

C1 56575

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

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

ST/CO USE ONLY DATE RECEIVED 01/17/19

DATE WELL COMPLETED 12-12-18

Depth of Well 350

PERMIT NO. FROM "PERMIT TO DRILL WELL" HO-17-6327

OWNER Trinity Homes WELL SITE ADDRESS Allnut Lane TOWN Highland SUBDIVISION The Estates e River Hill SECTION LOT 3

WELL LOG table with columns: DESCRIPTION, FEET (FROM, TO), check if water bearing. Includes handwritten entries: Clay, soft brown, Grey 4/5, Broken, Grey 4/5 limestone per driller.

GRROUTING RECORD form with fields: WELL HAS BEEN GROUTED (Y), TYPE OF GROUTING MATERIAL (CM, BC), NO. OF BAGS (25), NO. OF POUNDS (2350), GALLONS OF WATER (150), DEPTH OF GROUT SEAL (51).

CASING RECORD form with fields: casing types insert appropriate code below (ST, CO, PL, OT), MAIN CASING TYPE (ST), Nominal diameter (06), Total depth (54).

OTHER CASING (if used) form with fields: diameter, depth (feet).

SCREEN RECORD form with fields: screen type or open hole (ST, BR, HO, PL, OT), DEPTH (nearest ft.) (54, 350).

PUMPING TEST form with fields: HOURS PUMPED (3), PUMPING RATE (10), METHOD USED TO MEASURE PUMPING RATE (1900), WATER LEVEL (28, 33), TYPE OF PUMP USED (S).

NUMBER OF UNSUCCESSFUL WELLS: 2 WELL HYDROFRACTURED (Y)

CIRCLE APPROPRIATE LETTER: A (well abandoned), E (electric log), P (test well converted).

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT...

DRILLERS LIC. NO.: M 5 D 2 2 4 DRILLERS SIGNATURE L.C. NO.: D

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

DEPTH (nearest ft.) table with columns 1-21 and rows E, S, R, E, N. Includes handwritten values: 54, 350.

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

PUMP INSTALLED form with fields: DRILLER INSTALLED PUMP (NO), TYPE OF PUMP INSTALLED (29), CAPACITY: GALLONS PER MINUTE (31, 36), PUMP HORSE POWER (37, 41), PUMP COLUMN LENGTH (43, 47), CASING HEIGHT (+ above, - below), LAND SURFACE (2).

LATITUDE 39.196458 LONGITUDE 76.960530 (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.

TAG: 1/16/19

**B 1** SEQUENCE NO. (MDE USE ONLY) **59725** STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL STATE PERMIT NUMBER **HO-17-0327**

1 2 3 4 5 6 **503967-B** please type **70** fill in this form completely **79**

**OWNER INFORMATION**

Date Received (APA) **07/18**

8 MM DD YY 13

15 Last Name **Trinity Homes** Owner First Name **Trinity** 34

36 Street or RFD **3675 Park Ave Suite 301** 55

57 Town **ELIOTT CITY MD** 70 State **MD** 72 Zip **21043** 76

**B 3** LOCATION OF WELL

**Howard** 8 COUNTY 21 **Hill**

23 SUBDIVISION **The Estates at River** 42

SECTION **44** 46 LOT **3** 48 50

**Highland** 52 NEAREST TOWN 71

**DRILLER INFORMATION**

Driller's Name **Allen Completion** M S D **009** 76 License No. 81

Firm Name **Fogles Well Drilling LLC**

Address **P.O. Box 203 Looperbine MD 21747**

Signature **Andrew Houseman** Date **7-27-18**

**B 4** SOURCES OF DRILLING WATER

1. **Well Water**

2. **12/12**

3. **-54' steel casing**

**350'**

**-tremie to 45'**

**-started pumping**

11 STREET ADDRESS **Alnut Lane** 30

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)

NORTH  WEST  EAST  SOUTH

34 **50** 37 DISTANCE FROM ROAD ENTER FT OR MI **FT** 38 39

TAX MAP: **34** BLK: **23** PARCEL: **389**

**B 2** WELL INFORMATION

APPROX. PUMPING RATE (GAL. PER MIN.) **5** 8 12

AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) **500** 14 20

**USE FOR WATER (CIRCLE APPROPRIATE BOX)**

DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION

FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)

INDUSTRIAL, COMMERCIAL, DEWATERING

PUBLIC WATER SUPPLY WELL

TEST, OBSERVATION, MONITORING

OPEN LOOP GEOTHERMAL

CLOSED LOOP GEOTHERMAL

22 **-29' @ 10**

**-collected**

**at TDS of**

**at B sampler**

**@ 10:45 am**

**NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL**

**Howard** COUNTY NAME COUNTY NO. **(3)**

STATE SIGNATURE \_\_\_\_\_ INSERT S → 41

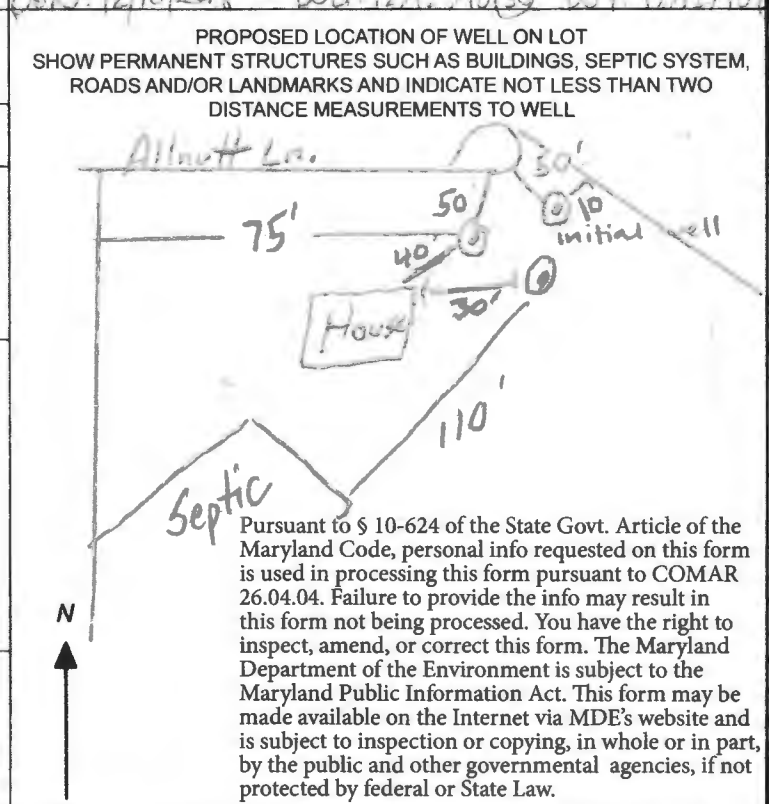
DATE ISSUED **9/17/18** CO SIGNATURE **Sch. C.H.** EXP. DATE **9/17/19**

43 MM DD YY 48

**DOB: 12/10/2018** **DOB: 12/10/18** **DOB: 12/10/18**

APPROXIMATE DEPTH OF WELL **300** FEET 24 28

APPROXIMATE DIAMETER OF WELL **6** 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 DEEPEINED WELLS (CIRCLE APPROPRIATE BOX)**

THIS WELL WILL NOT REPLACE AN EXISTING WELL

THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED

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 DEEPEIN AN EXISTING WELL

PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEINED (IF AVAILABLE) 41 \_\_\_\_\_ 52

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

APPROP. PERMIT NUMBER **H02018G005**

PERMIT No. **H0-17-0327**

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 LLC Telephone #: 246 882 0069  
Address: 104 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# 21897

**\*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: Trinity Homes Inc Telephone #: 410-480-0023  
Subdivision: Estate @ Riverhill Lot #: 3 Well Tag #: HO-17-0327(S)  
Site Address: 13519 Allnutt Ln  
Highland md. 20777

<u>Submersible Pump Data</u>	<u>Pitless Adapter</u>	<u>Well Cap and Electric Conduit</u>
Make: <u>Meters</u>	Make: <u>American Granby</u>	Two piece watertight cap: <u>yes</u>
Model #: <u>ST-2-8-9</u>	Model#: <u>PT 800 N2</u>	Screened, vented well cap: <u>yes</u>
Pump Capacity: <u>8</u> GPM	Depth: <u>yes</u> (36" min)	Cap secured to casing: <u>yes</u>
Well Yield: <u>10</u> GPM	NSF/WSC approved: <u>yes</u>	Conduit min 18" B.G.: <u>yes</u>
Depth of well encountered at time of pump installation: <u>350</u> (feet)		Conduit secured to well cap: <u>yes</u>
If pump capacity exceeds well yield, a low water cut off switch is required by NSPC 1990 Section 17.8.4		
Torque arrestors <u>Cable guards</u> or other acceptable method used- Must circle one		
Safety rope, if used, attached to brass rope adapter or other acceptable method <u>inside of well casing</u>		

**Piping to house**

Type: Poly  
PSI: yes (160 psi min)  
Depth of supply line: yes (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: April 28, 2020

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

Date Insp. Requested: 4/28/2020 Date Insp. Approved: 4/28/2020 Inspector: (ST)  
Inspection Data: Pitless adapter watertight & water supply line at least 36" below grade ✓ 42"  
Two piece cap installed and attached to casing securely ✓  
Elec. conduit extends at least 18" below grade/attached to cap properly ✓ 10"  
Safety rope not outside of well cap/casing ✓  
Correct well tag attached properly and casing 8" above finished grade ✓ 20"  
Water supply line sleeved adequately at house connection ✓ 5'  
Adequate grout observed below pitless adapter ✓



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

January 3, 2019

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

Re: Water sample results for The Estates at River Hill Lot 3 well, #HO-17-0327

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 3.

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 45.39 mg/L.**

Chloride and TDS are both considered secondary contaminants, meaning high concentrations may affect taste, color, odor, or corrosive properties of water but present no risk to health. The secondary maximum contaminant level for chloride is 250 mg/L; **chloride from the well measured <10 mg/L.** The secondary maximum contaminant level for TDS is 500 mg/L; **TDS from the well measured 150 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](mailto:SCollins@howardcountymd.gov)  
410-313-6287

*Cc: File*

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

January 24, 2019

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

**RE: Estates at River Hill Lot 3**  
**Allnut Lane**  
**Well Tag: HO – 17 – 0327**

Dear Mr. Keane:

A sample was collected during a yield test on December 12, 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  $12.3 \pm 2.5$  picocuries/liter (pCi/L), while the **Gross Beta** level was  $< 4.0 \pm 0.0$  pCi/L. With the Margin of Error, the **Gross Alpha** result was just 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, but may later be considered by the future homeowner. Please **note** that other standard testing parameters (bacteria, nitrate, turbidity and sand) will still be needed to help secure Use & Occupancy.

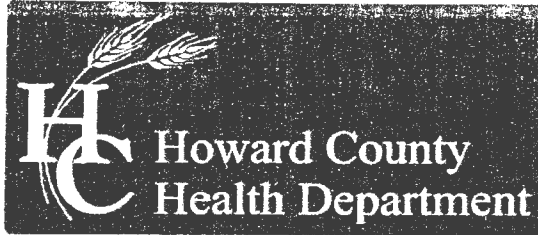
A copy of the test results is enclosed for your information. Please call this office at **410-313-1773** if you have any further questions.

Sincerely,



Bert Nixon, Director  
Bureau of Environmental Health

✓ Enclosure  
cc: Property file



## 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](http://www.facebook.com/hocohealth)

Twitter: [HowardCoHealthDep](https://twitter.com/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:

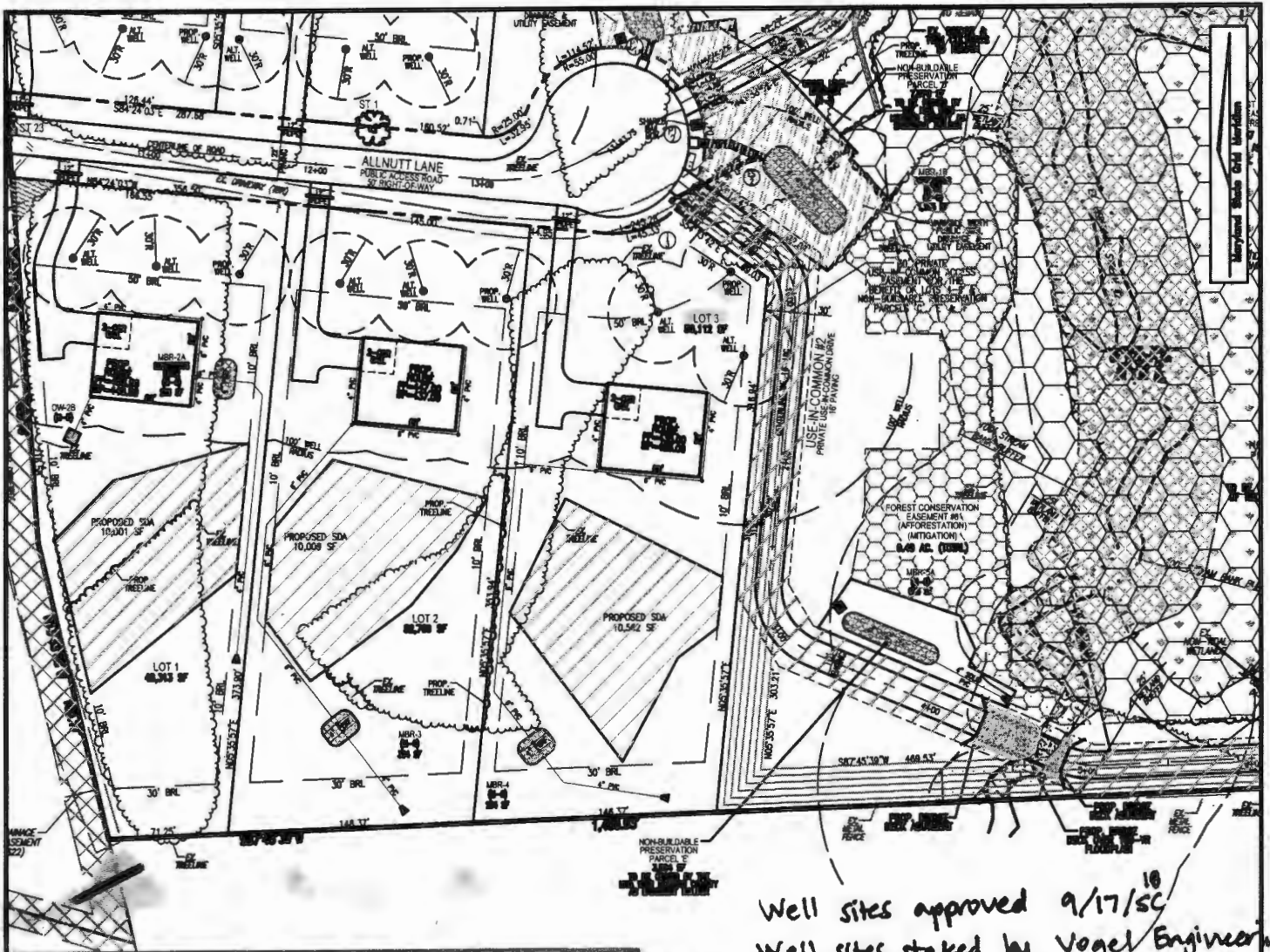
Well Site Location:

The Estates at River Hill    1-159 Parcel A - Allinett Lane  
Subdivision/Property Name      Lot #      Road Name

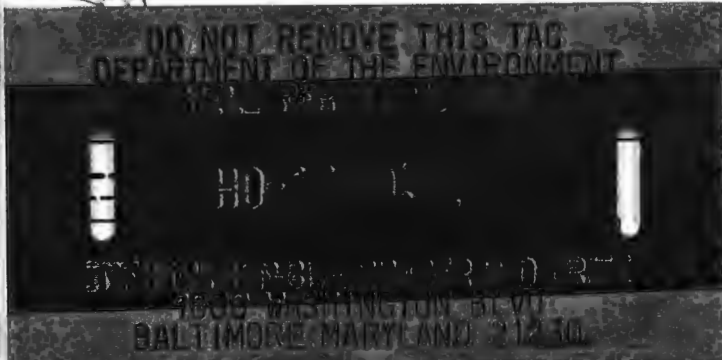
The well site has been staked by Robert H. Vogel Engineering, Inc  
(professional land surveyor or company employing professional land surveyors)  
on \_\_\_\_\_ (date) and does not require a site inspection.

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.

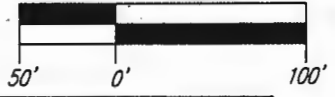
This sheet, along with two copies of an acceptable well site plan, must be attached to the green well permit application.



Well sites approved 9/17/18  
 Well sites staked by Vogel Engineering



**WELL EXHIBIT**



- WOOD FENCE
- METAL FENCE
- 100-YEAR FLOOD
- RAINAGE & UTILITY (PLAT 12949)
- ACCESS EASEMENT
- USE-IN-COMMON
- PROP. SEWAGE DISPOSAL AREA
- PROP. WELL AREA
- PROP. STORMDRAIN
- EXISTING WELL
- PROPOSED WELL

- PROP. PUBLIC SWM, DRAINAGE & UTILITY EASEMENT
- PROP. 35' PRIVATE MONUMENT EASEMENT

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

- EXISTING WETLANDS
- EXISTING WETLAND BUFFER
- EXISTING SPECIMEN TREES

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

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

**WELL EXHIBIT - LOT 3**  
**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

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

SEND REPORT TO: Rev 1

Howard County Health Dept  
Bureau of Environmental Health  
8930 Stanford Blvd  
Columbia, MD 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: Estates @ River Hill Lot 3 County: Howard

Sample Source: Allnut Lane Location: HO-17-0327

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

Radon-222 Bottle A \_\_\_\_\_ 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:  Federal Project: 5

Collector: S Collins Telephone No.: 412 31 6297

Date Collected: 12/12/13 Time Collected: 12:15 a.m. \_\_\_\_\_ p.m.

Field pH: \_\_\_\_\_ Field Chlorine: \_\_\_\_\_

Nitric Acid Preserved: Yes  No  Iced: Yes  No

Remarks: Sample collected during yield test.

<input type="checkbox"/>	TEST	EPA Code	Lab No.	Method No.	Results (pCi/L)	Date Analyzed	Analyst	Date Reported
<input checked="" type="checkbox"/>	Gross Alpha	4000	1272	DM900.0	12.3 ± 2.5	12/19/18	RH	12/20/18
<input checked="" type="checkbox"/>	Gross Beta	4100	1272	DM900.0	<4.0	12/19/18	RH	12/20/18
<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 Conf		1272	EPA900.0	10.1 ± 2.2	12/19/18	RH	12/20/18
<input checked="" type="checkbox"/>	Gross Beta Conf		1272	EPA900.0	<4.0	12/19/18	RH	12/20/18

Date Received: \_\_\_\_\_ Received By: \_\_\_\_\_

Data Release Signature: Sarah Williams Date: 12/27/18

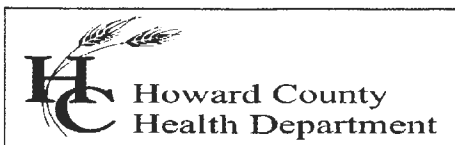
Lab Use Only	Yes	No	N/A
Sample Intact upon arrival?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample pH <2.0?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Received within holding time?	<input checked="" type="checkbox"/>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

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



ORIG MAILED  
1/2/19

# Invoice



Bureau of Environmental Health  
Attn: Bert Nixon, Director

DATE: JANUARY 2, 2019  
DATES OF SERVICE: DECEMBER 12, 2018  
INVOICE #: 2018-006

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

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

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

DATE	DESCRIPTION	BALANCE	AMOUNT
12/12/18	Gross Alpha/Beta testing performed for Lot 3 Estates at River Hill HO - 17 - 0327		\$45.00
			<b>AMOUNT DUE</b>
			\$45.00

Please detach and return with payment.

REMITTANCE	
Invoice #	2018-006
Site Information	Estates at River Hill Lots 3
Amount Due	\$45.00

Receipt 64738  
1/22/2019

SEND REPORT TO: Bert Nixon

Howard County Health Dept  
Bureau of Environmental Health  
8930 Stanford Blvd  
Columbia, MD 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: Field Blank

County: Howard

Sample Source: dH<sub>2</sub>O

Location: HCHD Lab

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

Radon-222 Bottle A \_\_\_\_\_  
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: \_\_\_\_\_

Federal Project: 5

Collector: S. Collins

Telephone No.: 410-313-6287

Date Collected: 12/12/18

Time Collected: \_\_\_\_\_ a.m. 3 p.m.

Field pH: \_\_\_\_\_

Field Chlorine: \_\_\_\_\_

Nitric Acid Preserved: Yes  No

Iced: Yes  No

Remarks: \_\_\_\_\_

✓	TEST	EPA Code	Lab No.	Method No.	Results (pCi/L)	Date Analyzed	Analyst	Date Reported
<input checked="" type="checkbox"/>	Gross Alpha	4000	<u>1270</u>	<u>EPA 910.0</u>	<u>&lt;2.0</u>	<u>12/15/18</u>	<u>1211</u>	<u>12/15/18</u>
<input checked="" type="checkbox"/>	Gross Beta	4100	<u>1270</u>	<u>EPA 910.0</u>	<u>&lt;4.0</u>	<u>12/15/18</u>	<u>1211</u>	<u>12/15/18</u>
<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: \_\_\_\_\_ Received By: Adrian Muncie

Data Release Signature: Adrian Muncie Date: 12/15/18

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

PROGRAM COPY

**SAMPLE TESTED AS RECEIVED**

# FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

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

## REPORT OF ANALYSIS

Laboratory ID #: 142475 Account #: 4035  
Reference: Estates at River Hill Lot 3 Company: Trinity Quality Homes, Inc.  
Location: 13519 Allnutt Lane Requested By: Michael Pfau  
Highland, MD 20777 Source: Well Water  
Date/ Time Collected: 1/25/2021 0947 Site: Pressure Tank  
Date/Time Rec'd: 1/25/2021 1529 Treatment: \*\*  
Chlorine ppm: Free: ND Total: ND pH: 7.5  
Collected By: R. Ott 0266RO Well #: HO-17-0327

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	1/26/2021 / 1015 / CRS
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	1/26/2021 / 1015 / CRS
Nitrate	<1.0	mg/L	10	601	1/26/2021 / 0920 / CRS
Turbidity	<0.30	NTU	<10	SM20 2130B	1/26/2021 / 0935 / CRS
Sand	ND	mg/L	5	Visual/Gravimetric	1/26/2021 / 0935 / CRS

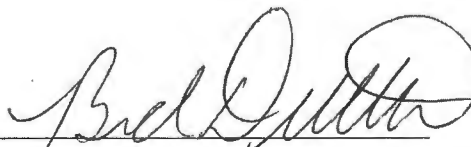
### NOTES

- 1 mg/L = milligrams per liter (also, parts per million)
- 2 MPN/ 100 ml = Most Probable Number [of viable bacteria] per 100 ml of sample.
- 3 NTU = Nephelometric Turbidity Units
- 4 pH & chlorine 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 Visual well check: Sealed, vented cap
- 8 \*\*Sample collected prior to Sediment Filter

Reason for Test : Use & Occupancy  
Building Permit # : B19002369

Date Reported: 1/26/2021

Reviewed By:



Send Report To: Bert Nixon

Howard County Health Dept  
Bureau of Environmental Health  
8930 Stanford Blvd  
Columbia, MD 21045

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

  
**E19001881001**  
Received: 12/13/2018  
Metals HO-17-0327

### LABORATORY ANALYSIS REQUEST

Do not write above this line

Please Print

Sample ID No: HO-17-0327 Site Name: Estates @ River Hill - Lot 3 County: Howard

Sample Source: Allants Lane Highland Collector: S. Collins  
Street Town of City Name

Date Collected: 12/12/2018 Time Collected: 12:15 (a.m./p.m.) Phone #: 410-313-6287  
12-13-18

Sample Preserved By:  Field  ESRL  WMRL  Central Lab  
Preservative Used:  HNO<sub>3</sub> mL pH: < 2

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

Specify Program:  SDWA  NPDES  CWA  RCRA  Consumer Products  Other

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

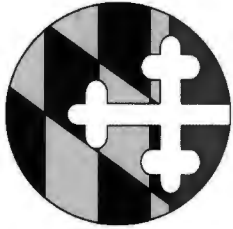
Remarks: Sample collected during yield test.

✓	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)	<u>SHS</u>		Potassium (K)				
	Thallium (Tl)			Silver (Ag)				

Lab Supervisor: \_\_\_\_\_ Date Reported: 12/13/18

•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: E19001881    Date Coll.: 12/12/2018    Date Received: 12/13/2018    Submitted By: Collins

Field ID: HO-17-0327  
Lab No.: E19001881001

<u>Method</u>	<u>Element</u>	<u>Result</u>	<u>Units</u>	<u>Date Analyzed</u>
EPA 200.7	Sodium	45.39	ppm	12/14/2018

### Comments:

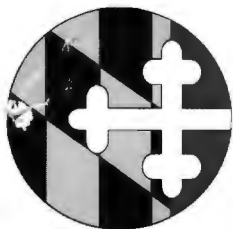
Approved by: *Sadia Muneer*

Approval date: 12/18/2018

\*\*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 NoE19001880 Date Coll. 12/12/2018 Date Received 12/13/2018 Submitted By:S. Collins

Field ID: HO-17-0327  
Lab No.: E19001880001

<u>Analyte</u>	<u>Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Analyzed</u>
Chloride	SM 4500-Cl E	<10	mg/L	12/14/2018
Total Dissolved Solids	SM 2540C	150	mg/L	12/19/2018

### Comments:

Approved by:

Approval date: 12/27/2018

\*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.

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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

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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](mailto:SCollins@howardcountymd.gov) with any questions.

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