

C1 0363

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 13 A515042

ST/CO USE ONLY DATE Received

DATE WELL COMPLETED 6 15 06

Depth of Well 300

9/13/06 O.K. (BB)

PERMIT NO. FROM "PERMIT TO DRILL WELL" HO-95-0348

OWNER Tall Brothers last name first name STREET OR RFD Fox Chase Court TOWN Ellicott City SUBDIVISION Benedict Farm SECTION LOT 15

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 Brown shale, Gray Limestone.

GROUTING RECORD

WELL HAS BEEN GROUTED (Y) (N) TYPE OF GROUTING MATERIAL (C) (B) NO. OF BAGS 26 NO. OF POUNDS 2944 GALLONS OF WATER 156 DEPTH OF GROUT SEAL 0 to 28 ft.

CASING RECORD

MAIN CASING TYPE PC Nominal diameter top (main) casing 06 Total depth of main casing 82

OTHER CASING (if used)

SCREEN RECORD screen type or open hole (ST) (BR) (HO) (PL) (OT)

DEPTH (nearest ft.)

Table with columns: E, A, C, H, S, C, R, E, E, N. Rows for casing depths: 80-81, 63-64, 66-70.

DIAMETER OF SCREEN 56 (NEAREST INCH) from to

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

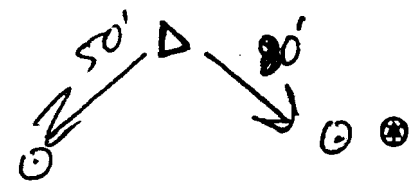
HOURS PUMPED (nearest hour) 63/9 PUMPING RATE (gal. per min.) 6. METHOD USED TO MEASURE PUMPING RATE 1566. WATER LEVEL (distance from land surface) BEFORE PUMPING 20/20 ft. WHEN PUMPING 96/25 ft. TYPE OF PUMP USED (for test) S submersible

PUMP INSTALLED

DRILLER INSTALLED PUMP (CIRCLE) (YES or NO) YES (X) 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 LAND SURFACE - below 02 (nearest foot)

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 (Y) no (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, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO. 1 MSD0091 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 1 8981

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND PERMIT TO DRILL WELL 524370 please print or type

STATE PERMIT NUMBER H0-95-0348 fill in this form completely

Date Received (APA) 3/24/2006 OWNER INFORMATION Toll Brothers 14324 Triadelphia Rd Glenely Md 21737

LOCATION OF WELL Howard Benedict Farm Columbia MILES FROM TOWN 3

DRILLER INFORMATION Allen Compton M SD 009 Foggles Well Drilling 580 Obrecht Rd 3-24-06

DIRECTION OF WELL FROM TOWN (CIRCLE BOX) ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX) DISTANCE FROM ROAD 50 ENTER FT OR MI 38 39 TAX MAP: 29 BLK: 9 PARCEL 28

WELL INFORMATION APPROX. PUMPING RATE 5 AVERAGE DAILY QUANTITY NEEDED 500

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL Howard 13 A515042 Brian Baber 4/5/2007

USE FOR WATER (CIRCLE APPROPRIATE BOX) DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION

APPROXIMATE DEPTH OF WELL 300 FEET APPROXIMATE DIAMETER OF WELL 6 INCH

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X SOURCES OF DRILLING WATER WRITE THE BOX NUMBER FROM THE MAP HERE

METHOD OF DRILLING (circle one) AIR-ROTary

REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX) THIS WELL WILL NOT REPLACE AN EXISTING WELL

Not to be filled in by driller (MDE OR COUNTY USE ONLY) APPROP. PERMIT NUMBER H020030006 PERMIT No. H0-95-0348

SPECIAL CONDITIONS Water Sample Must Be Taken During Yield Test



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: Fogles Well Drilling Telephone #: 443-609-4195  
Address: 6003 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# ms0009

\*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 #: 410-992-5998

Subdivision: Benedict Farm / Puttyent Lot #: 15 Well Tag #: HO-95-0348

Site Address: 11019 Fox Chase Ct  
Ellicott City, Md 21042

Submersible Pump Data

Make: Crowder  
Model #: ISS0E1529D  
Pump Capacity 15 GPM  
Well Yield: GPM

Pitless Adapter

Make: Crowder  
Model #: N/A  
Depth: 3 (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

Depth of well encountered at time of pump installation: 300 (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 N/A

Piping to house

Type: 1" BKVC PEX-C  
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.

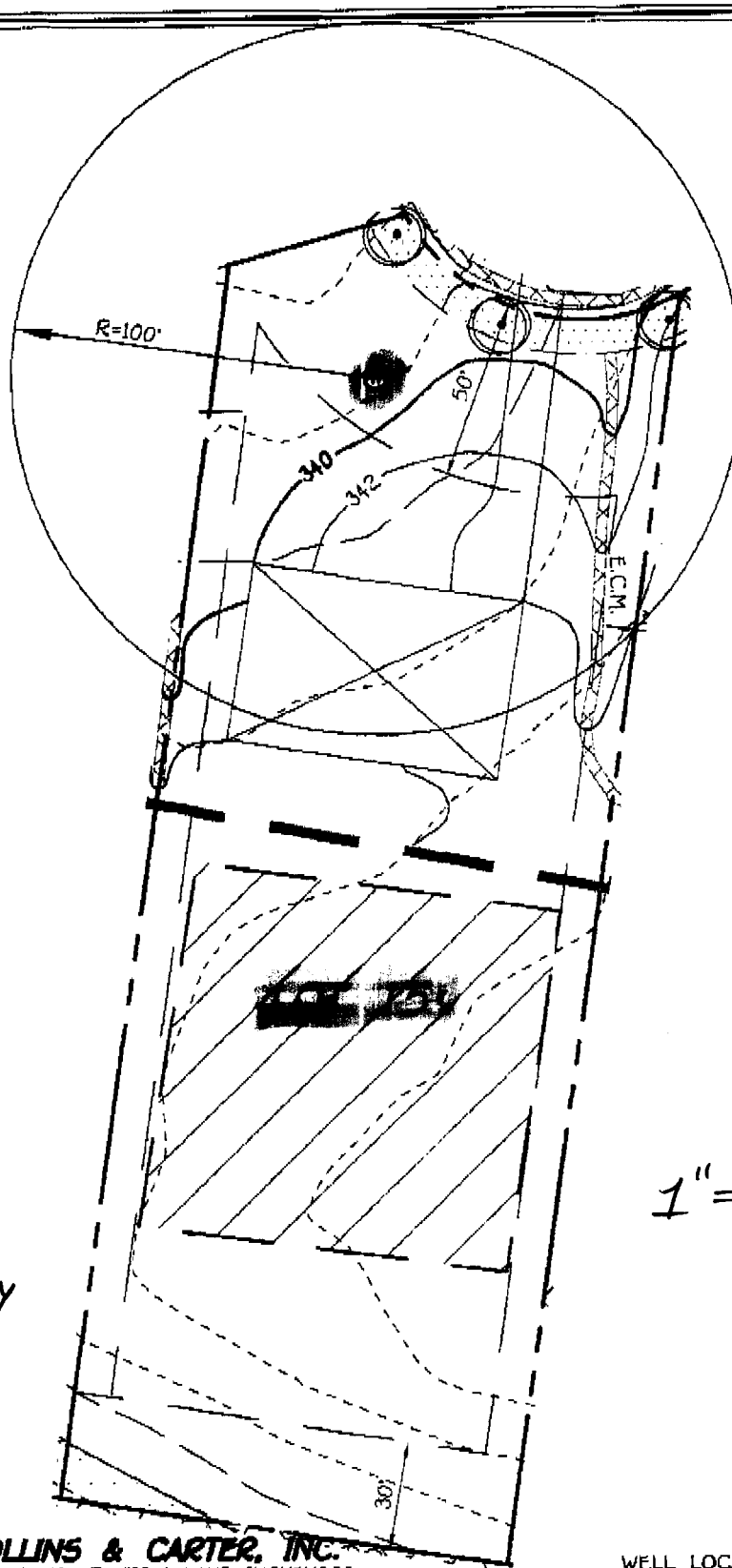
Signature of company representative responsible for installation: Allen Compton date: 7/9/08

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

Date Insp. Requested: \_\_\_\_\_ Date Insp. Approved: 11/6/08 (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

K:\SDSK\PROJ\130754 Benedict Farm\dwg\PHASE 1 - FINAL\130754 WELL LOCATION.dwg, 2/17/2006 11:22:22 AM, 1:1



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

**BB**

1" = 50'

**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-15  
 ZONED RC-DEO  
 TAX MAP No. 29 GRID No. 9 PARCEL No. 28  
 THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
 SCALE 1" = 50' DATE: FEBRUARY 15, 2006



Howard County  
Health Department

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

July 16, 2008

Toll MD II LP  
7164 Columbia Gateway Drive, #230  
Columbia, MD 21046

SENT VIA FACSIMILE 410-992-3234

RE: Homewood Crossing, Lot 15  
Benedict Farm  
11619 Fox Chase Court  
Ellicott City, MD 21042  
BP #: B07002181  
Well Permit # HO-95-0348

Dear Sir:

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 07/15/2008.**  
**Final approval of the well line connection to the dwelling was approved on 07/16/2008.**

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.

Gross Alpha and Beta samples were also collected on 06/15/2006. The Gross Alpha result was below its maximum contaminant level (MCL) of 15 pCi/L, while the Gross Beta level was below its targeted value of 50 pCi/L. At the time of the 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 and Occupancy.

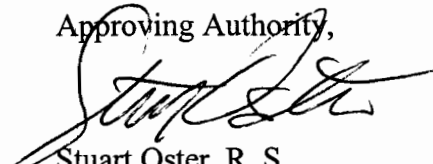
#### INTERIM CERTIFICATE OF POTABILITY

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-95-0348. 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: 07/14/2008  
Date of Sample for Gross Alpha & Beta: 06/15/2006  
Date of Well Completion: 06/15/2006

Approving Authority,



Stuart Oster, R. S.  
Well & Septic Program

cc: Building Inspector's Office  
Community Health Services  
File

**FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.**

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

**REPORT OF ANALYSIS**

Laboratory ID #:	68076	Account #:	1930
Reference:	Toll Brothers Lot 15	Company:	Fogle's Well Drilling
Location:	11619 Fox Chase Drive	Requested By:	Dave Fogle
	Ellicott City, MD 21042	Source:	Well Water
Date/ Time Collected:	7/14/2008 1230	Site:	Pressure Tank
Date/Time Rec'd:	7/14/2008 1336	Treatment:	None
Chlorine ppm:	Free: ND Total: ND	pH:	6.3
Collected By:	V.M. Fadoul 6804VF-FS	Well #:	HO-95-0348

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223 B.	7/15/2008 / 0800 / AD/BD
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223 B.	7/15/2008 / 0800 / AD/BD
Nitrate	<1.0	mg/L	10	601	7/15/2008 / 1045 / AD/BD
Turbidity	2.58	NTU	<10	SM18 2130B	7/15/2008 / 0845 / AD/BD
Sand	NS	mg/L	5	Visual/Gravimet	7/15/2008 / 0845 / 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 and Chlorine level tested in lab

Reason for Test : Use & Occupancy  
 Building Permit # : B07002181

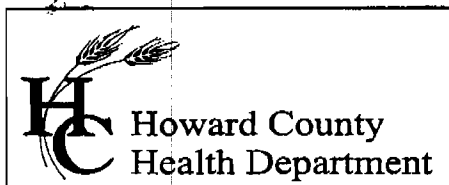
Date Reported: 7/15/2008

MD State Certification # 133

Analytical Summary Report

Client Name:	Howard County Health Department	Client Sample ID:	HOGC-BF156/15
Receipt Date/Time:	6/16/2006	Lab Sample ID:	606117-002-002-1/1
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 800.0

Isotope	Result	Uncertainty 2 $\sigma$	MDA	Q
Gross Alpha	1.0561 pCi/L	$\pm 0.6798$ pCi/L	1.1618 pCi/L	U
Gross Beta	2.2776 pCi/L	$\pm 1.0334$ pCi/L	2.1045 pCi/L	



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website: www.hchealth.org

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 15  
Well Tag: HO-95-0348

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  $1.1 \pm 0.7$  picocuries/liter (pCi/L); while the Gross Beta level was  $2.3 \pm 1.0$  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

MCE

Send Report To:

HCHD  
ENV. HEALTH

Toll Bros -MD Incorporated  
State of Maryland 164 Columbia Gateway Dr.  
DHHM - Laboratories A Columbia, MD 21046 (410) 872-9105  
Division of Environment

RADIATION LABORATORY

201 W. Preston Street, Baltimore, Maryland 21201

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

LABORATORY ANALYSIS REQUEST

HOGC BF15 6/15

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

Plant/Site Name: Benedict Farm County: Howard

Sample Source: Well lot 15 Location: HO-95-0348  
(well no., lab sink, sample tap, etc.)

County:  1  3 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: 10 a.m. \_\_\_\_\_ 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>606117-002</u>	<u>1.1 ± 0.7</u>	<u>6/22/06</u>
✓	Gross Beta	4100		<u>2.3 ± 1.0</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: \_\_\_\_\_