

REVISED

W-3357

C-614

COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

MAILING ADDRESS:

DIVISION OF MINERAL RESOURCES

OFFICE ADDRESS:

Box 3667

JAMES L. CALVER, COMMISSIONER

McCormick Road

Charlottesville, VA 22903

WATER WELL COMPLETION REPORT

Charlottesville, Virginia

OWNER: Massanutten Development Company Mailing Address: P.O. Box 1227, Harrisonburg, Va.

TENANT: well #3 Mailing Address: P.O. Box 98

DRILLER: George F. Burner Well Drilling Mailing Address: McGahaysville, Va.

WELL LOCATION: County Rockingham Approx. 250 feet South (direction) of Route #647 and 350 feet West (direction) of Route #644

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

DATE STARTED: October 18, 1971 DATE COMPLETED: November 14, 1971

TYPE OF DRILL RIG USED: Rotary TOTAL DEPTH 200 feet

WATER LEVEL: Stands \_\_\_\_\_ feet below surface OR  
has NATURAL flow of 2 gallons per minute.

YIELD TEST: Method Pump test attached  
Drawdown 64' feet  
Rate 330 gal. per min.  
Duration 72 hrs., 0 min.

HOLE SIZE: 10 inches from 0 to 103 feet  
6 inches from 103 to 200 feet

WATER ZONES: from 8 to 9 feet  
from 21 to 22 feet  
from 33 to 34 feet  
from 125 to 126 feet  
140 to 145

SCREEN SIZE: \_\_\_\_\_ inches from \_\_\_\_\_ to \_\_\_\_\_ feet  
\_\_\_\_\_ inches from \_\_\_\_\_ to \_\_\_\_\_ feet

WATER: Color Clear Taste Slight mineral  
Odor None Temp. \_\_\_\_\_ °F

CASE SIZE: 6 inches from 0 to 103 feet  
\_\_\_\_\_ inches from \_\_\_\_\_ to \_\_\_\_\_ feet  
\_\_\_\_\_ inches from \_\_\_\_\_ to \_\_\_\_\_ feet

WELL TO SUPPLY: (check one) Home \_\_\_\_\_  
Farm \_\_\_\_\_ Town \_\_\_\_\_ School \_\_\_\_\_  
Industry \_\_\_\_\_ Other Planned Development

GROUTING: Method Pressure  
Material Cement Depth 100 feet

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

TEST PUMP: Type Goulds 606NL34 SubTurbine 8 Stage  
Capacity 220 gal. per min.  
Depth of intake 177 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)

MARKS: One hour after 72 hour test pumping-59 feet water level  
Twenty-four hours after 72 hour test pumping-54 feet water level  
Thirty-nine hours after 72 hour test pumping-19 feet water level. Water level of well no. 2 during pumping #3-42 feet, water level of well no. 2, 24 hours after #3-26 feet, water level of well no. 2, 39 hours after #3-21 feet.

# LOG

FURNISHED BY: Burner Well Drilling

DATE: October 19, 1971

DEPTH (feet)		TYPE OF ROCK OR SOIL PENETRATED (gravel, clay, etc., hardness, color, etc.)	REMARKS (water, caving, shot, screen, sample, etc.)
FROM	TO		
0	9	Overburden and weathered shale	
9	200	Shale blue-grey	<p>Water Checked with 6" hole and 20' casing                      at 70 ft.-75 GPM                      at 136 ft.-100 GPM                      at 170 ft.-150 GPM</p> <p>Water checked after reaming 10" hole to 103 ft. - 475 GPM</p> <p>After installing 103 ft. of casing checked at 175 GPM</p>



OWNER: Masan<sup>S</sup>nutten Dev. Co. #3  
DRILLER: Burner Well Drilling Company  
COUNTY: Rockingham (McGaheysville)

W - 3357  
C - 614  
T.D.-200

GEOLOGIC LOG

Depth  
(in feet)

Martinsburg Formation (0 - 200')

0 - 10	Mudstone — gray, fine-grained
10 - 20	" "
20 - 30	" "
30 - 40	" "
40 - 50	Shale — dark-gray, fine-grained, moderately fissile
50 - 60	Sandstone — gray, medium to fine-grained, slightly feldspathic
60 - 70	Sandstone — gray, medium-grained, feldspathic; cut by white veins of calcite 2mm thick
70 - 80	Sandstone — gray, medium-grained, feldspathic; with clay matrix
80 - 90	Sandstone — gray, medium-grained, feldspathic; cut by white veins of calcite 2mm thick
90 - 100	Shale — dark-gray, moderately fissile, fine- grained
100 - 110	Sandstone — gray, medium to fine-grained
110 - 120	Shale — dark-gray, moderately fissile, fine- grained
120 - 130	Sandstone — gray, fine-grained, some fragments of white vein calcite
130 - 140	Shale — dark-gray, moderately fissile; cleavage at right angles to bedding; pyrite along cleavage surfaces; white, drusy-carbonate layers (2 mm thick) along bedding

140 - 150	Shale — dark-gray, very fissile
150 - 160	Intermixed sandstone, siltstone and shale — dark-gray, medium-to very fine-grained; white calcite lamelli
160 - 170	Sandstone — gray, medium-to fine-grained; flattened quartz grains impart a weak metamorphic foliation
170 - 180	" "
180 - 190	Sandstone — gray, medium-grained, feldspathic; with clay matrix
190 - 200	Shale and siltstone — dark-gray, moderately fissile

GEOLOGIC SUMMARY

<u>Thickness</u>	<u>Rock Unit</u>	<u>Age</u>
0 - 200'	Martinsburg Formation	Ordovician

VA. DIVISION OF MINERAL RESOURCES  
William S. Henika, Geologist  
December 1, 1975