

B 1 SEQUENCE NO. (MDE USE ONLY) **56869** STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL **501520C** please type. STATE PERMIT NUMBER **HO-17-0189** fill in this form completely

OWNER INFORMATION
 Date Received (APA) **09/11/17**
 8 MM DD YY 13
 15 Last Name **Williamsburg Group** 34 First Name
 36 Street or RFD **5485 Harpers Farm RD** 55
 57 Town **Columbia Md** 70 State **21044** 72 Zip 76

B 3 LOCATION OF WELL
 8 COUNTY **Howard** 21
 23 SUBDIVISION **Estates at Schoddy Mill** 42
 SECTION **44** 48 LOT **4** 48 50
 52 NEAREST TOWN **Highland** 71

DRILLER INFORMATION
 Driller's Name **Allen Compton** 76 License No. **M S D 005** 81
 Firm Name **Fogles Well Drilling, LLC**
 Address **P.O. Box 202 Woodbine MD 21797**
 Signature **Allen Compton** 9-8-17 Date

B 4 SOURCES OF DRILLING WATER
 1 Well water
 2
 3 **11/3**
 collected Na Cl, TDS, + gross α, β samples @ 10:20 am

SCAGGSVILLE RD 11 STREET ADDRESS 30
 ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX) NORTH N WEST W EAST E SOUTH S
 34 **150** 37 DISTANCE FROM ROAD ENTER FT OR MI 36 39
 TAX MAP: **40** BLK: **11** PARCEL **93**

B 2 WELL INFORMATION
 1 APPROX. PUMPING RATE (GAL. PER MIN.) **5** 12
 2 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

NOT TO BE FILLED IN BY DRILLER - HEALTH DEPARTMENT APPROVAL
 COUNTY NAME **Howard** COUNTY NO. **13**
 STATE SIGNATURE _____ INSERT S → 41
 DATE ISSUED **10/10/17** CO SIGNATURE **Sub. Call: 10/10/18** EXP. DATE

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

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

METHOD OF DRILLING (circle one)
 BORED (or Augered) JETTED Jetted & DRIVEN
 AIR-ROTARY AIR-PERCussion 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 DEEPEM AN EXISTING WELL
 PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED (IF AVAILABLE) 41 _____ 52

Pursuant to § 10-624 of the State Govt. Article of the Maryland Code, personal info requested on this form is used in processing this form pursuant to COMAR 26.04.04. Failure to provide the info may result in this form not being processed. You have the right to inspect, amend, or correct this form. The Maryland Department of the Environment is subject to the Maryland Public Information Act. This form may be made available on the Internet via MDE's website and is subject to inspection or copying, in whole or in part, by the public and other governmental agencies, if not protected by federal or State Law.

Not to be filled in by driller (MDE OR COUNTY USE ONLY)
 APPROP. PERMIT NUMBER _____ G _____
 PERMIT No. **HO-17-0189**
 70 71 72 73 74 75 76 77 78 79

SPECIAL CONDITIONS
 NOTE: APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED. See attached memo. Drill site #3 first

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

INTERIM CERTIFICATE OF POTABILITY
PERMANENT DEVIATION FOR RADIUM

Expiration Date – OCTOBER 7, 2020

April 7, 2020

Homeowner
7422 Haven Court
Highland, MD 20777

RE: Estates @ Schooley Mill, Lot 4
7422 Haven Court
Building Permit: B19002173
Well Permit: HO-17-0189

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 **3/17/2020**. Final approval of the well line connection to the dwelling was granted on **3/17/2020**. The well construction was completed on **11/3/2017**. Water samples were collected on **2/27/2020**.

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 **11/3/2017**. Results showed a Gross Alpha level of **34.4 ± 4.3 pCi/L** and a Gross Beta level of **32.9 ± 3.1 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 (Reverse Osmosis), post-treatment water samples were collected on **3/17/2020** and indicated a combined Radium 226/228 level of **<1.0 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-17-0189. Although the submitted sample results are in compliance with COMAR standards, the Health Department does not guarantee water supplies.

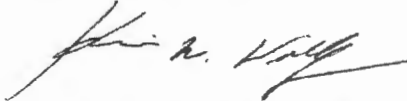
This Interim Certificate of Potability will expire **six months** from the date of issuance. Submission of a second bacteriological test indicating the water is free of coliform and fecal coliform bacteria is required prior to the expiration date, after which time a Final Certificate of Potability will 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 Environment 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 FAX (410) 848-0298

REPORT OF ANALYSIS

Laboratory ID #: 135961 Account #: 4470
Reference: Williamsburg Homes LLC Company: Williamsburg Homes LLC
Location: 7422 Haven Court Requested By: Bill McBride
Highland, MD 20777 Source: Well Water
Date/ Time Collected: 2/27/2020 1014 Site: Pressure Tank
Date/Time Rec'd: 2/27/2020 1243 Treatment: None
Chlorine ppm: Free: ND Total: ND pH: 7.0
Collected By: R. Ott 0266RO Well #: HO-17-0189

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	2/28/2020 / 0900 / RER
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	2/28/2020 / 0900 / RER
Nitrate	<1.0	mg/L	10	601	2/28/2020 / 0950 / RER
Turbidity	7.43	NTU	<10	SM20 2130B	2/28/2020 / 1000 / RER
Sand	NS	mg/L	5	Visual/Gravimetric	2/28/2020 / 1000 / RER

NOTES

- 1 mg/L = milligrams per liter (also, parts per million)
- 2 MPN/ 100 ml = Most Probable Number [of viable bacteria] per 100 ml of sample.
- 3 NS = None Seen (NS indicates less than 5 mg/L)
- 4 NTU = Nephelometric Turbidity Units
- 5 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 6 ND:None Detected
- 7 Visual well check: Sealed, vented cap
- 8 pH & Chlorine level tested on site

Reason for Test : Use & Occupancy
Building Permit # : 19002173

Date Reported: 2/28/2020

Oswald, Hank

From: Oswald, Hank
Sent: Wednesday, March 18, 2020 11:51 AM
To: Tammy@water-doctor.com
Subject: R/O Treatment_7422 Haven Court

Hi Tammy:

I've been tasked to find out what type of r/o treatment device(s) have been installed on the water supply for 7422 Haven Court, Highland Maryland. I haven't been to the site, but I was told that it consisted of multiple r/o treatment units. If this is the case, can you provide some answers to the following questions?

- 1.) How many r/o treatment devices were installed? Where do they go to? Whole house treatment etc.?
- 2.) What is the backwash volume and frequency for each device?
- 3.) Can you provide manufactures information about the device?

If there is anything else that you would like to add, please do so. Thanks in advance for your time.

Respectfully,

Hank

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



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Oswald, Hank

From: Bill McBride <BillMcBride@williamsburgllc.com>
Sent: Wednesday, March 18, 2020 11:17 AM
To: Oswald, Hank
Subject: Re: 7422 Haven Court

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

Water doctor
410-792-0327

Sent from my iPhone
Bill McBride
Production Manager
Williamsburg Homes
410-808-8241

On Mar 18, 2020, at 11:06 AM, Oswald, Hank <hoswald@howardcountymd.gov> wrote:

Hi Bill,

Can you provide me with the name and number or the water treatment company that did the r/o installation on 7422 Haven Court?

Thanks,

Hank

Hank Oswald
Licensed Environmental Health Specialist
Howard County Health Department
Bureau of Environmental Health
Well & Septic Program
8930 Stanford Boulevard
Columbia, MD 21045
410.313.1786 (Office)
hoswald@howardcountymd.gov
<image001.png>

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Wolf, Kevin

From: Wolf, Kevin
Sent: Friday, March 13, 2020 10:50 AM
To: Bill McBride; Marina Morris; Tim Morris; Bruce Harvey; Addison Bond
Subject: RE: 7422 Haven Court water test result with high Gross Alpha and Gross Beta
Attachments: Radium Agreement 2.11.19.pdf

Bill,
Yes based on this numbers you will need to install a 'Point-of-use' (POU) treatment system (i.e. Reverse Osmosis system, etc.) to treat the excessive radium in the well water. Once the treatment is in place, please have your lab test for gross alpha short term + long term, and radium 226 + 228. All tests should be done after treatment (post treatment). Along with this, you must complete the attached radium agreement signed by the potential owner, brought back to us for review and signature, then taken to Office of Land Records to record. Please retain the receipt of submission and send back to me to copy of recordation. Once all this has been confirmed, I can then issue the ICOP.

Kevin

From: Bill McBride <BillMcBride@williamsburgllc.com>
Sent: Wednesday, March 11, 2020 2:32 PM
To: Wolf, Kevin <KWolf@howardcountymd.gov>; Marina Morris <MarinaMorris@williamsburgllc.com>; Tim Morris <TimMorris@williamsburgllc.com>; Bruce Harvey <BruceHarvey@williamsburgllc.com>; Addison Bond <AddisonBond@williamsburgllc.com>
Subject: Fwd: 7422 Haven Court water test result with high Gross Alpha and Gross Beta

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

Kevin, we have treated this home based on the gross alpha and beta results and are ordering a new test. Is there any other things your going to want due to the results from the attached test? Please let me know ASAP as we have a pending settlement.

Thank you

Sent from my iPhone
Bill McBride
Production Manager
Williamsburg Homes
410-808-8241

Begin forwarded message:

From: Addison Bond <AddisonBond@williamsburgllc.com>
Date: March 11, 2020 at 2:25:10 PM EDT
To: Bill McBride <BillMcBride@williamsburgllc.com>
Subject: Fwd: 7422 Haven Court water test result with high Gross Alpha and Gross Beta

Addison Bond
Project Manager

Williamsburg Homes
240-393-2942
addisonbond@williamsburgllc.com

Begin forwarded message:

From: Addison Bond <AddisonBond@williamsburgllc.com>
Date: March 5, 2020 at 7:47:59 AM EST
To: Bill McBride <BillMcBride@williamsburgllc.com>
Subject: Fwd: 7422 Haven Court water test result with high Gross Alpha and Gross Beta

Addison Bond
Project Manager
Williamsburg Homes
240-393-2942
addisonbond@williamsburgllc.com

Begin forwarded message:

From: ccholland <ccholland@fval.com>
Date: March 4, 2020 at 3:57:11 PM EST
To: Bill McBride <BillMcBride@williamsburgllc.com>, Addison Bond <AddisonBond@williamsburgllc.com>
Cc: "Martin, Sharhonda" <smmartin@howardcountymd.gov>, "Kwolf@howardcountymd.gov" <Kwolf@howardcountymd.gov>
Subject: 7422 Haven Court water test result with high Gross Alpha and Gross Beta

Please feel free to call with any questions.

Regular office hours are Monday - Friday, 8am-4pm. I am out of the office on Fridays.

Thanks for using Fountain Valley Lab!

Sincerely,

Cass Holland
Fountain Valley Analytical Laboratory, Inc.
410-848-1014
410-876-4554
ccholland@fval.com

Celebrating 34 years (1986 - 2020)

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FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

1413 Old Taneytown Rd. Westminster, MD (410) 848-1014 (410) 876-4554 FAX (410) 848-0298

REPORT OF ANALYSIS

Laboratory ID #: 135962 Account #: 4470
Reference: Williamsburg Homes LLC Company: Williamsburg Homes LLC
Location: 7422 Haven Court Requested By: Bill McBride
Highland, MD 20777 Source: Well Water
Date/ Time Collected: 2/27/2020 1017 Site: Pressure Tank
Date/Time Rec'd: 2/27/2020 1243 Treatment: None
Chlorine ppm: Free: ND Total: ND pH: 7.0
Collected By: R. Ott 0266RO Well #: HO-17-0189

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Gross Alpha, Short Term	101	pCi/L	15	900.0	3/1/2020 / 1022 / MJN
Gross Beta, Short Term	64.4	pCi/L	50	900.0	3/1/2020 / 1022 / MJN

NOTES

- 1 Gross Alpha Detection Limit: 1.3 pCi/L; Gross Alpha Error: +/- 5.3 pCi/L
- 2 Gross Beta Detection Limit: 1.8 pCi/L; Gross Beta Error: +/- 2.4 pCi/L
- 3 pCi/L = picocuries per liter
- 4 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 5 Sub-contracted to Reference Lab #278
- 6 ND:None Detected
- 7 Visual well check: Sealed, vented cap
- 8 pH & Chlorine level tested on site

Reason for Test : Use & Occupancy

Building Permit # : 19002173

Date Reported: 3/4/2020

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

January 17, 2018

Williamsburg Group
5485 Harpers Farm Road
Columbia, Maryland 21044

RE: Estates at Schooley Mill Lot 4
Scaggsville Road
Well Tag: HO - 17 - 0189

Dear Williamsburg Group:

A sample was collected during a yield test on November 3, 2017 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 34.4 ± 4.3 picocuries/liter (pCi/L), while the **Gross Beta** level was 32.9 ± 3.1 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 normal) 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 **does not meet** EPA regulatory standards. Additional testing **for these parameters** will be required to secure the future Use & Occupancy. Additional raw water samples for **short and long term Gross Alpha and Gross Beta**, plus **Radium 226 / 228** will be needed to assess any future treatment needs. Alternatively, treatment such as a water softener system or point of use reverse osmosis (R/O) could be considered. If installed, post-treated sampling for **short and long term Gross Alpha, Gross Beta and Radium 226 / 228** will be needed. Please **note** that other standard testing parameters (bacteria, nitrate, turbidity and sand) will still be required 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 or to schedule additional testing.

Sincerely,

Bert Nixon, Director
Bureau of Environmental Health

Enclosure

✓ cc: Property file

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.
8-11-97 2-62

LABORATORY ANALYSIS REQUEST FORM

Plant/Site Name: Estates @ Schaeley Mill Lot 4 County: Howard

Sample Source: Seaggsville Rd. Fulton Location: HO-17-0189

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

County: 1 3 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: S

Collector: S. Collins Telephone No.: 410-313-6287

Date Collected: 11/3/17 Time Collected: 10:20 a.m. _____ p.m.

Field pH: _____ Field Chlorine: _____

Nitric Acid Preserved: Yes No Iced: Yes No

Remarks: Sample collected during yield test

TEST	EPA Code	Lab No.	Method No.	Results (pCi/L)	Date Analyzed	Analyst	Date Reported
<input checked="" type="checkbox"/> Gross Alpha	4000	0896	EPA9000	34.4 ± 4.3	11/7/17	JT	11/9/17
<input checked="" type="checkbox"/> Gross Beta	4100	0896	EPA9000	32.9 ± 3.1	11/7/17	JT	11/9/17
<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		0896	EPA9000	34.6 ± 3.9	11/8/17	JT	11/9/17
<input checked="" type="checkbox"/> Gross Beta Conf		0896	EPA9000	29.3 ± 2.9	11/8/17	JT	11/9/17

Date Received: 11/06/17 Received By: JT Date: 11-09-17

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

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

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: dH₂O Location: HCHD Lab
(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: S

Collector: S. Collins Telephone No.: 410-313-6287

Date Collected: 11/3/17 Time Collected: _____ a.m. 2 p.m.

Field pH: _____ Field Chlorine: _____

Nitric Acid Preserved: Yes No Iced: Yes No

Remarks: _____

<input checked="" type="checkbox"/>	TEST	EPA Code	Lab No.	Method No.	Results (pCi/L)	Date Analyzed	Analyst	Date Reported
<input checked="" type="checkbox"/>	Gross Alpha	4000	0815	EPA 900.0	<2.0	11/7/17	JS	11/9/17
<input checked="" type="checkbox"/>	Gross Beta	4100	0815	EPA 900.0	<4.0	11/7/17	JS	11/9/17
<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: 11/09/17 Received By: _____

Data Release Signature: _____ Date: 11-09-17

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

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

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

1413 Old Taneytown Rd. Westminster, MD (410) 848-1014 (410) 876-4554 FAX (410) 848-0298

REPORT OF ANALYSIS

Laboratory ID #:	136291	Account #:	4470
Reference:	Williamsburg Homes LLC	Company:	Williamsburg Homes LLC
Location:	7422 Haven Court Highland, MD 20777	Requested By:	Bill McBride
Date/ Time Collected:	3/17/2020 1130	Source:	Well Water
Date/Time Rec'd:	3/17/2020 1352	Site:	R/O Tap @ Kitchen Sink
Chlorine ppm:	Free: ND Total: ND	Treatment:	Softener/Reverse Osmosis
Collected By:	J. Yeager 0819JY	pH:	7.1
		Well #:	HO-17-0189

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Gross Alpha, Short Term	0.8	pCi/L	15	900.0	3/20/2020 / 0742 / MJN
Gross Beta, Short Term	2.3	pCi/L	50	900.0	3/20/2020 / 0742 / MJN
Gross Alpha, Long Term	0.7	pCi/L	15	900.0	3/27/2020 / 0618 / MJN
Gross Beta, Long Term	<1.9	pCi/L	50	900.0	3/27/2020 / 0618 / MJN
Radium-226	0.2	pCi/L	****	903.1	3/27/2020 / 1045 / MJN
Radium-228	<0.7	pCi/L	****	Ra-05	3/26/2020 / 0942 / SN

NOTES

- 1 ****Radium 226 and Radium 228 combined have a reference of 5 pCi/L
- 2 Long Term Gross Alpha Detection Limit: 0.6 pCi/L; Long Term Gross Alpha Error: +/- 0.7 pCi/L
- 3 Long Term Gross Beta Detection Limit: 1.9 pCi/L; Long Term Gross Beta Error: +/- 1.2 pCi/L
- 4 pCi/L = picocuries per liter
- 5 Radium 226 Detection Limit: 0.2 pCi/L; Radium 226 Error: +/- 0.2 pCi/L
- 6 Radium 228 Detection Limit: 0.7 pCi/L; Radium 228 Error: +/- 0.4 pCi/L
- 7 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 8 Short Term Gross Alpha Detection Limit: 0.7 pCi/L; Short Term Gross Alpha Error: +/- 0.6 pCi/L
- 9 Short Term Gross Beta Detection Limit: 1.8 pCi/L; Short Term Gross Beta Error: +/- 1.2 pCi/L
- 10 ND:None Detected
- 11 Subcontracted to Reference Lab #278
- 12 pH & Chlorine level tested on site

Reason for Test : Use & Occupancy
 Building Permit # : 19002173

Date Reported: 4/2/2020



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

February 20, 2018

Williamsburg Group, LLC
5485 Harpers Farm Road
Columbia, MD 21044

Re: Water sample results for Estates at Schooley Mill – Lot 4

Dear Homeowner,

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

Elevated sodium levels in drinking water may affect individuals on low-salt diets. The action level for sodium is 20 milligrams per liter (mg/L); **sodium from the well measured 10.25 mg/L pre-treatment.**

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 104 mg/L.** The secondary maximum contaminant level for TDS is 500 mg/L; **TDS from the well measured 329 mg/L.**

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

Sincerely,

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

Cc: Community Hygiene Program
File

Send Report To: Bert Nixon

State of Maryland
DHMH - Laboratories Administration
Division of Environmental Sciences

Lab No. Date Received

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

TRACE METALS LABORATORY

1770 Ashland Avenue
Baltimore, Maryland 21205



E18001822001

Received: 11/06/2017

Metals

HO-17-0189

LABORATORY ANALYSIS REQUEST

Do not write above this line

Please Print

Sample ID No: HO-17-0189 Site Name: Estates @ Schaefer Mill - Lot 4 County: Howard

Sample Source: Swagville Rd Felton Collector: S. Collins
Street Town or City Name

Date Collected: 11/3/2017 Time Collected: 10:20 a.m. p.m. Phone #: 410-313-6287

Sample Preserved By: Field ESRL WMRL Central Lab
Preservative Used: HNO₃ mL pH: < 2

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

Specify Program: SDWA NPDES CWA RCRA Consumer Products Other

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

Remarks: 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>8H</u>		Potassium (K)				
	Thallium (Tl)			Silver (Ag)				

RECEIVED

Lab Supervisor: _____

Date Reported: NOV 21 2017

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: E18001822 Date Coll.: 11/03/2017 Date Received: 11/06/2017 Submitted By: Collins

Field ID: HO-17-0189
Lab No.: E18001822001

<u>Method</u>	<u>Element</u>	<u>Result</u>	<u>Units</u>	<u>Date Analyzed</u>
EPA 200.7	Sodium	10.25	ppm	11/13/2017

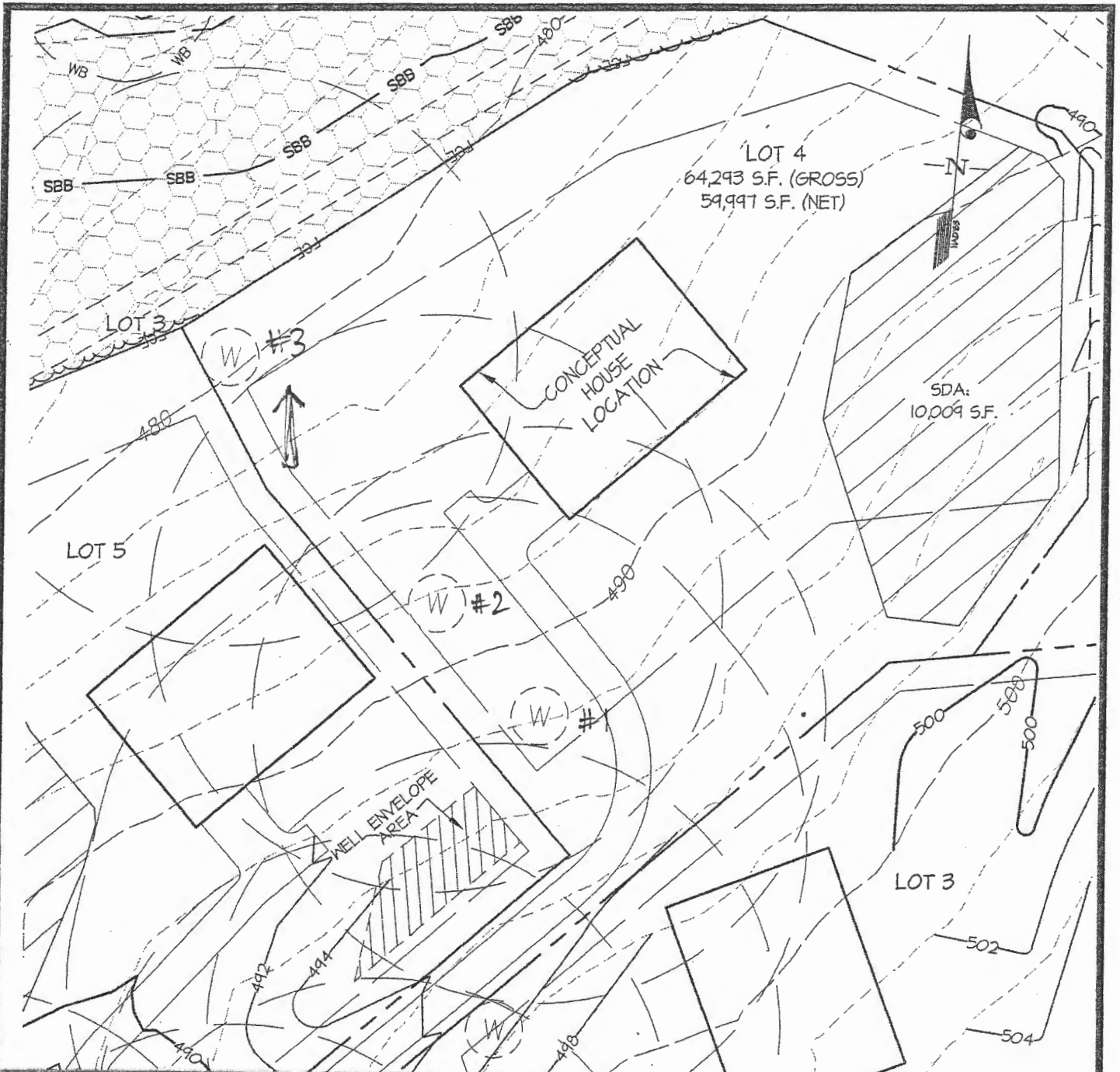
Comments:

Approved by: Yinfeng Chai

Approval date: 11/14/2017

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

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



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

H0-17-0189

INFORMATION CALL NUMBER AND WRITE
 1800 WASHINGTON BLVD
 BALTIMORE MARYLAND 21230

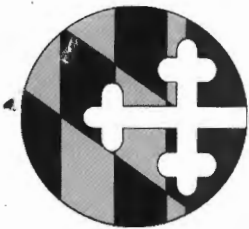
GLW GUTSCHICK LITTLE & WEBER, P.A.
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
 BURTONSVILLE, MARYLAND 20866
 TEL: 301-421-4024 BAL: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

Well sites approved
 10/10/17 SC
 Well sites staked by GLW
 Drill site #3 FIRST
 ESTATES AT SCHOOLEY MILL
 LOT 4

PREPARED FOR:
 WILLIAMSBURG GROUP, LLC
 5485 HARPERS FARM RD., SUITE 200
 COLUMBIA, MD 21044
 ATTN.: BOB CORBETT
 410-997-8800

G. L. W. No.	14067
ZONING	RR-DEO
TAX MAP/GRID	40-11
DATE	SEPTEMBER, 2017
SCALE	1"=50'
SHEET	1 OF 1

L:\CADD\DRAWINGS\14067\PLANS BY GLW\WELL SITE PLANS\LOT 4.dwg
 10/10/17 11:17 AM



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 NoE18001823 Date Coll. 11/03/2017 Date Received 11/06/2017 Submitted By: S. Collins

Field ID: HO-17-0189
Lab No.: E18001823001

<u>Analyte</u>	<u>Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Analyzed</u>
Chloride	SM 4500-Cl E	104	mg/L	11/14/2017
Total Dissolved Solids	SM 2540C	329	mg/L	11/09/2017

Comments:

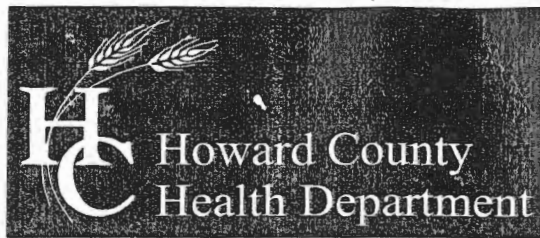
Approved by:

Shahin Amini

Approval date: 11/21/2017

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

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Bureau of Environmental Health

8930 Stanford Blvd, Columbia, MD 21045
Main: 410-313-2640 | Fax: 410-313-2648
TDD 410-313-2323 | Toll Free 1-866-313-6300
www.hchealth.org

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

MEMORANDUM

DATE: October 10, 2017

TO: Allen Compten (MSD 009)
Fogle's Well Drilling

FROM: Sarah Collins, L.E.H.S. SEC
Howard County Health Department

RE: Estates at Schooley Mill
Well Permits

Please note the following special conditions for the wells at the Estates at Schooley Mill:

1. All wells require 50' of steel casing or 10' into competent bedrock,* whichever is deeper.
2. All wells require a radium sample at the yield test.
3. Wells on lots 1 and 2 require volatile organic compounds (VOCs) sampling at the yield test.
4. Wells on lots 1, 3, 4, 7, and 9 require sodium, chloride, and total dissolved solids (TDS) sampling at the yield test.

Hinkle
Property

FILE INQUIRY NOTES

Lot 4

DATE RESULTS OF REVIEW FOR FILE

7/27/15 The Well installed
on this lot must
have steel casing
installed to at least
50 feet depth, OR
10 feet into competent
bedrock, WHICHEVER
IS DEEPER.

10/11/17 Discussed special conditions on well permit with Allen
Compton via phone. (SC)

R Buckner

7/27/15 The septic system on
this lot must include
a BAT unit and all drain fields
must have LPD design or
equivalent

R Buckner