COMMONWEALTH OF VIRGINIA

DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

MAILING ADDRESS:

DRILL CUTTINGS SAVED:

DIVISION OF MINERAL RESOURCES

OFFICE ADDRESS:

Box 3667

JAMES L. CALVER, COMMISSIONER

McCormick Road

C lottesville, VA 22903 WATER Charlottesville, Virginia WELL COMPLETION REPORT Geothermal OWNER: Van Kesteren Farms, Inc., #55 Mailing Address: Onancock, Virginia 23417 _____ Mailing Address:_____ TENANT: ___ DRILLER: Gruy Federal, Inc. Mailing Address: 2500 Tanglewilde #150, Houston, TX Approx. 0.5 miles_ West (direction) of WELL LOCATION: County _____ The descriptions of pay's well are unpublished. R. Road 316 on Road 178 miles (direction) of ____ and ____ (GIVE DIRECTION AND DISTANCE IN FEET OR MILES FROM TWO REFERENCE POINTS - ROADS, TOWNS, RIVERS, ETC. - ON Virginia Polytech. Inct. COUNTY HIGHWAY OR OTHER MAP.) DATE STARTED: Nov. 26, 1978 ____DATE COMPLETED: Nov. 29, 1978 TOTAL DEPTH 1034 feet TYPE OF DRILL RIG USED: Rotary WATER LEVEL: Stands_____feet below surface OR has NATURAL flow of_____gallons per minute. HOLE SIZE: 7-7/8 inches from 0 to 1034 feet YIELD TEST, Method ______to_____feet Drawdown _____ feet ______to _____feet Rate _____gal. per min. Duration _____hrs., ____min. SCREEN SIZE:____inches from _____to ____feet WATER ZONES: from _______to _____feet _____inches from _____to ____feet from _____feet inches from to feet CASE SIZE: 4½ inches from 2 to 1011 feet from to feet ____inches from___to___feet WATER: Color_____Taste___ ____inches from ____to___feet GROUTING: Method _____ WELL TO SUPPLY: (check one) Home Material Class A Depth 1011 feet Farm_____School____ Туре _____ industry____Other___ PUMP: WATER ANALYSIS AVAILABLE:Yes____No____ Capacity_____gal per min

RL ARKS:____

(DRILL CUTTINGS SHOULD BE COLLECTED AT 10 FOOT INTERVALS. THESE SAMPLES MAY BE SHIPPED TO THIS

Yes_____ No ____

OFFICE EXPRESS COLLECT SAMPLE BAGS ARE FURNISHED FREE OF CHARGE UPON REQUEST.)

Depth of intake _____

ALMIDATY RLOGIJABWHOMMOD

FURNISHED BY:____

DATE:

DEPTH (feet)	TYPE OF ROCK OR SOIL PENE	ETRATED	REMARKS
FROM TO	(gravel, clay, etc., hardness, col		(water, caving, shot, screen, sample, etc.)
ALPICA .	sultant and manufactured	CUII.	Numero Van Kesteren Farms, Inc.,
	Action Wilderson	¥	TENANT:
O. Houston, T	Advence 2500 Tanglewilde 15	I	ORILLER, Gruy Federal, Inc.
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	The descriptions of this information call or write	well are unpub	lished. For Road 316 on Road 178
VERE, ETC - ON	Virginia Polyte	ch. Inst.	GIVE ORECTION AND DISTANCE IN FEET OR COUNTY HIGHWAY ON STHER MAR!
978	Coorbandon Dont		DATE STARTED: Nov. 26, 1978
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and the management	THESE SAMPLES MAY RE THE	ME YOUR OF THE	RILL CUTTINGS SAVEO: UNL DHILL CUTTINGS SHOULD BE CULLECTED DEPICE EXPRESS COLLECT SAMPLE DAS
			(0.8xs)

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

INTERVAL SHEET

INTERVAL SHEET	
Page 1 of 1	Well Repository No.: W- 5828
Date rec'd: Date Processed: 3-24-80	Sample Interval: from 0 to: 930
PROPERTY: Van Kesteren Farms, Geothermal #55	Number of samples: 92
COMPANY: Gruy Federal	Total Depth: 1034
COUNTY: Accomack (Onancock)	Oil or Gas: Water: XX Exploratory:
From-To From-To From-To	From-To From-To
0-10 300-310 600-610	900-910 -
- 310-320 610-620	910-920 -
20-30 320-330 620-630	920-930 -
30-40 330-340 630-640	
40-50 340-350 640-650	
50-60 350-360 650-660	
60-70 360-370 660-670	
70-80 370-380 670-680	
80-90 380-390 680-690	
90-100 390-400 690-700	
100-110 400-410 700-710	
110-120 410-420 710-720	
120-130 420-430 720-730	
130-140 430-440 730-740	
140-150 440-450 740-750	-
150-160 450-460 750-760	_
160-170 460-470 760-770	
170-180 470-480 770-780	
180-190 480-490 780-790	
190-200 490-500 *790-800	-
200_210	_
210-220 510-520 810-820	
220_230	_
230_240 530_540 830_840	
240_250 540_550 840-850	
250-260 550-560 850-860	_
260-270 560-570 860-870	-
270-280 570-580 870-880	
280-290 580-590 880-890	-
200 200 500 600	

890-900

290-300

590-600

Split- wash

^{*}Unwashed only.

Owner: Driller: County:	Van Kesteren Farms Gruy Federal - Geothermal #55 Accomack W# 5828 C# 369 Total Depth: 930 Quad: Accomac Elev: 40'		
Depth (feet)	WELL LOG		
0-10	Sand - dusky yellow (5Y 6/4); sparse clay; medium to granule; sub-rounded; moderate sorting; quartz; smokey quartz.		
10-20	No sample.		
20-30	Sand - as above.		
30-40	Sand - light olive gray (5Y 6/1), as above; poor sorting; black phosphatic fragments; shell fragments.		
40-50	Sand - as above, except: medium to very coarse; some gran- ules; moderate sorting; feldspar; black crystalline fragments; flint.		
50-60	Sand - as above, except: muscovite; garnet chips.		
60-70	Sand - as above, except: medium to granule; 40% granule soapstone-talc fragments.		
70-80	Sand - as above, except: sparse sand clasts; medium to granule; 1% phosphatic fragments; garnet chips.		
80-90	Sand - as above, except: rare shell fragments.		
90-100	Sand - as above, except: moderate sorting; iron oxide.		
100-110	Sand - as above, except: fine to very coarse; few granules, sub-angular to sub-rounded; 6% fine black phosphatic fragments; rose quartz.		
110-120	Sand - as above, except: moderate sand clasts with sparse clay; medium to very coarse, sub-rounded; 3% phosphatic fragments; shell fragments.		
120-130	Sand - as above, except: moderate clay; some granules.		
130-140	Sand - as above, except: medium to granule; poor sorting.		
140-150	Sand - as above, except: shell fragments; mica.		
150-160	Sand - as above, except: moderate clay clasts.		
160-170	Sand - as above.		

Owner:	Van Kesteren Farms	-2-	W# 5828
Depth (feet)			
170-180	Sand - as above.		
180-190	Sand - light olive gray (5 to very coarse, sub-angula quartz; 7% phosphatic frag fine shell fragments; feld	r to sub-rounded; ments with rare gl	poor sorting;
190-200	Sand - as above.		
200-210	Sand - as above.		
210-220	Sand - as above; except:	3% fine shell frag	ments.
220-230	Sand - as above, except: medium; sparse glauconite; fragments; iron oxide.	- No. 1270 (1975), 1 - NO. 1970 (1970) - J. 1970 (1970) - N. 1970 (1970) -	
230-240	Sand - as above, except:	medium to very coa	rse.
240-250	Sand - as above, except: fragments; limestone fragm		on schist; bone
250-260	Sand - as above, except:	3% glauconite.	
260-270	Sand - as above, except:	25% shell fragment	s; 10%+ glauconite.
270-280	Sand - as above, except:	20% shell fragment	s; 2% glauconite.
280-290	Sand - as above, except: and green glauconite; 30%		10% fine black
290-300	Sand - as above, except:	10% shell fragment	S.
300-310	Sand - as above, except:	abundant clasts; 2	5% shell fragments.
310-320	Sand - as above, except: fragments; garnet.	sparse clay clasts	; 10% shell
320-330	Sand - as above, except:	15% shell fragment	.s.
330-340	Sand - as above, except: fragments.	medium to very coa	rse; 8% shell
340-350	Sand - as above, except:	moderate sorting;	3% shell fragments.
350-360	Sand - as above, except:	5% shell fragments	•
360-370	Shell-Gravel - as above, sorting; 50% granules; 25%		granules; poor

Owner:	Van Kesteren Farms -	3-	W# 5828
Depth (feet)			
370-380	Gravel - as above, except: muscovite.	20% shell fragme	nts; 1%+ fine
380-390	Gravel - as above, except:	medium to coarse	; granules.
390-400	Gravel - as above, except: larger, gravel.	15% shell fragme	nts; more and
400-410	Gravel - as above, except:	Anachis Milleri.	
410-420	Gravel - as above, except:	10% shell fragme	nts.
420-430	Gravel - as above, except:	20% shell fragme	ents - <u>Turritella</u> .
430-440	Gravel - as above, except:	25% shell fragme	nts.
440-450	Gravel - as above, except:	medium and granu	les; Polinices.
450-460	Sand - as above, except: m fragments.	nedium to granule;	30% shell
460-470	Sand - as above, except: 1	.5% shell fragment	S.
470-480	Gravel - as above, except: fine muscovite.	20% shell fragme	nts; 10% very
480-490	Gravel - salt and pepper; moderate clay; fine to pebble; poor sorting; 30% large pebbles; 1% large shell fragments - Turritella.		
490-500	Gravel - as above.		
500-510	No sample.		
510-520	Gravel - as above.		
520-530	No sample.		
530-540		nedium olive gray 8% shell fragments	
540-550	Sand - as above, except: 1	% shell fragments	; .
550-560	Sand - as above, except: 1	.0% shell fragment	S.
560-570	Sand - as above, except: 5	% shell fragments	

Owner:	Van Kesteren Farms -4- W# 5828		
Depth (feet)			
570-580	Sand - yellow brown (10YR 6/4); as above, except: moderate clay; medium to very coarse; few pebbles; 2% shell fragments.		
580-590	Sand - medium olive gray (5Y 5/1); as above, except: some pebbles; 5% shell fragments.		
590-600	Sand - as above.		
600-610	Sand - as above, except: medium to pebble; 7% shell fragments.		
610-620	Sand - as above.		
620-630	Sand - as above, except: moderate sand clasts with clay - tan, orange, gray; 3% fine shell fragments - Turritella sp.		
630-640	Sand - as above.		
640-650	Sand - as above; pebbles and shell fragments widely differ in size - coarse and fine.		
650-660	Sand - as above, except: sparse clay; few pebbles; 7% shell fragments.		
660-670	Gravel - as above, except: medium to pebble; 10% shell fragments.		
670-680	Sand - as above, except: moderate clay clasts; few small pebbles; 3% shell fragments.		
680-690	Gravel - as above, except: moderate sand clasts with clay; some pebbles; 5% shell fragments.		
690-700	Gravel - as above, except: abundant clay - clast and pellet.		
700-710	Sand - as above, except: abundant clay clasts.		
710-720	Sand - as above, except: 8% shell fragments; pebble.		
720-730	Sand - moderate yellow brown (10YR 5/2) - as above, except: medium to pebble; 3% shell fragments.		

730-740 Sand - as above.

Owner:	Van Kesteren Farms	-5-	W# 5828
Depth (feet)			
740-750	Sand - as above, except:	moderate olive gra	y (5Y 5/1).
750-760	Sand - as above, except: 25% granule to pebble.	moderate yellow br	own (10YR 5/2);
760-770	Sand - as above, except:	5% shell fragments	
770–780	Sand - as above, except: to very coarse; moderate 2% shell fragments.	The state of the s	
780-790	Gravel - as above, except medium to pebble; poor so		
790-810	No samples.		
810-820	Sand - as above, except: pebbles and shell fragmen); few large
820-830	Sand - as above, except:	medium to granule.	
830-840	Sand - as above, except:	few pebbles.	
840-850	Sand - as above, except:	10% pebbles; 3% sh	ell fragments.
850-860	Sand - as above.		
860-870	Sand - as above.		
870-880	Sand - as above.		
880-890	Sand - as above.		
890-900	Sand - as above, except:	5% pebbles.	
900-910	Sand - as above, except:	moderate clay clas	ts.
910-920	Sand - as above, except: glauconite; medium to gra		

Sand - as above, except: some pebbles; 5% shell fragments.

920-930

Logged by: J. K. Polzin June 2, 1980