

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

MAILING ADDRESS:
Box 2667
Charlottesville, VA 22903

DIVISION OF MINERAL RESOURCES
JAMES L. CALVER, COMMISSIONER
WATER WELL COMPLETION REPORT

OFFICE ADDRESS:
McCormick Road
Charlottesville, Virginia

OWNER: Prince George School Board Mailing Address: Prince George, Virginia 23875

TENANT: Burrowsville Elementary School Mailing Address: Disputana, VA. 23842

DRILLER: Mitchell's Well & Pump Co. Mailing Address: Rt. 1 Box 110, Col. Hgts. Va. 23834

WELL LOCATION: County Prince George Approx. 150 ^{feet}/_{miles} South (direction) of
Rt. # 10 (Burrowsville) and ^{feet}/_{miles} (direction) of

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

DATE STARTED: August 1972 DATE COMPLETED: September 1972

TYPE OF DRILL RIG USED: Cable Tool TOTAL DEPTH 214 ' feet

WATER LEVEL: Stands 65 feet below surface OR
has NATURAL flow of gallons per minute.

YIELD TEST: Method pumped
Tested with 105' pump pipe-took no air
Drawdown feet
Rate 15 gal. per min.
Duration 3 hrs., 45 min.

HOLE SIZE: 9 inches from 0 to 50 feet
4 1/2 inches from 50 to 210 feet
 inches from to feet

SCREEN SIZE: 4 inches from 200 to 210 feet
with blank above
 inches from to feet

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

CASE SIZE: 4 1/2 inches from 0 to 197 feet
 inches from to feet
 inches from to feet

WATER: Color clear Taste good
Odor none Temp. °F

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

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

WATER ANALYSIS AVAILABLE. res. No

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

DRILL CUTTINGS SAVED: 23 Yes X 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:

LOG

FURNISHED BY: Mitchell's Well & Pump Co.

DATE: December 5, 1972

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	Topsoil	SAMPLE # 1
1	10	Hard Reddish Clay	2
10	20	Ditto	3
26	30	Hard Lightish Clay	4
35	40	Yellowish Sandy Clay	5
48	50	Grayish Clay with Sand	6
55	60	Grayish Clay	7
60	70	Bluish Gray Sticky Clay	8
70	80	Ditto	9
87	90	Bluish Clay with some Sand	10
90	100	Bluish Clay with Sand & a few Shells	11
100	110	Ditto	12
110	120	Ditto	13
120	130	Bluish Clay with little Sand	14
130	140	Ditto	15
140	150	Bluish Clay with Sand	16
150	160	Ditto	17
160	170	lackish Sand with some Clay	18
170	180	Ditto	19
185	190	Grayish Sand with Clay-very hard	20
190	200	Grayish Sand & Clay	21
200	210	Grayish Sand	22
210	214	Ditto	23

(Use additional forms if necessary)

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

INTERVAL SHEET

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Well Repository No: W# 3794
C# 176

Date rec'd: 12/15/72 Date Processed: 8/8/73

Sample Interval: from 0 to: 214

PROPERTY: Pr. George Co. Sch. Bd.

Number of samples: 23

COMPANY: Mitchell Well & Pump Co.

Total Depth: 214'

COUNTY: Prince George (Burrowsville)

Oil or Gas: Water Exploratory:

From-To	From-To	From-To	From-To
-	-	-	-
0 - 1	-	-	-
1 - 10	-	-	-
10 - 20	-	-	-
26 - 30	-	-	-
35 40	-	-	-
-	-	-	-
48 - 50	-	-	-
55 - 60	-	-	-
- 70	-	-	-
- 80	-	-	-
87 90	-	-	-
-	-	-	-
-	-	-	-
- 100	-	-	-
- 110	-	-	-
- 120	-	-	-
130	-	-	-
- 140	-	-	-
-	-	-	-
-	-	-	-
- 150	-	-	-
- 160	-	-	-
170	-	-	-
- 180	-	-	-
185 - 190	-	-	-
-	-	-	-
190 - 200	-	-	-
- 210	-	-	-
214	-	-	-

All intervals have both washed and unwashed samples

OWNER: Prince George Co. School Board
(Burrowsville Elem. School)
DRILLER: Mitchell's
COUNTY: Prince George (Burrowsville)

W# 3794
C# 176
Ttotal Depth: 214'

GEOLOGIC LOG

Depth
(feet)

BACONS CASTLE FORMATION (0-40')

- 0-1 Sand - white; fine to medium grained, few granules; subangular to subrounded; moderately well sorted; quartz; feldspar; some opaques. (no unwashed sample)
- 1-10 Sand - pale yellowish orange; moderate clay - orange, light gray; very fine to fine grained; subangular to subrounded; moderately well sorted; quartz; feldspar; few opaques.
- 10-20 As above except dark yellowish orange; some muscovite.
- 20-30 Sand - white; moderate clay; fine grained, few pebbles; subangular to subrounded; well sorted; quartz; feldspar; 2% opaques; muscovite.
- 30-50 No sample.
- 35-40 Sand - dark yellowish orange; slight straining; moderate clay; fine grained; subangular to subrounded; well sorted; quartz; feldspar; some opaques.
- 40-48 No sample.

CALVERT FORMATION (48-90')

- 48-50 Sand - greenish gray; slightly clayey; fine grained; subangular to subrounded; well sorted; quartz; few opaques; few grains of glauconite; muscovite.
- 50-55 No sample.
- 55-60 Sand - olive light gray; abundant clay; very fine to medium grained; subangular to subrounded; moderately well sorted; quartz; magnetite plates; muscovite.
- 60-70 Clay - olive light gray; few magnetite plates.
- 70-80 Clay - olive light gray; slightly sandy; fine to medium grained; subangular to rounded; moderately well sorted; quartz; some glauconite; forams rare (inc. Nonion); ostracode.
- 80-87 No sample.

Depth
(feet)

87-90 Sand - olive light gray; moderate clay; very fine to medium grained, some coarse grains; subangular to subrounded; moderately sorted; quartz; 3% black phosphatic material; some shell fragments; ostracodes.

NANJEMOY - MATTAPONI FORMATION (90-170')

90-100 Sand - olive light gray; moderate clay; fine to coarse grained, some granules; subangular to rounded; moderately sorted; quartz; 20% glauconite; 5% shell fragments; some black phosphatic material; muscovite; forams (inc. Robulus); ostracodes; few spines.

100-110 Sand - olive light gray; moderate clay; fine to medium grained; subangular to rounded; moderately well sorted; quartz; 40% glauconite; some shell fragments; few bone fragments; muscovite; forams scarce (inc. Robulus).

110-120 Sand - olive light gray; abundant clay; fine to medium grained; subangular to rounded; moderately well sorted; quartz; 25% glauconite; 2% muscovite; few shell fragments; forams rare (inc. Robulus); ostracode.

120-130 Clay - very light gray; moderate sand; medium grained; rounded; well sorted; glauconite 95% of sand fraction; quartz; pyrite.

130-140 Sand - olive light gray; slightly clayey; very fine to medium grained; subangular to rounded; moderately well sorted; quartz; 30% glauconite; 2% muscovite; few shell fragments; pyrite; ostracode.

140-150 As above except no ostracode.

150-160 Sand - dark greenish gray; moderate clay, fine to medium grained; subrounded to rounded; well sorted; 60% glauconite; quartz.

160-170 As above except slightly clayey.

PATUXENT FORMATION (170-214')

170-180 Sand - olive light gray; moderate clay; fine to very coarse grained; 7% granules; subrounded to rounded; poorly sorted; quartz; 30% glauconite; feldspar; few grains of garnet.

180-185 No sample.

Depth
(feet)

- 185-190 Sand - white; moderate; fine grained to granular, 5% pebbles; subangular to subrounded; poorly sorted; quartz; feldspar; 3% glauconite; garnet.
- 190-200 As above except medium to very coarse grained, some granules; completely sorted; some glauconite.
- 200-210 Sand - white; slightly clayey; coarse grained to granular; subrounded; moderately well sorted; quartz; feldspar.
- 210-214 As above except some medium grains.

Logged by: Michael T. Currie

GEOLOGIC SUMMARY

<u>Thickness</u> <u>(feet)</u>	<u>Rock Unit</u>	<u>Time Rock Unit</u>
40 +	Bacon's Castle Formation	Pleistocene
8	No sample	
42 +	Calvert Formation	Miocene -Eocene
80	Nanjemoy - Mattaponi Formation	Eocene - Cretaceous
44 +	Patuxent Formation	Cretaceous

VIRGINIA DIVISION OF MINERAL RESOURCES
David A. Hubbard, Jr., Geologist
August 9, 1978