

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

INTERVAL SHEET

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Well Repository No: W-2504
C-131

Date rec'd: 6/9/69

Sample Interval: from 0 to 495'

PROPERTY: Town of Surry, well #2

Number of samples: 49

COMPANY: Sydnor Hydrodynamics, Inc.

Total Depth: 495'

COUNTY: Surry (Surry)

Oil or Gas: Water: ~~X~~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	490 - 495	-	-

All intervals have both washed and unwashed samples.



OWNER: Sydnor Hydrodynamics, Inc.
(Town of Surry, Well #2)

W-2504

C-131

DRILLER: Sydnor Hydrodynamics, Inc.

COUNTY: Surry (Surry Courthouse)

TOTAL DEPTH: 495'

GEOLOGIC SUMMARY

	<u>Rock Unit</u>	<u>Age</u>
0 - 40'	Columbia Group	Pleistocene
40 - 110'	Yorktown Formation	Late Miocene
110 - 230'	Calvert Formation	Middle Miocene
230 - 325'	Mattaponi Formation	Paleocene
325 - 495'	Patuxent Formation	Early Cretaceous

Virginia Division of Mineral Resources

Robert H. Teifke - Geologist

June 24, 1969

OWNER: Town of Surry #2
DRILLER: Sydnor Hydrodynamics
COUNTY: Surry (Surry)

W#: 2504
C#: 131
TOTAL DEPTH: 495'

GEOLOGIC LOG

Depth
(feet)

Moorings "Unit" (0-30)

- 0-10 Sand - dark yellowish orange; abundant clay; fine to medium grained; subangular to subrounded; moderately well sorted; quartz; some feldspar; some opaques.
- 10-20 Sand - dark yellowish orange; abundant clay; silty; very fine to coarse grained; subangular to subrounded; poorly sorted; quartz; feldspar; some opaques.
- 20-30 Sand - grayish orange; slightly clayey; medium to coarse grained; subangular to subrounded; moderately well sorted; quartz; feldspar; some opaques.

YORKTOWN FORMATION (30-120)

- 30-40 Clay - yellowish gray; moderate sand; fine to coarse grained; subangular to subrounded; moderately sorted; quartz; some feldspar; some opaques; some ferricrete; some opaques; weathered glauconite; black phosphatic fragments.
- 40-50 Shell hash - light brownish gray; few clay clasts; abundant sand; fine to medium grained; subangular to subrounded; moderately well sorted; quartz; abundant glauconite; some feldspar; spines; shark's teeth; forams rare (inc. Quinqueloculina).
- 50-60 Shell hash - light brownish gray; slightly clayey; slightly sandy; quartz; some glauconite; few feldspar grains; spines; forams (inc. Quinqueloculina, and Nonion); few black phosphatic fragments.
- 60-70 Shell hash - light brownish gray; slightly clayey; abundant sand; fine to medium grained; subangular to subrounded; moderately well sorted; quartz; some glauconite; spines; forams (inc. Quinqueloculina).
- 70-80 As above, except less sand.

Depth
(feet)

- 80-90 Shell hash - light brownish gray; slightly clayey; sandy; medium grained; subangular to subrounded; moderately well sorted; quartz; spines; ostracode; fish tooth.
- 90-100 Shell hash - light brownish gray; slightly clayey; sandy; medium grained; subangular to subrounded; moderately well sorted; quartz; some glauconite; some coquina fragments; spines; forams (inc. Quinqueloculina).
- 100-110 Shell hash and sand - medium gray; clay abundant; fine grained; subangular to subrounded; well sorted; shell fragments 60%; quartz; spines abundant; some glauconite; black phosphatic material; forams (inc. Quinqueloculina); ostracode.
- 110-120 Sand and shell hash - medium gray; clay abundant; very fine to fine grained; subangular to subrounded; well sorted; quartz; shell fragments 45%; some glauconite; spines; some black phosphatic material; forams scarce (inc. Buccella); ostracode.
- CALVERT FORMATION (120-230)
- 120-130 Clay - moderate olive brown; sand moderate; very fine to medium; subangular to subrounded; moderately well sorted; quartz; 10% shell fragments; some glauconite; spines; some black phosphatic material; few bone fragments; forams scarce.
- 130-140 As above, plus few granules and only 7% shell fragments.
- 140-150 As above, plus some pebbles.
- 150-160 Clay - light gray olive; sand abundant; fine to medium grained; subangular to subrounded; moderately well sorted; quartz; 10% coquina fragments; 2% glauconite; spines; few black phosphatic fragments; inc. shark's tooth; forams scarce (inc. Nonion and Quinqueloculina); fish vertebra; ostracode.
- 160-170 Clay - light gray olive; sand abundant; fine to medium grained; subangular to subrounded; moderately well sorted; quartz; 15% coquina fragments; some glauconite; few black phosphatic fragments; forams (inc. Nonion and Textularia); spines; ostracode.
- 170-180 Sand - light olive brown; clay abundant; fine to medium grained; subangular to subrounded; well sorted; quartz; 6% shell fragments inc. gastropods; 2% glauconite; few black phosphatic fragments; forams (inc. Nonion and Buccella); spines; fish tooth.

Depth
(feet)

- 180-190 Clay - light gray olive; sand abundant; fine to medium grained; subangular to subrounded; moderately well sorted; quartz; 7% coquina fragments; some glauconite; few black phosphatic fragments; forams (inc. Nonion and Buccella); spines.
- 190-200 Clay and sand - light gray olive; clay abundant; sand moderate; fine to medium grained; subangular to subrounded; moderately well sorted; quartz; 17% coquina fragments; some glauconite; few bone fragments; forams (inc. Nonion, Buccella, and Bulimina); few black phosphatic fragments.
- 200-210 Sand - moderate olive brown; abundant clay; fine to medium grained with some coarse grains; subangular to rounded; moderately sorted; quartz; 20% coquina fragments; some glauconite; black phosphatic material; few bone fragments; forams (inc. Nonion and Buccella).
- 210-220 Clay - moderate olive brown; abundant sand; fine to coarse grained; subangular to rounded; moderately sorted; quartz; 10% coquina fragments; some glauconite; black phosphatic material; bone fragments; forams (inc. Nonion, Uvigerina, Bolivina, and Robulus).
- 220-230 Clay - light gray olive; abundant sand; fine to coarse grained, few granules; subangular to rounded; moderately sorted; quartz; 10% coquina fragments; some glauconite; black phosphatic material inc. shark's tooth; bone fragments; forams (inc. Uvigerina, Nonion and Textularia).
- NANJEMOY FORMATION (230-270)
- 230-240 Sand - olive gray; abundant clay; fine to medium grained; subangular to rounded; moderately well sorted; quartz; 30% glauconite; few bone fragments; forams common (inc. Uvigerina, Bolivina, Nonion, Buccella, Discorbis, Bulimina, and Cibicides); pyrite; ostracodes.
- 240-250 Sand - olive gray; abundant clay; fine to medium grained with some coarse grains; subangular to rounded; moderately sorted; quartz; 40% glauconite; some muscovite; some pyrite; forams (inc. Nonion, Buccella, Robulus and Discorbis); ostracodes common; spines.
- 250-260 Sand and clay - moderate olive brown; clay abundant; sand moderate; fine to medium grained; subangular to subrounded; moderately well sorted; quartz; 30% glauconite; muscovite; forams (inc. Uvigerina, Nonion, Textularia and Discorbis); ostracodes; few black phosphatic fragments; spines; pyrite.

Depth
(feet)

260-270 Sand and clay - olive gray; clay abundant, minor pinkish clay; fine to medium grained; subangular to rounded; moderately well sorted; quartz; 38% glauconite; some muscovite; forams (inc. Nonion, Robulus, and Textularia).

MATTAPONI FORMATION (270-310)

270-280 Sand - moderate olive brown; abundant clay; medium grained; rounded; well sorted; 85% glauconite; quartz; forams (inc. Nonion and Uvigerina; few spines; pyrite; ostracodes; shark's tooth.

280-290 Sand - grayish olive; moderate clay; medium grained; rounded; well sorted; 80% glauconite; quartz; shell fragments; forams scarce (inc. Uvigerina); spines; ostracodes.

290-300 Sand - grayish olive; moderate clay; medium to coarse grained; rounded; moderately well sorted; 80% glauconite; quartz; shell fragments; pyrite.

300-310 Sand - olive gray; moderate clay; medium grained; rounded; moderately well sorted; 75% glauconite; quartz; few shell fragments; spines; pyrite.

PATUXENT FORMATION (310-495)

310-320 Sand - salt and pepper; slightly clayey; medium to very coarse grained; subangular to rounded; moderately sorted; quartz; 30% glauconite; some grains of garnet; black phosphatic material; few shell fragments.

320-330 Sand - salt and pepper; moderate clay; medium to coarse grained; subangular to rounded; moderately well sorted; quartz; 40% glauconite; feldspar; garnet; shell fragments.

330-340 Sand - salt and pepper; moderate clay; medium to very coarse grained; subangular to rounded; moderately sorted; quartz; 25% glauconite; feldspar; garnet; spines; shell fragments.

340-350 Sand - salt and pepper; moderate clay; medium to very coarse grained, granules; subangular to rounded; moderately sorted; quartz; 7% glauconite; feldspar; garnet; few shell fragments.

350-360 Sand - salt and pepper; moderate clay; medium to very coarse grained; subangular to subrounded; moderately sorted; quartz; 7% glauconite; feldspar; garnet; few shell fragments.

Depth
(feet)

360-370 As above except 20% glauconite; and slightly clayey.

370-380 As above, except 2% glauconite and slightly clayey.

380-390 Sand - white; slightly clayey; medium to very coarse grained; subangular to subrounded; poorly sorted; quartz; feldspar; some glauconite; garnet; forams rare (inc. Nonion).

390-400 Sand - salt and pepper; slightly clayey; medium to very coarse grained; subangular to subrounded; poorly sorted; quartz; feldspar; 5% glauconite; garnet; spines.

400-410 Sand - salt and pepper; slightly clayey; medium to coarse grained; subangular to rounded; moderately sorted; quartz; 25% glauconite; feldspar; garnet; few spines.

410-420 As above, plus slightly silty; only 20% glauconite.

420-430 Sand - salt and pepper; abundant clay; fine to coarse grained; subangular to rounded; poorly sorted; quartz; 15% glauconite; feldspar; garnet; black phosphatic fragments; spines.

430-440 Sand - salt and pepper; abundant clay; fine to medium grained; subangular to subrounded; moderately sorted; quartz; feldspar; 7% glauconite; muscovite; spines; garnet.

440-450 As above, plus shark's tooth.

450-460 Sand - white; moderate clay; medium to very coarse grained; few granules; subangular to subrounded; moderately sorted; quartz; feldspar; some glauconite; garnet.

460-470 As above, except 3% glauconite.

470-480 Sand - white; moderate clay; medium to very coarse grained; 20% granules; subangular to subrounded; poorly sorted; quartz; feldspar; glauconite; garnet; forams rare (inc. Uvigerina).

480-490 No Sample.

490-495 Sand - white; moderate clay; medium to very coarse grained; 20% granules; subangular to subrounded; poorly sorted; quartz; feldspar; some glauconite; muscovite; garnet.

GEOLOGIC SUMMARY

<u>Thickness (feet)</u>	<u>Rock Unit</u>	<u>Time Rock Unit</u>
30	Moorings "Unit"	Pleistocene
90	Yorktown Formation	Pliocene-Miocene
110	Calvert Formation	Miocene-Eocene
40	Nanjemoy Formation	Eocene
40	Mattaponi Formation	Eocene-Cretaceous
185+	Patuxent Formation	Cretaceous

Virginia Division of Mineral Resources
David A. Hubbard, Jr., Geologist
July 5, 1978