| | OF VIRGINIA W#: 422 ON AND ECONOMIC DEVELOPMENT C#: 7 |
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| MAILING ADDRESS: DIVISION OF MIL B 3667 JAMES L. CALVI | NERAL RESOURCES OFFICE ADDRESS: ER, COMMISSIONER McCormick Road OMPLETION REPORT Charlottesville, Virgini |
| Balance and the state of the st | c/o G. R. Balducci |
| | Mailing Address:Rt. 2, Mechanicsville, VA 2311 |
| TENANT: <u>Kenwood Farms Well #2</u> | |
| DRILLER Sydnor Hydrodynamics, Inc. | And set the state of the state of the state of the state |
| WELL LOCATION: County New Kent | 20.0 MW0033 011 00 |
| Route 33 and 500 | feet(direction) ofRoute 612 |
| (GIVE DIRECTION AND DISTANCE IN FEET OR MILES FROM T COUNTY HIGHWAY OR OTHER MAP.) | 170 180 Bleck and gray said, some s |
| DATE STARTED: 3/1/74 | DATE COMPLETED: 4/1/74 |
| TYPE OF DRILL RIG USED: Rotary | TOTAL DEPTH 503 fee |
| WATER LEVEL: Stands 159 feet below | surface OR composition and and and |
| has NATURAL flow of_ | 344 268 Steach, sticky ground clay 368 368 |
| YIELD TEST: MethodSubmersible | HOLE SIZE: 17: inches from 0 to 50 fee |
| Drawdown <u>42-7½"</u> feet | valo ville need 010 010 010 010 010 010 010 010 010 01 |
| Rate <u>100</u> gal. per min. | inches fromtofee |
| Duration <u>24</u> hrs., min. | SCREEN SIZE: 6 inches from 453 to 498 fee |
| WATER ZONES: from <u>453</u> to <u>498</u> feet | inches fromtofee |
| fromtotofeet | inches fromtofee |
| fromfeet | CASE SIZE: <u>12</u> inches from <u>0</u> to <u>50</u> fee |
| WATER: ColorTaste | 6_inches_from+2_to453_fee |
| OdorTemp | 6_inches_from_498_to_500_fee |
| WELL TO SUPPLY: (check one) Home | GROUTING: Method Pressure |
| FarmTownSchool | Material <u>Cement & Watemepth 50</u> fee |
| IndustryOther_Subdivision | PUMP: Type |
| WATER ANALYSIS AVAILABLE Yes No | Capacitygal per mir |
| DRILL CUTTINGS SAVED: Yes_x_No (DRILL CUTTINGS SHOULD BE COLLECTED AT 10 FOOT OFFICE EXPRESS COLLECT. SAMPLE BAGS ARE FURNISH | Depth of intakefee INTERVALS. THESE SAMPLES MAY BE SHIPPED TO THIS |
| R ARKS: Well #2 (Plans Marked Site#1) Elec | tric log and gamma log ran. |
| | |
| | |
| | |
| | (LOG OF WELL) OVER |

DATE

FURNISHED BY

DEPTH TYPE OF ROCK OR SOIL PENETRATED REMARKS (feet) (gravel, clay, etc., hardness, color, etc.) (water, caving, shot, screen, sample, etc.) FROM TO 0 16 Brown clay 16 31 Brown sand and clay 50 31 Brown clay mixed with pink 56 50 Brown clav 56 68 Shells 68 Blue clay 130 Black sand clay and shells 130 170 170 180 Black and gray sand, some shells 180 195 Dark gray clay Gray clay, some fine gray and black sand 195 230 230 268 Tough gray clay 268 336 Back sand clay 336 344 Coarse gray sand, some clay 344 368 Tough, sticky ground clay 368 388 Gray sand clay 388 420 Gray clay and sand streaks 420 440 Tough brown clay 440 449 Green silky clay 449 455 Green and white sand clay 455 503 Gray sand well #2 (Plane Marked vite#1) Electric log and gamma log ran.

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

INTERVAL SHEET

| | | | ₩#: 4222 | | |
|-------------|-----------------------------|---------|--------------------------------------------|--|--|
| Page 1 | of 1 | | Well Repository No: C#: 79 | | |
| Date rec'd: | 4/26/74 Date Processed: | 7/15/75 | Sample Interval: from:0 ^{to:} 503 | | |
| PROPERTY: | Kenwood Farms #2 | | Number of samples: 51 | | |
| COMPANY: | Sydnor | | Total Depth: 503 | | |
| COUNTY: | New Kent (Patterson's Hole) | | Oil or Gas: <u>Water</u> : Exploratory: | | |
| | | | | | |
| From-To | From-To | From-To | From-To | | |
| 0-10 | 300- 10 | <u></u> | - | | |
| 10-20 | 310- 20 | | 2 <u>—</u> 2 | | |
| 20-30 | 320- 30 | - | - | | |
| 30-40 | 330-40 | - | · _ | | |
| 40-50 | 340- 50 | | | | |
| 50-60 | 350- 60 | | - | | |
| 60-70 | 360- 70 | - | | | |
| 70-80 | 370- 80 | - | - | | |
| 80-90 | 380- 90 | - | 3. | | |
| 90-100 | 390 - 400 | | - | | |
| 100- 10 | 400-10 | - | - | | |
| 110- 20 | 410-20 | - | 77. | | |
| 120- 30 | 420-30 | - | | | |
| 130- 40 | 430 - 40 | | - | | |
| 140- 50 | 440 - 50 | - | - | | |
| 150- 60 | 450 - 60 | - | - | | |
| 160- 70 | 460-70 | | 201 | | |
| 170- 80 | 470 - 80 | | | | |
| 180- 90 | 480 - 90 | | - | | |
| 190-200 | 490 -500 | | . – | | |
| 200- 10 | 500 - 503 | - | - | | |
| 210- 20 | - | - | - | | |
| 220- 30 | - | - | - | | |
| 230- 40 | = | - | - | | |
| 240- 50 | - | | - | | |
| 250- 60 | | | | | |
| 260- 70 | | | | | |
| 270- 80 | | | | | |
| 280- 90 | | | | | |
| 200-300 | | | | | |

290-300

All intervals have both washed and unwashed samples.

| OWNER: DRILLER: COUNTY: | Kenwood Farms #2 Sydnor Hydrodynamics New Kent (Patersons' Store) | | | | |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|------------------------------------|--|--|
| GEOLOGIC LOG | | | | | |
| Depth (feet) | | | | | |
| 0-10 | Sand — pale yellowish orange; abundant clay — pale yellowish orange, dark yellowish orange, light gray; fine to medium grained, some coarse grains; subangular to subrounded; moderately well sorted; quartz; feldspar; muscovite; few grains of glauconite. | | | | |
| 10-20 | Sand — dark yellowish orange; moderately stained; slightly clayey; fine to coarse grained; subangular to subrounded; moderately sorted; quartz; feldspar; few opaques; few grains of glauconite. | | | | |
| 20-30 | Sand — dark yellowish orange; heavily stained; slightly clayey; medium grained to granular; some fine grains, some pebbles; sub- angular to subrounded; poorly sorted; quartz; feldspar; few opaques; muscovite. | | | | |
| 30-40 | Sand — moderate orange pink; abundant clay — dark yellowish orange, moderate orange pink, pale yellowish orange; very fine to medium grained, few granules; subangular to subrounded; moderately sorted; quartz; few grains of glauconite; few opaques; muscovite. | | | | |
| 40-50 | Sand — grayish orange; slightly clayey; fine to very coarse grained, 5% granules, few pebbles; subangular to subrounded; poorly sorted; quartz; feldspar; few opaques; few grains of glauconite. | | | | |
| 50-60 | Sand — dark yellowish orange; slightly stained; slightly clayey; medium to coarse grained, some fine grains, 7% granules; subangular to subrounded; poorly sorted; quartz; 20% sandy limestone and shell fragments; some feldspar; some spines; some glauconite; some black phosphatic material; some bone fragments; ferricrete; muscovite. | | | | |
| 60-70 | Sand — dusky yellow; slightly clayey; fine to medium grained; sub- angular to subrounded; moderately well sorted; quartz; 15% shell fragments; some black phosphatic material; some spines; some sandy limestone fragments; few grains of glauconite; ostracodes. | | | | |
| 70-80 | Sand — light olive gray; slightly grained, some granules; subangular quartz; 35% sandy limestone and sh material; few grains of glauconite | to subrounded; po ell fragments; som | orly sorted; e black phosphatic | | |

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OWNER: Kenwood Farms #2

Depth (<u>feet</u>)

- 80-90 Sand olive light gray; moderate clay; silty; very fine to medium grained, few granules; subangular to subrounded; poorly sorted; quartz (some very heavily stained grains); 7% shell fragments; some black phosphatic material; some glauconite; few spines; few sandy limestone fragments; muscovite.
- 90-100 Sand light olive gray; slightly clayey; slightly silty; very fine to coarse grained, some granules; subangular to subrounded; poorly sorted; quartz; 10% shell fragments inc. gastropods; few black phosphatic fragments; few grains of glauconite; few sandy limestone fragments; bone fragments.
- 100-110 Clay and sand olive light gray; abundant clay olive light gray, grayish orange; moderate sand; very fine to coarse grained, some granules; subangular to subrounded; poorly sorted; quartz, 15% sandy limestone and shell fragments; some black phosphatic material; few grains of glauconite; muscovite; forams rare (inc. Nonion).
- 110-120 Sand olive light gray; abundant clay; silty; very fine to fine grained, some medium grains; subangular to subrounded; moderately sorted; quartz; 7% shell fragments; some sandy limestone fragments; few grains of glauconite; few black phosphatic fragments.
- 120-130 As above except some glauconite; no limestone.
- 130-140 Sand olive light gray; moderate clay; slightly silty; very fine to fine grained, few granules; subangular to subrounded; moderately well sorted; quartz; 17% shell fragments; some black phosphatic material; some sandy limestone fragments; few grains of glauconite; few bone fragments.
- 140-150 Sand olive light gray; moderate clay; fine to medium grained, some coarse grains; subangular to subrounded; moderately sorted; quartz; 3% black phosphatic material; 2% shell fragments; few spines; forams (inc. Nonion).
- 150-160 Sand olive light gray; slightly clayey; fine to coarse grained, some very coarse grains, 7% granules, few pebbles; subangular to subrounded; poorly sorted; quartz; 15% sandy limestone and shell fragments; 5% black phosphatic material; forams scarce (inc. <u>Buccella</u>); bone fragment; ostracode.
- 160-170 Sand light olive gray; slightly clayey; fine to medium grained, some coarse grains, 5% granules; subangular to subrounded; poorly sorted; quartz; 15% sandy limestone and shell fragments; 10% glauconite (green, black); forams (inc. <u>Buccella</u>, <u>Discorbis</u>, and <u>Textularis</u>); few black phosphatic fragments; ostracodes; few spines; pyrite.

DWNER: Kenwood Farms #2

Depth (<u>feet</u>)

- 170-180 Sand light olive gray; slightly clayey; fine to medium grained, some coarse grains; subangular to rounded; moderately well sorted; quartz (some heavily stained grains); 15% glauconite (black, green); few shell fragments; few sandy limestone fragments; some pyrite; forams (inc. Robulus, Buccella, and Dentalina); few spines.
- 180-190 Sand olive light gray; slightly clayey; fine to coarse grained; subangular to rounded; moderately sorted; quartz; 25% glauconite (black, green, brown); 7% sandy limestone and shell fragments; few spines; pyrite; forams scarce (inc. Robulus).
- 190-200 As above except 10% shell fragments; some sandy limestone fragments; forams (inc. Robulus and Buccella).
- 200-210 Sand olive light gray; slightly clayey; fine to coarse grained; subangular to subrounded; moderately sorted; quartz; 15% glauconite (black, green); 12% sandy limestone and shell fragments; forams common (inc. Robulus, Globulina, and Discorbis); muscovite.
- 210-220 Sand olive light gray; slightly clayey; fine to very coarse grained, some granules, few pebbles; subangular to rounded; poorly sorted; quartz; 20% glauconite (black, green); 15% shell fragments; some sandy limestone fragments; forams (inc. Robulus and Pyrulina); muscovite.
- 220-230 Sand olive gray; moderate clay; fine to coarse grained, some granules; subangular to rounded; moderately sorted; quartz; 35% glauconite; 7% shell fragments; some muscovite; forams scarce (inc. Robulus and Pyrulina).
- 230-240 As above except 10% shell fragments; forams (inc. <u>Robulus</u>, <u>Globulina</u>, and <u>Lagina</u>?).
- 240-250 Sand olive light gray; abundant clay; fine to coarse grained, some granules, some pebbles; subangular to rounded; poorly sorted; quartz; 25% glauconite; 7% sandy limestone and shell fragments; some muscovite; forams (inc. Robulus).
- 250-260 Sand light olive gray; slightly clayey; medium to coarse grained, some granules; subangular to rounded; moderately well sorted; quartz (some moderately stained grains); 30% glauconite (black, green); 5% shell fragments; some muscovite; forams rare (inc. Globulina).

DWNER: Kenwood Farms #2

Depth (feet)

(1000)

- 260-270 Sand olive gray; moderate clay olive gray, moderate orange pink, light gray; fine to medium grained; rounded; moderately well sorted; 70% glauconite; quartz; some muscovite; few shell fragments; forams rare (inc. Nodosaria).
- 270-280 As above.
- 280-290 As above except 60% glauconite; no Nodosaria.
- 290-300 Sand olive gray; moderate clay; very fine to medium grained; subangular to rounded; moderately sorted; quartz; 40% glauconite; some muscovite; some shell fragments; pyrite.
- 300-310 As above.
- 310-320 As above plus some coarse grains; moderately sorted; 2% shell fragments.
- 320-330 Sand olive gray; moderate clay; fine to medium grained, some coarse grains; subangular to rounded; moderately well sorted; 55% glauconite; quartz; some shell fragments; muscovite.
- 330-340 Sand salt and pepper; slightly clayey; fine grained to granular, few pebbles; subangular to rounded; poorly sorted; quartz; 35% glauconite; feldspar; few shell fragments; muscovite.
- 340-350 Sand light olive gray; moderate clay light olive gray, light reddish brown, dark yellowish orange; medium to very coarse grained, some fine grains, some granules, few pebbles; subangular to rounded; poorly sorted; quartz; feldspar; 15% glauconite; few shell fragments; muscovite.
- 350-360 As above plus some dusky yellow clay.
- 360-370 As above except slightly clayey; 3% glauconite.
- 370-380 Sand light olive gray; moderate clay; slightly silty; medium to very coarse grained, some very fine grains, some fine grains, 7% granules; subangular to subrounded; poorly sorted; quartz; feldspar; 7% glauconite; some muscovite; forams rare (inc. Robulus).
- 380-390 As above except some granules; 10% glauconite; 3% shell fragments; no Robulus.
- 390-400 Sand off-white; slightly clayey; fine to very coarse grained, 5% granules; subangular to subrounded; poorly sorted; quartz; feldspar; 3% glauconite; muscovite.

wner: Kenwood Farms #2

Depth (feet)

- 400-410 As above except medium to very coarse grained, 15% granules; moderately sorted.
- 410-420 As above.
- 420-430 Sand moderate reddish brown; moderate clay moderate reddish brown, light olive gray; fine to coarse grained, some granules; subangular to subrounded; moderately sorted; quartz; feldspar; 7% glauconite; muscovite.
- 430-440 As above except abundant clay; forams rare (inc. Buccella).
- 440-450 Sand light olive gray; moderate clay light olive gray, moderate reddish brown; medium grained, some fine grains, some coarse grains, some granules; subangular to subrounded; moderately well sorted; quartz; feldspar; 5% glauconite; muscovite.
- 450-460 Sand white; coarse grained, some medium grains, few granules; subrounded; well sorted; quartz; feldspar; some glauconite; few shell fragments.
- 460-470 Sand off-white; slightly clayey; coarse to very coarse grained, some fine grains, some granules; subrounded; moderately well sorted; quartz; feldspar; few grains of glauconite.
- 470-480 Sand off-white; slightly clayey; very coarse grained to granular; subrounded; moderately well sorted; quartz; feldspar.
- 480-490 Sand white; coarse to very coarse grained, few granules; subrounded; moderately well sorted; quartz; feldspar; few grains of glauconite; garnet.
- 490-500 Sand off-white; slightly clayey; medium grained to granular; subrounded; moderately sorted; quartz; feldspar; some glauconite; muscovite.

500-503 As above plus few pebbles.

Logged by: Michael T. Currie