

INTERVAL SHEET

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VDMR Well No: 1927

Date rec'd: 8-9-67

Sample Interval: from 0 to: 190

PROP: N & W RR. Well # 212

Number of samples: 20

COMP:

Total Depth: 190

COUNTY: Southampton

Oil or Gas: Water: Exploratory: X

From-To	From-To	From-To	From-To
0 - 10	-	-	-
10 - 20	-	-	-
20 - 30	-	-	-
30 - 40	-	-	-
40 - 50 *	-	-	-
50 - 60	-	-	-
60 - 70	-	-	-
70 - 80	-	-	-
80 - 90	-	-	-
90 - 100	-	-	-
100 - 110	-	-	-
110 - 120	-	-	-
120 - 130	-	-	-
130 - 140	-	-	-
140 - 150	-	-	-
150 - 160	-	-	-
160 - 170	-	-	-
174 -	-	-	-
170 - 180	-	-	-
180 - 190	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

* unwashed samples only

Drilled 10/66
Continental
L/E/G

CONFIDENTIAL

50-T-9
NW 212


INTERVAL SHEET

ELEV.: 62'
Geol. Log ✓
Strip Log ✓
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VDMR Well No: **WELL NO. 1927**

Date rec'd: 7/7/67

Sample Interval: from 0 to 190

PROP:  Sussex - Southampton
COMP: Co. line and NW RR.
(IVOR SHEET)

Number of samples: 20

Total Depth: 190'

COUNTY: Southampton

Oil or Gas: Water: Exploratory: ✓

	LNW From-To	From-To	From-To	From-To
	0 - 10	-	-	-
20 BS	10 - 20	-	-	-
	20 - 30	-	-	-
	30 - 40	-	-	-
	40 - 50 X	-	-	-
	50 - 60	-	-	-
	60 - 70	-	-	-
	70 - 80	-	-	-
	80 - 90	-	-	-
	90 - 100	-	-	-
	100 - 110	-	-	-
	110 - 120	-	-	-
	120 - 130	-	-	-
140 BS	130 - 140	-	-	-
150 BS	140 - 150	-	-	-
	150 - 160	-	-	-
	160 - 170	-	-	-
	174 -	-	-	-
	170 - 180	-	-	-
190 BS	180 - 190 X	-	-	-
	-	-	-	-
	-	-	-	-
	-	-	-	-
	-	-	-	-
	-	-	-	-
	-	-	-	-
	-	-	-	-
	-	-	-	-
	-	-	-	-
	-	-	-	-
	-	-	-	-
	-	-	-	-
	-	-	-	-
	-	-	-	-
	-	-	-	-
	-	-	-	-
	-	-	-	-

CONFIDENTIAL

X - no slide

VDMR Well No. 1927
County: Southampton

Well: N. & W. R. R. Well # 212
Property: Norfolk and Western Railway
Driller: Norfolk and Western Railway
Location: At Sussex-Southampton county line, on Norfolk and
Western Railway right-of-way; 76° 57' 30" W,
36° 57' 00" N
Elevation: 62 feet
Total Depth: 190 feet
Started drilling: October, 1966 Completed drilling: October, 1966
Sample description by: Robert H. Teifke, Virginia Division of
Mineral Resources, May, 1968

GEOLOGIC LOG

Depth in
feet

✓ COLUMBIA GROUP (0-20')

0-10 Sand and gravel -- orange-brown , slightly clayey; 45% rounded gravel (2-20 mm), 50% fine--to very coarse-grained, poorly sorted, poorly rounded sand; partially decomposed feldspar is common; minor glauconite and muscovite

10-20 Clay - gray, mottled orange-brown, silty; slightly sandy; sand is fine--to very coarse-grained, poorly sorted, poorly rounded; moderately feldspathic, very slightly glauconitic

✓ YORKTOWN FORMATION (20-140')

20-30 Clay and shells -- gray, slightly sandy; 45% pelecypod shells (10mm) and shell fragments; 50% slightly sandy gray clay; sand is generally coarse--to very coarse-grained, angular to subrounded; a few grains of feldspar and glauconite

VDMR Well No. 1927

- 30-40 Shell and sand - gray, moderately clayey; 55% pelecypod shells (10 mm) and shell fragments; 35% clayey, fine- to medium-grained, well-sorted sand; sand is 60% clear to greenish angular quartz, and 35% dark-green glauconite; trace of gypsum; a few foraminifers
- 40-50 Shell - binder of brownish-gray sandy clay; large pelecypod shell fragments, up to 35 mm; sand is medium- to coarse-grained, very slightly glauconitic
- 50-60 Shell and sand - gray, slightly clayey; 65% coarse pelecypod (-gastropod-scapopod) shell debris; 30% fine-grained, well-sorted, angular sand; clear and greenish quartz with a trace of glauconite; a very few foraminifers
- 60-70 Shell and sand - gray, slightly clayey; 70-75% very coarse pelecypod shell debris; 20-25% fine- to medium-grained, well-sorted, angular sand; clear and greenish quartz, very slightly glauconitic; foraminifers rare
- 70-80 Sand and shell - brown clay binder; 25% pelecypod shell fragments; 65% fine-grained, well-sorted; angular quartz sand; trace of glauconite; foraminifers and ostracods rare
- 80-90 Clay - greenish-brown, sandy, 5-10% pelecypod shell fragments; sand is fine- to very fine-grained, well-sorted, angular; very slightly glauconitic; gypsum common
- 90-100 Clay - grayish-brown, very silty, slightly sandy, a few weathered shell fragments; abundant gypsum and anhydrite pseudomorphs after gypsum; sand is fine- to very fine-grained, well-sorted, angular, iron-stained, very slightly glauconitic; trace of muscovite
- 100-110 "

VDMR Well No. 1927

110-120 Clay -- greenish-brown, silty and sandy, a few weathered shell fragments; non-clay fraction consists of very well-sorted, angular, coarse-grained silt to very fine-grained sand; gypsiferous; very slightly glauconitic

120-130 " very slightly silty and sandy

130-140 " very slightly silty and sandy

✓ CALVERT FORMATION (140-150')

140-150 Clay -- dark-brown, very sandy, a few shell fragments; sand is fine- to coarse-grained, moderately sorted, subangular; sand consists of clear quartz, with 10% pelletal and bone phosphorite, and minor glauconite; a very few foraminifers and ostracods

✓ MATTAPONI FORMATION (150-190')

150-160 Sand - abundant matrix of greenish-brown clay, a few shell fragments; medium- to coarse-grained, fairly well-sorted; sand is 80% weathered glauconite (dark-green, medium-green, light-green, greenish-brown, brownish-green, brown and yellowish-brown), and 15% clear quartz; minor phosphorite; traces of gypsum, pyrite, and calcitic, glauconite-bearing sandstone; foraminifers rare

160-170 " a few Nodosaria

170-180 Sand and shell - abundant matrix of light-green clay; 25-30% shell fragments and fragments of fossiliferous, glauconite-bearing limestone; 60-65% fine- to coarse-grained, rather poorly sorted sand; sand is predominantly dark- to light-green and yellowish-brown glauconite; a few foraminifers, including Robulus

175 " 40% shell fragments, 50% sand

VDMR Well No. 1927

180-190 Gravel — clear, rounded quartz pebbles, 10-30 mm, and a few pebbles of calcitic, glauconite-bearing sandstone; many pebbles are stained green

GEOLOGIC SUMMARY

	<u>Rock Unit</u>	<u>Age</u>
0-20	Columbia Group	Pleistocene
20-140	Yorktown Formation	<input checked="" type="checkbox"/> Late Miocene
140-150	Calvert Formation	<input checked="" type="checkbox"/> Middle Miocene
150-190	Mattaponi Formation	Paleocene - <i>Late Cretaceous</i>

R.H. Tafel 3/3/72

* The use of the lithologic term, "clay" includes all size ranges of particles less than 1/32 mm.

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- 130-140 " very slightly silty and sandy

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