COMMONWEALTH OF VIRGINIA

DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

MAILING ADDRESS: DIVISION OF MIN	IERAL RESOURCES R, COMMISSIONER OMPLETION REPORT OFFICE ADDRESS: McCormick Road Charlottesville, Virginia
OWNER: United States Government	FROM TO (gravel, core, etc. menderen, color,
TENANT: Camp A. P. Hill #3	Mailing Address:
DRILLER: Douglas & Dickinson, Inc.	Mailing Address: Box 498 - Warsaw, Virginia
WELL LOCATION: County Caroline	Approxfeet(direction) of
north of Bowling Green and	feet(direction) of
(GIVE DIRECTION AND DISTANCE IN FEET OR MILES FROM T COUNTY HIGHWAY OR OTHER MAP.) DATE STARTED:	
TYPE OF DRILL RIG USED: Rotary	(7):1 (1 1 (2571)
WATER LEVEL: Stands 46 feet below	surface OR (1120 11010 00 00 0
has <u>NATURAL</u> flow of	gallons per minute.
YIELD TEST: Method	HOLE SIZE: 8 inches from 0 to 324 feet
Drawdownfeet	
Rate 80 gal. per min.	inches fromtofeet
Durationhrs.,min.	SCREEN SIZE: 3 inches from 324 to 334 feet
WATER ZONES: from 324 to 334 feet	totofeet
fromtofeet	inches fromtofeet
fromtofeet	CASE SIZE: 6 inches from 0 to 324 feet
WATER: ColorTaste	3inches from 303 to 324 feet
Odor	3inches from 334 to 344 feet
WELL TO SUPPLY: (check one) Home	GROUTING: Method
Farm Town School	Material Depthfeet
IndustryOther_Army Camp	PUMP: Type
WATER ANALYSIS AVAILABLE:YesNo	Capacitygal_per_min
DRILL CUTTINGS SAVED: Yes 34 No (DRILL CUTTINGS SHOULD BE COLLECTED AT 10 FOOT IN OFFICE EXPRESS COLLECT. SAMPLE BAGS ARE FURNISH ARKS:	ED FREE OF CHARGE UPON REQUEST.)

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

INTERVAL SHEET

Page	1	of	1	Well Repository No:	3044

C-89

Date rec'd: 3/24/70; processed 12/22/70 Sample Interval; from 0 to: 356'

PROPERTY: Camp A. P. Hill #3 Number of samples: 34

COMPANY: Douglas and Dickinson Total Depth: 357'

COUNTY: Caroline (Bowling Green) Oil or Gas: Water: Exploratory:

1		-	i		
	From-	10	From-To	From-To	From-To
	0 _	10 *	262 _ 273 *		_
	10 _	21 *	273 _ 283 *	177) 1721	
	21 _	31 *	283 _ 294 *		
	31	42	294 _ 304 *	-	_
	42	52 *	304 _ 315 *	1 - 2	-
			4.5	, -	-
)	52 _	63	315 _ 325 *	_	_
	63 _	72 *	325 _ 336 *		
	73 _	84	336 _ 346 *	_	_
	84 _	94	346 _ 357 *		~
	94 _	105 *			
	105 _	115	_ =		_
	115 _	126	_		200
	126 _	136	•••• _		-
	136 _	147 *	_		_
	147 _	157	_	-	-
	157 _	168	_	n un t	_
	168 _	178 *	_	1 - 2	_
	178 _	189 *	_	-	_
	189 _	199 *	<u> </u>	()	<u> </u>
	199 _	210 *			
	210 _	220 *	. 	:=:	-
	220 _	231	-		_
	231 _	241 *	2	124	
	241 _	252 *		(42)	_
)	252 _	262 *	_	·	
1					

^{*} Washed only

Owner: Driller: County:	Camp A. P. Hill (Cook House) W# 3044 Douglas and Dickinson C# 89 Caroline Total Depth 356' Quad:		
Depth (feet)	WELL LOG		
0-10	Sand - dark yellow orange (10YR 6/4); moderate clay; fine to granule; sub-angular; poorly sorted; quartz.		
10-21	Sand - pale yellow brown (10YR 5/2); moderate clay; fine to granule, some pebbles; sub-angular, poorly sorted; iron oxide fragments, rutile (?).		
21-31	Clay - moderate brownish gray (5YR 5/1) and brownish gray (5YR 4/1); sparse sand, fine to granule; subangular, poorly sorted, quartz.		
31-42	Clay - light olive gray (5Y 6/1); as above.		
42-52	Clay - as above, except: some yellow clay in gray; moderate sand - fine to coarse; some granules; 5% glauconite; mica; feldspar.		
52-63	Clay - as above; abundant sand - fine to granule; 15% glauconite.		
63-73	Clay - as above, except: 50% glauconite; 10% shell fragments; 1%+ mica; forams.		
73-84	Clay - as above, except: moderate sand; 5% shell bits.		
84-94	Clay - as above, except: streaks of dark yellow orange (10YR 6/6); abundant sand; 30%+ glauconite; 1% mica.		
94-105	Clay - as above, except: abundant sand, very fine to medium; some coarse; 45% glauconite; some shell fragments; some mica.		
105-115	Clay - as above, except: 10%+ glauconite; few shell bits.		
115-126	Clay - as above, except: very sparse glauconite.		
126-136	Clay - as above, except: light olive gray and grayish orange pink (5YR 7/2); pink clay in compact clasts; gray - as above.		
136-147	Clay - as above; 45% glauconite.		
147-157	Sandy Clay - as above; abundant clay - 2-colored, in small clasts; abundant sand; 30% glauconite; 8% shell fragments; mica.		

Camp A. P. Hill (Cook House)

Owner:

W# 3044

Owner	Camp A. P. Hill (Cook House) W# 3044
Depth (feet)	
157-168	Sandy clay - as above, except: yellow clay clasts; 1% shell fragments.
168-178	Sandy clay - as above, except: medium olive gray (5Y 5/1); 10% shell fragments; forams - Robulus, Lagena; mica.
178-189	Sandy clay - as above, except: medium olive gray and dark yellowish orange (10YR 6/6); sand is 50% glauconite; forams, (shells - Turritella).
189-199	Clayey sand - olive gray (5Y 4/7); moderate clay in small clasts; fine to medium, some coarse, sub-rounded; moderately well sorted; quartz; 40%+ glauconite; 10% shell fragments; ostracods; forams.
199-210	Clayey sand - as above, except 50% glauconite.
210-220	Clayey sand - as above, except 6% shell fragments.
220-231	Clay - moderate yellow brown (10YR 4/4); abundant clasts of clay; sand - as above; 30% glauconite; shells rare.
231-241	Sand - pale yellow brown (10YR 5/2); very sparse clay; coarse, sub-rounded; few smaller grains; well sorted; quartz; 15% glauconite; shells; rose quartz; feldspar.
241-252	Sand - as above, except: abundant clay in sand clasts; 40% glauconite; iron oxide.
252-262	Clay - moderate yellow brown (10YR 5/4); abundant clay in clasts; moderate fine-to medium-grained sand; poorly sorted; quartz; glauconite; mica.
262-273	Clay - as above.
273-283	Sand - moderate yellow brown (10YR 4/4); moderate clay in clasts and grains; medium to coarse, sub-angular; well sorted; quartz; 2% glauconite.
283-294	Sand - as above, except: sparse clay.
294-304	Sand - as above, except: no glauconite; feldspar.
304-315	Sand - as above, except: coarse-grained, well sorted sand
315-325	Sand - as above, except: very sparse clay in sand clasts; fine to coarse; poorly sorted; quartz; graphite.

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Owner: Camp A. P. Hill (Cook House) W# 3044

Depth
(feet)

325-336 Sand - as above, except: medium to granule.

336-346 Sand - as above, except: medium to very coarse.

346-359 Sand - as above, except: moderate clay in sand clasts and

grains; fine to very coarse sand.

Logged by: J. K. Polzin June 30, 1980 OWNER: Camp A. P. Hill #3

DRILLER: Douglas & Dickinson, Inc. COUNTY: Caroline (Bowling Green)

VDMR # 3044 WWCR # 89 TOTAL DEPTH: 357'

GEOLOGIC SUMMARY

Rock Unit	Age
Columbia Group	Pleistocene
Calvert Formation	Middle Miocene
Nanjemoy Formation	Middle Eocene
Marlboro Clay Member	
Mattaponi Formation	Late Cretaceous - Paleocene
Patuxent Formation	Early Cretaceous
glauconitic sands w/drab clay variegated clays w/abundant v feldspathic sand (Early K?)	
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Virginia Division of Mineral Resources Robert H. Teifke - Geologist January 5, 1971 OWNER: Camp A. P. Hill #3

DRILLER: Douglas & Dickinson, Inc.

COUNTY: Caroline (Bowling Green)

VDMR # 3044

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TOTAL DEPTH: 357'

GEOLOGIC SUMMARY

Depth (feet)	Rock Unit	Age	
0-42	Columbia Group	Pleistocene	
42-52	Calvert Formation	Middle Miocene	
52-147	Nanjemoy Formation	Middle Eocene	
132-147	Marlboro Clay Member		
147-231 * 231-294 *	Mattaponi Formation	Late Cretaceous - Paleocene	
294-357	Patuxent Formation	Early Cretaceous	
*147-231 231-294		glauconitic sands w/drab clay matrices (Paleocene?) variegated clays w/abundant variably-glauconitic feldspathic sand (Early K?)	

Virginia Division of Mineral Resources Robert H. Teifke - Geologist January 5, 1971