COMMONWEALTH OF VIRGINIA

DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

MAILING ADDRESS:

P 3667

DIVISION OF MINERAL RESOURCES

JAMES L. CALVER, COMMISSIONER

W#: 4218 C#: 190

OFFICE ADDRESS:

McCormick Road

C. rlottesville, VA 22903 WATER WELL COMPLETION REPORT Charlottesville, Virginia _____ Mailing Address: ____Colonial Beach, Virginia OWNER: L. L. Curley Monroe Bay Est. #2 TENANT: ____ Mailing Address:____ DRILLER: Douglas Drilling Co., Inc. Mailing Address: Box 498, Warsaw, Va. 22572 WELL LOCATION: County Westmoreland Manual Approx 1.2 Markx miles West CI (direction) of 130 Fine sand with red clay binder St. Route 205 miles data (direction) of St.Rds.628 & 658 __and_Iobaid (GIVE DIRECTION AND DISTANCE IN FEET OR MILES FROM TWO REFERENCE POINTS - ROADS, TOWNS, RIVERS, ETC. - ON COUNTY HIGHWAY OR OTHER MAP.) 453' approx. 460' Fine sand with clay binder DATE COMPLETED: August 2, 1973 DATE STARTED:____ rotary TOTAL DEPTH 460 feet TYPE OF DRILL RIG USED:___ (completed at 452') Stands 24 feet below surface OR WATER LEVEL: ____gallons per minute. has NATURAL flow of__ air YIELD TEST: Method ___ HOLE SIZE: 10 3/4nches from 0 to 105 feet Drawdown _____ feet 8 3/8 inches from 105 to 228 feet Rate _____gal. per min. 5 7/8 inches from 228 to 460 feet Duration 3 hrs., ____min. SCREEN SIZE:_____inches from _____to ____feet _____ to ____ 3 inches from 427 to 447 feet WATER ZONES: from ____ ____inches from to feet _____to____ from___ from 427 to 447 feet CASE SIZE: 6 inches from 0 to 228 feet WEIGHT: 3 inches from 228 to 427 feet WATER: Color_____ _____Taste___ 3 inches from 447 to 452 feet GROUTING: Method __tremmie pipe WELL TO SUPPLY: (check one) Home Material neat cement Depth 228 feet Farm _____ Town ____ School ____ Industry____Other__subdivision PUMP: Туре _____ WATER ANALYSIS AVAILABLE: Yes _____No _X Capacity_____gal per min Depth of intake ____ DRILL CUTTINGS SAVED: 44 Yes X No _____ (DRILL CUTTINGS SHOULD BE COLLECTED AT 10 FOOT INTERVALS. THESE SAMPLES MAY BE SHIPPED TO THIS OFFICE EXPRESS COLLECT, SAMPLE BAGS ARE FURNISHED FREE OF CHARGE UPON REQUEST.) R ARKS:____

ALMIBRIV RLOGTLATEMORNOS

DEPARTMENT OF SCHEFFEETING AND FORMAMIC DEVELOPMENT C#: 190 FURNISHED BY:__ TO THE PROPERTY OF THE PROPERT __DATE:_

DEPTH (feet)		TYPE OF ROCK OR SOIL PENETRATED		REMARKS	
FROM	rgiota	(gravel, clay, etc., hardness, colo	(water, caving, shot, screen, sample, etc.		
0' 20' 30' 60' 190' 230' 250' 431' 453'	approx.	20' Fine sand with clay bin 30' Fine sand with clay bin 60' Fine sand with clay bin 190' Fine sand with grey cla 230' Fine sand with red clay 250' Fine sand with grey cla 431' Fine sand with varying 453' Coarser and fine sands 460' Fine sand with clay bin	der and shell der and some sl y binder binder y binder % clay binder	C# .J2E yad sounoM ,.OO pnilling asipuod hell raistomtasW 202 stron .J2 Screen, water 427-447' Gravel base	
	0.60	TOTAL DEPT	Lx:		
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		atomim rag anottop			
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		(Use additional form			

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

INTERVAL SHEET

Page 1 of 1 Well Repository No.: W#: 4218 C#: 190

Date rec'd: 2/25/74 Date Processed: 7/10/75 Sample Interval: from 0 to: 460

PROPERTY: L. L. Curley Number of samples: 41

COMPANY: Douglass Drilling Co., Inc. Total Depth: 460'

COUNTY: Westmoreland (Col. Beach) Oil or Gas: Water: Exploratory:

From-To	From-To	From-To	From-To	From-To
0 - 11	323 - 333	<u>~</u>	<u>=</u>	=
11 - 22	333 - 344	_	गर ्ग,	1)
22 - 32	344 - 355	-	_	()
32 - 43	355 - 366	-	-	-
43 - 54	366 - 376	_	LOS .	-
54 - 65	376 - 387	-		_
65 - 75	387 - 398	-	-	-
75 - 86	398 - 409	_	_	-
86 - 97	X-	-	-	_
97 - 108	431 - 442	Table	MAIN	:
108 - 118	442 - 453	_	-	_
118 - 129	453 - 460	-	_	-
129 - 140	-	_		-
140 - 151	-	_	<u>199</u>	-
151 - 161	-	<u> </u>	2.5 × 2.5 ×	=
161 - 172	-	· :	<u> </u>	-
172 - 183	- 2	_	•0	·-
183 - 194	_	_		·- ,
194 - 204	_	_	<u> </u>	_
204 - 215	_	_	<u> </u>	
215 - 226	_	_	_	· —
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237 - 247	-	- -	=	:=
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All intervals have both washed and unwashed samples.

OWNER: L. L. Curley

(Monroe Bay Est. #2)

DRILLER: Douglas Drilling Co., Inc.

COUNTY: Westmoreland

(Colonial Beach)

W#: 4218 C#: 140

TOTAL DEPTH: 460'

QUAD: Colonial Beach South

GEOLOGIC LOG

Depth (feet)

- 0 11 Sand grayish yellow; abundant clay; fine to medium grained, some coarse grains; subangular to subrounded; monderately well sorted; quartz; 5% ferricrete; feldspar; few grains of glauconite.
- 11 22 Sand yellowish gray; slightly clayey; fine to coarse grained, some granules, few pebbles; subangular to subrounded; moderately sorted, quartz; feldspar; 2% opaques; few flakes of muscovite.
- 22 32 Clay light olive gray; moderate sand; fine grained, some medium grains; subangular to subrounded; well sorted, 15% shell fragments; 10% ferricrete; quartz; some vivianite; few black phosphatic fragments.
- 32 43 Clay olive light gray; some shell fragments; few ferricrete fragments; quartz; muscovite; vivianite; few black phosphatic fragments.
- 43 54 As above except some quartz; few grains of glauconite.
- 54 65 As above except some glauconite.
- 65 75 Sand olive light gray; slightly clayey; fine grained, some granules, some pebbles; subangular to subrounded; moderately well sorted; quartz; 5% glauconite; 2% muscovite; few black phosphatic fragments.
- 75 86 Sand olive light gray; slightly clayey; fine grained, some medium grains, few granules; subangular to rounded; well sorted; quartz; 15% glauconite; 2% muscovite; some shell fragments.
- 86 97 Sand olive light gray; fine grained, some medium grains; subangular to rounded; well sorted; quartz; 25% glauconite; 2% muscovite; some shell fragments; few black phosphatic fragments; vivianite.
- 97 108 Sand olive light gray; abundant clay; fine to medium grained; subangular to rounded; moderately well sorted; 50% glauconite; quartz; some muscovite; few shell fragments.
- 108 118 As above except 2% shell fragments; bone fragments.

Depth (feet)

- 118 129 As above plus some coarse grains; some shell fragments.
- 129 140 Sand olive light gray; abundant clay; fine to coarse grained; subangular to subrounded; moderately sorted; 60% glauconite; quartz; 2% shell fragments; some muscovite; few echinoid spines.
- 140 151 As above except 40% glauconite; few shell fragments.
- 151 161 As above except no echinoid spines.
- 161 172 Sand and clay olive light gray; moderate clay; abundant sand; fine to medium grained; subangular to rounded; moderately well sorted; quartz; 30% glauconite; some muscovite; few shell fragments.
- 172 183 As above plus some coarse grains; 10% glauconite; forams.
- 183 194 As above plus some light gray clay.
- 194 204 Clay grayish orange pink; moderate sand; medium to coarse grained; subangular to rounded; moderately well sorted; quartz; glauconite 30% of sand fraction; few shell fragments; muscovite.
- 204 215 As above.
- 215 226 Sand olive light gray; slightly clayey grayish orange pink (clasts); medium grained, some very fine grains; subangular to subrounded; well sorted; quartz; 20% glauconite; few shell fragments; muscovite.
- 226 237 As above except slightly silty.
- 237 247 Sand light greenish gray; slightly clayey light greenish gray, white; slightly silty; medium grains, some fine grains, some coarse grains; subangular to rounded; moderately well sorted; quartz (yellowish green stain); 25% glauconite (black, green); some shell fragments; few flakes of muscovite.
- 247 258 As above except 30% glauconite.
- 258 269 As above.
- 269 280 Sand light greenish gray; slightly clayey; fine to medium grained, some coarse grains; subangular to rounded; moderately well sorted; quartz; 35% glauconite, few shell fragments; forams (inc. Buccella and Nodosaria); ostracode.
- 280 290 As above except greenish gray; 40% glauconite; 2% sandy limestone and shell fragments; no Nodosaria.

Depth (feet)

- 290 301 As above.
- 301 312 Sand greenish gray; slightly clayey; medium grained, some coarse grains; subangular to rounded; well sorted; quartz; 35% glauconite (black, brown); 3% shell fragments; few flakes of muscovite; few shell fragments; foram.
- 312 323 Sand greenish gray; slightly clayey; medium grained, some fine grains; subangular to rounded; well sorted; quartz; 35% glauconite; few flakes of muscovite; forams (inc. Buccella).
- 323 333 Sand olive light gray; slightly clayey; medium to coarse grained, some fine grains; subangular to rounded; moderately well sorted; quartz; 40% glauconite, some sandy limestone and shell fragments; few flakes of muscovite; forams (inc. <u>Buccella</u> and Marginulina?).
- 333 344 Sand light greenish gray; moderate silt; medium to coarse grained; subangular to rounded; moderately well sorted; quartz; 30% glauconite; few sandy limestone and shell fragments; muscovite; forams scarce (inc. Buccella).
- 344 355 Sand yellowish gray; abundant clay (clasts); medium grained, some fine grains, some coarse grains; subangular to rounded; moderately well sorted; quartz; 25% glauconite; some sandy limestone fragments; few flakes of muscovite.
- 355 366 Sand light olive brown; moderate clay (clasts); medium to coarse grained, some fine grains; subangular to rounded; moderately well sorted; quartz; 25% glauconite; few flakes of muscovite.
- 366 376 As above except 10% glauconite; some muscovite.
- 376 387 As above except fine to medium grained, some coarse grains; 5% glauconite.
- 387 398 Sand yellowish gray; moderate clay (clasts); slightly silty; medium to coarse grained; subangular to rounded; well sorted; quartz; 35% glauconite; some sandy limestone fragments; few flakes of muscovite.
- 398 409 As above except 50% glauconite.
- 409 431 No sample.
- 431- 442 Sand white; medium to coarse grained, few granules; subangular to subrounded; moderately well sorted; quartz; feldspar; 3% glauconite; some muscovite; few grains of garnet.

Depth (feet)

442 - 453 As above plus 7% pebbles.

453 - 460 Clay - light olive brown, medium light gray, light brown, very light gray; moderate sand; fine to coarse grained; subangular to subrounded; moderately sorted; quartz; 2% glauconite; few grains of feldspar; muscovite.

Logged by: Michael T. Currie May 22, 1979 OWNER: L. L. Curley

(Monroe Bay Est. #2)

W#: 4218

GEOLOGIC SUMMARY

Depth (feet)	Thickness (feet)	Rock Unit	Time Rock Unit
0- 22	22	Columbia Group	Pleistocene
22- 75	53	Calvert Formation	Miocene
75-194	119	Nanjemoy Formation	Eocene
194-215	21	Marlboro Clay	Eocene
215-409	194	Aquia Formation	Eocene-Cretaceous
409-431	22	No Sample	
431-460	29	Patuxent Formation	Cretaceous

VIRGINIA DIVISION OF MINERAL RESOURCES

David A. Hubbard, Jr., Geologist

June 28, 1979