

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

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 Virginia Dept. of Highways Mailing Address: Richmond, Virginia

TENANT: _____ Mailing Address: _____

DRILLER: C. E. Gentry Mailing Address: Rt 1, Box 259, Louisa, Va.

WELL LOCATION: County Albemarle Approx. 16 ^{feet}/_{miles} West (direction) of
Charlottesville on Rt. 250 and 300 ^{feet}/_{miles} off 250 (direction) of Rt. 684

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

DATE STARTED: December 17, 1970 DATE COMPLETED: December 26, 1970

TYPE OF DRILL RIG USED: Air Rotary TOTAL DEPTH 226 feet

WATER LEVEL: Stands 46 feet below surface OR

has NATURAL flow of _____ gallons per minute.

YIELD TEST: Method Air

PL
Drawdown 186 feet

Rate 10 gal. per min.

Duration 2 hrs., 30 min.

HOLE SIZE: 10 inches from 0 to 50 feet

8 inches from 50 to 67 feet

6 inches from 67 to 226 feet

SCREEN SIZE: _____ inches from _____ to _____ feet

_____ inches from _____ to _____ feet

_____ inches from _____ to _____ feet

Standard

CASE SIZE: 6 inches from 0 to 67 feet

_____ inches from _____ to _____ feet

_____ inches from _____ to _____ feet

WATER ZONES: from _____ to _____ feet

from _____ to _____ feet

from _____ to _____ feet

WATER: Color Clear Taste Good

Odor None Temp. _____ °F

WELL TO SUPPLY: (check one) Home _____

Farm _____ Town _____ School _____

Industry _____ Other X

GROUTING: Method Pumping

Material Cement Depth 50 feet

PUMP: Type _____

Capacity _____ gal. per min

Depth of intake _____ feet

WATER ANALYSIS AVAILABLE: Yes _____ No X

DRILL CUTTINGS SAVED: Yes 23 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: _____

OWNER: Va. Dept. of Highways
DRILLER: C. E. Gentry
COUNTY: Albemarle (Yancey Mills)

W - 3048
C - 1472
T.D. - 226'

Geologic Log

Depth
(feet)

0 - 10 A light brown, sandy soil with chunks (2 cm) of red clay saprolite. Consists of quartz, feldspar biotite, and muscovite. Granitic soil with kaolinite.

10 - 20 " , however soil is finer and kaolinite increases.

20 - 30 "

30 - 40 Amount of Kaolinite & feldspar has increased, soil consists of fine rock fragments. First large cutting is granitic, with a gneissic fabric.

40 - 50 "

50 - 60 " Average granitic rock fragment measures .5 cm

60 - 70 Large rock fragments consisting of quartz, blue quartz, plagioclase, biotite, and orthoclase. Minerals interlock in a granitic texture, and are zoned as in a gneiss.

70 - 80 Granitic, layered gneiss. Probably a paragneiss.

80 - 90 More layered, and schist-like.

90 - 100 " cleavage very noticeable.

100 - 110 Fragments of biotite-muscovite schist, biotite-chlorite-muscovite schist, quartz and granitic gneiss. A more mafic interval.

110 - 120 Leucocratic & mafic fragments indicating a broad banded granitic gneiss. Cleavage well developed on mafic fragments.

120 - 130 Granitic paragneiss

130 - 140 "

140 - 150 " , some chloritization or epidotization

150 - 160 "

160 - 170 " Granitic gneiss, no epidote

170 - 223 "

Geologic Summary

<u>Rock Unit</u>	<u>Age</u>
Granitic paragneiss (current field term is "Meta-gneiss," obsolete name is "Marshall Formation")	Precambrian

These cuttings though less sheared and more leucocratic than samples from W-1559 and W-1558. Cleavage (or "shearing") increases with mafic (chlorite and/or biotite) content. Based upon outcrop and handspecimen analyses this unit is believed to be a multi-metamorphosed sediment.

VA. DIVISION OF MINERAL RESOURCES

John L. Sullivan
9/9/75