| MAILING ADDRESS: DIVISION OF MIN | DN AND ECONOMIC DEVELOPMENT IERAL RESOURCES OFFICE ADDRESS: R, COMMISSIONER McCormick Road |
|---|--|
| etc) (within course, shot, screan, nimple, etc.) | Chicago sakarabrian and arang control of the sarabrian and an arang control of the sarabrian and an arang control of the sarabrian and an arang control of the sarabrian and arang control of the sarabrian and area of the sarabr |
| Trailer Court | Mailing Address: Tappahannock, Virginia |
| | Mailing Address: |
| DRILLER: Douglas & Dickinson, Inc. | |
| WELL LOCATION: County Essex | |
| near Tappahannock and and | feet(direction) of |
| (GIVE DIRECTION AND DISTANCE IN FEET OR MILES FROM TO COUNTY HIGHWAY OR OTHER MAP.) | WO REFERENCE POINTS - ROADS, TOWNS, RIVERS, ETC ON |
| DATE STARTED: | |
| TYPE OF DRILL RIG USED: Rotary | TOTAL DEPTHfeet |
| WATER LEVEL: Stands 23 feet below | surface <u>OR</u> |
| has <u>NATURAL</u> flow of | gallons per minute. |
| YIELD TEST: Method | HOLE SIZE: 6 inches from 0 to 168 feet |
| Drawdown37 feet | 5 7/8 inches from 168 to 525 feet |
| Rate $\frac{40}{}$ gal. per min. | inches fromtofeet |
| Durationhrs.,min. | SCREEN SIZE: 2 inches from 503 to 523 feet |
| WATER ZONES: from 503 to 523 feet | tofeet |
| fromtofeet | inches fromtofeet |
| fromtofeet | CASE SIZE: 4 inches from 0 to 168 feet |
| WATER: ColorTaste | inches from 168 to 503 feet |
| Odor°F | _2inches from 523 to 525 feet |
| WELL TO SUPPLY: (check one) Home | GROUTING: Method |
| Farm Town School | Material Depth feet |
| IndustryOther_Trailer Court | PUMP: Type |
| WATER ANALYSIS AVAILABLE:YesNo | Capacitygal_per min |
| DRILL CUTTINGS SAVED: Yes 49 No (DRILL CUTTINGS SHOULD BE COLLECTED AT 10 FOOT IN OFFICE EXPRESS COLLECT. SAMPLE BAGS ARE FURNISHE | |

R ARKS:____

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

INTERVAL SHEET

COUNTY: Essex

| | | | C-148 | |
|-------------|-------------------------------|-----------------------|-------|------|
| Page 1 | of 1 | Well Repository No: | 3058 | |
| Date rec'd: | 3/24/70 ; processed 1/15/71 | Sample Interval; from | o to: | 514' |
| PROPERTY: | J. Hutchinson (Trailer Court) | Number of samples: | 49 | |
| COMPANY: | Douglas & Dickinson | Total Depth: 525 | | |
| | | | | |

Oil or Gas: $Water:_{\mathbf{X}} Exploratory:$

| 1 | | | | | | | |
|---|------|------|------|-----|------|---------------------------------------|------------|
| | Fror | n-To | Fron | n-' | Γο | From-To | From-To |
| | 0 | - 10 | 262 | _ | 2.73 | _ | _ |
| | | - 21 | 273 | | | - | _ |
| | | - 31 | 283 | | | | |
| | 31 | - 42 | 294 | | | | _ |
| | 42 | _ 52 | 304 | | | | _ |
| | | | | | | | |
|) | 52 | _ 63 | 315 | _ | 325 | _ | <u>5</u> 6 |
| | 63 | _ 73 | 325 | _ | 336 | Carr | |
| | 73 | _ 84 | 336 | - | 346 | ~ | |
| | 84 | - 94 | 346 | _ | 357 | _ | - |
| | 94 | -105 | 357 | _ | 367 | · · · · · · · · · · · · · · · · · · · | = |
| | | | | | | | |
| | 105 | -115 | 367 | _ | 378 | ×- | - |
| | 115 | -126 | 378 | - | 388 | 9 -1 0 | - |
| | 126 | -136 | 388 | - | 399 | - | - |
| | 136 | -147 | 399 | - | 409 | - | _ |
| | 147 | -157 | 409 | - | 420 | s e | |
| | | | | | | | |
| | 157 | -168 | 420 | - | 430 | ::: ' | = |
| | 168 | -178 | 430 | - | 441 | _ | ~ |
| | 178 | -189 | 441 | - | 451 | · | - |
| | 189 | -199 | 451 | - | 462 | - | - |
| | 199 | -210 | 462 | - | 472 | SE (| ₩. |
| | | | | | | | |
| | 210 | -220 | 472 | - | 483 | : | _ |
| | 220 | -231 | 483 | - | 493 | - | - |
| | 231 | -241 | 493 | - | 504 | (**) | = |
| | 241 | -252 | 504 | - | 514 | juli | Ħ |
|) | 252 | -262 | | - | | | 2 |

(Trailer Court)

OWNER : J. Hutchinson

DRILLER: Douglas and Dickinson C#

COUNTY : Essex

C# : 148 TOTAL DEPTH: 525'

W#

QUAD : Mount Landing

: 3058

GEOLOGIC LOG

- 0-10 Sand- pale yellowish-brown; slightly clayey; medium to coarse grained, some fine grains; subangular to subrounded; moderately well sorted; quartz; feldspar; few opaques.
- 10-21 Sand- off-white; coarse to very coarse grained, some granules; subangular to subrounded; moderately well sorted; quartz; feldspar; some opaques.
- 21-31 Sand- light olive gray; slightly clayey; fine grained, some medium grains, some coarse grains, few granules; subangular to subrounded; moderately well sorted; quartz; some glauconite; feldspar; few shell fragments; few opaques; muscovite.
- 31-42 Sand- light olive gray; slightly clayey; medium to coarse grained, some fine grains, few granules; subangular to subrounded; moderately well sorted; quartz; some feldspar; some glauconite; few opaques; muscovite.
- 42-52 Clay- light olive gray; slightly silty; slightly sandy; very fine to medium grained; subangular to subrounded; moderately sorted; quartz; few grains of glauconite; few diatoms; few flakes of muscovite.
- 52-63 As above except abundant sand.
- 63-73 Sand- light olive gray; abundant clay; moderate silt; fine to coarse grained, few granules; subangular to subrounded; moderately sorted; quartz; some glauconite; some shell fragments; muscovite.
- 73-84 As above except sand and clay; moderate clay; abundant sand.
- 84-94 Sand- light olive gray; slightly clayey; moderate silt; fine grained; subangular to subrounded; well sorted; quartz; some black phosphatic material; few grains of glauconite; few diatoms; muscovite.
- 94-105 Sand- light olive gray; slightly clayey; moderate silt; fine to medium grained, some coarse grains; subangular to subrounded; moderately sorted; quartz; some glauconite; few black phosphatic fragments; few diatoms; muscovite.

(Trailer Court)
OWNER: J. Hutchinson

W#: 3058

- 105-115 As above plus some shell fragments.
- 115-126 Sand- light olive gray; slightly clayey; slightly silty; fine grained, some medium grains; subangular to subrounded; well sorted; quartz; some black phosphatic material; some shell fragments; few grains of glauconite.
- 126-136 Sand- light olive gray; slightly clayey; medium to coarse grained, 3% granules; subangular to subrounded; moderately well sorted; quartz; 7% sandy limestone and shell fragments; 3% glauconite; some black phosphatic material; forams (inc. Buccella and Globulina).
- 136-147 Sand- light olive gray; slightly clayey; coarse grained to granular, few pebbles; subrounded; poorly sorted; quartz; some feldspar; some sandy limestone and shell fragments; some glauconite; few black phosphatic fragments.
- 147-157 Sand and granules- light olive gray; coarse to very coarse grained, some medium grains, 40% granules; subrounded; poorly sorted; quartz; 5% sandy limestone and shell fragments; 3% glauconite; some feldspar; forams (inc. <u>Buccella</u> and <u>Robulus</u>).
- 157-168 Sand and gravel- light olive gray; slightly silty; medium to coarse grained, some fine grains, some granules, 40% pebbles; subangular to rounded; poorly sorted; quartz; 20% sandy limestone and shell fragments; 7% glauconite; forams abundant (inc. Buccella); few black phosphatic fragments; ostracodes.
- 168-178 As above except 5% granules; 50% pebbles; forams (inc. <u>Buccella</u>).
- 178-189 Sand- olive light gray; slightly clayey; moderate silt; fine to medium grained, some coarse grains, 5% granules, few pebbles; subangular to rounded; moderately sorted; quartz; 35% glauconite; 5% sandy limestone and shell fragments; forams (inc. Buccella); few black phosphatic fragments.
- 189-199 As above except 10% granules; 20% glauconite.
- 199-210 As above except forams (inc. Buccella and Robulus); ostracode.
- 210-220 Sand- olive light gray; moderate clay; slightly silty; fine to medium grained, some granules, few pebbles; subangular to rounded; moderately well sorted; quartz; 35% glauconite; some shell fragments; few flakes of muscovite; forams (inc. Buccella, Globigerina, and Cibicides?).

(Trailer Court)
OWNER: J. Hutchinson

W#: 3058

- 220-231 Sand- olive light gray; medium grained, some coarse grains; rounded; well sorted; 75% glauconite; quartz; few flakes of muscovite; few shell fragments.
- 231-241 Sand- olive light gray; slightly clayey; medium to coarse grained, few granules; subrounded to rounded; moderately well sorted; 50% glauconite; quartz; some shell fragments; few flakes of muscovite; forams (inc. Buccella).
- 241-252 As above plus some fine grains; moderately sorted; 60% glauconite.
- 252-262 Sand- olive light gray; abundant clay- grayish-orange-pink (clasts), olive light gray; medium to coarse grained, some fine grains; subangular to rounded; moderately well sorted; 60% glauconite; quartz; few shell fragments; muscovite.
- 262-273 As above plus some light olive gray clay.
- 273-283 Sand- olive light gray; slightly clayey (clasts) light olive gray, grayish-orange-pink; medium to coarse grained, some fine grains; subangular to rounded; moderately well sorted; quartz; 40% glauconite; some shell fragments; few flakes of muscovite; forams (inc. Buccella and Robulus).
- 283-294 As above except abundant clay; 15% glauconite; forams rare (inc. Buccella).
- 294-304 Sand- salt and pepper; medium grained, some coarse grains; subrounded to rounded; well sorted; 60% glauconite; quartz; few shell fragments; muscovite.
- 304-315 As above except some limestone and shell fragments.
- 315-325 As above except 2% limestone and shell fragments; foram.
- 325-336 Sand- light olive gray; slightly clayey; medium grained to granular, 3% pebbles; subangular to rounded; poorly sorted; 10% glauconite; 7% sandy limestone and shell fragments; few flakes of muscovite; pyrite; forams scarce (inc. Buccella).
- 336-346 Sand- salt and pepper; medium grained, some coarse grains; subrounded to rounded; well sorted; 50% glauconite; quartz; some shell fragments; few flakes of muscovite.
- 346-357 As above plus some grayish-orange-pink clay; 60% glauconite; forams scarce (inc. Nodosaria and Dentalina).

(Trailer Court)
OWNER: J. Hutchinson

W#: 3058

- 357-367 Sand- olive light gray; slightly clayey; clasts; medium to coarse grained, some fine grains; subangular to rounded; moderately well sorted; quartz; 35% glauconite; forams (inc. Buccella, Cibicides, and Globigerina); few grains of garnet; muscovite.
- 367-378 As above except moderate clay; forams scarce (inc. Nodosaria).
- 378-388 Sand- light olive gray; slightly clayey; coarse to very coarse grained, 2% granules; subangular to rounded; moderately sorted; quartz; 10% glauconite; feldspar; few grains of garnet; muscovite.
- 388-399 Sand- olive light gray; moderate clay; moderate silt; medium to coarse grained, few granules; subangular to rounded; moderately well sorted; quartz; 10% glauconite; feldspar; few grains of garnet; muscovite.
- 399-409 Sand- olive light gray; slightly clayey; coarse grained, some medium grains, some very coarse grains, some granules; subangular to rounded; moderately well sorted; quartz; 20% glauconite; some feldspar; few grains of garnet; forams (inc. Buccella).
- 409-420 As above except 3% granules; few shell fragments; forams (inc. Buccella and Nodosaria).
- 420-430 Sand- salt and pepper; slightly clayey (clasts) olive light gray; medium to coarse grained; subangular to rounded; moderately well sorted; quartz; 25% glauconite; few flakes of muscovite.
- 430-441 As above.
- 441-451 Sand- light gray, light brown; abundant clay; slightly silty; medium to coarse grained, some fine grains; subangular to rounded; moderately well sorted; quartz; 10% glauconite; few flakes of muscovite; few shell fragments.
- 451-462 As above except 7% glauconite; no shell fragments.
- 462-472 Sand- light olive gray; medium to coarse grained; subangular to subrounded; moderately well sorted; quartz; feldspar; 7% glauconite; few flakes of muscovite.
- 472-483 Sand- off-white; coarse to very coarse grained, 2% granules; subangular to subrounded; moderately well sorted; quartz; feldspar; 2% glauconite; some muscovite.

(Trailer Court)

OWNER: J. Hutchinson

W#: 3058

Depth (feet)

483-493 As above except 5% granules; moderately sorted.

493-504 As above plus few grains of garnet.

504-514 As above.

514-525 No sample.

Logged by: Michael T. Currie August 10, 1979 OWNER: J. Hutchinson

DRILLER: Douglas & Dickinson, Inc.

COUNTY: Essex (Tappahannock)

VDMR # 3058

WWCR # 148

TOTAL DEPTH: 525'

GEOLOGIC SUMMARY

| Depth (feet) | Rock Unit | Age |
|-----------------|----------------------|--------------------------------|
| 0-21 | Columbia Group | Pleistocene |
| 21-155 | Calvert Formation | Middle Miocene |
| 155-275 | Nanjemoy Formation | Middle Eocene |
| 255-275 | Marlboro Clay Member | |
| 275-472 | Mattaponi Formation | Paleocene - Late Cretaceous |
| 472 - 51 4 | Patuxent Formation | Early Cretaceous |
| 514-525 | No sample | AND |

Virginia Division of Mineral Resources Robert H. Teifke - Geologist January 24, 1971