

SEQUENCE NO. (DENV USE ONLY)
 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

STATE OF MARYLAND
WELL COMPLETION REPORT
 FILL IN THIS FORM COMPLETELY
 PLEASE PRINT OR TYPE

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER **A 522 987**

ST/CO USE ONLY
 DATE Received **06/20/11**
 DATE WELL COMPLETED **06/09/11**

Depth of Well **9/16/2011**
185
 (TO NEAREST FOOT) **O.K. (PB)**
 PERMIT NO. FROM "PERMIT TO DRILL WELL" **1A0-95-2118**

OWNER **Heritages Realty & Land Development**
 STREET OR RFD last name **PO BOX 482** first name **LISBON MD**
 TOWN **LISBON MD**
 SUBDIVISION **menlweather FARM** SECTION **2** LOT **41**

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	
Top Soil	0	2	
Sandy	2	50	✓
Sand Stone	50	55	
MICKA	55	90	
Sand Stone	90	95	✓
MICKA	95	185	

GROUTING RECORD
 WELL HAS BEEN GROUTED (Circle Appropriate Box) **Y** **N**
 TYPE OF GROUTING MATERIAL
 CEMENT **CM** BENTONITE CLAY **BC**
 NO. OF BAGS **20** NO. OF POUNDS **2000**
 GALLONS OF WATER **120**
 DEPTH OF GROUT SEAL (to nearest foot)
 from **0** ft. to **60** ft.
 (enter 0 if from surface)

CASING RECORD
 casing types insert appropriate code below
ST **CO**
 STEEL CONCRETE
PL **OT**
 PLASTIC OTHER
 MAIN CASING TYPE **PL** Nominal diameter top (main) casing (nearest inch) **6** Total depth of main casing (nearest foot) **63**

OTHER CASING (if used)
 diameter inch from to

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

IN HARD ROCK AREAS, IDENTIFY SPECIFICALLY WHERE SATURATED FRACTURES WERE OBSERVED.

WELL HYDROFRACTURED **Y** **N**

C 2

EACH SCREEN	DEPTH (nearest ft.)	
	1	2
1	HO 61	185
2		
3		

SLOT SIZE 1 _____ 2 _____ 3 _____
 DIAMETER OF SCREEN _____ (NEAREST INCH)
 from _____ to _____

C 3

PUMPING TEST
 HOURS PUMPED (nearest hour) **3**
 PUMPING RATE (gal. per min. to nearest gal.) **8**
 METHOD USED TO MEASURE PUMPING RATE _____
 WATER LEVEL (distance from land surface)
 BEFORE PUMPING **29**
 WHEN PUMPING **35**
 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 WILL INSTALL PUMP YES **NO**
 (CIRCLE) (YES or NO)
 IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS EXCEPT HOME USE
 TYPE OF PUMP INSTALLED _____
 PLACE (A,C,J,P,R,S,T,O) IN BOX - SEE ABOVE: **29**
 CAPACITY: GALLONS PER MINUTE (to nearest gallon) _____
 PUMP HORSE POWER _____
 PUMP COLUMN LENGTH (nearest ft.) _____
 CASING HEIGHT (circle appropriate box and enter casing height)
+ above } **LAND SURFACE** **2** (nearest foot)
- below }

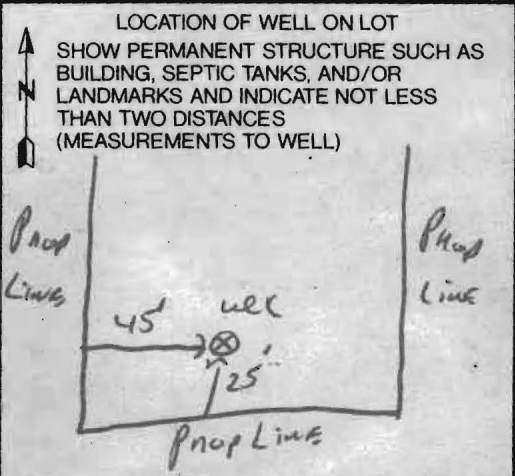
CIRCLE APPROPRIATE LETTER
A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
E ELECTRIC LOG OBTAINED
P TEST WELL CONVERTED TO PRODUCTION WELL

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 IDENT. NO. **MSA 112**
 DRILLERS SIGNATURE _____
 MUST MATCH SIGNATURE ON APPLICATION

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



Date Received (APA) 04 20 11
 OWNER INFORMATION
 Heritage Land Development
 P.O. Box 482
 Lisbon MD 21765

LOCATION OF WELL
 Howard
 Meriwether Farm
 SECTION 2 LOT 41
 Glenelg
 MILES FROM TOWN 2

DRILLER INFORMATION
 Ralph E Mayne M SD 117
 Ralph Mayne Well Drilling
 17024 Hardy Rd, Mt. Airy, MD 21771
 Signature Date 4/19/11

DIRECTION OF WELL FROM TOWN (CIRCLE BOX)
 Meriwether Dr.
 ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)
 DISTANCE FROM ROAD 385 FT
 TAX MAP: 21 BLK: 16 PARCEL 28

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
 GEO-THERMAL

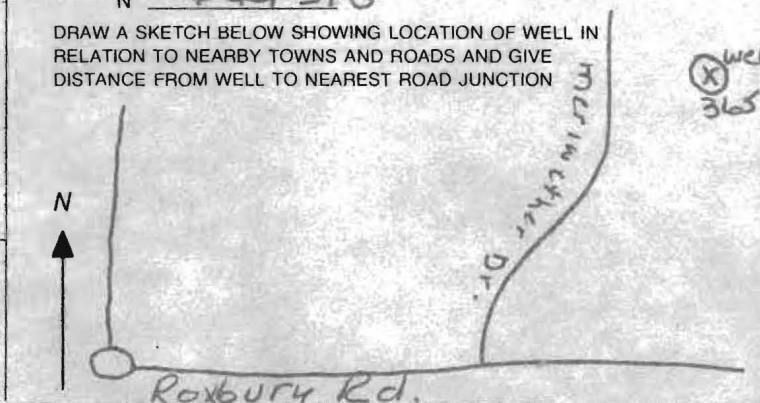
NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL
 Howard 13 A522987
 COUNTY NAME COUNTY NO.
 STATE SIGNATURE INSERT S
 DATE ISSUED 5/2/2011 Brian Baber 5/2/2012
 NORTH GRID 518 000 EAST GRID 792 000

APPROXIMATE DEPTH OF WELL 150 FEET
 APPROXIMATE DIAMETER OF WELL 6" NEAREST INCH

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X
 SOURCES OF DRILLING WATER
 1. well
 WRITE THE BOX NUMBER FROM THE MAP HERE
 E 792
 N 518

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) 41 52



Not to be filled in by driller (MDE OR COUNTY USE ONLY)
 APPROP. PERMIT NUMBER HO 20 08 G 01 0
 PERMIT No. HO 95-2118

SPECIAL CONDITIONS
 NOTE: APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED
 Well within 100' Must Be Simultaneously Yield Tested

FIELD DATA SHEET
HOWARD COUNTY WELL YIELD TEST

Well Permit No. HO - 95-2118
 Location of property (road) Meriwether Dr.
 Subdivision Meriwether KANA Lot 41 Block _____ Plat _____ Sec. 2
 Well Driller Ralph MAYNE Owner Heritage Realty & Land Develop

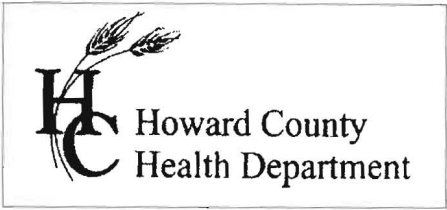
Depth of well 185
 Distance of measuring point (M.P.) above ground 2'
 Static water level (S.W.L.) below M.P. 294

I. High rate pumping -- reservoir drawdown

Time pump started 6:30 Pumping rate 10 GPM
 Total time 15 min to reach pumping water level 35 ft. below M.P.

II. Recovery pump test data - observations to be recorded every 15 minutes

TIME (in 15 minute intervals)	WATER LEVEL below M.P.	PUMPING RATE time to fill 5 gallon bucket	FLOW METER READING (if used)	CALCULATED FLOW (gallons per minute)
6:30	29 Ft.	6 Sec		10 GPM
			Test Started	
6:45	35 Ft	7 Sec		8 GPM
7:00	35 Ft	7 Sec		8 GPM
7:15	35 Ft	7 Sec		8 GPM
7:30	35 "	7 "		8 "
7:45	35 "	7 "		8 "
8:00	35 "	7 "		8 "
8:15	35 Ft	7 Sec		8 GPM
8:30	35 Ft	7 Sec		8 GPM
8:45	35 Ft	7 Sec		8 GPM
9:00	35 "	7 "		8 "
9:15	35 "	7 "		8 "
9:30	35 Ft	7 Sec		8 GPM
9:45	35 Ft	7 Sec		8 GPM



7178 Columbia Gateway Dr., 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. Bielensohn, M.D., M.P.H., Health Officer

TO ALL INTERESTED PARTIES

When submitting a well application for a proposed well for new construction, please indicate one of the following:

Well Site Location:

Meriwether Farm, Sec. II, Ph. 2 41 Meriwether Drive
Subdivision/Property Name Lot # Road Name

- The well site has been staked by Fisher, Collins & Carter, Inc.,
(professional land surveyor or company employing professional land surveyors)
on 03/21/11 (date) and does not require a site inspection.
- The well driller, builder or property owner will call the Health Department to schedule a time to meet in the field to verify the proposed well site location.

This sheet, along with two copies of an acceptable well site plan, must be attached to the green well permit application.

Revised 3/11/07

**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: Foote's Well Drilling LLC Telephone #: 410 795 5676
Address: PO Box 202J
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): David C. Foote License # MSD 226

*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 7408
Subdivision: CATALA OVERLOOK Lot #: 41 Well Tag #: HO-95-2118
Site Address: 14836 Meriwether Dr
Glenelg, MD 21737

<u>Submersible Pump Data</u>	<u>Pitless Adapter</u>	<u>Well Cap and Electric Conduit</u>
Make: <u>Grundfos</u>	Make: <u>Campbell</u>	Two piece watertight cap: <u>YES</u>
Model #: <u>155QE07-180</u>	Model #: <u>N/A</u>	Screened, vented well cap: <u>YES</u>
Pump Capacity: <u>7</u> GPM	Depth: <u>36"</u> (36" min)	Cap secured to casing: <u>YES</u>
Well Yield: <u>8</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>19.5</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 17.3.4		
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>N/A</u>		

<u>Piping to house</u>	<u>House Connection</u>
Type: <u>1" poly pipe</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>36"</u> (36" min)	Sleeve sealed properly: <u>YES</u>

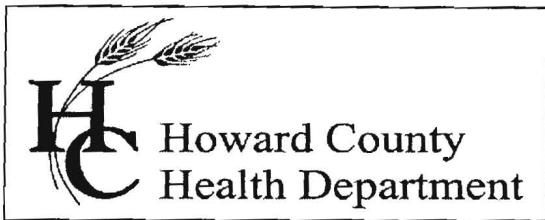
The water supply line is required to be at least ten feet from the septic tank, pump chamber, sewage piping, distribution box, drainfields, and sewage reserve area. If this cannot be accomplished, contact this office for approval prior to installation.

Signature of company representative responsible for installation: David Foote date: 7-11-14

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 _____		

*well line insp.
done 7/14/14
OK GW*



Bureau of Environmental Health

8930 Stanford Blvd., Columbia, MD 21045
Main: 410-313-1771 | 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

INTERIM CERTIFICATE OF POTABILITY

Expiration Date – MAY 1, 2015

October 31, 2014

Homeowner
14836 Meriwether Drive
Glenelg, MD 21737

**RE: Meriwether Farm, Lot 41
14836 Meriwether Drive
Building Permit: B14000880
Well Permit: HO-95-2118**

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 **10/31/2014**. Final approval of the well line connection to the dwelling was granted on **7/14/2014**. The well construction was completed on **6/9/2011**. Water samples were collected on **10/21/2014**.

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. 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-95-2118. 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 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,

A handwritten signature in cursive script, appearing to read "Robert Bricker".

Robert Bricker, REHS/R.S., L.E.H.S.

Environmental Sanitarian

Well & Septic Program

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

11. NON-TRANSFERRABLE - THIS PERMIT IS NON-TRANSFERRABLE. A NEW OWNER MAY ACQUIRE AUTHORIZATION TO CONTINUE THIS APPROPRIATION BY FILING A NEW APPLICATION WITH THE ADMINISTRATION. AUTHORIZATION WILL BE ACCOMPLISHED BY ISSUANCE OF A NEW PERMIT.

12. *****
* INITIATION OF WITHDRAWAL - THE PERMITTEE SHALL NOTIFY THE*
* ADMINISTRATION BY CERTIFIED MAIL WHEN WITHDRAWALS FOR THE*
* USES SPECIFIED IN THIS PERMIT HAVE BEEN INITIATED. THIS *
* PERMIT SHALL EXPIRE IF WATER WITHDRAWAL IS NOT COMMENCED *
* WITHIN TWO YEARS AFTER THE EFFECTIVE DATE OF THIS PERMIT *
* EXCEPT THAT UPON WRITTEN REQUEST TO THE ADMINISTRATION *
* PRIOR TO THE EXPIRATION OF THE TWO YEAR PERIOD, THE TIME *
* LIMIT MAY BE EXTENDED FOR GOOD CAUSE, AT THE DISCRETION *
* OF THE ADMINISTRATION. *

13. WELL SPACING- IN ORDER TO MINIMIZE THE POTENTIAL FOR INTERFERENCE BETWEEN WELLS, ALL WELLS SHALL BE LOCATED WITHIN LOCALLY APPROVED WELL BOXES AND, WHERE FEASIBLE, BE CONSTRUCTED SO AS TO ACHIEVE A SEPARATION OF AT LEAST 100 FEET FROM EACH OTHER AND/OR FROM EXISTING WELLS ON OTHER PROPERTIES. THE PERMITTEE SHALL CONDUCT SIMULTANEOUS YIELD TESTS FOR ANY WELLS THAT ARE SEPARATED BY LESS THAN 100 FEET. IN THE EVENT THAT A WELL TESTED SIMULTANEOUSLY WITH OTHER WELLS DOES NOT MEET MINIMUM YIELD STANDARDS, THE PERMITTEE SHALL RELOCATE OR DEEPEN THE WELL OR SEEK LOCAL APPROVAL TO RELOCATE THE WELL BOXES SO AS TO ACHIEVE THE 100-FOOT SEPARATION DISTANCE. ALL WELLS SHALL COMPLY WITH WELL CONSTRUCTION REQUIREMENTS.

BY AUTHORITY OF THE DIRECTOR
WATER MANAGEMENT ADMINISTRATION

Amidya 2/6/2009

for John W. Grace, Chief
SOURCE PROTECTION AND APPROPRIATION DIV
MSM

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 #: 97127 Account #: 1930
Reference: Toll Brothers Lot 41 Company: Fogle's Well Drilling
Location: 14836 Meriwether Drive Requested By: Dave Fogle
Glenelg, MD 21737 Source: Well Water
Date/ Time Collected: 10/21/2014 1322 Site: Kitchen Sink
Date/Time Rec'd: 10/21/2014 1500 Treatment: None
Chlorine ppm: Free: ND Total: ND pH: 5.8
Collected By: J. Fogle 1974JF Well #: HO-95-2118

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	10/22/2014 / 1000 / CCH
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	10/22/2014 / 1000 / CCH
Nitrate	3.08	mg/L	10	601	10/21/2014 / 1630 / CRS
Turbidity	0.75	NTU	<10	SM18 2130B	10/21/2014 / 1655 / CRS
Sand	NS	mg/L	5	Visual/Gravimetric	10/21/2014 / 1655 / CRS

MB
10/31/2014

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 in lab, chlorine level tested on site

Reason for Test : Use & Occupancy
Building Permit # : B14000880

Date Reported: 10/22/2014