8 1/2" feet
Rate 25 gal. per min.
Duration 48 hrs., _____ min.

HOLE SIZE: 12 inches from 0 to 190 feet
9 7/8 inches from 190 to 300 feet
_____ inches from _____ to _____ feet

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

SCREEN SIZE: 4 inches from 153 to 184 feet
_____ inches from _____ to _____ feet

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

CASE SIZE: 6 inches from +2 to 153 feet
4 inches from 184 to 190 feet
_____ inches from _____ to _____ feet

WELL TO SUPPLY: (check one) Home _____
Farm _____ Town _____ School _____
Industry _____ Other St. Correctional Unit

GROUTING: Method _____
Material _____ Depth 52 feet

WATER ANALYSIS AVAILABLE: Yes XX No _____

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

DRILL CUTTINGS SAVED: 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: E - log by driller.

LOG

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	20	Brown clay	
20	22	White sandy clay	
22	23	Iron rock	
23	35	Gray - brown and white silty sand	
35	46	Sticky gray clay	
46	61	Brown sandstone and gray clay	
61	65	Brown sandstone and some white gravel	
65	68	White clay	
68	80	White sandy clay	
80	98	Sandstone and some gravel	
98	112	Light gray clay	
112	142	Red clay	
142	175	White sandy clay	
175	180	White sandy clay	
180	187	White sandy clay	
187	203	Tough brown clay	
203	237	Silty white clay	
237	255	Hard brown clay	
255	277	Silty greenish clay	
277	300	Hard tough brown clay	

(Use additional forms if necessary)

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

INTERVAL SHEET

Page 1 of 1

Well Repository No: W#: 4828

C#: 79

Date rec'd: 4/26/77 Date Processed: 8/3/77

Sample Interval: from: 0 to: 300

PROPERTY: Comm. of Virginia
 (Correctional Unit #21) Well #3

Number of samples: 30

COMPANY: Sydnor Hydrodynamics

Total Depth: 300'

COUNTY: Stafford
 (Cranes Corner)

Oil or Gas: Water: Exploratory:

From-To	From-To	From-To	From-To
0 - 10	50 - 60	-	-
10 - 20	60 - 70	-	-
20 - 30	70 - 80	-	-
30 - 40	80 - 90	-	-
40 - 50	90 - 300	-	-
50 - 60	-	-	-
60 - 70	-	-	-
70 - 80	-	-	-
80 - 90	-	-	-
90 - 100	-	-	-
100 - 10	-	-	-
10 - 20	-	-	-
20 - 30	-	-	-
30 - 40	-	-	-
40 - 50	-	-	-
50 - 60	-	-	-
60 - 70	-	-	-
70 - 80	-	-	-
80 - 90	-	-	-
90 - 200	-	-	-
200 - 10	-	-	-
10 - 20	-	-	-
20 - 30	-	-	-
30 - 40	-	-	-
40 - 50	-	-	-

All samples washed and unwashed.

OWNER: Comm. of VA.
(Correctional Unite #21)
DRILLER: Sydnor Hydrodynamics
COUNTY: Stafford
(Cranes Corner)

W#: 4828
C#: 79
TOTAL DEPTH: 300'
QUAD: Stafford

GEOLOGIC LOG

Depth
(feet)

- 0 - 10 Sand -- dark yellowish orange; moderate clay; fine grained, some medium grains; subangular to subrounded; well sorted; quartz; feldspar; few grains of glauconite; muscovite.
- 10 - 20 Sand -- grayish orange; moderate clay; fine grained, few granules; subangular to subrounded; well sorted; quartz; feldspar; some muscovite; few grains of glauconite; ferricrete.
- 20 - 30 Sand -- off white; medium to coarse grained; subangular to subrounded; well sorted; quartz; feldspar; few opaques.
- 30 - 40 Sand -- grayish orange; 50% heavily stained grains; slightly clayey (clasts) - light olive gray, grayish orange; medium to coarse grained, few granules; subangular to subrounded; well sorted; quartz; feldspar.
- 40 - 50 Clay -- light olive gray; moderate sand; fine to coarse grained; subangular to subrounded; moderately sorted; quartz; some feldspar; few flakes of muscovite.
- 50 - 60 Sand -- off white; moderate clay -- light olive gray, white; medium to coarse grained, some granules; subangular to subrounded; moderately well sorted; quartz; feldspar.
- 60 - 70 As above except medium to coarse grained, 5% granules, 10% pebbles; poorly sorted.
- 70 - 80 Sand -- very light gray; slightly clayey; medium grained to granular, 10% pebbles; subrounded; poorly sorted; quartz; feldspar.
- 80 - 90 As above except 3% pebbles.
- 90 - 100 Sand -- very light gray; slightly clayey; coarse to very coarse grained, some medium grains, 5% granules, 5% pebbles; subrounded; moderately sorted; quartz; feldspar.
- 100 - 110 Sand -- light brown; slightly clayey; medium to coarse grained, few granules; subangular to subrounded; moderately well sorted; quartz; feldspar.
- 110 - 120 Sand -- light brown; moderate clay; medium to coarse grained, few granules, few pebbles; subangular to subrounded; moderately well sorted; quartz; feldspar.

Depth
(feet)

- 120 - 130 Sand and clay -- light brown; moderate clay; abundant sand; medium to coarse grained; subangular to subrounded; moderately well sorted; quartz; feldspar.
- 130 - 140 Sand -- light brown; coarse grained, some medium grains; subangular to subrounded; well sorted; quartz; feldspar.
- 140 - 150 As above plus few opaques.
- 150 - 160 As above except off white.
- 160 - 170 As above except no opaques.
- 170 - 180 Sand -- light grayish orange; slightly clayey; coarse grained; subrounded; well sorted; quartz; feldspar.
- 180 - 190 Sand -- off white; coarse to very coarse grained, some granules; subrounded; well sorted; quartz; feldspar.
- 190 - 200 Sand -- light grayish orange; slightly clayey; medium to coarse grained, some pebbles; subangular to subrounded; moderately sorted; quartz; feldspar; few opaques.
- 200 - 210 As above except grayish orange; few granules; no pebbles; moderately well sorted.
- 210 - 220 As above.
- 220 - 230 As above.
- 230 - 240 Sand -- light grayish orange; slightly clayey; medium to coarse grained; subangular to subrounded; moderately well sorted; quartz; feldspar.
- 240 - 250 As above except moderate clay.
- 250 - 260 Sand -- grayish orange; slightly clayey; medium grained, some coarse grains; subangular to subrounded; well sorted; quartz; feldspar; few opaques.
- 260 - 270 As above.
- 270 - 280 As above.
- 280 - 290 As above.
- 290 - 300 As above.

OWNER: Comm. of VA
(Correctional Unit #21)

-3-

W#: 4828

GEOLOGIC SUMMARY

<u>Depth</u> <u>(feet)</u>	<u>Thickness</u> <u>(feet)</u>	<u>Rock Unit</u>	<u>Time Rock Unit</u>
0 - 40	40	Columbia Group	Pleistocene
40 - 300	260	Patuxent Formation	Cretaceous

VIRGINIA DIVISION OF MINERAL RESOURCES
David A. Hubbard, Jr., Geologist
April 9, 1979