

C165155

SEQUENCE NO.
(MDE USE ONLY)

STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE TYPE

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

COUNTY
NUMBER

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

ST/CO USE ONLY
DATE RECEIVED
MM/YY
01/31/20

DATE WELL COMPLETED
MM/YY
11/27/20

Approved
2/24/2020

Depth of Well
425
(TO NEAREST FOOT)

PERMIT NO.
FROM "PERMIT TO DRILL WELL"
10-18-0160

OWNER
Toll Brothers

WELL SITE ADDRESS
Pudding Lane

SUBDIVISION
Kings Forest

SECTION
LOT 31

TOWN
Ellicott City

WELL LOG

Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR
COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET		check if water bearing
	FROM	TO	
Soft brown	0	14	
Gray limestone	14	151	
Fracture	151	152	✓
Gray limestone	152	320	
Fracture	320	321	✓
Gray limestone	321	425	

Storage: 561 gal

GROUTING RECORD

yes no
WELL HAS BEEN GROUTED (Circle appropriate box) Y N

TYPE OF GROUTING MATERIAL (Circle one)
CEMENT CM BENTONITE CLAY BC

NO. OF BAGS 45 46 4 NO. OF POUNDS 45 46 100

GALLONS OF WATER 96

DEPTH OF GROUT SEAL (to nearest foot)
from 48 62 ft. to 24 58 ft.
(enter 0 if from surface)

CASING RECORD

casing
types
insert
appropriate
code
below

ST STEEL
PL PLASTIC
CO CONCRETE
OT OTHER

MAIN CASING TYPE ST

Nominal diameter top (main) casing (nearest inch) 06

Total depth of main casing (nearest foot) 26

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

SCREEN RECORD

screen type
or open hole
(insert
appropriate
code
below)

ST STEEL
BR BRASS
PL PLASTIC
HO OPEN HOLE
OT OTHER

C3

PUMPING TEST

HOURS PUMPED (nearest hour) 6

PUMPING RATE (gal. per min.) 3.5

METHOD USED TO MEASURE PUMPING RATE 1 gal

WATER LEVEL (distance from land surface)

BEFORE PUMPING 41 ft.

WHEN PUMPING 194 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

NUMBER OF UNSUCCESSFUL WELLS: 1

WELL HYDROFRACTURED yes Y no N

CIRCLE APPROPRIATE LETTER
A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
E ELECTRIC LOG OBTAINED
P TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO. 1 M 5 D 224

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)

C2

DEPTH (nearest ft.)

26 425

SCREEN RECORD

ST STEEL BR BRASS PL PLASTIC HO OPEN HOLE OT OTHER

SLOT SIZE 1 2 3

DIAMETER OF SCREEN (NEAREST INCH) 56 60

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

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
- below
LAND SURFACE 2 (nearest foot)

LATITUDE 39.255094
LONGITUDE 76.881317
(DEFAULT COORD. WGS 84)

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B1 34449

SEQUENCE NO.
(MDE USE ONLY)STATE OF MARYLAND
APPLICATION FOR PERMIT TO DRILL WELL

STATE PERMIT NUMBER

HO-18-0160

fill in this form completely

Date Received (APA)

OWNER INFORMATION

8 MM DD YY 13

Toll Brothers
7164 Columbia Gateway Dr
Columbia, Md 21046

DRILLER INFORMATION

Andrew Houseman M.S.D. 224
Fogles Well Drilling, LLC
P.O. Box 202 Woodbine, Md 20797
11-1-18

B 3

LOCATION OF WELL

Howard
Kings Forest
SECTION 44 LOT 31
Ellicott City
52 NEAREST TOWN

B 4

SOURCES OF DRILLING WATER

- Well water
- 1/27/20
- Bentonite, Quik
Grout

Pudding Lane
11 STREET ADDRESS 30

ON WHICH SIDE OF ROAD
(CIRCLE APPROPRIATE BOX)

34 30 37
DISTANCE FROM ROAD
ENTER FT OR MI
TAX MAP: 23 BLK: 23 PARCEL 148

B 2

WELL INFORMATION

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

USE FOR WATER (CIRCLE APPROPRIATE BOX)

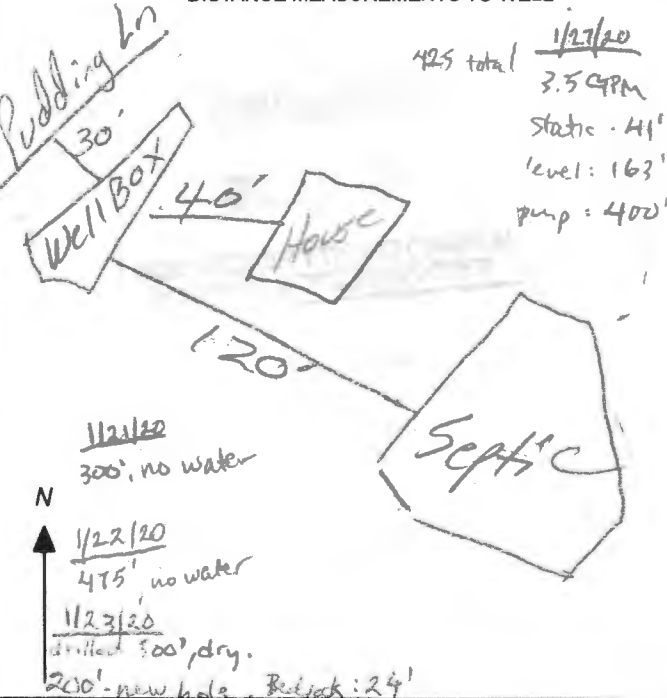
- ☒ DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION
☐ FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)
☐ INDUSTRIAL, COMMERCIAL, DEWATERING
☐ PUBLIC WATER SUPPLY WELL
☐ TEST, OBSERVATION, MONITORING
☐ OPEN LOOP GEOTHERMAL
☐ CLOSED LOOP GEOTHERMAL

NOT TO BE FILLED IN BY DRILLER
HEALTH DEPARTMENT APPROVAL

Howard
COUNTY NAME COUNTY NO. 13
STATE SIGNATURE INSERT S
DATE ISSUED 01/14/20 01/14/21
43 MM DD YY 46 CO SIGNATURE EXP. DATE

DON: 1/21/2020 (S) DOG: 1/27/2020 (E) DOY: 1/27/2020 (S)

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



APPROXIMATE DEPTH OF WELL 300 FEET

APPROXIMATE DIAMETER OF WELL 6 INCH

METHOD OF DRILLING (circle one)

BORED (or Augered) JETTED Jetted & DRIVEN
AIR-ROTARY AIR-PERCUSION ROTARY (Hydraulic Rotary)
CABLE REVERSE-ROTARY DRIVE-POINT
other

REPLACEMENT OR DEEPEMED WELLS
(CIRCLE APPROPRIATE BOX)

- ☒ THIS WELL WILL NOT REPLACE AN EXISTING WELL
☐ THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
☐ THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS
☐ THIS WELL WILL DEEPEMED AN EXISTING WELL

PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED
(IF AVAILABLE) 41

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

APPROX. PERMIT NUMBER HO 2018 GO 04

PERMIT No. HO 18 0160

SPECIAL CONDITIONS

RADIUM SAMPLES REQUIRED

NOTE: APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED

MARYLAND DEPARTMENT OF THE ENVIRONMENT, WATER MANAGEMENT ADMINISTRATION
1800 Washington Blvd., Baltimore, Maryland 21230 (410) 537-3784

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

Approved ST
2/21/2020

Dry Hole

DATE WELL ABANDONED: 1-27-20 (month/day/year)

* PERMIT NUMBER OF ABANDONED WELL (if any) _____

* PERMIT NUMBER OF REPLACEMENT WELL: _____

H0-18-0160

* PERSON ABANDONING WELL: Andrew Huseman

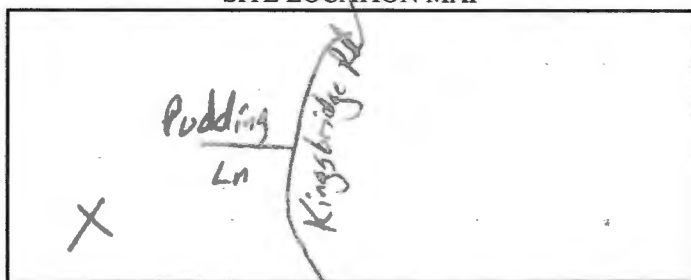
WELL DRILLER'S LICENSE NUMBER: 224

CIRCLE: MWD / MSD / MGD

* OWNER'S NAME: Toll Brothers

SITE LOCATION MAP

* WELL LOCATION:
COUNTY: Howard
NEAREST TOWN: Ellicott City
TAX MAP 23 BLOCK 23 PARCEL 148
SUBDIVISION: Kings Forest
SECTION: _____ LOT: 31
STREET ADDRESS: Pudding Lane



LATITUDE 39.255222

LONGITUDE 76.881211

LOG OF SEALING MATERIAL

* TYPE OF WELL BEING ABANDONED:

☒ DRILLED _____ JETTED
☐ BORED _____ HAND DUG
☐ OTHER (specify) Dry Hole

* USE CODE:

☒ DOMESTIC _____ MUNICIPAL/PUBLIC
☐ IRRIGATION _____ INDUSTRIAL
☐ TEST/OBSERVATION _____ GEOTHERMAL

* TYPE OF CASING:

☒ STEEL _____ PLASTIC
☐ CONCRETE _____ OTHER (specify) _____

MATERIAL	FEET	
	FROM	TO
<u>Cuttings</u>	<u>500</u>	<u>50</u>
<u>Bentonite</u>	<u>50</u>	<u>0</u>
VOLUME OF MATERIAL USED		
<u>Bentonite 500 lbs</u>		

SIZE OF CASING: 6 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 Andrew Huseman LICENSE# 224

MWD / MSD / MGS 1-27-20
CIRCLE ONE DATE

COUNTY

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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-18-0160

Date: January 27, 2020

Location of Property: Pudding Lane Ellicott City, Md

Subdivision: Kings Forest Lot#: 31

Well Driller/Tech: Fogles Andrew Houseman MSD224 Owner/Buyer: Toll Brothers

Depth of Well: 425' Casing: 26' of 6" Steel Casing Pump Depth: 405'

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

Static water level (S.W.L.) below M.P.: 41'

High rate pumping—reservoir Drawdown

Time pump started: 7:30 Pumping rate: 15

Total time 60 Mins to reach pumping water level 194 ft. below M.P.

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

TIME (in 15 minute intervals)	WATER LEVEL Below M.P.	PUMPING RATE Time to fill 1 gallon bucket	FLOW METER READING (if used)	CALCULATED FLOW (gallons per minute)
7:30	41'	4 Seconds		15 gpm
7:45	77'	4 Seconds		15 gpm
8:00	106'	4 Seconds		15 gpm
8:15	145'	4 Seconds		15 gpm
8:30	194'	17 Seconds		3.5 gpm
8:45	191'	17 Seconds		3.5 gpm
9:00	189'	17 Seconds		3.5 gpm
9:15	187'	17 Seconds		3.5 gpm
9:30	185'	17 Seconds		3.5 gpm
9:45	183'	17 Seconds		3.5 gpm
10:00	181'	17 Seconds		3.5 gpm
10:15	179'	17 Seconds		3.5 gpm
10:30	178'	17 Seconds		3.5 gpm
10:45	176'	17 Seconds		3.5 gpm
11:00	174'	17 Seconds		3.5 gpm
11:15	172'	17 Seconds		3.5 gpm
11:30	170'	17 Seconds		3.5 gpm
11:45	168'	17 Seconds		3.5 gpm
12:00	167'	17 Seconds		3.5 gpm
12:15	165'	17 Seconds		3.5 gpm
12:30	163'	17 Seconds		3.5 gpm
12:45	162'	17 Seconds		3.5 gpm
1:00	161'	17 Seconds		3.5 gpm
1:15	160'	17 Seconds		3.5 gpm
1:30	159'	17 Seconds		3.5 gpm
1:45	158'	17 Seconds		3.5 gpm
2:00	157'	17 Seconds		3.5 gpm
2:15	156'	17 Seconds		3.5 gpm
2:30	155'	17 Seconds		3.5 gpm
2:45	154'	17 Seconds		3.5 gpm
3:00	153'	17 Seconds		3.5 gpm

INTERIM CERTIFICATE OF POTABILITY
PERMANENT DEVIATION FOR RADIUM

Expiration Date – July 24, 2024

January 24, 2024

Homeowner
10521 Pudding Lane
Ellicott City, MD 21042

RE: Kingsley Woods, Lot 31
10521 Pudding Lane
Building Permit: B22000806
Well Permit: HO-18-0160

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 **3/8/2023**. Final approval of the well line connection to the dwelling was granted on **3/8/2023**. The well construction was completed on **2/21/2020**. Water samples were collected on **2/20/2023**.

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 **1/27/2020**. Results showed a Gross Alpha level of **51.6 ± 5.9 pCi/L** and a Gross Beta level of **23.8 ± 2.9 pCi/L**. **This exceeds the maximum contaminant level (MCL) of 15 pCi/L for Gross Alpha and the Gross Beta was below the target level of 50pCi/L** (roughly equivalent to the annual dose rate of 4 millirems per year).

After installation of a radionuclide removal device (water softener), post-treatment water samples were collected on **3/15/2023** and indicated a combined Radium 226/228 level of **<1.0 pCi/L +/- 0.7 pCi/L** which is below the MCL of 5 pCi/L.

This Department will grant a **permanent deviation** to the Interim Certificate of Potability on condition that the radionuclide removal system effectively maintains a Gross Alpha level of less than **15 pCi/L**, a Gross Beta level of less than **50 pCi/L**, and a Radium 226/228 level of less than **5 pCi/L**.

Furthermore, it will be necessary for you to comply with the following conditions:

1. The system must be properly operated and maintained continuously in accordance with the service contract for the life of the residence.
2. It is recommended that a Maryland certified water laboratory certified for radionuclide analysis perform a yearly radionuclide analysis.

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

3. If you decide to sell or rent your home in the future, you must make any potential buyer/tenant aware of this permanent deviation. **A person who fails to make this disclosure is subject to the penalties set out in COMAR 26.04.04.12F Enforcement and Environment Article 9-1311, Annotated Code of Maryland.**

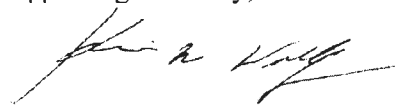
This certifies that the initial sampling requirements of COMAR 26.04.04 "Well Regulations" have been met for the water supply system installed under well permit HO-18-0160. Although the submitted sample results are in compliance with COMAR standards, the Health Department does not guarantee water supplies.

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 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](#)" 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, L.E.H.S., R.E.H.S./RS, Supervisor
Groundwater Management Section
Well & Septic Program

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

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

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

REPORT OF ANALYSIS

Laboratory ID #: 157955 Account #: 1933
Reference: Kingsley Woods Lot 31 Client: Fogle's Well Pump & Treatment
Location: 10521 Pudding Lane Requested By: Dave Fogle
Ellicott City, MD 21042 Source: Well Water
Date/ Time Collected: 3/15/2023 1145 Site: Prep Kitchen Sink
Date/Time Rec'd: 3/15/2023 1316 Treatment: Softener
Chlorine ppm: Free: ND Total: ND pH: 7.0
Collected By: B. Wilkerson 2383BW Well #: HO-18-0160

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Radium-226	0.3	pCi/L	****	903.0	3/27/2023 / 0859 / MJN
Radium-228	<0.7	pCi/L	****	Ra-05	3/24/2023 / 1033 / SN
Gross Alpha, Short Term	2.1	pCi/L	15	900.0	3/20/2023 / 0706 / MJN
Gross Alpha, Long Term	<0.9	pCi/L	15	900.0	3/23/2023 / 0716 / MJN
Gross Beta, Short Term	<1.5	pCi/L	50	900.0	3/20/2023 / 0706 / MJN
Gross Beta, Long Term	<1.5	pCi/L	50	900.0	3/23/2023 / 0716 / MJN

NOTES:


- ****Radium 226 and Radium 228 combined have a reference of 5 pCi/L
- Long Term Gross Alpha Detection Limit: 0.9 pCi/L; Gross Alpha Error: +/- 0.7 pCi/L
- Long Term Gross Beta Detection Limit: 1.5 pCi/L; Gross Beta Error: +/- 1.0 pCi/L
- pCi/L = picocuries per liter
- Radium 226 Detection Limit: 0.1 pCi/L; Radium 226 Error: +/- 0.1 pCi/L
- Radium 228 Detection Limit: 0.7 pCi/L; Radium 228 Error: +/- 0.6 pCi/L
- Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- Short Term Gross Alpha Detection Limit: 1.0 pCi/L; Gross Alpha Error: +/- 1.1 pCi/L
- Short Term Gross Beta Detection Limit: 1.5 pCi/L; Gross Beta Error: +/- 1.0 pCi/L
- Sub-contracted to Reference Lab #278
- ND:None Detected
- Visual well check: Sealed, vented cap
- pH and Chlorine level tested in lab (pH tested after recommended holding time)

Reason for Test : Use & Occupancy

Building Permit # : B22000806

Date Reported: 3/28/2023

Reviewed By:



FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

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

REPORT OF ANALYSIS

Laboratory ID #: 157464 Account #: 1933
Reference: Kinsley Woods Lot 31 Client: Fogle's Well Pump & Treatment
Location: 10521 Pudding Lane Requested By: Dave Fogle
Ellicott City, MD 21042 Source: Well Water
Date/ Time Collected: 2/20/2023 1000 Site: Pressure Tank
Date/Time Rec'd: 2/20/2023 1248 Treatment: None
Chlorine ppm: Free: ND Total: ND pH: 6.9
Collected By: J. Evans 0309JE Well #: HO-18-0160

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	2/21/2023 / 0840 / CRS
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	2/21/2023 / 0840 / CRS
Nitrate.	<0.40	mg/L	10	EPA 300.0	2/20/2023 / 1415 / TSD
Turbidity	7.43	NTU	<10	SM2130B	2/21/2023 / 1035 / MEW
Sand	ND	mg/L	5	Visual/Gravimetric	2/20/2023 / 1455 / TSD
Iron	0.74	mg/L	0.3*	Hach 8146	2/21/2023 / 1140 / MEW

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
- 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 # : 22000806

Date Reported: 2/21/2023

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

March 31, 2020

Toll Brothers
7164 Columbia Gateway Drive
Columbia, Maryland 21045

RE: Kings Forest Lot 31
Pudding Lane
Well Tag: HO – 18 – 0160

To Who it May Concern:

A sample was collected during a yield test on January 27, 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 **51.6 ± 5.9 picocuries/liter (pCi/L)**, while the **Gross Beta** level was **23.8 ± 2.9 pCi/L**. The **Gross Alpha** result was above its **maximum contaminant level (MCL)** of **15 pCi/L**, while the **Gross Beta** level was below (though higher than typically seen) 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, your “untreated” well water supply **does not meet** EPA regulatory standards. Given these initial readings, additional testing to further evaluate long-term **Gross Alpha**, **Gross Beta** and **Radium 226/228** will be required to secure the future Use & Occupancy. Treatment (a softener system and/or a point of use reverse osmosis (R/O)) can be considered; if installed then post-treatment levels to ensure the effectiveness of the installed treatment(s) will be needed. 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

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

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

Lab No.

LABORATORY ANALYSIS REQUEST FORM

Plant/Site Name: King's Forest, Lot 31County: HowardSample Source: King's Forest Lot 31, HO-18-0160Location: HO-18-0160

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

~~Radon-222~~Bottle A HO-18-0160RA

Radon-222 Field Blank

Bottle A Bottle B Bottle B

County

13

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 EFederal Project: Collector: Susan ThomasTelephone No.: 410-313-6287Date Collected: 1/27/2020Time Collected: a.m. 12:25 p.m.Field pH: 7.5Field Chlorine: negativeNitric Acid Preserved: Yes ☒ No ☐Iced: Yes ☐ No ☒

Remarks:

collected at yard of HO-18-0160

<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	1512	EP-910.0	51.6 ± 5.9	1/30/2020	KH	1/31/2020
<input checked="" type="checkbox"/>	Gross Beta	4100	1512	EP-910.0	23.8 ± 2.9	1/30/2020	KH	1/31/2020
<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: 1/30/2020Received By: Data Release Signature: Date: 02/10/20

Lab Use Only	Yes	No	N/A
Sample Intact upon arrival?			
Sample pH <2.0?			
Received within holding time?			

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

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~~

8930 Stanford Blvd.

Columbia, Maryland 21045

LABORATORY ANALYSIS REQUEST FORM

Plant/Site Name: Kings Forest, Lot 31County: HowardSample Source: Kings Forest, Lot 31Location: Field Blank

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

Radon-222 Bottle A _____

Radon-222 Field BlankBottle A H05131FB

Bottle B _____

Bottle B _____

County 13

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 ThomasTelephone No.: 410-313-6287Date Collected: 1/27/2020Time Collected: 11:30 a.m. _____ p.m.Field pH: 5.5Field Chlorine: negativeNitric 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	1571	EDPA900.0	42.0	1/30/2020	RH	1/31/2020
<input checked="" type="checkbox"/>	Gross Beta	4100	1571	EDPA900.0	14.0	1/30/2020	RH	1/31/2020
<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: 1-28-2020Received By: [Signature]Data Release Signature: [Signature]Date: 02/10/20

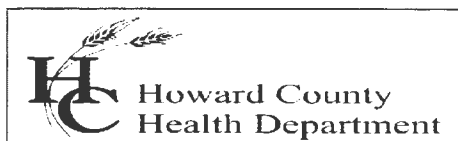
Lab Use Only	Yes	No	N/A
Sample Intact upon arrival?			
Sample pH <2.0?			
Received within holding time?			

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

CUSTOMER COPY IN

(PROGRAM)

SAMPLE TESTED AS RECEIVED



Invoice

Bureau of Environmental Health
Attn: Bert Nixon, Director

DATE: FEBRUARY 13, 2020
DATE OF SERVICE: JANUARY 27, 2020
INVOICE #: 2020-001

8930 Stanford Boulevard, Columbia, MD 21045
Phone 410-313-2640 Fax 410-313-2648
www.hchealth.org

BILL TO Toll Brothers
7164 Columbia Gateway Drive
Columbia, Maryland 21046

COMMENTS Payment due upon receipt. Letter
and results will be released upon
receipt of payment.

DATE	DESCRIPTION	BALANCE	AMOUNT
1/27/2020	Gross Alpha/Beta testing performed for Kings Forest Lot 31 HO - 18 - 0160		\$45.00
			AMOUNT DUE
			\$45.00

Please detach and return with payment.

REMITTANCE	
Invoice #	2020-001
Site Information	Kings Forest Lot 31
Amount Due	\$45.00

RECEIVED 3/13/20
#67342

Make Checks Payable to: **Director of Finance** Mail Payments to: **Bureau of Env. Health**



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

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: Fogle's Well Pump + Water Treatment, LLC Telephone #: 410-795-1535
Address: P.O. Box 63
Woodbine, Maryland 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): Dave 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 #: 31 Well Tag #: HO-18-0160
Site Address: 10524 Pudding Lane
Ellicott City, MD 21042

Submersible Pump Data

Make: Goulds

Model #: 1HS07422

Pump Capacity

Well Yield: 3.5

Depth of well encountered at time of pump installation: 425 (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 arrestors / 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

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

Piping to house

Type: 1" poly pipe

PSI: 200 psi (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): 6'

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

Date 12/18/2022

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

Date Insp. Requested: 12/17/22 Date Insp. Approved: _____ Inspector: SP

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

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

**OPERATION AND MAINTENANCE AGREEMENT
FOR AN ON-SITE SEWAGE DISPOSAL SYSTEM
HAVING AN ADVANCED PRE-TREATMENT SYSTEM**

THIS AGREEMENT is made this 3rd day of October, among Rick, Chae + Cameron Petty, hereinafter collectively referred to as "Owner", and the Howard County Health Department hereinafter referred to as the "County".

WHEREAS, Owner is the owner or contract owner of a parcel of land located at Lot 31 - 10521 Rocky Lane, in the 3rd Election District of Howard County, Maryland, and the deed and subdivision plat of the property is recorded among the Land Records of Howard County, Maryland, Tax Map # 23, Block # 23, Parcel # 148, Deed Reference # 35764-68 and Tax Account # 603441 ("the Property").

WHEREAS, The Property is suitable for the installation of a conventional on-site sewage disposal system with an advanced pre-treatment system, utilizing best available technology to perform nitrogen reduction, in accordance with the Code of Maryland Regulations 26.04.02.07, effective November 24, 2016. The pre-treatment device being installed is Nirwac TNTLP-750GPD

NOW, THEREFORE, the parties hereto agree as follows:

- A. Owner hereby grants to the County the right to enter upon the Property at any reasonable time with prior notice for access to the system to make periodic inspections and the Owner agrees to provide any information and data in Owner's possession reasonably requested and needed by the County.
- B. Owner acknowledges and agrees that neither the County nor any of its agents or employees, either officially or individually, underwrites the operation of any system approved by them.
- C. The Owner will devote reasonable care and effort to the operation and maintenance of the system in perpetuity or until a public sewer connection is made so that a system malfunction is not the result of poor maintenance, faulty operation, or neglect.
- D. The Owner agrees to enter into a contract reasonably acceptable to the Owner and the County with a private entity to operate and maintain on a regularly scheduled basis an approved advanced pre-treatment system. The owner shall supply a copy of the contract to the County when it is renewed or altered.
- E. This agreement shall run with the land and upon Owner's taking title to the Property shall bind the Owner, their heirs, successors, and assigns to the provisions of the agreement as long as

the property is in existence and after installation of the system. Owner further agrees that they shall inform in writing any subsequent purchaser or lessee of the Property that the system shall require maintenance or other attention. Upon taking title to the Property, the Owner agrees to cause this agreement to be recorded in the Land Records of Howard County and assure that it becomes part of the Deed for the subject property in order that prospective buyers may be aware of the special conditions affecting this property.

F. This agreement shall not be construed to limit any authority of the County to protect the public health, safety or comfort or to issue any other orders to take any other action which is now or may hereafter be within its authority.


G. This agreement may be voided at any time at the discretion of the County.

H. This agreement contains the entire agreement and understanding between the County and the Owner. There are no additional terms other than as contained in this agreement. This agreement may not be modified, except in writing signed by each of the parties or by their authorized representatives.

I. The laws of the State of Maryland govern the provisions of all transactions pursuant to this agreement.

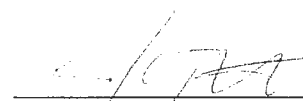
J. Owner acknowledges and agrees that interior renovations to increase the number of bedrooms or an increase in living space shall not be permitted without approval from the County.

IN WITNESS WHEREOF, the parties have signed this agreement on the date indicated above.

 10/5/22
Howard County Health Department

 9/15/22
Owner #1 Signature Date

Ruby Chang
Owner #1 Print Name

 9/19/22
Owner #2 Signature Date

Cameron Kelly
Owner #2 Print Name

Buyer #1 Signature Date

Buyer #1 Print Name

Buyer #2 Signature Date

Buyer #2 Print Name

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

**AGREEMENT FOR APPROVAL OF AN INDIVIDUAL DRINKING WELL WITH AN
ON-SITE TREATMENT SYSTEM**

This agreement is entered into by and between the Howard County Health Department ("the Health Department") and Ruby Chang and Cameron Petty ("the Owner").

WHEREAS, the Owner owns a tract of land at street address 10521 Pudding Lane, _____ and the deed and subdivision plat of the property is recorded among the Land Records of Howard County, Maryland, Tax Map # 23, Block # 23, Parcel # 148, Deed Reference # 25764-68 and Tax Account # 663 441 ("the Property").

WHEREAS, the Property lacks an available public drinking water source and is required to have and individual well as the source of drinking water for the residence of the property.

WHEREAS, the Owner has installed a residential drinking well under well permit H0-18-0160 that has been tested by the Health Department (or a private laboratory certified to perform testing) for radionuclide particles. The results of the tests have shown that the gross alpha particle content and/or the gross beta particle content and/or the combined radium 226/228 levels exceeds the standards of 15 picocuries per liter (pCi/L), 4 millirems per year (mrem/yr) and/or 5pCi/L respectively.

WHEREAS, The Maryland Department of the Environment (MDE) has promulgated rules and regulations under which a Certificate of Potability may be issued and has delegated the authority to issue such Certificate to the Health Department.

WHEREAS, MDE regulations permit the Health Department to issue as a special condition, a permanent deviation to the Certificate of Potability for individual wells where treatment has been installed to meet the maximum contaminate levels (MCL's) for radionuclides.

WHEREAS, MDE has determined that radium can be effectively removed from the drinking water by the use of treatment devices (e.g., ion exchange or reverse osmosis).

WHEREAS, the Owner is requesting that the Health Department issue a Certificate of Potability contingent upon installation and maintenance of a water treatment device to reduce radionuclides.


WHEREAS, neither the Owner nor the Health Department has knowledge of an alternative safe source of water for the Property.

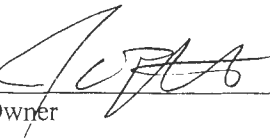
NOW THEREFORE, the parties have agreed to the following terms and conditions:

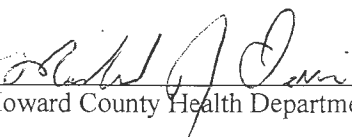
1. The Owner will record this Agreement among the Land Records of Howard County, Maryland and provide confirmation to the Health Dept.
2. The Owner agrees to install and maintain a water treatment device, which effectively reduces the gross alpha, gross beta and radium levels to below their respective MCL. The Health Department shall verify that the treatment device is operating effectively and the Owner agrees to allow access to the Health Department to collect a follow-up sample(s).

- 1.
3. The Health Department shall issue a Certificate of Potability for the well once follow-up sampling shows acceptable gross alpha, gross beta (short and long term) and radium 226 / 228 levels.
 4. The Owner agrees that there shall be no liability on part of the Health Department for any immediate or long term impacts to health or property, under any circumstance or including, but not limited to, treatment device failure, improper maintenance or installation, or defect. The Health Department does not warranty or guarantee that the device will adequately or properly function and the Owner agrees to implement and pay for any necessary changes or corrections.
 5. The Owner acknowledges and agrees that neither the Health Department nor any of its agents or employees, either officially or individually, underwrites the operation of any system or treatment device.
 6. This Agreement shall not be construed to limit any authority of the Health Department to protect the public health, safety or enjoyment of property or to issue any other orders to take any other action, which is now or may hereafter be within its authority.
 7. This agreement contains the entire agreement and understanding between the Health Department and the Owner. There are no additional terms other than as contained in this Agreement. This Agreement may not be modified except in writing signed by each of the parties or their authorized representatives.
 8. The Agreement shall run with the land and binds the Owner, his heirs, successors, and assigns. The owner agrees to provide a copy of this agreement to any purchaser or lessee of the property.
 9. The laws of the State of Maryland govern the provisions of all transactions.

The parties have signed this Agreement on the dates set forth below.

 3/14/2023
Owner Date Buyer Date

 3/16/2023
Owner Date Buyer Date

 3/17/2023
Howard County Health Department Date

Clerk of the Circuit Court for

Howard County

9250 Judicial Way
Ellicott City, MD 21043
410-313-2111

LR - Agreement Recording Fee
1x 20.00 20.00

Name: chang
Ref: 2

LR - Agreement Surcharge
1x 40.00 40.00

SubTotal: 60.00
Total: 60.00

CRD-Credit
Credit Card Confirmation : 027491 60.00

03/20/2023 12:25
#17073947/497/4

CC13-LP

Thank you for visiting us today

10521 Paddock Ln - Well
Agencies

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 *ST 12/27/19*
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

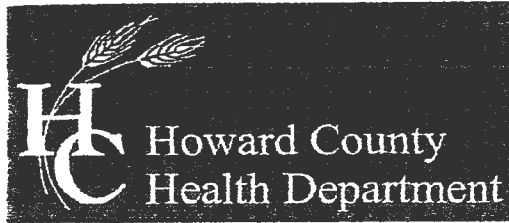
The following comments apply to the above referenced Well Permit Applications. Please read through and complete as needed.

- A. 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.

- B. 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.**
- C. If the wells on Lot 13 or Lot 28 are within 10' of the driveway the well must be surrounded by bollards.**
- D. 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.**





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

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}
Subdivision/Property Name Parcel D Lot # Pudding Lane
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 11/1/19

Received From

PHONE #

☐ CASH
☐ CHECK
NO. 10

For

Dollars

\$ 5000.00

Received By