### COMMONWEALTH OF VIRGINIA

MAILING ADDRESS: DIVISION OF MIN	ERAL RESOURCES OFFICE ADDRESS:  R, COMMISSIONER McCormick Road  OMPLETION REPORT Charlottesville, Virginia
\$21-1-7-01-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	Willow Lawn Drive
TENANT: Maryfield Sub.	
DRILLER: Douglas & Dickinson, Inc.	
WELL LOCATION: County Essex	
on Rt. 17	feet(direction) of
(GIVE DIRECTION AND DISTANCE IN FEET OR MILES FROM TWO COUNTY HIGHWAY OR OTHER MAP.)	
DATE STARTED:	DATE COMPLETED: August 13, 1968
TYPE OF DRILL RIG USED: Rotary	TOTAL DEPTH 422 feet
WATER LEVEL: Stands 26 feet below	surface <u>OR</u>
has <u>NATURAL</u> flow of	gallons per minute.
YIELD TEST: Method	HOLE SIZE: 8 inches from 0 to 218 feet
Drawdown34feet	_5 7/8nches from 218 to 422 feet
Rate 100 gal. per min.	inches fromtofeet
Durationhrs.,min.	SCREEN SIZE: 3 inches from 395 to 415 feet
WATER ZONES: from 395 to 415 feet	inches fromtofeet
fromtofeet	inches fromtofeet
fromfeet	CASE SIZE: 6 inches from 0 to 218 feet
WATER: ColorTaste	inches from_218_to395_feet
Odor	inches fromtofeet
WELL TO SUPPLY: (check one) Home	GROUTING: Method
Farm Town School	Material Depth feet
IndustryOther_Subdivision	PUMP: Type
WATER ANALYSIS AVAILABLE:YesNo	Capacitygal_per_min
DRILL CUTTINGS SAVED: Yes 37 No  (DRILL CUTTINGS SHOULD BE COLLECTED AT 10 FOOT IN OFFICE EXPRESS COLLECT. SAMPLE BAGS ARE FURNISHE	D FREE OF CHARGE UPON REQUEST.)

(LOG OF WELL) OVER

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

#### INTERVAL SHEET

Date rec'd: 3-24-70 Processed: 10-15-70 Sample Interval: from 0 to: 405'

PROPERTY: H. S. Realty Corp. Number of samples: 36

(Merryfield Sub.)

COMPANY: Douglas & Dickinson Total Depth: 422'

COUNTY: Essex (Tappahannock) Oil or Gas: Water: x Exploratory:

From - To		Fro	From - To		From - To	From - To	
0 24 35	-	24 35 45	266 277 287	-	277 287 298	-	-
45	_	56	298	-	309	-	_
56	1994	66	309	-	320	_	_
		77	320		330		
66 77	-	87			341	-	
	-		330	-		-	=.
87	-	88	341	10 <b>—</b> 11	351	-	-
88	-	98	351	-	362	-	-
98	-	109	362	-	372	-	-
109	-	119	372	-	383	-	-
119		130					
130	-	140	393	-	405	1-	-
140	-	151		-		-	-
	-			-		-	-
161	-	172		-		-	-
172	-	182		-		-	-
182		193					
193	-	203		-		-	-
203	-	214		-		<u>~</u>	-
214	-	224		-		-	
224	-	235		-		-	-
235	-	245		-		#	-
245		256					
256	-	266		-		-	-
	-			-		-	-
	~			-		-	-
	-			-		-	_
	-			-		-	-

All intervals have both washed and unwashed samples.

(Merryfield Sub.)

OWNER: H. S. Realty Corporation W#: 2948
DRILLER: Douglas and Dickinson C#: 146
COUNTY: Essex TOTAL DEPTH: 422'

QUAD : Mount Landing

#### GEOLOGIC LOG

# Depth (feet)

- 0-24 Sand- grayish-orange; slightly clayey; medium grained; subangular to subrounded; well sorted; quartz; 10% ferricrete; feldspar; some glauconite.
- 24-35 Sand- off-white; fine to medium grained; subangular to subrounded; well sorted; quartz; feldspar; some ferricrete; some glauconite.
- 35-45 Sand- light olive gray; slightly silty; very fine grained; subangular to subrounded; well sorted; quartz; few black phosphatic fragments; glauconite.
- 45-56 Sand- yellowish-gray; slightly clayey; moderate silt; very fine grained; subangular to subrounded; well sorted; quartz; few black phosphatic fragments; glauconite.
- Sand- yellowish-gray; moderate clay; moderate silt; very fine grained; subangular to subrounded; well sorted; quartz; few bone fragments; few flack phosphatic fragments; glauconite; few diatoms; forams rare (inc. Nonion).
- 66-77 As above except forams scarce (inc. Nonion and Textularia).
- 77-87 As above except some black phosphatic material; forams rare.
- 87-88 Sand- yellowish-gray; some stained grains; moderate clay; moderate silt; very fine grained, some medium grains; subangular to subrounded; moderately well sorted; quartz; some black phosphatic material; glauconite; few diatoms.
- As above except light olive gray; 2% black phosphatic material; 2% shell fragments.
- 98-109 Sand- light olive gray; moderate clay; slightly silty; fine grained, some medium grains; subangular to subrounded; well sorted; quartz; some black phosphatic material; few grains of glauconite; few bone fragments; few shell fragments; few fragments of ferricrete.
- 109-119 Sand- light olive gray; slightly silty; fine to medium grained, some coarse grains; subangular to subrounded; moderately well sorted; quartz; some black phosphatic material; some shell fragments; few grains of glauconite; bone fragments.

#### Depth (feet)

- 119-130 Sand- light olive brown; slightly clayey; slightly silty; fine to coarse grained; subangular to subrounded; moderately sorted; quartz; 3% shell fragments; some black phosphatic material; some glauconite; few bone fragments; forams rare (inc. Textularia).
- 130-140 Sand- light olive gray; medium to coarse grained, some fine grains, 10% granules; subangular to rounded; poorly sorted; quartz; 30% sandy limestone and shell fragments; 7% glauconite; few echinoid spines; forams (inc. Buccella).
- 140-151 Sand-light olive gray; slightly clayey; medium to coarse grained; subrounded to rounded; moderately well sorted; quartz; 15% glauconite; 15% sandy limestone and shell fragments; few black phosphatic fragments; few bone fragments; forams (inc. Buccella); ostracode.
- 151-161 No sample.
- 161-172 Sand and coquina- light olive gray; coarse grained, some medium grains; subrounded to rounded; well sorted; quartz; 35% sandy limestone and shell fragments; 20% glauconite; few bone fragments; forams (inc. Buccella); ostracodes.
- Sand- light olive gray; medium to coarse grained; subangular 172-182 to rounded; moderately well sorted; quartz; 15% glauconite; 7% limestone and shell fragments; few black phosphatic fragments; few grains of garnet; few echinoid spines; forams (inc. Buccella and Robulus).
- 182-193 Sand- light olive gray; coarse to very coarse grained; subrounded to rounded; moderately well sorted; quartz; 15% glauconite; 5% sandy limestone and shell fragments; few echinoid spines; forams (inc. Buccella).
- 193-203 Sand and coquina- light olive gray; moderate clay; medium to coarse grained, 20% granules, few pebbles; subangular to rounded; poorly sorted; quartz; 35% sandy limestone and shell fragments; 10% glauconite; some black phosphatic material; few flakes of muscovite; forams (inc. Buccella and Robulus).
- As above except abundant clay; 10% granules, no pebbles; moder-203-214 ately sorted.

# Depth (feet)

- 214-224 Sand- olive light gray; abundant clay; fine to coarse grained, some granules; subangular to rounded; moderately sorted; quartz; 15% glauconite; 5% sandy limestone and shell fragments; few black phosphatic fragments; muscovite.
- 224-235 Sand- olive light gray; moderately clay; medium to coarse grained, some fine grains, few granules; subangular to rounded; moderately sorted; quartz; 40% glauconite; 5% sandy limestone and shell fragments; some ferricrete; few flakes of muscovite; forams scarce (inc. Buccella).
- 235-245 Sand- olive gray; slightly silty; medium to coarse grained; subrounded to rounded; moderately well sorted; 75% glauconite; quartz; few shell fragments; muscovite.
- 245-256 As above plus few echinoid spines.
- 256-266 Clay- grayish-orange-pink, light olive gray; slightly sandy; medium grained, some coarse grains; subrounded to rounded; well sorted; glauconite 65% of sand fraction; quartz; few flakes of muscovite.
- 266-277 As above except grayish-orange-pink.
- 277-287 Sand- olive light gray; moderate clay (clasts) grayish-orangepink, yellowish-gray; medium grained; subrounded to rounded; well sorted; 50% glauconite; quartz; few flakes of muscovite.
- 287-298 Sand- olive gray; slightly clayey (clasts) grayish-orangepink; medium grained; subrounded to rounded; well sorted; 60% glauconite; quartz.
- 298-309 Sand- salt and pepper; medium grained, some coarse grains; rounded; well sorted; 50% glauconite; quartz.
- 309-320 As above except slightly clayey (grayish-orange-pink); few sandy limestone and shell fragments.
- 320-330 Sand- olive light gray; moderate clay (clasts) grayish-orangepink; medium grained to gravel; subrounded to rounded; poorly sorted; quartz; 25% glauconite; 3% sandy limestone and shell fragments; forams rare (inc. Nodosaria).
- 330-341 As above.

# Depth (feet)

- 341-351 Sand- olive light gray; some stained grains; moderate silt; medium grained, some fine grains, 10% pebbles; subangular to rounded; moderately sorted; quartz; 20% glauconite; forams common (inc. Buccella); few flakes of muscovite.
- 351-362 As above except forams abundant (inc. <u>Buccella</u>); few ferricrete fragments.
- 362-372 As above except yellowish-gray; 7% glauconite; some feldspar.
- 372-383 Sand and gravel- yellowish-gray; some stained grains; medium grained, 5% granules, 40% pebbles; subangular to subrounded; poorly sorted; quartz; feldspar; 7% glauconite; forams common (inc. Buccella); few flakes of muscovite.
- 383-393 No sample.
- 393-405 Sand- yellowish-gray; coarse grained, some granules, 3% pebbles; subangular to subrounded; moderately well sorted; quartz; feldspar; 3% glauconite; few grains of garnet; muscovite.
- 405-422 No sample.

Logged by: Michael T. Currie August 3, 1979 OWNER: H. S. Relaty Corp. (Merryfield Sub.)

VDMR # 2948

DRILLER: Douglas & Dickinson, Inc.

WWCR # 146

COUNTY: Essex (Tappahannock)

TOTAL DEPTH: 422

## GEOLOGIC SUMMARY

DEPTH (feet)	ROCK UNIT	AGE
0-35	Columbia Group	Pleistocene
35-133	Calvert Formation	Middle Miocene
133-285	Nanjemoy Formation	Middle Eocene
285-393	Mattaponi Formation	Paleocene-Late Cretaceous
393-405	Patuxent Formation	Early Cretaceous
405-422	No Samples	-

Virginia Division of Mineral Resources Robert H. Teifke - Geologist November 19, 1970