

C 1 52468

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)

COUNTY NUMBER

ST/CO USE ONLY DATE Received

DATE WELL COMPLETED

Depth of Well 400

PERMIT NO. FROM "PERMIT TO DRILL WELL" OK 9/22/17 SC HS-17-0101

OWNER 2LM Street Development WELL SITE ADDRESS HAVILAND Mill Rd TOWN CLARKSVILLE SUBDIVISION Mill Creek SECTION LOT 4

WELL LOG Not required for driven wells

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. Rows include Soil, Red Clay, Brown Shale, Hard Gray Rock, med Gray Rock.

GROUTING RECORD

WELL HAS BEEN GROUTED (Circle Appropriate Box) YES [Y] NO [N] TYPE OF GROUTING MATERIAL (Circle one) CEMENT [CM] BENTONITE CLAY [BC] NO. OF BAGS 12 NO. OF POUNDS 400

CASING RECORD

MAIN CASING TYPE PL Nominal diameter top (main) casing (nearest inch)! 60 61 63 64 66 70 Total depth of main casing (nearest foot) 30

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

SCREEN RECORD

DEPTH (nearest ft.) 1 2 3 4 5 6 7 8 9 11 15 17 21 23 24 26 30 32 36 38 39 41 45 47 51 SLOT SIZE 1 2 3 DIAMETER OF SCREEN (NEAREST INCH) 56 60

PUMPING TEST

HOURS PUMPED (nearest hour) 8 9 6 PUMPING RATE (gal. per min.) 11 15 1.5 METHOD USED TO MEASURE PUMPING RATE Submersible WATER LEVEL (distance from land surface) BEFORE PUMPING 17 20 22 WHEN PUMPING 22 25 168 TYPE OF PUMP USED (for test) [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 (nearest foot) 1 50 51

NUMBER OF UNSUCCESSFUL WELLS: 0 WELL HYDROFRACTURED YES [Y] NO [N]

- 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. M D 355 DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION) LIC. NO. WR 0113 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 70 72 74 75 76 TELESCOPE CASING LOG INDICATOR OTHER DATA

LATITUDE 3 9.18579 LONGITUDE 7 69.97779 (DEFAULT COORD. WGS 84)

Pursuant to §10-624 of the State Govt. Article of the Maryland Code personal info. requested on this form is used in processing this form pursuant to COMAR 26.04.04. Failure to provide the info. may result in this form not being processed. You have the right to inspect, amend, or correct this form. The Maryland Department of the Environment is subject to the Maryland Public Information Act. This form may be made available on the Internet via MDE's website and is subject to inspection or copying, in whole or in part, by the public and other governmental agencies, if not protected by federal or state law.

TAG: 3/8/17 50

B 1 19396
1 2 3 6

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND
APPLICATION FOR PERMIT TO DRILL WELL
559843-C please type

STATE PERMIT NUMBER
HO-17-0101
70 fill in this form completely 79

Date Received (APA) 11/16/16
8 MM DD YY 13
OWNER INFORMATION
15 Elm Street Development
Last Name Owner First Name 34
36 1355 Beverly Rd, Suite 240
Street or RFD 55
70 McClean VA 22101
Town State Zip 76

B 3 LOCATION OF WELL
8 Howard
COUNTY 21
23 mill creek
SUBDIVISION 42
SECTION 44 46 LOT 48 50
52 Clarksville
NEAREST TOWN 71

DRILLER INFORMATION
76 Michael Barlow M W D 355
Driller's Name License No. 81
Barlow Well Drilling
Firm Name
522 Underwood Lane 21014
Address
Signature Date 11/3/16

B 4 SOURCES OF DRILLING WATER
1. Well
2. see fill inquiry notes - no drilling insp completed

11 Haviland mill Rd
STREET ADDRESS 30
ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)
NORTH
WEST EAST
SOUTH
34 600 37
DISTANCE FROM ROAD FT
ENTER FT OR MI 38 39
TAX MAP: 39 BLK: 6 PARCEL 0001

B 2 WELL INFORMATION
1 APPROX. PUMPING RATE 5
2 (GAL. PER MIN.) 8 12
AVERAGE DAILY QUANTITY NEEDED 750
(GAL. PER DAY) 14 20

USE FOR WATER (CIRCLE APPROPRIATE BOX)
22 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 A546326-C 13
COUNTY NAME COUNTY NO.
STATE SIGNATURE INSERT S 41
DATE ISSUED 3/2/17 3/2/18
43 MM DD YY 48 CO SIGNATURE EXP. DATE
DON: 3/6/17 DNI DOG: 3/8/17 50 DOY:

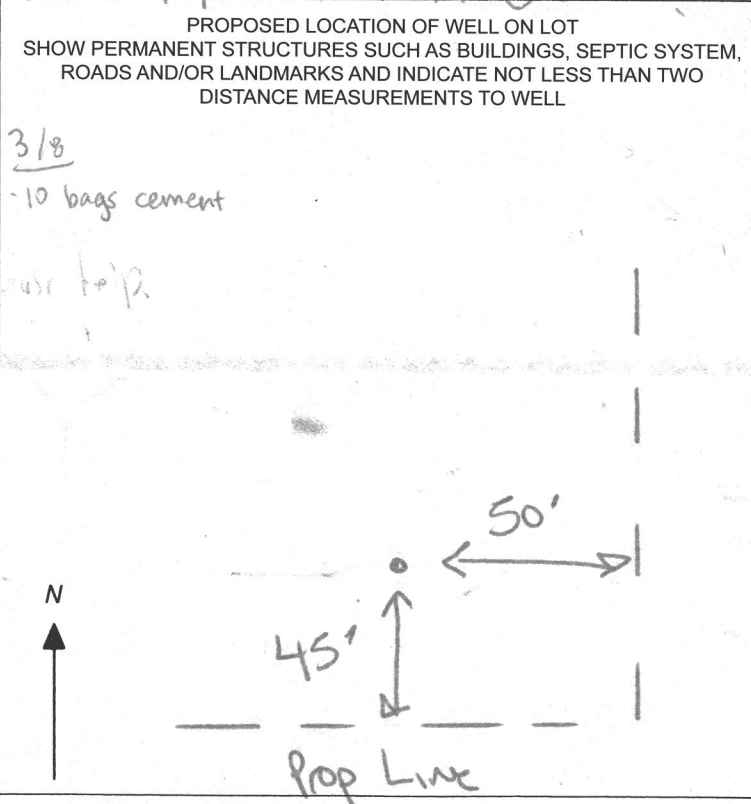
APPROXIMATE DEPTH OF WELL 300 FEET
24 28

APPROXIMATE DIAMETER OF WELL 6 INCH
NEAREST INCH

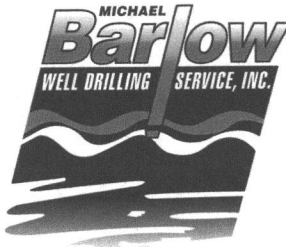
METHOD OF DRILLING (circle one)
30 BORED (or Augered) JETTED Jetted & DRIVEN
AIR-ROTary AIR-PERCussion ROTARY (Hydraulic Rotary)
37 CABLE REVERSE-ROTary DRIVE-POINT
other

REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX)
39 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)
APPROX. PERMIT NUMBER HQ 2016G002
PERMIT No. HO-17-0101
70 71 72 73 74 75 76 77 78 79



SPECIAL CONDITIONS
NOTE APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED: SEE ATTACHED MEMO



MICHAEL BARLOW WELL DRILLING & SERVICE, INC.

522 Underwood Lane
(410) 838-6910

Bel Air, Maryland 21014
Fax (410) 838-3582

WELL YIELD REPORT

Date Test Completed:	July 18, 2017		
Well Depth:	400	feet	
Customer	Elm Street Development	Permit #	HO-17-0101
Road	Haviland Mill Road	Subdivision	Mill Creek
City	Clarksville	Section	
State	Maryland	Lot #	4

Time	Water Level feet	Time to Fill 1-gallon bucket seconds	G.P.M.
9:30 AM	22	4	15.00
9:45 AM	135	7	8.57
10:00 AM	170	40	1.50
10:15 AM	170	40	1.50
10:30 AM	170	40	1.50
10:45 AM	170	40	1.50
11:00 AM	170	40	1.50
11:15 AM	170	40	1.50
11:30 AM	170	40	1.50
11:45 AM	170	40	1.50
12:00 PM	169	40	1.50
12:15 PM	169	40	1.50
12:30 PM	169	40	1.50
12:45 PM	169	40	1.50
1:00 PM	169	40	1.50
1:15 PM	169	40	1.50
1:30 PM	169	40	1.50
1:45 PM	169	40	1.50
2:00 PM	169	40	1.50
2:15 PM	169	40	1.50
2:30 PM	169	40	1.50
2:45 PM	169	40	1.50
3:00 PM	169	40	1.50
3:15 PM	168	40	1.50
3:30 PM	168	40	1.50
3:45 PM	168	40	1.50
4:00 PM	168	40	1.50

This yield test report is for informational purposes only. Please note the yield may increase or decrease over time and the GPM indicated above is not a guarantee.

**HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH
WELL & SEPTIC PROGRAM
TEL: (410)313-1771 FAX: (410)313-2648**

Permit Form for the Installation of the Well Pump, Pileless Adapter, and Safety Fencing

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: James Well Pump & Water Treatment, LLC Telephone #: 410 795 5670
Address: 1580 Obrecht Rd.
Sykesville, MD 21784

(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. Anzile License #: MSD226

*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 in field verification. Unlicensed individuals may be reported to the appropriate licensing agency.

Name of Property Owner: NVR Inc Telephone #: _____
Subdivision: Mill Creek Lot #: 4 Well Tag #: HO - 17-0101
Site Address: 13922 Mill Creek Ct
Clarksville, MD 21029

<u>Submersible Pump Data</u>	<u>Pileless Adapter</u>	<u>Well Cap and Electric Conduit</u>
Material: <u>Galv</u>	Material: <u>Campbell</u>	Two piece watertight cap: <u>YES</u>
Model #: <u>74507422</u>	Model #: <u>N/A</u>	Screened, vented well cap: <u>YES</u>
Pump Capacity: <u>7</u> GPM	Depth: <u>36" (36" min)</u>	Cap secured to casing: <u>YES</u>
Well Yield: <u>1.5</u> GPM	NSE/WSC approved: <u>YES</u>	Conduit min 18" B.C.: <u>YES</u>
Depth of well encountered at time of pump installation: <u>400 (feet)</u>	Conduit secured to well cap: <u>YES</u>	

If pump capacity exceeds well yield, a low water cutoff switch is required by NSPC 1990 Section 17.8.4
Torque wrenches, 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>Pipe 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 (150 psi min)</u>	Length of sleeve (5' minimum from foundation): <u>6'</u>
Depth of supply line: <u>36" (36" min)</u>	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.

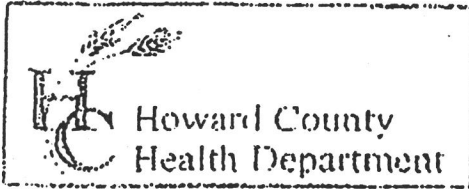
Signature of company representative responsible for installation: David C. Anzile date: 5/15/19

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

Date Insp. Requested: 05/15/2019 Date Insp. Approved: 05/15/2019 Inspector: (Signature)
Inspection Data: Pileless adapter watertight & water supply line at least 36" below grade: 46" 5/15/2019 (Signature)
Two piece cap installed and attached to casing securely: (Signature)
Elec conduit extends at least 18" below grade/attached to cap properly: 42" 5/15/2019 (Signature)
Safety rope not outside of well cap/casing: (Signature)
Correct well tag attached properly and casing 8" above finished grade: 18" 5/15/2019 (Signature)
Water supply line sleeved adequately at house connection: 10' 5/15/2019 (Signature)
Adequate ground observed below pileless adapter: (Signature)

EX HOUSE
05/15/2019





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

TO ALL INTERESTED PARTIES

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

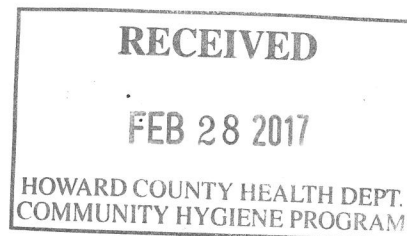
INDIVIDUAL well sites have been staked for Mill Creek

The well site has been staked by Bohler Engineering,
(professional land surveyor or company employing professional land surveyors)
on 2/24/17 (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



INTERIM CERTIFICATE OF POTABILITY
Expiration Date – FEBRUARY 1, 2020

August 1, 2019

Homeowner
13822 Mill Creek Court
Clarksville, MD 21029

RE: Mill Creek, Lot 4
13822 Mill Creek Court
Building Permit: B19000498
Well Permit: HO-17-0101

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 **6/12/2019**. Final approval of the well line connection to the dwelling was granted on **5/15/2019**. The well construction was completed on **7/18/2017**. Water samples were collected on **7/10/2019, 7/19/2019**.

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-17-0101. Although the submitted sample results are in compliance with COMAR standards, the Health Department does not guarantee water supplies.

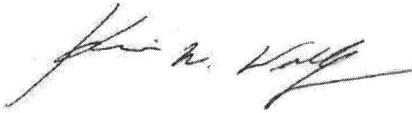
This Interim Certificate of Potability will expire **six months** from the date of issuance. Submission of a second bacteriological test indicating the water is free of coliform and fecal coliform bacteria is required prior to the expiration date, after which time a Final Certificate of Potability will 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>

Maura J. Rossman, M.D., Health Officer

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,



Kevin M. Wolf, LEHS, R.S./REHS, Supervisor
Groundwater Management Section
Well & Septic Program

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

Collins, Sarah

From: Mike Isom <misom@mbwd.us>
Sent: Friday, October 20, 2017 9:09 AM
To: Wolf, Kevin; Collins, Sarah
Subject: Mill Creek

Follow Up Flag: Flag for follow up
Flag Status: Completed

Wanted to let you know that we were asked to extend the pvc well casings on lots 4, 5, 6, & 7 and the steel casings on lots 20 & 21 because of changes in the grade. All of them were extended at least 7 feet, so grout will not be visible any longer and likely won't be apparent when the water lines are excavated. The tags were relocated and will be visible after the grading is complete.

--

Sincerely,

Michael Isom
Project Manager
Michael Barlow Well Drilling Service
Phone: (410) 838-6910
Fax: (410) 838-3582
522 Underwood Lane
Bel Air, MD 21014
www.michaelbarlowwelldrilling.com
www.thermalloopcorp.com
[Click HERE to like us on Facebook!](#)

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 #: 131338 Account #: 1933
Reference: Mill Creek Lot 4 Company: Fogles Well Pump & Treatment
Location: 13822 Mill Creek Court Requested By: Dave Fogle
Clarksville, MD 21029 Source: Well Water
Date/ Time Collected: 7/10/2019 1545 Site: Kitchen Sink Tap
Date/Time Rec'd: 7/11/2019 0854 Treatment: None
Chlorine ppm: Free: ND Total: ND pH: 6.7
Collected By: B. Wilkerson 9315BW Well #: HO-17-0101

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	1.0	MPN/ 100 ml	<1.0	SM20 9223B	7/12/2019 / 0930 / CRS
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	7/12/2019 / 0930 / CRS
Nitrate	<1.0	mg/L	10	601	7/11/2019 / 0915 / CRS
Turbidity	0.87	NTU	<10	SM20 2130B	7/11/2019 / 0920 / CRS
Sand	NS	mg/L	5	Visual/Gravimetric	7/11/2019 / 0920 / 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 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 6 Sample collected by client, analyzed as received
- 7 ND = None Detected
- 8 Visual well check: Sealed, vented cap
- 9 pH and Chlorine level tested in lab (pH tested after recommended holding time)

Reason for Test : Use & Occupancy
Building Permit # : 19000498

Date Reported: 7/12/2019

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 #: 131495 Account #: 1933
Reference: Mill Creek Lot 4 Company: Fogles Well Pump & Treatment
Location: 13822 Mill Creek Court Requested By: Dave Fogle
Clarksville, MD 21029 Source: Well Water
Date/ Time Collected: 7/19/2019 0745 Site: Front Hose Bib
Date/Time Rec'd: 7/19/2019 1130 Treatment: None
Chlorine ppm: Free: ND Total: ND pH: 6.8
Collected By: J. Evans 7411JE Well #: HO-17-0101

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	7/20/2019 / 1015 / CCH
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	7/20/2019 / 1015 / CCH

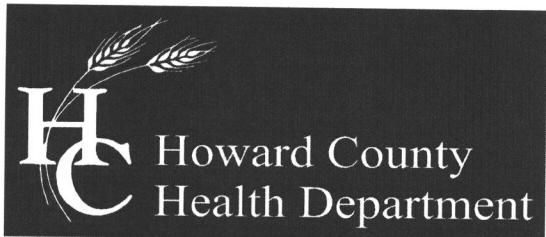
NOTES

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- 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 Visual well check: Sealed, vented cap
- 5 pH and Chlorine level tested in lab (pH tested after recommended holding time)

Reason for Test : Use & Occupancy

Building Permit # : 19000498

Date Reported: 7/22/2019



Bureau of Environmental Health

8930 Stanford Blvd, Columbia, MD 21045
Main: 410-313-2640 | Fax: 410-313-2648
TDD 410-313-2323 | Toll Free 1-866-313-6300
www.hchealth.org

Maura J. Rossman, M.D., Health Officer

LOT 4

MEMORANDUM

TO: Barlow Well Drilling
FROM: Ryan Rappaport, L.E.H.S. (RR)
Well and Septic Program
DATE: March 1, 2017
RE: **State Water Appropriation and Use Permit for Crawford Property/Mill Creek Subdivision #HO2016G002(01) & Special Conditions**

The State Water Appropriation and Use Permit for the Crawford Property/Mill Creek Subdivision has a requirement regarding well spacing and testing:

15. The Permittee shall conduct simultaneous yield tests of wells closer than 100 feet apart, if at least one of the wells is on a lot less than one acre in size. The yield testing shall be conducted to ensure that the minimum yield requirements of COMAR 26.04.04.26 are met. In the event that a well that has been tested simultaneously with other wells does not meet minimum yield standards, the Permittee may relocate a well so as to achieve the 100-foot separation distance, deepen or otherwise modify the well to improve its yield or drill a second well to be used in tandem to meet the minimum yield standards during simultaneous testing. All wells shall comply with well construction standards.

The lots of the Crawford Property/Mill Creek Subdivision that are less than an acre are lots 2, 3, 12, 13 and 18. If a well on one of these lots is within 100' of another well, a simultaneous yield test of both wells will be required.

SPECIAL CONDITIONS

- All drilling, grouting and yields must be called into the Health Department for inspection. Call 410-313-1771 for scheduling.
- Since all 23 lots have the well locations staked and not the lot's well boxes it is required that if during the drilling a dry hole is encountered, the Health Department must be notified immediately before any additional drilling is completed on that particular lot.
- The wells on lots 1, 7, 15 and 19 will require TDS, sodium and chloride water samples during the yield test.
- The wells on lots 20 and 21 must be drilled using steel casing that extends to at least 50 feet depth or 10 feet into competent bedrock, whichever is deeper.

Feel free to contact me with any questions at 410-313-1781 or RRappaport@howardcountymd.gov.

Cc: File

