

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

INTERVAL SHEET

C- 133

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Well Repository No.: 3879

Date rec'd 6/19/73 Date Processed: 5/16/74

Sample Interval: from 0 to:480

PROPERTY: Surry Co. High School

Number of samples: 48

COMPANY: Sydnor Hydrodynamics

Total Depth: 481'

COUNTY: Surry (Eberon)

Oil or Gas: Water & Exploratory:

From-To	From-To	From-To	From-To
0 - 10	250- 260	-	-
10 - 20	260- 270	-	-
20 - 30	270- 280	-	-
30 - 40	280- 290	-	-
40 - 50	290- 300	-	-
50 - 60	300- 310	-	-
60 - 70	310- 320	-	-
70 - 80	320- 330	-	-
80 - 90	330- 340	-	-
90 - 100	340- 350	-	-
100 - 110	350- 360	-	-
110 - 120	360- 370	-	-
120 - 130	370- 380	-	-
130 - 140	380- 390	-	-
140 - 150	390- 400	-	-
150 - 160	400- 410	-	-
160 - 170	410- 420	-	-
170 - 180	420- 430	-	-
180 - 190	430- 440	-	-
190 - 200	440- 450	-	-
200 - 210	450- 460	-	-
210 - 220	460- 470	-	-
220 - 230	470- 480	-	-
230 - 240	-	-	-
240 - 250	-	-	-

All intervals have both washed and unwashed samples.

OWNER: Surry Co. High School
DRILLER: Sydnor
COUNTY: Surry (Eberon)

W#: 3879
C#: 133
TOTAL DEPTH: 481'

GEOLOGIC LOG

Depth
(feet)

BACONS CASTLE FORMATION (0-30')

- 0-10 Clay and sand - dark yellowish orange; abundant clay; abundant sand; very fine to medium grained; subangular to subrounded; moderately sorted; quartz; opaques; feldspar.
- 10-20 Sand - white; slightly clayey; medium grained; subangular to subrounded; well sorted; quartz; feldspar; few opaques.
- 20-30 Sand - dark yellowish orange; medium to very coarse grained; subangular to subrounded; moderately well sorted; quartz; ferricrete; feldspar; few opaques.

YORKTOWN FORMATION (30-100')

- 30-40 Shell hash and clay - medium light gray; abundant sand; fine to medium grained; subangular to subrounded; moderately sorted; 50% shell fragments; quartz; some glauconite; ferricrete; spines; forams (inc. Buliminella ?).
- 40-50 Shell hash and sand - medium light gray; abundant clay; fine to medium grained; subangular to subrounded; moderately well sorted; 60% shell fragments; quartz; glauconite 25% of sand fraction; few spines; forams (inc. Nonion and Quinqueloculina).
- 50-60 Shell hash - light brownish gray; slightly clayey; abundant sand; fine to medium grained; subangular to subrounded; moderately well sorted; quartz; glauconite; spines; sandy limestone fragments; few black phosphatic fragments; forams (inc. Quinqueloculina).
- 60-70 Shell hash and sand - light brownish gray; slightly clayey; fine to medium grained; subangular to rounded; moderately well sorted; quartz; 50% shell fragments; 7% ferricrete; black phosphatic fragments; few sandy limestone fragments; glauconite.
- 70-80 Shell hash and sand - light brownish gray; slightly clayey; fine to medium grained; subangular to subrounded; moderately well sorted; 60% shell fragments; quartz; black phosphatic fragments; sandy limestone fragments; glauconite.
- 80-90 As above.

Depth
(feet)

90-100 Sand - light brownish gray; abundant clay; very fine to fine grained; subangular to subrounded; well sorted; quartz; 40% shell fragments; spines; sandy limestone fragments; black phosphatic fragments; few grains of glauconite; foram.

CALVERT FORMATION (100-180')

110-110 Clay - moderate olive brown; moderate sand; fine to medium grained, granules; subangular to subrounded; moderately sorted; 40% shell fragments; quartz; black phosphatic fragments; spines; few glauconite grains; bone fragments; ostracode.

110-120 Clay - moderate olive brown; sandy; fine to medium grained, granules; subangular to subrounded; moderately sorted; quartz; 30% shell fragments; black phosphatic fragments; few bone fragments; spines; glauconite; forams.

120-130 As above, except 10% shell fragments; (inc. Discorbis).

130-140 Clay - light gray olive; sandy; fine to medium grained, granules, few pebbles; subangular to subrounded; moderately sorted; quartz; 20% shell fragments; black phosphatic material; spines, glauconite, forams (inc. Nonion, Textularia, and Bulimina).

140-150 Clay - light gray olive; sandy; fine to medium grained; subangular to subrounded; moderately well sorted; quartz; 7% shell fragments; black phosphatic material; glauconite; forams (inc. Nonion, Textularia, and Bulimina).

150-160 Clay - light gray olive; slightly sandy; fine to medium grained; few granules; subangular to subrounded; moderately well sorted; quartz; 15% shell fragments; some black phosphatic material; glauconite; forams (inc. Nonion and Textularia); spines; bone fragments; ostracodes; vertebra.

160-170 Clay - very pale orange; moderate sand; fine to medium grained; few granules; subangular to subrounded; moderately sorted; quartz; 25% shell fragments; black phosphatic fragments; bone fragments; forams (inc. Nonion and Quinqueloculina); spines; ostracodes

170-180 Clay - light gray olive; sandy; fine to medium grained; subangular to subrounded; moderately sorted; quartz; black phosphatic material; shell fragments; glauconite; bone fragments; forams common (inc. Bulimina, Nonion, Textularia, Buccella, Uvigerina, and Quinqueloculina); spines; ostracode.

Depth
(feet)

NANJEMOY FORMATION (180-200')

- 180-190 Clay - grayish olive; abundant sand; medium to coarse grained, few granules; subangular to rounded; moderately well sorted; quartz; 25% glauconite; 25% shell fragments; few bone fragments; forams common (inc. Uvigerina, Nonion, Textularia, Buccella, Bulimina, and Globigerina); spines; limestone fragment.
- 190-200 Sand - grayish olive; abundant clay; fine to coarse grained; subangular to rounded; poorly sorted; quartz; 20% glauconite; 20% shell fragments; few bone fragments; black phosphatic material inc. shark's tooth; spines; forams (inc. Robulus, Cibicides, and Buccella); ostracodes.

MATTAPONI FORMATION (200-280')

- 200-210 Sand - grayish olive; moderate clay; medium grained; rounded; moderately well sorted; 85% glauconite; quartz; 5% shell fragments; pyrite; forams (inc. Nonion, Textularia, and Robulus).
- 210-220 Sand - grayish olive; abundant clay; medium grained with some coarse grains; rounded; moderately well sorted; 85% glauconite; quartz; muscovite; shell fragments; spines; few sandy limestone fragments.
- 220-230 As above plus ostracode.
- 230-240 Sand - grayish olive; abundant clay; medium grained; rounded; moderately well sorted; 85% glauconite; quartz; shell fragments; sandy limestone fragments; spines; pyrite; forams rare (inc. Nodosaria); ostracode.
- 240-250 As above, except 7% shell fragments; foram.
- 250-260 Sand - grayish olive; abundant clay; medium to very coarse grained, 30% granules; subangular to rounded; moderately well sorted; 50% glauconite; 30% coquina fragments; quartz; few black phosphatic fragments; forams (inc. Nodosaria); shark's tooth.
- 260-270 Sand - grayish olive; moderate clay; medium grained; rounded; moderately well sorted; 50% glauconite; 30% coquina fragments; quartz.
- 270-280 Sand and shell hash - light gray olive; moderate clay; medium grained; rounded; moderately well sorted; 45% coquina fragments; 40% glauconite; quartz; bone fragments; few grains of garnet; ostracode.

Depth
(feet)

PATUXENT FORMATION (280-480'+)

- 280-290 Sand - salt and pepper; slightly clayey; medium to coarse grained; subangular to rounded; moderately well sorted; quartz; 25% glauconite; 4% shell fragments; feldspar.
- 290-300 As above except 2% glauconite; few shell fragments; few grains of garnet.
- 300-310 Sand - white; very slightly clayey; medium to coarse grained; subangular to subrounded; moderately well sorted; quartz; feldspar; glauconite; garnet.
- 310-320 Sand - white; very slightly clayey; medium to very coarse grained; subangular to subrounded; moderately well sorted; quartz; feldspar; glauconite.
- 320-330 As above plus limestone fragments and few garnet grains.
- 330-340 Sand - white; moderate clay; medium to very coarse grained; subangular to subrounded; moderately sorted; quartz; feldspar; glauconite; garnet.
- 340-350 Sand - white; slightly clayey; medium to coarse grained; subangular to subrounded; moderately well sorted; quartz; feldspar; glauconite.
- 350-360 Sand - white; slightly clayey; medium to very coarse grained; subangular to subrounded; moderately sorted; quartz; feldspar; glauconite.
- 360-370 Sand - white; moderate clay; medium to coarse grained; subangular to subrounded; moderately sorted; quartz; feldspar; glauconite; garnet.
- 370-380 Sand - white; moderate clay; medium to coarse grained; subangular to subrounded; moderately sorted; quartz; feldspar; 2% glauconite; garnet; muscovite.
- 380-390 Sand - white; moderate clay; medium to coarse grained; subangular to subrounded; moderately sorted; quartz; feldspar; glauconite; garnet.
- 390-400 Sand - white; moderate clay; medium to very coarse grained; few granules; subangular to subrounded; moderately sorted; quartz; feldspar; glauconite; few shell fragments; garnet; fish tooth
- 400-410 Sand and clay - moderate yellowish brown; abundant clay; moderate sand; medium to very coarse grained, granules; subangular to subrounded; moderately well sorted; quartz; feldspar; glauconite; few shell fragments.

Depth
(feet)

410-420 Clay - moderate yellowish brown; abundant sand; medium to very coarse grained, 30% granules; subangular to subrounded; moderately sorted; quartz; feldspar; glauconite; muscovite.

420-430 As above.

430-440 Sand and clay - light olive gray; medium to very coarse grained, 20% granules; subangular to subrounded; poorly sorted; quartz; feldspar; 3% glauconite; few grains of garnet.

440-450 Clay - light olive gray; moderate sand; fine to medium grained; subangular to subrounded; moderately well sorted; quartz; feldspar; 5% glauconite; muscovite.

450-460 As above except 2% glauconite.

460-470 Sand - light brownish gray; moderate clay; medium to very coarse grained, 20% granules; subangular to subrounded; poorly sorted; quartz; feldspar; glauconite; shell fragments; muscovite.

470-480 Sand -white; slightly clayey; medium to very coarse grained; granules; subangular to subrounded; moderately well sorted; quartz; feldspar; glauconite; few grains of garnet.

480-481 NO SAMPLE.

Logged by: Michael T. Currie

GEOLOGIC SUMMARY

<u>Thickness</u> <u>(feet)</u>	<u>Rock Unit</u>	<u>Time Rock Unit</u>
30	Bacons Castle Formation	Pleistocene
70	Yorktown Formation	Pliocene-Miocene
80	Calvert Formation	Miocene-Eocene
20	Nanjemoy Formation	Eocene
80	Mattaponi Formation	Eocene-Cretaceous
200+	Patuxent Formation	Cretaceous

Virginia Division of Mineral Resources
David A. Hubbard, Jr., Geologist
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