COMMONWEALTH	OF VIRGIN		W#: 3 C#:	
B 3667 JAMES L. CALVE	IERAL RES r, commissioner OMPLETION	OURCES	T OFFICE ADDI McCormick R Charlottesvill	Road
		5709 Mechanicsvi	lle Pike	
OWNER: Bremner, Youngblood, & Sharp, Inc.			VA. 2311	1
TENANT: Pebblebrook Subdivision		Rt. 1, Box 110	3.0	6
DRILLER: Mitchell's Well & Pump Co., Inc.	Mailing Address.	Col. Hgts. VA	04	01
WELL LOCATION: County Hanover		_milesEast		rection) of
Mechanicsville on St. Rd. 606, left side	feet miles	(direction) of	50 I	40
(GIVE DIRECTION AND DISTANCE IN FEET OR MILES FROM T COUNTY HIGHWAY OR OTHER MAP.)	WO REFERENCE P	OINTS - ROADS, TOWN	S, RIVERS, E	ETC ON
DATE STARTED: May 1973	DATE COMPLI	ETED: May 197	73 00	80
TYPE OF DRILL RIG USED: Cable tool		_TOTAL DEPT		fee1
WATER LEVEL: Stands_155_feet below	surface OR		120	110
has NATURAL flow of_		nor minuto	140	130
YIELD TEST: Method Pumped	1	. per minure. . 12 inches from .	160	
Drawdown225 feet	l fragments	<u> </u>	200	
Rate <u>102.85</u> gal. per min.		inches from	10 A. C.	
Duration <u>33</u> hrs., <u>30</u> min.				514 feet
WATER ZONES: from294 to314 feet	champs i llede	inches from_	to	feet
fromfeet		inches from		
fromfeet	CASE SIZE	<u>6</u> inches from.	0	6" feet
WATER: ColorClearGood		5_inches from.	260 to 29	94feet
OdorNoneTemp°F		inches from	to	feet
WELL TO SUPPLY: (check one) Home	GROUTING:	Method		
Farm Town School	Mater	ialC	epth	feet
IndustryOtherSubdivision	PUMP:	Type B Submersil	le	
WATER ANALYSIS AVAILABLE Yes No N		Capacity		
DRILL CUTTINGS SAVED: 31 Yes_XX_No		Depth of intake		
(DRILL CUTTINGS SHOULD BE COLLECTED AT IO FOOT I OFFICE EXPRESS COLLECT. SAMPLE BAGS ARE FURNISH	NTERVALS. THESE	SAMPLES MAY BE	SHIPPED	
REMARKS				
	eren (f. f. f			
	1.00	OF WELL'S OVER		

LOG

FURNISHED BY: ______Mitchell's Well & Pump Co., Inc. _____DATE: _____July 16, 1973

DEPTH (feet)		TYPE OF ROCK OR SOIL PENETRA	TED REMARKS
FROM	ТО	(gravel, clay, etc., hardness, color, et	
		A	
0	10	Tan dirt	
10	220	Tan dirt, some grit	LER Mitchwill's Well & Pung Co. Inc.
20	30	White dirt	isvarsH
30	40	Light Tan dirt	A CALL LOS AND A CALL AND A
40	50	Yellowish gravel	chanicsville on St. Ed. 606, laft side
50	60	Tan dirt	Chart after ford the rol to satury solution
60	70	Gray dirt	NOT DISCOVER AN OCTAVEL REAL OR MALE FROM
70	80	Ditto	小型小型,并且为了12、同门、为工程14000K,为14000K
80	90	II	TE STARTED - May 1973
90	100	""""""""""""""""""""""""""""""""""""""	
100	110	Dark gray dirt	and a Coble to a second coble tool
110	120	Ditto	
120	130	"	VIER LEYCL ANNAL 185 MAL
130	140		* 21 W 1 C C C C C C C C C C C C C C C C C
140	150	п	
150	160	" Light gray dirt	A WOLL DIPUTAN ASH
160	170	Ditto	ELG TEST Jumped
170	180	UITTO II	PupperPupper
180	190		225
		Gray dirt-shell fragments	
190	200	Gray dirt	88.201
200	210	Dark gray dirt	
210	220 pe	Ditto	1 02 03 EE mourait
220	230	Tan dirt	
230	240	Ditto	TER 2010 0 - 294 - 214
240	250	Brownish dirt-shell fragments	PARTY AND A DATA AND A DATA AND A DATA AND A DATA
250	260	Brownish dirt-pebbles	(in a line) in the line) of the
260	270	Tan sand & gravel	
270	and the second	Ditto	
280	290		
290	005300 00	month average 2	Lood to the second second
300	314	п	
			None None
			And The State Provide the State of the USE
	<i>CTC</i>		non-men a long de l'âns anna Arrolf anna an Intel?
	0	NUMP, THE P Submersio	no in Prindra
			 A second state of the second se
	108		No. 1 Contraction and the second second
	1 M/C 10 10 10 10		TER AMALYSIS AVAILABLE TV
			31. 31. 1997 (1965) SAVE D
	1.0391.772		
			און המתרדות אות לקומעולים איז המערכים להיין אין אוריין לייור. לאורה ארגאלא באיר דמעה אלור הגרוריות העוקב עליע להיילים
			A REPAIR OF A R
		(Use additional forms i	

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

INTERVAL SHEET

	.ge .te		of 9/27/73	l Date	Processed:	7/17/74	Well Repository No: W#: 3979 C#: 164 Sample Interval: from: to: 0 314'
PROPERTY: COMPANY:			Bremner, Youngblood & Sharp (Pebblebrook Subdivision) Mitchell's Well & Pump Co.			Number of samples: 31 Total Depth: 314'	
COUNTY:		ТΥ:	Hanover (Farmers S	hop)			Oil or Gas: <u>Water</u> : Exploratory:
From-To		-То	From-To F		From-To	From-To	
0 10 20		10 20 30	60 70	- 60 - 70 - 80		Ξ	
30 40				- 90 - 300	,	-	· = .
30 60	-	70	310	- 14 -		-	-
70 80 90	-			-		-	-
100	-	10		-		-	-
	-	30		-			-
30 40				-			-
	-	70		-		=	-
	-		ž	-		-	
200 10	-			-		_	-
20 30	Ē	30 40		_		_	-
40	-	50		-		-	-

oth washed and unwashed samples.

0					
	OWNER: Bremn (Pebb) DRILLER: Mitcl	W#: 3979 C#: 164 TOTAL DEPTH: 314'			
	COUNTY: Hano	QUAD: Manquin			
	(Far				
GEOLOGIC LOG					
	Depth (feet)				
	0 - 10	Sand light brown; abundant clay; fine to medium g to subrounded; moderately well sorted; quartz; some opaques.			
	10 - 20	Sand grayish orange; slightly stained; slightly of to gravel (20%); subangular to subrounded; poorly so spar; few opaques.			
	20 - 30	Sand white; slightly clayey; fine to medium grain subangular to subrounded; moderately well sorted; qu some opaques.			
C	30 - 40	Sand very pale orange; medium to coarse grained, pebbles; subangular to subrounded; moderately sorted few opaques; muscovite.			
	40 - 50	Gravel dark yellowish orange; heavily stained; so 20% granules; subrounded; moderately well sorted; qu			
	50 - 60	Sand grayish orange; some stained grains; moderat to granular, 15% pebbles; subangular to subrounded; quartz; feldspar; some opaques; few flakes of muscov	poorly sorted;		
	60 - 70	Clay light olive gray; moderate sand; fine graine sorted; quartz; few flakes of muscovite.	ed; subangular; well		
	70 - 80	As above plus few fragments of ferricrete.			
	80 - 90	Sand light olive gray; abundant clay; fine graine sorted; quartz; few flakes of muscovite; few black p			
	90 - 100	Sand olive light gray; moderate clay; medium to o granules; subrounded; moderately well sorted; quart; material; few flakes of muscovite; garnet.			
0	100 - 110	Sand and clay olive light gray; moderate clay; at medium grained; subangular to rounded; moderately we 40% glauconite; 5% shell fragments; some muscovite; <u>Robulus</u> and <u>Guttulina</u>).	ell sorted; quartz;		

OWNER: Bremner, Youngblood, & Sharp

Depth (feet)

- 110 120 Clay olive light gray; abundant sand; fine to medium grained; subangular to rounded; well sorted; quartz; glauconite, 30% of sand sized fraction; 3% muscovite; some shell fragments; forams (inc. <u>Robulus</u>, <u>Globigerina</u>, <u>Bolivina</u>, and <u>Buccella</u>): ostracodes; few echinoid spines; few grains of pyrite.
- 120 130 Sand olive light gray; abundant clay; fine to medium grained, some coarse grains; subangular to rounded; moderately well sorted; quartz; 35% glauconite; 5% shell fragments; some muscovite; few echinoid spines; few black phosphatic fragments; forams (inc. Guttulina and Buccella).
- 130 140 Sand olive light gray; moderate clay; fine to medium grained; subangular to rounded; moderately well sorted; 50% glauconite; quartz; 5% shell fragments; some muscovite; few grains of pyrite.
- 140 150 Clay light olive gray; moderate sand; fine to medium grained; subangular to rounded; moderately well sorted; glauconite, 60% of sand sized fraction; quartz; some shell fragments; some muscovite; ostracodes; some pyrite; few echinoid spines; forams rare (inc. Buccella).
- 150 160 Clay very light gray; slightly sandy; medium grained; rounded; well sorted; glauconite, 90% of sand sized fraction; quartz; few flakes of muscovite.
- 160 170 Clay light olive gray, very light gray; slightly sandy; fine to medium grained; subangular to rounded, moderately well sorted; glauconite, 75% of sand sized fraction, some muscovite; few shell fragments.
- 170 180 Clay very light gray; 5% limestone fragments; some quartz; some glauconite; few flakes of muscovite.
- 180 190 Clay olive light gray; abundant sand; fine to medium grained; subangular to rounded; moderately well sorted; glauconite, 60% of sand sized fraction; quartz; 5% shell fragments, inc. pelecypod; 2% muscovite; few grains of pyrite; forams rare (inc. Globigerina): ostracode.
- 190 200 Clay olive light gray, very light gray; slightly sandy; fine grained; subangular to subrounded; well sorted; quartz; glauconite, 15% of sand sized fraction; some shell fragments; some muscovite; few limestone fragments; few black phosphatic fragments.
- 200 210 Sand olive light gray; moderate clay; fine to medium grained; subangular to rounded; well sorted; quartz; 35% glauconite; some muscovite.
- 210 220 Clay olive light gray; abundant sand; fine to medium grained; subangular to rounded; well sorted; quartz; glauconite, 20% of sand sized fraction; 3% shell fragments; 2% muscovite; forams (inc. <u>Robulus</u> and Nodosaria); few black phosphatic fragments; bone fragment.

OWNER: Bremner, Youngblood & Sharp

-3-

Depth (feet)

- 220 230 Clay -- light brown; abundant sand and gravel; coarse grained to granular, 60% pebbles; subangular to subrounded; poorly sorted; quartz; 5% shell fragments; 3% black phosphatic material; 2% glauconite; few flakes of muscovite.
- 230 240 Clay -- yellowish gray, light brown; abundant sand and gravel; fine to medium grained, 15% granules, 40% pebbles; subangular to subrounded; poorly sorted; quartz; 2% black phosphatic material; some glauconite; few flakes of muscovite.
- 240 250 Clay -- light brown; moderate sand and gravel; coarse grained to granular, 35% pebbles; subangular to subrounded; moderately sorted; quartz; 7% shell fragments; some black phosphatic material; some glauconite.
- 250 260 As above except 60% pebbles.
- 260 270 Sand -- white, coarse to very coarse grained, some granules; subangular to subrounded; moderately well sorted; quartz; feldspar; few grains of glauconite.
- 270 280 Sand -- off white; some stained grains; coarse to very coarse grained, 5% granules, some pebbles; subangular to subrounded; moderately sorted; quartz; feldspar; some glauconite.
 - 280 290 As above except 7% pebbles.
 - 290 300 Sand -- off white; some stained grains; medium to very coarse grained, 3% granules, few pebbles; subangular to subrounded; moderately sorted; quartz; feldspar; few flakes of muscovite; garnet.
 - 300 310 No sample.
 - 310 314 Sand -- off white; coarse grained to granular, 10% pebbles; subangular to subrounded; moderately sorted; quartz; feldspar; few grains of garnet.

Logged by: Michael T. Currie Feb. 14, 1979