

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 #5 Mailing Address: _____

DRILLER: Sydnor Hydrodynamics, Inc. Mailing Address: P. O. Box 1476
1305 Brook Rd., Richmond, Va.

WELL LOCATION: County Prince William Approx. 200 ~~miles~~ ^{feet} north (direction) of _____
St. Rt. 55 and 3 ~~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: 8/6/68 DATE COMPLETED: 8/7/68

TYPE OF DRILL RIG USED: air rotary TOTAL DEPTH 345 feet

WATER LEVEL: Stands 10 feet below surface OR

has NATURAL flow of _____ gallons per minute.

YIELD TEST: Method air lift

Drawdown _____ feet

Rate 20 gal. per min.

Duration 1 hrs., 0 min.

WATER ZONES: from 30 to 31 feet

from 109 to 119 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: _____

HOLE SIZE: 8 3/4 inches from 0 to 20 feet

6 1/2 inches from 20 to 345 feet

_____ inches from _____ to _____ feet

SCREEN SIZE: _____ inches from _____ to _____ feet

_____ inches from _____ to _____ feet

_____ inches from _____ to _____ feet

CASE SIZE: 7 inches from +2 to 20 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, Incorporated 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	10	Sandstone	
10	31	Trap rock	
31	32	Water zone	
32	37	Trap rock	
37	74	Shale	
74	100	Sandstone and quartz	
100	136	Trap rock	
136	200	Blue shale	
200	205	Green shale	
205	234	Red and green shale	
234	243	Red shale	
243	245	Green shale	
245	289	Green and red shale	
289	345	Sandy, blue shale	

(Use additional forms if necessary)

INTERVAL SHEET

Page 1 of 1

WWCR: 311
VDMR Well No: 2311

Date rec'd: 11/8/68

Sample Interval: from 0 to: 345'

PROP: U. S. Geological Survey
(Test Well #5)

Number of samples: 34

COMP: Sydnor Hydrodynamics, Inc.

Total Depth: 345'

COUNTY: Pr. William (Thoroughfare)

Oil or Gas: Water: Exploratory:

From-To	From-To	From-To	From-To
0 - 10	300 - 310	-	-
10 - 20	310 - 320	-	-
20 - 30	320 - 330	-	-
30 - 40	330 - 345	-	-
40 - 50	-	-	-
50 - 60	-	-	-
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	-	-	-
250 - 260	-	-	-
260 - 270	-	-	-
270 - 280	-	-	-
280 - 290	-	-	-
290 - 300	-	-	-

All intervals have both washed and unwashed samples.

OWNER: U. S. Geological Survey, Test Well #5
DRILLER: Sydnor Hydrodynamics, Inc.
COUNTY: Prince William (Thoroughfare)

VDMR: 2311
WWCR: 311
TOTAL DEPTH: 345'

GEOLOGIC LOG

Depth
in feet

OVERBURDEN (0-10')

0-10 Sand — tan, iron-oxide stained, medium grained, angular to subangular, fairly well-sorted quartz; clay

NEWARK GROUP (10-345')

10-20 Siltstone — gray, slightly fissile, shaley, very calcareous; quartz, feldspar, mica and clay, with minor amounts of black, opaque minerals and calcite

20-30 Siltstone — red-brown, iron-oxide stained, very fine grained, slightly fissile, shaley, very calcareous; quartz, feldspar, mica and clay, with minor amount of opaque minerals

30-40 Siltstone — gray, calcareous, slightly fissile; quartz, feldspar, mica and calcite, with trace of lithic material

40-50 " red-brown, iron-oxide stained

50-60 " "

60-70 " "

70-80 "

80-90 "

90-100 Sand and gravel — gray and tan, unconsolidated, poorly sorted; 60 percent sand, 39 percent gravel, 1 percent non-calcareous silt and clay: sand is well rounded to subrounded; partially iron-oxide stained and weathered; quartz, feldspar, mica, clay, and lithic fragments (metamorphosed basalt, quartzite, sandstone and shale)

100-110 "

OWNER: U. S. Geological Survey, Test Well #5

110-120	Siltstone — gray, very calcareous, slightly fissile; trace amount of fine sand-size grains; quartz, feldspar, mica, calcite, and trace amounts of lithic material
120-130	"
130-140	"
140-150	"
150-160	"
160-170	"
170-180	"
180-190	" increase in amount of fine sand-size grains
190-200	" "
200-210	" "
210-220	Sandstone — gray and red-brown, fine grained, angular to subangular, poorly sorted sand with silt, clay and fragments of siltstone; slightly fissile, slightly calcareous; quartz, with minor amounts of feldspar and mica; trace of lithic fragments and calcite
220-230	"
230-240	"
240-250	"
250-260	"
260-270	"
270-280	"
280-290	"
290-300	Sandstone — gray, fine grained, silty, angular to subangular, moderately sorted; quartz, with minor amounts of feldspar, mica, and lithic fragments; trace of calcite

OWNER: U. S. Geological Survey, Test Well #5

- 300-310 Siltstone — gray, angular to subangular, poorly sorted, fine sand with silt and clay; quartz, with minor amounts of feldspar and mica; several fragments of silty sandstone and lithic material; traces of calcite
- 310-320 Siltstone — gray to dark gray; sandy, slightly fissile, calcareous; quartz, feldspar, mica, black opaque minerals, lithic fragments, and trace of calcite
- 320-330 "
- 330-345 "

GEOLOGIC SUMMARY

	<u>Rock Unit</u>	<u>Age</u>
0-10'	Overburden	—
10-345'	Newark Group	Early Triassic

Virginia Division of Mineral Resources
 Robert G. Willson, Geologist
 November 18, 1968