

C1 16608 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.

ST/CO USE ONLY
DATE Received
MM DD YY
12 21 12

DATE WELL COMPLETED
MM DD YY
12 1 12

Depth of Well
22 400 26
(TO NEAREST FOOT)
2/1/2013
PERMIT NO.
FROM "PERMIT TO DRILL WELL"
40-95-2392

OWNER
WELL SITE ADDRESS
SUBDIVISION
TOWN
SECTION
LOT

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	
Orange Loamy	0	17	
Light Brown	17	56	
Dark Brown Loamy	56	80	
Gray Limestone	80	115	
Quartz	115	116	✓
Gray Limestone	116	177	
Brown	177	178	✓
Gray Limestone	178	400	

GROUTING RECORD yes no
WELL HAS BEEN GROUTED (Circle Appropriate Box) Y N
TYPE OF GROUTING MATERIAL (Circle one)
CEMENT CM BENTONITE CLAY BC
NO. OF BAGS 42 NO. OF POUNDS 3798
GALLONS OF WATER 252
DEPTH OF GROUT SEAL (to nearest foot)
from 0 ft. to 88 ft.
TOP BOTTOM

CASING RECORD
casing types insert appropriate code below
STEEL ST CONCRETE CO
PLASTIC PL OTHER OT
MAIN CASING TYPE Nominal diameter top (main) casing (nearest inch!) Total depth of main casing (nearest foot)
PL 06 90

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

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

NUMBER OF UNSUCCESSFUL WELLS: 0
WELL HYDROFRACTURED Y N

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

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

C 2 DEPTH (nearest ft.)
1 2 HO 90 400
E 1 8 11 15 17 21
A 2 23 24 26 30 32 36
C 3 38 39 41 45 47 51
S
R
E
N
SLOT SIZE 1 2 3
DIAMETER OF SCREEN (NEAREST INCH)
56 60
from to

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)
T (E.R.O.S.) W Q
70 72 74 75 76

C 3 PUMPING TEST
HOURS PUMPED (nearest hour) 56
PUMPING RATE (gal. per min.) 1.7
METHOD USED TO MEASURE PUMPING RATE 1906
WATER LEVEL (distance from land surface)
BEFORE PUMPING 39 ft.
WHEN PUMPING 154 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
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 02 (nearest foot)

LATITUDE 39.3228035
LONGITUDE 77.0156411
(DEFAULT COORD. WGS 84)

NOTES:

B 1 09388

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL

STATE PERMIT NUMBER

HO -95 -2392

fill in this form completely

538027-H

please type

Date Received (APA)

08 06 12

OWNER INFORMATION

DB Horton Inc, 1356 Beverly RD Suite 300, McLean, VA 22101

B 3

LOCATION OF WELL

Howard County, Vista Ridge, Cooksville

DRILLER INFORMATION

Allen Compton, MS D 009, Eagles Well Drilling, LLC, P.O. Box 202 Woodbine MD, 21797

B 4

SOURCES OF DRILLING WATER

1. Drovers Lane

Drovers Lane, 30, 8 BLK: 23 PARCEL 176

B 2

WELL INFORMATION

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

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Howard A 516045 13, STATE SIGNATURE, DATE ISSUED 09/26/2012, CO SIGNATURE RBA, EXP. DATE 9/26/13

USE FOR WATER (CIRCLE APPROPRIATE BOX)

- DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION, FARMING, INDUSTRIAL, COMMERCIAL, DEWATERING, PUBLIC WATER SUPPLY WELL, TEST, OBSERVATION, MONITORING, OPEN LOOP GEOTHERMAL, CLOSED LOOP GEOTHERMAL

PROPOSED LOCATION OF WELL ON LOT SHOW PERMANENT STRUCTURES SUCH AS BUILDINGS, SEPTIC SYSTEM, ROADS AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCE MEASUREMENTS TO WELL

APPROXIMATE DEPTH OF WELL 300 FEET

APPROXIMATE DIAMETER OF WELL 6 INCH

METHOD OF DRILLING (circle one)

BORED (or Augered) AIR-ROTary, JETTED AIR-PERCussion, Jetted & DRIVEN ROTARY (Hydraulic Rotary), CABLE REVerse-ROTary, DRive-POINT

REPLACEMENT OR DEEPEINED 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 DEEPEIN AN EXISTING WELL

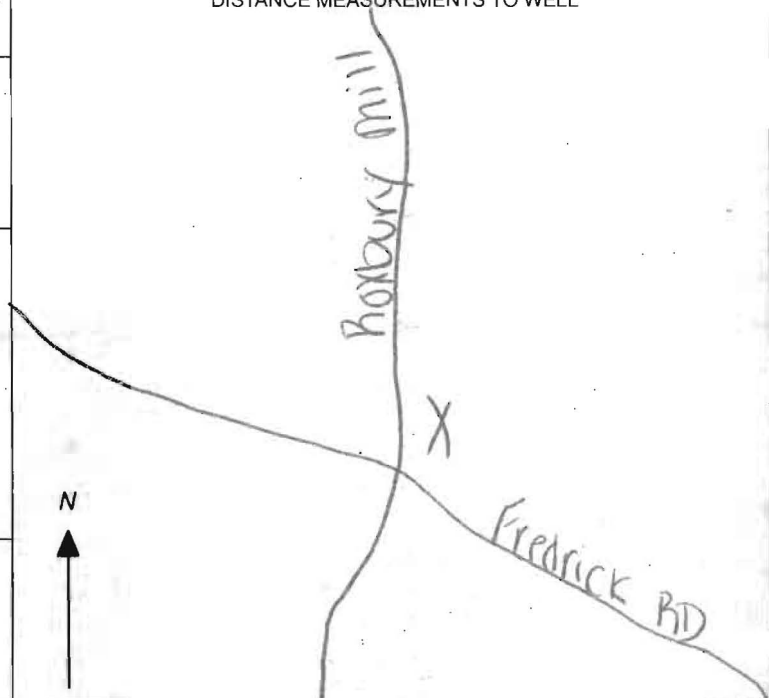
PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEINED (IF AVAILABLE)

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

APPROX. PERMIT NUMBER G, PERMIT No. HO -95 -2392

SPECIAL CONDITIONS

NOTE APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED



FIELD DATA SHEET
HOWARD COUNTY WELL YIELD TEST

Well Permit No. HO - 95-2392
 Location of property (road) Doves Lane
 Subdivision Vista Ridge Lot 17 Block _____ Plat _____ Sec. _____
 Well Driller Fogles Owner D R Horton

Depth of well 400'
 Distance of measuring point (M.P.) above ground 2'
 Static water level (S.W.L.) below M.P. 39'

I. High rate pumping -- reservoir drawdown

Time pump started 8:00 Pumping rate 8.5
 Total time 30 min to reach pumping water level 154 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 #1 gallon bucket	FLOW METER READING (if used)	CALCULATED FLOW (gallons per minute)
8:00	39		7	8.5
8:15	104		7	8.5
8:30	154		7	8.5
8:45	153		35	1.7
9:00	152		35	1.7
9:15	151		35	1.7
9:30	150		35	1.7
9:45	149		35	1.7
10:00	148		35	1.7
10:15	147		35	1.7
10:30	146		35	1.7
10:45	145		35	1.7
11:00	144		35	1.7
11:15	143		35	1.7
11:30	142		35	1.7
11:45	141		35	1.7
12:00	140		35	1.7
12:15	139		35	1.7
12:30	138		35	1.7
12:45	137		35	1.7
1:00	136		35	1.7
1:15	135		35	1.7
1:30	134		35	1.7

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 #: 410 795 5670
 Address: JPO 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): David C. Fogle 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: D.R. Horton Telephone #: _____
 Subdivision: Vista Ridge Lot #: 17 Well Tag #: HO-95-23926
 Site Address: 2057 Drovers Lane
Coopersville, MD 21723

<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>ISSQE07-180</u>	Model #: <u>N/A</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>1.7</u> GPM	NSF/WSC approved: <u>YES</u>	Conduit min 1 1/2" B.G.: <u>YES</u>
Depth of well encountered at time of pump installation: <u>400</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 inside of well casing <u>N/A</u>		

<u>Piping to house</u>	<u>House Connection</u>
Type: <u>1" PVC PIPE</u>	PVC sleeve to undisturbed soil at wall penetration: <u>YES</u>
PSI: <u>200</u> (160 psi min)	Length of sleeve (5" minimum from foundation): <u>6'</u>
Depth of supply line: <u>36</u> (36" min)	Sleeve sealed properly: <u>YES</u>

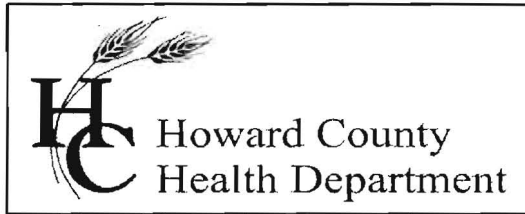
The water supply line is required to be at least ten feet from the septic tank, pump chamber, sewage piping, distribution box, drainfields, and sewage reserve area. If this cannot be accomplished, contact this office for approval prior to installation.

Signature of company representative responsible for installation: David Fogle date: 3/23/17

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

Date Insp. Requested: 3/24/17 Date Insp. Approved: 3/24/17 Inspector: SC

Inspection Data: Pitless adapter watertight & water supply line at least 36" below grade	<u>✓</u>
Two piece cap installed and attached to casing securely	<u>✓</u>
Elec. conduit extends at least 1 1/2" below grade/attached to cap properly	<u>✓</u>
Safety rope not outside of well cap/casing	<u>✓</u>
Correct well tag attached properly and casing 8" above finished grade	<u>✓</u>
Water supply line sleeved adequately at house connection	<u>✓</u>
Adequate grout observed below pitless adapter	<u>✓</u>



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

INTERIM CERTIFICATE OF POTABILITY

Expiration Date – FEBRUARY 23, 2018

August 23, 2017

Homeowner
2037 Drovers Lane
Cooksville, Maryland 21723

**RE: Vista Ridge, Lot 17
2037 Drovers Lane
Building Permit: B16004908
Well Permit: HO-95-2392**

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 **7/25/2017**. Final approval of the well line connection to the dwelling was granted on **3/24/2017**. The well construction was completed on **12/2/2012**. Water samples were collected on **8/8/2017, & 8/18/2017**.

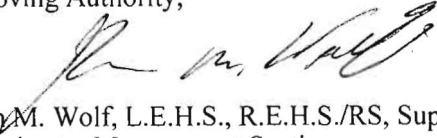
The water sample results indicate that the water samples submitted for testing were free of coliform and fecal coliform bacteria at the time of sampling and are bacteriologically safe for drinking. This certifies that the initial sampling requirements of COMAR 26.04.04 "Well Regulations" have been met for the water supply system installed under well permit HO-95-2392. 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>

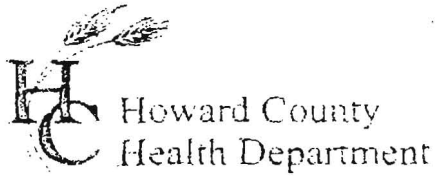
In closing, please refer to our "[Homeowner Fact Sheet](#)" which illustrates a better understanding for your onsite sewage disposal system. You will also find a link to Maryland Department of the Environments website which describes in further detail operation and maintenance of your septic system.

Approving Authority,

A handwritten signature in black ink, appearing to read "Kevin M. Wolf", is written over the printed name below.

Kevin M. Wolf, L.E.H.S., R.E.H.S./RS, Supervisor
Groundwater Management Section
Well & Septic Program

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



3525 H Ellicott Mills Drive, Ellicott City, MD 21043
(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

lot #8-21

TO ALL INTERESTED PARTIES

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

- The well site has been staked by Benchmark Engineering
(professional land surveyor or company employing professional land surveyors)
on 7/13/12 (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 6/10/03

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 #: 116260 Account #: 1933
Reference: D.R. Horton Lot 17 Company: Fogles Well Pump/Water Treatment
Location: 2037 Drovers Lane Requested By: Dave Fogle
Cooksville, MD 21723 Source: Well Water
Date/ Time Collected: 8/8/2017 1205 Site: Kitchen Sink
Date/Time Rec'd: 8/8/2017 1337 Treatment: None
Chlorine ppm: Free: ND Total: ND pH: 5.9
Collected By: R. Eyster 1061RE Well #: HO-95-2392

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	11.1	MPN/ 100 ml	<1.0	SM20 9223	8/9/2017 / 1000 / CCH
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223	8/9/2017 / 1000 / CCH
Nitrate	<1.0	mg/L	10	601	8/9/2017 / 1000 / CRS
Turbidity	0.88	NTU	<10	SM20 2130B	8/9/2017 / 1030 / CRS
Sand	NS	mg/L	5	Visual/Gravimetric	8/9/2017 / 1030 / CRS

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 pH and chlorine level tested in lab
- 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 Visual well check: Sealed, vented cap
- 9 Sample collected by client, analyzed as received

Reason for Test : Use & Occupancy

Building Permit # : 16004908

Date Reported: 8/9/2017

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 #: 116531 Account #: 1933
Reference: Vista Ridge Lot 17 Company: Fogles Well Pump/Water Treatment
Location: 2037 Drovers Lane Requested By: Dave Fogle
Cooksville, MD 21723 Source: Well Water
Date/ Time Collected: 8/18/2017 1120 Site: Kitchen Sink
Date/Time Rec'd: 8/18/2017 1419 Treatment: None
Chlorine ppm: Free: NT Total: NT pH: NT
Collected By: A. Berchock 1223AB Well #: HO-95-2392

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223	8/19/2017 / 1000 / BCD
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223	8/19/2017 / 1000 / BCD

NOTES

- 1 MPN/ 100 ml = Most Probable Number [of viable bacteria] per 100 ml of sample.
- 2 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 3 Thio Check Negative
- 4 NT = Not Tested
- 5 Visual well check: Sealed, vented cap
- 6 Sample collected by client, analyzed as received

Reason for Test : Use & Occupancy

Building Permit # : 16004908

Date Reported: 8/21/2017