

COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

W-3916  
C- 177

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: J. R. Byrd Suburban Water Supply Company Mailing Address: Rt. #2-Box 90  
McKenney, Va. 23872

TENANT: Birchett Estates Subdivision #3 Mailing Address: Rt. #1, Box 110

DRILLER: Mitchell's Well & Pump Co., Inc. Mailing Address: Col. Hgts. Va. 23834

WELL LOCATION: County Prince George Approx. 1 1/4 ~~xxxx~~ miles South (direction) of  
Hopewell city limits and \_\_\_\_\_ feet \_\_\_\_\_ miles \_\_\_\_\_ (direction) of Rt. #156

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

DATE STARTED: May 1973 DATE COMPLETED: May 1973

TYPE OF DRILL RIG USED: Cable tool TOTAL DEPTH 198 feet

WATER LEVEL: Stands 63 feet below surface OR  
has NATURAL flow of \_\_\_\_\_ gallons per minute.

YIELD TEST: Method Pumped  
Drawdown 145 feet  
Rate 78 gal. per min.  
Duration 24 hrs., \_\_\_\_\_ min.  
continuous

HOLE SIZE: 12 inches from 0 to 50 feet  
\_\_\_\_\_ inches from \_\_\_\_\_ to \_\_\_\_\_ feet  
\_\_\_\_\_ inches from \_\_\_\_\_ to \_\_\_\_\_ feet

WATER ZONES: from \_\_\_\_\_ to \_\_\_\_\_ feet  
from \_\_\_\_\_ to \_\_\_\_\_ feet  
from \_\_\_\_\_ to \_\_\_\_\_ feet

SCREEN SIZE: 5 inches from 188 to 198 feet  
with blank above  
\_\_\_\_\_ inches from \_\_\_\_\_ to \_\_\_\_\_ feet  
\_\_\_\_\_ inches from \_\_\_\_\_ to \_\_\_\_\_ feet

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

CASE SIZE: 6 inches from 0 to 180'6" feet  
\_\_\_\_\_ inches from \_\_\_\_\_ to \_\_\_\_\_ feet  
\_\_\_\_\_ inches from \_\_\_\_\_ to \_\_\_\_\_ feet

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

GROUTING: Method Pumped under pressure  
Material Cement & water Depth 50 feet

WATER ANALYSIS AVAILABLE: Yes \_\_\_\_\_ No \_\_\_\_\_  
DRILL CUTTINGS SAVED: Yes X No \_\_\_\_\_

PUMP: Type Submersible  
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: #2 Well

Collected and located 13 Aug. 73 RF Bower Map 990

Location 2,355,750 x 339,950

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	10	Tan dirt & small pebbles	
10	20	Orangish dirt	
20	30	Gray dirt	
30	40	Ditto	
40	50	"	
50	60	Dark gray dirt	
60	70	Ditto	
70	80	Gray dirt	
80	90	Ditto	
90	100	Sand & gravel	
100	110	Gray sand	
110	120	Tan sand	
120	130	Grayish dirt	
130	140	Ditto	
140	150	"	
150	160	Brown dirt	
160	170	Light gray dirt	
170	180	Gravel	
180	190	Ditto	

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INTERVAL SHEET

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Well Repository No: W-3916  
 C- 177

Date rec'd: 8/22/74 Date Processed: 6/6/74

Sample Interval: from:0 to: 198'

PROPERTY: J. R. Byrd (Buchett Estates #3)

Number of samples: 19

COMPANY: Mitchell W. & P. Co.

Total Depth: 198'

COUNTY: Prince George (Hopewell)

Oil or Gas: Water: XExploratory:

From-To	From-To	From-To	From-To
0 - 10	-	-	-
10 - 20	-	-	-
20 - 30	-	-	-
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 - 198	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Washed and unwashed samples.

OWNER: J. R. Byrd (Buchett Estates #2) W#: 3916  
DRILLER: Mitchell C#: 177  
COUNTY: Prince George TOTAL DEPTH: 198'  
(Hopewell)

GEOLOGIC LOG

Depth (feet)

MOORINGS "UNIT" (0-30')

- 0-10 Sand and gravel — dark yellowish orange; moderate clay; fine grained to gravel; subangular to subrounded; poorly sorted; quartz; feldspar; few opaques.
- 10-20 Clay — grayish orange; moderate sand; fine to medium grained, few granules; subangular to subrounded; moderately well sorted; quartz; feldspar; few opaques.
- 20-30 Sand — light olive brown; abundant clay; fine to medium grained, some coarse grains; subangular to subrounded; moderately well sorted; quartz; feldspar; few opaques.

CALVERT FORMATION (30-50')

- 30-40 Sand — light olive brown; abundant clay; fine to medium grained, some coarse grains; subangular to subrounded; moderately well sorted; quartz; feldspar; some black phosphatic material; few opaques.
- 40-50 As above except 2% black phosphatic material.

NANJEMOY FORMATION (50-90')

- 50-60 Sand — grayish green; abundant clay; very fine to medium grained; subangular to rounded; moderately well sorted; quartz; 15% glauconite; some muscovite; foram.
- 60-70 Sand — greenish gray; moderate clay; fine to medium grained, some coarse grains; subangular to rounded; moderately sorted; quartz; 35% glauconite; muscovite; few shell fragments; forams (inc. Uvigerina and Robulus); ostracode.
- 70-80 Sand — medium light gray; abundant clay-gray, white; fine to medium grained; subangular to rounded; moderately well sorted; 50% glauconite; quartz; 10% shell fragments; forams rare (inc. Robulus).
- 80-90 Clay — light gray; abundant sand; medium grained to granular; subrounded to rounded; moderately sorted; quartz; glauconite 25% of sand sized fraction; 15% shell fragments; ostracodes common; some feldspar; few grains of garnet; forams scarce.

PATUXENT FORMATION (90-198')

- 90-100 Sand — white; coarse grained to granular, some medium grains, some pebbles; subrounded; moderately sorted; quartz; feldspar; some glauconite; few shell fragments; bone fragment.

## Depth (feet)

- 100-110 Sand — salt and pepper; slightly clayey; fine to medium grained, some granules; subangular to subrounded; moderately well sorted; quartz; feldspar; 5% glauconite; muscovite; few shell fragments.
- 110-120 Sand — white; coarse grained to granular; subrounded; moderately well sorted; quartz; feldspar; some glauconite.
- 120-130 Sand — grayish yellow; moderate clay; coarse grained to granular, some pebbles; subrounded; moderately sorted; quartz; feldspar; few grains of garnet.
- 130-140 Clay — grayish yellow, reddish brown; moderate sand; medium to very coarse grained, some granules; subrounded; moderately well sorted; quartz; feldspar; some muscovite.
- 140-150 Clay — yellowish gray, reddish brown; abundant sand; fine to medium grained, few granules; subangular to subrounded; moderately well sorted; quartz; feldspar; muscovite.
- 150-160 Clay — light reddish brown; moderate sand; medium to very coarse grained, some granules; subrounded; moderately sorted; quartz; feldspar; some glauconite.
- 160-170 Clay — pale yellowish gray, reddish brown; slightly sandy; medium to very coarse grained; subangular to subrounded; moderately well sorted; quartz; feldspar; some glauconite.
- 170-180 Sand — off white; slightly clayey; coarse grained to granular; subrounded; moderately well sorted; quartz; feldspar; few grains of glauconite.
- 180-198 Sand — white; coarse grained to granular, some pebbles; subrounded; moderately sorted; quartz; feldspar; few grains of glauconite; garnet.

Logged by: Michael T. Currie

GEOLOGIC SUMMARY

Thickness (feet)	<u>ROCK UNIT</u>	<u>TIME ROCK UNIT</u>
30	Moorings "Unit"	Pleistocene
20	Calvert Formation	Miocene-Eocene
40	Nanjemoy Formation	Eocene
108+	Patuxent Formation	Cretaceous

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