

C1 05924

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 4 5 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

COUNTY NUMBER

ST/CO USE ONLY DATE RECEIVED MM DD YY 08 22 13

DATE WELL COMPLETED MM DD YY 8 12 13

Depth of Well 22 200 26 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" H0-95-2467

OWNER Brothers Toll WELL SITE ADDRESS 4792 Ashby Ct. TOWN Elliott City SUBDIVISION Benedict Farm SECTION LOT 76

WELL LOG table with columns: DESCRIPTION, FEET (FROM, TO), check if water bearing. Includes entries for Brown Lumpy Mica, Gravel, Brown Mica, Dark Brown, Gray Schist, White, Gray, White, Gray.

GROUTING RECORD: WELL HAS BEEN GROUTED (Y), TYPE OF GROUTING MATERIAL (CM, BC), NO. OF BAGS 17, NO. OF POUNDS 1598, GALLONS OF WATER 102, DEPTH OF GROUT SEAL 0 to 50 ft.

CASING RECORD: MAIN CASING TYPE PL, Nominal diameter 10, Total depth 54. Includes casing types ST, CO, PL, OT.

OTHER CASING (if used) table with columns for diameter and depth.

SCREEN RECORD: screen type or open hole (HO), insert appropriate code below.

PUMPING TEST: HOURS PUMPED 03, PUMPING RATE 4, METHOD USED TO MEASURE PUMPING RATE 190L, WATER LEVEL BEFORE PUMPING 55, WHEN PUMPING 84, TYPE OF PUMP USED (S) submersible.

PUMP INSTALLED: DRILLER INSTALLED PUMP YES (NO), TYPE OF PUMP INSTALLED PLACE (C), CAPACITY: GALLONS PER MINUTE 31, PUMP HORSE POWER 37, PUMP COLUMN LENGTH 41, CASING HEIGHT (+) above, LAND SURFACE 01 (nearest) foot.

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED YES (Y) NO (N)

CIRCLE APPROPRIATE LETTER: A WELL WAS ABANDONED AND SEALED, 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...

DRILLERS, L.C. NO. 1 MS D 109, DRILLER'S SIGNATURE, LIC. NO. 1 D

DEPTH (nearest ft.) 1 2 H0 59 200, E A C H S C 3 R E E N, SLOT SIZE 1 2 3, DIAMETER OF SCREEN 56 60

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

LATITUDE 39.2409821, LONGITUDE 76.9073410 (DEFAULT COORD. WGS 84), NOTES:

DRILLER: COMPLETE THIS APPLICATION AND RETURN ALL PARTS OF THIS FORM INTACT TO THE ENVIRONMENTAL AGENCY IN THE COUNTY IN WHICH THE WELL IS TO BE DRILLED. PRESS FIRMLY FOR FOURTH COPY.

EMERGENCY/TEMP NO. IF ANY

| | | | | |
|-----|--------------|--------------------------------|---|---|
| B 1 | 09366 | SEQUENCE NO. (MDE USE ONLY) | STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL 54471-B please type | STATE PERMIT NUMBER Ho-95-2467 <small>fill in this form completely</small> |
|-----|--------------|--------------------------------|---|---|

Date Received (APA) 12 1912

OWNER INFORMATION

8 MM DD YY 13

15 Last Name Toll Brothers Owner First Name 34

36 Street or RFD 11423 Hunt Crossing Ct 55

57 Town Ellicott City Md 70 State md 72 Zip 21043 76

B 3 **LOCATION OF WELL**

8 COUNTY Howard 21

23 SUBDIVISION Homewood Crossing 42

SECTION 44 46 LOT 76 48 50

52 NEAREST TOWN Ellicott City Md 71

DRILLER INFORMATION

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

Firm Name Fogles Well Drilling, LLC

Address P.O. Box 202 Woodbine 21797

Signature Allen Compton Date 12-6-12

B 4 **SOURCES OF DRILLING WATER**

11 STREET ADDRESS 4709 Ashby 30

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)

34 50 37

DISTANCE FROM ROAD ENTER FT OR MI 38 39

TAX MAP: 0029 BLK: 0009 PARCEL 0038

B 2 **WELL INFORMATION**

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

AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 500

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

OPEN LOOP GEOTHERMAL

CLOSED LOOP GEOTHERMAL

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Howard (13) A-515042

COUNTY NAME COUNTY NO.

STATE SIGNATURE _____ INSERT S →

DATE ISSUED 1/18/13 Kim R. Way 1/18/14

43 MM DD YY 48 CO SIGNATURE EXP. DATE

APPROXIMATE DEPTH OF WELL 300 FEET

APPROXIMATE DIAMETER OF WELL 6 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)

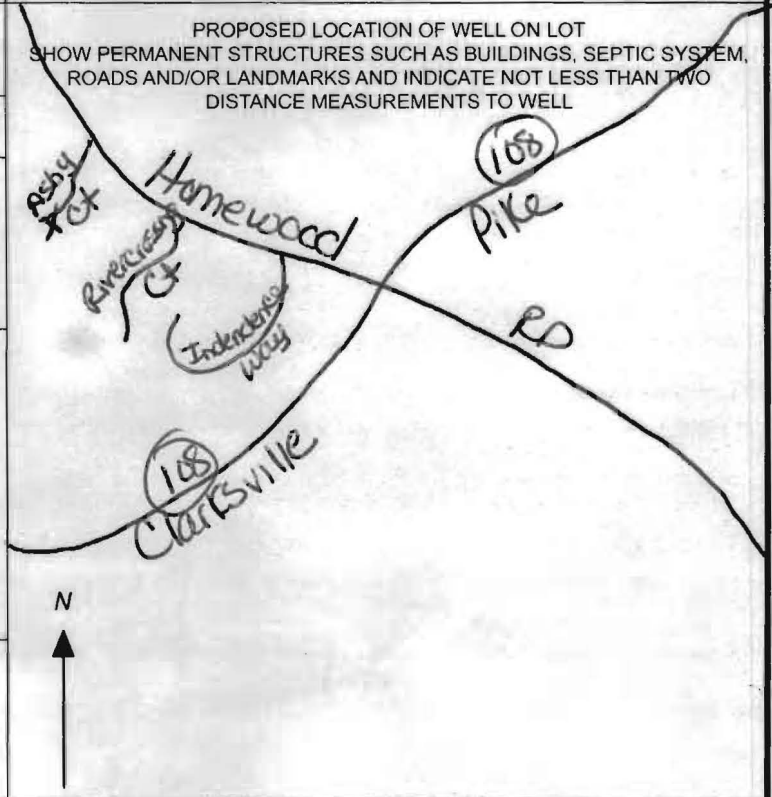
THIS WELL WILL NOT REPLACE AN EXISTING WELL

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 DEEPEM AN EXISTING WELL

PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED (IF AVAILABLE) _____



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

APPROP. PERMIT NUMBER Ho 2023 G 006

PERMIT No. Ho-95-2467

SPECIAL CONDITIONS See attached

**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: FACPS Well Drilling Telephone #: 443 609 4195
Address: PO 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# MSD 009

*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 #: 410 489 7407
Subdivision: Benedict Farm Lot #: 76 Well Tag #: HO-95-2467
Site Address: 4709 Ashby Ct

Submersible Pump Data

Make: Grundfos
Model #: IS56GE07-100
Pump Capacity 7 GPM
Well Yield: 5 GPM

Pitless Adapter

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

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: 200 (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" 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.

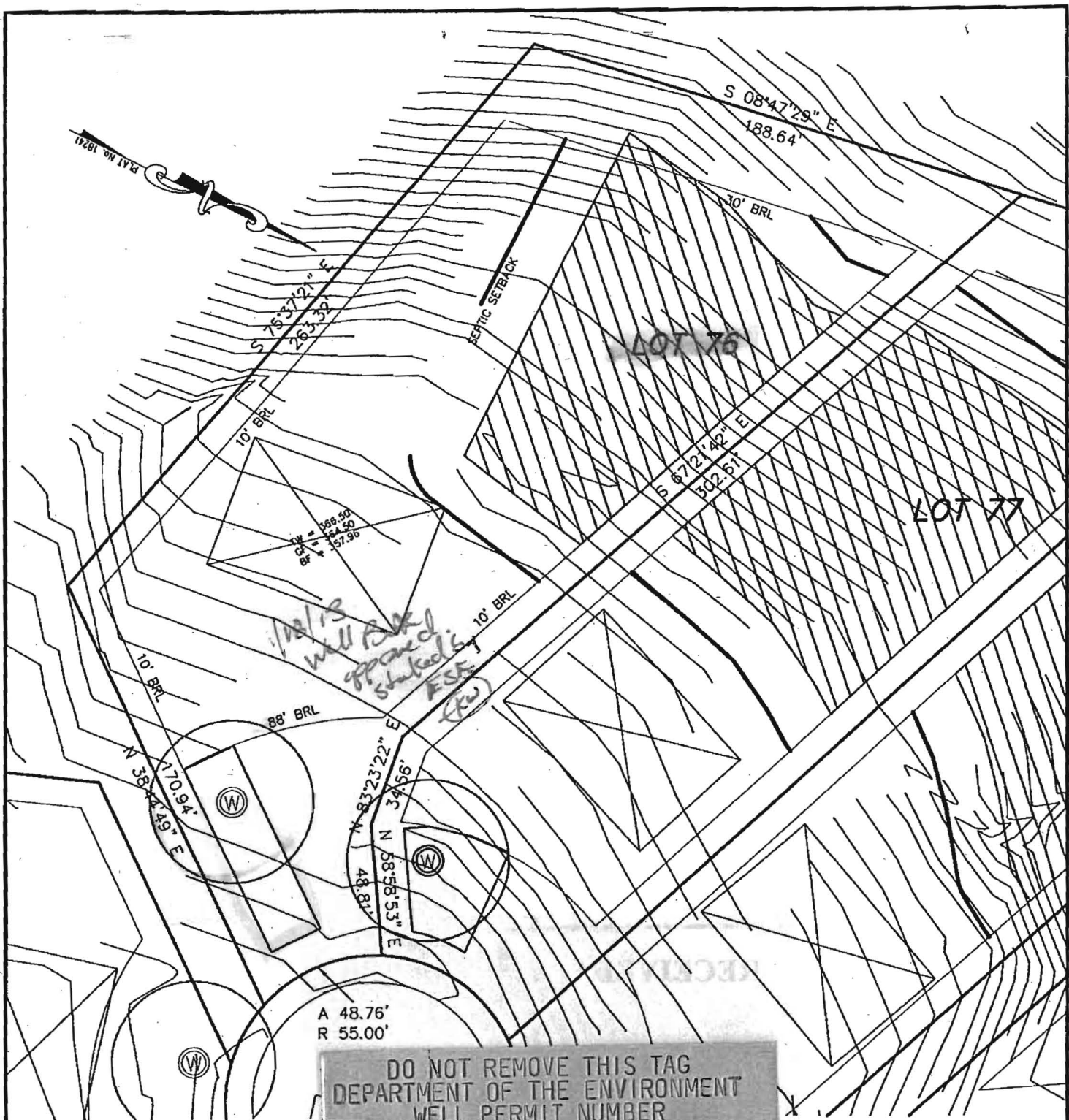
Signature of company representative responsible for installation: Allen Compton date: 12/31/13

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

Date Insp. Requested: _____ Date Insp. Approved: 1/10/2013 Inspector: BB

- 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

Covered - Not Inspected



DO NOT REMOVE THIS TAG
 DEPARTMENT OF THE ENVIRONMENT
 WELL PERMIT NUMBER
 HO-95-2467
 INFORMATION-GIVE NUMBER AND WRITE
 1800 WASHINGTON BLVD.
 BALTIMORE, MARYLAND 21230

DATE: 12/14/2012
 DRAWN BY: C.E.R.
 CHK'D: M.J.B.

SCALE 1" = 50'



ESE Consultants Inc.
 7164 Columbia Gateway Dr.
 Suite 203
 Columbia, MD 21046
 TEL: 410-872-9105
 FAX: 410-872-4870

Send Report To: Bert Nixon

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

Laboratories Administration

201 W. Preston St

P.O. Box 2355, Baltimore, Maryland 21203

Robert A. Myers, Ph. D., Director

WATER ANALYSIS

Lab No. Date Received

Do not write above this line.

Howard Co Env/Health

7178 Columbia Gateway Dr.

Columbia, MD 21046

SAMPLE

Bottle Number 952467BB Name Homewood Crossing - 76 County Howard County Code 13

Location 4709 Ashby Court Data Category Code

Collected: Date 8/5/2013 Time 11:00AM Collector & Phone B. Baker (410) 313-2643 Submitter Code

CHECK (one per box)

| | | | | |
|--|---|--|---|--|
| Drinking Water <input checked="" type="checkbox"/> | Community <input type="checkbox"/> | Source (raw water) <input checked="" type="checkbox"/> | Emergency <input type="checkbox"/> | Federal Project <input type="checkbox"/> |
| Landfill <input type="checkbox"/> | Non-community <input type="checkbox"/> | Distribution (treated) <input type="checkbox"/> | Routine <input checked="" type="checkbox"/> | |
| Stream <input type="checkbox"/> | Private <input checked="" type="checkbox"/> | MCL <input type="checkbox"/> | Recheck <input type="checkbox"/> | |
| Other <input type="checkbox"/> | Other <input type="checkbox"/> | | Special <input type="checkbox"/> | |

FIELD

Plant No. Sampling Station Preservation: Iced Acid Type of Acid

pH Chlorine: Free Total Specific Conductance

Notes to Lab/Remarks: Sample Collected During Yield Test

| CHECK TESTS | TESTS | Error Code | RESULTS |
|-------------|--------------------------|------------|---------|
| | Alkalinity (Total) | | |
| | Ammonia - N | | |
| ✓ | Chloride | | |
| | Conductance*, Spec. | | |
| ✓ | Dissolved Solids (Total) | | |
| | Hardness | | |
| | Fluoride | | |
| | Nitrite, N | | |
| | Nitrate - Nitrite, N | | |
| | Sulfate | | |
| | Total Solids | | |
| | Turbidity* | | |
| ✓ | Other: <u>SPATIAL</u> | | |
| | | | |
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| | | | |
| | | | |

* Results reported in Units, all others in milligrams per liter (ppm)

Number of Tests Requested 2 Section Chief _____ Date Reported _____

SEND REPORT TO: Bert Nixon DEPARTMENT OF HEALTH AND MENTAL HYGIENE
Howard Co. Env. Health Laboratories Administration
7178 Columbia Gateway Dr. 201 W. Preston St., Baltimore, MD 21201
Columbia, MD 21046 Robert A. Myers, Ph.D., Director

Lab No.

RADIATION ANALYSIS REQUEST FORM

Plant/Site Name: Homewood Crossing - Lot 76 County: Howard
 Sample Source: 4709 Ashby Court Location: HO-95-2467
(Well no., lab sink, sample tap, etc.)
 Radon-222 Bottle A 952467BB Radon-222 Field Blank Bottle A 2466 + 2467
 Bottle B _____ Bottle B _____

County 113 Plant No.

CHECK (one per Box)

| Type | Service | Point of Collection | Testing |
|--|---|---|---|
| Drinking Water <input checked="" type="checkbox"/> | Community <input type="checkbox"/> | Source (Raw) <input type="checkbox"/> | Emergency <input type="checkbox"/> |
| Landfill <input type="checkbox"/> | Non-Community <input type="checkbox"/> | Distribution (treated) <input type="checkbox"/> | Routine <input checked="" type="checkbox"/> |
| Stream <input type="checkbox"/> | Private <input checked="" type="checkbox"/> | MCL <input type="checkbox"/> | Recheck <input type="checkbox"/> |
| Other <input type="checkbox"/> | Other <input type="checkbox"/> | | Special <input type="checkbox"/> |

Submitters Code: Federal Project:
 Collector: B. Baker Telephone No.: (410) 313-2643
 Date Collected: 8/5/2013 Time Collected: 11:00 a.m. _____ p.m.
 Field pH: _____ Field Chlorine: _____
 Nitric Acid Preserved: Yes No Iced: Yes No

Remarks: Sample Collected During Yield Test

| | TEST | EPA Code | Lab No. | Method No. | Results (pCi/L) | Date Analyzed | Analyst | Date Reported |
|-------------------------------------|----------------------|----------|---------|------------|-----------------|---------------|---------|---------------|
| <input checked="" type="checkbox"/> | Gross Alpha | 4000 | | | | | | |
| <input checked="" type="checkbox"/> | Gross Beta | 4100 | | | | | | |
| <input type="checkbox"/> | Radium-226 | 4020 | | | | | | |
| <input type="checkbox"/> | Radium-228 | 4030 | | | | | | |
| <input type="checkbox"/> | Total Uranium | 4006 | | | | | | |
| <input type="checkbox"/> | Radon-222 (Bottle A) | 4004 | | | | | | |
| <input type="checkbox"/> | Radon-222 (Bottle B) | 4004 | | | | | | |
| <input type="checkbox"/> | Radon Field Blank A | 4004 | | | | | | |
| <input type="checkbox"/> | Radon Field Blank B | 4004 | | | | | | |
| <input type="checkbox"/> | Tritium | | | | | | | |
| <input type="checkbox"/> | | | | | | | | |

Date Received: _____ Received By: _____
 Data Release Signature: _____ Date: _____

| Lab Use Only | Yes | No | N/A |
|-------------------------------|-----|----|-----|
| Sample Intact upon arrival? | | | |
| Sample pH <2.0? | | | |
| Received within holding time? | | | |

•Tel. No.: (410) 767-5537 •Fax No.: (410) 333-5373

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 #: 95036 Account #: 1931
Reference: Patuxent Chase Lot 76 Company: Fogles Septic
Location: 4709 Ashby Court Requested By: Kim Fogle
Ellicott City, MD 21042 Source: Well Water
Date/ Time Collected: 7/3/2014 0954 Site: Pressure Tank
Date/Time Rec'd: 7/3/2014 1137 Treatment: None
Chlorine ppm: Free: ND Total: ND pH: 6.7
Collected By: K. Davis 5531KD Well #: HO-95-2467

| PARAMETERS | RESULTS | UNITS | REFERENCE | METHOD | DATE/TIME/ANALYST |
|--------------------------------|---------|-------------|-----------|--------------------|----------------------------|
| Bacteria, Coliform, Total, MPN | <1.0 | MPN/ 100 ml | <1.0 | SM18 9223 | 7/4/2014 / 1100 / BCD |
| Bacteria, E. coli, MPN | <1.0 | MPN/ 100 ml | <1.0 | SM18 9223 | 7/4/2014 / 1100 / BCD |
| Nitrate | <1.0 | mg/L | 10 | 601 | 7/3/2014 / 1200 / CH/CS/BD |
| Turbidity | 1.03 | NTU | <10 | SM18 2130B | 7/3/2014 / 1215 / JKW |
| Sand | NS | mg/L | 5 | Visual/Gravimetric | 7/3/2014 / 1215 / JKW |

OK
DB
7-24-14

NOTES

- 1 Revised report: Lot Number changed from Lot 47 to Lot 76 per client 7/18/14 CCH
- 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 pH and Chlorine level tested in lab
- 9 Sample collected by client, analyzed as received

Reason for Test : Use & Occupancy
Building Permit # : B13002095

Date Reported: 7/18/2014

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

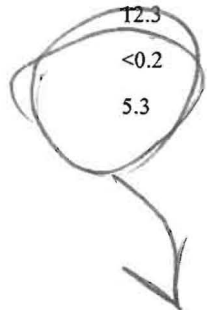
1413 Old Taneytown Rd. Westminster, MD (410) 848-1014 (410) 876-4554 FAX (410) 848-0298

REPORT OF ANALYSIS

Laboratory ID #: 95050 Account #: 1931
Reference: Patuxent Chase Lot 76 Company: Fogles Septic
Location: 4709 Ashby Court Requested By: Kim Fogle
Ellicott City, MD 21042 Source: Well Water
Date/ Time Collected: 7/7/2014 0853 Site: Pressure Tank Spigot
Date/Time Rec'd: 7/7/2014 1205 Treatment: None
Chlorine ppm: Free: ND Total: ND pH: 6.4
Collected By: K. Davis 5531KD Well #: HO-95-2467

| PARAMETERS | RESULTS | UNITS | REFERENCE | METHOD | DATE/TIME/ANALYST |
|-------------------------|---------|-------|-----------|--------|------------------------|
| Gross Alpha, Short Term | 9.2 | pCi/L | 15 | 900.0 | 7/10/2014 / 1042 / MJN |
| Gross Beta, Short Term | 12.4 | pCi/L | 50 | 900.0 | 7/10/2014 / 1042 / MJN |
| Gross Alpha, Long Term | 8.5 | pCi/L | 15 | 900.0 | 7/15/2014 / 0709 / MJN |
| Gross Beta, Long Term | 12.3 | pCi/L | 50 | 900.0 | 7/15/2014 / 0709 / MJN |
| Radium-226 | <0.2 | pCi/L | **** | 903.1 | 7/16/2014 / 1156 / MJN |
| Radium-228 | 5.3 | pCi/L | **** | Ra-05 | 7/16/2014 / 1207 / SN |

* RQ



NOT OK
DS
7-24-14
Issued per Jeff

NOTES

- 1 Revised report: Lot Number changed from Lot 47 to Lot 76 per client 7/18/14 CCH
- 2 ****Radium 226 and Radium 228 combined have a reference of 5 pCi/L
- 3 Long Term Gross Alpha Detection Limit: 1.3 pCi/L; Long Term Gross Beta Detection Limit: 1.9 pCi/L
- 4 pCi/L = picocuries per liter
- 5 Radium 226 Detection Limit: 0.2 pCi/L; Radium 228 Detection Limit: 0.8 pCi/L
- 6 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 7 Short Term Gross Alpha Detection Limit: 1.4 pCi/L; Short Term Gross Beta Detection Limit: 2.1 pCi/L
- 8 ND:None Detected
- 9 pH and Chlorine level tested in lab
- 10 Sample collected by client, analyzed as received

Reason for Test : Use & Occupancy

Building Permit # : B13002095

Date Reported: 7/18/2014

4709 Ashby Ct

Clerk of the Circuit Court for
Howard County
Land Records/Licensing

The Thomas Dorsey Building
9250 Bendix Road
Columbia, MD 21045
410-313-5850

=====
LR - Recording Fee
1x 20.00 20.00

Grantor Name: Toll MD V
Reference/Control #: 116

LR - Agreement Surcharge
1x 40.00 40.00

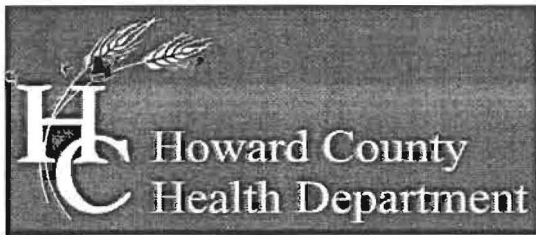
=====
SubTotal: 60.00
Total: 60.00

=====
REV-Check-BOA 60.00
Number : 6078

07/23/2014 09:41
#3074971 /494/109

CC13-NN

~ Thank you for visiting us today ~



Bureau of Environmental Health

8930 Stanford Boulevard, Columbia, MD 21045

Main: 410-313-2640 | Fax: 410-313-2648

TDD 410-313-2323 | Toll Free 1-866-313-6300

www.hchealth.org

Facebook: www.facebook.com/hocohealth

Twitter: HowardCoHealthDep

Maura J. Rossman, M.D., Health Officer

AGREEMENT FOR APPROVAL OF AN INDIVIDUAL DRINKING WELL WITH AN ON-SITE TREATMENT SYSTEM

This agreement is entered into by and between the Howard County Health Department ("the Health Department") and TOLL MOV ("the Owner").

WHEREAS, the Owner owns a tract of land at street address 4709 Ashby Court, Ellicott City, MD 21042 and the deed and subdivision plat of the property is recorded among the Land Records of Howard County, Maryland, Tax Map # 29, Block # 999, Parcel # 28, Deed Reference # 9808/204 and Tax Account # 05-443415 ("the Property").

WHEREAS, the Property lacks an available public drinking water source and is required to have and individual well as the source of drinking water for the residence of the property.

WHEREAS, the Owner has installed a residential drinking well under well permit Ho-95-2467 that has been tested by the Health Department (or a private laboratory certified to perform testing) for radionuclide particles. The results of the tests have shown that the gross alpha particle content and/or the gross beta particle content and/or the combined radium 226/228 levels exceeds the standards of 15 picocuries per liter (pCi/L), 4 millirems per year (mrem/yr) and/or 5pCi/L respectively.

WHEREAS, The Maryland Department of the Environment (MDE) has promulgated rules and regulations under which a Certificate of Potability may be issued and has delegated the authority to issue such Certificate to the Health Department.

WHEREAS, MDE regulations permit the Health Department to issue as a special condition, a permanent deviation to the Certificate of Potability for individual wells where treatment has been installed to meet the maximum contaminate levels (MCL's) for radionuclides.

WHEREAS, MDE has determined that radium can be effectively removed from the drinking water by the use of treatment devices (e.g., ion exchange or reverse osmosis).

WHEREAS, the Owner is requesting that the Health Department issue a Certificate of Potability contingent upon installation and maintenance of a water treatment device to reduce radionuclides.

WHEREAS, neither the Owner nor the Health Department has knowledge of an alternative safe source of water for the Property.

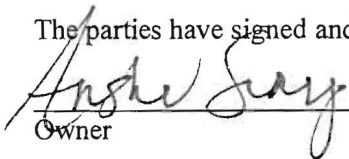
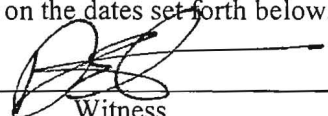
NOW THEREFORE, the parties have agreed to the following terms and conditions:

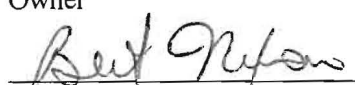
1. The Owner will record this Agreement among the Land Records of Howard County, Maryland and provide confirmation to the Health Dept.
2. The Owner agrees to install and maintain a water treatment device, which effectively reduces the gross alpha, gross beta and radium levels to below their respective MCL. The Health Department

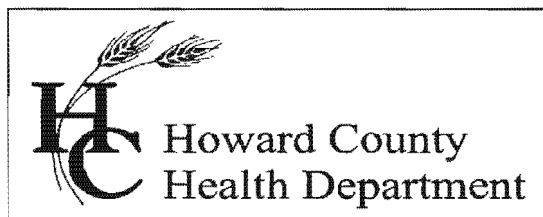
shall verify that the treatment device is operating effectively and the Owner agrees to allow access to the Health Department to collect a follow-up sample(s).

3. The Health Department shall issue a Certificate of Potability for the well once follow-up sampling shows acceptable gross alpha, gross beta (short and long term) and radium 226 / 228 levels.
4. The Owner agrees that there shall be no liability on part of the Health Department for any immediate or long term impacts to health or property, under any circumstance or including, but not limited to, treatment device failure, improper maintenance or installation, or defect. The Health Department does not warranty or guarantee that the device will adequately or properly function and the Owner agrees to implement and pay for any necessary changes or corrections.
5. The Owner acknowledges and agrees that neither the Health Department nor any of its agents or employees, either officially or individually, underwrites the operation of any system or treatment device.
6. This Agreement shall not be construed to limit any authority of the Health Department to protect the public health, safety or enjoyment of property or to issue any other orders to take any other action, which is now or may hereafter be within its authority.
7. This agreement contains the entire agreement and understanding between the Health Department and the Owner. There are no additional terms other than as contained in this Agreement. This Agreement may not be modified except in writing signed by each of the parties or their authorized representatives.
8. The Agreement shall run with the land and binds the Owner, his heirs, successors, and assigns. The owner agrees to provide a copy of this agreement to any purchaser or lessee of the property.
9. The laws of the State of Maryland govern the provisions of all transactions.

The parties have signed and sealed this Agreement on the dates set forth below.

| | | | |
|---|---------|--|---------|
|  | 7.21.14 |  | 7/21/14 |
| Owner | Date | Witness | Date |

| | | | |
|---|-----------|---------|-------|
| _____ | _____ | _____ | _____ |
| Owner | Date | Witness | Date |
|  | 7/23/2014 | | |
| Howard County Health Department | Date | | |



Bureau of Environmental Health

8930 Stanford Blvd. Columbia, MD 21045
Main: 410-313-6300 | Fax: 410-313-6303
TDD 410-313-2323 | Toll Free 1-866-313-6300
www.hchealth.org
Facebook: www.facebook.com/hocohealth
Twitter: HowardCoHealthDep

Maura J. Rossman, M.D., Health Officer

INTERIM CERTIFICATE OF POTABILITY
PERMANENT DEVIATION FOR RADIUM

Expiration Date – February 5, 2015

August 5, 2014

Homeowner
4709 Ashby Court
Ellicott City, Maryland 21042

RE: Patuxent Chase, Lot #76
4709 Ashby Court
Building Permit: B13002095
Well Permit: HO-95-2467

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 **1/10/2014**. Final approval of the well line connection to the dwelling was granted on **1/10/2013**. The well construction was completed on **8/12/2013**. Water samples were collected on **7/03/2014**.

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.

Gross Alpha and Beta samples were also collected on **7/07/2014**. 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). However, the Radium 226 and Radium 228 samples collected on **7/07/2014** showed results of a combined total of 5.5 pCi/L, which indicated elevated levels of Radium 226 and/or Radium 228. The EPA recommends the combined levels of Radium 226/228 to be less **5 pCi/L to meet EPA standards**.

After installation of a radionuclide removal device (kitchen tap reverse osmosis system), post-treatment water samples were collected on **7/21/2014** and indicated Radium 226 at a level of 0.1 pCi/L and Radium 228 at a level of <0.9 pCi/L. The combined total of Radium 226/228 is less than **5 pCi/L which meets EPA recommendations**.

This Department will grant a **permanent deviation** to the Interim Certificate of Potability on condition that the radionuclide removal system effectively maintains a Gross Alpha level of less than **15 pCi/L**, a Gross Beta level of less than **50 pCi/L**, and a Radium 226/228 level of less than **5 pCi/L**.

Furthermore, it will be necessary for you to comply with the following conditions:

1. The system must be properly operated and maintained continuously in accordance with the service contract for the life of the residence.
2. It is recommended that a Maryland certified water laboratory certified for radionuclide analysis perform a yearly radionuclide analysis.
3. If you decide to sell or rent your home in the future, you must make any potential buyer/tenant aware of this permanent deviation. **A person who fails to make this disclosure is subject to the penalties set out in COMAR 26.04.04.12F Enforcement and Environment Article 9-1311, Annotated Code of Maryland.**

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-95-2467. 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 Maryland 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,



Dana Bernard, R.E.H.S.
Environmental Sanitarian
Well & Septic Program

cc: Howard County Dept. of Inspections, Licenses, and Permits
Community Hygiene Program
File



Bureau of Environmental Health
 7178 Columbia Gateway Drive, Columbia, MD 21046-2147
 Main: 410-313-2640 | Fax: 410-313-2648
 TDD 410-313-2323 | Toll Free 1-866-313-6300
 www.hchealth.org
 Facebook: www.facebook.com/hocohealth
 Twitter: HowardCoHealthDep

Maura J. Rossman, M.D., Health Officer

REQUEST FOR TEMPORARY DEVIATION TO
 RADIUM STANDARDS FOR CERTIFICATE OF POTABILITY

DATE: 7/21/14 WELL PERMIT #: HO - 95 - 2467
 PROPERTY OWNER: TOLL M.D.V
 SUBDIVISION & LOT #: Benedict Farm 76
 PROPERTY ADDRESS: 4709 Ashby Court Ellicott City, md 21042

TESTIMONIAL: Steps that will be taken, or that have already been taken, by the well owner or agent to bring the well into compliance with COMAR 26.04.04.09 (B) within forty-five (45) days. If post-treatment water samples have been taken, state the specific analyses that will be reported in results, e.g. Gross Alpha and Gross Beta and/or Radium.

SHORT & LONG TERM GROSS ALPHA & BETA & POST RADIUM 226/228
SHORT TERM GROSS ALPHA & BETA - PRE-TREATMENT
 R/O Device has been installed, tests are at lab.

CONDITIONS:

- 1) Within forty-five (45) days, the well installed under permit # HO - 95 - 2467 will be documented to have Gross Alpha level of 15 pCi/l, Gross Beta level 50 pCi/l, and/or sum of Radium 226 and Radium 228 at level 5 pCi/l or less (including reported margin of error) at the primary drinking tap as a result of installation of a water softener system, or at the reverse osmosis tap.
- 2) If the radium condition cannot be remediated to a level of Gross Alpha level of 15 pCi/l, Gross Beta level 50 pCi/l, and/or sum of Radium 226 and Radium 228 at level 5 pCi/l or less (including reported margin of error) via installation of a water softener treatment or reverse osmosis system, then drilling a replacement well would likely be necessary. Issuance of a Final Certificate of Potability will be delayed until the issue is resolved.

I hereby request that a Forty-five Day Temporary Deviation to COMAR 26.04.04.09 be granted for the well installed under permit # HO 95 - 2467. I am fully aware of the conditions under which this deviation will be granted, and of my responsibilities as the well owner which include advising any future buyer/tenant of the installation, condition and maintenance responsibilities of the radium removal device.

Prospective Owner's Original Signature(s) [Person(s) that intend to live in the dwelling

Ashu Sanyal

Prospective Owner's Day Time Phone Number(s)

443 878 4310

OK to process/proceed BMD if on 7/22/2014

B 1 6139

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL

STATE PERMIT NUMBER

HO-95-1241 fill in this form completely

527287 please type

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

B 3 LOCATION OF WELL

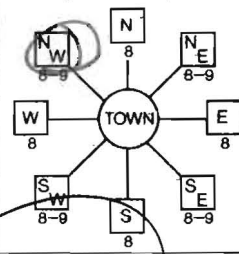
8 COUNTY 21
Howard
23 SUBDIVISION
Homewood Crossing
SECTION II LOT 76
44 46 48 50
Columbia
52 NEAREST TOWN 71
MILES FROM TOWN (enter 0 if in town) 5.0 MI

DRILLER INFORMATION

Allen Compton M S D 009
Driller's Name 76 License No. 81
Fogles Well Drilling
Firm Name
580 Obiccht rd.
Address
Signature Date 7-17-07

B 4

1 2
DIRECTION OF WELL FROM TOWN (CIRCLE BOX)



11 NEAR WHAT ROAD 30
Ashby CT.

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)

90 00 37
DISTANCE FROM ROAD FT

ENTER FT OR MI 38 39

TAX MAP: 29 BLK: 9 PARCEL 28

B 2 WELL INFORMATION

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

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 8/23/2007 Brian Baker 8/23/2008
43 MM DD YY 48 CO SIGNATURE EXP. DATE
NORTH GRID 513 0 0 0 EAST GRID 826 0 0 0
50 55 57 63

APPROXIMATE DEPTH OF WELL 300 FEET
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)

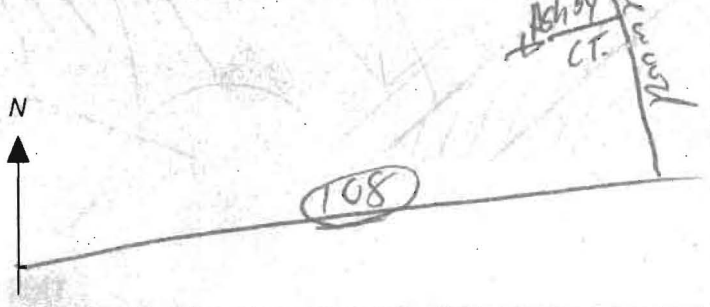
N THIS WELL WILL NOT REPLACE AN EXISTING WELL
Y THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
S THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS
D THIS WELL WILL DEEPEMED AN EXISTING WELL
PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED (IF AVAILABLE) 41 52

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

SOURCES OF DRILLING WATER
1.
2.
3.

WRITE THE BOX NUMBER FROM THE MAP HERE
E 826
N 513

DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION



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

APPROP. PERMIT NUMBER HO2003G006
PERMIT No. HO95-1241

SPECIAL CONDITIONS Radium Sample Needed During Yield Test




Howard County
Health Department

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: Teresa Miller
Allen Compton, MWD
Fogles Well & Septic
Faxed to 443-609-4196

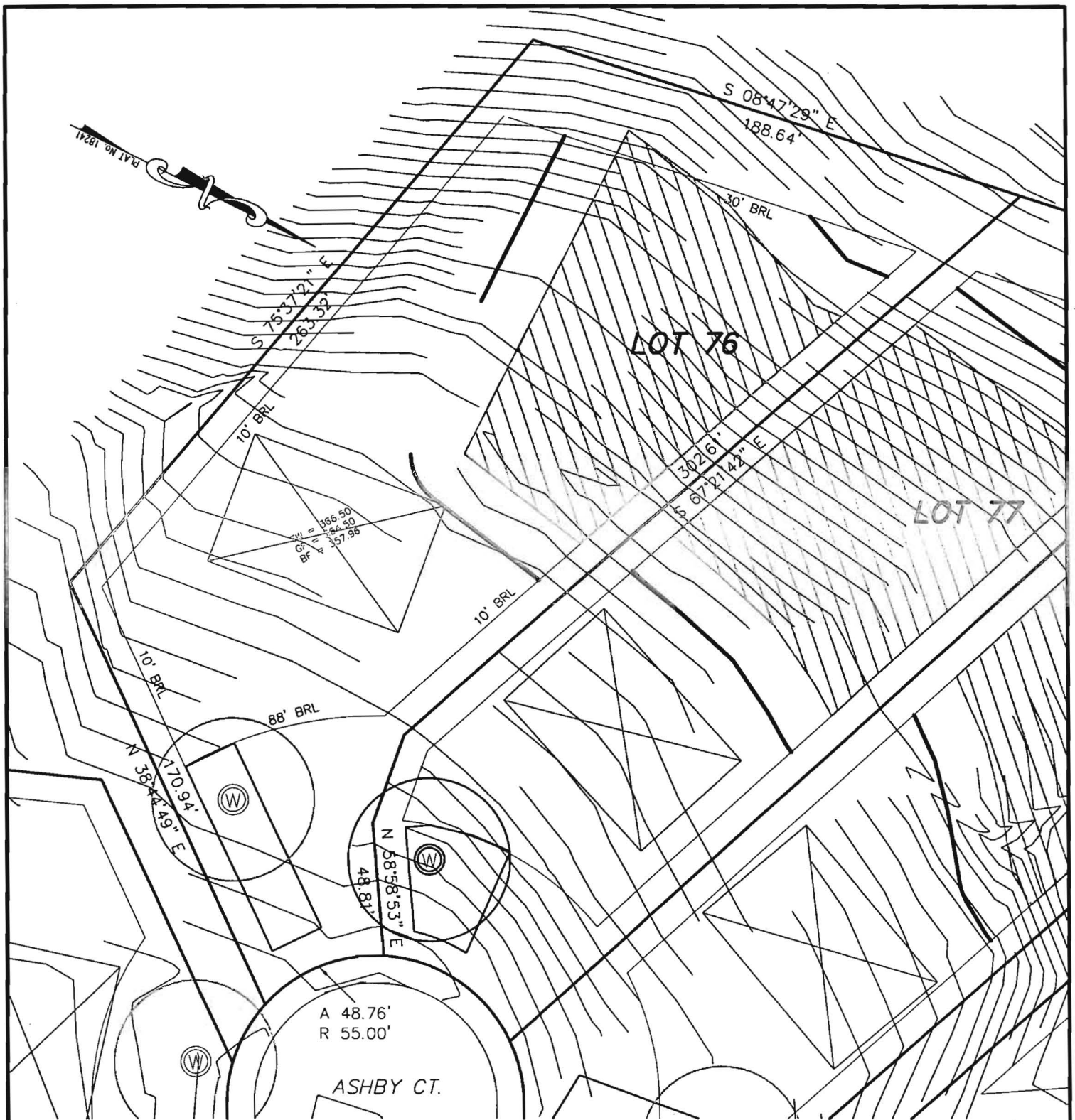
FROM: Stuart F. Oster, R.S. 
Groundwater Management Section Supervisor
Well and Septic Program

DATE: August 21, 2009

RE: One year well permit extension (8/23/09 to 8/23/10) for the following
wells in the **Patuxent Chase (Homewood Crossing) Development**

| <u>LOT #</u> | <u>WELL TAG #</u> |
|--------------|-------------------|
| 44 | HO-95-1229 |
| 67 | HO-95-1295 |
| 70 | HO-95-1238 |
| 71 | HO-95-1296 |
| 73 | HO-95-1239 |
| 75 | HO-95-1240 |
| 76 | HO-95-1241 |
| 78 | HO-95-1242 |
| 79 | HO-95-1243 |

C: Files



A 48.76'
 R 55.00'
 ASHBY CT.

WELL EXHIBIT
LOT 76
HOMWOOD CROSSING

DATE: 12/14/2012
 DRAWN BY: C.E.R.
 CHK'D: M.J.B.

SCALE 1" = 50'



Land Planning
 Engineering
 Land Surveying

ESE Consultants Inc.
 7164 Columbia Gateway Dr.
 Suite 203
 Columbia, MD 21046
 TEL: 410-872-9105
 FAX: 410-872-4870

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 #: | 95255 | Account #: | 1931 |
| Reference: | Patuxent Chase Lot 76 | Company: | Fogles Septic |
| Location: | 4709 Ashby Court | Requested By: | Kim Fogle |
| | Ellicott City, MD 21042 | Source: | Well Water |
| Date/ Time Collected: | 7/21/2014 1322 | Site: | R/O Tap |
| Date/Time Rec'd: | 7/21/2014 1450 | Treatment: | Reverse Osmosis <i>OK</i> |
| Chlorine ppm: | Free: ND Total: ND | pH: | 6.9 |
| Collected By: | J. Fogle 1974JF | Well #: | HO-95-2467 |

| PARAMETERS | RESULTS | UNITS | REFERENCE | METHOD | DATE/TIME/ANALYST |
|-------------------------|---------|-------|-----------|--------|------------------------|
| Gross Alpha, Short Term | <1.0 | pCi/L | 15 | 900.0 | 7/23/2014 / 0948 / MJN |
| Gross Beta, Short Term | 3.0 | pCi/L | 50 | 900.0 | 7/23/2014 / 0948 / MJN |
| Gross Alpha, Long Term | <0.9 | pCi/L | 15 | 900.0 | 7/29/2014 / 1035 / MJN |
| Gross Beta, Long Term | 3.5 | pCi/L | 50 | 900.0 | 7/29/2014 / 1035 / MJN |
| Radium-226 | 0.1 | pCi/L | **** | 903.1 | 7/30/2014 / 1417 / MJN |
| Radium-228 | <0.9 | pCi/L | **** | Ra-05 | 7/28/2014 / 1406 / SN |

** Q252*

Treatment working

OK BB 8-5-14

NOTES

- 1 ****Radium 226 and Radium 228 combined have a reference of 5 pCi/L
- 2 Long Term Gross Alpha Detection Limit: 0.9 pCi/L; Long Term Gross Beta Detection Limit: 2.0 pCi/L
- 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 Short Term Gross Alpha Detection Limit: 1.0 pCi/L; Short Term Gross Beta Detection Limit: 2.0 pCi/L
- 7 Sub-contracted to Reference Lab #278
- 8 ND:None Detected
- 9 pH and Chlorine level tested in lab
- 10 Sample collected by client, analyzed as received

Reason for Test : Use & Occupancy
Building Permit # : B13002095

Date Reported: 8/1/2014



Bureau of Environmental Health

7178 Columbia Gateway Drive, Columbia, MD 21046-2147

Main: 410-313-2640 | Fax: 410-313-2648

TDD 410-313-2323 | Toll Free 1-866-313-6300

www.hchealth.org

Facebook: www.facebook.com/hocohealth

Twitter: HowardCoHealthDep

Maura J. Rossman, M.D., Health Officer

MEMORANDUM

TO: Fogle's Well Drilling
ATTN: 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 70, 71, 73, 75, 76, 78, 79 Well Permit
Applications: Special Conditions***

DATE: January 17th, 2013

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

In order to preserve the quality of ground drinking water, a special condition has been set for the above referenced lots. This condition requires the driller to seal off the upper strata by placing a certain amount of casing to the approximate depth below the very first water-bearing fracture OR a minimum of 75 feet (which ever comes first). For example, if you hit a water-bearing fracture at 53 feet, then there should be at least 55 feet of casing or enough casing to get below that fracture. **Any deviations to this condition are to be prior approved by the Health Department.** This will also require sampling at the time of yield test for each well. Sampling will include but not limited to, total dissolved solids, chlorides and sodium.

Homewood Crossing Lots 70, 71, 73, 75, 76, 78, and 79 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 take the recommended samples.

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 70, 71, 73, 75, 76, 78, and 79