

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

W#: 3654
C#: 154

MAILING ADDRESS:
B-3667
Charlottesville, VA 22903

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

OFFICE ADDRESS:
McCormick Road
Charlottesville, Virginia

OWNER: Natkins & Company, Inc. Mailing Address: Rt. 1 Ashland, VA

TENANT: _____ Mailing Address: _____

DRILLER: Atlantic Pump & Equipment Co. Mailing Address: P.O. Box 4009 Richmond, VA

WELL LOCATION: County Hanover Approx. 150 ^{feet}/_{miles} West (direction) of
U.S. Hwy. 1 and 1.2 ^{feet}/_{miles} North (direction) of Henrico Co. Line

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

DATE STARTED: July 8, 1972 DATE COMPLETED: July 15, 1972

TYPE OF DRILL RIG USED: Air Rotary TOTAL DEPTH 200 feet

WATER LEVEL: Stands 30 feet below surface OR

has NATURAL flow of _____ gallons per minute.

YIELD TEST: Method pumped

Drawdown 120 feet

Rate 85 gal. per min.

Duration 24 hrs., _____ min.

WATER ZONES: from 58 to _____ feet

from 122 to _____ feet

from 152 to 158 feet

WATER: Color None Taste 0

Odor None Temp. 61 °F

WELL TO SUPPLY: (check one) Home _____

Farm _____ Town _____ School _____

Industry XX Other _____

WATER ANALYSIS AVAILABLE: Yes XX No _____

19

DRILL CUTTINGS SAVED: 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: _____

HOLE SIZE: 10 inches from 0 to 51 feet

6 inches from 51 to 200 feet

_____ inches from _____ to _____ feet

SCREEN SIZE: _____ inches from _____ to _____ feet

_____ inches from _____ to _____ feet

_____ inches from _____ to _____ feet

CASE SIZE: 6 inches from 0 to 51 feet

_____ inches from _____ to _____ feet

_____ inches from _____ to _____ feet

GROUTING: Method Pressure

Material Cement Depth 51 feet

PUMP: Type Submersible

Capacity 40 gal. per min

Depth of intake 168 feet

LOG

FURNISHED BY: Charles Thomas

DATE: July 8, 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	Red clay	
10	18	Yellow clay	
18	30	Brown clay	
30	58	Blue Mica w/white quartz	3 GPM
58	65	White & Blue Quartz	
65	96	White & Green, Black granite	
96	108	Dark green granite	
108	147	Weathered granite	2 GPM
147	152	White quartz	
152	158	Black & white quartz	80 GPM
158	200	White brown & black granite	

(Use additional forms if necessary)

W-365
C-154

DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

W-3654

MAILING ADDRESS:

DIVISION OF MINERAL RESOURCES

OFFICE ADDRESS:

Box 3667
Charlottesville, VA 22903

JAMES L. CALVER, COMMISSIONER

McCormick Road
Charlottesville, Virginia

WATER WELL COMPLETION REPORT

OWNER: NATKINS & COMPANY., INC. Mailing Address: Rt 1 Ashland, Virginia

TENANT: Natkins & Company., Inc. Mailing Address: Same

DRILLER: Atlantic Pump & Equipment Co Mailing Address: P. O. Box 4009, Richmond, Va

WELL LOCATION: County ~~Henrico~~ (Richmond) Approx. 150 ^{feet} ~~miles~~ West (direction)
Rt 1 (Hanover Co.) and 1.2 ^{miles} ~~miles~~ North (direction) of ~~1100 Rd~~ Henrico Co line

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

DATE STARTED: July 8, 1972 DATE COMPLETED: July 15, 1972

TYPE OF DRILL RIG USED: Air Rotary TOTAL DEPTH 200 feet

WATER LEVEL: Stands 30 feet below surface OR
has NATURAL flow of gallons per minute.

YIELD TEST: Method Pump
Drawdown 150 feet
Rate 85 gal. per min.
Duration 24 hrs., 0 min.

HOLE SIZE: 10 inches from 0 to 51 feet
6 inches from 51 to 200 feet
 inches from to feet

WATER ZONES: from 58 to feet
 from 122 to feet
 from 180 to feet

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

WATER: Color None Taste 0
Odor None Temp. 61 °F

CASE SIZE: 6" inches from 0 to 51 feet
 inches from to feet
 inches from to feet

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

GROUTING: Method Pressure
Material Cement Depth 51 feet

WATER ANALYSIS AVAILABLE: Yes X No
DRILL CUTTINGS SAVED: Yes X No

PUMP: Type Submersible
Capacity 40 gal. per min.
Depth of intake 168 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: YELLOW TAVERN QUADRANGLE
ELEV. : 182'

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

INTERVAL SHEET

Page 1 of 1

Well Repository No: W#: 3654
 C#: 154
 Sample Interval: from: to:
 0 200

Date rec'd: 9/18/72 Date Processed: 1/5/73

PROPERTY: Natkins & Co., Inc.

Number of samples: 19

COMPANY: Atlantic P & E Co.

Total Depth: 200'

COUNTY: Hanover
 (Richmond)

Oil or Gas: Water: 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 - 10	-	-	-
110 - 20	-	-	-
120 - 30	-	-	-
130 - 40	-	-	-
140 - 50	-	-	-
150 - 60	-	-	-
160 - 70	-	-	-
170 - 80	-	-	-
180 - 200	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

All intervals have both washed & unwashed samples.

OWNER: Natkins and Co., Inc.
DRILLER: Atlantic P & E Co.
COUNTY: Hanover
(Richmond)

W#: 3654
C#: 154
TOTAL DEPTH: 200'
QUAD: Yellow Tavern

GEOLOGIC LOG

Depth
(feet)

- 0 - 10 Sand -- very dark yellowish orange; moderate clay; fine to medium grained, some coarse grains, some granules, some pebbles; subangular to subrounded; moderately sorted; quartz; feldspar; few opaques; few fragments of ferricrete.
- 10 - 20 Granite (heavily weathered) -- light olive brown; moderate clay; quartz; white potassic feldspar; 5% biotite; some muscovite.
- 20 - 30 As above except 2% muscovite.
- 30 - 40 Granite (heavily weathered) -- light olive brown; moderate clay; quartz; white potassic feldspar; 5% biotite; some muscovite.
- 40 - 50 Granite (weathered) -- light olive gray; moderate clay; quartz; white potassic feldspar; 20% biotite; some muscovite.
- 50 - 60 As above.
- 60 - 70 Granite (slightly weathered) -- light olive gray; quartz; white potassic feldspar; 15% muscovite; 10% biotite.
- 70 - 80 Granite (slightly weathered) -- grayish olive; slightly clayey; quartz; white potassic feldspar; 40% biotite; some muscovite.
- 80 - 90 Granite (slightly weathered) -- medium light gray, white; quartz; white potassic feldspar; 35% biotite; 3% muscovite; few grains of pyrite.
- 90 - 100 Biotite schist -- medium dark gray; 60% biotite; quartz; white potassic feldspar; few flakes of muscovite.
- 100 - 110 As above except 75% biotite.
- 110 - 120 Biotite schist -- medium dark gray, pale yellowish brown; 50% biotite, quartz; white potassic feldspar; 7% muscovite; some pyrite.
- 120 - 130 As above except 40% biotite; 12% muscovite; few grains of pyrite.
- 130 - 140 As above.

Depth
(feet)

- 140 - 150 Granite -- white; quartz; white potassic feldspar; 10% biotite schist fragments; 5% biotite (schist only); few flakes of muscovite.
- 150 - 160 Biotite schist -- medium dark gray; 60% biotite; quartz; white potassic feldspar; few flakes of muscovite; pyrite.
- 160 - 170 As above.
- 170 - 180 As above except slightly weathered; 40% biotite; some muscovite.
- 180 - 200 As above plus few grains of garnet.

Logged by: Michael T. Currie
Feb. 6, 1979

GEOLOGIC SUMMARY

<u>Depth</u> <u>(feet)</u>	<u>Thickness</u> <u>(feet)</u>	<u>Rock Unit</u>	<u>Time Rock Unit</u>
0 - 10	10	Columbia Group	Pleistocene
10 - 200	190	Petersburg Granite	Paleozoic (?)

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