

INTERVAL SHEET WWCR - 159

Page 1 of 1

VDMR Well No: 2192

Date rec'd: 5/24/68

Sample Interval: from 0 to: 290'

PROP: Williamsburg West Corp. Sub.

Number of samples: 29

COMP: Mitchell's Well & Pump Co.

Total Depth: 290'

COUNTY: James City (Williamsburg)

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	-	-	-
190 - 200	-	-	-
200 - 210	-	-	-
210 - 220	-	-	-
220 - 230	-	-	-
230 - 240	-	-	-
240 - 250	-	-	-
250 - 260	-	-	-
260 - 270	-	-	-
270 - 280	-	-	-
280 - 290	-	-	-
-	-	-	-

All intervals have washed and unwashed samples.

OWNER: Williamsburg West Corporation
DRILLER: Mitchell's Well and Pump Company
COUNTY: James City (Williamsburg)

VDMR: 2192
WWCR: 159
TOTAL DEPTH: 290'

GEOLOGIC LOG

Depth in
feet

COLUMBIA GROUP (0-20')

- 0-10 Sand — brownish-orange, slightly clayey; medium-grained, well-sorted, subangular; moderately feldspathic
- 10-20 Sand — bright orange-brown, slightly- to moderately clayey; fine- to coarse-grained, rather poorly-sorted, angular to rounded; slightly to moderately feldspathic; magnetite and weathered glauconite common in fine fraction; traces of muscovite and garnet, and a few rock fragments

YORKTOWN FORMATION (20-60')

- 20-30 Sand and Shell — tan, moderately-clayey; 35% fine- to coarse abraded pelecypod, echinoid, and bryozoan shell debris, and a few fragments of calcitic sandstone; 65% medium-grained, moderately-sorted, subangular- to well-rounded quartz sand; trace of glauconite; foraminifers common, but not abundant
- 30-40 Sand — gray, slightly- to moderately clayey, 25% coarse pelecypod (-scaphopod-gastropod) shell material; fine- to medium-grained, well-sorted, angular- to subangular sand; clear and pale-green quartz, with minor glauconite; a few echinoid spines, foraminifers, and fragments of coral
- 40-50 "
- 50-60 " with 3-5% dark-green glauconite, and a few bone fragments

CALVERT FORMATION (60-190')

- 60-70 Sand — greenish-gray, slightly clayey, a few shell fragments; fine-grained, fairly well-sorted, angular to subangular; clear and pale-green quartz, with minor glauconite

OWNER: Williamsburg West Corporation

#2192

- 70-80 Sand — grayish-green, slightly clayey; fine-grained, well-sorted, angular; minor glauconite, hornblende, biotite, and relatively-coarse muscovite
- 80-90 Sand — gray, slightly-clayey; trace of shell; fine-grained, well-sorted, angular; clear and greenish quartz, with minor muscovite, hornblende, and fine-grained glauconite
- 90-100 " grayish-green, very-slightly clayey
- 100-110 Sand — grayish-green, slightly-clayey, 5-10% pelecypod shell fragments; fine-grained, very well-sorted, angular to subangular; trace of glauconite; a few echinoid spines
- 110-120 " moderately-clayey to clayey; very little shell material
- 120-130 " clayey, diatomaceous, a few large shell fragments
- 130-140 Clay — greenish-gray, sandy, diatomaceous, a few large shell fragments; sand fraction is fine- to very-fine grained, very well-sorted, angular; traces of glauconite and muscovite
- 140-150 " very sandy, somewhat less diatomaceous
- 150-160 Clay — gray, compact, slightly silty and sandy; sand is fine- to very-fine grained, well-sorted, angular micaceous, very-slightly glauconitic; a few plant fragments
- 160-170 Sand and Clay — interlaminated light-gray, sand-free clay and greenish-gray, moderately-clayey sand; sand fraction is fine, well-sorted, angular; small foraminifers common, but not abundant
- 170-180 Clay — brownish-gray, very-slightly sandy, 5% decomposed pelecypod shell fragments; sand is fine, angular, quartzose; abundant nodular pyrite; foraminifers moderately abundant (Nonion most common)

OWNER: Williamsburg West Corporation

#2192

180-190 Clay — greenish-gray, slightly sandy, a few shell fragments; sand is fine, angular, quartzose; phosphatic nodules and bone fragments common; foraminifers moderately abundant (Nonion, Balivina, Uvigerina dominant)

CHICKAHOMINY FORMATION (190-220')

190-200 Sand — abundant matrix of drab, greenish-gray clay, a few shell fragments; medium-grained, moderately-sorted, subangular; clear quartz, with 5% fragmental phosphorite; a few foraminifers, including Siphogenerina

200-210 " medium- to coarse-grained, moderately-sorted, subrounded; trace of phosphorite

210-220 Sand — greenish-gray, moderately-clayey, trace of shell material, a few fragments of coarse-grained calcitic sandstone; medium- to coarse-grained, fairly well-sorted, subangular to rounded; clear quartz, with minor fragmental phosphorite

NANJEMOY FORMATION (220-290')

220-230 Limestone — light-gray, equi-granular, fossiliferous, slightly pyritic

230-240 Sand and Limestone — 40% medium-grained sand and 60% yellowish, sandy limestone; sand fraction consists of reddish-brown allochthonous glauconite and subordinate subrounded- to well-rounded stained quartz

240-250 Limestone — light-gray, equi-granular; slightly fossiliferous and glauconitic

250-260 Sand — brown, speckled; 60% medium- to coarse-grained, partially-decomposed glauconite, and 40% coarse-grained, rounded, stained quartz

260-270 "

270-280 "

280-290 "

OWNER: Williamsburg West Corporation

#2192

GEOLOGIC SUMMARY

	<u>ROCK UNIT</u>	<u>AGE</u>
0-20'	Columbia Group	Pleistocene
20-60'	Yorktown Formation	Late Miocene
60-190'	Calvert Formation	Middle Miocene
190-220'	Chickahominy Formation	Late Eocene
220-290'	Nanjemoy Formation	Middle Eocene

Virginia Division of Mineral Resources
Robert H. Teifke, Geologist
July 23, 1968

R
P

VDMR-2192
WWCR-159

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

MAILING ADDRESS:
Box 3667, University Sta.
Charlottesville, Virginia

DIVISION OF MINERAL RESOURCES
JAMES L. CALVER, COMMISSIONER
WATER WELL COMPLETION REPORT

OFFICE ADDRESS:
McCormick Road
Charlottesville, Virginia

OWNER: Williamsburg West Corporation Mailing Address: c/o Mr. M. W. Hitson P. O. Box 2480, Williamsburg, Va., 23185
TENANT: Williamsburg West Subdivision Mailing Address: same
DRILLER: Mitchell's Well & Pump Company Mailing Address: R#1, Bx 110, Col. Hgts., Va 23834

WELL LOCATION: County James City Approx. feet miles (direction) of
Rear of Lot # 47, Lexington Drive; Williamsburg West Subdivision
 and miles (direction) of

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

DATE STARTED: March 1968 DATE COMPLETED: March 1968

TYPE OF DRILL RIG USED: Cable Tool TOTAL DEPTH 290 feet

WATER LEVEL: Stands 82 feet below surface OR
has NATURAL flow of gallons per minute.

YIELD TEST: Method pumped
Drawdown XXXXXX 22 feet
Rate 250 gal. per min.
Duration 36 hrs., 30 min.
not continuous

HOLE SIZE: 10 inches from 0 to 50 feet
6 inches from to 290 feet
 inches from to feet

WATER ZONES: from to feet
from to feet
from to feet

SCREEN SIZE: 5 inches from 226 to 246 feet
 inches from to feet
 inches from to feet

WATER: Color clear Taste good
Odor none Temp. °F

CASE SIZE: 6 inches from 0 to 225 feet
 inches from to feet
 inches from to feet

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

GROUTING: Method
Material cement & water Depth 50 feet

WATER ANALYSIS AVAILABLE: Yes No

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: Filled with gravel from 290 back to 246'

29 samples

LOG

FURNISHED BY: Mitchell's Well & Pump Co DATE: May 10, 1968

DEPTH (feet)		TYPE OF ROCK OR SOIL PENETRATED (gravel, clay, etc., hardness, color, etc.)	REMARKS (water, caving, shot, screen, sample, etc.)
FROM	TO		
0	10	red mud	Sample # 1
10	20	"	2
20	30	brown mud	3
30	40	marl & shell	4
40	50	"	5
50	60	"	6
60	70	"	7
70	80	"	8
80	90	"	9
90	100	"	10
100	110	"	11
110	120	"	12
120	130	"	13
130	140	"	14
140	150	marl	15
150	160	marl & shell	16
160	170	"	17
170	180	"	18
180	190	"	19
190	200	"	20
200	210	"	21
210	220	sand	22
222	230	"	23
230	240	"	24
240	250	"	25
250	260	"	26
260	270	black sand	27
270	280	"	28
280	290	"	29

SAMPLES TO BE PICKED UP BY REPRESENTATIVE OF DIVISION OF
MINERAL RESOURCES, CHARLOTTESVILLE, VIRGINIA.