

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

W-4789
C- 135

MAILING ADDRESS:
Box 3667
Charlottesville, VA 22903

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

OFFICE ADDRESS:
McCormick Road
Charlottesville, Virginia

Claremont Manor #3

OWNER: James L. Kirby Mailing Address: Claremont, Va. 23899

TENANT: _____ Mailing Address: _____

DRILLER: R. A. Turner Mailing Address: 2111 Magnolia St.
Richmond, VA. 23223

WELL LOCATION: County Surry Approx. 1500 ^{feet}~~miles~~ N (direction) of _____
Int. T-1203 - T-1207 and _____ ^{feet}~~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: 10/22/76 DATE COMPLETED: 11/10/76

TYPE OF DRILL RIG USED: Rotary TOTAL DEPTH 303 feet

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

YIELD TEST: Method Pump
Drawdown 12 feet
Rate 100 gal. per min.
Duration 24 hrs., _____ min.

HOLE SIZE: 12 inches from 0 to 303 feet
_____ inches from _____ to _____ feet
_____ inches from _____ to _____ feet

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

SCREEN SIZE: 4 inches from 262 to 272 feet
4 inches from 280 to 300 feet
_____ inches from _____ to _____ feet

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

CASE SIZE: 6 inches from +2 to 262 feet
4 inches from 272 to 303 feet
_____ inches from _____ to _____ feet

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

GROUTING: Method _____
Material _____ Depth 65 feet

WATER ANALYSIS AVAILABLE: Yes _____ No _____
DRILL CUTTINGS SAVED: Yes 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	7	Yellow and Brown Clay	
7	30	Yellow Sandy Clay and Large Gravel	
30	40	Gray Sand and Shells	
40	55	Blue Clay, Shells and Rock	
55	56	Hard Rock	
56	60	Blue Clay and Shells	
60	70	Tough Green and Gray Clay	
70	110	Soft Green Clay and Shells	
110	130	Tough Green Clay	
130	135	Rock	
135	145	Soft Sand, Shells and Green Clay	
145	180	Tough Green Clay	
180	218	Blue and Green Clay with Fine Sand	
218	220	Tough Sand Clay	
220	242	Soft Green Sand Clay	
242	260	Hard Sand Clay	
260	270	Sand and Gravel	
270	280	Sand Clay Streaks	
280	301	Sand, Gravel, Some Clay Streaks	
301	303	Clay	

VIRGINIA DIVISION OF MINERAL RESOURCES
Box 3667, Charlottesville, VA 22903

INTERVAL SHEET

Page 1 of 1 Well Repository No.: C#: 135 W#: 4789
Date rec'd 1/11/77 Date Processed: 7/11/77 Sample Interval: from 0 to: 303
PROPERTY: James L. Kirby (Claremont Manor #3) Number of samples: 31
COMPANY: Sydnor Hydrodynamics Total Depth: 303'
COUNTY: Surry (Claremont) Oil or Gas: Water: Exploratory:

From-To	From-To	From-To	From-To
0 - 10	250 - 260	-	-
10 - 20	260 - 270	-	-
20 - 30	270 - 280	-	-
30 - 40	280 - 290	-	-
40 - 50	290 - 300	-	-
50 - 60	300 - 303	-	-
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	-	-	-

Washed and unwashed samples.

OWNER: James L. Kirby
Claremont Manor #3
DRILLER: Sydnor Hydrodynamics
COUNTY: Surry (Claremont)

W#: 4789
C#: 135
TOTAL DEPTH: 304'

GEOLOGIC LOG

Depth
(feet)

BACONS CASTLE (0-20)

- 0-10 Sand - grayish orange; abundant clay; fine to coarse grained; subangular to subrounded; poorly sorted; quartz (inc. rose); feldspar; some very fine opaques.
- 10-20 Sand and gravel- dark yellowish orange; abundant clay; silty; fine sand to pebble size; subangular to rounded; poorly sorted; various type of quartz; feldspar; very fine opaques; few grains weathered glauconite.

YORKTOWN FORMATION (20-70)

- 20-30 Sand - grayish orange; moderate clay; fine to medium grained; subangular to subrounded; moderately well sorted; quartz; abundant very fine opaques; some black phosphatic material; some shell and limestone fragments; weathered glauconite; feldspar; spines.
- 30-40 Sand - dusky yellowish gray; moderately clayey; fine with some medium grains, some granules; subangular to subrounded; moderately well sorted; quartz; 25% shell fragments; black phosphatic material; very fine opaques; glauconite; spines.
- 40-50 Sand - light olive gray; fine to medium grained; subangular to subrounded; moderately well sorted; quartz; 15% shell fragments; black phosphatic material; glauconite; spines; few fragments of ferricrete; ostracode.
- 50-60 As above except granules; 35% shell and limestone fragments; no ostracode.
- 60-70 Sand - light olive gray; slightly clayey; very fine to granular grained; subangular to rounded; poorly sorted; quartz; 25% shell and limestone fragments; black phosphatic material; spines; few ferricrete fragments.

CALVERT FORMATION (70-140)

- 70-80 Sand - olive light gray; abundant clay; fine to medium grained with granules; subrounded; moderately well sorted; quartz; 8% shell fragments; phosphatic material; spines; few glauconite grains.

OWNER: James L. Kirby
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Depth
(feet)

- 80-90 As above except fewer granules; 15% shell fragments; forams rare (inc. Buccella); ostracodes.
- 90-100 As above except darker olive color; more forams observed.
- 100-110 Sand - olive light gray; moderate clay; fine to medium grained; subangular to subrounded; moderately well sorted; quartz; 8% shell fragments; black phosphatic material; glauconite; spines; forams (inc. Buccella and Textularia).
- 110-120 Sand - olive light gray; abundant clay; fine to medium grained; subangular to subrounded; moderately well sorted; quartz; 10% shell fragments; black phosphatic material inc. teeth, glauconite; spines; forams (inc. Buccella, Nonion and Discorbis); bone fragments.
- 120-130 Sand and clay - grayish olive; abundant clay; abundant sand; fine to coarse grained; subangular to subrounded; moderately sorted; quartz; 17% shell fragments; 3% black phosphatic material; some sandy limestone fragments; glauconite; forams; spines.
- 130-140 As above except 7% phosphatic material.
- NANJEMOY FORMATION (140-180)
- 140-150 Limestone and sand - olive light gray; abundant clay; abundant sand; fine to coarse grained; subangular to rounded; moderately sorted; 45% limestone (sandy) and shell fragments; quartz; 3% glauconite; phosphatic material; forams; ostracodes (sp ?); poorly washed.
- 150-160 Limestone and sand - olive light gray; abundant clay; fine to coarse grained; subrounded to rounded; moderately sorted; quartz; 25% sandy limestone and shell fragments; 15% glauconite; phosphatic material; ostracodes common; forams (inc. Buccella); few spines.
- 160-170 Sand and clay - olive light gray; abundant clay; abundant sand; fine to coarse grained; subrounded to rounded; moderately sorted; quartz; 20% sandy limestone and shell fragments; 15% glauconite; phosphatic material; ostracodes abundant; forams scarce; few spines.
- 170-180 As above - clay appears to be weathered limestone; 20% glauconite; ostracodes not as plentiful.

OWNER: James L. Kirby
Claremont Manor #3

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Depth
(feet)

300-303 As above except a few pebbles; garnet common.

Note: Sp - sample taken.

GEOLOGIC SUMMARY

<u>Thickness</u> <u>(feet)</u>	<u>Rock Unit</u>	<u>Time Rock Unit</u>
20	Bacons Castle Formation	Pleistocene
50	Yorktown Formation	Pliocene-Miocene
70	Calvert Formation	Miocene -Eocene
40	Nanjemoy Formation	Eocene
70	Mattiponi Formation	Eocene-Cretaceous
53	Patuxent Formation	Cretaceous

Virginia Division of Mineral Resources
David A. Hubbard, Jr., Geologist
June 29, 1978

Depth
(feet)

MATTIPONI FORMATION (180-250)

- 180-190 Sand - grayish olive; abundant clay; medium grained; rounded; moderately well sorted; 45% glauconite; quartz; 3% shell and limestone fragments; pyrite; ostracodes; sharks teeth.
- 190-200 Sand - grayish olive; abundant clay; fine to medium grained; rounded; moderately well sorted; 60% glauconite; quartz; some shell and limestone fragments; pyrite.
- 200-210 As above except olive gray; 70% glauconite; forams.
- 210-220 As above except 50% glauconite; (inc. Robulus).
- 220-230 As above except 60% glauconite; no forams observed; phosphatic material.
- 230-240 Sand - olive light gray; abundant clay; fine to medium grained; subrounded to rounded; moderately well sorted; quartz; 45% glauconite; 3% shell and limestone fragments; some phosphatic fragments; forams rare.
- 240-250 Sand - grayish olive; moderate clay; silty; fine to medium grained with 20% granules; rounded; moderately well sorted; 50% glauconite; quartz; pyrite; few spines.

PATUXENT FORMATION (250-303)

- 250-260 As above except 9% granules; 60% glauconite; garnet.
- 260-270 Sand - salt and pepper; fine to very coarse grained with a few granules; subangular to rounded; moderately sorted; quartz; 45% glauconite; feldspar; garnet; few shell fragments; pyrite.
- 270-280 As above except slightly clayey; 10% glauconite; garnet abundant.
- 280-290 Sand - light olive gray; moderate clay; medium to very coarse grained with 6% gravel; subangular to rounded; poorly sorted; quartz; feldspar; 7% glauconite; garnet; a few phosphatic fragments; few shell and limestone fragments.
- 290-300 Sand - light olive gray; moderate clay; fine to very coarse grained with a few granules; subangular to rounded; poorly sorted; quartz; feldspar; 25% glauconite; garnet abundant; few shell and limestone fragments.