

C1 0342 (MDE USE ONLY)
 1 2 3 6
 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

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

45 DAYS AFTER WELL IS COMPLETED.
 COUNTY NUMBER **13** A515042

ST/CO USE ONLY
 DATE Received
 MM DD YY
 8 13

DATE WELL COMPLETED
 MM DD YY
 6 5 06

Depth of Well
 22 350 26
 (TO NEAREST FOOT)

PERMIT NO.
 FROM "PERMIT TO DRILL WELL"
 HO-95-0307
 28 29 30 31 32 33 34 35 36 37

OWNER Toll Brothers
 last name Fox River Drive first name
 TOWN Ellicott City
 STREET OR RFD
 SUBDIVISION Benedict Farm SECTION LOT 10

WELL LOG
 Not required for driven wells

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

DESCRIPTION (Use additional sheets if needed)	FEET		check if water bearing
	FROM	TO	
Brown shale	0	78	
Grmp Limestone	78	350 ✓	

GRROUTING RECORD yes no
 Y N
 44 44

WELL HAS BEEN GROUTED (Circle Appropriate Box)

TYPE OF GROUTING MATERIAL (Circle one)
 CEMENT CM BENTONITE CLAY BC

NO. OF BAGS ⁴⁵ 15 ⁴⁶ NO. OF POUNDS ⁴⁵ 1110 ⁴⁶
 GALLONS OF WATER 90
 DEPTH OF GROUT SEAL (to nearest foot)
 from 0 ft. to 52 ft.
 48 TOP 52 54 BOTTOM 58 ft.
 (enter 0 if from surface)

CASING RECORD

casing types insert appropriate code below

ST STEEL CO CONCRETE
 PL PLASTIC OT OTHER

MAIN CASING TYPE Nominal diameter top (main) casing (nearest inch)! Total depth of main casing (nearest foot)
 PL 06 83
 60 61 63 64 66 70

OTHER CASING (if used)

E A C H C A S I N G	diameter		depth (feet)	
	inch		from	to
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

SCREEN RECORD

screen type or open hole insert appropriate code below

ST STEEL BR BRASS HO OPEN HOLE
 PL PLASTIC OT OTHER

C2 DEPTH (nearest ft.)

E A C H S C R E E N	1		2		3	
	8	9	11	15	17	21
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DIAMETER OF SCREEN (NEAREST INCH)
 56 60
 from to

C3 **PUMPING TEST**

HOURS PUMPED (nearest hour) 03
 8 9

PUMPING RATE (gal. per min.) 7.5
 11 15

METHOD USED TO MEASURE PUMPING RATE 150L

WATER LEVEL (distance from land surface)

BEFORE PUMPING 15 ft.
 17 20

WHEN PUMPING 36 ft.
 22 25

TYPE OF PUMP USED (for test)

A air P piston T turbine
 C centrifugal R rotary O other (describe below)
 J jet S submersible

PUMP INSTALLED

DRILLER INSTALLED PUMP YES NO

(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. 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 } LAND SURFACE
 - below } 02 (nearest foot)
 49 50 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)

40'
75'

NUMBER OF UNSUCCESSFUL WELLS: 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, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO. M SD 009

DRILLERS SIGNATURE [Signature]

LIC. NO. D

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

B 1 0738 SEQUENCE NO. (MDE USE ONLY) STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL please type 524353 STATE PERMIT NUMBER 40-95-0307 fill in this form completely

Date Received (APA) 03 15 06 OWNER INFORMATION
 8 MM DD YY 13
Toll Brothers
 15 Last Name Owner First Name 34
14324 Triadelphia Rd
 36 Street or RFD 55
Glenelg, md 21737
 57 Town 70 State 72 Zip 76

DRILLER INFORMATION
Allen Compton M S D 009
 Driller's Name 76 License No. 81
Fogles Well Drilling
 Firm Name
580 obrecht RD
 Address
Allen Compton 3-14-06
 Signature Date

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

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 300 FEET
 24 28
 APPROXIMATE DIAMETER OF WELL 6 INCH
 NEAREST

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

REPLACEMENT OR DEEPEINED 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 DEEPEIN AN EXISTING WELL
 PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEINED (IF AVAILABLE) 41 _____ 52

Not to be filled in by driller (MDE OR COUNTY USE ONLY)
 APPROP. PERMIT NUMBER 40 2003G006
 PERMIT No. 40-95-0307
 70 71 72 73 74 75 76 77 78 79

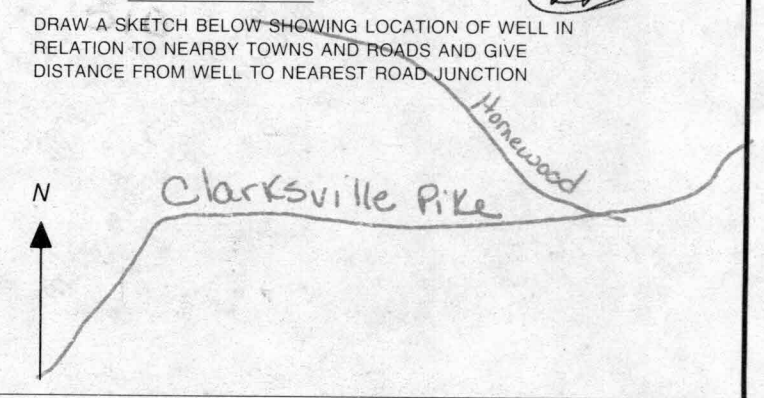
SPECIAL CONDITIONS
 NOTE - APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED

B 3 LOCATION OF WELL
Howard
 8 COUNTY 21
Benedict Farm
 23 SUBDIVISION 42
 SECTION _____ LOT 10
 44 46 48 50
Columbia
 52 NEAREST TOWN 71
 MILES FROM TOWN (enter 0 if in town) 3 M I
 73 76 77 78

B 4 DIRECTION OF WELL FROM TOWN (CIRCLE BOX)
 1 2
 ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)
 11 NEAR WHAT ROAD Fox River Drive 30
 ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)
 NORTH NORTH
 WEST WEST EAST EAST
 SOUTH SOUTH
 34 35 36 37
 DISTANCE FROM ROAD
 ENTER FT OR MI 38 39
 TAX MAP: 29 BLK: 9 PARCEL 28

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL
Howard (13) A515042
 COUNTY NAME COUNTY NO.
 STATE SIGNATURE _____ INSERT S → 41
 DATE ISSUED
3/16/2006 Brian Baber 3/16/2007
 43 MM DD YY 48 CO SIGNATURE EXP. DATE
 NORTH GRID 510 0 0 0 EAST GRID 825 0 0 0
 50 55 57 63

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X
 SOURCES OF DRILLING WATER
 1. _____
 2. _____
 3. _____
 WRITE THE BOX NUMBER FROM THE MAP HERE
 E 8265
 N 510
 000
 000
 (BB)



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

11/14/06
FAXED

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: Fogles Well Drilling Telephone #: 410-795-5670
Address: 580 OBERON RD J
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): Allen Compton License# MSD009
*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: Tail Brothers Telephone #: _____
Subdivision: Belmont Chase Lot #: 10 Well Tag #: HO-95-0300
Site Address: 11519 Fox River Dr

Submersible Pump Data
Make: Grundfos
Model #: 1550E 10C 220
Pump Capacity: 15 GPM
Well Yield: 7.5 GPM
Depth of well encountered at time of pump installation: 35 (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 NA

Pitless Adapter
Make: Combell
Model#: N/A
Depth: 36 (36" min)
NSF approved: YES

Well Cap and Electric Conduit
Two piece watertight cap: YES
Screened, vented well cap: YES
Cap secured to casing: YES
Conduit min 18" B.G.: YES
Conduit secured to well cap: YES

Piping to house
Type: 1" Black Plastic
PSI: 160 (160 psi min)
Depth of supply line: 42 (36" min)

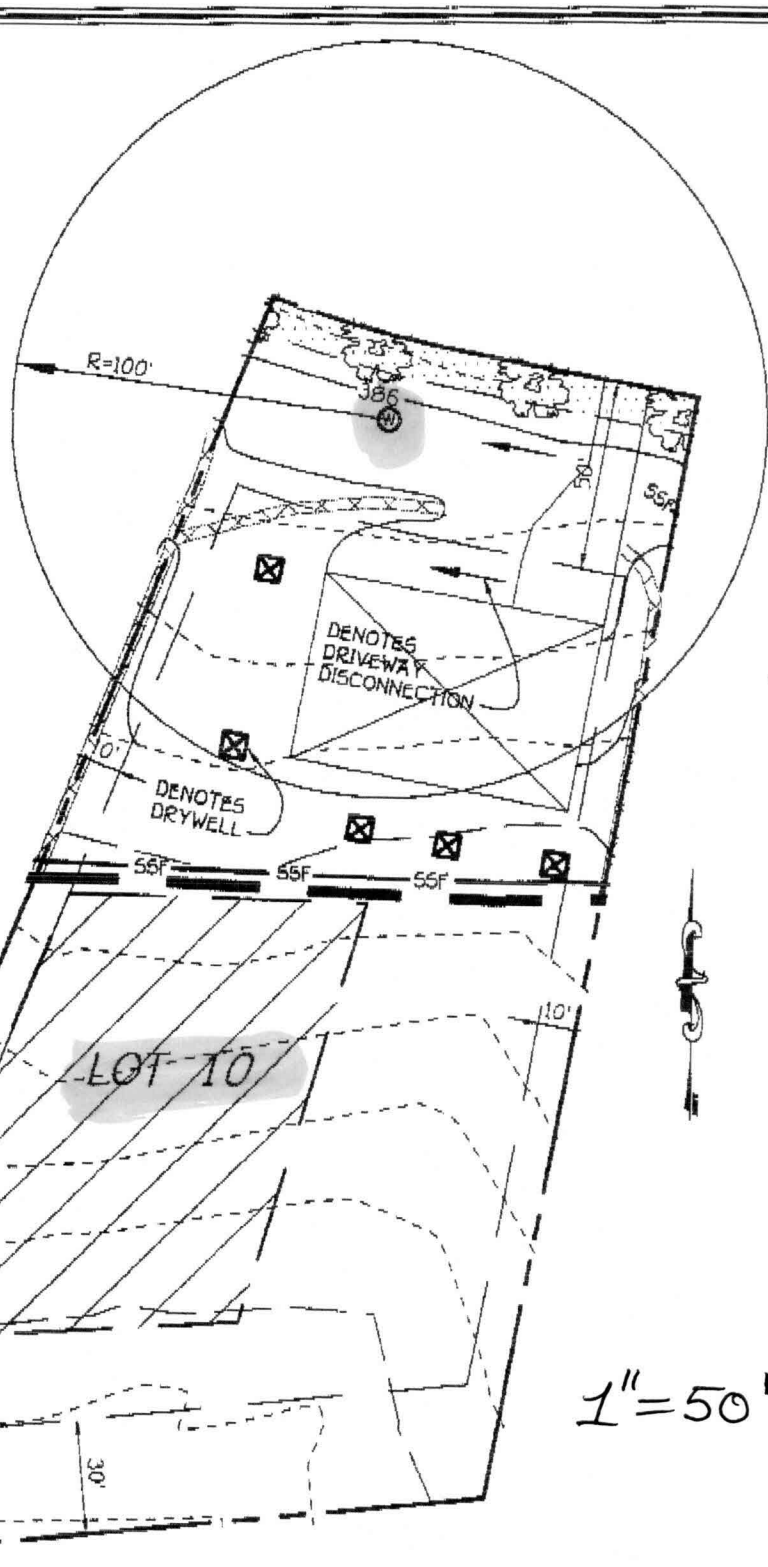
House Connection
PVC sleeved to undisturbed soil at wall penetration: YES
Approximate length of sleeve: 5
Sleeve caulked and sealed properly: YES

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: Allen Compton date: 11/14/06

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

Date Insp. Requested: _____ Date Insp. Approved: 11/14/06 KW
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
Water supply line sleeved adequately at house connection
Adequate grout observed below pitless adapter

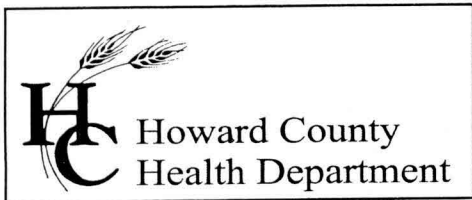


3/16/06
 Well Site
 Staked By
 F, C + C.
 (BB)

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21042
 (410) 461 - 2855

WELL LOCATION PLAN
 LOT-10
 ZONED RC-DEO
 TAX MAP No. 29 GRID No. 9 PARCEL No. 28
 THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE 1" = 50' DATE: FEBRUARY 16, 2006

K:\ISDK\PROJ\30754 Benedict Farm\dwg\PHASE I - FINAL\30754 WELL LOCATION.dwg, 2/17/2006 11:53:08 AM, 1:1



Bureau of Environmental Health
7178 Columbia 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

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

June 30, 2006

Toll Brothers – Maryland Division
7164 Columbia Gateway Drive
Columbia, Maryland 21046

RE: Benedict Farm Subdivision, Lot 10
Well Tag: HO-95-0307

To Whom It May Concern:

A sample was collected from a yield test on June 5, 2006 and submitted to GPL Laboratories to assess the possible presence of **Gross Alpha** and **Gross Beta** in the future well water supply. **Gross Alpha** and **Gross Beta** measure the total alpha and beta particle activity in a water supply. These naturally occurring radioactive nuclides have been demonstrated to be present in a certain type of geologic formation known as the Baltimore Gneiss which exists in your area of development within the County.

Results from this screening revealed a **Gross Alpha** of 22.5 ± 3.3 picocuries/liter (pCi/L); while the **Gross Beta** level was 11.7 ± 1.9 pCi/L. The **Gross Alpha** result exceeded its **maximum contaminant level (MCL)** of 15 pCi/L, while the **Gross Beta** level was below its MCL of 50 pCi/L.

Since the **Gross Alpha** finding exceeded its MCL, additional testing for **Radium** will be necessary prior to occupancy to verify existing levels. Alternatively, you may install treatment designed to reduce **Gross Alpha, Gross Beta and Radium**, plus provide post treated results confirming that levels are in conformance with existing standards. Keep in mind that the standard potability parameters required for occupancy will still be needed.

A copy of the test results is enclosed for your information. Please call this office at 410-313-1773 if you have any further questions or to discuss additional testing requirements.

Sincerely,

Bert Nixon, Deputy Director
Bureau of Environmental Health

cc: Eric Dougherty, MDE Water Mgmt., Groundwater
Well & Septic property file

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

1413 Old Taneytown Rd. Westminster, MD (410) 848-1014 (410) 876-4554 FAX (410) 848-0298

REPORT OF ANALYSIS

Laboratory ID #:	61604	Account #:	1930
Reference:	Toll Brothers Lot 10	Company:	Fogle's Well Drilling
Location:	11519 Fox River Drive Clarksville, MD 21029	Requested By:	Dave Fogle
Date/ Time Collected:	12/13/2006 0830	Source:	Well Water
Date/Time Rec'd:	12/13/2006 1100	Site:	Kitchen Sink Tap
Chlorine ppm:	Free: ND Total: ND	Treatment:	Reverse Osmosis**
Collected By:	V.M. Fadoul 6804VF-FS	pH:	6.7
		Well #:	HO-95-0307

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYS
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223 B.	12/14/2006 / 0850 / BCD
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223 B.	12/14/2006 / 0850 / BCD
Nitrate	<1.0	mg/L	10	601	12/13/2006 / 1400 / BCD
Turbidity	1.49	NTU	<10	SM18 2130B	12/13/2006 / 1505 / AD/BD
Sand	NS	mg/L	5	Visual/Gravimetric	12/13/2006 / 1505 / AD/BD

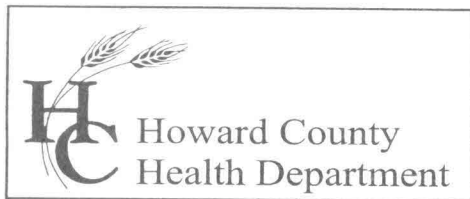
NOTES

- 1 **Sample collected prior to treatment
- 2 mg/L = milligrams per liter (also, parts per million)
- 3 MPN/ 100 ml = Most Probable Number [of viable bacteria] per 100 ml of sample.
- 4 NS = None Seen (NS indicates less than 5 mg/L)
- 5 NTU = Nephelometric Turbidity Units
- 6 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 7 ND:None Detected
- 8 Sample collected by client, analyzed as received
- 9 pH and Chlorine level tested in lab

Reason for Test : Use & Occupancy

Building Permit # : B00160142

Date Reported: 12/14/2006



Bureau of Environmental Health
7178 Columbia 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

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

December 20, 2006

Resident
11519 Fox River Drive
Ellicott City, MD 21042

RE: Patuxent Chase - Lot 10
11519 Fox River Drive
BP # B00160142
Well Permit #HO-95-0307

Dear New Homeowner:

This is to advise you that the septic system for the above referenced property has been installed and inspected. Final approval of the septic system was granted on November 6, 2006.

The water sample results indicate that the water samples submitted for testing were free of coliform and fecal coliform bacteria at the time of sampling and are bacteriologically safe for drinking. The water sample results were found to be in compliance with COMAR water quality standards.

INTERIM CERTIFICATE OF POTABILITY

This certifies that the initial sampling requirements of COMAR 26.04.04 "Well Regulations" have been met for the water supply system installed under well permit #HO-95-0307. Although the submitted sample results are in compliance with COMAR standards, the Health Department does not guarantee water supplies. Based upon satisfactory investigation and evaluation, the Howard County Health Department as authorized by the Maryland Department of the Environment accepts this well system as required by COMAR 26.04.04.

This certificate may become final upon completion of the second bacteriological test which is to be taken by the county health department within six months of receipt of this letter. **Please contact (410) 313-1773 to schedule a final water sample appointment.**

Date of Water Sample Analysis: June 5th & December 13th, 2006

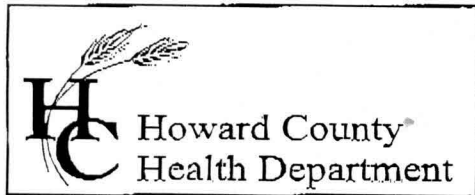
Date of Well Completion: June 5, 2006

Approving Authority

Brian Baker, R.S.
Well and Septic Program

BB

cc: Building Inspector's Office
File



Bureau of Environmental Health
7178 Columbia 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

Penny E. Borenstein, M.D., M.P.H., Health Officer
Temporary Radium Agreement

Previous sampling performed during the well yield test for **Lot 10 Benedict Farm**, (11519 Fox River Road), indicated an elevated **Gross Alpha**, a naturally occurring radionuclide.

Properties initially found to have an elevated **Gross Alpha** and/or **Gross Beta**, are required to have appropriate treatment installed and additional testing performed.

Follow-up post-treatment sampling for **Gross Alpha**, **Gross Beta** and **Radium** was conducted on December 6, 2006 and those sample results are pending.

Since all other sampling, construction and inspection requirements have been satisfied, an **Initial Certificate of Potability (ICOP)** will be issued with the following addendum and agreement:

If the results for the follow-up **Gross Alpha**, **Gross Beta** and **Radium** are all within established standards, then the ICOP remains valid and only testing for standard potability parameter(s) will be needed to secure the **Final Certificate of Potability (FCOP)**.

If any of these parameters are found to exceed existing standards, then further measures including the possible need for additional treatment and/or further testing shall occur until the **Gross Alpha**, **Gross Beta** and **Radium** results are within established standards. At that time, the ICOP will be deemed valid and only testing for standard potability parameter(s) will be needed to secure the **FCOP**.

The undersigned have read and agreed with the provisions as established above.

Raguel Amory 12/20/06
Owner Date

Owner Date

Nazim 12/20/06
Builder/Representative Date

Bea Rifen 12/20/06
Health Department Representative Date