

C1 05851 SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT

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

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

FILL IN THIS FORM COMPLETELY PLEASE TYPE

COUNTY NUMBER

ST/CO USE ONLY DATE RECEIVED MM 03 DD 18 YY 13

DATE WELL COMPLETED MM 3 DD 13

Depth of Well 22 100 26 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" 95-2396

OWNER P. R. Horton WELL SITE ADDRESS Drivers Lane TOWN Cooksville SUBDIVISION Vista Ridge SECTION LOT 21

WELL LOG Not required for driven wells

Table with columns: DESCRIPTION, FEET FROM, FEET TO, check if water bearing. Includes entries for Large Rocks, Brown Clay, Light Brown, Gray, Brown White, and Gray.

GROUTING RECORD

WELL HAS BEEN GROUTED (Y/N) TYPE OF GROUTING MATERIAL (Cement CM, Bentonite Clay BC) NO. OF BAGS 40 NO. OF POUNDS 3760 GALLONS OF WATER 240 DEPTH OF GROUT SEAL 0 to 65 ft.

CASING RECORD casing types insert appropriate code below (ST Steel, CO Concrete, PL Plastic, OT Other)

MAIN CASING TYPE ST Nominal diameter top (main) casing (nearest inch) 06 Total depth of main casing (nearest foot) 67

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

SCREEN RECORD screen type or open hole (ST Steel, BR Brass, HO Open Hole, PL Plastic, OT Other)

DEPTH (nearest ft.) 1 40 2 67 3 100

NUMBER OF UNSUCCESSFUL WELLS: 0 WELL HYDROFRACTURED (Y/N)

CIRCLE APPROPRIATE LETTER A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED

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...

DRILLERS LIC. NO. 1 M SD 009 DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION) LIC. NO. 1 D

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

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

TELESCOPE CASING LOG INDICATOR OTHER DATA

PUMPING TEST

HOURS PUMPED (nearest hour) 03 PUMPING RATE (gal. per min.) 8.5 METHOD USED TO MEASURE PUMPING RATE 196L WATER LEVEL (distance from land surface) BEFORE PUMPING 47 ft. WHEN PUMPING 49 ft. TYPE OF PUMP USED (for test) A air, P piston, T turbine, C centrifugal, R rotary, O other, J jet, S submersible

PUMP INSTALLED

DRILLER INSTALLED PUMP (CIRCLE) (YES or 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 39.3219032 LONGITUDE 77.0167694 (DEFAULT COORD. WGS 84)

NOTES:

B 1 09395

SEQUENCE NO (MDE USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL

STATE PERMIT NUMBER

HO-95-2396

538027-L please type

fill in this form completely

Date Received (APA)

08 06 12

OWNER INFORMATION

D.B. Horton INC. 1356 Beverly RD Suite 300 Mclean, VA 22101

LOCATION OF WELL

Howard COUNTY Vista Ridge SUBDIVISION SECTION 44 46 LOT 21 COOKSVILLE NEAREST TOWN

DRILLER INFORMATION

Allen Compton M S D 0099 Eagles Well Drilling, LLC P.O. Box 202 Woodbine MD 21797 Allen Compton 7-11-12

SOURCES OF DRILLING WATER

Drovers Drovers Lane 1953 ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX) DISTANCE FROM ROAD 8 ENTER FT OR MI 23 PARCEL 176

WELL INFORMATION

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

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 OPEN LOOP GEOTHERMAL CLOSED LOOP GEOTHERMAL

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Howard A516045 13 COUNTY NAME COUNTY NO. STATE SIGNATURE DATE ISSUED 09/26/2012 CO SIGNATURE EXP. DATE 9/26/13

APPROXIMATE DEPTH OF WELL 300 FEET APPROXIMATE DIAMETER OF WELL 6 INCH

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

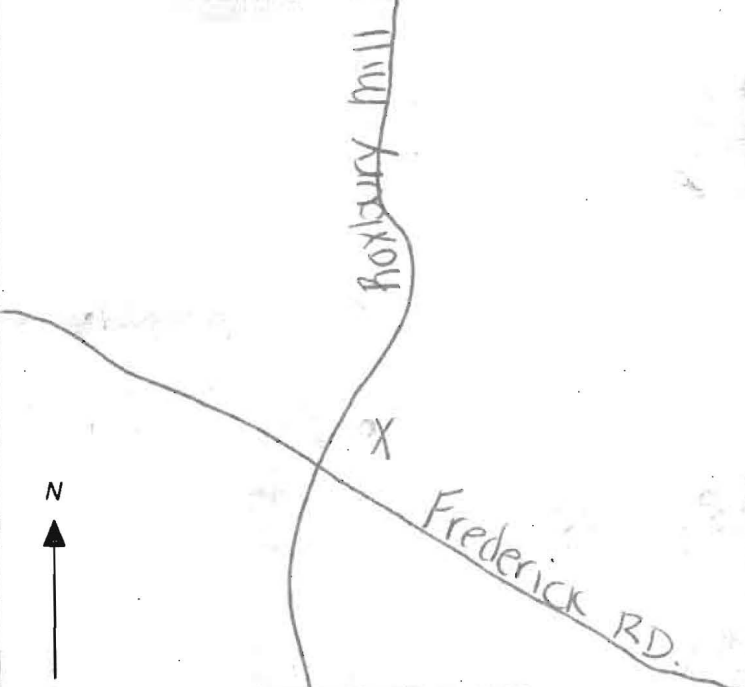
METHOD OF DRILLING (circle one)

- 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 DEEPEMED AN EXISTING WELL PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED (IF AVAILABLE)

Not to be filled in by driller (MDE OR COUNTY USE ONLY) APPROP. PERMIT NUMBER G PERMIT No. HO-95-2396



SPECIAL CONDITIONS

NOTE APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED

**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: PO Box 702
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# MSD2226

*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. Harton Telephone #: _____
Subdivision: Vista Ridge Lot #: 21 Well Tag #: HO-95-2396v
Site Address: 2021 Drivers Lane
ROCKSVILLE, MD

<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>154GE07-180</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>4.5</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>100'</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 N/A

<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>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: 6-12-15

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

Date Insp. Requested: 6/15/15 Date Insp. Approved: 6/15/15 Inspector: SC

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"/>

4" PVC sleeve under driveway

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 #: 101874 Account #: 1930
Reference: Vista Ridge Lot 21 Company: Fogle's Well Drilling
Location: 2021 Drovers Lane Requested By: Dave Fogle
Cooksville, MD 21723 Source: Well Water
Date/ Time Collected: 7/14/2015 1020 Site: Pressure Tank ✓
Date/Time Rec'd: 7/14/2015 1215 Treatment: None
Chlorine ppm: Free: ND Total: ND pH: 5.2
Collected By: J. Yeager 6176JY Well #: HO-95-2396

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	2.0	MPN/ 100 ml	<1.0	SM18 9223	7/15/2015 / 0915 / LLO
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	7/15/2015 / 0915 / LLO
Nitrate	3.41	mg/L	10	601	7/15/2015 / 1025 / CRS
Turbidity	1.24	NTU	<10	SM18 2130B	7/15/2015 / 0910 / CRS
Sand	NS	mg/L	5	Visual/Gravimetric	7/15/2015 / 0910 / CRS

Fail
7/22/15 (Knew)

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 & Chlorine level tested on site
- 8 Visual well check: Sealed, vented cap

Reason for Test : Use & Occupancy
Building Permit # : 15000738

Date Reported: 7/16/2015

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 #: 102006 Account #: 1930
Reference: Vista Ridge Lot 21 Company: Fogle's Well Drilling
Location: 2021 Drovers Lane Requested By: Dave Fogle
Cooksville, MD 21723 Source: Well Water
Date/ Time Collected: 7/20/2015 1115 Site: Laundry Room Sink
Date/Time Rec'd: 7/20/2015 1239 Treatment: None
Chlorine ppm: Free: ND Total: ND pH: 5.0
Collected By: J. Fogle 1974JF Well #: HO-95-2396

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	7/21/2015 / 0830 / CCH
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	7/21/2015 / 0830 / CCH

OK

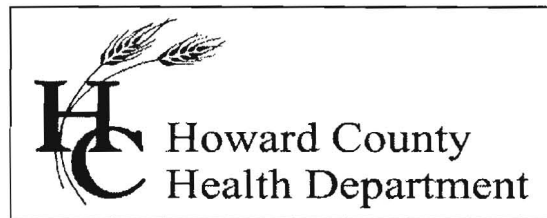
NOTES

- 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 ND:None Detected
- 4 pH tested in lab, chlorine level tested on site
- 5 Visual well check: Sealed, vented cap

Reason for Test : Use & Occupancy

Building Permit # : 15000738

Date Reported: 7/21/2015



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 – January 23, 2016

July 23, 2015

Homeowner
2021 Drovers Lane
Cooksville, MD 21723

RE: Vista Ridge, Lot # 23
2021 Drovers Lane
Building Permit: B15000738
Well Permit: HO-95-2396

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 **7/22/15**. Final approval of the well line connection to the dwelling was granted on **6/15/15**. The well construction was completed on **3/02/2013**. Water samples were collected on **7/20/15**.

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-95-2396. 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.**

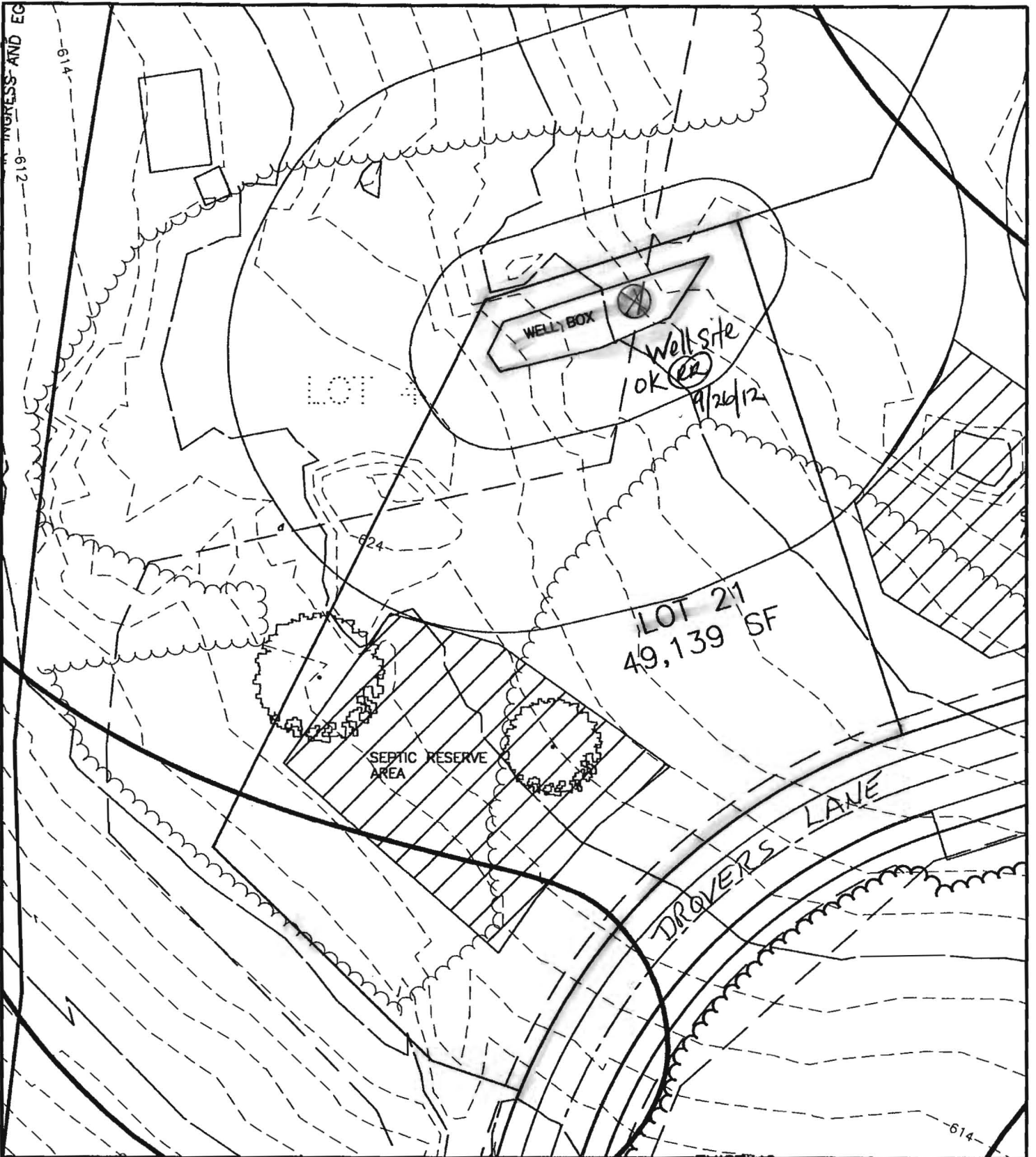
Please contact (410) 313-1773 to schedule a final water sample appointment or contact a Maryland certified water laboratory to schedule a water sample. A list of laboratories certified by the state of Maryland may be found at the following website:
<http://www.mde.state.md.us/assets/document/WSP-Labs-2010apr16.pdf>

Approving Authority,

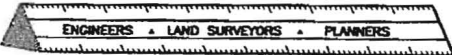
A handwritten signature in black ink that reads "Dana Bernard". The signature is written in a cursive, flowing style.

Dana Bernard, REHS, L.E.H.S.
Environmental Sanitarian
Well & Septic Program

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



BENCHMARK



ENGINEERING, INC.

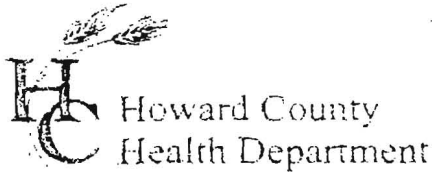
8480 BALTIMORE NATIONAL PIKE • SUITE 418 • ELLICOTT CITY, MD 21043
 PHONE: 410-465-6105 FAX: 410-465-6644

**WELL EXHIBIT
 VISTA RIDGE**

LOT 21

FORTH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

SCALE: 1" = 50' DATE: 5/16/12



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

Let #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