

B 1 5695 SEQUENCE NO. (MDE USE ONLY)

1 2 3 6

STATE OF MARYLAND
 PERMIT TO DRILL WELL
 please print or type
533980

STATE PERMIT NUMBER
H10-95-1981
 70 fill in this form completely 79

Date Received (APA) 08 19 10
 8 MM DD YY 13

OWNER INFORMATION

Toll Brothers
 15 Last Name Owner First Name 34

11423 Huntcrossing Ct
 36 Street or RFD 55

Ellicott City Md 21042
 57 Town 70 State 72 Zip 76

B 3 **LOCATION OF WELL**

Howard
 8 COUNTY 21

Homewood Crossing
 23 SUBDIVISION 42

SECTION 81 LOT 81
 44 46 48 50

Columbia
 52 NEAREST TOWN 71

MILES FROM TOWN (enter 0 if in town) 5 M I I
 73 76 77 78

DRILLER INFORMATION

Allen Compton MSD 009
 76 Driller's Name License No. 81

Eagles Well Drilling
 Firm Name

P.O. Box 202
 Address

Allen Compton 8-9-10
 Signature Date

B 4 **DIRECTION OF WELL FROM TOWN (CIRCLE BOX)**

1 2

Clarksville Pike
 11 NEAR WHAT ROAD 30

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)

34 30 37
 DISTANCE FROM ROAD ENTER FT OR MI FT 38 39

TAX MAP: 29 BLK: 9 PARCEL 28

B 2 **WELL INFORMATION**

APPROX. PUMPING RATE 5
 8 (GAL. PER MIN.) 12

AVERAGE DAILY QUANTITY NEEDED 500
 14 (GAL. PER DAY) 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 COUNTY NAME (13) A 515042 COUNTY NO.

STATE SIGNATURE _____ INSERT S →

DATE ISSUED 9/7/10 DATE EXPIRES 9/7/11
 43 MM DD YY 48 CO SIGNATURE EXP. DATE

NORTH GRID 510 000 EAST GRID 822 000
 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

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

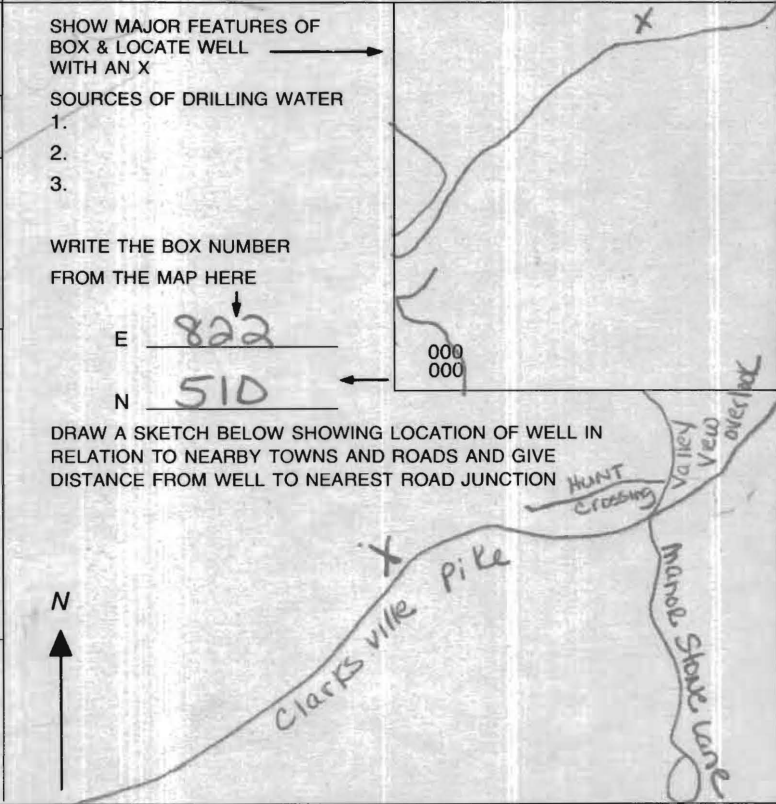
D THIS WELL WILL DEEPEM AN EXISTING WELL

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 H02003 GAP 006(2)
 54 63

PERMIT No. H0-95-1981
 70 71 72 73 74 75 76 77 78 79



**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 202
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 #: 410-992-5978
Subdivision: Benedict Farm - Homewood Lot #: 81 Well Tag #: HO-95-1981
Site Address: 11610 Clarksville Pike

Submersible Pump Data

Make: Grundfos
Model #: 1050215-330
Pump Capacity 15 GPM
Well Yield: 1 GPM

Pitless Adapter

Make: Campbell
Model#: N/A
Depth: 36" (36" min)
NSF/WSC 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: 550 (feet)

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 Plastic
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: 3/21/12

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

Date Insp. Requested: _____ Date Insp. Approved: _____ Inspector: _____

- Inspection Data: Pitless adapter watertight & 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 not outside of well cap/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**

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: _____ 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 #: 81 Well Tag #: HO-95-1981
Site Address: 11610 Clarksville Pike

Submersible Pump Data

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

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: _____

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 _____

Piping to house

Type: _____
PSI: _____ (160 psi min)
Depth of supply line: _____ (36" min)

House Connection

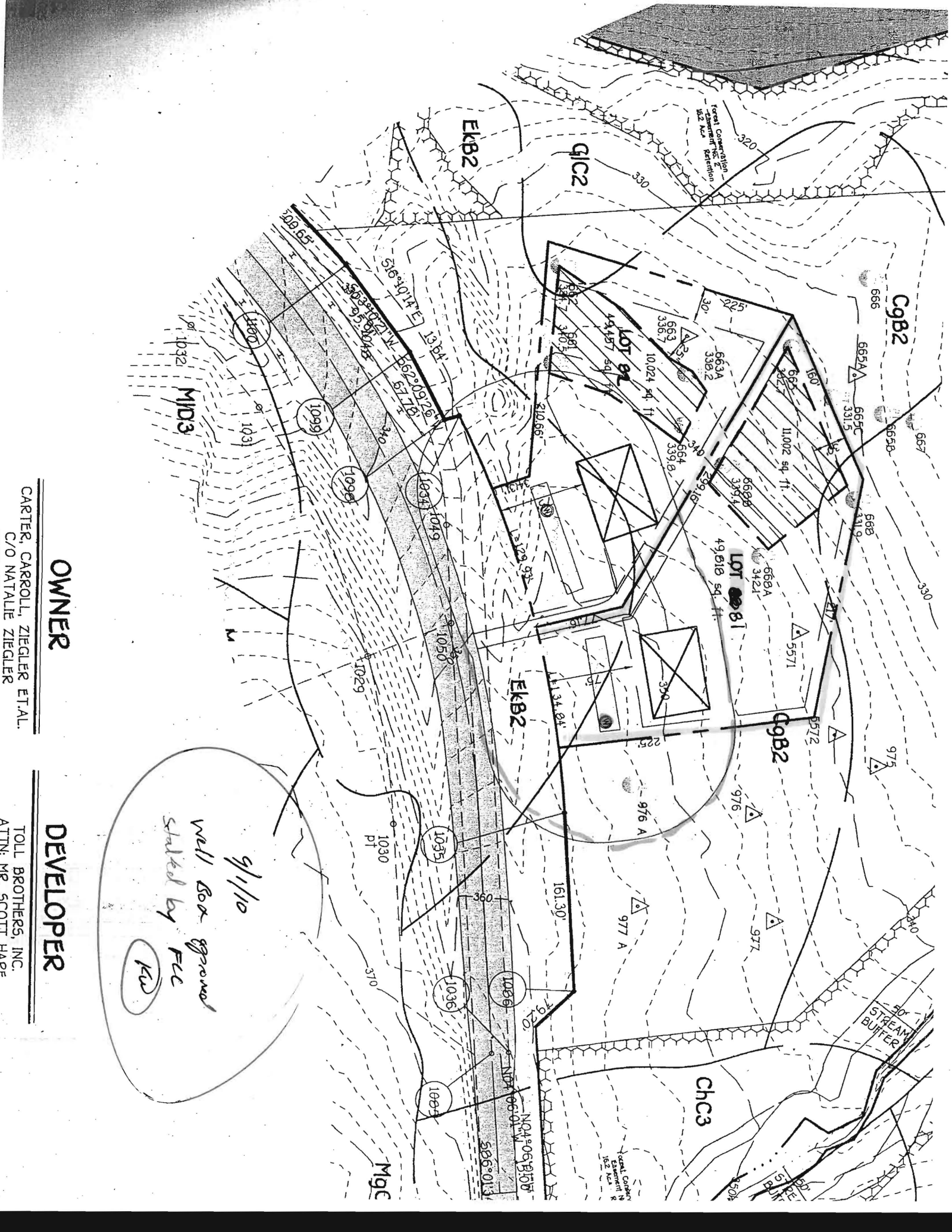
PVC sleeved to undisturbed soil at wall penetration: _____
Approximate length of sleeve: _____
Sleeve caulked and sealed properly: _____

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: 3/16/12 Date Insp. Approved: HR 3/16/12
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



OWNER

CARTER, CARROLL, ZIEGLER ET AL.
C/O NATALIE ZIEGLER

DEVELOPER

TOLL BROTHERS, INC.
ATTN: MR. SCOTT HARE

9/1/10
Well Box ground
staked by FCC
(KW)



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

INTERIM CERTIFICATE OF POTABILITY

Expiration Date – January 6, 2013

July 6, 2012

Homeowner
11610 Clarksville Pike
Ellicott City, MD 21042

**RE: Homewood Crossing, Lot 81
11610 Clarksville Pike
Building Permit: B11001595
Well Permit: HO-95-1981**

Dear Homeowner:

This is to advise you that the septic system installation and water well construction for the above referenced property have been inspected and approved. Final approval of the septic system was granted on **3/23/2012**. Final approval of the well line connection to the dwelling was granted on **3/16/2012**. The well construction was completed on **1/24/2011**. Water samples were collected on **5/15/2012 and 5/21/2012**.

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.

Radium samples were also collected on **5/15/2012**. Results showed a **Radium 226** level of **0.7 pCi/L** and **Radium 228** level of **<0.9 pCi/L, pre-treatment**, and **Radium 226** level of **0.4 pCi/L** and **Radium 228** level of **<0.8 pCi/L, post-treatment**. The Gross Alpha was below the maximum contaminant level (MCL) of 15 pCi/L and the Gross Beta was below the target level of 50pCi/L (roughly equivalent to the annual dose rate of 4 millirems per year). At the time of testing and with respect to these parameters, the well water is safe for all uses.


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-95-1981. Although the submitted sample results are in compliance with COMAR standards, the Health Department does not guarantee water supplies.

This Interim Certificate of Potability will expire **six months** from the date of issuance. Submission of a second bacteriological test indicating the water is free of coliform and fecal coliform bacteria is required prior to the expiration date, after which time a Final Certificate of Potability will be issued. **Failure to submit an additional sample and obtain a Final Certificate of Potability will result in a Notice of**

Violation and is punishable as a misdemeanor under the *Annotated Code of Maryland, Environment Article, 9-1311*, subject to a fine of up to \$500 or imprisonment not to exceed three months.

Please contact (410) 313-1773 to schedule a final water sample appointment or contact a certified water quality laboratory to schedule a water sample. A list of laboratories certified by the state of Maryland may be found at the following website: <http://www.mde.state.md.us/assets/document/WSP-Labs-2010apr16.pdf>

Approving Authority,



Robert Bricker, REHS/R.S.
Environmental Sanitarian
Well & Septic Program

cc: Howard County Dept. of Inspections, Licenses, and Permits
Community Hygiene Program
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 #: 84443 Account #: 1930
Reference: Toll Brothers Lot 81 Company: Fogle's Well Drilling
Location: 11610 Clarksville Pike Requested By: Dave Fogle
Ellicott City, MD 21042 Source: Well Water
Date/ Time Collected: 5/21/2012 1003 Site: Kitchen Sink Tap
Date/Time Rec'd: 5/21/2012 1330 Treatment: Reverse Osmosis**
Chlorine ppm: Free: ND Total: ND pH: 7.1
Collected By: J. Fogle 1974JF Well #: HO-95-1981 1982?

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	5/22/2012 / 0930 / CCH
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	5/22/2012 / 0930 / CCH

Bacteria OK
4-1-12 HS

NOTES

- ** Sample collected prior to Reverse Osmosis
- MPN/ 100 ml = Most Probable Number [of viable bacteria] per 100 ml of sample.
- Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- ND:None Detected
- Sample collected by client, analyzed as received
- pH & Chlorine level tested in lab

Reason for Test : Use & Occupancy

Building Permit # : B11001595

Date Reported: 5/22/2012

MD State Certification # 133

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 #:	84388	Account #:	1930
Reference:	Toll Brothers Lot 81	Company:	Fogle's Well Drilling
Location:	11610 Clarksville Pike	Requested By:	Dave Fogle
	Ellicott City, MD 21042	Source:	Well Water
Date/ Time Collected:	5/15/2012 1405	Site:	Kitchen Sink Tap
Date/Time Rec'd:	5/15/2012 1523	Treatment:	Reverse Osmosis**
Chlorine ppm:	Free: ND Total: ND	pH:	6.6
Collected By:	J. Fogle 1974JF	Well #:	HO-95-1981 1982?

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Nitrate	<1.0	mg/L	10	601	5/15/2012 / 1750 / BCD
Bacteria, Coliform, Total, MPN	2.0	MPN/ 100 ml	<1.0	SM18 9223	5/17/2012 / 0945 / CCH
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	5/17/2012 / 0945 / CCH
Turbidity	1.43	NTU	<10	SM18 2130B	5/16/2012 / 1320 / JKW
Sand	NS	mg/L	5	Visual/Gravimetric	5/16/2012 / 1100 / CCH

Coliform too high
5-1-12 HS Rest-OK

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 & Chlorine level tested in lab

Reason for Test : Use & Occupancy
 Building Permit # : B11001595

Date Reported: 5/17/2012

MD State Certification # 133

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 #:	84388.1	Account #:	1930
Reference:	Toll Brothers Lot 81	Company:	Fogle's Well Drilling
Location:	11610 Clarksville Pike Ellicott City, MD 21042	Requested By:	Dave Fogle
Date/ Time Collected:	5/15/2012 1405	Source:	Well Water
Date/Time Rec'd:	5/15/2012 1523	Site:	Kitchen Sink Tap
Chlorine ppm:	Free: ND Total: ND	Treatment:	Reverse Osmosis**
Collected By:	J. Fogle 1974JF	pH:	6.6
		Well #:	HO-95-1981 1982

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Radium-226	0.7	pCi/L	****	903.1	5/25/2012 / 1108 / MJN
Radium-228	<0.9	pCi/L	****	Ra-05	5/25/2012 / 1208 / SN

*pre treatment
Radium OK
6-1-12 ITS*

NOTES

- 1 ****Radium 226 and Radium 228 combined have a reference of 5 pCi/L
- 2 **Sample collected prior to Reverse Osmosis
- 3 pCi/L = picocuries per liter
- 4 Radium 226 Detection Limit: 0.1 pCi/L; Radium 228 Detection Limit: 0.9 pCi/L
- 5 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 6 Sub-contracted to Reference Lab #278
- 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 # : B11001595

Date Reported: 5/29/2012

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

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

REPORT OF ANALYSIS

Laboratory ID #: 84387.1 Account #: 1930
 Reference: Toll Brothers Lot 81 Company: Fogle's Well Drilling
 Location: 11610 Clarksville Pike Requested By: Dave Fogle
 Ellicott City, MD 21042 Source: Well Water
 Date/ Time Collected: 5/15/2012 1411 Site: R/O Tap
 Date/Time Rec'd: 5/15/2012 1523 Treatment: Reverse Osmosis
 Chlorine ppm: Free: ND Total: ND pH: 7.0
 Collected By: J. Fogle 1974JF Well #: HO-95-1981 ~~1982~~

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Radium-226	0.4	pCi/L	****	903.1	5/25/2012 / 1108 / MJN
Radium-228	<0.8	pCi/L	****	Re-05	5/25/2012 / 1208 / SN

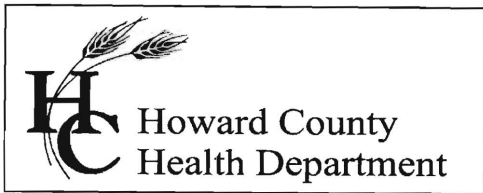
*Post treatment
 Radium OK
 4-1-12 HS*

NOTES

- ****Radium 226 and Radium 228 combined have a reference of 5 pCi/L
- pCi/L: picocuries per liter
- Radium 226 Detection Limit: 0.1 pCi/L; Radium 228 Detection Limit: 0.8 pCi/L
- Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- Sub-contracted to Reference Lab #278
- ND:None Detected
- Sample collected by client, analyzed as received
- pH & Chlorine level tested in lab

Reason for Test : Use & Occupancy
 Building Permit #: B11001595

Date Reported: 5/29/2012



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

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

MEMORANDUM

TO: Fogle's Well Drilling
Theresa
Allen Compton MWD

FROM: Kevin M. Wolf, R.S., R.E.H.S. *(Kmw)*
Well and Septic Program
Groundwater Management Section

RE: *Homewood Crossing Lots 81-88 Well Permit Applications*
Special Condition → **Radium Testing Needed**

DATE: September 7th, 2010

The following comments apply to the above referenced Well Permit Applications. Please read through and complete as needed.

Homewood Crossing Lots 81-88 are located in the Radium area and require testing. This testing will be done during the yield test of each well on each indicated lot. When calling in yields and grouts on such pre-scheduled days, please make a note that a sanitarian will need to be present during the time of the yield test to sample the water for radium.

If you have any questions on this matter, please feel free to call me at any time at 410-313-2645.

KMW
C.C. Files Lots 81-88