

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

OWNER: U. S. Geological Survey Mailing Address: Washington, D. C.

TENANT: Test Well #3 Mailing Address: P.O. Box 1476, 1305 Brook Rd.,

DRILLER: Sydnor Hydrodynamics, Inc. Mailing Address: Richmond, Virginia

WELL LOCATION: County Loudoun Approx. feet miles south (direction) of  
Leesburg City Limits and 2500 feet miles west (direction) of U.S. Hwy. 15

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

DATE STARTED: 7/16/68 DATE COMPLETED: 7/17/68

TYPE OF DRILL RIG USED: air rotary TOTAL DEPTH 285 feet

WATER LEVEL: Stands        feet below surface OR

has NATURAL flow of        gallons per minute.

YIELD TEST: Method air lift

Drawdown        feet

Rate 2 gal. per min.

Duration 0 hrs., 30 min.

WATER ZONES: from 50 to 50 1/2 feet

from        to        feet

from        to        feet

WATER: Color        Taste       

Odor        Temp.        °F

WELL TO SUPPLY: (check one) Home       

Farm        Town        School       

Industry        Other test well

WATER ANALYSIS AVAILABLE: Yes        No X

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: \* Casing pulled out after air test: well abandoned and hole back-filled.

HOLE SIZE: 7 7/8 inches from 0 to 17 feet

6 1/2 inches from 17 to 285 feet

       inches from        to        feet

SCREEN SIZE:        inches from        to        feet

       inches from        to        feet

       inches from        to        feet

CASE SIZE: \*7 inches from 0 to 17 feet

       inches from        to        feet

       inches from        to        feet

GROUTING: Method none

Material        Depth        feet

PUMP: Type       

Capacity        gal. per min

Depth of intake        feet

# 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	7	Clay	
7	14	Clay and boulders	
14	50	Greenstone, sandstone, limestone, and quartz	
50	50 1/2	Water zone	
50 1/2	95	Greenstone, limestone, and sandstone	
95	98	Greenstone	
98	255	Sandstone, quartz, greenstone and limestone	
255	285	Schist, greenstone and mica	

(Use additional forms if necessary)

INTERVAL SHEET

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WWCR: 611  
VDMR Well No: 2309

Date rec'd: 11/6/68

Sample Interval: from 0 to: 265'

PROP: U.S. Geological Survey (Test Well #3)

Number of samples: 27

COMP: Sydnor Hydrodynamics, Inc.

Total Depth: 285'

COUNTY: Loudoun (Leesburg)

Oil or Gas: Water: XExploratory:

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	-	-	-
-95	-	-	-
95 - 105	-	-	-
105 - 115	-	-	-
115 - 125	-	-	-
125 - 135	-	-	-
135 - 145	-	-	-
145 - 155	-	-	-
155 - 165	-	-	-
165 - 175	-	-	-
175 - 185	-	-	-
185 - 195	-	-	-
195 - 205	-	-	-
205 - 215	-	-	-
215 - 225	-	-	-
225 - 235	-	-	-
235 - 245	-	-	-
245 - 255	-	-	-
255 - 265	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

All intervals have both washed and unwashed samples.

OWNER: U. S. Geological Survey, Test Well #3  
DRILLER: Sydnor Hydrodynamics, Inc.  
COUNTY: Loudoun (Leesburg)

VDMR: 2309  
WWCR: 611  
TOTAL DEPTH: 285'

GEOLOGIC LOG

Depth  
in feet

ALLUVIUM (0-10')

0-10 Clay, silt, sand and gravel — brown, poorly sorted, angular to rounded; fragments of weathered and unweathered, iron oxide-stained metamorphosed basalt, schist, quartzite, vein quartz, and clay

NEWARK GROUP (10-255')

10-20 Argillaceous limestone — purple to red-gray, very fine grained to cryptocrystalline; 50 to 90 percent calcite (with possible minor amounts of dolomite), 10 to 50 percent silicates (primarily quartz); minor amount of vein calcite, traces of vein quartz, samples may be fragments of a limestone conglomerate

20-30 "

30-40 "

40-50 "

50-60 "

60-70 "

70-80 "

80-90 "

95 Calcareous siltstone — dark gray, light gray, and light green, microcrystalline to cryptocrystalline matrix; some larger fragments appear to be conglomeratic; quartz, feldspar (?), calcite and vein calcite; samples may be fragments of a conglomerate

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95-105	Calcareous siltstone — red-purple; slightly conglomeratic in appearance; 90 to 95 percent silicates, 5 to 10 percent calcite
105-115	Calcareous siltstone and argillaceous limestone — red-purple; silt and clay-size material with micro-crystalline and cryptocrystalline calcite matrix; quartz, calcite and feldspar; samples may be fragments of a conglomerate
115-125	"
125-135	"
135-145	"
145-155	"
155-165	"
165-175	"
175-185	"
185-195	"
195-205	"
205-215	"
215-225	"
225-235	"
235-245	"
245-255	" medium-gray
CATOCTIN FORMATION (255-265')	
255-265	Chlorite schist — dark greenish-gray, well foliated, some surfaces have slickensides; feldspar, chlorite, amphiboles, biotite (?) and quartz (?)
265-285	No samples

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GEOLOGIC SUMMARY

	<u>Rock Unit</u>	<u>Age</u>
0-10'	Alluvium	Recent (?)
10-255'	Newark Group	Early Triassic
255-265'	Catoctin Formation	Early Cambrian (?)
265-285'	No samples	

Virginia Division of Mineral Resources  
Robert G. Willson, Geologist  
November 15, 1968