

COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

W#: 3661  
C#: 183

MAILING ADDRESS:

B# 3667  
Charlottesville, VA 22903

DIVISION OF MINERAL RESOURCES

JAMES L. CALVER, COMMISSIONER

OFFICE ADDRESS:

McCormick Road  
Charlottesville, Virginia

WATER WELL COMPLETION REPORT

OWNER: U.S. Government National Park Service Mailing Address: P.O. Box 679  
Fredericksburg, VA 22401

TENANT: George Washington Birthplace, VA, Well #3 Mailing Address: P.O. Box 27186

DRILLER: Sydnor Hydrodynamics, Inc. Mailing Address: Richmond, VA 23261

WELL LOCATION: County Westmoreland Approx. 2 miles North (direction) of  
St. Hwy 3 near Potomac Mills and 500 feet Northwest (direction) of St. Rt. 204

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

DATE STARTED: 7/26/72 DATE COMPLETED: 9/5/72

TYPE OF DRILL RIG USED: Rotary TOTAL DEPTH 360 feet

WATER LEVEL: Stands 28'10" feet below surface OR (Completed @ 326')  
has NATURAL flow of \_\_\_\_\_ gallons per minute

YIELD TEST: Method Submersible pump  
Drawdown 74'10" feet  
Rate 50 gal. per min.  
Duration 8 hrs., \_\_\_\_\_ min.

HOLE SIZE: 15 inches from 0 to 260 feet  
18 inches from 260 to 335 feet  
9 7/8 inches from 335 to 360 feet

WATER ZONES: from 266 to 271 feet  
283 to 288  
from 293 to 298 feet  
from 306 to 321 feet

SCREEN SIZE: 6 inches from 266 to 271 feet  
6 283 288  
6 inches from 293 to 298 feet  
6 inches from 306 to 321 feet

WATER: Color Clear Taste \_\_\_\_\_  
Odor \_\_\_\_\_ Temp. \_\_\_\_\_ °F

CASE SIZE: 6 inches from +18" to 266 feet  
6 271 283  
6 inches from 288 to 293 feet  
6 298 306  
6 inches from 321 to 326 feet

WELL TO SUPPLY: (check one) Home \_\_\_\_\_  
Farm \_\_\_\_\_ Town \_\_\_\_\_ School \_\_\_\_\_  
Industry \_\_\_\_\_ Other Park

GROUTING: Method Pressure  
Material cement-water Depth 171 feet

WATER ANALYSIS AVAILABLE: Yes XX No \_\_\_\_\_  
DRILL CUTTINGS SAVED: Yes 36 XX 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: Electric log ran by driller - no copy available.

LOG

FURNISHED BY: Sydnor Hydrodynamics, Inc.

DATE: 9/5/72

DEPTH (feet)		TYPE OF ROCK OR SOIL PENETRATED (gravel, clay, etc., hardness, color, etc.)	REMARKS (water, caving, shot, screen, sample, etc.)
FROM	TO		
0	2	Top soil	
2	10	Brown sand and gravel some clay	
10	20	Gray sand and gravel	
20	30	Gray sand	
30	40	Gray-brown sand and gravel	
40	47	Brown clay	
47	70	Green clay	
70	90	Gray sand	
90	100	Shells and sand	
100	140	Gray and black silty sand with shell and clay	
140	210	Gray and black silty sand clay	
210	225	Tough gray clay	
225	230	Pink clay	
230	240	Green, gray, sandy clay with rock streaks	
240	250	Pink clay	
250	252	Sand rock	
252	270	Green, gray, pink clay with silty sand	
270	282	Green, gray, black sand	
282	283	Sand rock	
283	310	Gray, black silty sand	
310	315	Shell rock and sand	
315	355	Brown, black sand	
355	360	Pink clay	

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

INTERVAL SHEET

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Well Repository No: W#: 3661

Date rec'd: 1/18/72 Date Processed: 1/26/73

C#: 183  
 Sample Interval: from: 0 to: 360

PROPERTY: National Park Service  
 (George Washington Birthplace) #3  
 COMPANY: Sydnor Hydrodynamics

Number of samples: 36

COUNTY: Westmoreland

Total Depth: 360'

Oil or Gas: Water: Exploratory:

From-To	From-To	From-To	From-To
0 - 10	250 - 60	-	-
10 - 20	260 - 70	-	-
20 - 30	270 - 80	-	-
30 - 40	280 - 90	-	-
40 - 50	290 - 300	-	-
50 - 60	300 - 10	-	-
60 - 70	310 - 20	-	-
70 - 80	320 - 30	-	-
80 - 90	330 - 40	-	-
90 - 100	340 - 55	-	-
100 - 10	355 - 60	-	-
110 - 20	-	-	-
120 - 30	-	-	-
130 - 40	-	-	-
140 - 50	-	-	-
150 - 60	-	-	-
160 - 70	-	-	-
170 - 80	-	-	-
180 - 90	-	-	-
190 - 200	-	-	-
200 - 10	-	-	-
210 - 20	-	-	-
220 - 30	-	-	-
230 - 40	-	-	-
240 - 50	-	-	-

All intervals have both washed and unwashed samples.

OWNER: National Park Service  
(George Washington's Birthplace)  
DRILLER: Sydnor Hydrodynamics  
COUNTY: Westmoreland

W#: 3661  
C#: 183  
TOTAL DEPTH: 560'  
QUAD: Colonial Beach S

GEOLOGIC LOG

Depth  
(feet)

- 0 - 10 Sand and granules -- dark yellowish orange; moderately to very heavily stained; medium to coarse grained, 60% granules; subangular to subrounded; poorly sorted; quartz; feldspar; some opaques.
- 10 - 20 Sand -- white; slightly clayey -- grayish orange (clasts); medium to very coarse grained, 15% granules; subangular to subrounded; poorly sorted; quartz; feldspar; few grains of glauconite; few opaques; muscovite.
- 20 - 30 Sand -- white; medium to coarse grained, some granules; subangular to subrounded; moderately well sorted; quartz; feldspar; few opaques; muscovite.
- 30 - 40 Granules -- white; abundant coarse to very coarse grained sand; subangular to subrounded; moderately well sorted; quartz; feldspar; few opaques.
- 40 - 50 Clay -- light olive gray; some very fine to fine grained sand; 25% granules; subangular to subrounded; moderately well sorted; quartz; some feldspar; some bluish-green and dark blue vivianite; few diatoms; muscovite.
- 50 - 60 As above except 5% granules; trace of vivianite.
- 60 - 70 Clay and granules -- light olive gray; moderate fine to coarse grained sand; angular to subrounded; moderately sorted; quartz; 7% black phosphatic material; few shell fragments.
- 70 - 80 Sand -- light grayish olive; coarse grained, some medium grains, few granules; subangular to subrounded; well sorted; quartz; 5% shell fragments; few flakes of muscovite; forams scarce (inc. Buccella).
- 80 - 90 As above plus few black phosphatic fragments.
- 90 - 100 As above plus some fine grains; moderately well sorted; 7% shell fragments; no forams.
- 100 - 110 Sand -- olive light gray; medium to very coarse grained; subangular to rounded; moderately sorted; quartz; 20% glauconite (black, brown, green); 10% shell fragments; some muscovite.
- 110 - 120 As above except 30% glauconite; 7% shell fragments.

Depth  
(feet)

- 120 - 130 Sand -- olive light gray; fine to coarse grained; subangular to rounded; moderately sorted; 35% glauconite; 10% shell fragments; some muscovite.
- 130 - 140 As above except 40% glauconite; few black phosphatic fragments.
- 140 - 150 Sand -- olive light gray; medium grained, some coarse grains; subangular to rounded; well sorted; 45% glauconite; quartz; 10% shell fragments; few flakes of muscovite; forams scarce (inc. Cibicides and Buccella).
- 150 - 160 Sand -- olive light gray; medium grained, some granules; subangular to rounded; well sorted; 70% glauconite; quartz; few shell fragments; few flakes of muscovite.
- 160 - 170 As above except slightly clayey; some shell fragments.
- 170 - 180 Sand and granules -- olive light gray; slightly clayey; medium to coarse grained, 35% granules; subangular to rounded; poorly sorted; 50% glauconite; quartz; some sandy limestone fragments; few flakes of muscovite.
- 180 - 190 As above except sand; 25% granules.
- 190 - 200 As above except 10% granules; 40% glauconite.
- 200 - 210 Sand -- olive light gray; moderate clay; medium to coarse grained, 7% granules; subangular to rounded; moderately well sorted; 60% glauconite; quartz; few limestone fragments; few flakes of muscovite.
- 210 - 220 Sand -- olive light gray; moderate clay; medium grained, some coarse grains, 5% pebbles; subangular to rounded; moderately well sorted; quartz; 40% glauconite; few flakes of muscovite.
- 220 - 230 Clay -- light olive gray, grayish orange pink; abundant sand; medium grained to gravel; subangular to rounded; poorly sorted; 25% glauconite; few black phosphatic fragments; forams scarce (inc. Buccella).
- 230 - 240 Sand -- olive gray; slightly clayey; medium grained, some coarse grains; subangular to rounded; well sorted; quartz; 40% glauconite (brown, black, green); few limestone and shell fragments; forams rare (inc. Nodosaria).
- 240 - 250 Clay and sand -- light olive gray, grayish orange pink; abundant clay; moderate sand; medium to coarse grained; subangular to rounded; moderately well sorted; quartz; 30% glauconite; few shell fragments; forams rare (inc. Robulus).
- 250 - 260 Sand -- light olive gray; some moderately to heavily stained grains; slightly clayey; medium to coarse grained; subangular to rounded;

Depth  
(feet)

moderately well sorted; quartz; 25% glauconite; few shell fragments; muscovite.

- 260 - 270 As above except 35% glauconite.
- 270 - 280 Sand -- light olive gray; medium grained, some coarse grains; subangular to rounded; well sorted; quartz; 20% glauconite; few sandy limestone and shell fragments.
- 280 - 290 As above except 30% glauconite; some sandy limestone and shell fragments.
- 290 - 300 As above except slightly clayey; 40% glauconite.
- 300 - 310 Coquina and sand -- light olive gray; medium to coarse grained; subangular to rounded; moderately well sorted; 60% sandy limestone fragments; 25% glauconite; quartz; some shell fragments; forams scarce (inc. Nodosaria).
- 310 - 320 Sand -- light olive gray; some moderately to heavily stained grains; medium grained; subangular to rounded; quartz; 35% glauconite (brown, black, green); some sandy limestone and shell fragments; forams scarce (inc. Buccella).
- 320 - 330 As above plus some coarse grains.
- 330 - 340 As above except no forams.
- 340 - 355 As above.
- 355 - 360 Sand and clay -- yellowish brown; moderate clay; abundant sand; medium to coarse grained; subangular to subrounded; moderately well sorted; quartz; 3% sandy limestone and shell fragments; 2% glauconite.

Logged by: Michael T. Currie  
April 23, 1979