

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

INTERVAL SHEET

Page 1 of 1

Well Repository No.: 5231

Date rec'd Date Processed: 7/31/78

Sample Interval: from 5 to 171

PROPERTY: YOAT

Number of samples: 33

COMPANY:

Total Depth: 171

COUNTY: Surry L2

Oil or Gas: Water: ~~Exploratory~~:

| From-To | From-To | From-To | From-To |
|--------------------|---------|---------|---------|
| 5 - 6 | 40 - 41 | - | - |
| 10 - 11 | 45 - 46 | - | - |
| 15 - 16 | 50 - 51 | - | - |
| 20 - 21 | 55 - 56 | - | - |
| 25 - 26 | 60 - 61 | - | - |
| 30 - 31 | 65 - 66 | - | - |
| 35 - 36 | 70 - 71 | - | - |
| 40 - 41 | - | - | - |
| 45 - 46 | - | - | - |
| 50 - 51 | - | - | - |
| 50 - 56 | - | - | - |
| 65 - 66 | - | - | - |
| 70 - 71 | - | - | - |
| 75 - 76 | - | - | - |
| 80 - 81 | - | - | - |
| 85 - 86 | - | - | - |
| 90 - 91 | - | - | - |
| 95 - 96 | - | - | - |
| 100 - 101 | - | - | - |
| 105 - 106 | - | - | - |
| 110 - 111 | - | - | - |
| 115 - 116 | - | - | - |
| 120 - 21 | - | - | - |
| 25 - 26 | - | - | - |
| 30 - 31 | - | - | - |

washed & unwashed samples

OWNER: VDHT
COUNTY: Surry L2

W# 5231
Total Depth: 171'
Quad: Surry

Depth
(feet)

GEOLOGIC LOG

0-5 No sample.

5-6 Sand - grayish orange; slightly clayey; medium to coarse grained, some fine grains, few granules; subangular to subrounded; moderately sorted; quartz; feldspar; some glauconite.

6-10 No sample.

10-11 Sand - dark yellowish orange; moderately stained; slightly clayey; medium to very coarse grained, some granules; subangular to subrounded; moderately sorted; quartz; feldspar; few opaques.

11-15 No sample.

15-16 As (10-11) except medium to coarse grained, few granules; moderately well sorted.

16-20 No sample.

20-21 Sand - dark yellowish orange; heavily stained; slightly clayey; medium to very coarse grained, some granules, few pebbles; subangular to subrounded; moderately sorted; quartz; feldspar.

21-25 No sample.

25-26 Sand - very dark yellowish orange; moderately stained; fine grained, some medium grains; subangular to rounded; well sorted; quartz; 15% glauconite; feldspar.

26-30 No sample.

30-31 Clay and sand - very dark yellowish orange; abundant clay - dark reddish brown, dark yellowish orange; moderate sand; fine to medium grained, some coarse grains; subangular to subrounded; moderately well sorted; quartz; some feldspar; some glauconite.

31-35 No sample.

35-36 Sand - light grayish orange; slightly clayey; fine to medium grained; subangular to subrounded; well sorted; quartz; 12% shell fragments; some glauconite; few spines.

36-40 No sample.

40-41 Sand - light grayish orange; slightly clayey; fine to medium grained; subangular to subrounded; well sorted; quartz; 30% sandy limestone fragments (1-15mm); 5% shell fragments; some glauconite; few spines.

Depth
(feet)

- 41-45 No sample.
- 45-46 Sand - light greenish yellow; slightly clayey; fine grained; subangular to subrounded; well sorted; quartz; 3% shell fragments; some black phosphatic material; few grains of glauconite; few spines; bone fragment.
- 46-50 No sample.
- 50-51 As (45-46) except light gray; 10% shell fragments; no bone fragment.
- 51-55 No sample.
- 55-56 Sand - light gray; slightly clayey, medium grained, some fine grains; subangular to subrounded; well sorted; quartz; 25% shell fragments; some black phosphatic material
- 56-60 No sample.
- 60-61 Sand - light grayish olive; moderate clay, fine to medium grained; subangular to subrounded; well sorted; quartz; few shell fragments; few black phosphatic fragments; glauconite.
- 61-65 No sample.
- 65-66 As (60-61).
- 66-70 No sample.
- 70-71 As (65-66) plus some spines.
- 71-75 No sample.
- 75-76 Sand - light olive gray; slightly clayey; very fine to fine grained; subangular to subrounded; well sorted; quartz; 2% spines; 2% shell fragments; some black phosphatic material; ostracodes; foram.
- 76-80 No sample.
- 80-81 As (75-76) except moderate clay; 5% shell fragments; some spines.
- 81-85 No sample.
- 85-86 Sand - light olive gray; slightly clayey; very fine grained; subangular to subrounded; well sorted; quartz; 5% spines; some shell fragments; some black phosphatic material; ostracodes.
- 86-90 No sample.
- 90-91 As (85-86) except 2% shell fragments; forams rare (inc. Nonion).
- 91-95 No sample.

Depth
(feet)

- 95-96 Sand - olive light gray; moderate clay; silty; very fine to medium grained; moderately sorted; quartz; 3% shell fragments; 2% spines; some black phosphatic material; forams (inc. Nonion and Buccella).
- 96-100 No sample.
- 100-101 Sand - grayish olive; moderate clay; fine to medium grained; subangular to subrounded; moderately well sorted; quartz; some shell fragments; some black phosphatic material; some spines; few grains of glauconite.
- 101-105 No sample.
- 105-106 Sand - olive light gray; moderate clay; very fine grained; subangular to subrounded; well sorted; quartz; few shell fragments; few spines; few black phosphatic fragments; forams (inc. Nonion).
- 106-110 No sample.
- 110-111 As (105-106) plus some muscovite; some spines.
- 111-115 No sample.
- 115-116 Sand - olive light gray; moderate clay; silty; very fine to fine grained; subangular to subrounded; moderately well sorted; quartz; few black phosphatic fragments; muscovite; few spines; forams (inc. Buccella and Nonion).
- 116-120 No sample.
- 120-121 As (115-116) except sand and clay; moderate clay; abundant sand; no spines.
- 121-125 No sample.
- 125-126 As (120-121) except no Buccella.
- 126-130 No sample.
- 130-131 Clay and sand - olive light gray; abundant clay; moderate sand; very fine to fine grained; subangular to subrounded; moderately well sorted; quartz; some muscovite; few shell fragments; few black phosphatic fragments.
- 131-140 No sample.
- 140-141 Clay - olive light gray, light gray; moderate sand; very fine to medium grained; subangular to subrounded; moderately well sorted; quartz; few black phosphatic fragments; few spines; few grains of glauconite.
- 141-145 No sample.

Depth
(feet)

- 145-146 Clay - light olive gray; slightly sandy; fine to medium grained; sub-angular to subrounded; moderately well sorted; quartz; some heavily stained shell fragments; few spines; forams (inc. Nonion).
- 146-150 No sample.
- 150-151 Clay - light olive gray; some shell fragments; quartz; forams; (inc. Bulimina, Buccella, Nonion, and Textularia).
- 151-155 No sample.
- 155-156 Clay - olive light gray; silty; 2% shell fragments; quartz.
- 156-160 No sample.
- 160-161 Clay - olive light gray; few shell fragments; foram.
- 161-165 No sample.
- 165-166 Clay - olive light gray; some shell fragments; quartz; forams; common (inc. Nonion, Bulimina, and Uvigerina).
- 166-170 No sample.
- 170-171 Clay - olive light gray; moderate sand; fine to medium grained; sub-angular to subrounded; moderately well sorted; quartz; 2% shell fragments; some black phosphatic material; few grains of glauconite.

Logged by: Michael T. Currie

GEOLOGIC SUMMARY

| <u>Depth</u> <u>(feet)</u> | <u>Thickness</u> <u>(feet)</u> | <u>Rock Unit</u> | <u>Time Rock Unit</u> |
|-------------------------------|-----------------------------------|-------------------------|-----------------------|
| 0-5 | 5 | No sample | |
| 5-31 | 26 | Bacons Castle Formation | Pleistocene |
| 31-35 | 4 | No sample | |
| 35-56 | 21 | Yorktown Formation | Pliocene-Miocene |
| 56-60 | 4 | No sample | |
| 60-171 | 111+ | Calvert Formation | Miocene - Eocene |

VIRGINIA DIVISION OF MINERAL RESOURCES
David A. Hubbard, Jr., Geologist
October 2, 1978

OWNER: VDHT
COUNTY: Surry L2

W# 5231
Total Depth: 171'
Quad: Surry

Depth
(feet)

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- 141-145 No sample.

*Yorktown
cobham*

*cobham
classroom*

Depth
(feet)

- 145-146 Clay - light olive gray; slightly sandy; fine to medium grained; sub-angular to subrounded; moderately well sorted; quartz; some heavily stained shell fragments; few spines; forams (inc. Nonion).
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- 156-160 No sample.
- 160-161 Clay - olive light gray; few shell fragments; foram.
- 161-165 No sample.
- 165-166 Clay - olive light gray; some shell fragments; quartz; forams; common (inc. Nonion, Bulimina, and Uvigerina).
- 166-170 No sample.
- 170-171 Clay - olive light gray; moderate sand; fine to medium grained; sub-angular to subrounded; moderately well sorted; quartz; 2% shell fragments; some black phosphatic material; few grains of glauconite.

Logged by: Michael T. Currie

GEOLOGIC SUMMARY

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VIRGINIA DIVISION OF MINERAL RESOURCES
David A. Hubbard, Jr., Geologist
October 2, 1978

U.S. DEPT. OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
GROUND WATER SITE INVENTORY
SITE SCHEDULE

Recorded by W.V. Daniels

Date 5-11-78

Check One English Metric Units

GENERAL SITE DATA (0)

Site Ident No 37 1 1 4 0 0 7 6 4 8 3 0 2 RG Number R=0* Transaction T= D M V *
 Site-Type 2= C D H I M P T (W) * Reliability 3= E U L M * Reporting Agency 4= U.S.G.S *
 Project No. 5= 445104600 * District 6= 51 * State 7= 51 * County Suffry 8= 181 *
 Latitude 9= 37 1 1 4 8 * Longitude 10= 0 7 6 4 8 3 0 * Lat-Long Accuracy 11= F T M *
 Local Number 12= 56F 32 * Land Net Loc. 13= S T R *
 Location Map 14= SUFFY * Scale 15= 24000 *
 Altitude 16= 75.0 * Method of Measurement 17= A L (M) * Accuracy 18= 5 *
 Topo Setting 19= D C E F H K L Ø P S (T) U V W * Hydrologic Unit (OWDC) 20= 02080206 *
 Date of First Construction/Completion 21= 1 0 0 0 1 9 7 7 * Use of Site 23= A D E G H Ø M P R S (T) U W X Z *
 Use of Water 24= A B C D E F H I M N P R S T (W) Y Z *
 Secondary Water Use 25= * Tertiary Use of Water 26= * Depth of Hole 27= 17.1 * Depth of Well 28= 17.1 * Source of Depth Data 29= 5 *
 Water Level 30= * Date Measured 31= / / * Source 33= *
 Method of Measurement 34= A C E G H L M R S T V Z *
 Site Status 37= D F G H Ø P R S T V X Z *
 Source of Geohydrologic Data 36= * Pump Used 35= * Measuring Point 266= * Measuring Point Date 267= / / *

OWNER IDENTIFICATION (1)

R=158 * T= D M * Date of Ownership 159# 1 0 0 0 1 9 7 7 *
 Name: Last 161= VA. DEPT. * First 162= HIGHWAY * Middle Initial 163= *

OTHER SITE IDENTIFICATION NUMBERS (1)

R=189 * T= D M * Ident 190# L. N. 2 * Assigner 191= VA. DEPT. HWYS. *
 New Card Same R & T Ident 190# * Assigner 191= *

SITE VISIT DATA (1)

R=186 * T= D M * Date of Visit 187# 1 0 0 0 1 9 7 7 * Name of Person 188= REID, C. E. *

FIELD WATER QUALITY MEASUREMENTS (1)

R=192 * T= A D M * Date 193# / / * Geohydro-logic Unit 195# *
 New Card Same R thru 195 Temperature 196# 0 0 0 1 0 * Degrees C 197= *
 Conductance 196# 0 0 0 8 5 * µ Mhos 197= *
 Other (STORET) Parameter 196# * Value 197= *
 Other (STORET) Parameter 196# * Value 197= *

FOOT NOTES:

① Source of Data Codes:

S D Ø A R L G Z

Lithologic description of samples from VDHT Test Bore L2
 Jamestown Ferry Improvement Project

Location: Surry, Virginia Well number: L2
 3600 feet from end of 371148N764838-2
 State Highway 610 on Altitude: 75 feet
 Private road

Owner: Virginia Dept. of Highways
 and Transportation

Driller: VDHT

Log by: Charles Reid

Lithology

| | Depth in feet | |
|--|---------------|-----------|
| | <u>From</u> | <u>To</u> |
| Sand, granule size and smaller poorly sorted light brown | 5 | 6 |
| Sand, very coarse, poorly sorted, light brown | 10 | 11 |
| Sand, coarse, poorly sorted, light brown | 15 | 16 |
| Sand, very coarse, poorly sorted, light brown quartzitic | 20 | 21 |
| Silty sand, fine grained light brown, moist, soft | 25 | 26 |
| Silty sand, very fine grained red-brown, no calcareous matter | 30 | 31 |
| Sand, coarse, poorly sorted very large shell fragments light gray | 35 | 36 |
| Sand, coarse, well sorted light gray, calcareous large shell fragments | 40 | 41 |
| Sand, medium grained, well sorted, light gray, calcareous, large shell fragments | 45 | 46 |
| Sand, medium grained, light gray, small shell fragments | 50 | 56 |
| Sand, as above | | |
| Sand, medium grained well sorted, gray, calcareous | 60 | 71 |

*Columbian
 disconformity*

ithology

| | Depth in feet | |
|---|---------------|-----|
| | From | To |
| and, as above, shell fragments | 75 | 76 |
| ilty sand, fine grained, gray, shell fragments | 80 | 86 |
| ilty sand, as above, large shell fragments | 90 | 91 |
| and, fine grained, gray large shell fragments | 95 | 96 |
| ilty sand, fine grained, gray, shell fragments | 100 | 101 |
| ilty marl, very light gray, highly calcareous | 105 | 106 |
| ilty sand, very fine grained gray, slightly calcareous | 110 | 111 |
| Sandy silt, very fine grained gray, highly calcareous | 115 | 116 |
| Sandy silt, as above, only slightly calcareous | 120 | 121 |
| ilty sand, very fine grained gray-green non calcareous, W.L.* 30 ft | 125 | 126 |
| Sandy silt, gray-green, non calcareous, W.L. 35 ft | 130 | 131 |
| ilty sand, as above, W.L. 40 ft | 135 | 136 |
| ilty sand, gray-green, some calcareous matter, W.L. 41.5 ft | 140 | 141 |
| Sandy silt, gray-green shell fragments, streaks of white calcareous matter W.L. 45' | 145 | 146 |
| ilty sand, fine calcareous grains, gray, shell fragments, W.L. 40 ft | 150 | 151 |
| ilty sand, as above, W.L. 45 feet | 155 | 156 |
| ilty marl, gray, shell fragments W.L. 50 ft | 160 | 161 |

Lithology

| | Depth in feet | |
|---|---------------|-----------|
| | <u>From</u> | <u>To</u> |
| Silty sand, very fine grained, calcareous, shell fragments, W.L. 51 feet | 165 | 166 |
| Silty sand, very fine grained, calcareous, shell fragments, W.L. 55 ft | 170 | 171 |

Water Level after after casing removed 29.25 feet

* water level relative to land surface datum