

1231 (MDE USE ONLY)  
 THIS NUMBER IS TO BE PUNCHED  
 COLS. 3-6 ON ALL CARDS)

**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.  
 COUNTY NUMBER

DATE WELL COMPLETED: 10/3/07  
 Depth of Well: 100 (TO NEAREST FOOT)  
 PERMIT NO. FROM "PERMIT TO DRILL WELL": HO-95-1256  
 DATE: 1/31/08  
 O.K. (BB)

OWNER: TOLL Brothers  
 STREET OR RFD: Independence Way  
 TOWN: Columbia  
 SUBDIVISION: Home Well Crossing SECTION: LOT 48

**WELL LOG**  
 Not required for driven wells

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

DESCRIPTION (Use additional sheets if needed)	FEET		check if water bearing
	FROM	TO	
Brown mica shale	0	73	
Grey Limestone	73	100	✓

**GROUTING RECORD** yes no  
 WELL HAS BEEN GROUTED (Circle Appropriate Box)  Y  N  
 TYPE OF GROUTING MATERIAL (Circle one)  
 CEMENT  CM BENTONITE CLAY  BC  
 NO. OF BAGS 19 NO. OF POUNDS 1786  
 GALLONS OF WATER 119  
 DEPTH OF GROUT SEAL (to nearest foot) from 0 ft. to 75 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: PL  
 Nominal diameter top (main) casing (nearest inch): 06  
 Total depth of main casing (nearest foot): 80

**OTHER CASING (if used)**  
 diameter inch depth (feet) from to

**SCREEN RECORD**  
 screen type or open hole insert appropriate code below  
 ST STEEL  BR BRASS  HO OPEN HOLE  
 PL PLASTIC  OT OTHER

**C 2** DEPTH (nearest ft.)

1	2	3	4	5	6	7	8	9	10
E	80	80	100						
A	8	9	11	15	17				21
C									
H	23	24	26	30	32				36
S									
C									
R	38	39	41	45	47				51
E									
S									
L									
N									

SLOT SIZE 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_

DIAMETER OF SCREEN \_\_\_\_\_ (NEAREST INCH)  
 from \_\_\_\_\_ to \_\_\_\_\_

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

**C 3** **PUMPING TEST**

HOURS PUMPED (nearest hour) 03  
 PUMPING RATE (gal. per min.) 20  
 METHOD USED TO MEASURE PUMPING RATE 196L  
 WATER LEVEL (distance from land surface)  
 BEFORE PUMPING 38 ft.  
 WHEN PUMPING 41 ft.  
 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  
 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 } 01 (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  
 ALL HYDROFRACTURED  Y  N  
 CIRCLE APPROPRIATE LETTER  
 A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED  
 ELECTRIC LOG OBTAINED  
 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 PERFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE MENTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.  
 PERMITTERS LIC. NO.: M SD 009  
 PERMITTER SIGNATURE: [Signature]  
 STATE MATCH SIGNATURE ON APPLICATION

LIC. NO.: D

**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

NO SURVEY STAKES

B 1 6144

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL 527287 please type

STATE PERMIT NUMBER 40-95-1256 fill in this form completely

Date Received (APA) OWNER INFORMATION 8 MM DD YY 13 15 Last Name Owner First Name 34 11423 Hunt Crossing Ct 36 Street or RFD 55 Ellicott City Md. 21042 57 Town 70 State 72 Zip 76

DRILLER INFORMATION 76 Driller's Name M SD 009 81 76 Firm Name 76 580 Obrecht rd. Address 76 Signature Date 7-13-07

B 3 LOCATION OF WELL 8 COUNTY 21 23 SUBDIVISION 42 52 NEAREST TOWN 71 522 NEAREST TOWN 71 MILES FROM TOWN (enter 0 if in town) 5 MI 73 76 77 78

B 4 DIRECTION OF WELL FROM TOWN (CIRCLE BOX) ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX) 11 NEAR WHAT ROAD 30 34 500 37 DISTANCE FROM ROAD FT 38 39 ENTER FT OR MI TAX MAP: 29 BLK: 9 PARCEL 28

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) 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 Howard (13) A515042 COUNTY NAME COUNTY NO. STATE SIGNATURE INSERT S DATE ISSUED 9/20/2007 Brian Baber 9/20/2008 CO SIGNATURE EXP. DATE NORTH GRID 510 000 EAST GRID 827 000

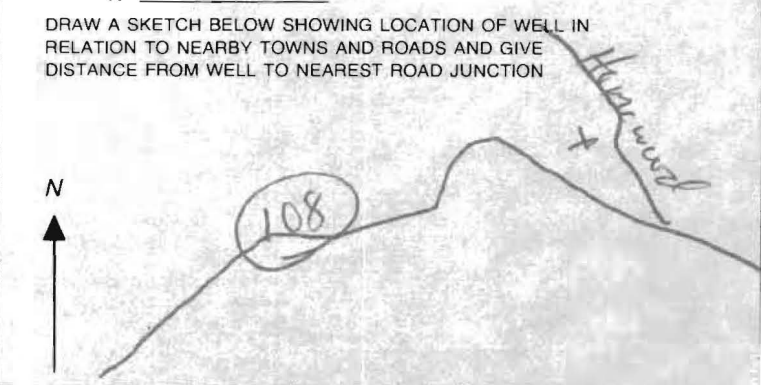
APPROXIMATE DEPTH OF WELL 300 FEET 24 28 APPROXIMATE DIAMETER OF WELL 6 INCH NEAREST

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 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 DEEPEAN 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 H02003G006 PERMIT No. H0-95-1256

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 827 N 510



SPECIAL CONDITIONS Radon Sample Needed During Yield Test

# FOGLE'S WELL DRILLING & PUMP SERVICE'S

580 OBRECHT RD  
 Sykesville, Md 21784  
 (410)795-5670

Date: 10-3-07

Name: TOLL Brothers

Address Independence way Lot# 48 Tag# HO-95-1256

**Well Yield Test Results:**

TIME	WATER LEVEL	TIME TO FILL 1 GAL	GPM
11 :00	38	3	20
11 :15	41	3	20
11 :30	41	3	20
11 :45	41	3	20
12 :00	41	3	20
12 :15	41	3	20
12 :30	41	3	20
12 :45	41	3	20
1 :00	41	3	20
1 :15	41	3	20
1 :30	41	3	20
1 :45	41	3	20
2 :00	41	3	20
2 :15	41	3	20
:30			
:45			
:00			

**HOWARD COUNTY HEALTH DEPARTMENT  
BUREAU OF ENVIRONMENTAL HEALTH  
WELL & SEPTIC PROGRAM  
TEL: (410)313-1771 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, LLC Telephone #: 443-609-4195  
Address: P.O. Box 269  
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 supervision of a licensed journeyman or master plumber, pump installer or well driller. Licenses may be subjected to field verification. Unlicensed individuals may be reported to the appropriate licensing agency.

Name of Property Owner: Toll Brothers Telephone #: 410-320-0223  
Subdivision: Benedict Farm Lot #: 48 Well Tag #: HO-95-1256  
Site Address: 14219 Independence Way  
Ellicott City, Md.

<b><u>Submersible Pump Data</u></b>	<b><u>Pitless Adapter</u></b>	<b><u>Well Cap and Electric Conduit</u></b>
Make: <u>Grundfos</u>	Make: <u>Campbell</u>	Two piece watertight cap: <u>yes</u>
Model #: <u>1556209-180</u>	Model #: <u>N/A</u>	Screened, vented well cap: <u>yes</u>
Pump Capacity <u>15</u> GPM	Depth: <u>42"</u> (36" min)	Cap secured to casing: <u>yes</u>
Well Yield: <u>20</u> GPM	NSF/WSC approved: <u>yes</u>	Conduit min 18" B.G.: <u>yes</u>
Depth of well encountered at time of pump installation: <u>100'</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, Cable guards, or other acceptable method used- Must circle one

Safety rope, if used, attached to brass rope adapter or other acceptable method inside of well casing N/A

**Piping to house**

Type: 1" Black Poly Pipe  
PSI: 160 (160 psi min)  
Depth of supply line: 42" (36" min)

**House Connection**

PVC sleeve to undisturbed soil at wall penetration: yes  
Length of sleeve (5' minimum from foundation): 5'  
Sleeve sealed properly: yes

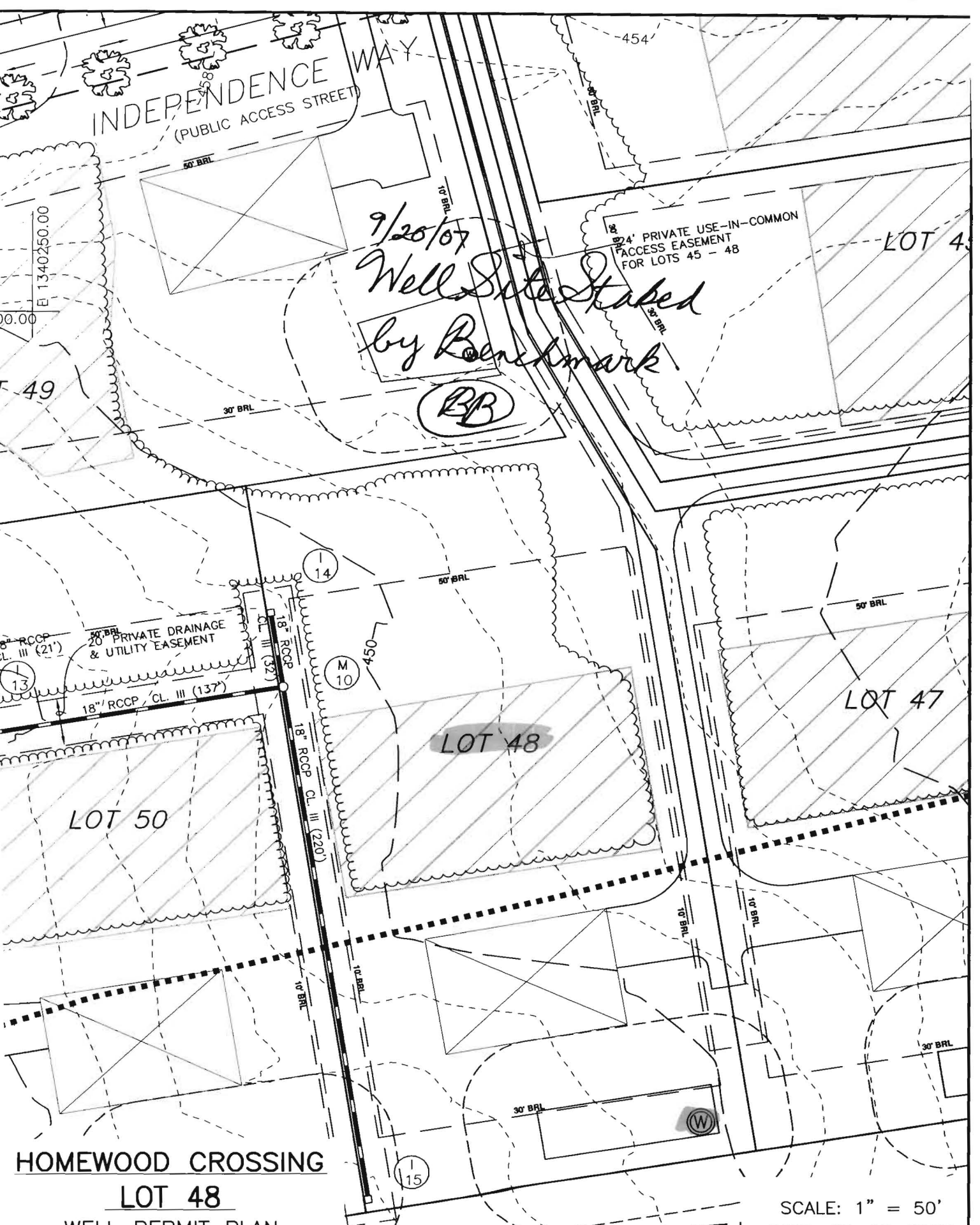
The water supply line is required to be at least ten feet from the septic tank, pump chamber, sewage piping, distribution box, drainfields, and sewage reserve area. If this cannot be accomplished, contact this office for approval prior to installation.

Signature of company representative responsible for installation: Allen Compton date: 3/1/11

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

Date Insp. Requested: \_\_\_\_\_ Date Insp. Approved: 3/4/11 Inspector: (KD)

Inspection Data: Pitless adapter watertight & 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 not outside of well cap/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"/>



INDEPENDENCE WAY  
(PUBLIC ACCESS STREET)

9/20/07  
Well Site Staked  
by Benchmark  
(BB)

24' PRIVATE USE-IN-COMMON  
ACCESS EASEMENT  
FOR LOTS 45 - 48

LOT 49

LOT 47

LOT 48

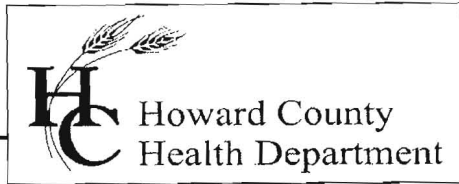
LOT 50

HOMWOOD CROSSING

LOT 48

WELL PERMIT PLAN

SCALE: 1" = 50'



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](http://www.hchealth.org)

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

June 14, 2011

Homeowner  
11219 Independence Way  
Ellicott City, MD 21042

RE: Walnut Grove, Lot 48  
11219 Independence Way  
BP #: B10002400  
Well Tag: HO-95-1256

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 01/31/2011. Final approval of the well line connection to the dwelling was approved on 03/04/2011.**

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 10/03/2007. Results showed a Gross Alpha level of **5.0 +- 2.0 pCi/L** and **Gross Beta** level of **6.0 +- 2.0 pCi/L**. The **Gross Alpha** was below the maximum contaminant level (MCL) of 15 pCi/L, while the Gross Beta was below the MCL of 50pCi/L. Future well water supply appears safe for all uses.

Enclosed with this certificate, is a copy of the septic permit and the as-built along with important information regarding the use and maintenance of your septic system. Please read through carefully and thoroughly. Any questions regarding your well and/or septic, please call this office for guidance 410-313-1771.

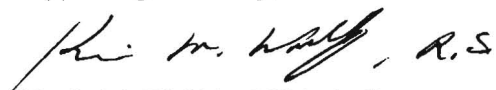
#### **INTERIM CERTIFICATE OF POTABILITY**

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-95-1256. 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: 05/11/2011  
Date of Radium Samples: 10/03/2007  
Date of Well Completion: 10/03/2007

Approving Authority,



Kevin M. Wolf, R.E.H.S., R.S.  
Environmental Sanitarian  
Well & Septic Program

cc: Building Inspector's Office  
Community Hygiene Program  
File

FW Shortford

**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 #: 79435 Account #: 1930  
Reference: Toll Brothers Lot 48 Company: Fogle's Well Drilling  
Location: 11219 Independence Way Requested By: Dave Fogle  
Ellicott City, MD 21042 Source: Well Water  
Date/ Time Collected: 5/11/2011 1415 Site: Kitchen Sink Tap  
Date/Time Rec'd: 5/11/2011 1525 Treatment: None  
Chlorine ppm: Free: ND Total: ND pH: 5.8  
Collected By: J. Fogle 1974JF Well #: HO-95-1256

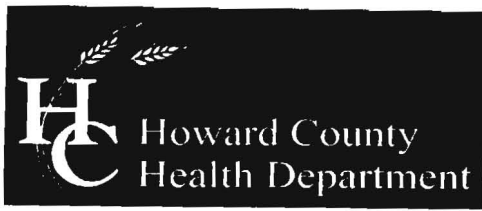
PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	5/12/2011 / 1000 / CCH
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	5/12/2011 / 1000 / CCH
Nitrate	1.31	mg/L	10	601	5/11/2011 / 1600 / CCH
Turbidity	3.22	NTU	<10	SM18 2130B	5/11/2011 / 1630 / KME
Sand	NS	mg/L	5	Visual/Gravimetric	5/11/2011 / 1630 / KME

**NOTES**

- 1 **\*\*Revised report to show correct address 6/14/11 BCD**
- 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 & Chlorine level tested in lab

Reason for Test : Use & Occupancy  
Building Permit # : B-10002400

Date Reported: 6/14/2011



Bureau of Environmental Health  
7178 Columbia Gateway Drive, Columbia, MD 21046-2147  
(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

December 19, 2007

Toll Brothers, Inc.  
11423 Hunt Crossing Ct.  
Ellicott City, Maryland 21042

**RE: Patuxent Chase Lot 48  
Independence Way  
Well Tag: HO - 95 - 1256**

To Whom It May Concern:

A sample was collected during a yield test on October 3, 2007 and submitted to the Department of Health & Mental Hygiene 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  $5.0 \pm 2.0$  picocuries/liter (pCi/L); while the **Gross Beta** level was  $6.0 \pm 2.0$  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 targeted value of 50 pCi/L (roughly equivalent to the annual dose rate of 4 millirems/year).

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 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 to discuss additional testing requirements.

Sincerely,

A handwritten signature in black ink that reads 'Bert Nixon'.

Bert Nixon, Director  
Bureau of Environmental Health

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

