

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

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

Department of Interior
Washington, D. C.

OWNER: U. S. Geological Survey Mailing Address: _____

TENANT: Test Well #8 Mailing Address: _____

DRILLER: Sydnor Hydrodynamics, Inc. Mailing Address: 1305 Brook Rd., Richmond, Va.

WELL LOCATION: County Prince William Approx. 1 ~~feet~~ miles west (direction) of
U. S. Hwy. 15 and 2 1/2 ~~feet~~ miles north (direction) of St. Rt. 55

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

DATE STARTED: 8/13/68 DATE COMPLETED: 8/23/68

TYPE OF DRILL RIG USED: air rotary TOTAL DEPTH 250 feet

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

YIELD TEST: Method air lift
Drawdown _____ feet
Rate 8 gal. per min.
Duration 0 hrs., 30 min.

HOLE SIZE: 12 inches from 0 to 22 feet
10 inches from 22 to 89 feet
6 1/2 inches from 89 to 250 feet

WATER ZONES: from 175 to 175 1/2 feet
from _____ to _____ feet
from _____ to _____ feet

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

WATER: Color _____ Taste _____
Odor _____ Temp. _____ °F

CASE SIZE: *10 inches from 0 to 22 feet
7 inches from 0 to 89 feet
_____ inches from _____ to _____ feet

WELL TO SUPPLY: (check one) Home _____
Farm _____ Town _____ School _____
Industry _____ Other test well

GROUTING: Method _____
Material _____ Depth _____ feet

WATER ANALYSIS AVAILABLE: Yes _____ No X

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

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: * All casing pulled out after air test: well abandoned and hole back-filled.

LOG

FURNISHED BY: Sydnor Hydrodynamics, Inc.

DATE: 8/26/68

DEPTH (feet)		TYPE OF ROCK OR SOIL PENETRATED (gravel, clay, etc., hardness, color, etc.)	REMARKS (water, caving, shot, screen, sample, etc.)
FROM	TO		
0	1	Topsoil	
1	46	Sandy soil and boulders	
46	48	Quartz and greenstone	
48	87	Quartz and greenstone boulders	
87	89	Greenstone and quartz	
89	90	Greenstone	
90	95	Sandstone	
95	250	Greenstone and quartz, mixed	

INTERVAL SHEET

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WWCR: 313
VDMR Well No: 2313

Date rec'd: 11/8/68

Sample Interval: from 0 to: 250'

PROP: U. S. Geological Survey
(Test Well #8)

Number of samples: 23

COMP: Sydnor Hydrodynamics, Inc.

Total Depth: 250'

COUNTY: Prince William (Antioch)

Oil or Gas: Water Exploratory:

From-To	From-To	From-To	From-To
0 - 10	-	-	-
10 - 20	-	-	-
20 - 30	-	-	-
-	-	-	-
40 - 50	-	-	-
-	-	-	-
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	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

All intervals have both washed and unwashed samples.

OWNER: U. S. Geological Survey, Test Well #8
DRILLER: Sydnor Hydrodynamics, Inc.
COUNTY: Prince William (Antioch)

VDMR: 2313
WWCR: 313
TOTAL DEPTH: 250'

GEOLOGIC LOG

Depth
in feet

COLLUVIUM ? (0-90')

0-10	Gravelly sand — tan, partially weathered, moderately sorted, angular to subrounded, fine-grained sand; quartz, with traces of detrital material and clay
10-20	Gravelly sand — tan, partially weathered, poorly sorted, angular to subrounded, fine-grained sand; quartz, feldspar, mica, and lithic fragments (quartzite, schist and sandstone)
20-30	Gravel — greenish-gray; angular to subangular rock fragments that include epidosite, unikite, quartzite, basalt or diabase, greenstone and vein quartz
30-40	No sample
40-50	Gravel — greenish-gray; angular to subangular rock fragments that include epidosite, unikite, quartzite, greenstone, basalt or diabase, and vein quartz
50-60	No sample
60-70	Gravelly sand — brown, partially weathered; fine to medium grained, poorly sorted, angular to subrounded sand; quartz and feldspar, with rock fragments that include epidosite, quartzite, greenstone and vein quartz
70-80	"
80-90	" well sorted; no gravel or fine sand

CATOCTIN FORMATION (90-250')

90-100	Metamorphosed basalt — gray; aphanitic, non-foliated, a few slickensides; very low grade metamorphism; plagioclase feldspar, biotite, chlorite, quartz, epidote, amphiboles (?), and trace of calcite; fragments of epidosite and metamorphosed quartzite, sandstones and tuffs
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OWNER: U. S. Geological Survey, Test Well #8

VDMR: 2313

100-110	Metamorphosed basalt — gray; aphanitic, non-foliated, a few slickensides; very low grade metamorphism; plagioclase feldspar, biotite, chlorite, quartz, epidote, amphiboles (?), and trace of calcite; fragments of epidosite and metamorphosed quartzite, sandstones and tuffs
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	"

GEOLOGIC SUMMARY

	<u>Rock Unit</u>	<u>Age</u>
0-90'	Colluvium ?	—
90-250'	Catoctin Formation	Early Cambrian

NOTE: original size of sedimentary material in the first 50 feet destroyed by drill bit

Virginia Division of Mineral Resources
Robert G. Willson, Geologist
November 19, 1968