

C1 0362

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 13 A515042

ST/CO USE ONLY DATE Received MM DD YY

DATE WELL COMPLETED MM DD YY 10 15 06

Depth of Well 22 125 26 9/13/06 (TO NEAREST FOOT) O.K. BB

PERMIT NO. FROM "PERMIT TO DRILL WELL" Ho-95-0347

OWNER last name first name TOWN STREET OR RFD 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: Brown shale, Gray Limestone.

GROUTING RECORD

WELL HAS BEEN GROUTED (Circle Appropriate Box) YES NO CEMENT BENTONITE CLAY NO. OF BAGS NO. OF POUNDS GALLONS OF WATER DEPTH OF GROUT SEAL

CASING RECORD

casings types insert appropriate code below MAIN CASING TYPE Nominal diameter top (main) casing Total depth of main casing

OTHER CASING (if used)

TABLE with columns: diameter inch, depth (feet) from to

SCREEN RECORD

screen type or open hole (insert appropriate code below) STEEL BRASS BRONZE PLASTIC OPEN HOLE OTHER

DEPTH (nearest ft.)

DEPTH (nearest ft.) 49 125 TABLE with columns: 1, 2, 3, DIAMETER OF SCREEN (NEAREST INCH)

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

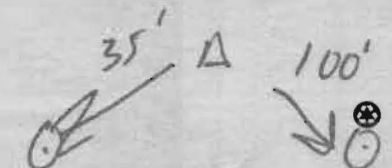
PUMPING TEST

HOURS PUMPED (nearest hour) 03 PUMPING RATE (gal. per min.) 12 METHOD USED TO MEASURE PUMPING RATE WATER LEVEL (distance from land surface) BEFORE PUMPING WHEN PUMPING TYPE OF PUMP USED (for test)

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) PUMP HORSE POWER PUMP COLUMN LENGTH (nearest ft.) CASING HEIGHT (circle appropriate box and enter casing height) LAND SURFACE

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)



NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED YES NO 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. 1 M SD 009 DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO. 1 D

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

<b>B 1</b>	<b>8980</b>	SEQUENCE NO. (MDE USE ONLY)	<b>STATE OF MARYLAND</b> <b>PERMIT TO DRILL WELL</b>	STATE PERMIT NUMBER <b>HO-95-0347</b>
1 2 3 6			524370	70 fill in this form completely 79

**OWNER INFORMATION**

Date Received (APA) 3/24/2006

8 MM DD YY 13

15 Last Name Toll Brothers Owner First Name 34

36 Street or RFD 14324 Triadelphia Rd 55

57 Town Glenelg Md. 70 State 72 Zip 76

**LOCATION OF WELL**

8 COUNTY Howard 21

23 SUBDIVISION Benedict Farm 42

SECTION 44 46 LOT 14 48 50

52 NEAREST TOWN Columbia 71

MILES FROM TOWN (enter 0 if in town) 3 M I 73 76 77 78

**DRILLER INFORMATION**

Driller's Name Allen Compton M S D 009 76 License No. 81

Firm Name Fogles Well Drilling

Address 580 Obrecht Rd

Signature [Signature] Date 3-24-06

**B 4**

1 2 DIRECTION OF WELL FROM TOWN (CIRCLE BOX)

11 NEAR WHAT ROAD Fox Chase Court 30

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)

50 34 37 DISTANCE FROM ROAD ENTER FT OR MI 38 39

TAX MAP: 29 BLK: 9 PARCEL 28

**WELL INFORMATION**

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)

I INDUSTRIAL, COMMERCIAL, DEWATERING

P PUBLIC WATER SUPPLY WELL

T TEST, OBSERVATION, MONITORING

G GEO-THERMAL

**NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL**

COUNTY NAME Howard COUNTY NO. 13

STATE SIGNATURE [Signature] INSERT S → 41

DATE ISSUED 4/5/2006 EXP. DATE 4/5/2007

43 MM DD YY 48 CO SIGNATURE Brian Baber EXP. DATE

NORTH GRID 510 0 0 0 EAST GRID 824 0 0 0

50 55 57 63

APPROXIMATE DEPTH OF WELL 300 FEET 24 28

APPROXIMATE DIAMETER OF WELL 6 INCH NEAREST INCH

**METHOD OF DRILLING (circle one)**

BORED (or Augered)  JETTED  Jetted & DRIVEN

39 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 DEEPEMED AN EXISTING WELL

PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED (IF AVAILABLE) 41 \_\_\_\_\_ 52

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

SOURCES OF DRILLING WATER

- 
- 
- 

WRITE THE BOX NUMBER FROM THE MAP HERE

E 8264

N 510

000 000

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

APPROP. PERMIT NUMBER HO200365006

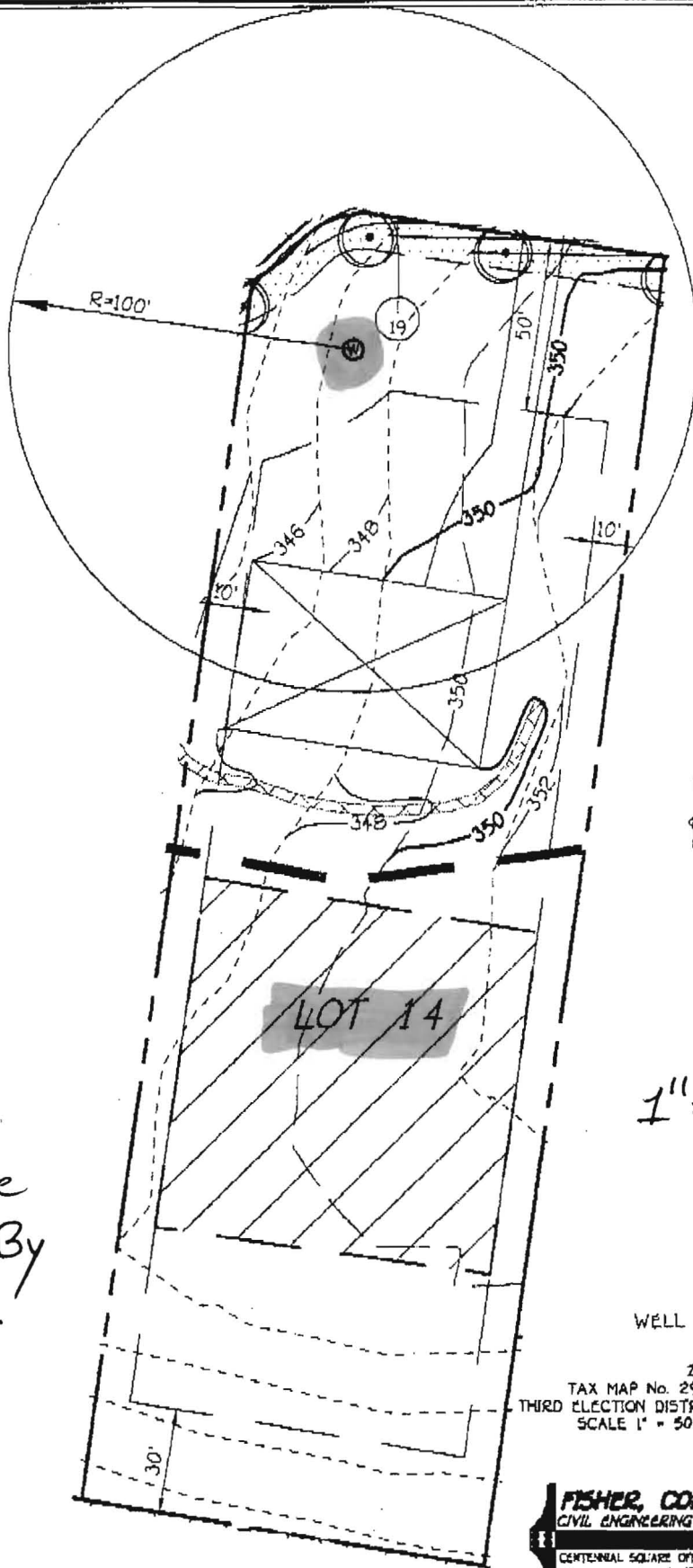
PERMIT No. HO-95-0347

**SPECIAL CONDITIONS**

Water Sample Must Be Taken During Yield Test



K:\SDSKPROJ\130754 Benedict Farm\dwg\PHASE I - FINAL\130754 WELL LOCATION.dwg, 2/17/2006 11:27:52 AM, 1:1



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

1" = 50'

WELL LOCATION PLAN  
 LOT-14  
 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

**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE  
 ELLICOTT CITY, MARYLAND 21042  
 (410) 481 - 2855

APR 1 2008 10:51AM

FOGLES WELL DRILLING  
ST. LOUIS 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: Fogles Well Drilling Telephone #: 410-795-5670  
Address: 10031 Woodbine Rd  
Woodbine, Md 21797

(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: Toll Brothers Telephone #: \_\_\_\_\_  
Subdivision: Benedict Farms / Palmyra Lot #: 14 Well Tag #: HO-95-0347  
Site Address: 11615 Fox Chase Ct

<u>Submersible Pump Data</u>	<u>Pitless Adapter</u>	<u>Well Cap and Electric Conduit</u>
Make: <u>Grundfos</u>	Make: <u>Campbell</u>	Two piece watertight cap: <u>yes</u>
Model #: <u>1556E07450</u>	Model#: <u>N/A</u>	Screened, vented well cap: <u>yes</u>
Pump Capacity: <u>15</u> GPM	Depth: <u>36</u> (36" min)	Cap secured to casing: <u>yes</u>
Well Yield: <u>12</u> GPM	NSF approved: <u>yes</u>	Conduit min 18" B.G.: <u>yes</u>
Depth of well encountered at time of pump installation: <u>125</u> (feet)		Conduit secured to well cap: <u>yes</u>

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 N/A

<u>Piping to house</u>	<u>House Connection</u>
Type: <u>1" Black Plastic</u>	PVC sleeved to undisturbed soil at wall penetration: <u>yes</u>
PSI: <u>160</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: <u>yes</u>

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.

Allen Compton date: 1-18-08  
Signature of company representative responsible for installation

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

Date Insp. Requested: _____	Date Insp. Approved: <u>4/1/08</u> <u>KW</u>
Inspection Data: Pitless adapter and water supply line at least 36" below grade	<input checked="" type="checkbox"/>
Two piece cap installed and attached to casing securely	<input checked="" type="checkbox"/>
Elec. conduit extends at least 18" below grade/attached to cap properly	<input checked="" type="checkbox"/>
Safety rope installed inside of well casing	<input checked="" type="checkbox"/>
Correct well tag attached properly and casing 8" above finished grade	<input checked="" type="checkbox"/>
Water supply line sleeved adequately at house connection	<input checked="" type="checkbox"/>
Adequate grout observed below pitless adapter	<input checked="" type="checkbox"/>



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 Beilenson, M.D., M.P.H., Health Officer*

April 1, 2008

Homeowner  
11615 Fox Chase Court  
Ellicott City, MD 21042

RE: Patuxent Chase, Lot 14  
11615 Fox Chase Ct.  
BP # B07001782  
Well Permit # HO-95-0347

Dear Sir/Madam:

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 3/28/2008. Final approval of the well line connection to the dwelling was approved on 4/1/2008.**

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-95-0347. 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. Currently, there is no charge for this final sampling.**

Date of Water Samples: 3/20/2008  
Date of Well Completion: 6/15/2006

Approving Authority,

Kevin Wolf, Sanitarian  
Well & Septic Program

cc: Building Inspector's Office  
Community Health Services  
File

# FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

2415 Old Lanesville Rd. Westminster, MD 21157-1044 Phone: (410) 655-1100 Fax: (410) 655-1155

## REPORT OF ANALYSIS

Laboratory ID #:	66973	Account #:	1930
Reference:	Toll Brothers Lot 14	Company:	Fogle's Well Drilling
Location:	11615 Fox Chase Court Ellicott City, MD 21043	Requested By:	Dave Fogle
Date/ Time Collected:	3/20/2008 0915	Source:	Well Water
Date/Time Rec'd:	3/20/2008 1530	Site:	Kitchen Sink Tap
Chlorine ppm:	Free: ND Total: ND	Treatment:	None
Collected By:	V.M. Fadoul 6804VF-FS	pH:	6.5
		Well #:	HO-95-0347

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME ANALYSIS
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223 B.	3/21/2008 / 1000 / BCD
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223 B.	3/21/2008 / 1000 / BCD
Nitrate	7.38	mg/L	10	601	3/20/2008 / 1550 / AD/BD
Turbidity	0.69	NTU	<10	SM18 2130B	3/20/2008 / 1545 / AD/BD
Sand	NS	mg/L	5	Visual/Gravimet	3/20/2008 / 1545 / AD/BD

### NOTES

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

Reason for Test : Use & Occupancy  
 Building Permit # : B07001782

Date Reported: 3/21/2008

# FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

1413 Old Tinseltown Rd. Westminster, MD (410) 848-2014 (410) 876-4554 FAX: (410) 848-0298

## REPORT OF ANALYSIS

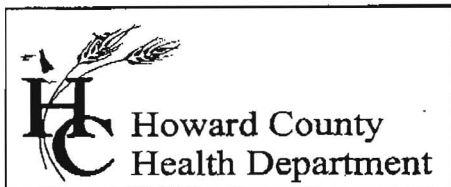
Laboratory ID #:	66112	Account #:	1930
Reference:	Toll Brothers Lot 14	Company:	Fogle's Well Drilling
Location:	11615 Fox Chase Court Ellicott City, MD 21043	Requested By:	Dave Fogle
Date/ Time Collected:	12/12/2007 1100	Source:	Well Water
Date/Time Rec'd:	12/12/2007 1452	Site:	Kitchen Sink Tap
Chlorine ppm:	Free: ND Total: ND	Treatment:	None
Collected By:	V.M. Fadoul 6804VF-FS	pH:	5.1
		Well #:	HO-95-0347

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Radium-226	0.808	pCi/L	****	Georgia Tech	1/7/2008 / --- / GPL
Radium-228	2.38	pCi/L	****	Georgia Tech	1/7/2008 / --- / GPL

### NOTES

- 1 \*\*\*\*Radium 226 and Radium 228 combined have a reference of 5 pCi/L
  - 2 MDA= Minimum Detection Activity
  - 3 pCi/L = picocuries per liter
  - 4 pH & chlorine level tested in lab
  - 5 Radium 226 was analyzed for but not detected at or above the reporting limit.
  - 6 Radium 226: MDA 1.40 pCi/L
  - 7 Radium 228: MDA 1.48 pCi/L
  - 8 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
  - 9 ND:None Detected
  - 10 Sample collected by client, analyzed as received
  - 11 Subcontracted to Reference Lab #110
- Reason for Test : Use & Occupancy  
 Building Permit # : B07001782

Date Reported: 1/14/2008



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

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

June 26, 2006

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

**RE: Benedict Farm Subdivision, Lot 14  
Well Tag: HO-95-0347**

To Whom It May Concern:

A sample was collected during a yield test on June 15, 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  $0.8 \pm 0.6$  picocuries/liter (pCi/L); while the **Gross Beta** level was  $1.7 \pm 0.8$  pCi/L. The **Gross Alpha** result was below its **maximum contaminant level (MCL)** of 15 pCi/L, while the **Gross Beta** level was below its **MCL** of 50 pCi/L. At the time of testing and with respect to these parameters, the future well water supply appears safe for all uses. No additional testing for these parameters will be required to secure the future Use & Occupancy. However, other standard (potability) testing will still be necessary.

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 concerns.

Sincerely,

Bert Nixon, Deputy Director  
Bureau of Environmental Health

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

Analytical Summary Report

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Client Name:	Howard County Health Department	Client Sample ID:	HOGC-BF146/15
Receipt Date/Time:	6/16/2006	Lab Sample ID:	606117-001-001-1/1
Prepared Date/Time:	6/19/2006	Sample Matrix:	WATER
Analysis Date/Time:	6/19/2006 3:48:00 PM	Analytical Method:	ALPHA/BETA BY METHOD 900.0

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Isotope	Result	Uncertainty $2\sigma$	MDA	Q
Gross Alpha	0.7607 pCi/L	$\pm 0.5677$ pCi/L	1.0691 pCi/L	U
Gross Beta	1.7238 pCi/L	$\pm 0.8385$ pCi/L	1.6904 pCi/L	



Send Report To:

HCHD  
ENV HEALTH

State of Maryland Toll Bros -MD Incorporated  
DHMH - Laboratories 164 Columbia Gateway Dr.  
Division of Environment Columbia, MD 21046 (410) 872-9105  
**RADIATION LABORATORY**

201 W. Preston Street, Baltimore, Maryland 21201

John M. DeBoy, Dr. P.H., Director

### LABORATORY ANALYSIS REQUEST

H04CBF146/15

Sample Bottle No. A: \_\_\_\_\_ No. B: \_\_\_\_\_ Field Blank Bottle No. A: \_\_\_\_\_ No. B: \_\_\_\_\_

Plant/Site Name: Benedict Farms County: HOWARD

Sample Source: Well Lot 14 Location: HO 95-0347  
(well no., lab sink, sample tap, etc.)

County:   Plant No.

CHECK (one per box)

Drinking Water   
Landfill   
Stream   
Other

Community   
Non-community   
Private   
Other

Source (raw water)   
Distribution (treated)   
MCL

Emergency   
Routine   
Recheck   
Special

Collector: GAC

Telephone No: 410 313 1773

Date Collected: 6/15/06

Time Collected: \_\_\_\_\_ a.m. 12 p.m.

Nitric Acid Preserved: Yes  No

Iced: Yes  No

Submitters Code:   Federal Project:  Field Data: \_\_\_\_\_

pH \_\_\_\_\_ Chlorine \_\_\_\_\_

Remarks: yield

✓	Test	EPA Code	Laboratory No.	Results (pCi/L)	Date Reported
✓	Gross Alpha	4000	<u>60417-001</u>	<u>0.8 ± 0.4</u>	<u>6/22/06</u>
✓	Gross Beta	4100		<u>1.7 ± 0.8</u>	
	Radon-222 Bottle A	4004			
	Radon-222 Bottle B	4004			
	Field Blank A	4004			
	Field Blank B	4004			
	Tritium				
	Ra - 226	4020			
	Ra - 228	4030			
	Total Uranium	4006			

Date Received: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

Supervisor: \_\_\_\_\_