

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

W#: 3791

C#: 157

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 School Board Mailing Address: Hanover, VA

TENANT: Washington Henry Elementary School Mailing Address: 6138 Mann Dr. Mechanicsville, VA

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

WELL LOCATION: County Hanover Approx. 1 1/2 ^{feet} miles East (direction) of

U.S. Hwy. 301 at intersection of St. Rd 640 & 639 ^{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: September 1972 DATE COMPLETED: October 1972

TYPE OF DRILL RIG USED: Cable tool TOTAL DEPTH 431 feet

WATER LEVEL: Stands 180 feet below surface OR

has NATURAL flow of _____ gallons per minute.

YIELD TEST: Method Pumped

Drawdown 24' feet

Rate 41 gal. per min.

Duration 4 hrs., 30 min.

HOLE SIZE: 12 inches from 0 to 50 feet

6 inches from 50 to 431 feet

_____ inches from _____ to _____ feet

SCREEN SIZE: 5 inches from 411 to 431 feet

_____ inches from _____ to _____ feet

_____ inches from _____ to _____ feet

WATER ZONES: from 411 to 431 feet

from _____ to _____ feet

from _____ to _____ feet

CASE SIZE: 6 inches from 0 to 356'11" feet

5 inches from 357 to 411 feet

_____ inches from _____ to _____ feet

WATER: Color Clear Taste good

Odor None Temp. _____ °F

GROUTING: Method Pressure

Material Cement & water 50 feet

PUMP: Type unknown

Capacity _____ gal per min

Depth of intake _____ feet

WATER ANALYSIS AVAILABLE: Yes _____ No XX

DRILL CUTTINGS SAVED: 40 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: _____

LOG

Mitchell's Well & Pump Company

November 1, 1972

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	Red clay	
10	20	Red clay	
20	30	Red clay	
30	40	Red sand	
40	50	Ditto	
50	60	Brown Sand	
60	70	Blue mud	
70	80	Ditto	
80	90	"	
90	100	"	
100	110	"	
110	120	"	
120	130	"	
130	140	"	
140	150	"	
150	160	Gray clay	
160	170	Ditto	
170	180	"	
180	190	Black sand	
190	200	Ditto	
200	210	White sand	
210	220	Ditto	
220	230	"	
230	240	"	
240	250	"	
250	260	"	
260	270	White sand	
270	280	Ditto	
280	290	Brown clay	
290	300	White sand	
300	310	Ditto	
310	320	"	
320	330	"	
330	340	"	
340	350	"	
350	360	"	
360	370	"	
370	380	Gray sand	
380	390	Salt & pepper	
390	400	Ditto	
400	410	"	
410	420	"	
420	431	"	

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

INTERVAL SHEET

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Well Repository No: W#: 3791
 C#: 157

Date rec'd: 11/27/72 Date Processed: 7/30/73

Sample Interval: from: to:
 0 431

PROPERTY: Hanover Co. School Board
 (Washington Henry Elem. School)

Number of samples: 48

COMPANY: Mitchells Well & Pump

Total Depth: 431

COUNTY: Hanover
 (Ellerson)

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 - 50	-	-
100 - 10*	350 - 60	-	-
110 - 20*	360 - 70	-	-
120 - 30*	370 - 80	-	-
130 - 40*	380 - 90	-	-
140 - 50*	390 - 400	-	-
150 - 60*	400 - 10	-	-
160 - 70*	410 - 20	-	-
170 - 80*	420 - 31	-	-
180 - 90*	-	-	-
190 - 200*	-	-	-
200 - 10	-	-	-
210 - 20	-	-	-
220 - 30	-	-	-
230 - 40	-	-	-
240 - 50	-	-	-

* Have washed & unwashed samples: rest have unwashed only

OWNER: Hanover Co. School Board
(Washington Henry Elem. School)
DRILLER: Mitchell Well & Pump Co.
COUNTY: Hanover

W#: 3791
C#: 157
TOTAL DEPTH: 431'
QUAD: Yellow Tavern

GEOLOGIC LOG

Depth
(feet)

- 0 - 10 Sand -- dark yellowish orange; moderate clay; fine to medium grained; subangular; to subrounded; moderately well sorted; quartz; feldspar; few opaques.
- 10 - 20 Sand -- light brown; slightly clayey; fine to medium grained; subangular; well sorted; quartz; feldspar; few opaques; few grains of glauconite.
- 20 - 30 Sand -- light brown; slightly stained; slightly clayey; medium grained, some coarse grains; subangular to subrounded; well sorted; quartz; feldspar; some opaques.
- 30 - 40 As above except dark yellowish orange; few granules.
- 40 - 50 As above except medium to coarse grained, some granules; moderately well sorted.
- 50 - 60 Sand and clay -- light olive gray; moderate clay - light olive gray, dark yellowish orange; abundant sand; fine to medium grained, 10% granules, 7% pebbles; subangular to subrounded; moderately sorted; quartz; feldspar; some ferricrete; few opaques; few grains of glauconite; muscovite; few grains of garnet.
- 60 - 70 Sand -- light olive gray; moderate clay; fine grained; subangular to subrounded; well sorted; quartz; some muscovite; few flakes of biotite.
- 70 - 80 As above except abundant clay.
- 80 - 90 As above.
- 90 - 100 As above plus 10% shell fragments (unwashed sample only).
- 100 - 110 Clay -- light olive gray; abundant sand; fine grained; subangular to subrounded; well sorted; quartz; 7% shell fragments; few black phosphatic fragments; muscovite.
- 110 - 120 As above except 5% shell fragments.
- 120 - 130 As above except moderate sand; 2% shell fragments; some glauconite.
- 130 - 140 As above.

Depth
(feet)

- 140 - 150 Clay -- very light gray; some quartz; few flakes of muscovite; shell fragments.
- 150 - 160 As above.
- 160 - 170 Clay -- light gray; moderate sand; fine to medium grained, some granules; subangular to subrounded; moderately well sorted; quartz; glauconite, 10% of sand sized fraction; some limestone; few flakes of muscovite.
- 170 - 180 Clay -- moderate orange pink, very light gray, light olive gray; slightly sandy; fine to medium grained; subangular to subrounded; moderately well sorted; quartz; 10% limestone fragments; 2% black phosphatic material; 2% glauconite; few flakes of muscovite; shark's tooth.
- 180 - 190 Clay -- very light gray, moderate orange pink; slightly sandy; fine grained, some medium grains; subangular to subrounded; well sorted; quartz; some glauconite; few limestone fragments; few black phosphatic fragments; muscovite.
- 190 - 200 Clay -- olive gray; abundant sand; fine to medium grained; subangular to rounded; well sorted; quartz; 20% glauconite; 2% shell fragments; some muscovite; few black phosphatic fragments; few limestone fragments; forams scarce (inc. Robulus); few grains of blue quartz.
- 200 - 210 Sand and granules -- multicolored; coarse to very coarse grained, 40% granules, 10% pebbles; angular; moderately sorted; quartz; some shell fragments; few grains of glauconite.
- 210 - 220 Sand -- white; coarse grained, some fine grains, some medium grains, some granules; subangular to subrounded; moderately sorted; quartz; feldspar; some glauconite; few grains of garnet.
- 220 - 230 Sand -- white; coarse to very coarse grained, some medium grains, some granules; subangular to subrounded; moderately well sorted; quartz; feldspar; few grains of glauconite.
- 230 - 240 As above plus few pebbles; few flakes of muscovite.
- 240 - 250 Sand -- white; coarse grained to granular, some medium grains, few pebbles; subangular; moderately sorted; quartz; feldspar; few grains of glauconite.
- 250 - 260 As above.
- 260 - 270 As above.
- 270 - 280 Sand -- white; medium to very coarse grained, some granules; subangular; moderately sorted; quartz; feldspar; few flakes of muscovite.

Depth
(feet)

- 280 - 290 Clay -- dusky yellow; moderate sand; coarse grained to granular; subangular to subrounded; moderately sorted; quartz; feldspar.
- 290 - 300 Granite (weathered) -- off white; slightly clayey (dusky yellow clasts); quartz; feldspar; 2% muscovite; few flakes of heavily weathered biotite.
- 300 - 310 As above except 7% biotite.
- 310 - 320 Granite (slightly weathered) -- salt and pepper; quartz; white potassic feldspar; 15% biotite; 3% muscovite.
- 320 - 330 As above except 30% biotite; few grains of pyrite.
- 330 - 340 Granite (slightly weathered) -- salt and pepper; quartz; white potassic feldspar; 7% biotite; some muscovite.
- 340 - 350 As above except 10% biotite.
- 350 - 360 As above except 35% biotite; 7% muscovite.
- 360 - 370 As above except 15% biotite; 2% muscovite.
- 370 - 380 Granite (slightly weathered) -- salt and pepper; quartz; white potassic feldspar; 25% biotite; 7% muscovite; few grains of garnet.
- 380 - 390 As above except 15% muscovite; no garnet.
- 390 - 400 As above.
- 400 - 410 Granite (slightly weathered) -- salt and pepper; quartz; white potassic feldspar; 20% biotite; 7% muscovite.
- 410 - 420 Granite (slightly weathered) -- salt and pepper; quartz; white potassic feldspar; 25% biotite; 20% muscovite; few grains of pyrite.
- 420 - 431 Granite (slightly weathered) -- salt and pepper; 35% biotite; 20% muscovite; few grains of pyrite.

NOTE: Samples 200 - 431 are unwashed only.

Logged by: Michael T. Currie
Feb 6, 1979