

B 1
59726
1 2 3 6

SEQUENCE NO.
(MDE USE ONLY)

STATE OF MARYLAND
APPLICATION FOR PERMIT TO DRILL WELL
please type

JAN-11/15/2018
STATE PERMIT NUMBER
H0-17-0328
70 fill in this form completely 79

OWNER INFORMATION
Date Received (APA) 01/27/18
8 MM DD YY 13
Trinity Homes
15 Last Name Owner First Name 34
31275 Park Ave Suite 301
35 Street or RFD 55
Ellicott City MD 21043
57 Town 70 State 72 Zip 76

B 3 LOCATION OF WELL
Howard
8 COUNTY 21
The Estates at River Hill
23 SUBDIVISION 42
SECTION 44 46 LOT 4 48 50
Highland
52 NEAREST TOWN 71

DRILLER INFORMATION
Allen Compton
61 Driller's Name 76 License No. 81
Focus Well Drilling LLC
57 Firm Name
P.O. Box 202 Woodbine MD 2179
57 Address
Andrew Houseman MSO 224
Signature Date 7-27-15

B 4 SOURCES OF DRILLING WATER
1. Well Water
2.
3.

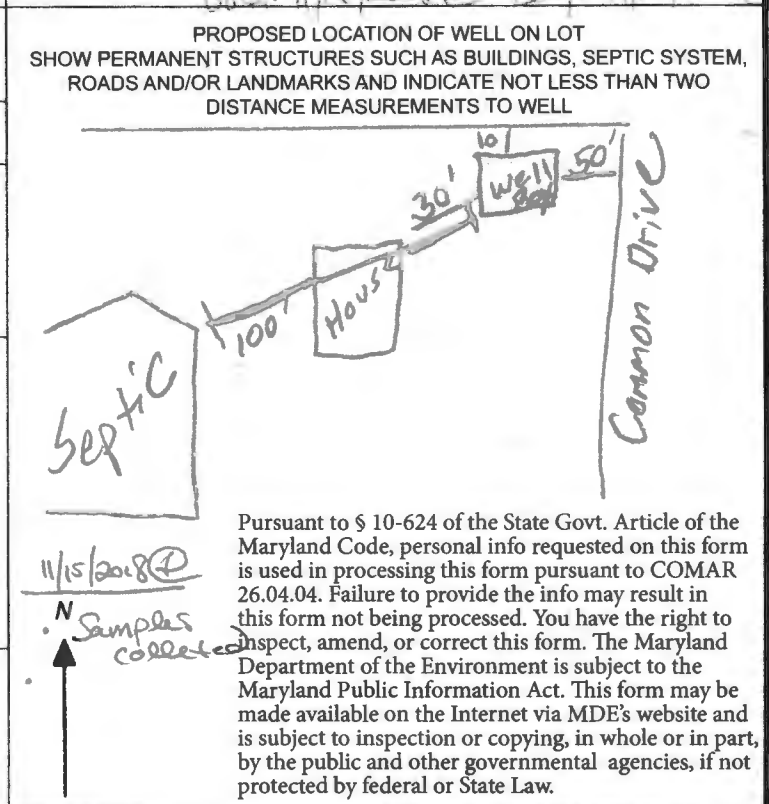
Alnut Lane
11 STREET ADDRESS 30
ON WHICH SIDE OF ROAD
(CIRCLE APPROPRIATE BOX)
NORTH N
WEST W EAST E
SOUTH S
34 1000 37
DISTANCE FROM ROAD FT
ENTER FT OR MI 38 39
TAX MAP: 34 BLK: 23 PARCEL 389

B 2 WELL INFORMATION
APPROX. PUMPING RATE 5
(GAL. PER MIN.) 8 12
AVERAGE DAILY QUANTITY NEEDED 500
(GAL. PER DAY) 14 20

**NOT TO BE FILLED IN BY DRILLER
HEALTH DEPARTMENT APPROVAL**
Howard 13
COUNTY NAME COUNTY NO.
STATE SIGNATURE INSERT S → 41
DATE ISSUED 9/17/18 43 MM DD YY 48
CO SIGNATURE EXP. DATE 9/17/19

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

APPROXIMATE DEPTH OF WELL 300 FEET
24 28
APPROXIMATE DIAMETER OF WELL 10 INCH
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 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
39 THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS
 THIS WELL WILL DEEPEM AN EXISTING WELL
PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED (IF AVAILABLE) 41 52

Not to be filled in by driller (MDE OR COUNTY USE ONLY)
APPROP. PERMIT NUMBER H02019G005
PERMIT No. H0-17-0328
70 71 72 73 74 75 76 77 78 79

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

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

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

NOTE: The installer is responsible for requesting an inspection prior to 9 am on the day of the desired inspection. No work is to be covered until approved by the Health Department. All installations must comply with the National Standard Plumbing Code (NSPC, as amended locally) and COMAR 26.04.04 (MD Well Construction Regulations). Submission of a complete form is required prior to Use and Occupancy approval.

Company Name: Do-It Plumbing & Heating Telephone #: 240 882 0669
Address: 109 Estelle Ct
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): Duane Gilbert License# 21879

***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: TBI Telephone #: 410-480-6023
Subdivision: River Hill @ Allantail Lane Lot #: 4 Well Tag #: HO-17-0328
Site Address: 13621 Noble way
Highland Md

Submersible Pump Data

Make: DAB
Model #: BF-8710-122
Pump Capacity: 7 GPM
Well Yield: 8 GPM

Pitless Adapter

Make: Doshart
Model#: P-800-35
Depth: 42 (36" min)
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: 300 (feet)

If pump capacity exceeds well yield, a low water cut off switch is required by NSPC 1990 Section 17.8.4

Torque arrestors, Cable guards, or other acceptable method used- Must circle one

Safety rope, if used, attached to brass rope adapter or other acceptable method inside of well casing N/A

Piping to house

Type: Black Poly
PSI: 250 (160 psi min)
Depth of supply line: 42 (36" min)

House Connection

PVC sleeve to undisturbed soil at wall penetration: yes
Length of sleeve (5' minimum from foundation): 10 ft
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.

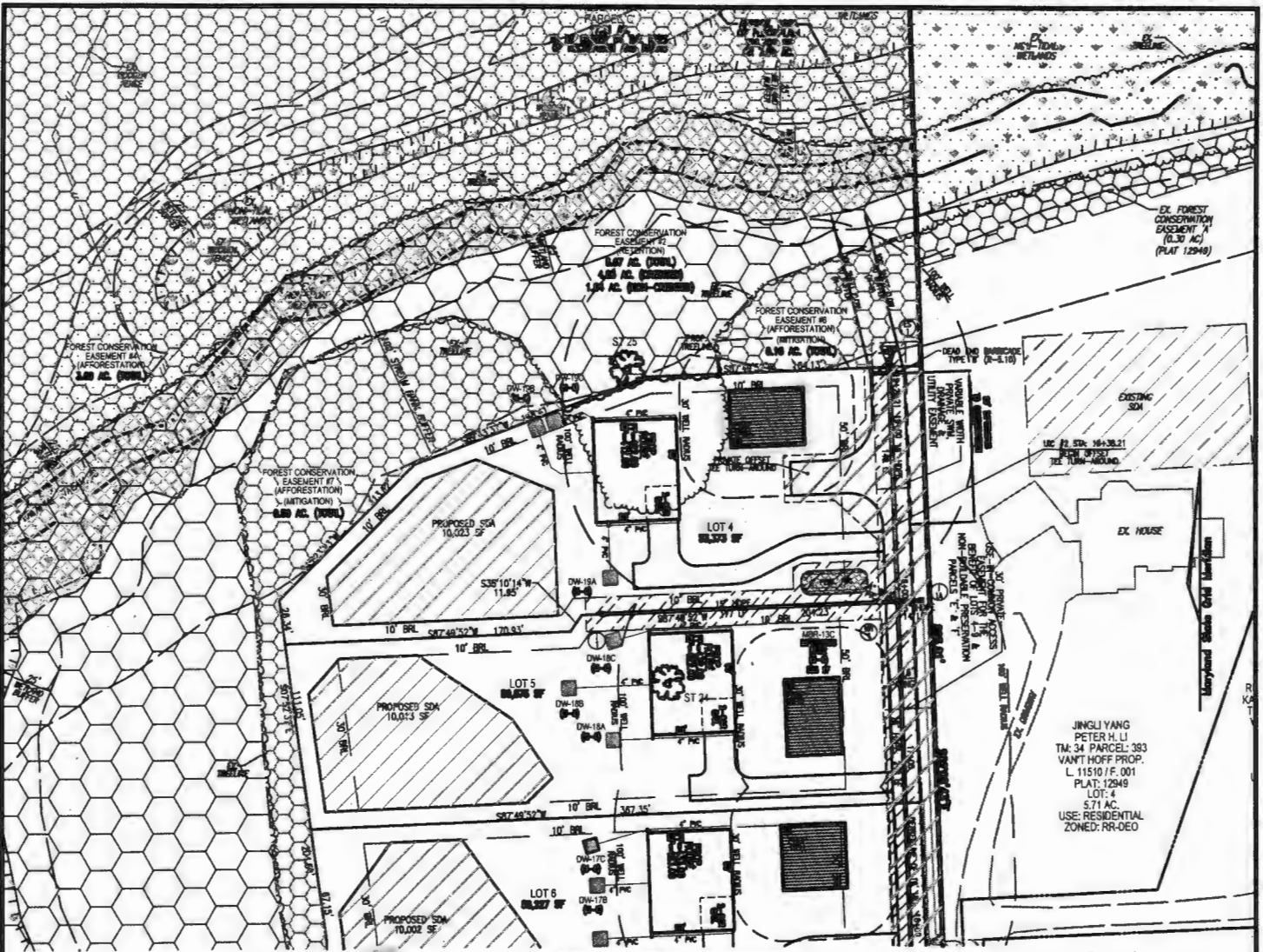
Signature of company representative responsible for installation [Signature]

Date July 1 - 2022

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

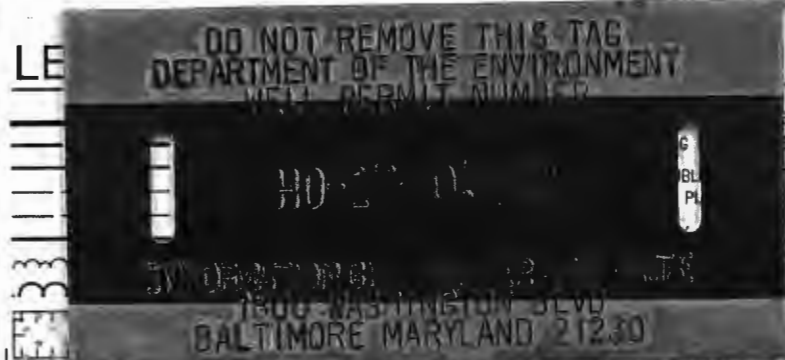
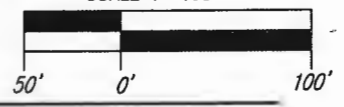
Date Insp. Requested: 7/1/22 Date Insp. Approved: 7/1/22 Inspector: [Signature]
Inspection Data: Pitless adapter watertight & water supply line at least 36" below grade ✓ 36"
Two piece cap installed and attached to casing securely ✓
Elec. conduit extends at least 18" below grade/attached to cap properly ✓ 36"
Safety rope not outside of well cap/casing ✓
Correct well tag attached properly and casing 8" above finished grade ✓ 9"
Water supply line sleeved adequately at house connection ✓ 10"
Adequate grout observed below pitless adapter ✓





LOT 4 - WELL EXHIBIT

SCALE 1"=100'



- PROP. SEWAGE DISPOSAL AREA
- PROP. WELL AREA
- PROP. STORMDRAIN
- EXISTING WELL
- PROPOSED WELL



- EXISTING WETLAND BUFFER
- & UTILITY EASEMENT
- EXISTING SPECIMEN TREES
- PROP. 35' PRIVATE MONUMENT EASEMENT

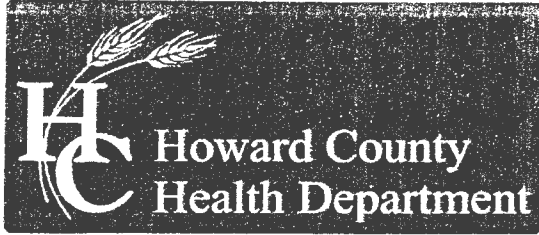
ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
3300 N. RIDGE ROAD, SUITE 110 ELLICOTT CITY, MD 21043 TEL: 410.461.7666 FAX: 410.461.8961

SCALE: 1"=100'
DRAWN BY: JMR
CHECKED BY: RHV
DATE: JUNE 2018
W. O. #: 15-39
SHEET #: 1 OF 1

Well box approved 9/17/10 SC
Well box staked by Vogel Engineering
WELL EXHIBIT - LOT 4
THE ESTATES AT RIVER HILL
LOTS 1-15, BUILDABLE PRESERVATION PARCEL 'A'
AND NON-BUILDABLE PRESERVATION PARCELS 'B-H'
A RE-SUBDIVISION OF THE "GREENE PROPERTY" LOT 1

PARCEL: 389
TAX MAP: 34 GRID: 23
5TH ELECTION DISTRICT

ZONED: RR-DEO
L 4772 / F. 265
HOWARD COUNTY, MARYLAND



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:

The Estates at River Hill 1-15 Parcel A - Alluvial Line
Subdivision/Property Name Lot # Road Name

The well site has been staked by Robert H. Vogel Engineering, Inc.
(professional land surveyor or company employing professional land surveyors)
on _____ (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.

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

INTERIM CERTIFICATE OF POTABILITY
PERMANENT DEVIATION FOR RADIUM
Expiration Date – JULY 23, 2023

January 23, 2023

Homeowner
13621 Noble Way
Highland, MD 20777

RE: Est. @ River Hill, Lot 4
13621 Noble Way
Building Permit: B19003289
Well Permit: HO-17-0328

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 **10/24/2022**. Final approval of the well line connection to the dwelling was granted on **7/1/2022**. The well construction was completed on **11/13/2018**. Water samples were collected on 10/4/2022, 10/12/2022.

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.

Radium samples were also collected on **10/4/2022**. Results showed a Radium 226 level of **3.6 ± 0.6 pCi/L** and a Radium 228 level of **4.4 ± 0.8 pCi/L**. **This exceeds the maximum contaminant level (MCL) combined Radium 226 and 228 of 5.0 pCi/L.**

After installation of a radionuclide removal device (water softener), post-treatment water samples were collected on **10/24/2022** and indicated a combined Radium 226/228 level of **2.6 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.**

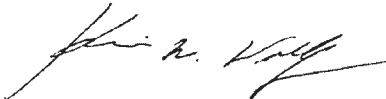
This certifies that the initial sampling requirements of COMAR 26.04.04 "Well Regulations" have been met for the water supply system installed under well permit HO-17-0328. Although the submitted sample results are in compliance with COMAR standards, the Health Department does not guarantee water supplies.

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 #: 155395 Account #: 4035
Reference: Estates at River Hill Lot 4 Client: Trinity Quality Homes, Inc.
Location: 13621 Noble Way Requested By: Michael Pfau
Highland, MD 20777 Source: Well Water
Date/ Time Collected: 10/24/2022 1336 Site: Kitchen Sink
Date/Time Rec'd: 10/24/2022 1525 Treatment: Sediment Filter/Softener
Chlorine ppm: Free: ND Total: ND pH: 7.5
Collected By: J. Yeager 0819JY Well #: HO-17-0328

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Gross Alpha, Short Term	7.1	pCi/L	15	900.0	10/26/2022 / 0637 / MJN
Gross Beta, Short Term	2.8	pCi/L	50	900.0	10/26/2022 / 0637 / MJN
Gross Alpha, Long Term	2.7	pCi/L	15	900.0	11/3/2022 / 0625 / MJN
Gross Beta, Long Term	2.4	pCi/L	50	900.0	11/3/2022 / 0625 / MJN
Radium-226	0.9	pCi/L	****	903.0	11/3/2022 / 0937 / MJN
Radium-228	0.8	pCi/L	****	Ra-05	11/2/2022 / 1037 / SN

↳ Combined 2.16 pCi/L

NOTES:

- ****Radium 226 and Radium 228 combined have a reference of 5 pCi/L
- Long Term Gross Alpha Detection Limit: 1.2 pCi/L; Long Term Gross Alpha Error: +/- 1.3 pCi/L
- Long Term Gross Beta Detection Limit: 1.5 pCi/L; Long Term Gross Beta Error: +/- 1.0 pCi/L
- pCi/L = picocuries per liter
- Radium 226 Detection Limit: 0.2 pCi/L; Radium 226 Error: +/- 0.3 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: 1.6 pCi/L; Short Term Gross Alpha Error: +/- 2.1 pCi/L
- Short Term Gross Beta Detection Limit: 1.5 pCi/L; Short Term Gross Beta Error: +/- 1.1 pCi/L
- Sub-contracted to Reference Lab #278
- ND:None Detected
- pH & Chlorine level tested on site
- Visual well check: Sealed, vented cap

Reason for Test : Use & Occupancy
Building Permit # : B19003289

Date Reported: 11/4/2022

Reviewed By: Loi Oe

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

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

REPORT OF ANALYSIS

Laboratory ID #: 154970 Account #: 4035
Reference: Estates at River Hill Lot 4 Client: Trinity Quality Homes, Inc.
Location: 13621 Noble Way Requested By: Michael Pfau
Highland, MD 20777 Source: Well Water
Date/ Time Collected: 10/4/2022 1253 Site: Pressure Tank
Date/Time Rec'd: 10/4/2022 1502 Treatment: **
Chlorine ppm: Free: ND Total: ND pH: 7.0
Collected By: R. Ott 0266RO Well #: HO-17-0328

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	10/5/2022 / 0935 / MEW
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	10/5/2022 / 0935 / MEW
Nitrate.	<0.40	mg/L	10	EPA 300.0	10/4/2022 / 2105 / TSD
Sand	>5	mg/L	5	Visual/Gravimetric	10/4/2022 / 1600 / TSD
Turbidity	2.59	NTU	<10	SM2130B	10/4/2022 / 1555 / 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 pH & Chlorine level tested on site
- 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 prior to Sediment Filter/Softener
- 8 Visual well check: Sealed, vented cap

Reason for Test : Use & Occupancy
Building Permit # : B19003289

Date Reported: 10/5/2022

Reviewed By:

Catherine C Holland

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

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

REPORT OF ANALYSIS

Laboratory ID #: 155188 Account #: 4035
Reference: Estates at River Hill Lot 4 Client: Trinity Quality Homes, Inc.
Location: 13621 Noble Way Requested By: Michael Pfau
Highland, MD 20777 Source: Well Water
Date/ Time Collected: 10/12/2022 1325 Site: Pressure Tank
Date/Time Rec'd: 10/12/2022 1550 Treatment: **
Chlorine ppm: Free: ND Total: ND pH: 7.3
Collected By: J. Yeager 0819JY Well #: HO-17-0328

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Sand	ND	mg/L	5	Visual/Gravimetric	10/13/2022 / 0845 / TSD

NOTES:

- 1 mg/L = milligrams per liter (also, parts per million)
- 2 pH & Chlorine level tested on site
- 3 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 4 ND:None Detected
- 5 **Sample collected prior to Sediment Filter/Softener
- 6 Visual well check: Sealed, vented cap

Reason for Test : Use & Occupancy

Building Permit # : B19003289

Date Reported: 10/13/2022

Reviewed By: Catherine C Holland

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

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

REPORT OF ANALYSIS

Laboratory ID #: 154972 Account #: 4035
Reference: Estates at River Hill Lot 4 Client: Trinity Quality Homes, Inc.
Location: 13621 Noble Way Requested By: Michael Pfau
Highland, MD 20777 Source: Well Water
Date/ Time Collected: 10/4/2022 1240 Site: Kitchen Sink
Date/Time Rec'd: 10/4/2022 1502 Treatment: Sediment Filter/Softener
Chlorine ppm: Free: ND Total: ND pH: 7.3
Collected By: R. Ott 0266RO Well #: HO-17-0328

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Gross Alpha, Short Term	16.5	pCi/L	15	900.0	10/7/2022 / 0558 / MJN
Gross Beta, Short Term	13.5	pCi/L	50	900.0	10/7/2022 / 0558 / MJN
Gross Alpha, Long Term	9.3	pCi/L	15	900.0	10/14/2022 / 0924 / MJN
Gross Beta, Long Term	10.6	pCi/L	50	900.0	10/14/2022 / 0924 / MJN
Radium-226	3.6	pCi/L	****	903.0	10/19/2022 / 0931 / MJN
Radium-228	4.4	pCi/L	****	Ra-05	10/18/2022 / 1052 / MJN

NOTES:

- ****Radium 226 and Radium 228 combined have a reference of 5 pCi/L
- Long Term Gross Alpha Detection Limit: 1.6 pCi/L; Long Term Gross Alpha Error: +/- 2.3 pCi/L
- Long Term Gross Beta Detection Limit: 1.6 pCi/L; Long Term Gross Beta Error: +/- 1.4 pCi/L
- pCi/L = picocuries per liter
- Radium 226 Detection Limit: 0.1 pCi/L; Radium 226 Error: +/- 0.6 pCi/L
- Radium 228 Detection Limit: 0.7 pCi/L; Radium 228 Error: +/- 0.8 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: 1.6 pCi/L; Short Term Gross Alpha Error: +/- 3.0 pCi/L
- Short Term Gross Beta Detection Limit: 1.6 pCi/L; Short Term Gross Beta Error: +/- 1.5 pCi/L
- ND:None Detected
- pH & Chlorine level tested on site
- Visual well check: Sealed, vented cap

Reason for Test : Use & Occupancy
Building Permit # : B19003289

Date Reported: 10/20/2022

Reviewed By: Catherine C Holland

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

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

REPORT OF ANALYSIS

Laboratory ID #:	154971	Account #:	4035
Reference:	Estates at River Hill Lot 4	Client:	Trinity Quality Homes, Inc.
Location:	13621 Noble Way	Requested By:	Michael Pfau
	Highland, MD 20777	Source:	Well Water
Date/ Time Collected:	10/4/2022 1258	Site:	Pressure Tank
Date/Time Rec'd:	10/4/2022 1502	Treatment:	**
Chlorine ppm:	Free: ND Total: ND	pH:	7.0
Collected By:	R. Ott 0266RO	Well #:	HO-17-0328

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Gross Alpha, Short Term	16.2	pCi/L	15	900.0	10/7/2022 / 0558 / MJN
Gross Beta, Short Term	14.9	pCi/L	50	900.0	10/7/2022 / 0558 / MJN
Gross Alpha, Long Term	11.9	pCi/L	15	900.0	10/14/2022 / 0811 / MJN
Gross Beta, Long Term	13.8	pCi/L	50	900.0	10/14/2022 / 1020 / MJN
Radium-226	3.8	pCi/L	****	903.0	10/19/2022 / 0931 / MJN
Radium-228	4.3	pCi/L	****	Ra-05	10/18/2022 / 1052 / MJN

Re-sampled on the
10/4/22 for Radium

- Also need Radium agreement

NOTES:

- 1 ****Radium 226 and Radium 228 combin
- 2 Long Term Gross Alpha Detection Limit:
- 3 Long Term Gross Beta Detection Limit: 1
- 4 pCi/L = picocuries per liter
- 5 pH & Chlorine level tested on site
- 6 Radium 226 Detection Limit: 0.2 pCi/L; Radium 226 Error: +/- 0.6 pCi/L
- 7 Radium 228 Detection Limit: 0.6 pCi/L; Radium 228 Error: +/- 0.7 pCi/L
- 8 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 9 Short Term Gross Alpha Detection Limit: 1.0 pCi/L; Short Term Gross Alpha Error: +/- 2.5 pCi/L
- 10 Short Term Gross Beta Detection Limit: 1.4 pCi/L; Short Term Gross Beta Error: +/- 1.5 pCi/L
- 11 ND:None Detected
- 12 **Sample collected prior to Sediment Filter/Softener
- 13 Visual well check: Sealed, vented cap

Phone call 10/27/22 /L
(Kms)

Reason for Test : Use & Occupancy
Building Permit # : B19003289

Date Reported: 10/20/2022

Reviewed By: Catherine C Holland



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

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 Pranathi Kotta + Rakeesh M. Ganbarath ("the Owner").

WHEREAS, the Owner owns a tract of land at street address 13621 NOBLE WAY, HIGHLAND MD 20777 and the deed and subdivision plat of the property is recorded among the Land Records of Howard County, Maryland, Tax Map # 34, Block # 23, Parcel # 389, Deed Reference # _____ and Tax Account # _____ ("the Property"). LOT 4

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 HO-19-0328 it 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).

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 and sealed this Agreement on the dates set forth below.

<u>x Michael Pfad</u> Owner	<u>10/27/22</u> Date	<u>Pranathi</u> Buyer	<u>10/27/22</u> Date
<u>MICHAEL PFAD</u> Owner	<u>10/27/22</u> Date	<u>Pranathi Katta</u> PRINT NAME Buyer	<u>10/27/22</u> Date
<u>[Signature]</u> Howard County Health Department	<u>10/27/22</u> Date	<u>Rakesh N Gombavantha</u> PRINT NAME Buyer	

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: katta
Ref: 11

LR - Agreement Surcharge
1x 40.00 40.00

=====
SubTotal: 60.00
Total: 60.00

=====
REV-Check-WFB 60.00
Number : 000631

10/28/2022 10:07 CC13-LP
#16738706/497/4

Thank you for visiting us today"

Freemon, Robert

From: Freemon, Robert
Sent: Friday, October 28, 2022 1:44 PM
To: Tim Keane; Williams, Jeffrey; Martin, Sharhonda; Wolf, Kevin; Sarah Jahng
Cc: 'michaelpf'; James Pfau; Hill, Amanda; Huskins, Thomas; Cole, Colleen; Hall, Stephanie; Hill, Chad; Schmidt, Heather; Tracey, Megan
Subject: RE: ERH lot 4 ICOP
Attachments: 13621 Noble Way.pdf

Hi Tim,

Attached is the Temporary Deviation For Radium ICOP letter for 13621 Noble Way.



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

*Well and Septic Program
Robert "Spencer" Freemon
Phone: 410-313-6357*

*Email: rfreemon@howardcountymd.gov
Website: <https://www.howardcountymd.gov/health/well-septic-program>*

From: Tim Keane <tkeane@trinityhomes.com>
Sent: Friday, October 28, 2022 10:54 AM
To: Williams, Jeffrey <jewilliams@howardcountymd.gov>; Martin, Sharhonda <smmartin@howardcountymd.gov>; Freemon, Robert <rfreemon@howardcountymd.gov>; Wolf, Kevin <KWolf@howardcountymd.gov>; Sarah Jahng <sjahng@trinityhomes.com>
Cc: Tim Keane <tkeane@trinityhomes.com>; 'michaelpf' <Michaelpfau1955@gmail.com>; James Pfau <jpfau@trinityhomes.com>
Subject: ERH lot 4 ICOP

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

Good morning, Jeff,
Please find attached the receipt for recording ERH lot 4.
I can email the recorded document latter today, I hope.
Can you please issue an ICOP today, based on this receipt, so that we can settle next week.
Your help, as always, is greatly appreciated.
Tim Keane
4433249806

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

January 3, 2019

Tim Keane
Trinity Homes
3625 Park Avenue
Ellicott City, Maryland 21043

RE: Estates at River Hill Lot 4
Allnutt Lane
Well Tag: HO – 17 – 0328

Dear Mr. Keane:

A sample was collected during a yield test on November 16, 2018 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 10.9 ± 2.4 picocuries/liter (pCi/L), while the **Gross Beta** level was 14.4 ± 2.2 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

SEND REPORT TO:

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: EST PIT RIVER HILL
~~HOJCC328~~

County: Howard

Sample Source: LOT 4

Location: HO. 17-C328

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

Radon-222 Bottle A HOJCC0328RA
Bottle B _____

Radon-222 Field Blank Bottle A _____
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: HIF

Federal Project:

Collector: CABRILLO JOSEPH

Telephone No.: 410 313 2643

Date Collected: 11/15/2018

Time Collected: 11:00 a.m. _____ p.m.

Field pH: 7.5

Field Chlorine: _____

Nitric Acid Preserved: Yes No

Iced: Yes No

Remarks: sample collected at field.

TEST	EPA Code	Lab No.	Method No.	Results (pCi/L)	Date Analyzed	Analyst	Date Reported
<input checked="" type="checkbox"/> Gross Alpha	4000	1052	EPA 900.0	10.9 ± 2.4	11/19/18	WT	12/13/18
<input checked="" type="checkbox"/> Gross Beta	4100	1052	EPA 900.0	14.4 ± 2.2	11/19/18	WT	12/13/18
<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 checked="" type="checkbox"/> Gross Alpha - Dup		1052	EPA 900.0	8.8 ± 2.1	11/19/18	WT	12/13/18
<input checked="" type="checkbox"/> Gross Beta - Dup		1052	EPA 900.0	14.7 ± 2.3	11/19/18	WT	12/13/18

Date Received: 11/16/18

Received By: _____

Data Release Signature: _____

Date: 12/7/18

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

FORM REVISED 05/15
DHMH 4540 05/17

SEND REPORT TO:
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. 11/19/18

LABORATORY ANALYSIS REQUEST FORM

Plant/Site Name: HCAD County: HOWARD

Sample Source: WEGMANS DISTILLED Location: LAB
(Well no., lab sink, sample tap, etc.)

Radon-222 Bottle A FIELD BLANK Radon-222 Field Blank Bottle A _____
 Bottle B _____ Bottle B _____

RADIUM

County 13 Plant No.

--	--	--	--	--	--	--	--	--	--

CHECK (one per Box)

Type	Service	Point of Collection	Testing
Drinking Water <input checked="" type="checkbox"/>	Community <input type="checkbox"/>	Source (Raw) <input checked="" type="checkbox"/>	Emergency <input type="checkbox"/>
Landfill <input type="checkbox"/>	Non-Community <input type="checkbox"/>	Distribution (treated) <input type="checkbox"/>	Routine <input checked="" type="checkbox"/>
Stream <input type="checkbox"/>	Private <input checked="" type="checkbox"/>	MCL <input type="checkbox"/>	Recheck <input type="checkbox"/>
Other <input type="checkbox"/>	Other <input type="checkbox"/>		Special <input type="checkbox"/>

Submitters Code: 4 F Federal Project:

Collector: CABATH, JOSEPH Telephone No.: 410 313 2643

Date Collected: 11/19/2018 Time Collected: 8:30 AM a.m. _____ p.m.

Field pH: 7.0 Field Chlorine: NES

Nitric Acid Preserved: Yes No Iced: Yes No

Remarks: SAMPLE

TEST	EPA Code	Lab No.	Method No.	Results (pCi/L)	Date Analyzed	Analyst	Date Reported
<input checked="" type="checkbox"/> Gross Alpha	4000	1051	EPA 900.0	< 2.0	11/19/18	WT	12/13/18
<input checked="" type="checkbox"/> Gross Beta	4100	1051	EPA 900.0	< 4.0	11/19/18	WT	12/13/18
<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: 11/16/18 Received By: [Signature]
 Data Release Signature: [Signature] Date: 12/4/18

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

FORM REVISED 05/15
 DHMH 4540 05/17

CUSTOMER COPY I
 PROGRAM

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

December 14, 2018

Trinity Homes
3675 Park Ave
Suite 301
Ellicott City, MD 21043

Re: Water sample results for The Estates at River Hill Lot 4 well, #HO-17-0328

Dear Trinity Homes,

The Health Department received results from the testing for sodium, chloride, and total dissolved solids (TDS) from the well at The Estates at River Hill Lot 4.

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 25.39.**

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 172 mg/L.**

Sodium, chloride, and TDS are all secondary contaminants and will not affect the issuance of a Certificate of Potability for the well. Given the elevated levels of sodium, the builder or future homeowner may want to consult a plumber and/or water treatment company to discuss options. Please be aware that any backwash generated from a treatment system must be disposed of in a subsurface disposal system. Prior to installing a system that generates backwash, please contact the Health Department to ensure that all regulatory requirements are met.

Levels of contaminants can also have seasonal variation. You may want to consider future testing prior to installation of any water treatment system.

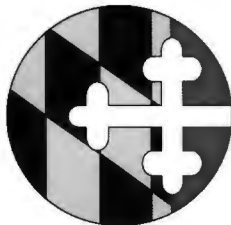
Feel free to contact me at the number or email below with any questions regarding the results of water sampling.

Sincerely,



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

Cc: File



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: E19001669 Date Coll.: 11/15/2018 Date Received: 11/16/2018 Submitted By: Cabahug

Field ID: HOJC0328NA
Lab No.: E19001669001

<u>Method</u>	<u>Element</u>	<u>Result</u>	<u>Units</u>	<u>Date Analyzed</u>
EPA 200.7	Sodium	25.39	ppm	11/16/2018

Comments:

Approved by: *Sadia Muneer*

Approval date: 11/28/2018

**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.



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 NoE19001668 Date Coll. 11/15/2018 Date Received 11/16/2018 Submitted By: J. Cabahug

Field ID: HOJC0328YP
Lab No.: E19001668001

<u>Analyte</u>	<u>Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Analyzed</u>
Chloride	SM 4500-Cl E	<10	mg/L	11/20/2018
Total Dissolved Solids	SM 2540C	172	mg/L	11/21/2018

Comments:

Approved by: _____

Shahla Aneli

Approval date: 11/28/2018

*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

MEMORANDUM

TO: Allen Compton (MSD 009)

FROM: Sarah Collins, L.E.H.S. SEC
Howard County Health Department
Well and Septic Program

DATE: September 17, 2018

RE: Well permits for the Estates at River Hill

The following conditions apply to the well permits for the Estates at River Hill:

- A radium sample is required at the yield test for all lots.
- Sodium, chloride, and total dissolved solids samples are required at the yield test for Lots 1, 2, 3, 4, 10, and 11.
- Steel casing to 50' or 10' into competent bedrock, whichever is deeper, is required for Lots 5, 7, and 8.
- Per the Groundwater Appropriations Permit from Maryland Department of the Environment, any well less than 100' from another well AND on a lot less than one acre requires a simultaneous yield test. Lot 10 is the only lot less than one acre; any well less than 100' from Lot 10 requires a simultaneous yield test with the Lot 10 well.

Feel free to contact me at 410-313-6287 or SCollins@howardcountymd.gov with any questions.

Cc: Vogel Engineering, Rob Vogel (rvogel@vogeleng.com)
File