

C1 7298

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT

PERMIT NO. FROM "PERMIT TO DRILL WELL" HO-95-1266

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

COUNTY NUMBER

ST/CO USE ONLY

DATE WELL COMPLETED

Depth of Well

PERMIT NO. FROM "PERMIT TO DRILL WELL"

DATE Received MM DD YY

2 7 08

150 (TO NEAREST FOOT)

4/8/08 O.K. (PB)

28 29 30 31 32 33 34 35 36 37

OWNER: Lou Brothers, STREET OR RFD: Independence Way, TOWN: Columbia, SUBDIVISION: Homeland Crossing, SECTION: , LOT: 62

WELL LOG

Not required for driven wells

GROUTING RECORD

WELL HAS BEEN GROUTED (Y) (N) TYPE OF GROUTING MATERIAL (C) (M) (B) (C) NO. OF BAGS 20 NO. OF POUNDS 1800 GALLONS OF WATER 120 DEPTH OF GROUT SEAL (to nearest foot) from 0 ft. to 70 ft.

C 3

PUMPING TEST

HOURS PUMPED (nearest hour) 0.3 PUMPING RATE (gal. per min.) 12 METHOD USED TO MEASURE PUMPING RATE 1 gal

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

Table with columns: DESCRIPTION, FEET (FROM, TO), check if water bearing. Includes entries for Brown mica (0-95) and Gray mica (95-150).

CASING RECORD (S) (T) (C) (O) (P) (L) (O) (T) (P) (L) (O) (T)

WATER LEVEL (distance from land surface) BEFORE PUMPING 39 ft. WHEN PUMPING 98 ft. TYPE OF PUMP USED (for test) (A) air (P) piston (T) turbine (C) centrifugal (R) rotary (O) other (J) jet (S) submersible

MAIN CASING TYPE (P) (L) Nominal diameter top (main) casing (nearest inch)! 06 Total depth of main casing (nearest foot) 100

PUMP INSTALLED DRILLER INSTALLED PUMP (YES) (NO) IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.

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

SCREEN RECORD (S) (T) (B) (R) (H) (O) (P) (L) (O) (T) (P) (L) (O) (T)

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

NUMBER OF UNSUCCESSFUL WELLS: 0

Table with columns: C 2, DEPTH (nearest ft.), 1-21, 23-36, 38-51, SLOT SIZE 1-3, DIAMETER OF SCREEN (NEAREST INCH) 56-60

CASING HEIGHT (circle appropriate box and enter casing height) (+) above (-) below LAND SURFACE 01 (nearest foot)

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

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)

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 28.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO. 1 M SD 009, DRILLERS SIGNATURE

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

LIC. NO. 1 D

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER) T (E.R.O.S.) W Q

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

70 72 LOG INDICATOR 74 75 76 TELESCOPE CASING OTHER DATA

No survey station see plans.

B 1 6124

SEQUENCE NO. (MDE USE ONLY)

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

STATE PERMIT NUMBER HO-95-1266 fill in this form completely

Date Received (APA)

OWNER INFORMATION

8 MM DD YY 13 Toll Brothers 15 Last-Name Owner First Name 34 36 11423 Hunt Crossing Ct Street or RFD 55 57 Ellicott City md 21042 Town 70 State 72 Zip 76

B 3

LOCATION OF WELL

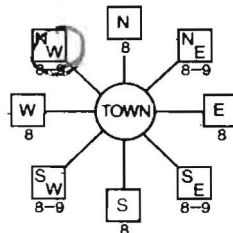
8 COUNTY Howard 21 Home wood Crossing 23 SUBDIVISION 42 SECTION 44 46 LOT 48 50 52 NEAREST TOWN Columbia 71 MILES FROM TOWN (enter 0 if in town) 5 73 76 77 78

DRILLER INFORMATION

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

B 4

1 2 DIRECTION OF WELL FROM TOWN (CIRCLE BOX)



Independence Way 11 NEAR WHAT ROAD 30 ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX) NORTH WEST EAST SOUTH 34 30 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 (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 41 DATE ISSUED 9/20/2007 Brian Baber 9/20/2008 43 MM DD YY 48 CO SIGNATURE EXP. DATE NORTH 510 0 0 0 EAST 827 0 0 0 GRID 50 55 57 63

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 30 AIR-ROTary AIR-PERCussion ROTARY (Hydraulic Rotary) 37 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)

APPROX. PERMIT NUMBER H02003G006 PERMIT No. HO-95-1266 70 71 72 73 74 75 76 77 78 79

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 8267 N 510

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



SPECIAL CONDITIONS

NOTE - APPROVING AUTHORITIES SHOULD USE SPECIAL CONDITIONS WHEN NEEDED Radon Sample Needed During Yield Test

Yield Test Data Sheet

County File # _____

District 2

MD Well Permit #. HO-95-1266

Date of Test: 2-7-08

Subdivision Name: Homewood Crossing

Section _____ Lot # 62

Street Address: Independence Way

Measuring Point (MP) Description: Top of casing
(for ex. "Top of casing")

Distance from MP to ground surface 2' ft.

Well Depth 150 ft.

Well Driller: Fogle's Well Drilling

Must be submitted with the State of Maryland Well Completion Report

Submit to:

Pump Start Time <u>8:00</u>	Static Water level: <u>39</u> ft.	Pumping Rate <input type="checkbox"/> Time to fill _____ gal. bucket <input type="checkbox"/> Flow meter reading (if used)	Calculated Flow (gallons per minute): <u>20</u>
TIME	WATER LEVEL BELOW M.P.		

Water level and pumping rate must be recorded every 15 minutes

#	TIME	WATER LEVEL ft.	PUMPING RATE	CALCULATED FLOW (GPM)
1	8:00	39 ft.	3	20 GPM
2	8:15	48 ft.	5	12 GPM
3	8:30	48 ft.	5	12 GPM
4	8:45	48 ft.	5	12 GPM
5	9:00	48 ft.	5	12 GPM
6	9:15	48 ft.	5	12 GPM
7	9:30	48 ft.	5	12 GPM
8	9:45	48 ft.	5	12 GPM
9	10:00	48 ft.	5	12 GPM
10	10:15	48 ft.	5	12 GPM
11	10:30	48 ft.	5	12 GPM
12	10:45	48 ft.	5	12 GPM
13	11:00	48 ft.	5	12 GPM
14	11:15	48 ft.	5	12 GPM
15		ft.		GPM
16		ft.		GPM
17		ft.		GPM
18		ft.		GPM
19		ft.		GPM
20		ft.		GPM
21		ft.		GPM
22		ft.		GPM
23		ft.		GPM
24		ft.		GPM
25		ft.		GPM
26		ft.		GPM
27		ft.		GPM
28		ft.		GPM
29		ft.		GPM
30		ft.		GPM

NOTES:

HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH
WATER AND SEWERAGE PROGRAM
TEL: (410)313-2640 FAX: (410)313-2648

Information Form for the Installation of the Well Pump, Pitless Adapter, and Supply Piping

NOTE: The installer is responsible for requesting an inspection prior to 9 am on the day of the desired inspection. No work is to be covered until approved by the Health Department. All installations must comply with the National Standard Plumbing Code (NSPC, as amended locally) and COMAR 26.04.04 (MD Well Construction Regulations). Submission of a complete form is required prior to Use and Occupancy approval.

Company Name: Fogles Well Drilling Telephone #: 443-609-4195
Address: 6093 Woodbine Rd
Woodbine Md 21797

(Must circle one) Licensed Plumber Licensed Well Driller Licensed Well Pump Installer

License # and name of individual responsible for the field installation:
Name (Print): Allen Compton License# MSD 009

*A licensed individual must perform the actual installation. Apprentices must be under the direct supervision of a licensed journeyman or master plumber, pump installer or well driller. Licenses may be subjected to field verification.

Name of Property Owner: Toll Brothers Telephone #: 410-993-5978
Subdivision: Benedict / Bulwent Chase Lot #: 62 Well Tag #: HO - 95-1266
Site Address: 11260 Independence way

<u>Submersible Pump Data</u>	<u>Pitless Adapter</u>	<u>Well Cap and Electric Conduit</u>
Make: <u>Grundfos</u>	Make: <u>Cummins</u>	Two piece watertight cap: <u>yes</u>
Model #: <u>1050E07180</u>	Model #: <u>NA</u>	Screened, vented well cap: <u>yes</u>
Pump Capacity <u>10</u> GPM	Depth: <u>36</u> (36" min)	Cap secured to casing: <u>yes</u>
Well Yield: <u>12</u> GPM	NSF approved: <u>yes</u>	Conduit min 18" B.G.: <u>yes</u>
Depth of well encountered at time of pump installation: <u>150</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 or Cable guards are required - Must circle one
Safety rope, if used, attached to inside of well casing with eye bolt NA

<u>Piping to house</u>	<u>House Connection</u>
Type: <u>1" Black Plastic</u>	PVC sleeved to undisturbed soil at wall penetration: <u>yes</u>
PSI: <u>100</u> (160 psi min)	Approximate length of sleeve: <u>5'</u>
Depth of supply line: <u>42</u> (36" min)	Sleeve caulked and 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.

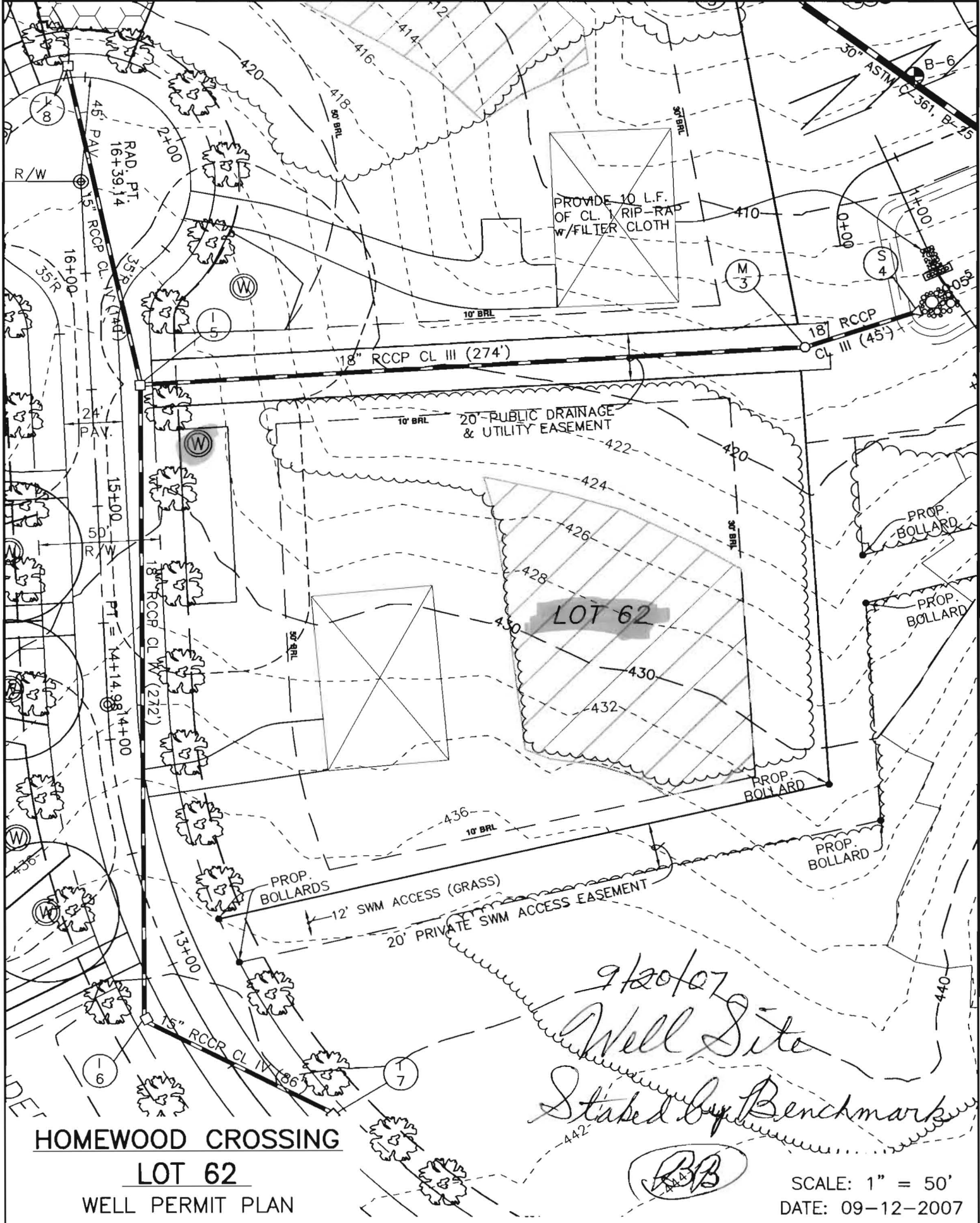
Allen Compton 5/15/08
Signature of company representative responsible for installation date

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

Date Insp. Requested: _____ Date Insp. Approved: 4/17/08 BB

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 ✓



PROVIDE 10 L.F. OF CL. RIP-RAP W/FILTER CLOTH

20' PUBLIC DRAINAGE & UTILITY EASEMENT

LOT 62

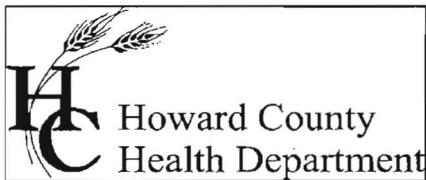
12' SWM ACCESS (GRASS)
20' PRIVATE SWM ACCESS EASEMENT

9/20/07
Well Site
Staked by Benchmarks

BB

HOMWOOD CROSSING
LOT 62
WELL PERMIT PLAN

SCALE: 1" = 50'
DATE: 09-12-2007



Bureau of Environmental Health
7178 Columbia Gateway Drive Columbia, Maryland 21046-2132
(410) 313-2640 Fax (410) 313-2648
TDD (410) 313-2323 Toll Free 1-866-313-6300
website: www.hchealth.org

Penny E. Borenstein, M.D., M.P.H., Health Officer

August 13, 2008

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

SENT VIA FACSIMILE 410-992-3234
RE: Homewood Crossing, Lot 62
11260 Independence Way
Ellicott City, MD 21042
BP #: B07004712
Well Permit # HO-95-1266

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 06/09/2008. Final approval of the well line connection to the dwelling was approved on 04/17/2008.**

The water sample results indicate that the water samples submitted for testing were free of coliform and fecal coliform bacteria at the time of sampling and are bacteriologically safe for drinking. The water sample results were found to be in compliance with COMAR water quality standards.

Gross Alpha and Beta samples were also collected on 12/11/2007. Both findings were below the maximum limit suggested by the EPA. At the time of the testing and with respect to these parameters, the future well water supply appears safe for all uses. No addition testing **for these parameters** will be required to secure the future Use and Occupancy.

INTERIM CERTIFICATE OF POTABILITY

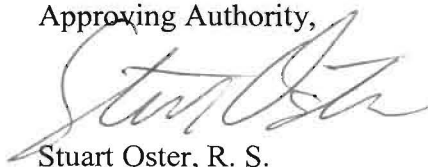
This certifies that the initial sampling requirements of COMAR 26.04.04 "Well Regulations" have been met for the water supply system installed under well permit #HO-95-1266. Although the submitted sample results are in compliance with COMAR standards, the Health Department does not guarantee water supplies. 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: 08/07/2008

Date of Well Completion: 02/07/2008

Approving Authority,

A handwritten signature in black ink, appearing to read "Stuart Oster", written over a faint, illegible stamp or background.

Stuart Oster, R. S.
Well & Septic Program

cc: Building Inspector's Office
Community Health Services
File

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

1415 Old Lane, P.O. Box 1014 Westminster, MD (410) 848-1014 (410) 876-4534 FAX (410) 848-0258

REPORT OF ANALYSIS

Laboratory ID #:	68344	Account #:	1930
Reference:	Toll Brothers Lot 62	Company:	Fogle's Well Drilling
Location:	11260 Independence Way Ellicott City, MD 21042	Requested By:	Dave Fogle
Date/ Time Collected:	8/7/2008 1400	Source:	Well Water
Date/Time Rec'd:	8/7/2008 1458	Site:	Kitchen Sink Tap
Chlorine ppm:	Free: ND Total: ND	Treatment:	None
Collected By:	V.M. Fadoul 6804VF-FS	pH:	6.4
		Well #:	HO-95-1266

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE / TIME ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223 B.	8/8/2008 / 0915 / AMD
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223 B.	8/8/2008 / 0915 / AMD
Nitrate	<1.0	mg/L	10	601	8/7/2008 / 1515 / AMD
Turbidity	2.20	NTU	<10	SM18 2130B	8/7/2008 / 1510 / AMD
Sand	NS	mg/L	5	Visual/Gravimetr	8/7/2008 / 1510 / AMD

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 # : B07004712

Date Reported: 8/8/2008



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

February 22, 2008

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

**RE: Patuxent Chase Lot 62
Independence Way
Well Tag: HO - 95 - 1266**

To Whom It May Concern:

A sample was collected during a yield test on December 11, 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 2.0 ± 1.0 picocuries/liter (pCi/L); while the **Gross Beta** level was 5.0 ± 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,

Bert Nixon, Director
Bureau of Environmental Health

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

