

C1 8094 SEQUENCE NO. (MDE USE ONLY)

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.

1 2 3 6
 (THIS NUMBER IS TO BE PUNCHED
 IN COLS. 3-6 ON ALL CARDS)

COUNTY
 NUMBER

ST/CO USE ONLY
 DATE RECEIVED
 MM DO YY

DATE WELL COMPLETED
 MM DO YY

Depth of Well
 22 205 26 5/31/07
 (TO NEAREST FOOT) O.K. (BB)

PERMIT NO.
 FROM "PERMIT TO DRILL WELL"
 HO-95-0781

OWNER Toll Brothers
 STREET OR RFD Edgewoods Way TOWN Glenn
 SUBDIVISION Edgewood Farms SECTION _____ LOT 25

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 | |
| Dirt | 0 | 36 | |
| Hard Clay | 36 | 98 | |
| Med Brown | 98 | 99 | ✓ |
| Hard Clay | 99 | 160 | |
| Med Clay | 160 | 165 | ✓ |
| Hard Clay | 165 | 205 | |

GROUTING RECORD yes no
 WELL HAS BEEN GROUTED Y N
 (Circle Appropriate Box) 44 44

TYPE OF GROUTING MATERIAL (Circle one)
 CEMENT CM BENTONITE CLAY BC

NO. OF BAGS 10 NO. OF POUNDS 904

GALLONS OF WATER 600

DEPTH OF GROUT SEAL (to nearest foot)
 from 0 TOP 52 ft. to 41 BOTTOM 58 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)! 6 Total depth of main casing (nearest foot) 41

60 61 63 64 66 70

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 40 2 40 3 205

E 8 9 11 15 17 21
 C 23 24 26 30 32 36
 H 38 39 41 45 47 51
 S
 C 3
 R
 E
 E
 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 _____

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

C 3

PUMPING TEST

HOURS PUMPED (nearest hour) 3

PUMPING RATE (gal. per min.) 8.57

METHOD USED TO MEASURE PUMPING RATE Tim Bucket

WATER LEVEL (distance from land surface)

BEFORE PUMPING 43 ft.
 WHEN PUMPING 68 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 (CIRCLE) (YES or NO) 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 _____ 29

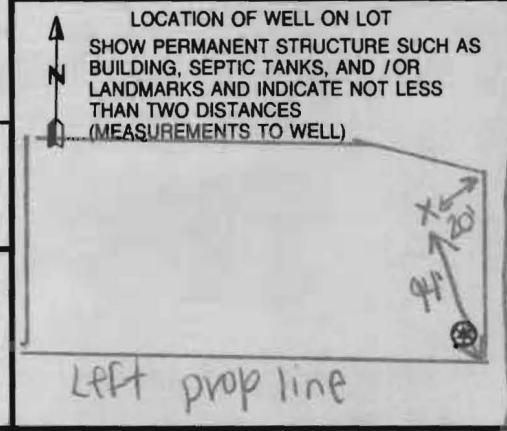
CAPACITY: GALLONS PER MINUTE (to nearest gallon) _____ 31 _____ 35

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 } _____ (nearest foot)



NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED Y N

CIRCLE APPROPRIATE LETTER
 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. MW D 355

DRILLERS SIGNATURE _____

LIC. NO. D 553

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

B 1 9337

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL

STATE PERMIT NUMBER

40-95-0781

OWNER INFORMATION: Date Received (APA), Toll Brothers, 1164 Columbia Gateway Dr. Ste 230, Columbia MD 21046

LOCATION OF WELL: Howard, Edgewood Farms, 25, Glenelg, 2 miles from town

DRILLER INFORMATION: Michael Barlow, MWD 355, Michael Barlow Well Drilling Srvc, 104 Underwood Ln, Bel Air, MD 21014

Edgewoods Way, 35, 21, 22, 90, Edgewoods Way

WELL INFORMATION: APPROX. PUMPING RATE 5 GAL. PER MIN., AVERAGE DAILY QUANTITY NEEDED 500 GAL PER DAY

USE FOR WATER: DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION

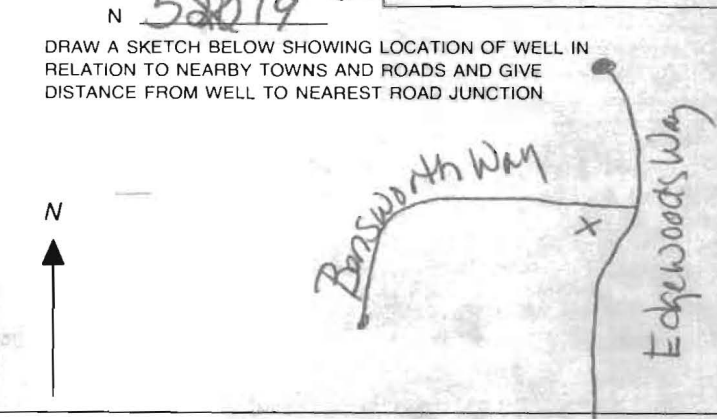
NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL: Howard, A518964, 3/30/2007, Brian Baker, 3/30/2008

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: BORED (or Augered), AIR-ROTary, AIR-PERCussion, ROTARY (Hydraulic Rotary), CABLE, REVERSE-ROTary, DRIVE-POINT

REPLACEMENT OR DEEPEMED WELLS: THIS WELL WILL NOT REPLACE AN EXISTING WELL



Not to be filled in by driller (MDE OR COUNTY USE ONLY): APPROP. PERMIT NUMBER H02006G004, PERMIT No. H0-95-0781

SPECIAL CONDITIONS



MICHAEL BARLOW WELL DRILLING & SERVICE, INC.

**522 Underwood Lane
(410) 838-6910**

**Bel Air, Maryland 21014
Fax (410) 838-3582**

WELL YIELD REPORT

Date Test Completed: April 4, 2007

Well Depth: 205 feet

| | | | |
|----------|---------------|-------------|----------------|
| Customer | Toll Brothers | Permit # | HO-95-0781 |
| Road | Edgewoods Way | Subdivision | Edgewood Farms |
| City | Glenelg | Section | |
| State | Maryland | Lot # | 25 |

| Time | Water Level feet | Time to Fill 1-gallon bucket seconds | G.P.M. |
|----------|------------------|--------------------------------------|--------|
| 9:00 AM | 43 | 7 | 8.57 |
| 9:15 AM | 52 | 7 | 8.57 |
| 9:30 AM | 68 | 7 | 8.57 |
| 9:45 AM | 68 | 7 | 8.57 |
| 10:00 AM | 68 | 7 | 8.57 |
| 10:15 AM | 68 | 7 | 8.57 |
| 10:30 AM | 68 | 7 | 8.57 |
| 10:45 AM | 68 | 7 | 8.57 |
| 11:00 AM | 68 | 7 | 8.57 |
| 11:15 AM | 68 | 7 | 8.57 |
| 11:30 AM | 68 | 7 | 8.57 |
| 11:45 AM | 68 | 7 | 8.57 |
| 12:00 PM | 68 | 7 | 8.57 |
| 12:15 PM | 68 | 7 | 8.57 |
| 12:30 PM | 68 | 7 | 8.57 |

**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 200
Iceburne, 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: Tall Brothers Telephone #: 410-992-5978
Subdivision: Edgewood Farm Lot #: 25 Well Tag #: HO-95-0781
Site Address: 14545 Edgewood Farm
Glenns Rd 21737

| | | |
|--|------------------------------|---|
| <u>Submersible Pump Data</u> | <u>Pitless Adapter</u> | <u>Well Cap and Electric Conduit</u> |
| Make: <u>Cummins</u> | Make: <u>Cummins</u> | Two piece watertight cap: <u>yes</u> |
| Model #: <u>1550K-07-130</u> | Model#: <u>NA</u> | Screened, vented well cap: <u>yes</u> |
| Pump Capacity <u>15</u> GPM | Depth: <u>36</u> (36" min) | Cap secured to casing: <u>yes</u> |
| Well Yield: <u>3.57</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>26.5</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 <u>inside of well casing</u> <u>no</u> | | |

| | |
|--|--|
| <u>Piping to house</u> | <u>House Connection</u> |
| Type: <u>1" Black Plastic</u> | PVC sleeve to undisturbed soil at wall penetration: <u>yes</u> |
| PSI: <u>160</u> (160 psi min) | Length of sleeve (5' minimum from foundation): <u>5'</u> |
| Depth of supply line: <u>42'</u> (36" min) | Sleeve sealed properly: <u>yes</u> |

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

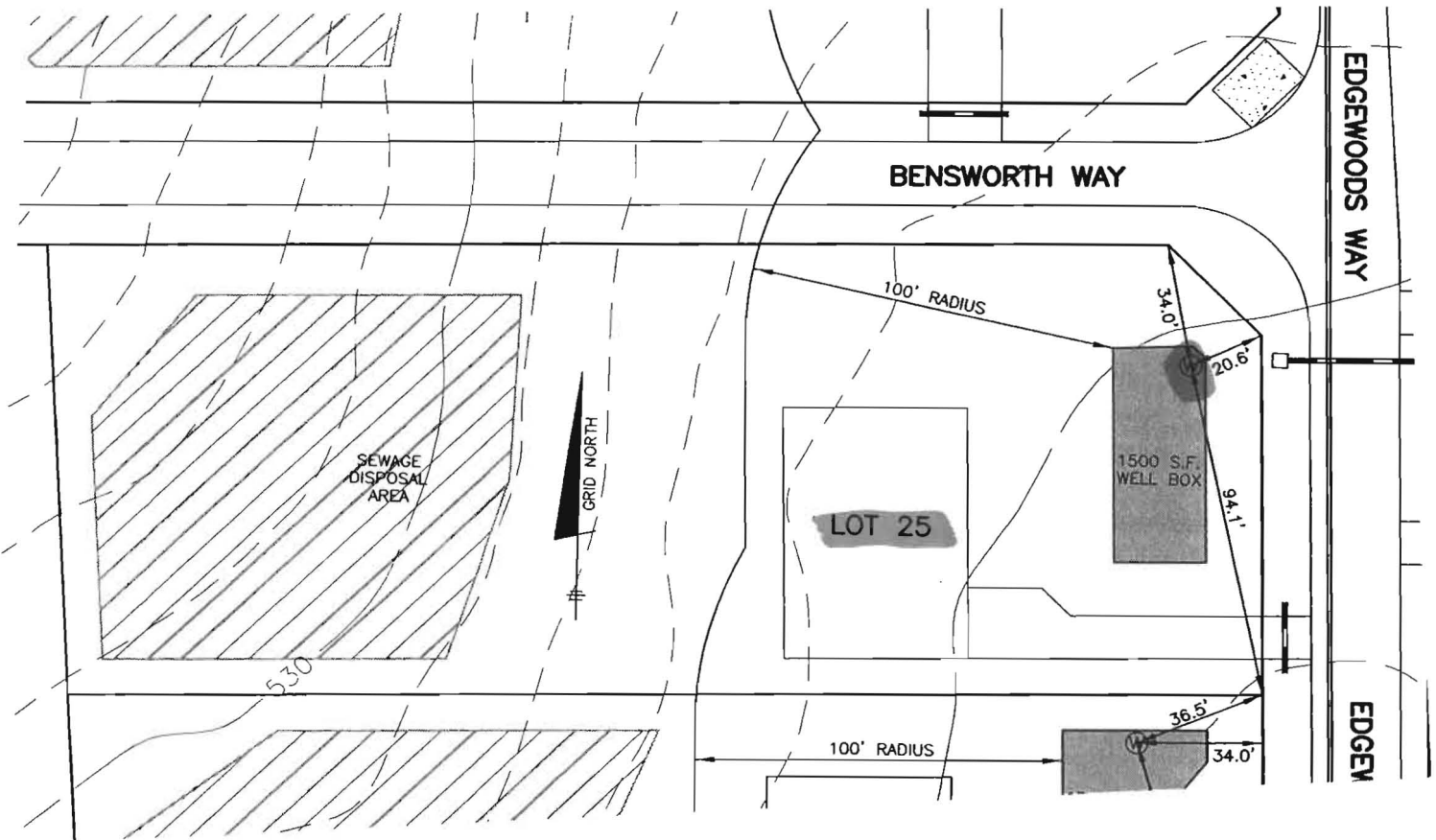
Signature of company representative responsible for installation: Allen Compton date: 8/26/10

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

Date Insp. Requested: _____ Date Insp. Approved: 8/6/10 Inspector: (initials)

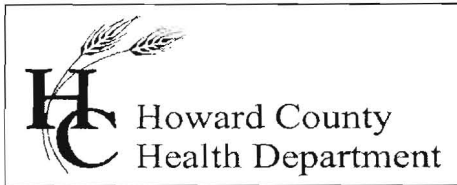
| | |
|--|-------------------------------------|
| Inspection Data: Pitless adapter watertight & water supply line at least 36" below grade | <input checked="" type="checkbox"/> |
| Two piece cap installed and attached to casing securely | <input checked="" type="checkbox"/> |
| Elec. conduit extends 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"/> |

3/30/07
Well site staked
by Benchmark. **BB**



BENCHMARK
ENGINEERS ▲ LAND SURVEYORS ▲ PLANNERS
ENGINEERING, INC.
8480 BALTIMORE NATIONAL PIKE ▲ SUITE 418
ELLICOTT CITY, MARYLAND 21043
PHONE: 410-465-6105 FAX: 410-465-6644

EDGEWOOD FARM
WELL LOCATION PLAN
LOT 25
F-06-108
SCALE: 1" = 50'
DATE: 10-4-06



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

December 8, 2010

Homeowner
 14545 Edgewoods Way
 Glenelg, MD 21737

RE: Edgewood Farm - Lot 25
 14545 Edgewoods Way
 Glenelg, MD 21737
 BP #B10000419
 Well Permit #HO-95-0781

Dear Sir/Madam,

This is to advise you that the septic system for the above referenced property has been installed and inspected. **Final approval of the septic system was granted on 08/5/2010. Final approval of the well line connection to the dwelling was approved on 08/6/2010.**

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 raw nitrate sample results were previously documented to be 10.9 ppm. **A nitrate removal device (Reverse Osmosis) has been installed to treat the excessive nitrate contamination. The nitrate treatment device appears to be operating properly as evidenced by the water sample results taken on 11/29/2010 which indicates a nitrate level of <1.0 ppm.**

Permanent Deviation for Nitrates

COMAR 26.04.04.09 prohibits approval of any water supply with a nitrate-nitrogen contaminant level in excess of 10 parts per million. **This department will grant a permanent deviation to that section of the regulation on condition that the nitrate removal system effectively maintains the nitrate-nitrogen contaminant level of 10 ppm or less.**

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 laboratory certified for water testing perform a yearly nitrate analysis. (Certified to test for nitrates)
3. If you decide to sell or rent your home in the future, you must make any potential buyer/tenant aware of the above condition.

INTERIM CERTIFICATE OF POTABILITY
(Permanent Deviation for Nitrates)

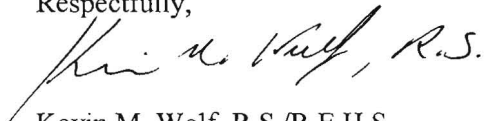
This certifies that **the initial** sampling requirements of COMAR 26.04.04 "Well Regulations" have been met for the water supply system installed under well permit #HO-95-0781. **Although the submitted sample results are in compliance with COMAR standards, the Health Department does not guarantee water 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.

Further more under COMAR 26.04.04.09 E. *Disclosure*, any and all special conditions to this interim certificate of potability shall be disclosed to any purchaser of the property served by the well HO-95-0757 before entering into a contract of sale or lease. A person who fails to make this disclosure is subject to the penalties set out in Regulation .12F Enforcement and Environment Article 9-1311, Annotated Code of Maryland.

This certificate may become final upon completion of the second bacteriological and nitrate tests, which may be taken by the health department within six months of the date 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 Sample(s): 11/16/2010, 11/19/2010 & 11/29/2010
Date of Well Completion: 04/4/2007

Respectfully,



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

cc: Building Inspector's office
Community Health Services
File

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.
 1413 Old Timey Town Rd., Westminster, MD (410) 348-7013 (410) 876-4554 FAX (410) 348-0298

REPORT OF ANALYSIS

| | | | |
|----------------------|---|---------------|-----------------------|
| Laboratory ID #: | 77575 | Account #: | 1930 |
| Reference: | Toll Brothers Lot 25 | Company: | Fogle's Well Drilling |
| Location: | 14545 Edgewood Way Glenelg, MD 21737 | Requested By: | Dave Fogle |
| Date/Time Collected: | 11/16/2010 1130 | Source: | Well Water |
| Date/Time Rec'd: | 11/16/2010 1552 | Site: | Kitchen Sink Tap ✓ |
| Chlorine ppm: | Free: ND Total: ND | Treatment: | None |
| Collected By: | J. Fogle 1974JF | pH: | 5.5 |
| | | Well #: | HO-95-0781 ✓ |

| PARAMETERS | RESULTS | UNITS | REFERENCE | METHOD | DATE/TIME/ANALYST |
|--------------------------------|---------|-------------|-----------|--------------------|-------------------------|
| Bacteria, Coliform, Total, MPN | <1.0 | MPN/ 100 ml | <1.0 | SM18 9223 | 11/17/2010 / 1000 / CCH |
| Bacteria, E. coli, MPN | <1.0 | MPN/ 100 ml | <1.0 | SM18 9223 | 11/17/2010 / 1000 / CCH |
| Nitrate | 10.2 | mg/L | 10 | 601 | 11/17/2010 / 1300 / CCH |
| Turbidity | 1.18 | NTU | <10 | SM18 2130B | 11/17/2010 / 0845 / KME |
| Sand | NS | mg/L | 5 | Visual/Gravimetric | 11/17/2010 / 0845 / KME |

Nitrates Elevated

NOTES

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

Reason for Test : Use & Occupancy
 Building Permit # : B10000419

Date Reported: 11/17/2010

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

143 Old Tarrytown Rd., Westminster, MD 21157 (410) 843-1014 (410) 876-1555 FAX: (410) 843-1099

REPORT OF ANALYSIS

| | |
|---|--------------------------------|
| Laboratory ID #: 77614 | Account #: 1930 |
| Reference: Toll Brothers Lot 25 | Company: Fogle's Well Drilling |
| Location: 14545 Edgewood Way Glenelg, MD 21737 | Requested By: Dave Fogle |
| Date/ Time Collected: 11/19/2010 0830 | Source: Well Water |
| Date/Time Rec'd: 11/19/2010 1014 | Site: Kitchen Sink Tap |
| Chlorine ppm: Free: ND Total: ND | Treatment: None |
| Collected By: J. Fogle 1974JF | pH: 5.7 |
| | Well #: HO-95-0781 |

| PARAMETERS | RESULTS | UNITS | REFERENCE | METHOD | DATE/TIME ANALYSIS |
|------------|---------|-------|-----------|--------|-------------------------|
| Nitrate | 10.9 | mg/L | 10 | 601 | 11/19/2010 / 1020 / BCD |

NOTES

- 1 mg/L = milligrams per liter (also, parts per million)
- 2 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 3 ND:None Detected
- 4 Sample collected by client, analyzed as received
- 5 pH & Chlorine level tested in lab

Reason for Test : Use & Occupancy
 Building Permit # : B10000419

Date Reported: 11/19/2010

MD State Certification # 133

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.
 1415 Old Laneysville Rd., Westminster, MD 21156-1019 (410) 876-4552 FAX (410) 848-0298

REPORT OF ANALYSIS

| | | | |
|-----------------------|---|---------------|------------------------|
| Laboratory ID #: | 77681 | Account #: | 1930 |
| Reference: | Toll Brothers Lot 25 | Company: | Fogle's Well Drilling |
| Location: | 14545 Edgewood Way Glenelg, MD 21737 | Requested By: | Dave Fogle |
| Date/ Time Collected: | 11/29/2010 1520 | Source: | Well Water |
| Date/Time Rec'd: | 11/29/2010 1610 | Site: | R/O Tap |
| Chlorine ppm: | Free: ND Total: ND | Treatment: | <u>Reverse Osmosis</u> |
| Collected By: | J. Fogle 1974JF | pH: | 5.4 |
| | | Well #: | HO-95-0781 <i>OK</i> |

| PARAMETERS | RESULTS | UNITS | REFERENCE | METHOD | DATE/TIME/ANALYST |
|------------|---------|-------|-----------|--------|-------------------------|
| Nitrate | <1.0 | mg/L | 10 | 601 | 11/29/2010 / 1615 / CCH |

Post-Treatment

NOTES

- 1 mg/L = milligrams per liter (also, parts per million)
- 2 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 3 ND:None Detected
- 4 Sample collected by client, analyzed as received
- 5 pH & Chlorine level tested in lab

Reason for Test : Use & Occupancy
 Building Permit # : B10000419

Date Reported: 11/29/2010

* KEEP WITH FILE *
HEALTH DEPT COPY

REQUEST FOR PERMANENT DEVIATION TO
NITRATE STANDARDS FOR CERTIFICATE OF POTABILITY

DATE: 12/06/10 WELL PERMIT #: HO-950-781

PROPERTY OWNER: Toll Brothers Inc. (Caton Bietel) Buyer
SUBDIVISION & LOT #: The Reserve at Triadelphia Crossing #25
PROPERTY ADDRESS: 14545 Edgewoods Way
Glencol, md 21737

CONDITIONS:

- 950 781 10.9
- 1) The well installed under permit # HO - - has been documented to have a nitrate level of ___ ppm which exceeds the MCL of 10 ppm. As a result of installation and operation of a nitrate filtration system, this nitrate contamination has been reduced to ___ ppm at the primary drinking tap.

40

I hereby request that a Permanent Deviation to COMAR 26.04.04.09 be granted for the well installed under permit HO -95-078/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 nitrate removal device.

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

Caton Bietel _____

Prospective Owner's Day Time Phone Number(s)

301233 9337 _____