

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

MAILING ADDRESS: Box 3667 Charlottesville, VA 22903 **DIVISION OF MINERAL RESOURCES** JAMES L. CALVER, COMMISSIONER OFFICE ADDRESS: McCormick Road Charlottesville, Virginia

WATER WELL COMPLETION REPORT

OWNER: Crater Detention Home Commission Mailing Address: Petersburg, Va.

TENANT: _____ Mailing Address: _____

DRILLER: Sydnor Hydrodynamics, Inc. Mailing Address: P. O. Box 27186, Richmond, Va.

WELL LOCATION: County Prince George Approx. 1.2 ~~xxxx~~ miles West (direction) of Route 156 and 2,500 feet ~~xxxx~~ North (direction) of Route 460

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

DATE STARTED: 3-11-74 DATE COMPLETED: 3-26-74

TYPE OF DRILL RIG USED: Rotary TOTAL DEPTH 190 feet

WATER LEVEL: Stands 28 feet below surface OR has NATURAL flow of _____ gallons per minute.

YIELD TEST: Method Submersible
Drawdown 22 feet
Rate 63 gal. per min.
Duration 24 hrs., _____ min.

HOLE SIZE: 8 inches from 0 to 190 feet
_____ inches from _____ to _____ feet
_____ inches from _____ to _____ feet

WATER ZONES: from 142 to 152 feet
from 174 to 184 feet
from _____ to _____ feet

SCREEN SIZE: 4 inches from 142 to 152 feet
4 inches from 174 to 184 feet
_____ inches from _____ to _____ feet

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

CASE SIZE: 4 inches from +2 to 142 feet
4 inches from 152 to 174 feet
_____ inches from _____ to _____ feet

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

GROUTING: Method Pressure
Material Cement-Water Depth 50 feet

WATER ANALYSIS AVAILABLE: Yes X No _____
DRILL CUTTINGS SAVED: Yes X No _____

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

REMARKS: _____

LOG

FURNISHED BY: _____ DATE: _____

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	Top soil	
1	10	Brown clay	
10	15	White clay	
15	40	Gray clay, shells	
40	55	Gray rock and clay mixed	
55	70	Gray clay and shells mixed	
70	85	Gray clay	
85	125	Gray sand	
125	190	Gray sand and gravel	

VIRGINIA DIVISION OF MINERAL RESOURCES
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INTERVAL SHEET

Page 1 of 1

Well Repository No: W-4217

Date rec'd: 5/13/75 Date Processed: 7/9/75

Sample Interval: from: 0 to: 190
 C- 180

PROPERTY: Crater Detention Home

Number of samples: 19

COMPANY: Sydnor

Total Depth: 190'

COUNTY: Prince George (New Bohemia)

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	-	-	-
90 - 100	-	-	-
100 - 110	-	-	-
110 - 120	-	-	-
120 - 130	-	-	-
130 - 140	-	-	-
140 - 150	-	-	-
150 - 160	-	-	-
160 - 170	-	-	-
170 - 180	-	-	-
180 - 190	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

All intervals have both washed and unwashed samples.

OWNER: Crater Detention Home
DRILLER: Sydnor
COUNTY: Prince George (New Bohemia)

W#: 4217
C#: 180
TOTAL DEPTH: 190'

GEOLOGIC LOG

Depth
(feet)

MOORINGS "UNIT" (0-20')

0-10 Sand - dark yellowish orange; moderate clay; fine to medium grained, some coarse grains; subangular to subrounded; moderately well sorted; quartz; some feldspar; few opaques.

10-20 As above except grayish orange; few grains of glauconite.

CALVERT FORMATION (20-80')

20-30 Shell hash and sand - light olive gray; slightly clayey; fine to medium grained; subrounded; moderately well sorted; 60% shell fragments inc. gastropods; quartz; spines; forams common (inc. Quinqueloculina); few black phosphatic fragments.

30-40 As above except some black phosphatic material; few grains of glauconite.

40-50 Sand - light olive gray; moderate clay; very fine to medium grained; subangular to subrounded; moderately well sorted; quartz; 40% shell fragments; 2% spines; some black phosphatic material; some glauconite; forams (inc. Quinqueloculina and Robulus); ostracode.

50-60 Clay - olive light gray; slightly sandy; medium to coarse grained; subrounded; moderately well sorted; quartz; 3% shell fragments; few black phosphatic fragments; glauconite; forams (inc. Quinqueloculina and Buccella); ostracodes.

60-70 Clay - olive light gray; some shell fragments; few black phosphatic fragments; few grains of quartz.

70-80 Clay - olive light gray; few quartz grains.

PATUXENT FORMATION (80-190')

80-90 Sand - white; coarse to very coarse grained, some granules; subrounded; moderately well sorted; quartz; feldspar.

90-100 As above except 5% granules.

100-110 Sand - white; slightly clayey; coarse grained to granular, 10% pebbles; subrounded; moderately sorted; quartz; feldspar; pyrite.

110-120 As above except few pebbles.

120-130 As above.

Depth
(feet)

130-140 Sand - white; slightly clayey; very coarse grained to granular; 15% pebbles; subrounded; moderately well sorted; quartz; feldspar.

140-150 Sand and gravel-white; slightly clayey.

150-160 Gravel - off white; slightly clayey; moderate sand; very coarse grained to gravel; subangular to subrounded; moderately sorted; quartz; feldspar; garnet.

160-170 Sand - off white; slightly clayey; coarse grained to granular (40%), 10% pebbles; **subrounded**; moderately well sorted; quartz; feldspar.

170-180 As above except 30% granules; no pebbles.

180-190 As above except 20% granules; few pebbles.

Logged by: Michael T. Currie

GEOLOGIC SUMMARY

<u>Thickness (feet)</u>	<u>Rock Unit</u>	<u>Time Rock Unit</u>
20	Moorings "Unit"	Pleistocene
60	Calvert Formation	Miocene-Eocene
110 ⁺	Patuxent Formation	Cretaceous

Virginia Division of Mineral Resources
David A. Hubbard, Jr., Geologist
August 11, 1978