

C1 6153

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

1 2 3 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

COUNTY NUMBER

ST/CO USE ONLY DATE Received MM DD YY

DATE WELL COMPLETED

Depth of Well

PERMIT NO. FROM "PERMIT TO DRILL WELL"

OWNER CRAIG NESSLY STREET OR RFD 6570 BELMONT WOODS RD TOWN ELK RIDGE SUBDIVISION SECTION LOT

WELL LOG

Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

Table with columns: DESCRIPTION (Use additional sheets if needed), FEET (FROM, TO), check if water bearing. Includes handwritten entries: Top Soil, Brown slate, Grey slate, Granite.

Installed loop & backfilled from 450-0 Bentonite slurry

GROUTING RECORD

WELL HAS BEEN GROUTED (Y/N) TYPE OF GROUTING MATERIAL (Cement, Bentonite Clay) NO. OF BAGS, NO. OF POUNDS, GALLONS OF WATER, DEPTH OF GROUT SEAL

CASING RECORD

casings types insert appropriate code below (ST, CO, PL, OT) MAIN CASING TYPE, Nominal diameter top (main) casing, Total depth of main casing

OTHER CASING (if used)

Table for other casing with columns: diameter inch, depth (feet) from, to

SCREEN RECORD

screen type or open hole (ST, BR, HO, PL, OT) insert appropriate code below

DEPTH (nearest ft.)

Table for depth with columns: 1-11, 15-17, 21-24, 26-32, 36-38, 39-41, 45-47, 51-53. Includes handwritten values: 28, 600.

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER) T (E.R.O.S.) W Q

TELESCOPE CASING LOG INDICATOR OTHER DATA

C 3

PUMPING TEST

HOURS PUMPED (nearest hour) 8 9 PUMPING RATE (gal. per min.) 11 15 METHOD USED TO MEASURE PUMPING RATE WATER LEVEL (distance from land surface) BEFORE PUMPING 17 20 ft. WHEN PUMPING 22 25 ft. TYPE OF PUMP USED (for test) A air, P piston, T turbine, C centrifugal, R rotary, O other, J jet, S submersible

PUMP INSTALLED

DRILLER INSTALLED PUMP (CIRCLE) YES NO IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS. TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29. CAPACITY: GALLONS PER MINUTE (to nearest gallon) 31 35 PUMP HORSE POWER 37 41 PUMP COLUMN LENGTH (nearest ft.) 43 47 CASING HEIGHT (circle appropriate box and enter casing height) (+) above, (-) below LAND SURFACE (nearest foot) 2

LOCATION OF WELL ON LOT

SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND /OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)

See plot

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

B 1 2691
1 2 3 6

SEQUENCE NO.
(MDE USE ONLY)

STATE OF MARYLAND
APPLICATION FOR PERMIT TO DRILL WELL
531888 please type

STATE PERMIT NUMBER
HO-95-1802
70 fill in this form completely 79

Date Received (APA) 11177
OWNER INFORMATION
8 MM DD YY 13
CRAIG NESSLY
15 Last Name Owner First Name 34
6570 BELMONT WOODS ROAD
36 Street or RFD 55
ELKRIDGE, MD 21075
57 Town 70 State 72 Zip 76

B 3 LOCATION OF WELL
Howard
8 COUNTY 21
23 SUBDIVISION 42
SECTION 44 46 LOT 48 50
Elkridge
52 NEAREST TOWN 71
MILES FROM TOWN (enter 0 if in town) 73 76 77 78

DRILLER INFORMATION
George F. Easterday M W D 040
Driller's Name 76 License No. 81
L. Franklin Easterday, Inc.
Firm Name
9265 Brown Church Rd., MT. Airy, Md. 21771
Address
George F. Easterday 8/18/2009
Signature Date

B 4
1 2
DIRECTION OF WELL FROM TOWN (CIRCLE BOX)
6570 Belmont Woods Road
11 NEAR WHAT ROAD 30
ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)
NORTH N
WEST W EAST E
SOUTH S
34 90 37
DISTANCE FROM ROAD
ENTER FT OR MI 38 39
TAX MAP: 32 BLK: 19 PARCEL 7

B 2 WELL INFORMATION
1 2
APPROX. PUMPING RATE (GAL. PER MIN.) 5
8 12
AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 500
14 20

USE FOR WATER (CIRCLE APPROPRIATE BOX)
D DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION
F FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)
22 I INDUSTRIAL, COMMERCIAL, DEWATERING
P PUBLIC WATER SUPPLY WELL
T TEST, OBSERVATION, MONITORING
G GEO-THERMAL
1 X 600'
2 X 300'

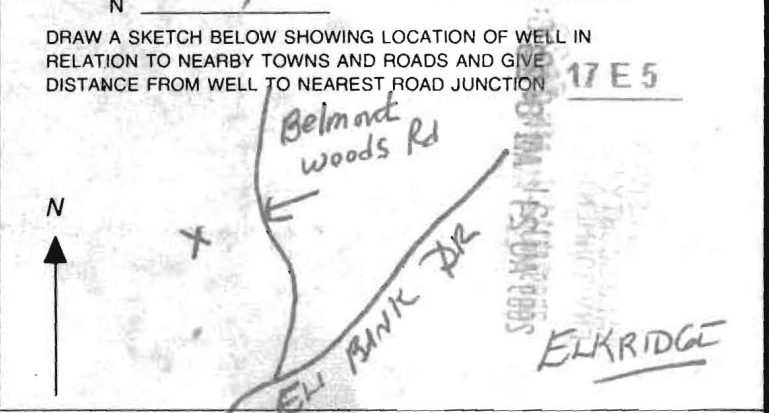
NOT TO BE FILLED IN BY DRILLER
HEALTH DEPARTMENT APPROVAL
Howard 13
COUNTY NAME COUNTY NO.
STATE SIGNATURE INSERT S 41
DATE ISSUED 9/10/09
9/10/10
43 MM DD YY 48 CO SIGNATURE EXP. DATE
NORTH GRID 50 000 EAST GRID 57 0872 000
55 63

APPROXIMATE DEPTH OF WELL 300 FEET
24 28
APPROXIMATE DIAMETER OF WELL 6 INCH
NEAREST INCH

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X
SOURCES OF DRILLING WATER
1. wells
2. wells
3. wells
WRITE THE BOX NUMBER FROM THE MAP HERE
E 870 2
N 500 4
000
000

METHOD OF DRILLING (circle one)
BORED (or Augered) JETTED Jetted & DRIVEN
30 AIR-ROTary AIR-PERCussion ROTARY (Hydraulic Rotary)
37 CABLE REVerse-ROTary DRive-POINT
other

REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX)
N THIS WELL WILL NOT REPLACE AN EXISTING WELL
Y THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
39 S THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS
D THIS WELL WILL DEEPEM AN EXISTING WELL
PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED (IF AVAILABLE) 41 52



Not to be filled in by driller (MDE OR COUNTY USE ONLY)
APPROP. PERMIT NUMBER G
PERMIT No. HO-95-1802
70 71 72 73 74 75 76 77 78 79

DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS 2430 COURT HOUSE DRIVE ELLICOTT CITY, MD 21043 PERMITS (410)313-2455 INSPECTIONS (410)313-1850	HOWARD COUNTY RESIDENTIAL HEATING-VENTILATION-AIR CONDITIONING AND REFRIGERATION PERMIT APPLICATION	HVACR PERMIT # M09000730 BUILDING PERMIT #
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BUILDING ADDRESS: 6570 Belmont Woods Rd.	SUITE/APT:	OWNERS NAME: Nessler Craig ADDRESS: 6570 Belmont Woods Rd.
SUBDIVISION: CENSUS TRACT: SECTION: LOT: TAX MAP: BLOCK: ZONE:	AREA: PARCEL:	CITY: Elkridge STATE: MD ZIP CODE: 21075
PROPERTY ID: MAP COORDINATES:		HOME PHONE: WORK PHONE:
TYPE OF IMPROVEMENT: USE:		410-796-8997 410-455-2248

<u>CHECK ONE</u>	<u>HOW MANY</u>	COMPANY NAME: Total Comfort Htg & AC
<input checked="" type="checkbox"/> SINGLE FAMILY DWELLING	<input checked="" type="checkbox"/> 1 ZONES	LICENSEE NAME: James E. Aaron
<input type="checkbox"/> SINGLE FAMILY TOWNHOUSE	<input type="checkbox"/> _____ ZONES	ADDRESS: P.O. Box 643
<input type="checkbox"/> MULTI-FAMILY / HOTEL/MOTEL	<input type="checkbox"/> _____ UNITS	CITY: Smithsburg
		STATE: MD ZIP CODE: 21783
		PHONE: 301-824-3700 HVACR LICENSE NO: SB33-01

New

Heating and Air Conditioning
 Heating System Only
 Other Work (Describe):

Replacement
 Heating
 Air Conditioning
 Heating and Air Conditioning

Additions and Alterations
 Heating
 Air Conditioning
 Heating and Air Conditioning

Removing oil furnace & A/C. Replacing with geothermal system.

Zones	Units
Permit Fee = # of Zones x \$40 = <u>40.00</u>	Permit Fee = # of Units x \$80 = _____
Technology Fee (10% of Permit Fee) = <u>4.00</u>	Technology Fee (10% of Permit Fee) = _____
Plus Application Fee <u>\$50</u>	Plus Application Fee <u>\$50</u>
Total Fees Due = <u>94.00</u>	Total Fees Due = _____

I HAVE CAREFULLY EXAMINED AND READ THIS APPLICATION AND KNOW IT IS TRUE AND CORRECT. THE WORK DESCRIBED HEREIN WILL BE PERFORMED BY A STATE HVACR LICENSED PERSON(S) INSURED TO CONTRACT WORK, AND ALL WORK WILL BE PERFORMED IN COMPLIANCE WITH APPLICABLE CODES AND STANDARDS OF HOWARD COUNTY AND THE STATE OF MARYLAND.

James E. Aaron 9/15/09
 SIGNATURE OF LICENSED CONTRACTOR DATE
 James E. Aaron

Validation	
Check Number: <u>2168</u>	
Receipt Number: <u>183725</u>	

Make check payable to: DIRECTOR OF FINANCE OF HOWARD COUNTY
 T:\Chieftan\HVACR4.WPD REV 6/17/04

Approved 9/21/09

HCHDA Kim Wolf



Bureau of Environmental Health
7178 Gateway Drive Columbia, MD 21046
(410) 313-2640 Fax (410) 313-2648
TDD (410) 313-2323 Toll Free 1-866-313-6300
website: www.hchealth.org


Peter L. Beilenson, M.D., M.P.H., Health Officer

Thursday, September 03, 2009

IMPORTANT

MEMORANDUM - Geothermal Wells

To: L. Franklin Easterday, Inc.
FILE

From: Kevin Wolf, Environmental Sanitarian 
Well and Septic Program

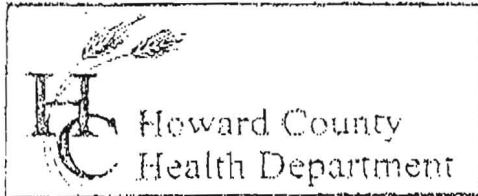
Re: **Geothermal Wells**
6570 Belmont Woods Dr., *Nessly Craig Property*

The following information needs to accompany geothermal well application permits:

- 1) A **Site Plan** that is to scale or a plan that shows nominal distances from features on the property to the geobores and indicates other pertinent features and structures on, or to be constructed on, the property; including the distances from the existing well and septic.
- 2) A **cross-sectional diagram** of the proposed geothermal well construction. This should be a simplified drawing or sketch of the bore/s and is required for approval.

Remember, bentonite alone should be mixed at a ratio of 2 lbs or greater per gallon of water. If *thermal-enhanced* grout is to be used, remember to follow manufactures specifications when mixing. Health Department officials can inspect this grout by requesting the well driller to collect a sample of the grout in a bucket. If it the sand settles out within 1 hour, the grout mix is improper. Thermal enhanced bentonite grouts are a mixture of bentonite and quartz sand. The sand stays suspended in the clay for the life of the well. Please refer to the NGWA published article "Guidelines for the Construction of Vertical Boreholes for Closed Loop Heat Pump Systems" (1997)

Any questions please feel free to call me. 410-313-1771



3525 H Ellicott Mills Drive, Ellicott City, MD 21043
(410) 313-2640 Fax (410) 313-2648
TDD (410) 313-2323 Toll Free 1-866-313-6300
website: www.hchealth.org

Penny E. Borenstein, M.D., M.P.H., Health Officer

TO ALL INTERESTED PARTIES

When submitting a well permit application for a proposed well for new construction, please indicate one of the following:

- The well site has been staked by Own Dep.
(professional land surveyor or company employing professional land surveyors)
on 8-18-09 (date) and does not require a site inspection.
- The well driller, builder or property owner will call the Health Department to schedule a time to meet in the field to verify the proposed well site location.

This sheet, along with two copies of an acceptable well site plan, must be attached to the green well permit application.

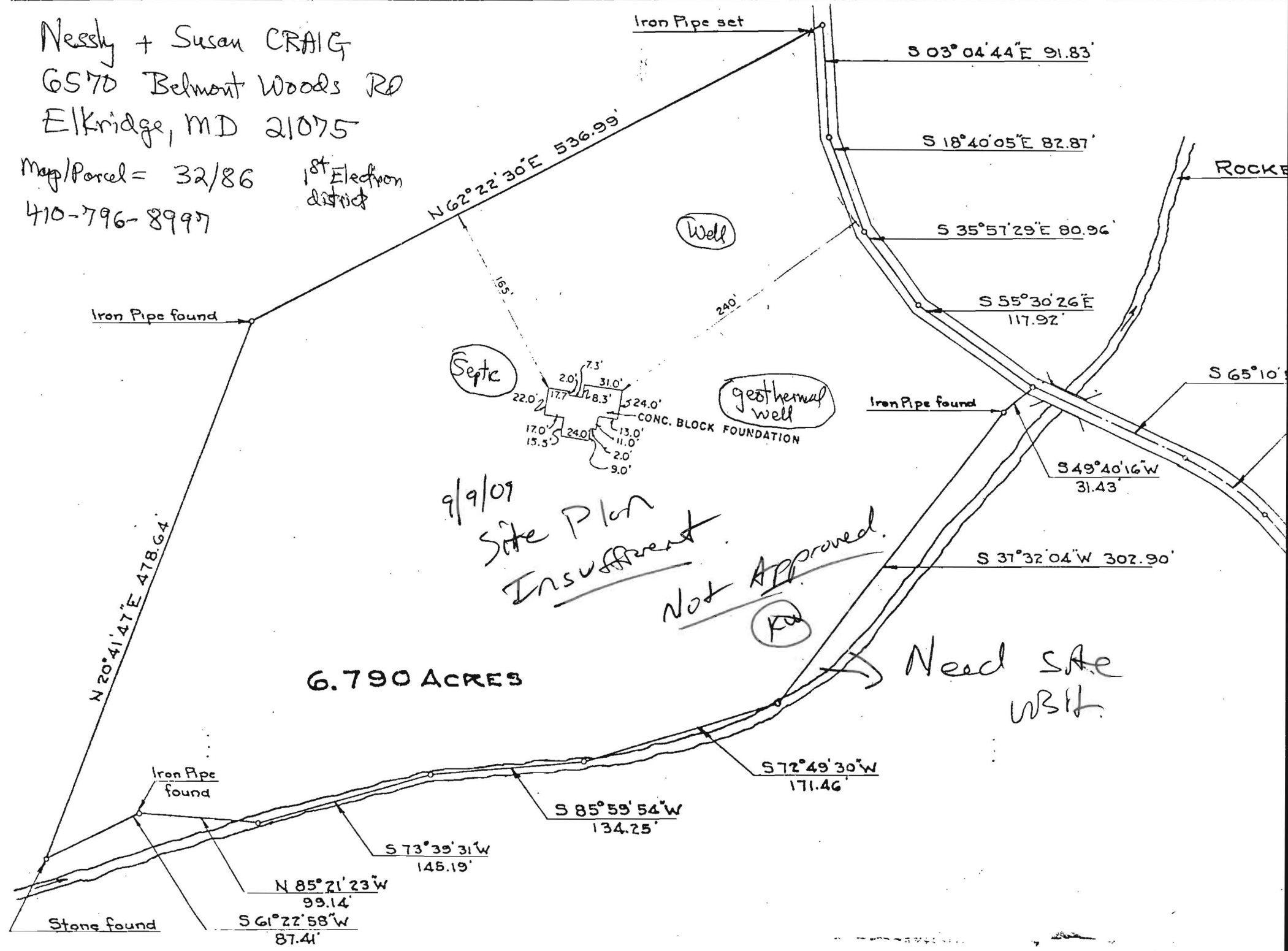
Revised 6/10/03

DRILLING 1600 FOOT well for
CLOSED LOOP GEO Thermal - Installing
loop - Backfilling from the bottom
up with Bentonite Slurry -

6570 Belmont Woods Rd
Elkridge Md - 21075

Nessly + Susan CRAIG
6570 Belmont Woods RD
Elkridge, MD 21075

Map/Parcel = 32/86 1st. Electron district
410-796-8997



6.790 ACRES

9/9/09
Site Plan
Insufficient
Not Approved
KA

Need SAE
with

SITE INSPECTION SHEET

OWNER: Nessly Craig PHONE #: _____

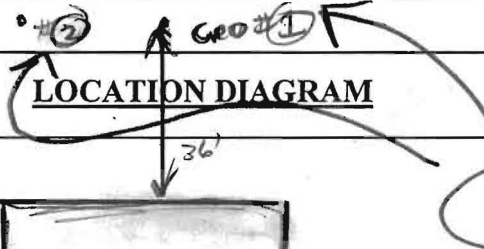
ADDRESS: 6570 Belmont Woods Dr. CONTRACTOR: Easterday

WELL TAG #: _____

SUBDIVISION: _____ LOT: _____ COUNTY #: (13)

PROPOSAL: _____

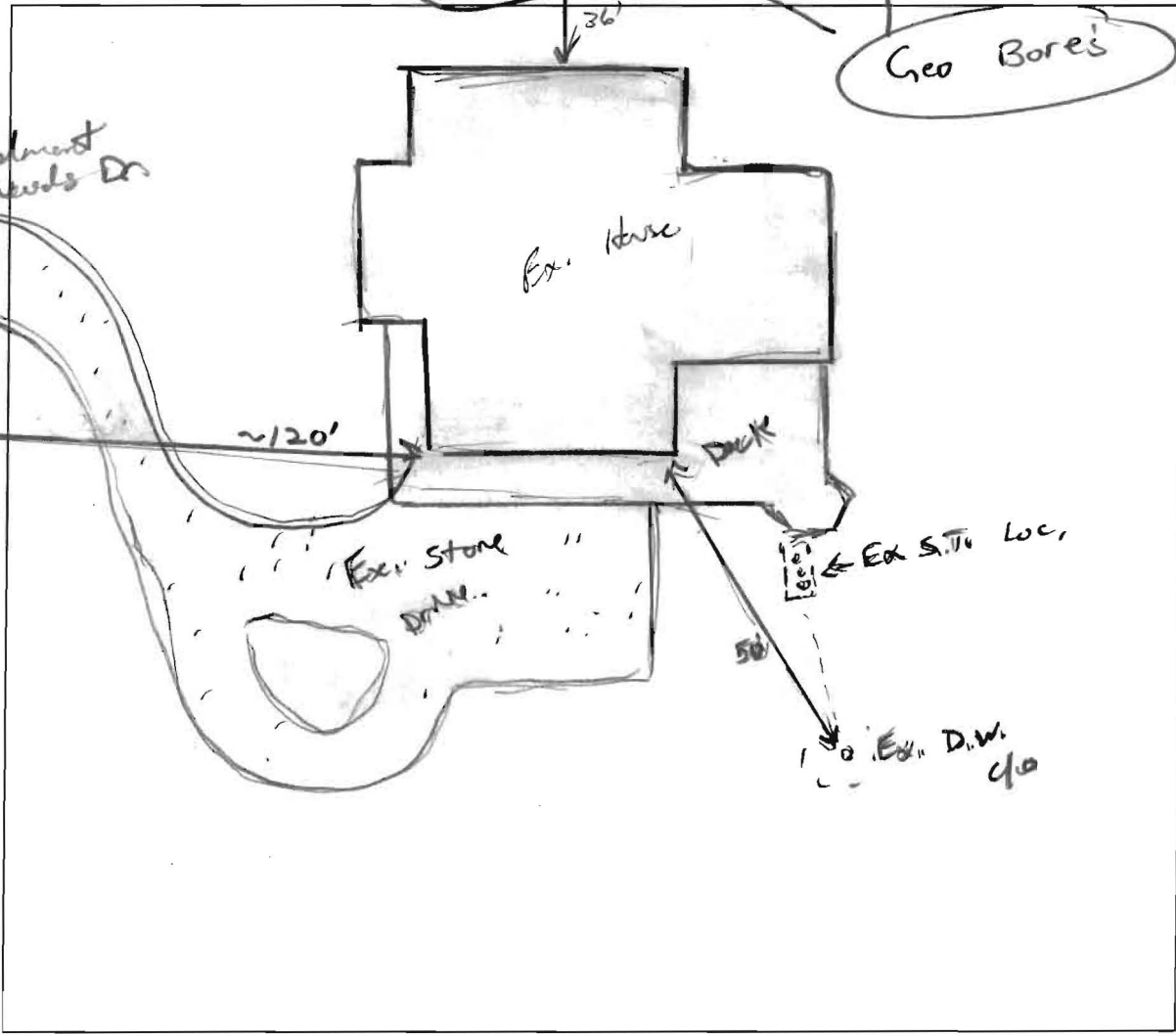
Geothermal



Geo Bore's

← To Belmont Woods Dr

← Ex. Well



COMMENTS: Proposed Geo s/ts OK.

DATE: 9/9/09 INSPECTOR: [Signature]