0			INTER	RVAL SHEET		WWCR 132
Pa	ge1			VDMR WELL NO .: W	ell No. 1182	
Da	te <u>1</u> ]	1/13/64		Sample Interval:	from 0	to628
PR	OP: E	Bay Quarter Shores		Total Depth 620	)	
CO	MP: ]	Douglas & Dickinson		OilGas	WaterXI	Exploratory
		Northumberland <b>(</b> Lewisetta) ELL NO: W-1182		Cuttings X Co	oreOthe	er
	om-To	From-To	From-To	o From-	·То	From-To
0	- 21		-	-		_
21	- 42	· · · · · · · · · · · · · · · · · · ·	-			÷ 1
42	- 64	-	-	-		H (- 1
64	- 85	-	-	-		-
64 85	- 105	-		-		- · · ·
				No washe	ed samples	
105	- 126		-			A. 1993
126	- 147	· · · ·	-	-		· · · ·
147	- 168		-	<del>-</del>		-
168	- 189	-	-	-		-
D	- 210		-	-		
210	- 231		-	-		-
231	- 252		-	-		2
252	- 273		_	-		
273 294	- 294 - 315	<u> </u>	-	112 111		-
6/1	515					
315	- 336	-	_	· · · · ·		_
336	- 357	-	-			-
357	- 378					-
378	- 399	-	-	-		-
399	- 420	- 3.2	1 <b></b> 1	-		-
	1/2					
420	- 462					
462	- 483		_	_		2
483	502					-
502 523	523	<u> </u>				_
543	- 544					1 - 2
544	- 565		-	-		<u>.</u>
544	- 586		-			-
500	- 607		-	-		-
607	- 628		-	-		-
	÷	-	-	-		-

OWNER: Douglas and Dickinson, IncorporatedVDMR: 1182DRILLER: Booker TaylorWWCR: 132COUNTY: NorthumberlandTOTAL DEPTH: 620'

### GEOLOGIC LOG

### COLUMBIA GROUP (0-21')

0-21 Sand - light brown, fine-to-medium grained, fairly well sorted, angular to subangular, very argillaceous, moderately arkosic, ferruginous-limonitic clay

## YORKTOWN FORMATION (21-421)

21-42 Clay - gray, with purple cast, very sandy, very fine to medium grained, poorly sorted, subangular, ferruginous, some limonitic clay, much iron-stained quartz, traces of glauconite and garnet, moderately arkosic-feldspar is moderately decomposed, small amount shell materialpelecypods

#### CALVERT FORMATION (42-231<sup>1</sup>)

42-64	Clay - gray, with greenish cast
64-85	Clay - gray, with greenish cast, small amount carbonaceous material
85-105	Clay - gray, mottled reddish-brown, small amount very fine to fine grained sand, moderately micaceous (muscovite)
105-126	Clay - gray, with greenish cast, trace of sand
126-147	Clay - gray, with greenish cast, slightly sandy, small amounts carbonaceous matter, plant remains
147-168	Clay - gray, with greenish cast, slightly sandy, muscovite, very small amount shell material
168-189	Clay - gray, with greenish cast, very slightly sandy, small amount shell material
189-210	Clay - gray, with greenish cast, slightly sandy, muscovite, and carbonaceous material, small amounts shell material
210-231	Clay - gray, with greenish cast, slightly to moderately sandy, small amounts shell material and plant remains

OWNER: Douglas and Dickinson, Incorporated

CHICKAHOMINY FORMATION (231-252)

- 231-252 Sand gray, fine to coarse grained, fairly well sorted, angular to subangular, clear quartz in brownish clay; argillaceous, small amounts garnet, phosphate nodules, large amount shell material-pelecypods, gastropods, echinoid spines, chitino-phosphotic fragments
- \*252-273 Sand brown, very fine to medium grained, poorly sorted, subangular, very argillaceous, traces muscovite, glauconite, ferruginous, small amounts shell material, carbonaceous material

NANJEMOY FORMATION (273-3991)

- 273-294 Sand gray, medium to coarse-grained, well sorted, subangular to subrounded, glauconite, slightly argillaceous, trace of pyrite, very slightly arkosic
- 294-315 "
- 315-336 Sand and limestone grayish-brown, medium to coarse grained, fairly well sorted, subangular, argillaceous, abundant gray clay, and white calcareous clay with included glauconite grains, glauconitic, much of this is goethite after glauconite, trace of muscovite, small, rounded shell fragments, abundant small amounts pelecypods, echinoid spines, worm borings, and a few ostrocods.
- 336-357 "
- 357-378 Sand some limestone, dark gray, medium to coarse grained, well sorted, very glauconitic (75-85%), quartz sand (15-25%) is subangular to subrounded and coarser grained than the glauconite, slightly argillaceous, abundant comminuted shell material - pelecypods identified
- 378-399 Sand black, medium grained, very well sorted glauconite (85-90%), coarse to very coarse grained, subrounded quartz sand and a few granules (10-15%), very slightly argillaceous, small amount shell material

MATTAPONI FORMATION (399-565')

399-420 Sand - black, fine to medium grained, very well sorted glauconite (about 90%), coarse to very coarse grained, subrounded to rounded quartz and a few granules (about 10%), slightly argillaceous, muscovite, traces of shell material OWNER: Douglas and Dickinson, Incorporated

- 420-462 Sand black, medium to coarse grained, well sorted glauconite (85-90%), coarse to very coarse grained quartz and a few granules (10-15%), slightly argillaceous.
- 462-483 Sand dark gray, argillaceous, the sand fraction is poorly sorted glauconite (55-65%) and poorly sorted, subangular to subrounded quartz (35-45%), pyrite, and phosphate, moderate amount shell material - pelecypods, echinoid spines, and a few foraminifera, small amounts of plant remains
- 483-502 Sand dark gray, fine to medium grained, fairly well sorted glauconite - quartz sand, glauconite (80-85%), subangular to subrounded quartz (15-20%), very argillaceous, light gray clay appears to have come from separate unit (s) in that it occurs in the cuttings as virtually sand-free fragments of clay, clay only slightly subordinate to sand, interval contains moderate amount muscovite and small amount echinoid spines.
- 502-523 Sand black, fine to coarse grained, fairly well sorted glauconite quartz sand, glauconite (75-85%), subangular quartz (15-25%), slightly argillaceous, slightly ferruginous, small amounts phosphate, muscovite, feldspar, traces of pyrite, tourmaline, small amount shell material - pelecypods, echinoid spines, uniserial foraminifera, bryozoans, fish teeth.
- 523-544 Sand black, coarse-grained, very well sorted glauconite (90-95%), similar in all other characteristics, to preceding sample
- 544-565 Sand black, poorly sorted glauconite quartz sand, glauconite predominant, slightly silty and argillaceous, moderately ferruginous, small amounts phosphate and muscovite, very abundant shell material pelecypods

PATUXENT FORMATION (565-620')

565-586 Sand - gray, fine to very coarse grained, very poorly sorted, angular to subangular, slightly argillaceous, moderately glauconitic, micaceous (muscovite), small amounts garnet, shell material

# 586-607 Sand - brown, fine to coarse grained, poorly sorted, angular to subangular, slightly argillaceous, moderately glauconitic, micaceous (muscovite), trace of phosphate

OWNER: Douglas and Dickinson, Incorporated

607-620 Sand - gray, medium to very coarse grained, fairly well sorted, subangular, slightly micaceous, arkosic, very slightly glauconitic, slightly argillaceous

### GEOLOGIC SUMMARY

## Rock Unit

## Age

Columbia Group	Pleistocene	
Yorktown Formation	Late Miocene	
Calvert Formation	Middle Miocene	
Chickahominy Formation	Late Eocene	
Unidentifiable, contaminated sample		
Nanjemoy Formation	Middle Eocene	
Mattaponi Formation	Paleocene	
Patuxent Formation	Early Cretaceous	
	Yorktown Formation Calvert Formation Chickahominy Formation Unidentifiable, contaminated sample Nanjemoy Formation Mattaponi Formation	

Virginia Division of Mineral Resources Robert H. Teifke, Geologist November 28, 1964

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