

C1 1920

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE TYPE

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)

ST/CO USE ONLY
DATE Received
MM DD YY

DATE WELL COMPLETED
JUNE 16 08

Depth of Well
22 605 26
(TO NEAREST FOOT)

COUNTY NUMBER

PERMIT NO.
FROM "PERMIT TO DRILL WELL"
HO - 95 - 1630

OWNER BERG ROBERT
STREET OR RFD 12844 MACBETH FARM LANE TOWN CLARKSVILLE MD
SUBDIVISION MACBETH FARMS SECTION LOT 8

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. Rows include DIRT, BR & RED CLAY, SOFT BR SAND, etc.

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

MAIN CASING TYPE (ST, PL)
Nominal diameter top (main) casing, Total depth of main casing

OTHER CASING (if used)

Table for other casing with columns for diameter and depth.

SCREEN RECORD

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

DEPTH (nearest ft.)

Table for depth measurements at various intervals (8, 9, 11, 15, 17, 21, etc.)

GRAVEL PACK IF WELL DRILLED IF WELL FLOWING WELL INSERT F IN BOX 88

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) 4
PUMPING RATE (gal. per min.) 5
METHOD USED TO MEASURE PUMPING RATE BUCKET
WATER LEVEL (distance from land surface) BEFORE PUMPING 46 ft, WHEN PUMPING 22 ft

PUMP INSTALLED

DRILLER INSTALLED PUMP (YES/NO)
TYPE OF PUMP INSTALLED (A, C, J, P, R, S, T, O)
CAPACITY: GALLONS PER MINUTE 31
PUMP HORSE POWER 37
PUMP COLUMN LENGTH 41
CASING HEIGHT 43

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)
Handwritten notes: Macbeth Farm Lane, Home, etc.

NUMBER OF UNSUCCESSFUL WELLS: FOOT 0

WELL HYDROFRACTURED (Y/N)

CIRCLE APPROPRIATE LETTER
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 M D 296
DRILLERS SIGNATURE (Must match signature on application)

LIC. NO. 1 M D 296

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

B 1 9758
1 2 3 6

SEQUENCE NO.
(MDE USE ONLY)

STATE OF MARYLAND
PERMIT TO DRILL WELL

STATE PERMIT NUMBER

HO-95-1630
fill in this form completely

W528977
please print or type

Date Received (APA)

8 MM DD YY 13

OWNER INFORMATION

BERG ROBERT
15 Last Name Owner First Name 34
12844 MACBETH FARM LANE
36 Street or RFD 55
CLARKSVILLE MARYLAND 21029
57 Town 70 State 72 Zip 76

DRILLER INFORMATION

RONALD KYKER MW D 296
Driller's Name 76 License No. 81
WESTMINSTER WELL DRILL INC
Firm Name
P.O. BOX 861 WESTMINSTER MD 21157
Address
Ronald Kyker MAY 29-08
Signature Date

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

USE FOR WATER (CIRCLE APPROPRIATE BOX)

- DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION
- FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)
- INDUSTRIAL, COMMERCIAL, DEWATERING
- PUBLIC WATER SUPPLY WELL
- TEST, OBSERVATION, MONITORING
- GEO-THERMAL

APPROXIMATE DEPTH OF WELL 500 FEET
24 28

APPROXIMATE DIAMETER OF WELL 6 INCH NEAREST

METHOD OF DRILLING (circle one)

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

REPLACEMENT OR DEEPEMED WELLS
(CIRCLE APPROPRIATE BOX)

- THIS WELL WILL NOT REPLACE AN EXISTING WELL
 - THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
 - THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS
 - THIS WELL WILL DEEPEEN 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
PERMIT No. HO-95-1630
70 71 72 73 74 75 76 77 78 79

SPECIAL CONDITIONS

NOTE - APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED

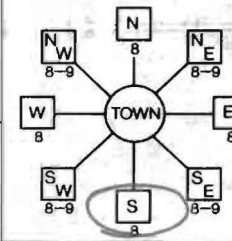
Radium Sample Required?

B 3 LOCATION OF WELL

HOWARD
8 COUNTY 21
MACBETH FARMS
23 SUBDIVISION 42
SECTION 44 46 LOT 8 48 50
CLARKSVILLE
52 NEAREST TOWN 71
MILES FROM TOWN (enter 0 if in town) 1 M I
73 76 77 78

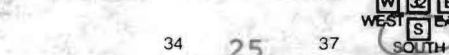
B 4

1 2 DIRECTION OF WELL FROM TOWN (CIRCLE BOX)



MACBETH FARM LANE
11 NEAR WHAT ROAD 30

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)



34 25 37 DISTANCE FROM ROAD FT
ENTER FT OR MI 38 39

TAX MAP: 34 BLK: 24 PARCEL 90

NOT TO BE FILLED IN BY DRILLER
HEALTH DEPARTMENT APPROVAL

Howard 13 A524124
COUNTY NAME COUNTY NO.
STATE SIGNATURE INSERT S 41
DATE ISSUED 9/11/2008
43 MM DD YY 48 CO SIGNATURE EXP. DATE
NORTH GRID 494 000 EAST GRID 816 000
50 55 57 63

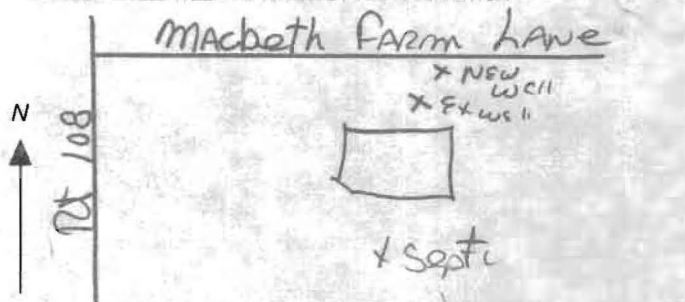
SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

- SOURCES OF DRILLING WATER
- 1. CITY
- 2.
- 3.

WRITE THE BOX NUMBER FROM THE MAP HERE

E 816
4984
N

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



FIELD DATA SHEET
HYDROGEOLOGIC AREA (3) WELL YIELD TEST

Maryland Well Permit No. HO-95-1630 Election District _____
 Location of Property (road) 12844 MACBETH FARM LANE
 Subdivision MACBETH FARMS Lot 8 Block _____ Plat _____ Sec. _____
 Well Driller RONALD KYKER Owner ROBERT BERG

Depth of Well 605 FEET
 Distance of Measuring Point (M.P.) above ground 2 FEET
 Static Water Level (S.W.L.) below M.P. 46 FEET

I. High Rate Pumping -- reservoir drawdown
 Time pump started 7:25 Pumping rate 12 GPM
 Total time 4 HR to reach pumping water level 384 ft. below M.P.

II. Recovery pump test data - observations to be recorded every 15 minutes.

TIME	WATER LEVEL Below M.P.	PUMPING RATE Time to fill 1 gal. bucket	FLOW METER READING (if used)	CALCULATED FLOW (gallons per min.)
7:25	46 FEET	5 SEC		12 GPM
7:40	120 FEET	5 "		12 "
7:55	167 "	6 "		10 "
8:10	203 "	6 "		10 "
8:25	228 "	6 "		10 "
8:40	255 "	7 "		8.5 "
8:55	278 "	7 "		8.5 "
9:10	292 "	7 "		8.5 "
9:25	305 "	7 "		8.5 "
9:40	323 "	7 "		8.5 "
9:55	337 "	7 "		8.5 "
10:10	352 "	7 "		8.5 "
10:25	363 "	7 "		8.5 "
10:40	369 "	9 "		6.6 "
10:55	376 "	9 "		6.6 "
11:10	383 "	9 "		6.6 "
11:25	384 "	9 "		6.6 "
11:40	383 "	12 "		5.0 "
11:55	382 "	12 "		5.0 "
12:10	381 "	12 "		5.0 "

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: ROBERT L. FREEZER CO INC Telephone #: 410-781-4155
Address: 6321 BARNETT AVENUE
SYKESVILLE, MD. 21784

(Must circle one) Licensed Plumber Licensed Well Driller Licensed Well Pump Installer
License # and name of individual responsible for the field installation:

Name (Print): ROBERT L. FREEZER CO INC License# 2122

*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: Mrs & Mrs SCOTT BEIG Telephone #: _____
Subdivision: CLARKSVILLE OVERLOOK Lot #: 8 Well Tag #: HO-95-1630
Site Address: 12844 MACBETH FARM LANE
CLARKSVILLE, MD. 21029

<u>Submersible Pump Data</u>	<u>Pitless Adapter</u>	<u>Well Cap and Electric Conduit</u>
Make: <u>GARDNER</u>	Make: <u>CAMPBELL</u>	Two piece watertight cap: <input checked="" type="checkbox"/>
Model #: <u>SSQ15450</u>	Model #: <u>DA800</u>	Screened, vented well cap: <input checked="" type="checkbox"/>
Pump Capacity <u>5</u> GPM	Depth: <u>42</u> (36" min)	Cap secured to casing: <input checked="" type="checkbox"/>
Well Yield: <u>5</u> GPM	NSF approved: <input checked="" type="checkbox"/>	Conduit min 1 1/2" B.G.: <input checked="" type="checkbox"/>

Depth of well encountered at time of pump installation: 605 (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

<u>Piping to house</u>	<u>House Connection</u>
Type: <u>POLY</u>	PVC sleeved to undisturbed soil at wall penetration: <input checked="" type="checkbox"/>
PSI: <u>200</u> (160 psi min)	Approximate length of sleeve: <u>5'</u>
Depth of supply line: <u>42</u> (36" min)	Sleeve caulked and sealed properly: <input checked="" type="checkbox"/>

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: Robert L. Freezer Date: 7/10/08

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

Date Insp. Requested: _____	Date Insp. Approved: _____
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 1 1/2" below grade/attached to cap properly	_____
Safety rope installed inside of well casing	_____
Correct well tag attached properly and casing 8" above finished grade	_____
Water supply line sleeved adequately at house connection	_____
Adequate grout observed below pitless adapter	_____

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

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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 #: 8 Well Tag #: HO - _____
Site Address: 12844 Macbeth Farm Ln.

Submersible Pump Data

Make: _____
Model #: _____
Pump Capacity _____ GPM
Well Yield: _____ GPM
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 _____

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: _____

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: _____
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 Tag Mangled
Water supply line sleeved adequately at house connection
Adequate grout observed below pitless adapter

7/11/08
BB

CLARKSVILLE OVERLOOK
(on MacBeth Farm)
Lot # 8

AGREEMENT FOR APPROVAL OF AN INDIVIDUAL DRINKING WELL
WITH AN ON-SITE TREATMENT SYSTEM

This agreement is entered into by and between the Howard County Health Department ("the Health Department") and Robert + Lisa Berg ("the Owner").

WHEREAS, the Owner owns a tract of land at street address 12844 MacBeth Farm Lane, _____ and the deed and subdivision plat of the property is recorded among the Land Records of Howard County, Maryland, Tax Map # _____, Block # _____, Parcel # _____, Deed Reference # _____ and Tax Account # _____ ("the Property").

WHEREAS, the Property lacks an available public drinking water source and is required to have an individual well as the source of drinking water for the residence of the property.

WHEREAS, the Owner has installed a residential drinking well under well permit _____ that has been tested by the Health Department (or a private laboratory certified to perform testing) for radionuclide particles. The results of the tests have shown that the gross alpha particle content and/or the gross beta particle content and/or the combined radium 226/228 levels exceeds the standards of 15 picocuries per liter (pCi/L), 4 millirems per year (mrem/yr) and/or 5 pCi/L respectively.

WHEREAS, The Maryland Department of the Environment (MDE) has promulgated rules and regulations under which a Certificate of Potability may be issued and has delegated the authority to issue such Certificate to the Health Department.

WHEREAS, MDE regulations permit the Health Department to issue as a special condition, a permanent deviation to the Certificate of Potability for individual wells where treatment has been installed to meet the maximum contaminate levels (MCL's) for radionuclides.

WHEREAS, MDE has determined that radium can be effectively removed from the drinking water by the use of treatment devices (e.g., ion exchange or reverse osmosis).

WHEREAS, the Owner is requesting that the Health Department issue a Certificate of Potability contingent upon installation and maintenance of a water treatment device to reduce radionuclides.

WHEREAS, neither the Owner nor the Health Department has knowledge of an alternative safe source of water for the Property.

RENDERED BY TOM HERBERT w/ NV HOMES.
Lot # 8 @ CLARKSVILLE OVERLOOK (MacBeth Farm)

NOW THEREFORE, the parties have agreed to the following terms and conditions:

1. The Health Department will record this Agreement among the Land Records of Howard County, Maryland.
2. The Owner agrees to install and maintain a water treatment device, which effectively reduces the gross alpha, gross beta and radium levels to below their respective MCL. The Health Department shall verify that the treatment device is operating effectively and the Owner agrees to allow access to the Health Department to collect a follow-up sample(s).
3. The Health Department shall issue a Certificate of Potability for the well once follow-up sampling shows acceptable gross alpha, gross beta and radium levels.
4. The Owner agrees that there shall be no liability on part of the Health Department for any immediate or long term impacts to health or property, under any circumstance or including, but not limited to, treatment device failure, improper maintenance or installation, or defect. The Health Department does not warrant nor guarantee that the device will adequately or properly function and the Owner agrees to implement and pay for any necessary changes or corrections.
5. The Owner acknowledges and agrees that neither the Health Department nor any of its agents or employees, either officially or individually, underwrites the operation of any system or treatment device.
6. This Agreement shall not be construed to limit any authority of the Health Department to protect the public health, safety or enjoyment of property or to issue any other orders to take any other action, which is now or may hereafter be within its authority.
7. This agreement contains the entire agreement and understanding between the Health Department and the Owner. There are no additional terms other than as contained in this Agreement. This Agreement may not be modified except in writing signed by each of the parties or their authorized representatives.
8. The Agreement shall run with the land and binds the Owner, his heirs, successors, and assigns. The owner agrees to provide a copy of this agreement to any purchaser or lessee of the property.
9. The laws of the State of Maryland govern the provisions of all transactions.


The parties have signed and sealed this Agreement on the dates set forth below.

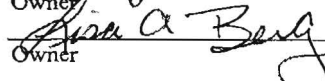
6/19/07

Date
6/19/07

Date

Date



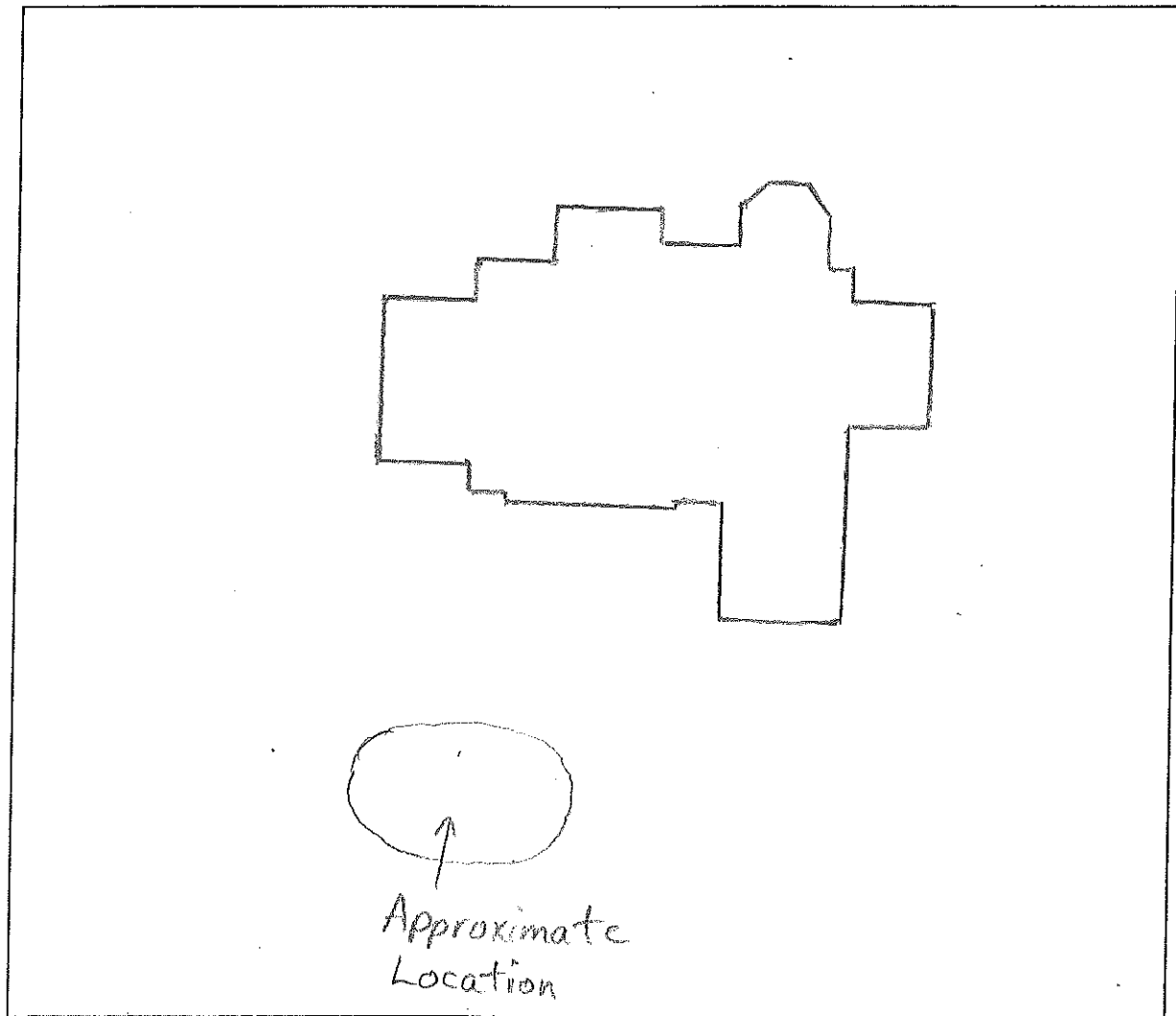
Owner


Owner
Howard County Health Department

SITE INSPECTION SHEET

OWNER: Robert Berg PHONE #: _____
ADDRESS: 12844 Macbeth Farm Ln. CONTRACTOR: Westminster Rotary
WELL TAG #: H0-95-1630
SUBDIVISION: Macbeth Farms LOT: 8 COUNTY #: A524124
PROPOSAL: Low yield on existing well.

LOCATION DIAGRAM



COMMENTS: 6/11/08 O.K. to drill somewhere in area shown.
Underground lines need to be marked. Both wells to
be hooked together (BB)

DATE: _____ INSPECTOR: _____