

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

MAILING ADDRESS:
Box 3667
Charlottesville, VA 22903

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

OFFICE ADDRESS:
McCormick Road
Charlottesville, Virginia

OWNER: Hanover County Mailing Address: Hanover County CH. Hanover VA.

TENANT: Beaverdam Park Subdivision Mailing Address: _____

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

WELL LOCATION: County Hanover Approx. 1/2 ^{feet} miles going South (direction) of _____
on Rt. #156 direction of Cold Harbor 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: November 1972 DATE COMPLETED: December 1972

TYPE OF DRILL RIG USED: Cable Tool TOTAL DEPTH 320 3/4 feet

WATER LEVEL: Stands 162 feet below surface OR
has NATURAL flow of _____ gallons per minute.

YIELD TEST: Method Pumped
Drawdown 80 feet
Rate 128 gal. per min.
Duration 86 hrs., 25 min.

HOLE SIZE: 12 inches from 0 to 50 feet
6 inches from 50 to 320 3/4 feet
_____ inches from _____ to _____ feet

WATER ZONES: from 276 to 318 feet
from _____ to _____ feet
from _____ to _____ feet

SCREEN SIZE: 5 inches from 276'7" to 318'7" feet
_____ inches from _____ to _____ feet
_____ inches from _____ to _____ feet

WATER: Color Clear Taste good
Odor None Temp. _____ °F

CASE SIZE: 6 inches from 0 to 288 3/4 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 XX

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

DRILL CUTTINGS SAVED: Yes 32 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: _____

LOG

FURNISHED BY: Mitchell's Well & Pump Company DATE: December 28, 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	10	Top Soil	
10	20	Red Clay	
20	30	Ditto	
30	40	"	
40	50	Blue Mud	
50	60	Ditto	
60	70	"	
70	80	"	
80	90	"	
90	100	White clay	
100	110	Blue mud	
110	120	Ditto	
120	130	"	
130	140	"	
140	150	Black mud & shell	
150	160	Ditto	
160	170	"	
170	180	Green clay - gravel	
180	190	White mud-gravel	
190	200	Ditto	
200	210	White sand	
210	220	Ditto	
220	230	"	
230	240	Sand & gravel	
240	250	Ditto	
250	260	"	
260	270	"	
270	280	"	
280	290	Sand	
290	300	Sand & gravel	
300	310	Sand & gravel	
310	320	Ditto	

(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#:3797

Date rec'd: 1/22/73 Date Processed: 9/10/73

C#: 158
 Sample Interval: from: 0 to: 320

PROPERTY: Hanover County
 (Beaverdam Park Sub.)

Number of samples: 32

COMPANY: Mitchell's W. & P. Co.

Total Depth: 320 3/4

COUNTY: Hanover
 (Mechanicsville)

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	-	-	-
80 - 90	-	-	-
90 - 100	-	-	-
100 - 10	-	-	-
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 washed and unwashed samples.

OWNER: E.A. Dixon
(Beaverdam Park Sub.)
DRILLER: Mitchell's W. & P. Co.
COUNTY: Hanover
(Mechanicsville)

W#: 3797
C#: 158
TOTAL DEPTH: 320 3/4'
QUAD: Seven Pines

GEOLOGIC LOG

Depth
(feet)

- 0 - 10 Sand -- very dark yellowish orange; moderate clay; fine to medium grained, some coarse grains; subangular to subrounded; moderately well sorted; quartz; feldspar; few opaques.
- 10 - 20 Sand -- pale yellowish orange; slightly clayey; medium to coarse grained, 10% granules, 5% pebbles; subangular to subrounded; moderately sorted; quartz; feldspar; some opaques.
- 20 - 30 As above except some pebbles; few flakes of muscovite.
- 30 - 40 Sand -- dark yellowish orange; slightly clayey; medium grained to granular, some fine grains, 5% pebbles; subangular to subrounded; poorly sorted; quartz; feldspar; few opaques.
- 40 - 50 Clay -- light olive gray; moderate sand; fine grained; subangular to subrounded; well sorted; quartz; few flakes of muscovite.
- 50 - 60 As above plus few grains of glauconite.
- 60 - 70 As above except slightly sandy.
- 70 - 80 As above plus some olive light gray clay.
- 80 - 90 Sand -- olive light gray; moderate clay; fine to medium grained, some very coarse grains, some granules; subangular to rounded; moderately well sorted; 50% glauconite; quartz; 5% black phosphatic material inc. shark's tooth; few flakes of muscovite.
- 90 - 100 Sand -- olive light gray; moderate clay; fine to medium grained; subangular to rounded; well sorted; quartz; 20% glauconite; 2% muscovite; few black phosphatic fragments.
- 100 - 110 Limestone fragments - light gray; moderate clay; abundant sand; fine to coarse grained; subangular to rounded; moderately sorted; 70% limestone fragments; 20% glauconite; quartz; few flakes of muscovite.
- 110 - 120 Clay -- light gray; abundant sand; fine to medium grained; subangular to rounded; well sorted; glauconite, 70% of sand sized fraction; quartz; few flakes of muscovite; few limestone fragments.

Depth
(feet)

- 120 - 130 Sand - light gray; abundant clay; fine grained, some medium grains; subangular to subrounded; well sorted; quartz; 5% glauconite; some black phosphatic material; some limestone fragments; few flakes of muscovite.
- 130 - 140 Clay - olive light gray, light gray; moderate sand; fine to medium grained; subangular to rounded; well sorted; quartz; glauconite, 15% of sand sized fraction; 2% muscovite; few limestone fragments.
- 140 - 150 Sand - olive light gray; moderate clay; fine grained; subangular to subrounded; well sorted; quartz; 10% shell fragments; 5% glauconite; forams common (inc. Robulus); few flakes of muscovite; bone fragment; ostracode.
- 150 - 160 Sand - olive light gray; abundant clay; fine to medium grained; subangular to subrounded; well sorted; quartz; 10% glauconite; 7% shell fragments; forams common (inc. Robulus); few flakes of muscovite.
- 160 - 170 Sand and shell fragments - light olive gray, off white; fine to medium grained, some coarse grains; subangular to rounded; moderately well sorted; 40% shell fragments; quartz; 20% glauconite; bone fragment.
- 170 - 180 Sand and clay - pale olive; moderate clay; abundant sand; coarse grained to gravel; subangular to subrounded; poorly sorted; quartz; 2% glauconite; few shell fragments.
- 180 - 190 Sand - light olive gray; slightly clayey; medium grained to granular, 7% pebbles; subrounded; poorly sorted; quartz; feldspar; 3% glauconite; some shell fragments; few flakes of muscovite.
- 190 - 200 Sand - yellowish gray; moderate clay; coarse grained to granular, some medium grains, some pebbles; subrounded; moderately sorted; quartz; feldspar; few flakes of muscovite; glauconite.
- 200 - 210 As above plus some olive gray clay; few shell fragments.
- 210 - 220 Sand - moderate orange pink; moderate clay - moderate orange pink, yellowish gray; medium to coarse grained, 15% granules; subrounded; moderately sorted; quartz; feldspar; few flakes of muscovite; glauconite; garnet.
- 220 - 230 Sand - yellowish gray; moderate clay; coarse grained to granular, 5% pebbles; subrounded; moderately sorted; quartz; feldspar; few flakes of muscovite; glauconite.
- 230 - 240 Sand and gravel - off white; coarse grained to granular, 50% pebbles; subangular to subrounded; poorly sorted; quartz; feldspar; few grains of glauconite.

Depth:
(feet)

- 240 - 250 As above except 40% pebbles; some glauconite.
- 250 - 260 Sand -- off white; coarse grained to granular, some pebbles; sub-rounded; moderately sorted; quartz; feldspar; few flakes of muscovite; glauconite.
- 260 - 270 Sand -- off white; very coarse grained to gravel (35%): subrounded; poorly sorted; quartz; feldspar; few flakes of muscovite.
- 270 - 280 As above except 20% pebbles; few grains of garnet; no muscovite.
- 280 - 290 As above except grayish red due to staining.
- 290 - 300 Sand -- off white; coarse grained to granular, 15% pebbles; sub-angular to sub-rounded; moderately sorted; quartz; feldspar; few grains of garnet.
- 300 - 310 As above except 10% pebbles.
- 310 - 320 As above except 20% pebbles.
- 320 - 320 3/4 No sample.

Logged by: Michael T. Currie
Feb 8, 1979

OWNER: Hanover County
(Beaverdam Park Subdivision)

W# 3797

GEOLOGIC SUMMARY

<u>Depth</u> (feet)	<u>Thickness</u> (feet)	<u>Rock Unit</u>	<u>Time</u>	<u>Rock Unit</u>
0-40	40	Columbia Group		Pleistocene
40-80	40	Eastover Formation (Clay)		Miocene
80-170	90	Nanjemoy-Mattaponi Formation		Eocene-Cretaceous
170-320	150	Patuxent Formation		Cretaceous
320-320 $\frac{3}{4}$	$\frac{3}{4}$	No Sample		

VIRGINIA DIVISION OF MINERAL RESOURCES
David A. Hubbard, Jr., Geologist
February 12, 1979