| | N AND ECONOMIC DEVELOPMENT C#: 191 |
|--|---|
| | ERAL RESOURCES OFFICE ADDRESS: R, COMMISSIONER McCormick Road MPLETION REPORT Charlottesville, Virginia |
| e, etc't (= etcm. coving, etch, enceen, evengle, etc.) | Box 98, Route 1 Mailing Address: <u>Montross VA</u> 22520 |
| TENANT: | Mailing Address |
| DRILLER: Douglas Drilling Co., Inc. | Box 498 Mailing Address: <u>Warsaw, VA</u> 22572 |
| WELL LOCATION: County Westmoreland | Approx. 0.2 miles Southeast (direction) of |
| St. Rd. 6240.5 | feet Southwest (direction) of Potomac River at 624. |
| TOTE BILLEOTION AND DISTANCE IN TELL ON MILLS TROM T | 624. VO REFERENCE POINTS - ROADS, TOWNS, RIVERS, ETC ON Is bus son beam - bedlieds |
| DATE STARTED: 00511 Llode bas rebaild yeld and | DATE COMPLETED: 14 June 1974 |
| TYPE OF DRILL RIG USED: Rotary | TOTAL DEPTH 329feet |
| WATER LEVEL: Stands_29_feet below | surface <u>CR</u> |
| has NATURAL flow of | gallons per minute. |
| YIELD TEST: Method Air | HOLE SIZE: <u>11</u> inches from <u>0</u> to <u>51</u> feet |
| Drawdown81 feet | <u> 6 inches from 51 to 147 feet</u> |
| Rate <u>30</u> gal. per min. | <u>3 7/8</u> inches from <u>147</u> to <u>329</u> feet |
| Duration <u>2</u> hrs., min. | SCREEN SIZE:inches fromtofeet |
| WATER ZONES: from tofeet | |
| from <u>284</u> to <u>294</u> feet | |
| from <u>309 to 319</u> feet | CASE SIZE: <u>4</u> inches from 0 to 147 feet |
| WATER: ColorTaste | <u> 2 inches from 147 to 284 feet</u> |
| OdorTemp°F | inches from 294to309feet |
| WELL TO SUPPLY: (check one) Home | GROUTING Method tremmie pipe |
| Farm Town School | Material <u>neat cement</u> Depth <u>51</u> feet |
| IndustryOther_Subdivision | PUMP: Type |
| WATER ANALYSIS AVAILABLE Yes No | Capacitygal. per min |
| DRILL CUTTINGS SAVED: 31 Yes_XX_No (DRILL CUTTINGS SHOULD BE COLLECTED AT 10 FOOT IN OFFICE EXPRESS COLLECT. SAMPLE BAGS ARE FURNISHE | |
| R. ARKS: | |
| | |
| | |
| | |
| | (LOG OF WELL) OVER |

АТИТАЯТИ ЭЦОСГЬАЗЖИАМ МОО COMMONWEALTING PLANE ALLEGING ALLEGINGING ALLEGINGING ALLEGINGING ALLEGINGING ALLEGINGING ALLEGINGING ALLEGINGING ALLEGINGING ALLEGINGING ALLEGINGIN ALLEGINGING ALLEGINGING ALLEGINGING ALLEGINGING ALLE

FURNISHED BY

DATE:_

| DEPTH (feet) | | TYPE OF ROCK OR SOIL PENETRATED | | REMARKS | |
|---|---|--|--|---|--|
| FROM | то | Lotin (gravel, clay, etc., hardness, color, etc.) | | (water, caving, shot, screen, sample, etc.) | |
| 0 30 75 85 250 265 280 295 310 320 | 30 75 85 250 265 280 295 310 320 330 | fine sand with clay binder a fine sand with varying % cla fine sand with clay binder a fine and medium sands with s fine and medium sands with s fine and medium sands with s shellbed - fused rock and sh | nd shell trace y binder nd shell trace ome clay binde ome shell ome clay binde ell | DAULER Douglas Drilling Co., In | |
| | 329 | TOTAL DEPTH | | TYPE OF DRILL RIG USED | |
| | | <u>MO</u> Sobtrue | weist las | WATER LEVEL Storts 29 | |
| | | where are confing | to walt d | NRUTAN 194 | |
| | Ē (| HOLE SIZE, 11 server from _ | 1 1. Peter - Sector - 2 | TIA | |
| | 1 <u>41</u> | | 150 | Dress sev | |
| | 7_16 323 | 3 7/Barros Iron 1 | | 0 | |
| | | SCREEN SIZE | ñte | Durgh of 21_610 | |
| | M (s_ 294 | from21 | (100 - co | | |
| | 10 of 21 | 2 | 194 Leet | rem18416 | |
| | 147 | GASE SIZE 4 mohen home | lei ette | | |
| | 7 10 28 | 2 100-110 100 | | VATER: Crist | |
| | 4 11 30 | <u>2</u> | | net seho | |
| | 9 32. Pe | S GROUTING Method Streamle IN | | ELL TO SURPLY LEADER FREE CO. | |
| | 1651 | Markey heat condit in | | Farm Town Scuno | |
| | | 19 M US | nois | ivitation states states | |
| | ""D == == | 10000 | XX _ 6.6 | ATER ANALYSIS AVAILABLE THE | |
| | | analy to depend | ······································ | ALL CUTTINGS SAVES! 11.8 | |
| | 01-0049042 | ATRAVELS. THREE SAMPLES MAY US DIFES OF CHURDE UTON DEGUEST | 1 100% (c) 10. | DRUL COTTAIGS BUBULD BE COLLECTED | |
| | | | | | |
| | | | | | |
| | | | 14 | | |
| | | | | | |

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

INTERVAL SHEET

| Page 1 | of 1 | | Well Repository No: W#: 4229 C# 191 |
|----------------|--------------------------------|--------------------|---|
| Date rec' | d: 7/18/74 Date | Processed: 7/18/75 | Sample Interval: from: to: 0 329 |
| PROPERTY: | Gordon Horner | | Number of samples: 32 |
| COMPANY: | Douglas | | Total Depth: 324' |
| COUNTY: | Westmoreland (Morris Store) | | Oil or Gas: <u>Water</u> : Exploratory: |
| From-To | From-To | From-To | From-To |
| 0 - 10 | 256 - 266 | - | - |
| 10 - 20 | 266 - 276 | - | — / |
| 20 - 30 | 276 - 287 | - | _ |
| 30 - 41 | 287 - 297 | - | - |
| 41 - 51 | 297 - 307 | | - |
| 31 - 61 | 307 - 318 | - | - |
| 61 - 71 | 318 - 329 | - | - |
| 71 - 82 | | - | - |
| 82 - 92 | - | - | - |
| 92 - 102 | 2 | | - |
| 102 - 112 | - | - | - |
| 112 - 123 | - 1 | - | - |
| 123 - 133 | T > | - | - |
| 133 - 143 | - | - | - |
| 143 - 153 | - | - | - |
| 153 - 164 | _ | _ | _ |
| 164 - 174 | _ | _ | 2 |
| 174 - 184 | _ | _ | L. |
| 184 - 194 | _ | _ | - |
| 194 - 205 | | - | - |
| | | | |
| 205 - 215 | - | - | - |
| 215 - 225 | - | - | - |
| 225 - 235 | - | | - |
| 235 - 246 | - | - | - |
| 246 - 256 | - | ~ | - |

Both washed and unwashed samples.

OWNER: Gordon Horner DRILLER: Douglas COUNTY: Westmoreland W#: 4229 C#: 191 TOTAL DEPTH: 329' QUAD: Col. Beach S.

GEOLOGIC LOG

Depth (feet)

- 0 10 Sand -- grayish orange; slightly to heavily stained; coarse grained to gravel (30%); subangular to subrounded; poorly sorted; quartz; feldspar; some opaques.
- 10 20 Sand and gravel -- multicolored; slightly to heavily stained; moderate clay - yellowish gray; coarse grained to granular, some medium grains, 50% pebbles; subangular to subrounded; poorly sorted; quartz; feldspar; some opaques.
- 20 30 Sand -- dusky orange; slightly clayey; medium to very coarse grained, some fine grains, 15% granules, 5% pebbles; subangular to subrounded; moderately sorted; quartz; feldspar; some opaques; few grains of glauconite.
- 30 41 Clay -- light olive gray; abundant sand; fine grained, some medium grains, some coarse grains; subangular to subrounded; moderately well sorted; quartz; few grains of glauconite; few shell fragments.
- 41 51 Clay and sand -- light olive gray, olive light gray; abundant clay; moderate sand; fine grained, few granules; subangular to subrounded; well sorted; quartz; some black phosphatic material; few grains of glauconite; muscovite.
- 51 61 Clay -- yellowish gray; slightly silty; moderately diatomaceous; few medium grains of quartz; sand; few black phosphatic fragments; muscovite.
- 61 71 As above except slightly diatomaceous; some quartz sand.
- 71 82 Clay and sand -- light olive gray; abundant clay; moderate sand; fine to medium grained; subangular to subrounded; moderately well sorted; quartz; 15% glauconite; 3% shell fragments; few black phosphatic fragments; few echinoid spines; muscovite.
- 82 92 As above plus some coarse grains; few granules; 3% glauconite; foram.
- 92 102 As above except 5% glauconite; forams scarce (inc. Robulus and Buccella).
- 102 112 Sand -- olive light gray; moderate clay; fine to coarse grained, some granules; subangular to subrounded; moderately sorted; quartz; some muscovite; some shell fragments; some glauconite; few grains of pyrite.

112 - 123 As above except 2% granules; 10% glauconite.

OWNER: Gordon Horner

Depth (feet)

- 123 133 Sand and clay -- olive light gray, light olive gray; moderate clay; abundant sand; fine to medium grained, some coarse grains, some granules, few pebbles; subangular to rounded; moderately sorted; quartz; 40% glauconite; some muscovite; some shell fragments.
- 133 143 As above except 30% glauconite; 3% shell fragments.
- 143 153 As above except 20% glauconite.
- 153 164 Sand and clay -- olive light gray; moderate clay; abundant sand; fine to medium grained, some coarse grains, few granules; subangular to rounded; moderately well sorted; quartz; 40% glauconite; 2% shell fragments; few flakes of muscovite.
- 164 174 Sand -- olive light gray; abundant clay; fine to medium grained; subangular to rounded; moderately well sorted; 65% glauconite; quartz; few flakes of muscovite; few shell fragments.
- 174 184 As above except clay and sand; 50% glauconite; some muscovite.
- 184 194 Sand -- olive light gray; abundant clay; medium to coarse grained; subrounded to rounded; moderately well sorted; 50% glauconite; quartz; some muscovite; few shell fragments.
 - 194 205 Sand and clay -- light olive gray; moderate clay; abundant sand; fine to medium grained; subangular to rounded; moderately well sorted; 60% glauconite; quartz; some shell fragments; muscovite.
 - 205 215 As above except 40% glauconite; ostracode; no shell fragments.
 - 215 225 Sand and clay -- light olive gray; moderate clay; abundant sand; fine to coarse grained; subangular to rounded; moderately sorted; quartz; 35% glauconite; some muscovite; few shell fragments; forams rare (inc. Nonion ?).
 - 225 235 Clay -- very light gray, light olive gray, grayish orange pink; moderate sand; medium grained, some fine grains, some coarse grains; subangular to rounded; moderately well sorted; quartz; glauconite 30% of sand sized fraction; some muscovite.
 - 235 246 Clay -- moderate orange pink; slightly sandy; medium grained; subangular to rounded; wellssorted; quartz; glauconite 40% of sand sized fraction; few flakes of muscovite.
 - 246 256 Sand -- olive light gray; moderate clay; medium grained, some coarse grains; subangular to rounded; well sorted; quartz; 40% glauconite (black, brown); few flakes of muscovite; forams rare (inc. Nodosaria).

OWNER: Gordon Horner

Depth (feet)

- 256 266 As above plus some moderate orange pink clay; 25% glauconite; forams scarce (inc. Nodosaria and Robulus).
- 266 276 Sand -- olive light gray; slightly clayey; medium to coarse grained; subangular to rounded; moderately well sorted; quartz; 40% glauconite (black, brown, green); some sandy limestone and shell fragments.
- 276 287 As above except 5% sandy limestone and shell fragments.
- 287 297 Sand -- olive light gray; slightly clayey moderate orange pink (clasts); medium grained, some coarse grains; subangular to rounded; well sorted; quartz; 40% glauconite (black, green); few shell fragments; forams (inc. Buccella and Nodosaria).
- 297 307 Sandy limestone -- very light gray; moderate sand; medium to coarse grained; subangular to rounded; moderately well sorted; 50% glauconite; quartz.
- 307 318 Coquina and sand -- light gray; medium to coarse grained; subangular to rounded; moderately well sorted; 60% sandy limestone fragments; quartz; 20% glauconite; few shell fragments.
- 318 329 Sand -- grayish olive; medium to coarse grained; subrounded to rounded; moderately well sorted; 60% glauconite (black, dark green, brown); quartz; some sandy limestone and shell fragments; forams (inc. <u>Nodosaria</u>, Robulus, Guttulina, and Buccella).

Logged by: Michael T. Currie April 26, 1979