

COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

W-5826  
C-220

MAILING ADDRESS:  
Box 3667  
Charlottesville, VA 22903

DIVISION OF MINERAL RESOURCES  
JAMES L. CALVER, COMMISSIONER  
WATER WELL COMPLETION REPORT

OFFICE ADDRESS:  
McCormick Road  
Charlottesville, Virginia

OWNER: Isle of Wight, Geothermal #26 Mailing Address: Isle of Wight, VA 23397

TENANT: \_\_\_\_\_ Mailing Address: 2500 Tanglewilde #150

DRILLER: Gruy Federal, Inc. Mailing Address: Houston, Texas

WELL LOCATION: County Isle of Wight Approx. 6.5 <sup>max</sup> miles SW (direction) of  
Road 10 on Road 258 and \_\_\_\_\_ feet miles (direction) of \_\_\_\_\_

(GIVE DIRECTION AND DISTANCE IN FEET OR MILES FROM TWO REFERENCE POINTS - ROADS, TOWNS, RIVERS, ETC. - ON COUNTY HIGHWAY OR OTHER MAP.)

DATE STARTED: 9/20/78 DATE COMPLETED: 9/26/78

TYPE OF DRILL RIG USED: Rotary TOTAL DEPTH 1018 feet

WATER LEVEL: Stands \_\_\_\_\_ feet below surface OR  
has NATURAL flow of \_\_\_\_\_ gallons per minute.

YIELD TEST: Method \_\_\_\_\_  
Drawdown \_\_\_\_\_ feet  
Rate \_\_\_\_\_ gal. per min.  
Duration \_\_\_\_\_ hrs., \_\_\_\_\_ min.

HOLE SIZE: 7-7/8 inches from 0 to 1018 feet

\_\_\_\_\_ inches from \_\_\_\_\_ to \_\_\_\_\_ feet

\_\_\_\_\_ inches from \_\_\_\_\_ to \_\_\_\_\_ feet

SCREEN SIZE: \_\_\_\_\_ inches from \_\_\_\_\_ to \_\_\_\_\_ feet

WATER ZONES: from \_\_\_\_\_ to \_\_\_\_\_ feet  
from \_\_\_\_\_ to \_\_\_\_\_ feet  
from \_\_\_\_\_ to \_\_\_\_\_ feet

\_\_\_\_\_ inches from \_\_\_\_\_ to \_\_\_\_\_ feet

\_\_\_\_\_ inches from \_\_\_\_\_ to \_\_\_\_\_ feet

CASE SIZE: 4 1/2 inches from 2 to 1014 feet

WATER: Color \_\_\_\_\_ Taste \_\_\_\_\_  
Odor \_\_\_\_\_ Temp. \_\_\_\_\_ °F

\_\_\_\_\_ inches from \_\_\_\_\_ to \_\_\_\_\_ feet

\_\_\_\_\_ inches from \_\_\_\_\_ to \_\_\_\_\_ feet

WELL TO SUPPLY: (check one) Home \_\_\_\_\_  
Farm \_\_\_\_\_ Town \_\_\_\_\_ School \_\_\_\_\_  
Industry \_\_\_\_\_ Other \_\_\_\_\_

GROUTING: Method \_\_\_\_\_

Material Class A cement Depth 1014 feet

WATER ANALYSIS AVAILABLE: Yes \_\_\_\_\_ No \_\_\_\_\_

PUMP: Type \_\_\_\_\_

Capacity \_\_\_\_\_ gal per min

DRILL CUTTINGS SAVED: Yes \_\_\_\_\_ No \_\_\_\_\_

Depth of intake \_\_\_\_\_ feet

(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.)

REMARKS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

# LOG

FURNISHED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

DEPTH (XXX) METERS		TYPE OF ROCK OR SOIL PENETRATED (gravel, clay, etc., hardness, color, etc.)	REMARKS (water, caving, shot, screen, sample, etc.)
FROM	TO		
0	64	silty fine sand	
64	95	fine-coarse sand	
95	125	glaucanitic sand	
125	134	silty sand	
134	192	fine-coarse sand	
192	201	silty fine-med. sand	
201	213	coarse-very coarse sand	
213	293	silty fine-coarse sand	
293	296	fine medium sand	
		<p>The descriptions of this well are unpublished. For more information, call or write:</p> <p style="text-align: center;">Virginia Polytech Inst. Geophysics Dept. Dr. Joe Lambiase (703) 961-6112</p>	

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

INTERVAL SHEET

Page 1 of 1 Well Repository No: C-220 W-5826  
 Date rec'd: Date Processed: 3/21/80 Sample Interval: from:0to:970  
 PROPERTY: Isle of Wight - Geothermal #26 Number of samples: 88  
 COMPANY: Gruy Federal Total Depth: 1078  
 COUNTY: Isle of Wight (Isle of Wight) Oil or Gas: Water: XExploratory:

From-To	From-To	From-To	From-To
0-10	250-260	500-510	*750-760
*10-20	-	*510-520	760-770
*20-30	-	520-530	*770-780
*30-40	-	530-540	*780-790
*40-50	290-300	540-550	*790-800
50-60	300-310	550-560	*800-810
*60-70	310-320	560-570	*810-820
70-80	320-330	570-580	-
*80-90	330-340	580-590	830-840
*90-100	340-350	590-600	*840-850
*100-110	350-360	600-610	*850-860
*110-120	360-370	610-620	860-870
*120-130	370-380	-	*870-880
130-140	380-390	630-640	*880-890
140-150	390-400	640-650	*890-900
*150-160	400-410	650-660	-
-	*410-420	660-670	910-920
170-180	*420-430	670-680	920-930
180-190	*430-440	680-690	-
190-200	*440-450	690-700	*940-950
200-210	*450-460	-	950-960
210-220	460-470	710-720	960-970
220-230	470-480	720-730	-
230-240	480-490	*730-740	-
240-250	*490-500	*740-750	-

Split-Wash \*Unwashed only

Owner: Isle of Wight  
Geothermal #26  
Driller: Gruy Federal  
County: Isle of Wight

W# 5826  
C# 220  
Total Depth: 1018'  
Quad: Smithfield  
Elev: 70'

Depth  
(feet)

WELL LOG

0-10 Sand - pale yellowish brown (10YR 6/2); abundant clay; medium to coarse, subangular, moderately well sorted.

10-70 Sand - moderate yellow brown (10YR 5/4); abundant clay; medium to very coarse, subangular, moderate sorting; very rare glauconite grains and rare shell fragments.

70-80 Sand - pale yellowish brown (10YR 6/2); abundant clay; medium to coarse, subangular, moderate sorting.

80-90 Sand - pale yellowish brown (10YR 7/2); abundant clay; medium to coarse, subangular, moderate sorting; very rare glauconite; 2% shell fragments - Dentalium, Nucula.

90-100 Sand - light olive gray (5Y 5/2); abundant clay; medium to very coarse, subangular, moderate sorting; 35% shell fragments - Turritella, pectens.

100-110 Sand, Shelly - light olive gray (5Y 5/2); 60% shell fragment; abundant clay; fine to granule, subangular, moderate sorting; 10% fine phosphate fragments; shells - gastropod, dentalium - 2 species; oyster, coral (cup).

110-120 Sand - moderate yellow brown (10YR 5/4); abundant clay; fine to coarse, subangular, moderate sorting; 3% fine phosphate; 5% fine shell fragments - Turritella.

120-150 Sand - light olive gray (5Y 5/2); moderate clay; medium to coarse, subangular, well sorted; 10% phosphate fragments; shell fragments 10% at 120-130; 130-150 - 8%; echinoderm spines; forams; bryozoa at 140-150.

150-160 Sand, Shelly - light olive gray (5Y 5/2); 50% shell fragments; moderate clay; fine to coarse; subangular, moderate sorting; 10% phosphate fragments; shells - Venicardia, Turritella, Yoldia, gastropod; madreporite.

160-170 No Sample.

170-180 Sand - light olive gray (5Y 5/2); moderate clay; fine to coarse, subangular, moderate sorting; 10% phosphate fragments; 20% shell fragments; echinoderm spines; forams - Textularia.

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Depth  
(feet)

- 180-190 Sand - moderate yellow brown (10YR 6/3); abundant clay; medium to coarse, subangular, moderate sorting; 10% phosphate fragments; 10% shell fragments - Anomia.
- 190-210 Sand, Shelly - light olive gray (5Y 5/2) at 190-200 and moderate yellow brown (10YR 6/3) at 200-210; 50% shell fragments; abundant clay; medium with some very fine and some very coarse, subangular, moderate sorting; 10% phosphate fragment.
- 210-230 Sand, Shelly - light olive gray (5Y 6/2); 70% shell fragments; moderate clay; fine to coarse with some very coarse, subangular, moderate sorting; 10% fine phosphate fragments.
- 230-240 Sand - moderate yellow brown (10YR 6/3); moderate clay; medium, subangular, well sorted; 5% fine phosphate fragments; 5% fine shell fragments.
- 240-260 Sand, Shell - moderate yellow brown (10YR 6/3); 50% shell fragments; moderate clay; medium at 240-250 and fine to coarse at 250-260; subangular, well to moderate sorting; 8% fine phosphate fragments; echinoderm spines; gastropods; Architectonica; forams - Nonion; teeth and bone fragments; manta teeth.
- 260-290 No Sample.
- 290-310 Sand, Glauconitic - light and dark gray; 50% glauconite; sparse clay; medium to coarse with some granules, subangular, moderate sorting; rare shell fragments; feldspar.
- 310-410 Sand, Glauconitic - dark grayish green (5GY 4/1); 80% glauconite, 70% at 320-330, some weathered; traces of clay; fine and coarse until 330-340, then fine to coarse; subangular with some angular at 380-410, moderate sorting; feldspar.
- 410-420 Sand - yellowish gray (5Y 7/2); abundant clay; fine to coarse, subangular, moderate sorting; rare glauconite; 1% fine shell fragments.
- 420-550 Sand - light and dark gray; trace of clay until 480-490 then sparse clay; fine to very coarse, at 520-530; medium with some fine and some very coarse and very coarse mostly from 430-450; subangular, moderate sorting; 25% glauconite, 20% at 460-470, 10% at 470-500, 8% at 500-520, and 5% at 520-550; shell fragments - 3% from 420-520, then 1% and 5% from 530-550; garnet.

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Depth  
(feet)

550-560 Sand - pale yellowish brown (10YR 6/2); abundant clay; fine to very coarse, subangular, moderate sorting; 5% glauconite; 5% shell fragments; garnets.

560-580 Sand - light and dark gray; moderate clay; fine to very coarse, subangular, moderate sorting; 5% glauconite; 3% shell fragments.

580-620 Sand - light and dark gray; sparse clay at 580-590, then very sparse clay; fine to coarse at 580-590 then fine and coarse, subangular, moderate sorting; 2% glauconite; 1% shell fragments.

620-630 No Sample.

630-650 Sand - pale yellow brown (10YR 6/2); abundant clay; medium mostly with some fine and coarse, subangular, moderate sorting; rare glauconite and shell fragments.

650-660 No Sample.

660-670 Sand - light and dark gray; trace of clay; very coarse with few smaller grains, subangular, moderate sorting; 3% glauconite; 1% shell fragments; garnet.

670-680 Sand - light and dark gray, sparse clay in clasts of dark yellow brown (10YR 5/6); very coarse, subangular, moderate sorting; 1% glauconite and shell fragments; garnet.

680-700 Sand - light and dark gray; trace clay; very fine to very coarse, subangular, moderate sorting; 1% glauconite and shell fragments; garnet.

700-710 No Sample.

710-720 Sand - light and dark gray; trace clay; very fine to very coarse, subangular, moderate sorting; 1% glauconite and shell fragments; garnet.

720-730 Sand - light and dark gray; trace clay; fine to coarse and granules, subangular, poorly sorted; rare glauconite; 5% large shell fragments; garnet.

730-740 No Sample.

Owner: Isle of Wight  
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Depth  
(feet)

740-760 Sand - light and dark gray; rare clay; granules with a few smaller grains, subangular, well sorted; rare glauconite; 5-10% shell fragments; garnet.

760-790 Sand - light and dark gray; abundant clay in clasts; granules at 760-770 and fine to granule from 770-790; subangular, moderate at 760-770, poor for the rest; rare glauconite; 10% shell fragments; garnet.

790-800 Sand - light and dark gray; moderate clay; fine to granular, subangular, poor sorting; rare glauconite; 5% shell fragments; garnet.

800-820 Sand - light and dark gray; abundant clay; fine to granular, subangular, moderate sorting; rare glauconite; 5% shell fragments; garnet.

820-830 No Sample.

830-840 Sand - pale yellow brown (10YR 7/2); abundant clay; medium to very coarse, subangular, moderate sorting; rare glauconite and shell fragments.

840-880 Sand - pale yellowish brown (10YR 7/2); abundant clay; medium to granule, subangular, moderate sorting 740-750, poor at 750-770 and moderate at 770-780; rare glauconite; few shell fragments until 750-760 then 3%.

880-890 Sand - mixed colors; abundant clays - red, gray, brown clasts; medium to very coarse, subangular, moderate sorting; rare glauconite/shell fragments.

890-900 Sand - pale yellowish brown (10YR 6/2); abundant clay; medium to very coarse, subangular, moderate sorting; rare glauconite/shell fragments.

900-910 No Sample.

910-920 Sand - pale yellowish brown (10YR 7/2); abundant clay; fine to coarse with some very coarse, subangular, moderate sorting; rare glauconite/shell fragments.

920-970 Sand - pale yellowish brown (10YR 7/2); moderate clay, fine to granule, subangular with some angular, moderate sorting; rare glauconite/shell fragments; garnet.

930-940 No Sample.

970-1018 No Sample.

Logged by: J. K. Polzin  
October 20/21, 1980