

C165171SEQUENCE 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.

COUNTY
NUMBER

1236
(THIS NUMBER IS TO BE PUNCHED
IN COLS. 3-6 ON ALL CARDS)

DATE WELL COMPLETED
DATE RECEIVED
MMDDYY
050620
2-26-20
5/19/20
Approved
ST
Depth of Well
175
(TO NEAREST FOOT)

PERMIT NO.
FROM "PERMIT TO DRILL WELL"
HO-18-0168

OWNER
Toll Brothers
WELL SITE ADDRESS
Bidding Lane
SUBDIVISION
Kings Forest
SECTION
LOT
18

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	
	FROM	TO
Clay	0	8
Sand/clay	8	21
Gray limestone	21	80
Fracture	80	81
Gray limestone	81	160
Fracture	160	162
Gray limestone	162	175

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED
yes
Y
no
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 M5D224
DRILLERS SIGNATURE
(MUST MATCH SIGNATURE ON APPLICATION)
LIC. NO. 1 D

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

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 5 NO. OF POUNDS 250
GALLONS OF WATER 125
DEPTH OF GROUT SEAL (to nearest foot)
from 0 ft. to 33 ft.
(enter 0 if from surface)

CASING RECORD
casing types insert appropriate code below
STEEL ST
CONCRETE CO
PLASTIC PL
OTHER OT
MAIN CASING TYPE
ST
Nominal diameter top (main) casing (nearest inch) 6
Total depth of main casing (nearest foot) 35
EACH CASING
OTHER CASING (if used)
diameter inch depth (feet) from to

SCREEN RECORD
screen type or open hole
insert appropriate code below
STEEL ST
BRASS BR
OPEN HOLE HO
BRONZE PL
OTHER OT
PLASTIC PL
OTHER OT
DEPTH (nearest ft.)
1 35' 175'
E 8 9 11 15 17 21
C 23 24 26 30 32 36
S 38 39 41 45 47 51
R
E
N
SLOT SIZE 1 2 3
DIAMETER OF SCREEN (NEAREST INCH)
56 60
from to

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

C3
1 2
PUMPING TEST
HOURS PUMPED (nearest hour) 3
PUMPING RATE (gal. per min.) 10.4
METHOD USED TO MEASURE PUMPING RATE 1 gal
WATER LEVEL (distance from land surface)
BEFORE PUMPING 31 ft.
WHEN PUMPING 60 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)
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
- below
LAND SURFACE 2 (nearest foot)

LATITUDE 39.855036
LONGITUDE 76.881780
(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.

FOGLE'S WELL DRILLING, LLC
P.O. Box 202
Woodbine, Md 21797
443-609-4195
FIELD DATA SHEET
HOWARD COUNTY WELL YIELD TEST

Well Permit No. HO-18-0185
 Location of Property: Reynolds Ct Ellicott City, Md
 Subdivision: Kings Forest Lot#: 18
 Well Driller/Tech: Fogles Andrew Houseman MSD224 Owner/Buyer: Toll Brothers

Depth of Well: 175' **Casing:** 35' of 6" Steel Casing **Pump Depth:** 155'

Distance of measuring point (M.P.) above ground: 2'

Static water level (S.W.L.) below M.P.: 31'

High rate pumping –reservoir Drawdown

Time pump started: 11:30 **Pumping rate:** 10

Total time 30 Mins to reach pumping water level 60 ft. below M.P.

Recovery pump test data – observations to be recorded every 15 minutes

[illegible]

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

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 Pump & Water Treatment, LLC Telephone #: 410 795 1535
Address: PO Box 63
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 #: 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 to field verification. Unlicensed individuals may be reported to the appropriate licensing agency.

Name of Property Owner: Toll Brothers Telephone #: _____
Subdivision: Kingsley Woods Lot #: 18 Well Tag #: HO-18-0168 (S)
Site Address: 16522 Pudding Lane
Ellicott City, MD 21042

Submersible Pump Data
Make: Grundfos
Model #: ISSQE07-80
Pump Capacity: 15
Well Yield: 10

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

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

Depth of well encountered at time of pump installation: 175 (feet)
If pump capacity exceeds well yield, a low water cut off switch is required by NSPC 1990 Section 17.8.4
Must circle one: Torque restrictors / Cable guards / Other acceptable method used
Safety rope, if used, attached to brass rope adapter or other acceptable method inside of well casing N/A

Piping to house
Type: 1" poly pipe
PSI: 200 (160 psi min)
Depth of supply line: 36" (36" min)

House Connection
PVC sleeve to undisturbed soil at wall penetration: YES
Length of sleeve (5' minimum from foundation): 16'
Sleeve sealed properly: YES

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

Signature of company representative responsible for installation: [Signature] Date: 5/10/2022

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

Date Insp. Requested: 5/10/22 Date Insp. Approved: 5/10/22 Inspector: (S)
Inspection Data:
Pitless adapter watertight & water supply line at least 36" below grade
Two piece cap installed and attached to casing securely
Elec. conduit extends at least 18" below grade/attached to cap properly
Safety rope not outside of well cap/casing
Correct well tag attached properly and casing 8" above finished grade
Water supply line sleeved adequately at house connection
Adequate grout observed below pitless adapter

45"
30"
21"
15"

(Revised form 10/24/2018)

INTERIM CERTIFICATE OF POTABILITY

Expiration Date – MARCH 12, 2023

September 12, 2022

Homeowner
10512 Pudding Lane
Ellicott City, MD 21042

RE: King's Forest, Lot 18
10512 Pudding Lane
Building Permit: B21004498
Well Permit: HO-18-0168

Dear Homeowner:

This is to advise you that the septic system installation and water well construction for the above referenced property have been inspected and approved. Final approval of the septic system was granted on **8/30/2022**. Final approval of the well line connection to the dwelling was granted on **5/10/2022**. The well construction was completed on **2/26/2020**. Water samples were collected on **8/15/2022, 8/26/2022**.

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.

Gross Alpha and Beta samples were also collected on **2/26/2020**. Results showed a Gross Alpha level of **5.6 ± 1.6 pCi/L** and **Gross Beta** level of **6.3 ± 1.8 pCi/L**. The Gross Alpha was below the maximum contaminant level (MCL) of 15 pCi/L and the Gross Beta was below the target level of 50pCi/L (roughly equivalent to the annual dose rate of 4 millirems per year). At the time of testing and with respect to these parameters, the well water is safe for all uses.

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-18-0168. 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.**



Bureau of Environmental Health
8930 Stanford Blvd | Columbia, MD 21045
410.313.2640 - Voice/Relay
410.313.2648 - Fax
1.866.313.6300 - Toll Free

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

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

In closing, please refer to our "Homeowner Fact Sheet" for understanding your onsite sewage disposal system. You will also find a link to Maryland Department of the Environment's website which elaborates in further detail operation and maintenance of your Septic System.

Approving Authority,

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

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

Send Report To: Bert Nixon

State of Maryland
DHMH - Laboratories Administration

Division of Environmental Sciences

TRACE METALS LABORATORY

1770 Ashland Avenue
Baltimore, Maryland 21205



E20002914001

Received: 02/27/2020

Metals

HOST0168NA

Howard County Health Department
Bureau of Environmental Health
8950 Stanford Blvd
Columbia, Maryland 21046

LABORATORY ANALYSIS REQUEST

Do not write above this line

Please Print

Sample ID No: HOST0168NA Site Name: Puttling Ln, King's Forest Lot 18 County: Howard

Sample Source: Puttling Ln, King's Forest Lot 18 Collector: Susan Thomas
Street Town or City Name

Date Collected: 2/26/2020 Time Collected: 1:41 a.m. / (D) p.m. Phone #: 410-313-6287

Sample Preserved By: ☐ Field ☒ ESRL ☐ WMRL ☐ Central Lab

Preservative Used: ☒ HNO₃ 2 mL pH: 6.0

Sample Type: ☒ Drinking Water ☐ Landfill ☐ Source (Raw Water) ☐ Liquid
Data Category: ☐ Community ☐ Stream ☐ Distribution (Treated) ☐ Solid
Code ☐ ☐ ☐ Non-Community ☐ Sediment ☐ Other _____
☒ Private

Specify Program: ☐ SDWA ☐ NPDES ☐ CWA ☐ RCRA ☐ Consumer Products ☐ Other _____

Type of Sample Preparation: ☒ Total Metals ☐ Total Metals TCLP ☐ Dissolved Metals
(field preparation required)

Remarks: collected at middle of yield

✓	Element	Lab Use	✓	Element	Lab Use	✓	Element	Lab Use
	Antimony (Sb)			Aluminum (Al)			Uranium (U)	
	Arsenic (As)			Calcium (Ca)			Vanadium (V)	
	Barium (Ba)			Cobalt (Co)			Zinc (Zn)	
	Beryllium (Be)			Copper (Cu)				
	Cadmium (Cd)			Iron (Fe)				
	Chromium (Cr)			Lead (Pb)				
	Mercury (Hg)			Magnesium (Mg)				
	Nickel (Ni)			Manganese (Mn)				
	Selenium (Se)			Molybdenum (Mo)				
✓	Sodium (Na)	SHS		Potassium (K)				
	Thallium (Tl)			Silver (Ag)				

RECEIVED

MAR 16 2020

HOWARD COUNTY HEALTH DEPT.
COMMUNITY HYGIENE PROGRAM

Lab Supervisor: _____

Date Reported: _____

•Phone: (443) 681 - 4596

•Fax: (443) 681 - 4507



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



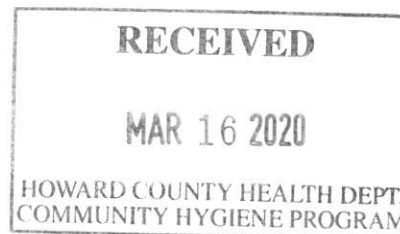
Certificate of Analysis

HOWARD CO ENVIRONMENTAL HLTH
8930 STANFORD BLVD
COLUMBIA, MD 21045

Lab Project No: E20002914 Date Coll.: 02/26/2020 Date Received: 02/27/2020 Submitted By: Thomas

Field ID: HOST0168NA
Lab No.: E20002914001

<u>Method</u>	<u>Element</u>	<u>Result</u>	<u>Units</u>	<u>Date Analyzed</u>
EPA 200.7	Sodium	6.19	ppm	03/10/2020



Comments:

Approved by: Wanda L. Tresson

Approval date: 03/12/2020

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

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.

Howard County Health Department
Bureau of Environmental Health
8009 Stanford Blvd.
Columbia, Maryland 21045

State of Maryland
MDH-Laboratories Administration
Division of Environmental Sciences
INORGANICS ANALYTICAL LABORATORY
1770 Ashland Avenue
Baltimore, Maryland 21205
WATER ANALYSIS



Received: 02/27/2020

Inorganic

HOST0168CLT

SAMPLE	Bottle Number	HOST0168CLTDS	Name	Toll Brothers	County	Hawaii	County Code	13					
	Address	Pudding Ln, King's Forest Lot 18					Data Category Code	4E					
ID	Collected: Date	2/26/20	Time	1:41 pm	Collector & Phone	Susan Thomas, 410-313-6287	Submitter Code						
	<table border="1"> <tr> <td colspan="2">CHECK (one per box)</td> </tr> <tr> <td> Drinking Water <input checked="" type="checkbox"/> Landfill <input type="checkbox"/> Stream <input type="checkbox"/> Other <input type="checkbox"/> </td> <td> Community <input type="checkbox"/> Non-community <input type="checkbox"/> Private <input checked="" type="checkbox"/> Other <input type="checkbox"/> </td> </tr> </table> <table border="1"> <tr> <td> Source (raw water) <input checked="" type="checkbox"/> Distribution (treated) <input type="checkbox"/> MCL <input type="checkbox"/> </td> <td> Emergency <input type="checkbox"/> Routine <input checked="" type="checkbox"/> Recheck <input type="checkbox"/> Special <input type="checkbox"/> </td> </tr> </table>								CHECK (one per box)		Drinking Water <input checked="" type="checkbox"/> Landfill <input type="checkbox"/> Stream <input type="checkbox"/> Other <input type="checkbox"/>	Community <input type="checkbox"/> Non-community <input type="checkbox"/> Private <input checked="" type="checkbox"/> Other <input type="checkbox"/>	Source (raw water) <input checked="" type="checkbox"/> Distribution (treated) <input type="checkbox"/> MCL <input type="checkbox"/>
CHECK (one per box)													
Drinking Water <input checked="" type="checkbox"/> Landfill <input type="checkbox"/> Stream <input type="checkbox"/> Other <input type="checkbox"/>	Community <input type="checkbox"/> Non-community <input type="checkbox"/> Private <input checked="" type="checkbox"/> Other <input type="checkbox"/>												
Source (raw water) <input checked="" type="checkbox"/> Distribution (treated) <input type="checkbox"/> MCL <input type="checkbox"/>	Emergency <input type="checkbox"/> Routine <input checked="" type="checkbox"/> Recheck <input type="checkbox"/> Special <input type="checkbox"/>												
								Federal Project					

FIELD	Plant No.	<div><div></div><div></div><div></div><div></div></div>	Sampling Station	<div><div></div><div></div><div></div><div></div></div>	Preservation: Iced	<input checked="" type="checkbox"/>	Acid	<input type="checkbox"/>	Type of Acid	<div><div></div><div></div><div></div><div></div></div>
	pH	<div><div></div><div>6</div><div>0</div></div>	Chlorine: Free	<div><div></div><div>0</div><div>0</div></div>	Total	<div><div></div><div>0</div><div>0</div></div>	Specific Conductance	<div><div></div><div></div><div></div><div></div><div></div></div>		
	Notes to Lab/Remarks: collected at middle of yield									

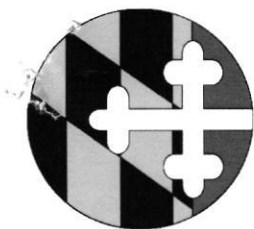
[illegible]

*Samples are tested as received.

Number of Tests Requested		
------------------------------	--	--

Section Chief

Date Reported _____



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



Certificate of Analysis

HOWARD CO ENVIRONMENTAL HLTH
8930 STANFORD BLVD
COLUMBIA, MD 21045

Lab Project NoE20002918 Date Coll. 02/26/2020 Date Received: 02/27/2020 Submitted By: S. Thomas

Field ID: HOST0168CLTDS
Lab No.: E20002918001

<u>Analyte</u>	<u>Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Analyzed</u>
Chloride	SM 4500-Cl E	<10	mg/L	03/02/2020
Total Dissolved Solids	SM 2540C	78	mg/L	02/28/2020

Comments:

Approved by:

Approval date: 03/03/2020

*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. Samples are tested as received.

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.

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

March 23, 2020

Toll Brothers
7164 Columbia Gateway Drive
Columbia, Maryland 21045

RE: Kings Forest Lot 18
Pudding Lane
Well Tag: HO – 18 – 0168

To Who it May Concern:

A sample was collected during a yield test on February 26, 2020 and submitted to the Maryland Department of Health Laboratories to assess the possible presence of **Gross Alpha** and **Gross Beta** in the future well water supply. **Gross Alpha** and **Gross Beta** measure the total alpha and beta particle activity in a water supply. These naturally occurring radioactive nuclides have been demonstrated to be present in a certain type of geologic formation known as the Baltimore Gneiss which exists in your area of development within the County.

Results from this screening revealed a **Gross Alpha** of 5.6 ± 1.6 picocuries/liter (pCi/L), while the **Gross Beta** level was 6.3 ± 1.8 pCi/L. The **Gross Alpha** result was below its **maximum contaminant level (MCL)** of **15 pCi/L**, while the **Gross Beta** level was below its targeted standard of **50 pCi/L** (roughly equivalent to the **annual dose rate** of **4 millirems/year**).

At the time of testing and with respect to these parameters, the well water supply **is within** EPA regulatory standards. Additional testing **for these parameters** will not be required to secure the future Use & Occupancy. Please **note** that other standard testing parameters (bacteria, nitrate, turbidity and sand) will still be needed to help secure Use & Occupancy.

A copy of the test results is enclosed for your information. Please call this office at **410-313-1773** if you have any further questions.

Sincerely,



Bert Nixon, Director
Bureau of Environmental Health

Enclosure

✓ cc: Property file
Theresa Miller, Fogles

SEND REPORT TO: Bert Nixon

State of Maryland
DHMH - Laboratories Administration
Division of Environmental Sciences
RADIATION LABORATORY
1770 Ashland Avenue
Baltimore, Maryland 21205

Lab No.

Howard County Health Department
Bureau of Environmental Health
8900 Stanford Blvd.
Columbia, Maryland 21045

LABORATORY ANALYSIS REQUEST FORMPlant/Site Name: Petting Ln, Kings Forest, Lot 18County: HowardSample Source: Petting Ln, Kings Forest Lot 18Location: HO-18-0168

(Well no., lab sink, sample tap, etc.)

Radon-222 Bottle A 110510168 RA

Radon-222 Field Blank

Bottle A _____

Bottle B _____

Bottle B _____

County 12Plant No.

CHECK (one per Box)

Type
Drinking Water <input checked="" type="checkbox"/>
Landfill <input type="checkbox"/>
Stream <input type="checkbox"/>
Other <input type="checkbox"/>

Service
Community <input type="checkbox"/>
Non-Community <input type="checkbox"/>
Private <input checked="" type="checkbox"/>
Other <input type="checkbox"/>

Point of Collection
Source (Raw) <input checked="" type="checkbox"/>
Distribution (treated) <input type="checkbox"/>
MCL <input type="checkbox"/>

Testing
Emergency <input type="checkbox"/>
Routine <input checked="" type="checkbox"/>
Recheck <input type="checkbox"/>
Special <input type="checkbox"/>

Submitters Code: 4 FFederal Project: Collector: Barbara ThomasTelephone No.: 410-313-6287Date Collected: 2/26/20Time Collected: _____ a.m. 1:41 p.m.Field pH: 6.0Field Chlorine: negNitric Acid Preserved: Yes ☒ No ☐Iced: Yes ☐ No ☒Remarks: collected from well at petting lot

✓	TEST	EPA Code	Lab No.	Method No.	Results (pCi/L)	Date Analyzed	Analyst	Date Reported
<input checked="" type="checkbox"/>	Gross Alpha	4000	1820	EPA 900.0	5.6 ± 1.6	2/29/2020	RH	3/2/2020
<input checked="" type="checkbox"/>	Gross Beta	4100	1820		6.3 ± 1.8	2/29/2020	RH	3/2/2020
<input type="checkbox"/>	Radium-226	4020						
<input type="checkbox"/>	Radium-228	4030						
<input type="checkbox"/>	Total Uranium	4006						
<input type="checkbox"/>	Radon-222 (Bottle A)	4004						
<input type="checkbox"/>	Radon-222 (Bottle B)	4004						
<input type="checkbox"/>	Radon Field Blank A	4004						
<input type="checkbox"/>	Radon Field Blank B	4004						
<input type="checkbox"/>	Tritium							
<input type="checkbox"/>								
<input type="checkbox"/>								

Date Received: 2-27-20Received By: [Signature]Data Release Signature: [Signature]Date: 03/02/20

Lab Use Only	Yes	No	N/A
Sample Intact upon arrival?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample pH <2.0?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Received within holding time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

•Tel. No.: (443) 681-3766 •Fax No.: (443) 681-4507

Howard County Health Department
Bureau of Environmental Health
8930 Stanford Blvd.
Columbia, Maryland 21045

DHMH - Laboratories Administration
Division of Environmental Sciences
RADIATION LABORATORY
1770 Ashland Avenue
Baltimore, Maryland 21205

Lab No.

LABORATORY ANALYSIS REQUEST FORM

Plant/Site Name: Puttling Lane, King's Forest Lots 22 + 18 County: Hannover

Sample Source: Puttling Lane, King's Forest, Lots 22 + 18 Location: Field Blank

Radon-222 Bottle A _____ Radon-222 Field Blank Bottle A HOSTER 2218
Bottle B _____ Bottle B _____

County 113 Plant No. _____

CHECK (one per Box)

Type	
Drinking Water	<input checked="" type="checkbox"/>
Landfill	<input type="checkbox"/>
Stream	<input type="checkbox"/>
Other	<input type="checkbox"/>

Service	
Community	<input type="checkbox"/>
Non-Community	<input type="checkbox"/>
Private	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>

Point of Collection	
Source (Raw)	<input checked="" type="checkbox"/>
Distribution (treated)	<input type="checkbox"/>
MCL	<input type="checkbox"/>

Testing	
Emergency	<input type="checkbox"/>
Routine	<input checked="" type="checkbox"/>
Recheck	<input type="checkbox"/>
Special	<input type="checkbox"/>

Submitters Code: 4 F Federal Project: _____

Collector: Susan Thomas Telephone No.: 410-313-6287

Date Collected: 2/26/20 Time Collected: 9:25 a.m. _____ p.m.

Field pH: 5.5 Field Chlorine: neg

Nitric Acid Preserved: Yes ☒ No ☐ Iced: Yes ☐ No ☒

Remarks: _____

<input checked="" type="checkbox"/>	TEST	EPA Code	Lab No.	Method No.	Results (pCi/L)	Date Analyzed	Analyst	Date Reported
<input checked="" type="checkbox"/>	Gross Alpha	4000	1819	4000	12.0	2/29/2020	RH	3/2/2020
<input checked="" type="checkbox"/>	Gross Beta	4100	1819	4100	24.0			
<input type="checkbox"/>	Radium-226	4020						
<input type="checkbox"/>	Radium-228	4030						
<input type="checkbox"/>	Total Uranium	4006						
<input type="checkbox"/>	Radon-222 (Bottle A)	4004						
<input type="checkbox"/>	Radon-222 (Bottle B)	4004						
<input type="checkbox"/>	Radon Field Blank A	4004						
<input type="checkbox"/>	Radon Field Blank B	4004						
<input type="checkbox"/>	Tritium							
<input type="checkbox"/>								
<input type="checkbox"/>								

Date Received: 2-27-2020 Received By: [Signature]

Data Release Signature: [Signature] Date: 03/02/20

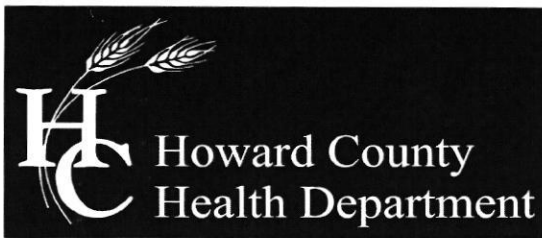
Lab Use Only	Yes	No	N/A
Sample Intact upon arrival?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample pH <2.0?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Received within holding time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

•Tel. No.: (443) 681-3766 •Fax No.: (443) 681-4507

FORM REVISED 05/15
DHMH 4540 05/17

CUSTOMER COPY II

SAMPLE TESTED AS RECEIVED



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

Sodium, Chloride and Total Dissolved Solids water sampling results

February 17, 2021

Toll Brothers
7164 Columbia Gateway Dr, Suite 230
Columbia, MD 21046

Re: Kings Forest Lot 18
Pudding Ln
Well Permit: HO-18-0168

Dear Toll Brothers,

The Health Department received results from the testing for sodium, chloride, and total dissolved solids (TDS) from your well water. These samples were collected directly from the raw well water when your well was drilled.

Sodium from your well measured 6.19 mg/L. There is no maximum contaminant level for sodium, however elevated sodium levels in drinking water could affect individuals on low-salt diets. If anyone in your household is on a low-salt diet, you may want to discuss these results with your physician.

Chloride and TDS are both considered secondary contaminants, meaning high concentrations can 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 your well measured <10 mg/L.** The secondary maximum contaminant level for TDS is 500 mg/L; **TDS from your well measured 78 mg/L.**

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

Respectfully,

Susan Thomas
Environmental Health Specialist
Howard County Health Department
Well and Septic Program
410-313-6287
sathomas@howardcountymd.gov

✓
Cc: File

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

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

REPORT OF ANALYSIS

Laboratory ID #: 154130 Account #: 1933
Reference: Kingsley Woods Lot 18 Client: Fogle's Well Pump & Treatment
Location: 10512 Pudding Lane Requested By: Dave Fogle
Ellicott City, MD 21042 Source: Well Water
Date/ Time Collected: 8/26/2022 1245 Site: Pressure Tank
Date/Time Rec'd: 8/26/2022 1504 Treatment: None
Chlorine ppm: Free: ND Total: ND pH: 6.2
Collected By: J. Evans 0309JE Well #: HO-18-0168

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	8/27/2022 / 1000 / TSD
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	8/27/2022 / 1000 / TSD
Nitrate.	<0.40	mg/L	10	EPA 300.0	8/26/2022 / 1928 / TSD
Turbidity	1.22	NTU	<10	SM2130B	8/26/2022 / 1610 / TSD
Sand	ND	mg/L	5	Visual/Gravimetric	8/26/2022 / 1535 / TSD

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 NTU = Nephelometric Turbidity Units
- 4 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 5 Sample collected by client, analyzed as received
- 6 ND = None Detected; N/A: Not Available
- 7 Visual well check: Sealed, vented cap
- 8 pH and Chlorine level tested in lab (pH tested after recommended holding time)

Reason for Test : Use & Occupancy

Building Permit # : B21004498

Date Reported: 8/29/2022

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

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

REPORT OF ANALYSIS

Laboratory ID #: 153875 Account #: 1933
Reference: Kingsley Woods Lot 18 Client: Fogle's Well Pump & Treatment
Location: 10512 Pudding Lane Requested By: Dave Fogle
Ellicott City, MD 21042 Source: Well Water
Date/ Time Collected: 8/15/2022 0900 Site: Pressure Tank
Date/Time Rec'd: 8/15/2022 1012 Treatment: None
Chlorine ppm: Free: ND Total: ND pH: 5.6
Collected By: J. Evans 0309JE Well #: HO-18-0168

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	34.4	MPN/ 100 ml	<1.0	SM20 9223B	8/16/2022 / 0830 / TSD
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	8/16/2022 / 0830 / TSD
Nitrate.	<0.40	mg/L	10	EPA 300.0	8/15/2022 / 1658 / TSD
Turbidity	19.0	NTU	<10	SM2130B	8/15/2022 / 1430 / TSD
Iron	1.67	mg/L	0.3*	Hach 8146	8/15/2022 / 1445 / TSD
Sand	ND	mg/L	5	Visual/Gravimetric	8/15/2022 / 1430 / TSD

NOTES:

- 1 *SMCL = Secondary Maximum Contaminant Level
- 2 mg/L = milligrams per liter (also, parts per million)
- 3 MPN/ 100 ml = Most Probable Number [of viable bacteria] per 100 ml of sample.
- 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; N/A: Not Available
- 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 # : 21004484

Date Reported: 8/16/2022

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

MEMORANDUM

TO: Fogle's Well Drilling
580 Obrecht Road
Sykesville, MD 21784

FROM: Susan Thomas
Environmental Health Specialist
Howard County Health Department
Well & Septic Program

RE: Kings Forest Subdivision – Well Permits Lots 1-36 and Parcel D
Special Conditions for wells

DATE: December 26th, 2019

The following comments apply to the above referenced Well Permit Applications. Please read through and complete as needed.

- A. The well box for Lot 18 encroaches within 100 ft of the proposed septic disposal area. The well for Lot 18 must be drilled 10 feet down from the northern edge of the well box, so as to meet the setbacks from the SDA.
- B.
- C. Lots 17, 26, 27, and 33-35 will require 50' of Steel Casing or 10' into competent bedrock, whichever is deeper.

10. A waiver for the location of the septic systems and wells, as shown on [Revised Percolation Certification Signed 11/12/2019] has been approved by MDE. As a condition of the approved [sic] of this waiver the initial and all replacement wells on lots 17, 26, 27, and 33 – 35 will require Steel Casings to be installed to 50' or 10' into competent bedrock, whichever is deeper.

- D. All lots in the Kings Forest Subdivision are within the Baltimore Gneiss Formation and will require Water Quality Tests for Radium to be collected at the time of the Yield Test.
- E. If the wells on Lot 13 or Lot 28 are within 10' of the driveway the well must be surrounded by bollards.

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

- F. Lots 2, 8, 9, 13, 18, 21, 24, 26, 27, 28, 33, 34 and 35 will require samples for Sodium, Chloride and TDS to be collected at the time of the Yield Test.

STONES
2525

DO NOT REMOVE THIS TAG
DEPARTMENT OF THE ENVIRONMENT
WELL PERMIT NUMBER

HO-18-0168

INFORMATION-GIVE NUMBER AND WRITE
1800 WASHINGTON BLVD
BALTIMORE, MARYLAND 21230

LOT 17

PARCEL 'A'

Kings Forest

1/21/2010

Staked by Benchmark

PARCEL 'H'

LOT 18

DO NOT
DRILL

WELLBOX

PUDDING LN.

WELLBOX

WELLBOX

WELLBOX

LOT 19

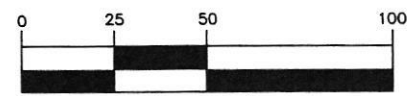
BENCHMARK

ENGINEERS • LAND SURVEYORS • PLANNERS

ENGINEERING, INC.

6480 BALTIMORE NATIONAL PIKE & SUITE 315 • ELLICOTT CITY, MARYLAND 21043
(P) 410-485-8105 (F) 410-485-8644

WWW.BED-CIVILENGINEERING.COM



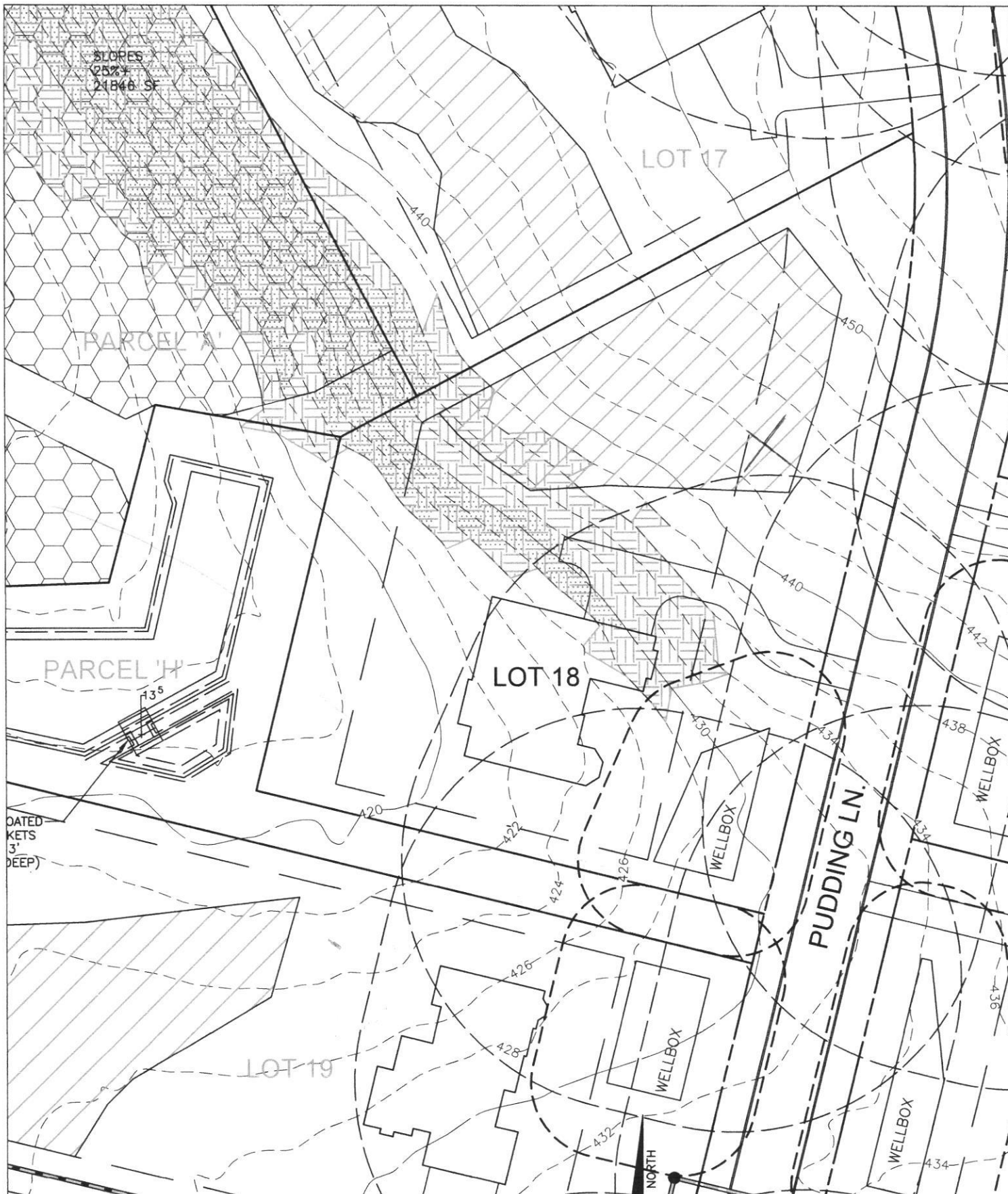
(IN FEET)
1 inch = 50 ft.



KINGS FOREST
WELL EXHIBIT

LOT 18

DATE: OCTOBER, 2019
SCALE: 1" = 50'



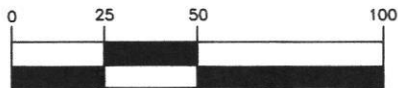
BENCHMARK

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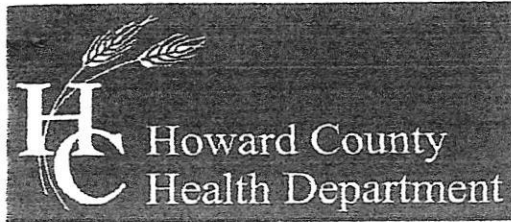
(IN FEET)
1 inch = 50 ft.



KINGS FOREST WELL EXHIBIT

LOT 18

DATE: OCTOBER, 2019
SCALE: 1" = 50'



Bureau of Environmental Health

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www.hchealth.org

Facebook: www.facebook.com/hocohealth

Twitter: HowardCoHealthDep

Dr. Maura J. Rossman, M.D., 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:

Well Site Location:

Kings Forest #18 thru 35 Pudding Lane
Subdivision/Property Name Lot # Road Name

☒ The well site has been staked by Benchmark
(professional land surveyor or company employing professional land surveyors)
on OCT 22, 2019 (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.



HOWARD COUNTY HEALTH DEPARTMENT

66429

DATE 11/15/19

WS
15-001-419

Received From

PHONE #

☐ CASH
☐ CHECK

NO.

For

well permits / 15 - Piddick
fame

Two hundred and four hundred Dollars

\$ 2400

Received By

JKing