W-4223
C- 181

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

MAILING ADDRESS:
B[illegible]3667
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DIVISION OF MINERAL RESOURCES
JAMES L. CALVER, COMMISSIONER
WATER WELL COMPLETION REPORT

OFFICE ADDRESS:
McCormick Road
Charlottesville, Virginia

OWNER: Van E. Harmison Mailing Address: Rt. #2, Box 46-A-47 Prince George, VA. 23875

TENANT: Van E. Harmison Mailing Address:

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

WELL LOCATION: County Prince George Approx. 1 ~~xxx~~ miles _____ (direction) of off Rt. #460 in direction of Kings Subdivision at corner of Rt. #1501 and #1504. feet and _____ 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: May 1974 DATE COMPLETED: May 1974

TYPE OF DRILL RIG USED: Cable tool TOTAL DEPTH 197 feet

WATER LEVEL: Stands 45 feet below surface OR

has NATURAL flow of _____ gallons per minute

YIELD TEST: Method Pumped
Did not drawdown to 80'
Drawdown _____ feet
Rate 25 gal. per min.
Duration 12 hrs., _____ min.
not continuous

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

WATER: Color _____ Taste _____
Odor _____ Temp. _____ °F

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

WATER ANALYSIS AVAILABLE: Yes _____ No _____

DRILL CUTTINGS SAVED: 19 Yes X No _____

HOLE SIZE: 4 inches from 0 to 197 feet
_____ inches from _____ to _____ feet
_____ inches from _____ to _____ feet

SCREEN SIZE: _____ inches from _____ to _____ feet
_____ inches from _____ to _____ feet
_____ inches from _____ to _____ feet

CASE SIZE: 4 inches from 0 to 182'10" feet
21' 1" of slotted pipe
3 inches from _____ to _____ feet
_____ inches from _____ to _____ feet

GROUTING: Method _____
Material _____ Depth _____ feet

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: _____

(LOG OF WELL) OVER

LOG

FURNISHED BY: _____ DATE: _____

DEPTH (feet) FROM	TO	TYPE OF ROCK OR SOIL PENETRATED (gravel, clay, etc., hardness, color, etc.)	REMARKS (water, caving, shot, screen, sample, etc.)
0	10	tan dirt	
10	20	Ditto	
20	30	"	
30	40	gray dirt -shell fragments	
40	50	Ditto	
50	60	gray mud-shell fragments	
60	70	dark gray mud	
70	80	Ditto	
80	90	gray sand	
90	100	gray dirt	
100	110	Ditto	
110	120	"	
120	130	"	
130	140	"	
140	150	gray sand	
150	160	Ditto	
160	170	"	
170	180	"	
180	197	"	

(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-4223
C- 181

Date rec'd: 7/18/74 Date Processed: 7/16/75

Sample Interval: from: 0 to: 190

PROPERTY: Van E. Harmison

Number of samples: 19

COMPANY: Mitchell W& P Co.

Total Depth: 197'

COUNTY: Prince George

Oil or Gas: Water: X Exploratory:

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- 190	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

All intervals have both washed and unwashed samples.

OWNER: Van E. Harmison
DRILLER: Mitchell W & P Co.
COUNTY: Prince George

W#: 4223
C#: 181
TOTAL DEPTH: 197'

GEOLOGIC LOG

Depth (feet)

MOORINGS "UNIT" (0-30')

0-10 Clay and sand — dark yellowish orange; abundant clay; moderate sand; medium to coarse grained, few granules; subangular to subrounded; moderately well sorted; quartz; few opaques.

10-20 Sand — dark yellowish orange; moderate clay; fine to very coarse grained, some granules, few pebbles; subangular to subrounded; poorly sorted; quartz; feldspar; some opaques.

20-30 Sand — dark yellowish orange; slightly clayey; medium grained, some coarse grains, few granules; subangular to subrounded; moderately well sorted; quartz; feldspar; some opaques; muscovite.

CALVERT FORMATION (30-80')

30-40 Sand — olive light gray; abundant clay; fine to medium grained; subangular to subrounded; well sorted; quartz; 2% shell fragments; some black phosphatic material; few spines; ostracode.

40-50 Sand — light olive gray; moderate clay; medium grained; subangular to subrounded; well sorted; quartz; 10% shell fragments; 3% black phosphatic material; some spines; few grains of glauconite; ostracodes.

50-60 Sand — light olive gray; moderate clay; fine to medium grained; subangular to subrounded; well sorted; quartz; 5% shell fragments; some black phosphatic material; some spines; foram.

60-70 Sand — olive light gray; slightly clayey; fine grained; subangular to subrounded; well sorted; quartz; 2% shell fragments; some black phosphatic material; few grains of glauconite; few spines.

70-80 Sand — olive light gray; moderate clay; very fine grained; subangular to subrounded; well sorted; quartz; 5% black phosphatic material; few grains of glauconite.

PATUXENT FORMATION (80-190')

80-90 Sand — white; medium to very coarse grained, some granules; subangular to subrounded; moderately sorted; quartz; feldspar; some glauconite; few black phosphatic fragments.

90-100 Sand — off white; moderate clay; coarse to very coarse grained; 7% granules; subrounded; moderately well sorted; quartz; feldspar; few grains of glauconite.

100-110 As above except 10% granules.

Depth (feet)

110-120	Sand — white; abundant clay; coarse grained to granular, some pebbles; subrounded; moderately sorted; quartz; feldspar.
120-130	Sand — off white; moderate clay; coarse to very coarse grained; 10% granules, few pebbles; subrounded; moderately sorted; quartz; feldspar.
130-140	Sand — white; moderate clay; coarse grained to granular, some medium grains, few pebbles; subrounded; moderately sorted; quartz; feldspar.
140-150	Sand — white; medium to coarse grained, some fine grains; subangular to subrounded; moderately sorted; quartz; feldspar; garnet.
150-160	Sand — white; coarse grained to granular (20%); subrounded; moderately well sorted; quartz; feldspar.
160-170	As above except coarse to very coarse grained, 10% granules; few grains of garnet.
170-180	Sand — white; coarse grained to granular (30%); subrounded; moderately well sorted; quartz; feldspar; some garnet.
180-190	As above except 20% granules.
190-197	No Sample.

Logged by: Michael T. Currie

GEOLOGIC SUMMARY

Thickness (feet)	ROCK UNIT	TIME ROCK UNIT
30	Moorings "Unit"	Pleistocene
50	Calvert Formation	Miocene-Eocene
110+	Patuxent Formation	Cretaceous
7	No Sample	

VIRGINIA DIVISION OF MINERAL RESOURCES
David A. Hubbard, Jr., Geologist
August 14, 1978