

COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

W-4788  
C-137

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: Gerald Webb Mailing Address: 3105 Conduit Rd1, Col. Hqts. VA

23834

TENANT: A. M. I. Corporation Mailing Address: Grays Creek, Surry County, VA

DRILLER: J. J. Mitchell, Jr. Mailing Address: 16815 Happy Hill Rd., Colonial Heights

VA 23834

WELL LOCATION: County Surry Approx. 3.6 <sup>XXXX</sup> miles (direction) of

on Route 31 (left side of road) 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 1976 DATE COMPLETED: November 1976

TYPE OF DRILL RIG USED: Cable Tool TOTAL DEPTH 311' feet

WATER LEVEL: Stands 80 feet below surface OR

has NATURAL flow of \_\_\_\_\_ gallons per minute.

YIELD TEST: Method Pumped

Drawdown 126 feet

Rate 14 gal. per min.

Duration 3 hrs., \_\_\_\_\_ min.

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

from \_\_\_\_\_ to \_\_\_\_\_ feet

from \_\_\_\_\_ to \_\_\_\_\_ feet

WATER: Color \_\_\_\_\_ Taste \_\_\_\_\_

Odor \_\_\_\_\_ Temp. \_\_\_\_\_ °F

WELL TO SUPPLY: (check one) Home \_\_\_\_\_

Farm \_\_\_\_\_ Town \_\_\_\_\_ School \_\_\_\_\_

Industry \_\_\_\_\_ Other Home (summer cottage)

WATER ANALYSIS AVAILABLE: Yes X No \_\_\_\_\_

DRILL CUTTINGS SAVED: 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: \_\_\_\_\_

HOLE SIZE: 7 inches from 0 to 12 feet

4 inches from 12 to 311 feet

\_\_\_\_\_ inches from \_\_\_\_\_ to \_\_\_\_\_ feet

SCREEN SIZE: 3 inches from 301 to 311 feet  
w/Blank above

\_\_\_\_\_ inches from \_\_\_\_\_ to \_\_\_\_\_ feet

\_\_\_\_\_ inches from \_\_\_\_\_ to \_\_\_\_\_ feet

CASE SIZE: 4 inches from 0 to 297 feet

\_\_\_\_\_ inches from \_\_\_\_\_ to \_\_\_\_\_ feet

\_\_\_\_\_ inches from \_\_\_\_\_ to \_\_\_\_\_ feet

GROUTING: Method Poured in

Material cement & sand Depth 12 feet

PUMP: Type \_\_\_\_\_

Capacity \_\_\_\_\_ gal. per min

Depth of intake \_\_\_\_\_ feet

# LOG

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		
			<b>SAMPLE #</b>
0	10	Orangeish soil	1
10	20	Orangeish dirt	2
20	30	Orangeish dirt	3
30	40	Gray dirt & shell fragments	4
40	50	Gray dirt & shell fragments	5
50	70	Gray mud	6, & 7
70	90	Gray mud	8, & 9
90	190	Gray mud & shell fragments	10, 11, 12, 13, 14, 15, 16, 17, 18, & 19
190	210	Gray mud	20 & 21
210	230	Lighter gray mud	22 & 23
230	240	Greenish	24
240	280	Greenish & shell fragments	25, 26, 27, & 28
280	300	Gray & black sand	29, & 30
300	311	Gray sand	31

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

INTERVAL SHEET

C-137

Page 1 of 1

Well Repository No.: R-4788

Date rec'd: 2/7/77 Date Processed: 7/11/77

Sample Interval: from 0 to: 311

PROPERTY: A. M. I. Corporation

Number of samples: 31

COMPANY: Mitchell W & P Company

Total Depth: 311'

COUNTY: Surry (Scotland)

Oil or Gas: Water: X Exploratory:

From-To	From-To	From-To	From-To
0-10	300 - 311	-	-
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	-	-	-
190-200	-	-	-
200-210	-	-	-
210-220	-	-	-
220-230	-	-	-
230-240	-	-	-
240-250	-	-	-
250-260	-	-	-
260-270	-	-	-
270-280	-	-	-
280-290	-	-	-
290-300	-	-	-

Both washed and unwashed samples.

OWNER: A. M. I. Corporation  
DRILLER: Mitchell P & W Co.  
COUNTY: Surry (Scotland)

W-4788  
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TOTAL DEPTH: 311'

GEOLOGIC LOG

Depth  
(feet)

Bacon's Castle Formation (0-30')

0-10 Sand-lt. brown; abundant clay; abundant silt; very fine to medium grained; subangular to subrounded; poorly sorted; quartz inc. pebbles; some opaques; poorly washed.

10-20 Sand and gravel-lt. orangish brown; abundant clay; silty; very fine to medium grained; subangular to subrounded; moderately well sorted; quartz; feldspar; opaques; poorly washed.

Yorktown Formation (20-50')

20-30 Sand-tan, slightly clayey; fine grained; subangular to rounded; well sorted; quartz; spines; some opaques; few grains of glauconite; few reworked shell fragments; sharks tooth fragment.

30-40 Sand-gray; abundant clay; fine grained; subangular to rounded; well sorted; quartz; spines; 7% shell fragments; some black phosphatic material; few forams; ostracode.

40-50 Sand and clay-gray; abundant clay; fine grained; subangular to rounded; well sorted; some abundantly sandy gray clay; quartz; spines; 5% shell frags; some black phosphatic material; forams (inc. Nonion).

Calvert Formation (50-170)

50-60 Clay-gray; silty; scattered fine sands; quartz; few phosphatic tooth fragments; spines.

60-70 Silt-gray; abundant clay; abundant, very fine grained sand; well sorted; quartz; muscovite; spines; few shell frags; forams (inc. Nonion).

70-80 Clay and silt-gray; some fine grained sand; quartz; muscovite; few frag. of phosphatic material.

80-90 As above plus bone fragments.

90-100 As above plus more shell frag. (inc. gastropod); forams (inc. Nonion).

Depth  
(feet)

- 100-110 Clay-gray; some silt; gastropod shells; forams (inc. Nonion, Bulimina, and Textularia) abundant; ostracode (Cytherella).
- 110-120 Clay-greenish gray interlayered with charcoal gray shell frags. inc. gastropod; forams common (inc. Nonion, Bulimina).
- 120-130 As above plus ostracode.
- 130-140 As above plus ostracode (Cytherella); magnetite plate.
- 140-150 As above plus magnetite plate.
- 150-160 Sand-gray; abundant clay; medium grained; moderately well sorted; subangular; quartz; 15% shell frags; some black phosphatic material; glauconite; forams (inc. Nonion); fish vertebra.
- 160-170 Sand-gray; abundant clay; medium grained; moderately well sorted; subangular to subrounded; quartz; 2% shell fragments; black phosphatic material inc. sharks teeth; glauconite; forams common (inc. Uvigerina, Nonion, Bulimina and Robulus); spines

Nanjemoy Formation (170-230)

- 170-180 Sand-greenish gray; abundant clay; fine to medium grained; moderately sorted; subangular to rounded; quartz; 12% glauconite; black phosphatic material; abundant forams (inc. Bulimina, Nonion, Textularia); few shell frags; spines; ostracode (Clithrocytheridea).
- 180-190 Sand-greenish gray; abundant clay; fine to medium grained; well sorted; subangular to rounded; quartz; 20% glauconite; abundant forams (inc. Bulimina, Nonion, Robulus and Textularia); spines; pyrite; few shell frags; few fragments of sandy limestone; ostracode.
- 190-200 Sand-dark greenish gray; abundant clay; fine to medium grained; moderately well sorted; rounded; 85% glauconite (black, brown and green); quartz; large fragment of sandy limestone.
- 200-210 Clay-dark greenish gray; abundant sand (medium grained); 80% glauconite (sand); abundant mica; quartz; few purplish brown siltstone and sandy limestone fragments; spines.

210-220 Clay-gray; locally contains glauconite sand (medium grained); micaceous (fine grained).

220-230 Clay and sand-gray; locally clay continues abundant medium grained glauconite sands; medium to coarse grained sands contain abundant clay; glauconite; mica; some pyrite; few quartz grains; forams rare (Robulus).

Mattiponi Formation (230-280)

230-240 Sand-very dark green; moderate clay; silty; medium grained; well sorted; rounded; 90% glauconite; quartz.

240-250 Sand-dark green; moderate clay; fine to coarse grained; moderately well sorted; rounded; 80% glauconite; quartz; 2% subangular limestone fragments.

250-260 Sand-dark green; moderate clay; fine to medium grained; well sorted; rounded; 80% glauconite.

260-270 As above.

270-280 Sand-dark green; abundant clay; medium grained; well sorted; rounded; 80% glauconite; few quartzite pebbles.

Patuxent Formation (280-311)

280-290 Sand-salt and pepper; medium to coarse grained; subangular to subrounded; moderately well sorted; quartz; feldspar; 7% glauconite; few grains of garnet; few quartz granules.

290-300 As above except 2% glauconite.

300-311 Sand-white; quartz silt; fine to coarse grained; subangular to subrounded; moderately well sorted; quartz; feldspar; few grains of garnet (fines believed to be crushed fragments caused by drilling operation).

GEOLOGIC SUMMARY

<u>Thickness (feet)</u>	<u>ROCK UNIT</u>	<u>TIME ROCK UNIT</u>
20	Bacons Castle Formation	Pleistocent
30	Yorktown Formation	Pliocene-Miocene
120	Calvert Formation	Miocene-Eocene
60	Nanjemoy Formation	Eocene
50	Mattiponi Formation	Eocene-Cretaceous
31+	Patuxent Formation	Cretaceous

Virginia Division of Mineral Resources  
David A. Hubbard, Jr. Geologist  
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