

C1 9337

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT

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

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

COUNTY NUMBER

ST/CO USE ONLY DATE RECEIVED

DATE WELL COMPLETED

Depth of Well

PERMIT NO. FROM "PERMIT TO DRILL WELL"

OWNER LESSING, Michael STREET OR RFD 12533 Holly Quarter Road TOWN Glenelg 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, FEET (FROM, TO), check if water bearing. Includes handwritten entries: Soft Brown, Med hard Tan, hrd limestone, Hard Gray.

GROUTING RECORD

WELL HAS BEEN GROUTED (Y/N) TYPE OF GROUTING MATERIAL (Cement CM, Bentonite Clay BC) NO. OF BAGS 25 NO. OF POUNDS 1250

CASING RECORD

MAIN CASING TYPE (Steel ST, Concrete CO, Plastic PL, Other OT) Nominal diameter top (main) casing (nearest inch) Total depth of main casing (nearest foot)

OTHER CASING (if used)

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

SCREEN RECORD

screen type or open hole (Steel ST, Brass BR, Open Hole HO, Plastic PL, Other OT) insert appropriate code below

Table for screen record with columns: E A C H S C R E E N, DIAMETER OF SCREEN (NEAREST INCH), SLOT SIZE 1 2 3

C 3

PUMPING TEST

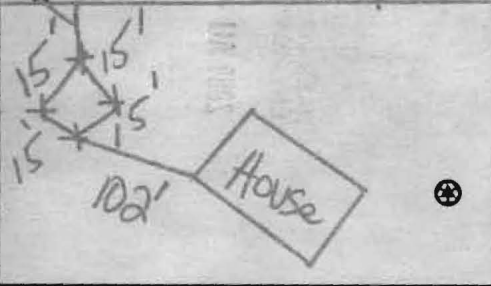
HOURS PUMPED (nearest hour) 8 9 PUMPING RATE (gal. per min.) 11 15 METHOD USED TO MEASURE PUMPING RATE WATER LEVEL (distance from land surface) BEFORE PUMPING 17 20 ft. WHEN PUMPING 22 25 ft. TYPE OF PUMP USED (for test) A air, P piston, T turbine, C centrifugal, R rotary, O other, J jet, S submersible

PUMP INSTALLED

DRILLER INSTALLED PUMP (CIRCLE) (YES or 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) 49 51

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) PL



NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED (Y/N)

- A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
E ELECTRIC LOG OBTAINED
P TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT...

DRILLERS LIC. NO. 1 MW D 304

DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO. 1 MW D 564

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

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

70 72 74 75 76 TELESCOPE CASING LOG INDICATOR OTHER DATA

C 7405

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 4 5 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

COUNTY NUMBER 13 A24418

ST/CO USE ONLY DATE RECEIVED

DATE WELL COMPLETED 02 30 07

Depth of Well 2200 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" HO-95-1161

OWNER Lessing Michael STREET OR RFD 12535 Folly Quarter Road TOWN Ellicott City SUBDIVISION Glenelg Manor SECTION LOT 4A

WELL LOG table with columns: DESCRIPTION, FEET (FROM, TO), check if water bearing. Rows include Soft Brown, Broken Limestone, Hard Limestone, Med Hard Limestone, Soft Brown chips, Med Hard Tan, Hard Limestone.

GROUTING RECORD form including: WELL HAS BEEN GROUTED (Y), TYPE OF GROUTING MATERIAL (CM, BC), NO. OF BAGS (115), NO. OF POUNDS (1210), GALLONS OF WATER (515), DEPTH OF GROUT SEAL (93).

CASING RECORD form including: casing types (ST, CO, PL, OT), MAIN CASING TYPE (ST), Nominal diameter (6), Total depth (95).

OTHER CASING (if used) section with diameter and depth fields.

SCREEN RECORD form including: screen type (ST, BR, HO, PL, OT), screen type (ST), BRASS, OPEN HOLE, PLASTIC, OTHER.

DEPTH (nearest ft.) table with rows for casing sections and slot size (25).

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED YES (Y) NO (N)

- CIRCLE APPROPRIATE LETTER: A (abandoned), E (electric log), P (production well)

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT...

DRILLERS LIC. NO. 1 M D 304 David Kelly

DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO. 1 MW D 564

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

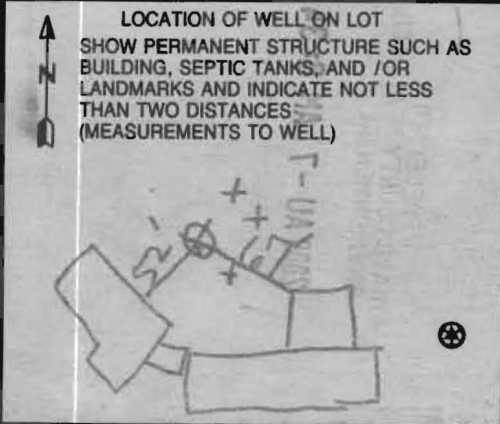
GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

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

TELESCOPE CASING LOG INDICATOR OTHER DATA

PUMPING TEST form including: HOURS PUMPED (3), PUMPING RATE (30.0), METHOD USED TO MEASURE PUMPING RATE (Timer), WATER LEVEL (32, 38), TYPE OF PUMP USED (S) submersible.

PUMP INSTALLED form including: DRILLER INSTALLED PUMP (YES), TYPE OF PUMP INSTALLED (S), CAPACITY: GALLONS PER MINUTE (31, 35), PUMP HORSE POWER (37, 41), PUMP COLUMN LENGTH (43, 47), CASING HEIGHT (2).

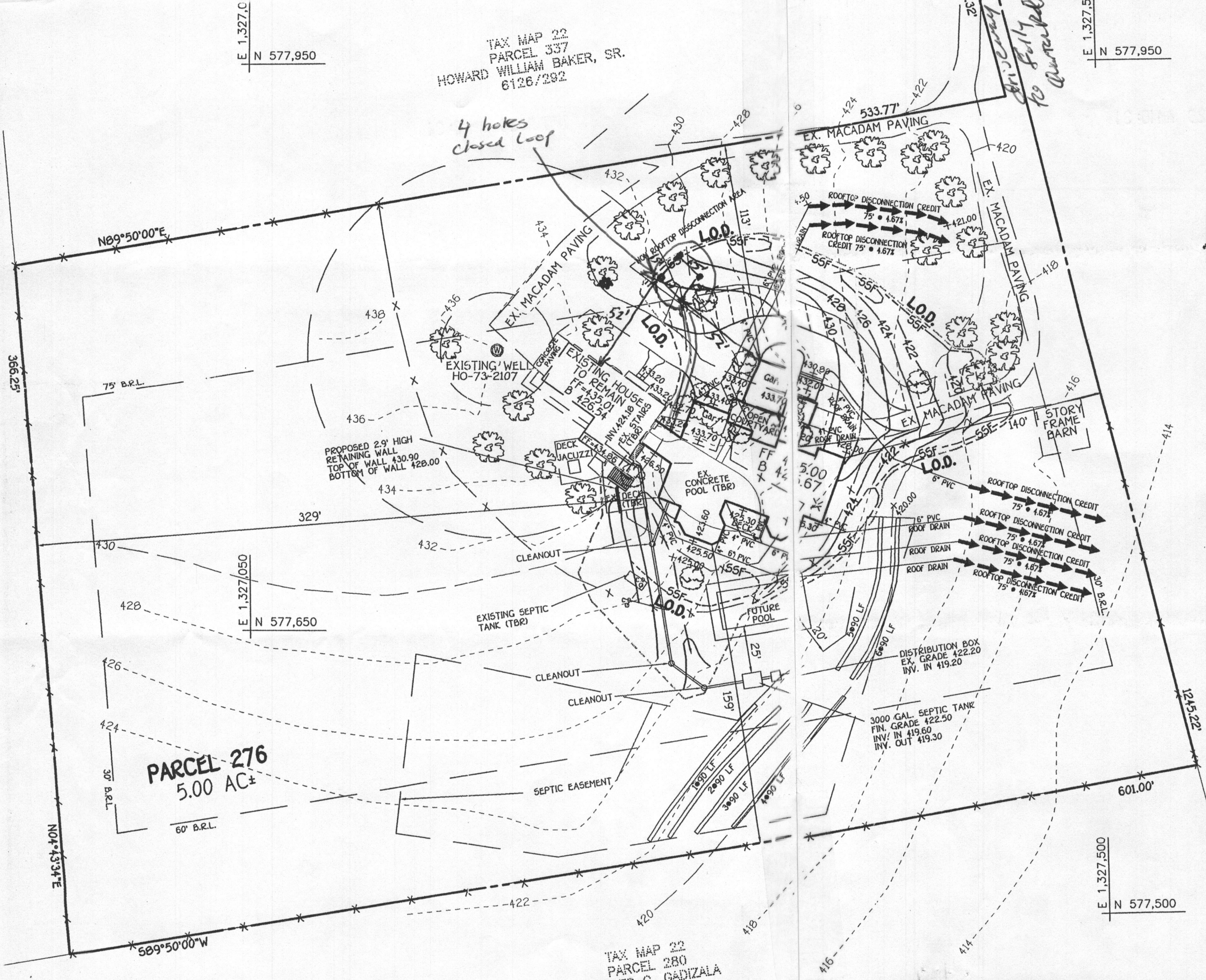


E 1,327.0  
N 577,950

TAX MAP 22  
PARCEL 337  
HOWARD WILLIAM BAKER, SR.  
61.26/292

E 1,327.50  
N 577,950

SCALE: 1"=30'  
NAD 83/91  
NAVD 88



4 holes  
closed loop

Owner: Michael W. Lessing  
Abdula Suna  
6224 Briar Ct  
Elkridge, Md 21075

Written: The Griffmore Group  
13554 Tridelpia Rd.  
Ellicott City, Md 21042  
- Wm. DeMarco 443-277-3233  
NOVIATE OF FRANCISCAN FATHERS  
MINOR CONVENTUALS OF MARYLAND,  
L 133 F. 236  
ZONED RC-DEO

well exhibit  
Hb-95-1161

Scale 1" = 50'

PARCEL 276  
5.00 AC±

TAX MAP 22  
PARCEL 280  
CHARLES G. GADIZALA  
717/255

B 1 7009

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL

STATE PERMIT NUMBER

HO-95-1161 fill in this form completely

537236 please type

Date Received (APA)

OWNER INFORMATION

8 MM DD YY 13
Lessing Michael
15 Last Name Owner First Name 34
6224 Briar Court
36 Street or RFD 55
Elkridge MD 21075
57 Town 70 State 72 Zip 76

B 3

LOCATION OF WELL

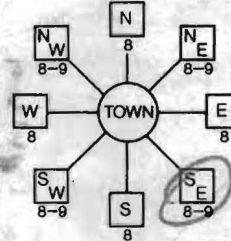
8. COUNTY Howard
23 SUBDIVISION Glenelg Manor
SECTION 44 46 LOT 48 50
52 NEAREST TOWN Glenelg
MILES FROM TOWN (enter 0 if in town) 1 M I 73 76 77 78

DRILLER INFORMATION

David Kelly M W D 304
Driller's Name 76 License No. 81
Jones Well Drilling, Inc.
Firm Name
3700 Rush Rd. - Arr MD 21084
Address
David Kelly 6/19/07
Signature Date

B 4

DIRECTION OF WELL FROM TOWN (CIRCLE BOX)



12533
Folly Quarter Road
11 NEAR WHAT ROAD 30

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)



34 360 37
DISTANCE FROM ROAD 38 39
ENTER FT OR MI FT

TAX MAP: 22 BLK: 23 PARCEL 276

B 2

WELL INFORMATION

APPROX. PUMPING RATE (GAL. PER MIN.) 8 12
AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 14 20

USE FOR WATER (CIRCLE APPROPRIATE BOX)

- D DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION
F FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION
I INDUSTRIAL, COMMERCIAL, DEWATERING
P PUBLIC WATER SUPPLY WELL
T TEST, OBSERVATION, MONITORING
G GEO-THERMAL 4 holes, closed loop

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Howard (3) A24418
COUNTY NAME COUNTY NO.
STATE SIGNATURE INSERT S 41
DATE ISSUED 7/27/2007 Brian Baber 7/27/2008
43 MM DD YY 48 CO SIGNATURE EXP. DATE
NORTH GRID 50 517 000 EAST GRID 57 815 000

APPROXIMATE DEPTH OF WELL 400 FEET
APPROXIMATE DIAMETER OF WELL 6 INCH NEAREST

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

- SOURCES OF DRILLING WATER
1.
2.
3.

METHOD OF DRILLING (circle one)

BORED (or Augered) JETTED Jetted & DRIVEN
AIR-ROTary AIR-PERCussion ROTARY (Hydraulic Rotary)
CABLE REVERSE-ROTary DRIVE-POINT
other

WRITE THE BOX NUMBER FROM THE MAP HERE

E 8145
N 5147

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
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

DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION



PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED (IF AVAILABLE) 41

Not to be filled in by driller (MDE OR COUNTY USE ONLY)

APPROX. PERMIT NUMBER G
PERMIT No. HO-95-1161

SPECIAL CONDITIONS Barehole Must Be Fully Grouted From Bottom to Top

With Approved Grout Submit Completion Report For Each Well

**HOWARD COUNTY HEALTH DEPARTMENT  
BUREAU OF ENVIRONMENTAL HEALTH  
WATER AND SEWERAGE PROGRAM  
TEL: (410)313-2640 FAX: (410)313-2648**

**Information Form for the Installation of the Well Pump, Pitless Adapter, and Supply Piping**

**NOTE: The installer is responsible for requesting an inspection prior to 9 am on the day of the desired inspection. No work is to be covered until approved by the Health Department. All installations must comply with the National Standard Plumbing Code (NSPC, as amended locally) and COMAR 26.04.04 (MD Well Construction Regulations). Submission of a complete form is required prior to Use and Occupancy approval.**

Company Name: \_\_\_\_\_ Telephone #: \_\_\_\_\_  
Address: \_\_\_\_\_  
\_\_\_\_\_

(Must circle one) Licensed Plumber      Licensed Well Driller      Licensed Well Pump Installer

License # and name of individual responsible for the field installation:

Name (Print): \_\_\_\_\_ License# \_\_\_\_\_

**\*A licensed individual must perform the actual installation. Apprentices must be under the direct supervision of a licensed journeyman or master plumber, pump installer or well driller. Licenses may be subjected to field verification.**

Name of Property Owner: \_\_\_\_\_ Telephone #: \_\_\_\_\_  
Subdivision: \_\_\_\_\_ Lot #: \_\_\_\_\_ Well Tag #: HO 73-2107  
Site Address: 12533 Folly Quarter Rd.

**Submersible Pump Data**

Make: \_\_\_\_\_  
Model #: \_\_\_\_\_  
Pump Capacity \_\_\_\_\_ GPM  
Well Yield: \_\_\_\_\_ GPM

**Pitless Adapter**

Make: \_\_\_\_\_  
Model#: \_\_\_\_\_  
Depth: \_\_\_\_\_ (36" min)  
NSF approved: \_\_\_\_\_

**Well Cap and Electric Conduit**

Two piece watertight cap: \_\_\_\_\_  
Screened, vented well cap: \_\_\_\_\_  
Cap secured to casing: \_\_\_\_\_  
Conduit min 18" B.G.: \_\_\_\_\_  
Conduit secured to well cap: \_\_\_\_\_

Depth of well encountered at time of pump installation: \_\_\_\_\_ (feet)  
If pump capacity exceeds well yield, a low water cut off switch is required by NSPC 1990 Section 17.8.4

Torque arrestors or Cable guards are required - Must circle one  
Safety rope, if used, attached to inside of well casing with eye bolt \_\_\_\_\_

**Piping to house**

Type: \_\_\_\_\_  
PSI: \_\_\_\_\_ (160 psi min)  
Depth of supply line: \_\_\_\_\_ (36" min)

**House Connection**

PVC sleeved to undisturbed soil at wall penetration: \_\_\_\_\_  
Approximate length of sleeve: \_\_\_\_\_  
Sleeve caulked and sealed properly: \_\_\_\_\_

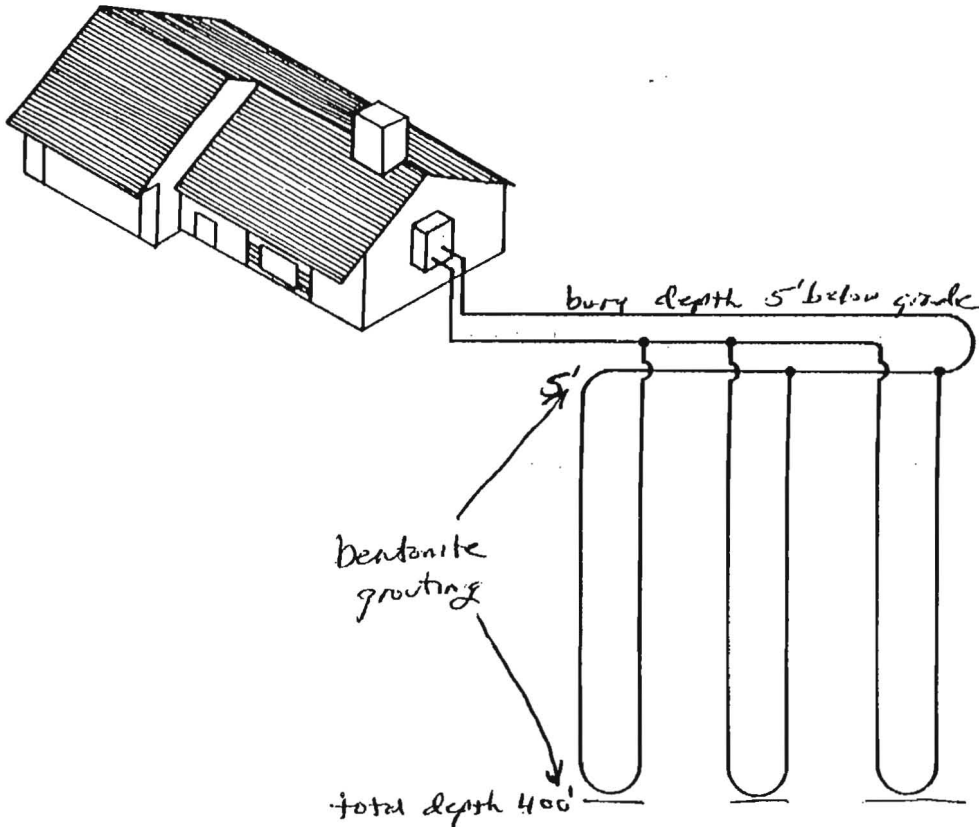
**The water supply line is required to be at least ten feet from the septic tank, pump chamber, sewage piping, distribution box, drainfields, and sewage reserve area. If this cannot be accomplished, contact this office for approval prior to installation.**

Signature of company representative responsible for installation \_\_\_\_\_ date \_\_\_\_\_

**For Health Department Use Only - Not to be completed by Installer**

Date Insp. Requested: \_\_\_\_\_ Date Insp. Approved: 11/19/08 BB  
Inspection Data: Pitless adapter and water supply line at least 36" below grade   
Two piece cap installed and attached to casing securely   
Elec. conduit extends at least 18" below grade/attached to cap properly   
Safety rope installed inside of well casing   
Correct well tag attached properly and casing 8" above finished grade No Tag  
Water supply line sleeved adequately at house connection   
Adequate grout observed below pitless adapter

Howard  
County



Earth Coil Type: Vertical - Single U-Bend

Water Flow: Parallel

Pipe Sizes: 1 1/4" double Loop

Bore Lengths: 400' x 4 holes (1600' vertical bore)

Pipe Lengths: 800' x 4 (3200' vertical pipe)

FIGURE 4.5: Parallel Vertical Ground Heat Exchanger