

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

W - 3672
C - 184

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

OWNER: Glendale Associates, Inc. Mailing Address: 415 Eight Street N.E. Charlottesville, VA

TENANT: Cabin Point Subdivision, Well #1 Mailing Address: _____

DRILLER: Sydnor Hydrodynamics, Inc. Mailing Address: P.O. Box 27186 Richmond, VA 23261

WELL LOCATION: County Westmoreland Approx. 5 ^{feet}/_{miles} North (direction) of _____
St. Route 202 and 1 ^{feet}/_{miles} East (direction) of St. Rd. 626

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

DATE STARTED: 6/9/72 DATE COMPLETED: 8/19/72

TYPE OF DRILL RIG USED: Rotary TOTAL DEPTH 780* feet

WATER LEVEL: Stands 14'7" feet below surface OR
has NATURAL flow of _____ gallons per minute.

YIELD TEST: Method turbine pump
Drawdown 132 feet
Rate 554 gal. per min.
Duration 24 hrs., 0 min.

HOLE SIZE: 23 inches from 0 to 56 feet
19 1/2 inches from 56 to 740 feet
9 7/8 inches from 740 to 780 feet
SCREEN SIZE: 8 inches from 340 to 360 feet
420 440
_____ inches from 522 to 538 feet
570 582
_____ inches from 689 to 718 feet
CASE SIZE: 10 inches from +2 to 340 feet
8 360 420
8 inches from 440 to 522 feet
8 538 570
8 inches from 582 to 698 feet
8 718 723

WATER ZONES: from 340 to 360 feet
420 440
from 522 to 538 feet
570 582
from 698 to 718 feet

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

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

WATER ANALYSIS AVAILABLE: Yes XX No _____

DRILL CUTTINGS SAVED: 77 Yes XX 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: Electric log ran by driller.

*Well construction completed at 723'.

LOG

FURNISHED BY: Sydnor Hydrodynamics, Inc.

DATE: 7/18/72

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	6	Yellow-brown sandy clay	
6	8	Yellow-sandy clay and gravel	
8	42	Gray clay and shells mixed	
42	102	Tough gray clay	
102	160	Green clay - few shells	
160	172	Black and gray sand, gray clay mixed	
172	207	Black and gray sand, gray clay, streaks of hard shells	
207	238	Black - sand and shells	
238	312	Gray clay and black sand	
312	480	Black and brown sand - hard streaks of shells	
480	492	White and gray sandy clay	
492	522	Gray, brown, and black sand - few shells mixed	
522	540	Coarse sand	
540	554	Gray clay and coarse sand	
554	569	Sand, gray clay and shells	
569	584	Gray sand	
584	617	Gray clay, sand and shells	
617	660	Tough brown clay	
660	689	Tough gray clay - few streaks of sand	
689	705	Gray clay, streaks of sand	
705	720	Gray sand	
720	749	Tough brown and gray clay	
749	780	Tough red, brown and gray clay mixed	

(Use additional forms if necessary)

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

INTERVAL SHEET

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Well Repository No: W: 3672

Date rec'd: 9/18/72 Date Processed: 2/13/73

C: 184
 Sample Interval: from: to:
 0 780

PROPERTY: Glendale Assoc., Inc.
 (Cabin Point #1)

Number of samples: 78

COMPANY: Sydnor

Total Depth: 780'

COUNTY: Westmoreland

Oil or Gas: Water: Exploratory:

From-To	From-To	From-To	From-To
0 - 10	250 - 60	500 - 10	750 - 60
10 - 20	260 - 70	510 - 20	760 - 70
20 - 30	270 - 80	520 - 30	770 - 80
30 - 40	280 - 90	530 - 40	-
40 - 50	290 - 300	540 - 50	-
50 - 60	300 - 10	550 - 60	-
60 - 70	310 - 20	560 - 70	-
70 - 80	320 - 30	570 - 80	-
80 - 90	330 - 40	580 - 90	-
90 - 100	340 - 50	590 - 600	-
100 - 10	350 - 60	600 - 10	-
110 - 20	360 - 70	610 - 20	-
120 - 30	370 - 80	620 - 30	-
130 - 40	380 - 90	630 - 40	-
140 - 50	390 - 400	640 - 50	-
150 - 60	400 - 10	650 - 60	-
160 - 70	410 - 20	660 - 70	-
170 - 80	420 - 30	670 - 80	-
180 - 90	430 - 40	680 - 90	-
190 - 200	440 - 50	690 - 700	-
200 - 10	450 - 60	700 - 10	-
210 - 20	460 - 70	710 - 20	-
220 - 30	470 - 80	720 - 30	-
230 - 40	480 - 90	730 - 40	-
240 - 50	490 - 500	740 - 50	-

All intervals have both washed and unwashed samples.

OWNER: Glendale Assoc., Inc.
(Cabin Point #1)
DRILLER: Sydnor Hydrodynamics
COUNTY: Westmoreland

W#: 3672
C#: 184
TOTAL DEPTH: 780'
QUAD: St. Clements Island

GEOLOGIC LOG

DEPTH
(feet)

- 0 - 10 Sand - dusky yellow; moderate clay; fine to medium grained, 7% granules; subangular to subrounded; moderately well sorted; quartz; feldspar; some opaques.
- 10 - 20 Clay - yellowish gray; slightly sandy; fine grained; subangular to subrounded; well sorted; quartz; few grains of glauconite.
- 20 - 30 Sand - light olive gray; moderate clay; fine grained; subangular to subrounded; well sorted; quartz; 7% shell fragments; some gypsum; few grains of glauconite; few black phosphatic fragments; few bone fragments; few echinoid spines.
- 30 - 40 As above except 15% shell fragments; 2% black phosphatic material.
- 40 - 50 Sand - light olive gray; moderate clay; fine to medium grained; subangular to subrounded; moderately well sorted; quartz; 5% shell fragments; 2% black phosphatic material; few bone fragments; glauconite.
- 50 - 60 Sand - light olive gray; moderate clay; fine to medium grained; subangular to subrounded; well sorted; quartz; some shell fragments; few black phosphatic fragments; glauconite.
- 60 - 70 As above except few shell fragments.
- 70 - 80 As above except abundant clay.
- 80 - 90 Clay - light olive gray; abundant sand; fine to medium grained; subangular to subrounded; moderately well sorted; quartz; few black phosphatic fragments; few shell fragments.
- 90 - 100 As above except 2% black phosphatic material; bone fragments.
- 100 - 110 Clay - light olive gray; abundant sand; fine to medium grained; subangular to subrounded; moderately well sorted; quartz; some shell fragments; few grains of glauconite; few black phosphatic fragments.
- 110 - 120 As above except moderate sand.
- 120 - 130 Clay - light olive gray; abundant sand; medium grained; subangular to subrounded; well sorted; quartz; few black phosphatic fragments; glauconite; few shell fragments.
- 130 - 140 As above.
- 140 - 150 As above.

Depth
(feet)

- 150-160 As above.
- 160-170 Sand- olive light gray; moderate clay; medium grained, some coarse grains; subangular to subrounded; well sorted; quartz; 10% shell fragments; 2% glauconite; some black phosphatic material; few limestone fragments.
- 170-180 Sand- olive light gray; moderate clay; medium to coarse grained, some granules; subangular to rounded; moderately well sorted; quartz; 15% glauconite; 7% shell fragments; few limestone fragments; few black phosphatic fragments; forams scarce (inc. Robulus and Dentalina).
- 180-190 Sand- olive light gray; moderate clay; medium to coarse grained, some granules; subangular to rounded; moderately well sorted; quartz; 15% glauconite; 10% shell fragments; some limestone fragments; some black phosphatic material; forams (inc. Buccella and Textularia?).
- 190-200 Sand- olive light gray; moderate clay; medium to coarse grained, some granules, few pebbles; subangular to rounded; moderately sorted; quartz; 25% sandy limestone and shell fragments; 10% glauconite; 2% sandy black phosphatic fragments; few echinoid spines; muscovite; forams (inc. Buccella and Robulus); ostracode.
- 200-210 Sand- salt and pepper; medium to coarse grained; subrounded to rounded; moderately well sorted; quartz; 20% glauconite; some shell fragments; forams scarce (inc. Buccella); bone fragment.
- 210-220 As above except 2% sandy limestone and shell fragments; no forams.
- 220-230 Sand- olive light gray; some stained grains; medium to coarse grained; subrounded to rounded; moderately well sorted; quartz; 40% glauconite (black, brown); few shell fragments.
- 230-240 As above.
- 240-250 As above.
- 250-260 Sand- olive light gray; medium to coarse grained; subrounded to rounded; moderately well sorted; quartz; 50% glauconite (black, brown, and green); some limestone and shell fragments; few black phosphatic fragments.
- 260-270 Sand- olive light gray; slightly clayey; medium to coarse grained, 20% granules; subrounded to rounded; moderately sorted; quartz; 40% glauconite; 15% limestone and shell fragments; few flakes of muscovite.

Depth
(feet)

- 270 - 280 As above except 60% glauconite; 3% limestone and shell fragments.
- 280 - 290 Sand - olive light gray; slightly clayey; medium to very coarse grained, some granules; subrounded to rounded; moderately sorted; 60% glauconite; quartz; 5% sandy limestone and shell fragments; few black phosphatic fragments.
- 290 - 300 As above.
- 300 - 310 Sand - olive light gray; moderate clay; medium to coarse grained, some very coarse grained, some granules; subrounded to rounded; moderately sorted; 65% glauconite; quartz; some sandy limestone and shell fragments; few flakes of muscovite.
- 310 - 320 Sand - olive light gray; slightly clayey; medium grained, some coarse grains; rounded; well sorted; 75% glauconite; quartz; few sandy limestone and shell fragments.
- 320 - 330 As above except no limestone.
- 330 - 340 As above except 65% glauconite.
- 340 - 350 Sand - salt and pepper; 35% moderately to heavily stained grains; medium grained; subrounded to rounded; well sorted; quartz; 25% glauconite (black, brown, green).
- 350 - 360 As above.
- 360 - 370 As above except medium to coarse grained; moderately well sorted; 30% glauconite.
- 370 - 380 As above.
- 380 - 390 As above.
- 390 - 400 Sand - salt and pepper; some moderately stained grains; medium grained; rounded; well sorted; quartz; 40% glauconite (black, brown, green).
- 400 - 410 Sand - salt and pepper; 20% moderately to heavily stained grains; coarse grained, some very coarse grains; rounded; well sorted; quartz; 30% glauconite (black, brown, green).
- 410 - 420 Sand - salt and pepper; some moderately stained grains; medium to coarse grained; subrounded to rounded; moderately well sorted; quartz; 40% glauconite (black, brown, green); some shell fragments.
- 420 - 430 As above except 3% shell fragments.
- 430 - 440 Sand - salt and pepper; 35% moderately to heavily stained grains; medium grained; subrounded to rounded; well sorted; quartz; 50% glauconite (brown, black, green); few shell fragments.

Depth
(feet)

- 440 - 450 As above.
- 450 - 460 Sand - salt and pepper; 25% moderately stained grains; medium to coarse grained; subrounded to rounded; moderately well sorted; quartz; 35% glauconite; few shell fragments; forams rare (inc. Nodosaria).
- 460 - 470 Sand - salt and pepper; some stained grains; medium to coarse grained; subrounded to rounded; moderately well sorted; quartz; 50% glauconite (green, brown, black); some shell fragments; forams (inc. Buccella, Cibicides, and Nodosaria).
- 470 - 480 As above except forams rare (inc. Nodosaria).
- 480 - 490 Sand - yellowish gray; slightly clayey; fine to coarse grained; subangular to rounded; moderately sorted; quartz; 25% glauconite (brown, black, green); 5% shell fragments; few flakes of muscovite; forams (inc. Buccella).
- 490 - 500 As above except 30% glauconite; 2% shell fragments.
- 500 - 510 As above except no forams.
- 510 - 520 As above except 2% shell fragments.
- 520 - 530 Sand - salt and pepper; medium to very coarse grained, some fine grains; subangular to rounded; moderately sorted; quartz; 50% glauconite; some shell fragments; few limestone fragments; muscovite.
- 530 - 540 As above except 40% glauconite; 2% shell fragments.
- 540 - 550 As above except 25% glauconite; 5% shell fragments; some feldspar.
- 550 - 560 Sand - salt and pepper; medium to coarse grained, some fine grains, some very coarse grains; subangular to rounded; moderately sorted; quartz; 15% glauconite (brown, black, green); feldspar; 3% limestone and shell fragments; few flakes of muscovite.
- 560 - 570 As above except slightly clayey; 10% glauconite.
- 570 - 580 Sand - white; medium to coarse grained; subangular to subrounded; well sorted; quartz; feldspar; some glauconite; few flakes of muscovite; few shell fragments.
- 580 - 590 Sand - light olive gray; slightly clayey; medium grained to granular; subangular to subrounded; poorly sorted; quartz; feldspar; 2% limestone and shell fragments; some glauconite.
- 590 - 600 As above except sand and granules (40%); 5% limestone and shell fragments; shark's tooth.

Depth
(feet)

- 600 - 610 Sand - light olive gray; slightly clayey; medium to coarse grained, 15% granules; subangular to subrounded; moderately sorted; quartz; feldspar; 5% limestone and shell fragments; 3% glauconite; few flakes of muscovite.
- 610 - 620 As above except abundant clay.
- 620 - 630 As above.
- 630 - 640 As above.
- 640 - 650 Sand - light olive gray; moderate clay; fine to medium grained, some coarse grains; subangular to rounded; moderately well sorted; quartz; 15% glauconite; some feldspar; some shell fragments; few flakes of muscovite.
- 650 - 660 As above.
- 660 - 670 Sand - white; medium grained, some coarse grains; subangular to subrounded; well sorted; quartz; feldspar; some glauconite; few flakes of muscovite.
- 670 - 680 Sand - light olive gray; slightly clayey; medium to very coarse grained; subangular to subrounded; moderately sorted; quartz; feldspar; some glauconite; few flakes of muscovite.
- 680 - 690 As above except 2% glauconite; some shell fragments.
- 690 - 700 Sand - salt and pepper; medium to coarse grained; subangular to rounded; moderately well sorted; quartz; 15% glauconite; feldspar; few flakes of muscovite; few shell fragments.
- 700 - 710 Sand - white; medium grained; subangular to subrounded; well sorted; quartz; feldspar; few grains of glauconite.
- 710 - 720 As above except some glauconite.
- 720 - 730 Sand - light olive gray; moderate clay; coarse to very coarse grained, some granules; subangular to subrounded; moderately well sorted; quartz; feldspar; 5% glauconite; 3% limestone and shell fragments; few flakes of muscovite.
- 730 - 740 As above except 10% glauconite.
- 740 - 750 As above.
- 750 - 760 As above except 7% glauconite; 2% limestone and shell fragments.
- 760 - 770 Sand - light olive gray; moderate clay; medium to coarse grained, 3% granules; subangular to rounded; moderately well sorted; quartz; 20% glauconite; feldspar; some shell fragments.
- 770 - 780 Sand and clay - light olive gray; moderate clay; abundant sand;

Depth
(feet)

medium grained, some coarse grains, few granules, few pebbles; sub-angular to rounded; moderately well sorted; quartz; 20% glauconite (green, black); feldspar; some shell fragments.

Logged by: Michael T. Currie
March 29, 1979

OWNER: Glendale Assoc., Inc.
(Cabin Point #1)

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W#: 3672

GEOLOGIC SUMMARY

<u>DEPTH</u> (feet)	<u>THICKNESS</u> (feet)	<u>ROCK UNIT</u>	<u>TIME ROCK UNIT</u>
0 - 10	10	Columbia Group	Pleistocene
10 - 80	70	Choptank Formation	Miocene
80 - 160	80	Calvert Formation	Miocene
160 - 340	180	Nanjemoy Formation	Eocene
340 - 570	230	Aquia Formation	Eocene - Cretaceous
570 - 780	210	Potomac Group	Cretaceous

VIRGINIA DIVISION OF MINERAL RESOURCES
David A. Hubbard, Jr., Geologist
March 30, 1979