

C1 40727

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

DATE RECEIVED MM DD 11 01 17

DATE WELL COMPLETED MM DD 10 01 17

DEPTH OF WELL 700 (TO NEAREST FOOT)

PERMIT NO. HO-17-0117

OWNER: Elm Street Development; WELL SITE ADDRESS: Havilmo Mill Rd; TOWN: Clarksville; SUBDIVISION: Mill Creek; SECTION: ; LOT: 14

WELL LOG table with columns: DESCRIPTION, FEET (FROM, TO), check if water bearing. Includes entries for Soil, Red soil, Brown shale, Med Gray Rock.

GROUTING RECORD form with fields for CEMENT (CM), BENTONITE CLAY (BC), NO. OF BAGS (23), NO. OF POUNDS (1725), GALLONS OF WATER (115), DEPTH OF GROUT SEAL.

PUMPING TEST form with fields for HOURS PUMPED (6), PUMPING RATE (1.0), METHOD USED TO MEASURE PUMPING RATE (Water/Bucket), WATER LEVEL (54 ft before, 203 ft when pumping), TYPE OF PUMP USED (S - submersible).

Attempt #1 - 500' Dry Abandoned w/ Cuttings to 25' cement From 25 to 0 39.18372 77.00078; Attempt #2 - 600' Dry abandoned w/ stone + cement - See Report 39.18378 77.00088

CASING RECORD form with fields for MAIN CASING TYPE (PL), Nominal diameter (6), Total depth of main casing (55).

OTHER CASING (if used) table with columns: diameter inch, depth (feet) from, to.

SCREEN RECORD form with fields for screen type (ST - steel), BR - brass, HO - open hole, PL - plastic, OT - other.

NUMBER OF UNSUCCESSFUL WELLS: 2; WELL HYDROFRACTURED: Y (yes), N (no)

DEPTH (nearest ft.) table with columns: T, E, A, C, H, S, R, E, N and rows for slot size and diameter of screen.

PUMP INSTALLED form with fields for DRILLER INSTALLED PUMP (YES/NO), TYPE OF PUMP INSTALLED (S - submersible), CAPACITY: GALLONS PER MINUTE (31-35), PUMP HORSE POWER (37-41), PUMP COLUMN LENGTH (43-47), CASING HEIGHT (+ above, - below).

CIRCLE APPROPRIATE LETTER: A (well abandoned and sealed), 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 WD 355; DRILLERS SIGNATURE; LIC. NO. WR0113

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER) form with fields for GRAVEL PACK, SLOT SIZE, DIAMETER OF SCREEN.

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

TELESCOPE CASING LOG INDICATOR form with fields for T, W, Q, 70, 72, 74, 75, 76.

LATITUDE 39.18383; LONGITUDE 77.00069; (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.

B 1 **32971** SEQUENCE NO. (MDE USE ONLY) STATE OF MARYLAND STATE PERMIT NUMBER
 1 2 3 6 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100
 APPLICATION FOR PERMIT TO DRILL WELL please type **559843-M** HD-17-0111
 fill in this form completely

Received (APA) **11/16/16**
 8 MM DD YY 13
ELM STREET DEVELOPMENT
 15 Last Name Owner First Name 34
1355 BEVERLY RD, SUITE 240
 36 Street of RFD 55
McCLEAN VA 22101
 57 Town 70 State 72 Zip 76

B 3 LOCATION OF WELL
HOWARD
 8 COUNTY 21
MILL CREEK
 23 SUBDIVISION 42
 SECTION 44 46 LOT **14** 48 50
CLARKSVILLE
 52 NEAREST TOWN 71

DRILLER INFORMATION
MICHAEL BARLOW MW D 355
 76 Driller's Name License No. 81
BARLOW WELL DRILLING
 Firm Name
511 UNDERWOOD LANE 21014
 Address
[Signature] **11/3/16**
 Signature Date

B 4 SOURCES OF DRILLING WATER
 1. WELL
 2.
 3. **9/29 simultaneous yield w/ lot 13. no influence pump down to 165' @ 9pm**
HAVILAND MILL RD
 STREET ADDRESS 30
 ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)
 NORTH
 WEST EAST SOUTH
 34 **1400** 37 DISTANCE FROM ROAD FT
 ENTER FT OR MI 38 39
 TAX MAP: **39** BLK: **6** PARCEL: **001**

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

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 **546326-M** **13**
 COUNTY NAME COUNTY NO.
 STATE SIGNATURE INSERT S 41
 DATE ISSUED **3/2/17** **[Signature]** **3/2/18**
 43 MM DD YY 48 CO SIGNATURE EXP. DATE
 DON: 3/23/17 DOY: 9/29/17 DOB:

APPROXIMATE DEPTH OF WELL **300** FEET
 24 28
 APPROXIMATE DIAMETER OF WELL **6** NEAREST INCH

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

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) 41 52

Not to be filled in by driller (MDE OR COUNTY USE ONLY)
 APPROP. PERMIT NUMBER **HO 2016G002**
 PERMIT No. **HO-17-0111**
 70 71 72 73 74 75 76 77 78 79

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
3/23 **9/26**
 -500' dry hole
3/29/17 - dry hole sealed
80' into new well with 60' of casing - no water yet.
45' **65'**
3/30 -drilling hole #2. looks dry
9/19 -simultaneous yield w/ lot 13
 - 40' static 125' m.p.
 - 11 am pumping 1 gpm, dropped to 80'
9/29/17 - water samples taken during yield test. Sodium Chloride, TDS

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



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 20, 2017		
Well Depth:	600	feet	
Customer	Elm Street Development	Permit #	HO-17-0111
Road	Haviland Mill Road	Subdivision	Mill Creek
City	Clarksville	Section	
State	Maryland	Lot #	14

Time	Water Level feet	Time to Fill 1-gallon bucket seconds	G.P.M.
9:45 AM	37	4	15.00
10:00 AM	105	6	10.00
10:15 AM	145	15	4.00
10:30 AM	160	60	1.00
10:45 AM	160	60	1.00
11:00 AM	160	60	1.00
11:15 AM	160	60	1.00
11:30 AM	160	60	1.00
11:45 AM	160	60	1.00
12:00 PM	160	60	1.00
12:15 PM	160	60	1.00
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2:15 PM	160	60	1.00
2:30 PM	160	60	1.00
2:45 PM	160	60	1.00
3:00 PM	160	60	1.00
3:15 PM	160	60	1.00
3:30 PM	160	60	1.00
3:45 PM	160	60	1.00
4:00 PM	160	60	1.00
4:15 PM	160	60	1.00

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.



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:	September 29, 2017		
Well Depth:	700	feet	
Customer	Elm Street Development	Permit #	
Road	Haviland Mill Road	Subdivision	Mill Creek
City	Clarksville	Section	
State	Maryland	Lot #	14

Time	Water Level feet	Time to Fill 1-gallon bucket seconds	G.P.M.
10:45 AM	54	4	15.00
11:00 AM	160	20	3.00
11:15 AM	176	30	2.00
11:30 AM	189	30	2.00
11:45 AM	197	50	1.20
12:00 PM	200	60	1.00
12:15 PM	200	60	1.00
12:30 PM	200	60	1.00
12:45 PM	200	60	1.00
1:00 PM	201	60	1.00
1:15 PM	201	60	1.00
1:30 PM	201	60	1.00
1:45 PM	201	60	1.00
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3:45 PM	202	60	1.00
4:00 PM	203	60	1.00
4:15 PM	203	60	1.00
4:30 PM	203	60	1.00
4:45 PM	203	60	1.00
5:00 PM	203	60	1.00
5:15 PM	203	60	1.00
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.			

6:00 pm

yield cut short 45 minutes but H₂O level seems ok - KR 11/27/17 reviewed w/ KW.

**HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH
WELL & SEPTIC PROGRAM
TEL: (410)513-3771 FAX: (410)513-2648**

Information Form for the Installation of the Well Pump, Pitless Adapter, and Sumpby Pump

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: Rockwell Pump & Water Treatment, LLC Telephone #: 410 795 9670
Address: 580 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 Fogle License #: MSD2260

*A licensed individual must perform the actual installation. Apprentices must be under the supervision of a foreman 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: NVR INC Telephone #: _____
Subdivision: Mill Creek Lot #: 14 Well Tag #: HO-17-0111 (ST)
Site Address: 13882 Mill Creek Ct
Clarksvine MD 21029

<u>Submersible Pump Data</u>	<u>Pitless Adapter</u>	<u>Well Cap and Electric Conduit</u>
Make: <u>Goulds</u>	Make: <u>Campbell</u>	Two piece watertight cap: <u>YES</u>
Model #: <u>54510422</u>	Model #: <u>NA</u>	Screened vented well cap: <u>YES</u>
Pump Capacity: <u>5</u> GPM	Depth: <u>36" (36" min)</u>	Cap secured to casing: <u>YES</u>
Well Yield: <u>1</u> GPM	NSE/WSC approved: <u>YES</u>	Conduit min 1 1/2" R.G.: <u>YES</u>
Depth of well encountered at time of pump installation: <u>700</u> (feet)		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 17.24

Temporary casing, cable guards, or other acceptable method used - Must circle one

Safety rope, if used, attached to hoist rope adaptor or other acceptable method inside of well casing: NA

<u>Pipes to house</u>	<u>Hoist Connection</u>
Type: <u>1" mvy pipe</u>	PVC sleeve to undisturbed soil at wall penetration: <u>YES</u>
PSI: <u>200</u> (psi)	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 12 feet from the septic tank, pump chamber, sewage piping, distribution box, drainfields, and sewage reservoirs. If this cannot be accomplished, contact this office for approval prior to installation.

Signature of company representative responsible for installation: David C Fogle date: 11/6/19

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

Date Insp Requested: 11/7/19 Date Insp Approved: 11/7/19 Inspector: (ST)

Inspection Data: Pitless adapter watertight & water supply line at least 36" below grade	<input checked="" type="checkbox"/>	47"
Two piece cap installed and attached to casing securely	<input checked="" type="checkbox"/>	46"
Elec. conduit extends at least 1 1/2" below grade/attached to cap properly	<input checked="" type="checkbox"/>	
Safety rope not outside of well casing	<input checked="" type="checkbox"/>	
Current well tag attached properly and casing 8" above finished grade	<input checked="" type="checkbox"/>	29"
Water supply line sleeved adequately at hoist connection	<input checked="" type="checkbox"/>	
Adequate grout observed below pitless adapter	<input checked="" type="checkbox"/>	



INTERIM CERTIFICATE OF POTABILITY

Expiration Date – JULY 17, 2020

January 17, 2020

Homeowner
13882 Mill Creek Court
Clarksville, MD 21029

RE: Mill Creek, Lot 14
13882 Mill Creek Court
Building Permit: B19002639
Well Permit: HO-17-0111

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 **11/15/2019**. Final approval of the well line connection to the dwelling was granted on **11/07/2019**. The well construction was completed on **10/01/2017**. Water samples were collected on **12/23/2019**.

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-17-0111. 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 Environment's website which describes in further detail operation and maintenance of your septic system.

Approving Authority,

Hank Oswald

Hank Oswald, LEHS
Well & Septic Program

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

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

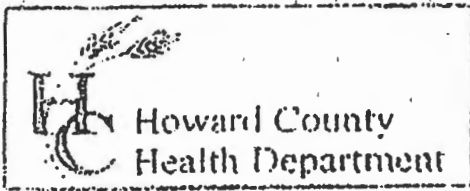
In closing, please refer to our "Homeowner Fact Sheet" which illustrates a better understanding for your Onsite Sewage Disposal System. You will also find a link to Maryland Department of the Environments website which describes in further detail operation and maintenance of your septic system.

Approving Authority,

Hank Oswald

Hank Oswald, LEHS
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

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

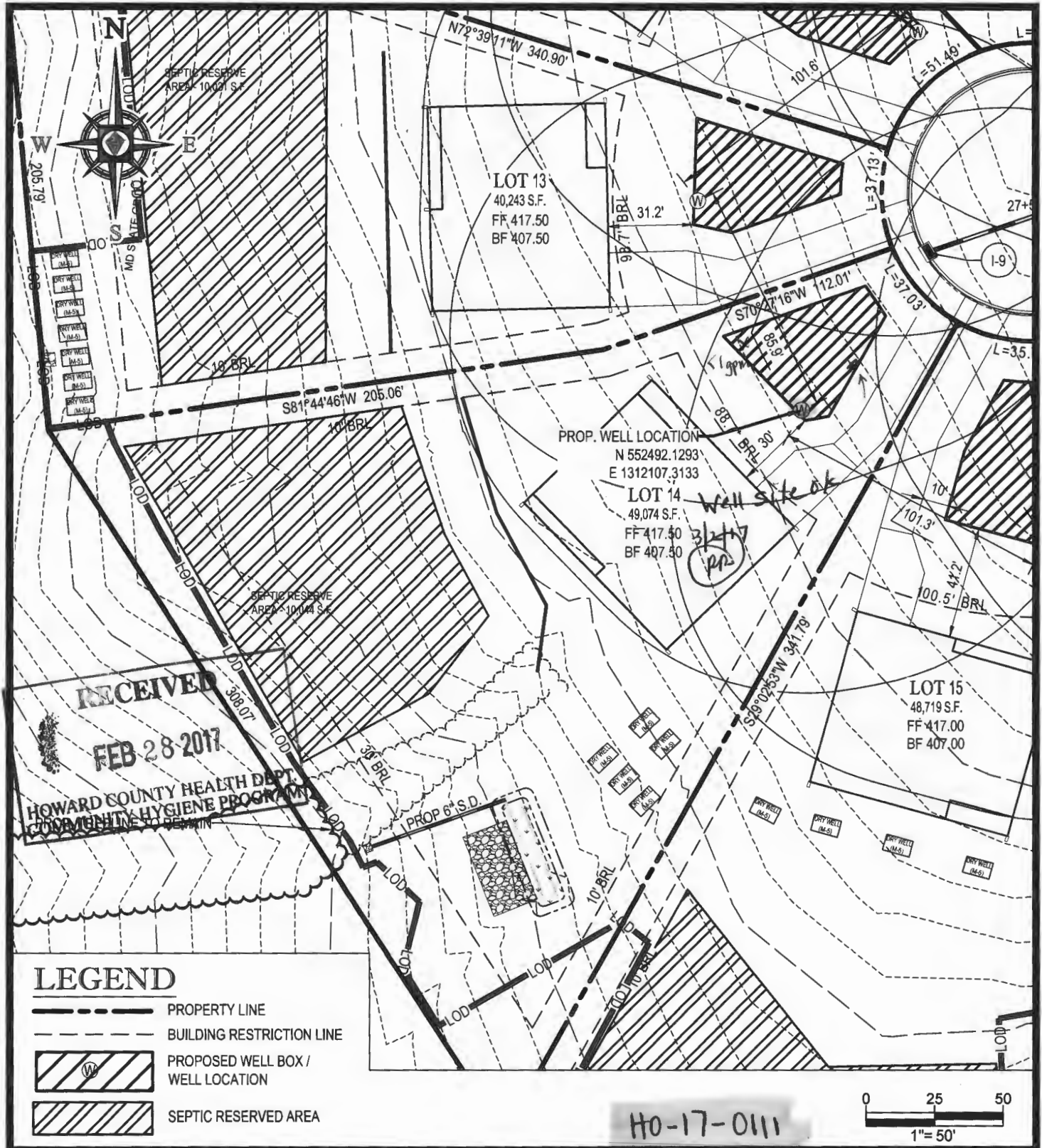
The well site has been staked by Bohler Engineering,
(professional land surveyor or company employing professional land surveyors)
on 2/24/17 (date) and does not require a site inspection.

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

RECEIVED
FEB 28 2017
HOWARD COUNTY HEALTH DEPT.
COMMUNITY HYGIENE PROGRAM



PROJECT NAME:

MILL CREEK SUBDIVISION
PROPOSED LOTS 1-23 & NONBUILDABLE PRESERVATION PARCEL A - G
6780 HAVILAND MILL ROAD, CLARKSVILLE, MD

SHEET TITLE:

WELL EXHIBIT - LOT 14
1 OF 1



BOHLER
ENGINEERING

22636 DAVIS DRIVE, SUITE 250 STERLING, VA 20164
PHONE: (703) 709-9500 FAX: (703) 709-9501

SCALE: 1" = 50'	DATE: 11-01-16	CAD ID: EX0	PROJECT NUMBER: MD142038
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Oswald, Hank

From: Srour, Matthew <msrour@nvrinc.com>
Sent: Friday, January 17, 2020 10:17 AM
To: Oswald, Hank
Cc: Wolf, Kevin; Tinordi, Matthew
Subject: RE: 13882 mill creek court
Attachments: Analysis Report.pdf

[Note: This email originated from outside of the organization. Please only click on links or attachments if you know the sender.]

Thanks Hank. Attached are the well results. I will give the sodium letter to the homeowners.

Thanks,

Matt Srour
Project Manager
Maple Lawn South & Mill Creek

C: 240-755-7378
msrour@nvrinc.com
www.nvhomes.com

Message classified as *NVR - Business Use Only* on Friday, January 17, 2020 10:17:13 AM

From: Oswald, Hank <hoswald@howardcountymd.gov>
Sent: Friday, January 17, 2020 9:15 AM
To: Srour, Matthew <msrour@nvrinc.com>
Cc: Wolf, Kevin <KWolf@howardcountymd.gov>; Tinordi, Matthew <mtinordi@nvrinc.com>
Subject: [Ext] RE: 13882 mill creek court

Hi Mr. Srour:

Good morning. I will assist you with this ICOP letter. Can you send me the water sample results for 13882 Mill Creek Court? Also, please provide the sodium result letter (attached) to the homeowner.

Thanks,

Hank

From: Wolf, Kevin <KWolf@howardcountymd.gov>
Sent: Friday, January 17, 2020 8:03 AM
To: Oswald, Hank <hoswald@howardcountymd.gov>
Subject: FW: 13882 mill creek court

Hank,
Can you look into this for me? Thanks

----- Original message -----

From: "Srour, Matthew" <msrour@nvrinc.com>

Date: 1/16/20 8:54 PM (GMT-05:00)

To: "Wolf, Kevin" <KWolf@howardcountymd.gov>

Cc: "Tinordi, Matthew" <mtinordi@nvrinc.com>, "Martin, Sharhonda" <smmartin@howardcountymd.gov>

Subject: 13882 mill creek court

[Note: This email originated from outside of the organization. Please only click on links or attachments if you know the sender.]

Good evening,
Can you please issue this ICOP?

Thanks,
Matt Srour

Sent from my iPhone

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

March 7, 2018

Homeowner

Clarksville, MD 21029

Dear Homeowner,

The Health Department received results from the testing for sodium, chloride, and total dissolved solids (TDS) from the well on this lot.

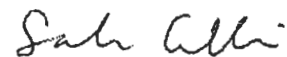
Elevated sodium levels in drinking water may affect individuals on low-salt diets. The action level for sodium is 20 milligrams per liter (mg/L); **sodium from the well measured 15.29 mg/L.**

Chloride and TDS are both considered secondary contaminants, meaning high concentrations may affect taste, color, odor, or corrosive properties of water but present no risk to health. The secondary maximum contaminant level for chloride is 250 mg/L; **chloride from the well measured <10 mg/L.** The secondary maximum contaminant level for TDS is 500 mg/L; **TDS from the well measured 88 mg/L.**

Levels of contaminants in groundwater may change over time due to construction activities or seasonal variations in weather. Given the intermediate levels of sodium in the water at the time of sample collection, you should consider future testing.

Feel free contact me at the number or email below with any questions regarding the results of water sampling.

Sincerely,



Sarah Collins, L.E.H.S.
Howard County Health Department
Well & Septic Program
SCollins@howardcountymd.gov
410-313-6287

Cc: 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 #:	134834	Account #:	1933
Reference:	Mill Creek Lot 14	Company:	Fogles Well Pump & Treatment
Location:	13882 Mill Creek Court Clarksville, MD 21029	Requested By:	Dave Fogle
Date/ Time Collected:	12/23/2019 0700	Source:	Well Water
Date/Time Rec'd:	12/23/2019 0857	Site:	Pressure Tank
Chlorine ppm:	Free: ND Total: ND	Treatment:	None
Collected By:	B. Wilkerson 9315BW	pH:	7.7
		Well #:	HO-17-0111

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	12/24/2019 / 0800 / CCH
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	12/24/2019 / 0800 / CCH
Nitrate	<1.0	mg/L	10	601	12/23/2019 / 1215 / CRS
Turbidity	1.60	NTU	<10	SM20 2130B	12/23/2019 / 1600 / RER
Sand	NS	mg/L	5	Visual/Gravimetric	12/23/2019 / 1600 / RER

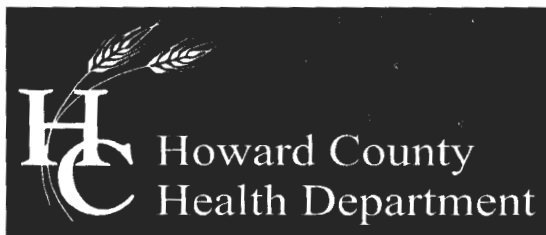
NOTES

- 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 and Chlorine level tested in lab (pH tested after recommended holding time)

Reason for Test : Use & Occupancy

Building Permit # : 19002639

Date Reported: 12/26/2019



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 14

MEMORANDUM

TO: Barlow Well Drilling

FROM: Ryan Rappaport, L.E.H.S. 
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.

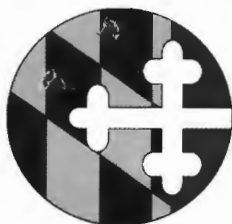
The lots of the Crawford Property/Mill Creek Subdivision that are less than an acre are lots 2, 3, 12, 13 and 18. If a well on one of these lots is within 100' of another well, a simultaneous yield test of both wells will be required.

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



State of Maryland
Department of Health
Laboratories Administration
Division of Environmental Sciences
INORGANICS ANALYTICAL LABORATORY
1770 Ashland Avenue, Baltimore, Maryland 21205
Robert Myers, Ph.D., Director



HOWARD CO ENVIRONMENTAL HLTH
8930 STANFORD BLVD
COLUMBIA, MD 21045

Certificate of Analysis

Lab Project NoE18001337 Date Coll. 09/28/2017 Date Received 10/02/2017 Submitted By:Rappaport

Field ID: HO-17-0111
Lab No.: E18001337001

<u>Analyte</u>	<u>Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Analyzed</u>
Chloride	SM 4500-Cl E	<10	mg/L	10/16/2017
Total Dissolved Solids	SM 2540C	88	mg/L	10/02/2017

Comments:

Approved by:

Shahin Aneli

Approval date: 10/17/2017

*The following methods are included in our A2LA Scope of Accreditation: EPA150.1, EPA 353.2, EPA 375.2, SM4500F C, SM 4500-CN G & QCM-CN, QCM-CN.

This document contains confidential health information that is privileged, confidential and exempt from disclosure under law. If you have received this information in error, please call (410) 767-6190 and arrange for return or destruction.

WATER WELL ABANDONMENT-SEALING REPORT FORM

SUBMIT COPIES OF COMPLETED FORM TO:

- * COUNTY ENVIRONMENTAL AGENCY (contact MDE, WMA if address needed)
- * WELL OWNER
- * MDE, WATER MANAGEMENT ADMINISTRATION, WELL PROGRAM

DATE WELL ABANDONED: 10/18/17 (month/day/year)

* PERMIT NUMBER OF ABANDONED WELL (if any)

* PERMIT NUMBER OF REPLACEMENT WELL:

HO-17-0111

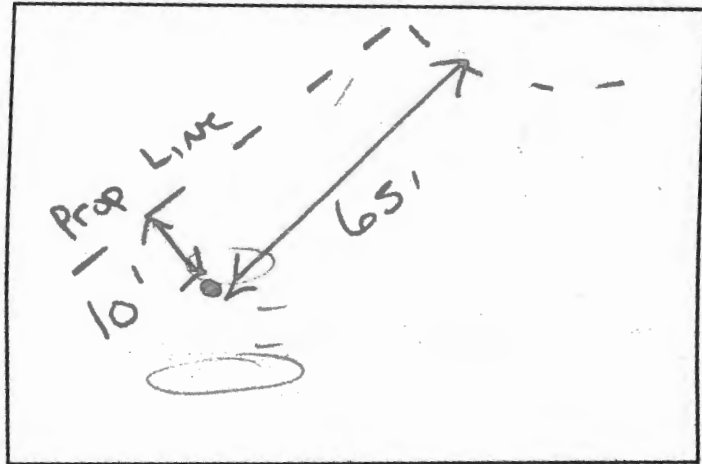
* PERSON ABANDONING WELL: Michael Barkow WELL DRILLER'S LICENSE NUMBER: 355

CIRCLE: MWD / MSD / MGD

* OWNER'S NAME: Elm Street Development

* WELL LOCATION:
 COUNTY: Howard
 NEAREST TOWN: Clarksville
 TAX MAP 39 BLOCK 6 PARCEL 0001
 SUBDIVISION: Mill Creek
 SECTION: _____ LOT: 14
 STREET ADDRESS: Harland Mill Rd

SITE LOCATION MAP



LATITUDE 39.18378 ✓

LONGITUDE 77.00088 ✓

* TYPE OF WELL BEING ABANDONED:
 DRILLED JETTED
 BORED HAND DUG
 OTHER (specify) _____

LOG OF SEALING MATERIAL

* USE CODE:
 DOMESTIC MUNICIPAL/PUBLIC
 IRRIGATION INDUSTRIAL
 TEST/OBSERVATION GEOTHERMAL

MATERIAL	FEET	
	FROM	TO
Stone	600	90
Cement GROUT	30	0

* TYPE OF CASING:
 STEEL PLASTIC
 CONCRETE OTHER (specify) _____

SIZE OF CASING: 6 INCHES IN DIAMETER

DEPTH OF WELL: 600 FEET DEEP

WAS ANY CASING REMOVED? YES NO
 If yes, length removed, in feet: _____

WAS CASING RIPPED OR PERFORATED? YES NO

MWD / MSD / MGS

10/20/17

CIRCLE ONE

DATE

 WATER WELL ABANDONMENT-SEALING REPORT FORM

SUBMIT COPIES OF COMPLETED FORM TO:

- * COUNTY ENVIRONMENTAL AGENCY (contact MDE, WMA if address needed)
- * WELL OWNER
- * MDE, WATER MANAGEMENT ADMINISTRATION, WELL PROGRAM

DATE WELL ABANDONED: 10/1/2017 (month/day/year)

* PERMIT NUMBER OF ABANDONED WELL (if any)

* PERMIT NUMBER OF REPLACEMENT WELL:

Hb - 17 - 0111

* PERSON ABANDONING WELL: Michael Barlow

WELL DRILLER'S LICENSE NUMBER: 355

* OWNER'S NAME: Elm Street Development

CIRCLE: MWD / MSD / MGD

SITE LOCATION MAP

* WELL LOCATION: Howard
 COUNTY: Howard
 NEAREST TOWN: Clarksville
 TAX MAP 39 BLOCK 6 PARCEL 0001
 SUBDIVISION: Mill Creek
 SECTION: _____ LOT: 14
 STREET ADDRESS: Haviland Mill Rd

Drilled within Staked well Area

LATITUDE 39.18372

LONGITUDE 77.00078

LOG OF SEALING MATERIAL

MATERIAL	FEET	
	FROM	TO
Drill cuttings	500	25
Cement Grout	25	0

* TYPE OF WELL BEING ABANDONED:
 DRILLED JETTED
 BORED HAND DUG
 OTHER (specify) _____

* USE CODE:
 DOMESTIC MUNICIPAL/PUBLIC
 IRRIGATION INDUSTRIAL
 TEST/OBSERVATION GEOTHERMAL

* TYPE OF CASING:
 STEEL PLASTIC
 CONCRETE OTHER (specify) Dry hole

SIZE OF CASING: 4 INCHES IN DIAMETER

DEPTH OF WELL: 500 FEET DEEP

WAS ANY CASING REMOVED? YES NO
 If yes, length removed, in feet: _____

WAS CASING RIPPED OR PERFORATED? YES NO

 SIGNATURE-MASTER WELL DRILLER OR SUPERVISING SANITARIAN LICENSE# 355

MWD / MSD / MGS
 CIRCLE ONE

12/18/17
 DATE

COUNTY

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.



State of Maryland
Department of Health
Laboratories Administration
Division of Environmental Sciences
TRACE METALS LABORATORY
1770 Ashland Avenue, Baltimore, Maryland 21205
Robert Myers, Ph.D., Director



Certificate of Analysis

HOWARD CO ENVIRONMENTAL HLTH
8930 STANFORD BLVD
COLUMBIA, MD 21045

Lab Project No: E18001336 Date Coll.: 09/28/2017 Date Received: 10/02/2017 Submitted By: Rappaport

Field ID: HO-017-0111
Lab No.: E18001336001

<u>Method</u>	<u>Element</u>	<u>Result</u>	<u>Units</u>	<u>Date Analyzed</u>
EPA 200.7	Sodium	15.29	ppm	10/12/2017

Comments:

Approved by: Yungso Choi

Approval date: 10/13/2017

**The following methods are included in our A2LA Scope of Accreditation: EPA 200.7, EPA 200.8, EPA 245.1.

This document contains confidential health information that is privileged, confidential and exempt from disclosure under law. If you have received this information in error, please call (410) 767-6944 and arrange for return or destruction.

Telephone: (443) 681 - 3853

Fax: (443) 681-4507

S:\EnviroFinal-Metals.rpt

Oswald, Hank

From: Oswald, Hank
Sent: Friday, January 17, 2020 10:46 AM
To: Anest, Cathy; DeMarco, Rebecca; Frey, Thomas; Huskins, Thomas; Reger, Linda; Sauerwein, Sandra; Schmidt, Heather; Wingo, Judy; 'msrour@nvrinc.com'; mtinordi@nvrinc.com
Cc: Wolf, Kevin; Martin, Sharhonda
Subject: ICOP_13882 Mill creek Court
Attachments: ICOP_13882 Mill Creek Court_1.17.2020.pdf

Hello All:

Good morning. Attached, please find the ICOP letter for 13882 Mill Creek Court. Should you have any questions, please don't hesitate to ask.

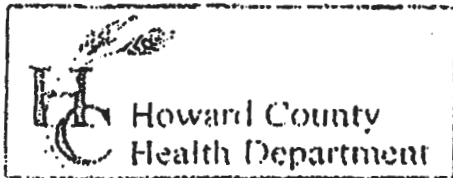
Respectfully,

Hank

Hank Oswald
Licensed Environmental Health Specialist
Howard County Health Department
Bureau of Environmental Health
Well & Septic Program
8930 Stanford Boulevard
Columbia, MD 21045
410.313.1786 (Office)
hoswald@howardcountymd.gov

CONFIDENTIALITY NOTICE

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Howard County
Health Department

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:

All individual well sites for lots 2-23 of Mill Creek are staked + properly labeled

The well site has been staked by Bohler Engineering,
(professional land surveyor or company employing professional land surveyors)
on 3/3/17 (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

RECEIVED
MAR -6 2017
HOWARD COUNTY HEALTH DEPT.
COMMUNITY HYGIENE PROGRAM



GLW
PLANNING | ENGINEERING | SURVEYING

3909 NATIONAL DR. SUITE 250
BURTONSVILLE, MD 20866
301-421-4024 | FAX: 301-421-4186
WWW.GLWPA.COM

LETTER OF TRANSMITTAL

TO: Bureau of Environmental Health
8930 Stanford Blvd.
Columbia, MD 21045

ATTN: _____

DATE	4-17-2018	JOB NO.	17071
PROJECT	Crawford Subdivision		
	Lot 14 (13882 Mill Creek Ct.)		

- WE ARE SENDING THE FOLLOWING ITEMS: ATTACHED UNDER SEPARATE COVER
- MYLARS PRINTS COST ESTIMATES DESCRIPTIONS GRADE SHEETS
 COPY OF LETTER APPLICATIONS COMPUTATIONS OTHER _____
- VIA: MAIL OVERNIGHT GLW COURIER COURIER OTHER _____

COPIES	DATE	PAGES	DESCRIPTION
3		1 of 1	OSDS Plan for Crawford Subdivision - Lot 14 (13882 Mill Creek Ct.)

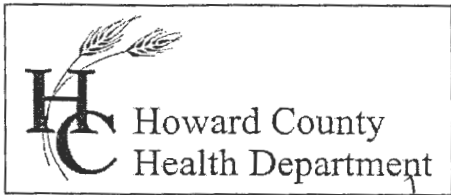
- THESE ARE TRANSMITTED as checked below:
- FOR APPROVAL SIGN & RETURN
 FOR YOUR USE AS SUBMITTED TO _____
 FOR REVIEW & COMMENT AS REQUESTED BY _____
 PER YOUR REQUEST _____

REMARKS: _____

COPY TO: _____

SIGNED: Kristy Pierce
 Kristy Pierce

If enclosures are not as noted, kindly notify us at once.



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

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

RECEIPT DATE: _____ **ONSITE SEWAGE DISPOSAL SYSTEM** P _____

APPROVAL DATE: 8-29-19 **PERMIT: CONSTRUCTION** A _____

PROPERTY ADDRESS: 13882 Mill Creek Court

SUBDIVISION: Mill Creek LOT: 14 TAX ID: _____

CONTRACTOR: _____ EMAIL: _____

CONTRACTOR ADDRESS: _____ PHONE: _____

PROPERTY OWNER: NVR Inc. EMAIL: _____

OWNER ADDRESS: 9720 Patuxent Woods Dr. PHONE: _____

SEPTIC TANK SIZE (GALLONS): 2000 G TANK MANUFACTURER: Babylon Valt

PUMP MODEL: _____ PUMP SIZE _____ PUMP TANK CAPACITY: _____

DISTRIBUTION SYSTEM: GRAVITY PRESSURE DOSED BEDROOMS: 6 APPLICATION RATE: 1.2

TRENCHES:	LINEAR FEET REQUIRED: <u>113.6</u>	INLET DEPTH: <u>3.5</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>8</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>10</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>4.5</u>
LOCATION:	PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND TANK LOCATIONS MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.	
NOTES:		

ISSUED BY: Dana Bernard ISSUE DATE: 8-29-19 EXPIRATION DATE: 8-28-20

- NOTE: CONTRACTOR MUST SCHEDULE A PRE-CONSTRUCTION INSPECTION PRIOR TO BEGINNING ANY INSTALLATION
- NOTE: CONTRACTOR MUST SCHEDULE AN INSPECTION AND GAIN APPROVAL OF ALL COMPONENTS PRIOR TO COVERING
- NOTE: STONE MUST BE APPROVED BY HEALTH DEPARTMENT AND GRAVEL TICKET MUST BE AVAILABLE FOR REVIEW.
- NOTE: WATERTIGHT TANKS REQUIRED
- NOTE: ALL PARTS OF SEPTIC SYSTEM SHALL BE AT LEAST 100 FEET DOWNGRADIENT FROM ANY WATER WELL
- NOTE: MANHOLE RISERS REQUIRED ON ALL SEPTIC TANKS AND PUMP CHAMBERS
- NOTE: AN ELECTRICAL PERMIT IS REQUIRED FOR INSTALLATION OF ANY ELECTRICAL COMPONENTS OF THE SYSTEM
 ELECTRICAL PERMIT ISSUED E _____
- NOTE: MDE RECOMMENDS SEPTIC TANKS, BAT, AND OTHER PRETREATMENT UNITS BE PUMPED AT A FREQUENCY ADEQUATE TO ENSURE THAT SOLIDS ARE NOT DISCHARGED TO THE DISPOSAL AREA

NEITHER THE HOWARD COUNTY COUNCIL NOR THE HEALTH DEPARTMENT IS RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM.
 PERMITTEE RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT.
 CALL 410-313-1771 TO SCHEDULE INSPECTIONS.



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

SEWAGE DISPOSAL SYSTEM SPECIFICATIONS WORKSHEET

Address: _____

Subdivision: Crawford and O'keefe Lot: 14

Table with 4 columns: Replacement type, Application rate, Effective area beginning depth, Bottom maximum depth. Rows include Initial system, 1st Replacement, and 2nd Replacement.

Design Flow = 150 gallons per day per bedroom

Design flow ÷ application rate = square footage of drainfield required

Linear length of trench required = drainfield square footage x sidewall reduction percentage ÷ trench width

Sidewall reduction credit formula:

(W + 2) / (W + 1 + 2D) x 100 = Percent of length of standard trench where W=trench width and D= depth between effective area beginning depth and trench bottom.

Standard design requirements:

- Trenches must be located to provide room for 3 systems in the disposal area
• All trenches must be equal length unless low pressure dosed
• All trenches must be on contour
• Minimum trench spacing: 10' for all trenches utilizing sidewall reduction credit. Additional spacing may be necessary for any trench using over 3.5' of effective sidewall. In those cases, the spacing formula is 2D +W up to a maximum spacing of 18'.
• Minimum trench spacing for trenches with no sidewall credit (bottom area only) is 6' for a 2' wide trench and 9' for a 3' wide trench (spacing is measured edge to edge)
• Maximum trench length is 100'
• Maximum pipe depth is 4'

Additional requirements:

Approved: Dana Bernard Date: 2-20-2018