

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

MAILING ADDRESS:

DIVISION OF MINERAL RESOURCES

OFFICE ADDRESS:

B 3667
C Charlottesville, VA 22903

JAMES L. CALVER, COMMISSIONER

McCormick Road
Charlottesville, Virginia

WATER WELL COMPLETION REPORT

OWNER: Continental Can Company #6 Mailing Address: Attn: Mr. H. C. Halupka

TENANT: Woodlands Division - Nursery Mailing Address: P. O. Box 340, Hopewell, VA 23860

DRILLER: Mitchell's Well and Pump Company Mailing Address: R#1, Box 110, Col. Heights, VA 23834

WELL LOCATION: County Chesterfield Approx. 3 ~~xxxx~~ miles east (direction) of U. S. Highway 1 and 1/4 ~~xxxx~~ miles south (direction) of St. Rt. 10

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

DATE STARTED: June 1970 DATE COMPLETED: June 1970

TYPE OF DRILL RIG USED: cable tool TOTAL DEPTH 372 feet

WATER LEVEL: Stands 140 feet below surface OR has NATURAL flow of _____ gallons per minute.

YIELD TEST: Method pumped
Drawdown 68 feet
w) pumped @ Rate 96 gal. per min.
Duration 8 hrs., 0 min.

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

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

CASE SIZE: 8 inches from 0 to 279'8" feet
6 inches from -11'4" to 336'7" feet
_____ inches from _____ to _____ feet

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

GROUTING: Method _____
Material _____ Depth _____ feet

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

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

WATER ANALYSIS AVAILABLE: Yes _____ No

DRILL CUTTINGS SAVED: Yes 37 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: Well for irrigation purpose only. Rock termination. 1 sample for each 10' drilling; 37 samples submitted.

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

INTERVAL SHEET

C-196

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Well Repository No: 3088

Date rec'd: 2/16/71; processed 2/19/71

Sample Interval: from 0 to: 372'

PROPERTY: Continental Can Co. Well 6

Number of samples: 37

COMPANY: Mitchell's Well & Pump Co.

Total Depth: 372'

COUNTY: Chesterfield (Walthall)

Oil or Gas: Water: Exploratory:

From - To	From - To	From - To	From - To
0 - 10	250 - 260	-	-
10 - 20	260 - 270	-	-
20 - 30	270 - 280	-	-
30 - 40	280 - 290	-	-
40 - 50	290 - 300	-	-
50 - 60	300 - 310	-	-
60 - 70	310 - 320	-	-
70 - 80	320 - 330	-	-
80 - 90	330 - 340	-	-
90 - 100	340 - 350	-	-
100 - 110	350 - 360	-	-
110 - 120	360 - 372	-	-
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	-	-	-

All intervals have both washed and unwashed samples

OWNER: Continental Can Co. (#6)
DRILLER: Mitchell's Well & Pump Co.
COUNTY: Chesterfield (Walthall)

VDMR # 3088
WWCR # 196
TOTAL DEPTH: 372'

GEOLOGIC LOG

Depth
(feet)

COLUMBIA GROUP (0-80')

0-10	Sand - fine to very coarse-grained; sparse binder of reddish-brown clay
10-20	"
20-30	Sand - fine-grained, well sorted; sparse binder of tan clay
30-40	Sand - fine-grained, well sorted; moderately abundant matrix of dark, brownish-gray clay
40-50	Sand - fine- to very coarse-grained, poorly sorted; 5% fine-grained gravel (2-10 mm); sparse binder of orange-brown clay
50-60	Sand - fine- to very fine-grained, well sorted; sparse binder of pale reddish-orange clay
60-70	"
70-80	"

CALVERT FORMATION (80-115')

80-90	Silt - well sorted; firmly bound by brown and dark-gray clays
90-100	Clay - bluish-gray, compact to fissile; fine-grained pyrite common
100-110	Clay - light-gray, compact; with laminae of brown, clayey micaceous silt; phosphorite nodules common; minor amount of pyrite
110-115	Sand - fine to coarse, poorly sorted, clayey; quartz and reworked phosphorite

MATTAPONI FORMATION (115-130')

- 115-120 Sand - greenish-gray, silty and clayey, fine- to very fine-grained, well sorted; slightly to moderately glauconitic; slightly pyritic and micaceous
- 120-130 Silt - greenish-brown, slightly clayey, very well sorted; slightly to moderately glauconitic; muscovite common

PATUXENT FORMATION (130-220')

- 130-140 Sand - moderately abundant matrix of pale-gray clay; 10-15% fine-grained, feldspathic gravel; sand is fine- to very coarse-grained, poorly sorted, feldspathic
- 140-150 "
- 150-160 "
- 160-170 Sand - white, clean; fine- to very coarse-grained, poorly sorted; with 10% fine-grained gravel; feldspathic
- 170-180 Clay, sand, and lignite - drab brown clay, and coarse-grained, feldspathic sand with abundant matrix of drab brown clay; numerous laminae of lignitic material; a few pyrite concretions
- 180-190 Gravel, sand, and clay - coarse sand and fine gravel in abundant matrix of drab grayish-brown clay; sand-gravel is feldspathic and lithic
- 190-200 Sand, clay, and gravel - coarse, poorly sorted, angular sand and fine-grained gravel in abundant matrix of dark-gray lignite-bearing clay; sand and gravel comprise quartz, feldspar, and a variety of metamorphic rock fragments
- 200-210 Sand - fine- to very coarse-grained, moderately sorted; feldspathic; moderately abundant matrix of light-gray clay
- 210-220 Sand - fine- to very coarse-grained, poorly sorted; slightly feldspathic; abundant matrix of yellowish-green clay; 5% fine-grained quartzo-lithic gravel

PETERSBURG GRANITE (220-372')

220-230	Saprolite- biotite-bearing multicolored clay with abundant angular quartz and decomposed feldspar
230-240	"
240-250	" very micaceous (biotite and muscovite); abundant feldspar
250-260	Saprolite - green; biotite abundant; quartz and feldspar relatively scarce (mafic dike ?)
260-270	Saprolite - gray; biotite extremely abundant; quartz, feldspar, and muscovite subordinate (mafic dike ?)
270-280	Biotite granite - quartz, feldspar, biotite, and muscovite; iron-stained
280-290	"
290-300	Biotite gneiss - fairly fresh biotite predominant; muscovite, quartz, and feldspar subordinate (schlieren ?)
300-310	Biotite granite - quartz, feldspar, biotite, and muscovite
310-320	" with less biotite and muscovite
320-330	" "
330-340	" "
340-350	Biotite granite - quartz and feldspar, with subordinate amounts of biotite and muscovite; iron-stained
350-360	"
360-372	Biotite granite - feldspar, quartz, biotite, and accessory muscovite; fresh

GEOLOGIC SUMMARY

<u>Depth</u> (feet)	<u>Rock Name</u>	<u>Age</u>
0-80	Columbia Group	Pleistocene
80-115	Calvert Formation	Middle Miocene
115-130	Mattaponi Formation	Paleocene-Early Cretaceous
130-220	Patuxent Formation	Early Cretaceous
220-372	Petersburg Granite	Paleozoic (?)

Virginia Division of Mineral Resources
 Robert H. Teifke - Geologist
 March 2, 1971

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