

C1 15986 SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT

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

COUNTY NUMBER A-522987

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

ST/CO USE ONLY DATE Received MM 05 DD 05 YY 11

DATE WELL COMPLETED MM 04 DD 07 YY 11

Depth of Well 22 145 26 (TO NEAREST FOOT) 9/15/11 OK KW

PERMIT NO. FROM "PERMIT TO DRILL WELL" 170-75-2068

OWNER Heritage Realty & Development STREET OR RFD P.O. Box 482 TOWN LISBOW MD. SUBDIVISION Meriwether Farm SECTION 2 LOT 16

WELL LOG Table with columns: DESCRIPTION, FEET (FROM, TO), check if water bearing. Includes entries for Top So. C, Sandy, Sand Stone, MICKA, Sand Stone, MICKA.

GROUTING RECORD Form with fields: WELL HAS BEEN GROUTED (Y), TYPE OF GROUTING MATERIAL (CM, BC), NO. OF BAGS (12), NO. OF POUNDS (1200), GALLONS OF WATER (2), DEPTH OF GROUT SEAL (32).

CASING RECORD Form with fields: MAIN CASING TYPE (PL), Nominal diameter (6), Total depth (35). Includes checkboxes for steel, concrete, plastic, other.

OTHER CASING (if used) Form with fields: diameter, depth.

SCREEN RECORD Form with fields: screen type (HO), diameter of screen (56, 60).

NUMBER OF UNSUCCESSFUL WELLS: 0 WELL HYDROFRACTURED: Y

CIRCLE APPROPRIATE LETTER: A (Well abandoned), 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 LIC. NO. M SD 117 DRILLERS SIGNATURE L. C. NO. D

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

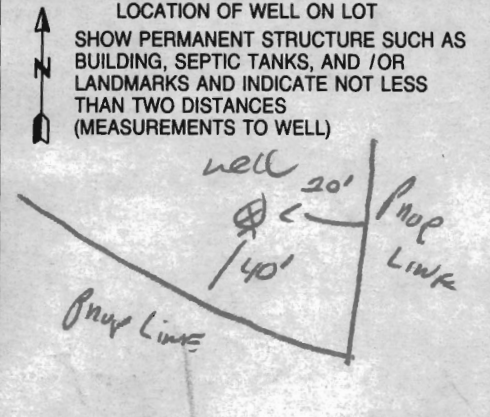
DEPTH (nearest ft.) Table with columns: 8, 9, 11, 15, 17, 21, 23, 24, 26, 30, 32, 36, 38, 39, 41, 45, 47, 51. Includes slot size and diameter of screen.

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

PUMPING TEST Form with fields: PUMPING TEST 3, HOURS PUMPED (8, 9), PUMPING RATE (10), METHOD USED TO MEASURE PUMPING RATE (Bucket), WATER LEVEL (17, 20), TYPE OF PUMP USED (S).

PUMP INSTALLED Form with fields: DRILLER INSTALLED PUMP (NO), TYPE OF PUMP INSTALLED (S), CAPACITY: GALLONS PER MINUTE (31, 35), PUMP HORSE POWER (37, 41), PUMP COLUMN LENGTH (43, 47), CASING HEIGHT (2).



B 1 0882

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL

STATE PERMIT NUMBER HO-95-2068

534488 please type

fill in this form completely

Date Received (APA) 030711

OWNER INFORMATION

Heritage Realty & Land Develop. PO Box 482 Lisbon MD 21765

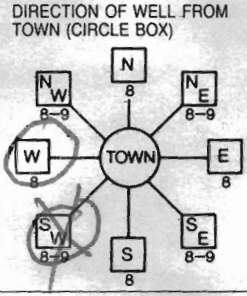
LOCATION OF WELL

Howard County Meriwether Farm Section 2 Lot 16 Glenell

DRILLER INFORMATION

Ralph E. Mayne MSD 119 Ralph E. Mayne Well Drilling 17024 Handy Rd. Mt Airy MD, 21771

DIRECTION OF WELL FROM TOWN (CIRCLE BOX)



Meriwether Dr. 315800 Distance from road 17

WELL INFORMATION

APPROX. PUMPING RATE 5 GAL. PER MIN. AVERAGE DAILY QUANTITY NEEDED 500 GAL. PER DAY

USE FOR WATER (CIRCLE APPROPRIATE BOX)

- Domestic Potable Supply & Residential Irrigation (circled), Farming, Industrial, Public Water Supply Well, Test, Geo-Thermal

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Howard (13) A522987 County Name County No. State Signature Brian Baber 3/21/2012

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

METHOD OF DRILLING (circle one)

AIR-ROTary, AIR-PERCussion, ROTARY, CABLE, REVerse-ROTary, DRive-POINT

REPLACEMENT OR DEEPEINED WELLS (CIRCLE APPROPRIATE BOX)

- This well will not replace an existing well (circled), 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 deepen an existing well

PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEINED

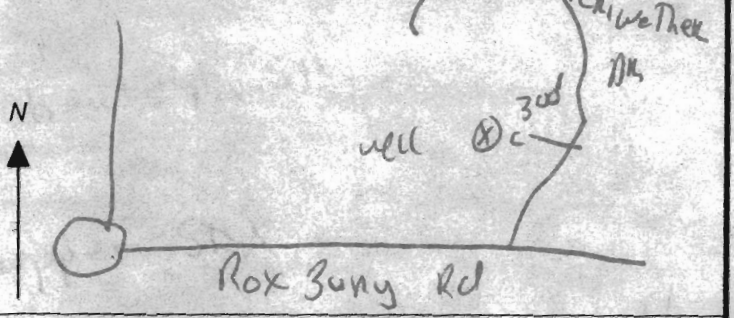
SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

SOURCES OF DRILLING WATER 1. well

WRITE THE BOX NUMBER FROM THE MAP HERE

E 52019 N 792

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 HO2008G010 PERMIT No. HO-95-2068

SPECIAL CONDITIONS

Wells Within 100' Must Be Yield Tested Simultaneously

FIELD DATA SHEET
HOWARD COUNTY WELL YIELD TEST

Well Permit No. HO - 95-2068
 Location of property (road) Meriwether Dr.
 Subdivision Meriwether Farm Lot 16 Block _____ Plat _____ Sec. 2
 Well Driller Ralph Payne Owner Heritage Realty & Land Develop.

Depth of well 145 ft.
 Distance of measuring point (M.P.) above ground 2 ft.
 Static water level (S.W.L.) below M.P. 48 ft.

I. High rate pumping -- reservoir drawdown

Time pump started 7:00 Pumping rate 10 GPM
 Total time 15 min to reach pumping water level 60 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 <u>5</u> gallon bucket	FLOW METER READING (if used)	CALCULATED FLOW (gallons per minute)
7:00	48 ft.	6 Sec		10 GPM
			TEST STARTED	
7:15	60 ft.	6 Sec		10 GPM
7:30	60 ft.	6 Sec		10 GPM
7:45	60 ft.	6 Sec		10 GPM
8:00	60 "	6 "		10 "
8:15	60 "	6 "		10 "
8:30	60 "	6 "		10 "
8:45	60 ft.	6 Sec		10 GPM
9:00	60 ft.	6 Sec		10 GPM
9:15	60 ft.	6 Sec		10 GPM
9:30	60 "	6 "		10 "
9:45	60 "	6 "		10 "
10:00	60 ft.	6 Sec		10 GPM
10:15	60 ft.	6 Sec		10 GPM

**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: 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# MSD009

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

Name of Property Owner: Toll Brothers Telephone #: 410-489-7407
Subdivision: Cattail Overlook Lot #: 16 Well Tag #: HO-95-2068
Site Address: 14853 Meriwether Dr
Greenbelt, MD 21737

Submersible Pump Data

Make: Grundfos
Model #: 1550E07780
Pump Capacity: 7 GPM
Well Yield: 10 GPM

Pitless Adapter

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

Well Cap and Electric Conduit

Two piece watertight cap: YES
Screened, vented well cap: YES
Cap secured to casing: YES
Conduit min 18" B.G.: YES

Depth of well encountered at time of pump installation: 145 (feet) Conduit secured to well cap: YES

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: WD (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

8-16-13
date

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

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

Inspection Data: Pitless adapter watertight & water supply line at least 36" below grade _____
Two piece cap installed and attached to casing securely _____
Elec. conduit extends at least 18" below grade/attached to cap properly _____
Safety rope not outside of well cap/casing _____
Correct well tag attached properly and casing 8" above finished grade _____
Water supply line sleeved adequately at house connection _____
Adequate grout observed below pitless adapter _____

*HOWARD COUNTY HEALTH DEPARTMENT
 BUREAU OF ENVIRONMENTAL HEALTH
 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: _____ Telephone #: _____
 Address: _____

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

License # and name of individual responsible for the field installation:

Name (Print): _____ License# _____

***A licensed individual must perform the actual installation. Apprentices must be under the 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: _____ Telephone #: _____
 Subdivision: _____ Lot #: 16 Well Tag #: HO-75-2063
 Site Address: 14853 Meriwether Dr.

Submersible Pump Data

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

Pitless Adapter

Make: _____
 Model#: _____
 Depth: _____ (36" min)
 NSF/WSC approved: _____

Well Cap and Electric Conduit

Two piece watertight cap: _____
 Screened, vented well cap: _____
 Cap secured to casing: _____
 Conduit min 18" B.G.: _____
 Conduit secured to well cap: _____

Depth of well encountered at time of pump installation: _____ (feet)
 If pump capacity exceeds well yield, a low water cut off switch is required by NSPC 1990 Section 17.8.4
 Torque arrestors, 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

Piping to house

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

House Connection

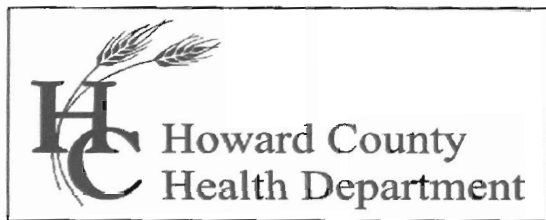
PVC sleeve to undisturbed soil at wall penetration: _____
 Length of sleeve(5' minimum from foundation): _____
 Sleeve sealed properly: _____

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

Signature of company representative responsible for installation _____ date _____

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

Date Insp. Requested: _____ Date Insp. Approved: 8/19/2013 Inspector: BIB
 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



Bureau of Environmental Health
7178 Columbia Gateway Drive, Columbia, MD 21046-2147
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 NITRATES

Expiration Date – April 26, 2014

October 24, 2013

Homeowner
14853 Meriwether Drive
Glenelg, MD, 21737

RE: Meriwether Farm, Lot #16
14853 Meriwether Drive
Building Permit: B13001006
Well Permit: HO-95-2068

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 **8/13/2013**. Final approval of the well line connection to the dwelling was granted on **8/19/2013**. The well construction was completed on **04/07/2011**. Water samples were collected on **10/22/2013**.

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 untreated water sample collected on **10/18/2013** indicated a nitrate level of **13.7 mg/L**. **This exceeds the maximum contaminant limit of 10 mg/L set forth in COMAR 26.04.04.09**. After installation of a nitrate removal device (kitchen tap reverse osmosis system), a post-treatment water sample was collected on **10/22/2013** and indicated a nitrate level of **1.35 mg/L**.

This Department will grant a **permanent deviation** to the Interim Certificate of Potability on condition that the nitrate removal system effectively maintains a nitrate-nitrogen contaminant level of **10 mg/L 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 Maryland certified water laboratory certified for nitrates analysis perform a yearly nitrate 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-95-2068. 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, REHS/RS
Environmental Sanitarian
Well & Septic Program

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

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

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

REPORT OF ANALYSIS

Laboratory ID #: 91615 Account #: 1931
Reference: Toll Brothers Lot 16 Company: Fogles Septic
Location: 14853 Meriwether Drive Requested By: Kim Fogle
Glenelg, MD 21737 Source: Well Water
Date/ Time Collected: 10/22/2013 1136 Site: R/O Tap
Date/Time Rec'd: 10/22/2013 1446 Treatment: Reverse Osmosis ✓
Chlorine ppm: Free: ND Total: ND pH: 6.2
Collected By: J. Fogle 1974JF Well #: HO 95-2068 ✓

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Nitrate	1.35	mg/L	10	601	10/22/2013 / 1545 / BCD

OK
DB
10-24-13

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 pH and Chlorine level tested in lab
- 5 Sample collected by client, analyzed as received

Reason for Test : Use & Occupancy

Building Permit # : B13001006

Date Reported: 10/22/2013

REPORT OF ANALYSIS

Laboratory ID #:	91577	Account #:	1931
Reference:	Toll Brothers Lot 16	Company:	Fogles Septic
Location:	14853 Meriwether Drive Glenelg, MD 21737	Requested By:	Kim Fogle
Date/ Time Collected:	10/18/2013 1330	Source:	Well Water
Date/Time Rec'd:	10/18/2013 1408	Site:	Kitchen Sink Tap
Chlorine ppm:	Free: ND Total: ND	Treatment:	None
Collected By:	K.Cassell 7398KC	pH:	5.2
		Well #:	HO 95-2068

Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	10/19/2013 / 1600 / LLO
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	10/19/2013 / 1600 / LLO
Nitrate	13.7	mg/L	10	601	10/18/2013 / 1630 / CRS
Turbidity	1.14	NTU	<10	SM18 2130B	10/18/2013 / 1600 / JKW
Sand	NS	mg/L	5	Visual/Gravimetric	10/18/2013 / 1600 / JKW

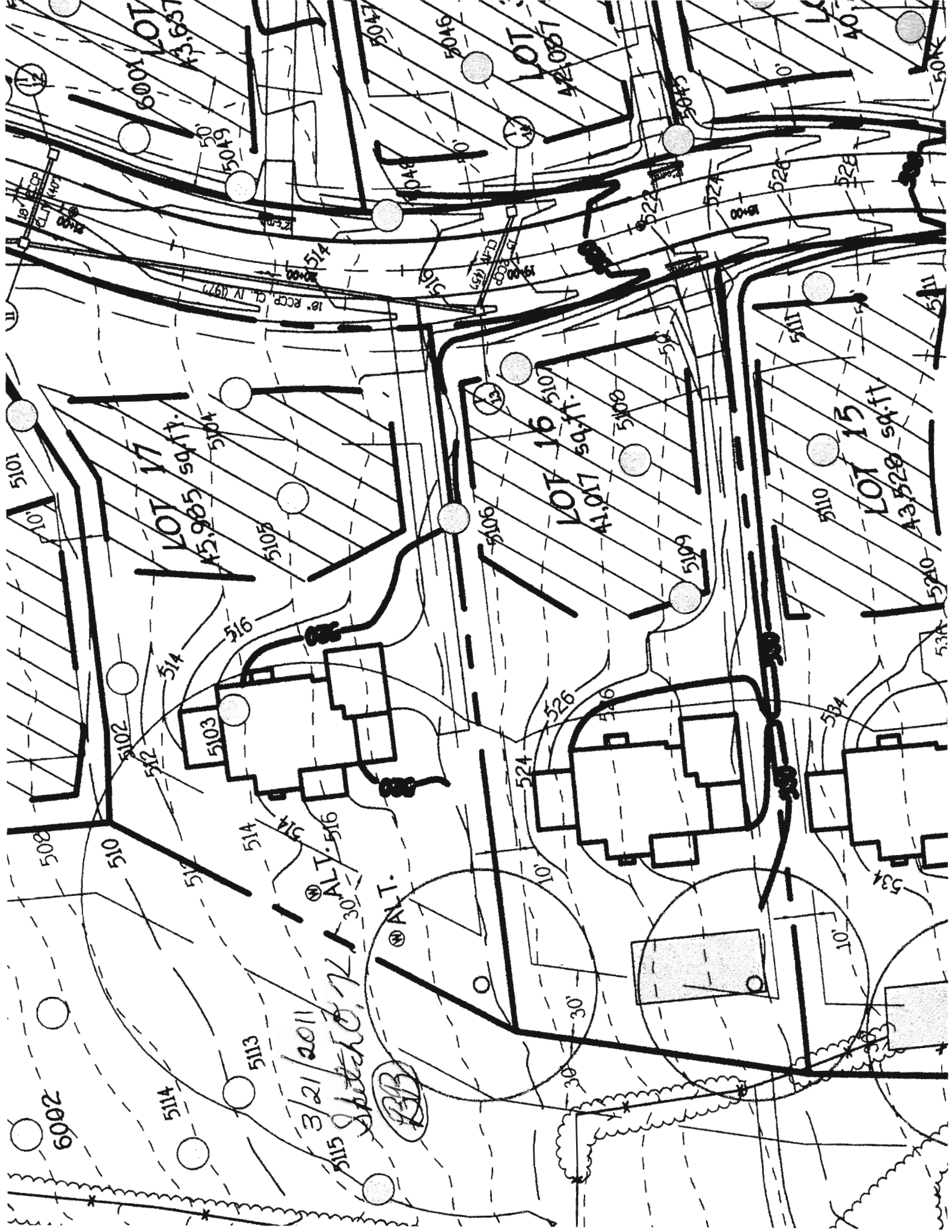
*Failed
DB
10-24-13*

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 pH and Chlorine level tested in lab
- 8 Sample collected by client, analyzed as received

Reason for Test : Use & Occupancy
 Building Permit # : B13001006

Date Reported: 10/21/2013



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

John W. Grace

2/6/2008

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

MSM



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:

<u>Meriwether Farm, Sec. II, Ph. 2</u>	<u>16</u>	<u>Meriwether Drive</u>
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 3/21/11 (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