

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

W-2943
C-120

MAILING ADDRESS:

DIVISION OF MINERAL RESOURCES

OFFICE ADDRESS:

Box 3667

JAMES L. CALVER, COMMISSIONER

McCormick Road

Charlottesville, VA 22903

WATER WELL COMPLETION REPORT

Charlottesville, Virginia

OWNER: J. C. Hayden Mailing Address: P. O. Box 664
Tappahannock, Virginia

TENANT: Rappahannock Beach Mailing Address: _____

DRILLER: Douglas & Dickinson, Inc. Mailing Address: Warsaw, Virginia

WELL LOCATION: County Essex Approx. near feet
miles Tappahannock (direction) of
at Rappahannock Beach and _____ feet
_____ (direction) of _____

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

DATE STARTED: _____ DATE COMPLETED: Sept. 2, 1969

TYPE OF DRILL RIG USED: Rotary TOTAL DEPTH 460 feet

WATER LEVEL: Stands 25 feet below surface OR
has NATURAL flow of _____ gallons per minute.

YIELD TEST: Method _____
Drawdown 75 feet
Rate 50 gal. per min.
Duration _____ hrs., _____ min.

HOLE SIZE: 6 inches from 0 to 168 feet
5 7/8 inches from 168 to 460 feet
_____ inches from _____ to _____ feet

WATER ZONES: from 420 to 435 feet
from _____ to _____ feet
from _____ to _____ feet

SCREEN SIZE: 2 inches from 420 to 435 feet
_____ inches from _____ to _____ feet
_____ inches from _____ to _____ feet

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

CASE SIZE: 4 inches from 0 to 168 feet
2 inches from 168 to 420 feet
2 inches from 435 to 460 feet

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

GROUTING: Method Tremmie
Material Neat Depth 100 feet

WATER ANALYSIS AVAILABLE: Yes _____ No _____

PUMP: Type Submersible
Capacity 40 gal. per min
Depth of intake 105 feet

DRILL CUTTINGS SAVED: Yes 44 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: _____

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

INTERVAL SHEET

Page 1 of 1

C-120
 Well Repository No: W-2943

Date rec'd: 3/24/70 ; processed 10/9/70

Sample Interval; from 0 to; 460'

PROPERTY: J. C. Haden
 (Rappahannock Beach)
 COMPANY: Douglas & Dickinson, Inc.

Number of samples: 44
 Total Depth: 460'

COUNTY: Essex (Tappahannock)

Oil or Gas: Water: Exploratory:

From-To	From-To	From-To	From-To
0 - 10	262 - 273	-	-
10 - 21	273 - 283	-	-
21 - 31	283 - 294	-	-
31 - 42	294 - 304	-	-
42 - 52	304 - 315	-	-
52 - 63	315 - 325	-	-
63 - 73	325 - 336	-	-
73 - 84	336 - 346	-	-
84 - 94	346 - 357	-	-
94 - 105	357 - 367	-	-
105 - 115	367 - 378	-	-
115 - 126	378 - 388	-	-
126 - 136	388 - 399	-	-
136 - 147	399 - 409	-	-
147 - 157	409 - 420	-	-
157 - 168	420 - 430	-	-
168 - 178	430 - 441	-	-
178 - 189	441 - 451	-	-
189 - 199	451 - 460	-	-
199 - 210	-	-	-
210 - 220	-	-	-
220 - 231	-	-	-
231 - 241	-	-	-
241 - 252	-	-	-
252 - 262	-	-	-

All intervals have both washed and unwashed samples

(Rappahannock Beach)
OWNER : J. C. Haden
DRILLER: Douglas and Dickinson
COUNTY : Essex

W# : 2943
C# : 120
TOTAL DEPTH: 460'
QUAD : Mount Landing

GEOLOGIC LOG

Depth
(feet)

- 0-10 Sand- olive light gray; slightly clayey; slightly silty; fine to medium grained, some coarse grains, some granules, few pebbles; subangular to subrounded; moderately sorted; quartz; 3% glauconite; some limestone and shell fragments; few black phosphatic fragments.
- 10-21 As above except moderate clay; fine to medium grained, few granules; moderately well sorted; few shell fragments; no limestone.
- 21-31 Sand- light olive gray; moderate silt; fine grained; subangular to subrounded; well sorted; quartz; few grains of glauconite; few black phosphatic fragments; muscovite.
- 31-42 As above.
- 42-52 Sand- yellowish-gray; slightly clayey; abundant silt; fine grained; subangular to subrounded; well sorted; quartz; few black phosphatic fragments; forams (inc. Bulimina, Uvigerina, and Nonion); few diatoms.
- 52-63 Sand- yellowish-gray; moderate clay; moderate silt; very fine grained; subangular; well sorted; quartz; few black phosphatic fragments; forams (inc. Uvigerina); few diatoms.
- 63-73 As above except light olive gray; forams rare (inc. Nonion).
- 73-84 As above except forams (inc. Nonion, Bulimina, and Textularia); few echinoid spines.
- 84-94 As above except no Bulimina; few bone fragments.
- 94-105 As above except forams (inc. Nonion).
- 105-115 Sand- olive light gray; slightly clayey; moderate silt; medium to coarse grained, some fine grains; subangular to subrounded; moderately sorted; quartz; some black phosphatic material; some shell fragments; few flakes of muscovite; forams scarce (inc. Bulimina and Nonion).
- 115-126 As above plus few echinoid spines; bone fragment.

Depth
(feet)

- 126-136 Sand- light olive gray; slightly silty; fine to coarse grained, few granules; subangular to subrounded; moderately sorted; quartz; 25% sandy limestone and shell fragments; 3% glauconite; few black phosphatic fragments; few echinoid spines; forams rare (inc. Robulus).
- 136-147 As above except 5% glauconite; forams (inc. Buccella, Robulus, and Guttulina).
- 147-157 Sand- light olive gray; fine to medium grained; subangular to rounded; moderately well sorted; quartz; 40% glauconite; 7% sandy limestone and shell fragments; forams common (inc. Buccella, Robulus, and Cibicides); few echinoid spines.
- 157-168 Sand- light olive gray; medium to coarse grained, some fine grains, 2% granules; subangular to rounded; moderately sorted; quartz; 15% glauconite; 10% sandy limestone and shell fragments; forams common (inc. Buccella, Guttulina, and Siphogenerina); few black phosphatic fragments; few echinoid spines; muscovite.
- 168-178 Sand- olive gray; medium grained, some coarse grains; rounded; well sorted; 80% glauconite; quartz; 3% shell fragments; few flakes of muscovite.
- 178-189 Sand- light olive gray; medium to coarse grained; subrounded to rounded; moderately well sorted; 50% glauconite; quartz; 10% rotten limestone and shell fragments; few flakes of muscovite; forams rare (inc. Robulus).
- 189-199 Sand- light olive gray; medium to coarse grained, some granules; subrounded to rounded; moderately well sorted; quartz; 30% glauconite; 7% rotten limestone and shell fragments; few black phosphatic fragments; ostracode.
- 199-210 As above except 15% rotten limestone and shell fragments.
- 210-220 Sand- olive light gray; slightly clayey; medium grained, some coarse grains; subrounded to rounded; well sorted; 75% glauconite; quartz; few shell fragments; muscovite.
- 220-231 Clay and sand- olive light gray; abundant clay; moderate sand; medium to coarse grained; subrounded to rounded; moderately well sorted; 60% glauconite; quartz; some muscovite; few shell fragments; forams rare (inc. Robulus).
- 231-241 As above plus some fine grains; moderately sorted; forams scarce (inc. Robulus and Buccella?).

(Rappahannock Beach)

OWNER: J. C. Haden

-3-

W#: 2943

Depth
(feet)

- 241-252 As above except 70% glauconite; no Buccella?
- 252-262 Clay- light olive gray, olive light gray, grayish-orange-pink; abundant sand, fine to medium grained; subangular to rounded; moderately well sorted; glauconite 60% of sand fraction; quartz; few flakes of muscovite; few shell fragments.
- 262-273 Clay- grayish-orange-pink; yellowish-gray; moderate sand; fine to medium grained; subangular to rounded; moderately well sorted; glauconite 60% of sand fraction; quartz; few flakes of muscovite.
- 273-283 Sand- olive light gray; slightly clayey; medium to coarse grained; subrounded to rounded; moderately well sorted; 70% glauconite; quartz; some limestone and shell fragments; few flakes of muscovite; foram.
- 283-294 As above except abundant clay (olive light gray, grayish-orange-pink); no forams.
- 294-304 As above except moderate clay; some stained grains; 60% glauconite.
- 304-315 As above.
- 315-325 Sand- olive light gray; abundant clay- olive light gray, grayish-orange-pink; medium to coarse grained; subrounded to rounded; moderately well sorted; 50% glauconite; quartz; some shell fragments; few flakes of muscovite; forams scarce (inc. Nodosaria).
- 325-336 As above.
- 336-346 Clay- olive light gray; some stained grains; abundant sand; fine to medium grained; subangular to subrounded; moderately well sorted; quartz; 35% glauconite; few shell fragments; forams (inc. Buccella, Robulus, and Cibicides?).
- 346-357 As above except 60% glauconite; forams common (inc. Buccella and Nodosaria).
- 357-367 Sand- olive light gray; abundant clay- olive light gray, yellowish-gray; medium grained, some coarse grains; subrounded to rounded; well sorted; 65% glauconite; quartz; few shell fragments; forams (inc. Buccella); ostracode.

(Rappahannock Beach)

OWNER: J. C. Haden

-4-

W#: 2943

Depth
(feet)

- 367-378 Clay- pale yellowish-brown, olive light gray; abundant sand; medium to coarse grained; subrounded to rounded; moderately well sorted; 60% glauconite; quartz; few shell fragments; muscovite; forams (inc. Buccella and Nodosaria).
- 378-388 As above except moderate sand; forams rare (inc. Nodosaria).
- 388-399 As above except 35% glauconite.
- 399-409 Sand- off-white; medium to coarse grained; subangular to subrounded; well sorted; quartz; feldspar; 3% muscovite; few flakes of muscovite.
- 409-420 As above.
- 420-430 As above.
- 430-441 As above except slightly silty.
- 441-451 As above.
- 451-460 Sand- off-white; moderate clay (clasts)- grayish-orange-pink; slightly silty; medium to coarse grained; subangular to subrounded; moderately well sorted; quartz; feldspar; 5% glauconite; few flakes of muscovite.

Logged by: Michael T. Currie
August 2, 1979

OWNER: J. C. Haden (Rappahannock Beach)
DRILLER: Douglas & Dickinson
COUNTY: Essex (Tappahannock)

VDMR # 2943
WWCR # 120
TOTAL DEPTH : 460'

GEOLOGIC SUMMARY

<u>DEPTH</u> <u>(feet)</u>	<u>ROCK UNIT</u>	<u>AGE</u>
0-143	Calvert Formation	Middle Miocene
143-273	Nanjemoy Formation	Middle Eocene
273-399	Mattaponi Formation	Paleocene-Late Cretaceous
399-460	Patuxent Formation	Early Cretaceous

Virginia Division of Mineral Resources
Robert H. Teifke - Geologist
November 6, 1970