

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

W#: 4221
C#: 78

MAILING ADDRESS:

B 3667
Charlottesville, VA 22903

DIVISION OF MINERAL RESOURCES

JAMES L. CALVER, COMMISSIONER

OFFICE ADDRESS:

McCormick Road
Charlottesville, Virginia

WATER WELL COMPLETION REPORT

OWNER: Kenwood Farms, Inc. Mailing Address: c/o G. R. Balducci
Rt. 2, Mechanicsville, VA 23111

TENANT: Kenwood Farms well #1 Mailing Address: _____

DRILLER: Sydnor Hydrodynamics, Inc. Mailing Address: P. O. Box 27181, Richmond, Va.

WELL LOCATION: County New Kent Approx. 3,200 ^{feet} ~~xxxx~~ north (direction) of
Rt. 33 and 50 ^{feet} ~~xxxx~~ east (direction) of Rt. 612

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

DATE STARTED: 1/28/74 DATE COMPLETED: 3/1/74

TYPE OF DRILL RIG USED: Rotary TOTAL DEPTH 474 feet

WATER LEVEL: Stands 157 feet below surface OR
has NATURAL flow of _____ gallons per minute.

YIELD TEST: Method Submersible
Drawdown 97'5" feet
Rate 116 gal. per min.
Duration 24 hrs., _____ min.

HOLE SIZE: 17 inches from 0 to 53 feet
12 inches from 53 to 474 feet
_____ inches from _____ to _____ feet

WATER ZONES: from 399 to 419 feet
from 446 to 466 feet
from _____ to _____ feet

SCREEN SIZE: 6 inches from 399 to 419 feet
6 inches from 446 to 466 feet
0" pipe 12 inches from +1 to 53 feet
CASE SIZE: 6 inches from +2 to 399 feet
6 inches from 419 to 446 feet
6 inches from 466 to 470 feet

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

GROUTING: Method Pressure
Material Cement Water Depth 53 feet

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

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

WATER ANALYSIS AVAILABLE: Yes X No _____

DRILL CUTTINGS SAVED: 47 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: _____

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	22	Red Clay	
22	33	Yellow Clay	
33	46	Coarse brown sand	
46	54	Brown clay	
54	67	Shells	
67	95	Blue Clay	
95	160	Blue clay, shells mixed with some gray clay	
160	190	Shells with gray clay streaks	
190	200	Fine black sand	
200	223	Fine black sand, gray sand with green clay streaks	
223	267	Dark gray clay	
367	311	Black sand clay	
311	328	Black sand	
328	345	Tough brown clay	
345	369	Brown and gray clay	
369	372	Fine gray sand	
372	391	Tough gray and brown clay	
391	402	Gray silty clay	
402	422	gray sand-clay streaks	
422	433	Tough brown clay	
433	440	Fine gray sand clay	
440	455	Gray sand and clay streaks	
455	467	gray sand	
467	474	White and gray clay - some sand	

(Use additional forms if necessary)

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

INTERVAL SHEET

Page 1 of 1
 Date rec'd: 4/26/74 Date Processed: 7/15/75
 PROPERTY: Kenwood Farms #1
 COMPANY: Sydnor
 COUNTY: New Kent (Patterson's Store)

W#: 4221
 Well Repository No: C#: 78
 Sample Interval: from:-to:-
 0 470
 Number of samples: 47
 Total Depth: 474
 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 - 310	-	-
60 - 70	310 - 320	-	-
70 - 80	320 - 330	-	-
80 - 90	330 - 340	-	-
90 - 100	340 - 350	-	-
100 - 110	350 - 360	-	-
110 - 120	360 - 370	-	-
120 - 130	370 - 380	-	-
130 - 140	380 - 390	-	-
140 - 150	390 - 400	-	-
150 - 160	400 - 410	-	-
160 - 170	410 - 420	-	-
170 - 180	420 - 430	-	-
180 - 190	430 - 440	-	-
190 - 200	440 - 450	-	-
200 - 210	450 - 460	-	-
210 - 220	460 - 470	-	-
220 - 230	-	-	-
230 - 240	-	-	-
240 - 250	-	-	-

All intervals have both washed and unwashed samples

OWNER: Kenwood Farms #1
DRILLER: Sydnor Hydrodynamics
COUNTY: New Kent (Patterson's Store)

W#: 4221
C#: 78
TOTAL DEPTH: 474'
QUAD.: Tunstall

GEOLOGIC LOG

Depth
(feet)

- 0-10 Sand — very dark yellowish orange; slightly stained; abundant clay; very fine to medium grained; subangular to subrounded; moderately sorted; quartz; feldspar; some opaques; muscovite.
- 10-20 As above except dark yellowish orange; moderate clay.
- 20-30 Sand — grayish orange; slightly clayey; fine grained to granular, few pebbles; subangular to subrounded; poorly sorted; quartz; feldspar; some opaques.
- 30-40 Sand — grayish orange; slightly clayey; coarse grained to granular, some medium grains, some pebbles; subrounded; moderately sorted; quartz (some manganese-stained grains); feldspar.
- 40-50 Sand — very dark yellowish orange; slightly stained; moderate clay; very fine to medium grained, 15% granules, 5% pebbles; subangular to subrounded; poorly sorted; quartz (some manganese-stained grains); feldspar; 3% ferricrete; some opaques.
- 50-60 Sand and sandy limestone fragments — grayish orange; slightly clayey; medium to coarse grained, some fine grains; subangular to subrounded; moderately well sorted; quartz; 40% sandy limestone fragments; 5% shell fragments; some feldspar; some spines; few black phosphatic fragments; few grains of glauconite; bone fragment.
- 60-70 Sand — light olive gray; slightly clayey; fine to coarse grained; subangular to subrounded; moderately sorted; quartz; 20% shell fragments; some glauconite; some black phosphatic material; few spines; few bone fragments.
- 70-80 Sand — olive light gray; moderate clay; very fine to medium grained; subangular to subrounded; moderately sorted; quartz; 15% shell fragments; some black phosphatic material; few grains of glauconite; forams rare (inc. Nonion).
- 80-90 As above except 25% shell fragments; forams scarce (inc. Quinqueloculina).

Depth
(feet)

- 90-100 Sand — light olive gray; moderate clay—light olive gray, medium light gray (clasts); fine to medium grained; subangular to subrounded; moderately well sorted; quartz; 2% shell fragments; some glauconite; few black phosphatic fragments; few sandy limestone fragments.
- 100-110 As above except 5% shell fragments.
- 110-120 Sand — olive light gray; moderate clay; very fine to medium grained; subangular to subrounded; moderately sorted; quartz; 5% shell fragments; some black phosphatic material; few grains of glauconite; ostracode.
- 120-130 As above except abundant clay (some clasts); some glauconite.
- 130-140 As above except 3% shell fragments; some muscovite.
- 140-150 Sand — olive light gray; abundant clay; fine to coarse grained, some granules; subangular to subrounded; poorly sorted; quartz; 10% shell fragments; 2% black phosphatic material; few grains of glauconite; forams (inc. Robulus, Guttulina, and Bulimina); ostracodes.
- 150-160 As above plus some sandy limestone fragments.
- 160-170 Sand — olive light gray; moderate clay; fine to coarse grained; subangular to rounded; moderately sorted; quartz; 25% sandy limestone and shell fragments; 15% glauconite (black, green); forams (inc. Quinqueloculina, Robulus, Buccella, and Discorbis); some pyrite; few bone fragments; ostracodes.
- 170-180 As above except 40% sandy limestone and shell fragments; no Discorbis.
- 180-190 As above except 25% glauconite (black, green, brown); forams (inc. Robulus and Buccella).
- 190-200 Sand — olive light gray; moderate clay; fine to coarse grained; subangular to rounded; moderately sorted; quartz; 25% glauconite (black, green, brown); 20% sandy limestone and shell fragments; pyrite; forams scarce (inc. Robulus); bone fragment.
- 200-210 Sand — light olive gray; slightly clayey; fine to coarse grained, some granules; subangular to rounded; poorly sorted; quartz; 25% glauconite (black, brown); 7% sandy limestone and shell fragments; some pyrite; forams (inc. Textuloria, Quinqueloculina, and Discorbis); few black phosphatic fragments; few spines; ostracodes.
- 210-220 Sand — olive light gray; slightly clayey; very fine to very coarse grained, some granules; subangular to subrounded; poorly sorted; quartz; 30% glauconite; 7% shell fragments; pyrite; forams (inc. Robulus, Guttulina, Buccella, and Cibicides?); muscovite; ostracode.

Depth
(feet)

- 220-230 As above plus some black phosphatic material; forams rare (inc. Buccella).
- 230-240 Sand — olive light gray; slightly clayey; fine to coarse grained, few granules; subangular to rounded; poorly sorted; quartz; 30% glauconite; 30% sandy limestone and shell fragments; forams scarce (inc. Quinqueloculina and Robulus); ostracode; bone fragment.
- 240-250 As above plus some pebbles; foram.
- 250-260 Sand — light olive gray, moderate clay—light olive gray, light orange pink; very fine to coarse grained; subangular to rounded; moderately sorted; quartz; 25% glauconite; 5% sandy limestone and shell fragments; muscovite; pyrite; few spines; forams scarce (inc. Buccella).
- 260-270 Sand — dark greenish gray; moderate clay-olive light gray, moderate orange pink; fine to medium grained; subangular to rounded; moderately well sorted; 50% glauconite; quartz; some muscovite; some shell fragments; forams rare (inc. Siphogenerina).
- 270-280 As above except 65% glauconite (black, green); no Siphogenerina.
- 280-290 As above.
- 290-300 Sand — olive light gray; slightly clayey; medium grained, some coarse grains; subangular to rounded; well sorted; 55% glauconite (black, green); quartz; some shell fragments; few sandy limestone fragments; muscovite.
- 300-310 Sand — dark greenish gray; moderate clay; very fine to medium grained; subangular to subrounded; moderately sorted; 70% glauconite (black, green) quartz; 2% shell fragments; muscovite.
- 310-320 As above except slightly clayey; 60% glauconite.
- 320-330 Sand — olive light gray; moderate clay-olive light gray, dark yellowish orange, light grayish yellow; fine to medium grained, some coarse grains; subangular to subrounded; moderately sorted; 55% glauconite (black, green); quartz; some shell fragments; muscovite; forams scarce (inc. Nodosaria).
- 330-340 Sand — light olive gray; abundant clay-light olive gray, light grayish yellow, dark yellowish orange; medium to coarse grained, some fine grains, some granules; subangular to rounded; moderately sorted; 65% glauconite; quartz; few shell fragments; forams rare (inc. Bolivina).
- 340-350 Sand — yellowish gray; slightly clayey; very fine to coarse grained, some granules, few pebbles; subangular to subrounded; poorly sorted; quartz; feldspar; 5% glauconite; few shell fragments; muscovite.

Depth

(feet)

- 350-360 Sand — very light brown; moderate clay-very light brown, moderate reddish brown; medium to coarse grained, few granules; subangular to rounded; moderately well sorted; quartz; feldspar; 15% glauconite; muscovite.
- 360-370 As above.
- 370-380 As above except 20% glauconite.
- 380-390 Sand — light reddish brown; moderate clay-light reddish brown, pale grayish yellow; fine to coarse grained; subangular to rounded; moderately sorted; quartz; feldspar; 15% glauconite; muscovite.
- 390-400 Sand — very light brown; slightly clayey; medium to coarse grained, some fine grains, few granules; subangular to subrounded; moderately sorted; quartz; feldspar; 10% glauconite; muscovite.
- 400-410 Sand — yellowish gray; slightly clayey; medium to very coarse grained, some granules; subangular to subrounded; moderately sorted; quartz; feldspar; 5% glauconite; muscovite; foram.
- 410-420 Sand — yellowish gray; slightly clayey; coarse grained to granular (30% granules); subrounded; moderately sorted; quartz; feldspar; 2% glauconite; muscovite.
- 420-430 Sand — yellowish gray; slightly clayey; medium grained to granular (20% granules); subrounded to rounded; moderately sorted; quartz; feldspar; 17% glauconite.
- 430-440 As above except 12% glauconite.
- 440-450 Sand — moderate reddish brown; abundant clay-moderate reddish brown, light olive gray, dusky yellow; fine to medium grained, some coarse grains; subangular to rounded; moderately well sorted; quartz; 25% glauconite; feldspar.
- 450-460 Sand — off white; slightly clayey; coarse grained to granular, some medium grains; subrounded; moderately sorted; quartz; feldspar; 12% glauconite; muscovite.
- 460-470 As above plus few pebbles; 2% glauconite.
- 470-474 No sample.

Logged by: Michael T. Currie