

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

June 26, 2019

Mueller Homes  
7520 Main Street  
Suite 201  
Sykesville, Maryland 21784

RE: Lot 70 Walnut Grove  
5215 Sweet Meadow Lane  
Clarksville, Maryland 21029  
Replacement Well  
Well Tag: HO - 18 - 0028

Dear Mueller Homes:

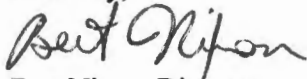
A sample was collected for your replacement well during a yield test on May 2, 2019 and submitted to the Maryland Department of Health Laboratories to assess the possible presence of **Gross Alpha** and **Gross Beta** in the future well water supply. **Gross Alpha** and **Gross Beta** measure the total 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  $< 2.0 \pm 0.0$  picocuries/liter (pCi/L), while the **Gross Beta** level was  $5.4 \pm 1.8$  pCi/L. The **Gross Alpha** result was below its **maximum contaminant level (MCL)** of 15 pCi/L, while the **Gross Beta** level was below its targeted standard of 50 pCi/L (roughly equivalent to the **annual dose rate** of 4 millirems/year).

At the time of testing and with respect to these parameters, the replacement well water supply **meets** EPA regulatory standards. Additional testing for these parameters will **not be necessary** to fully evaluate the levels of these naturally occurring contaminants. Keep in mind, other tests to meet potability standards (i.e., bacteria, nitrate, turbidity and sand), if not already done, will be needed to certify this well.

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

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

05-449340

Lab No.

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

## LABORATORY ANALYSIS REQUEST FORM

Plant/Site Name: 5215 Sweet Meadow LnCounty: HowardSample Source: HG0028Location: replacement well HO-18-0028  
(Well no., lab sink, sample tap, etc.)Radon-222 Bottle A \_\_\_\_\_  
Bottle B \_\_\_\_\_

Radon-222 Field Blank

Bottle A \_\_\_\_\_  
Bottle B \_\_\_\_\_County: 13Plant No. 

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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: 

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Federal Project: 5Collector: R. HoppertTelephone No.: 410-313-1781Date Collected: 5/2/19Time Collected: 11:00 a.m. \_\_\_\_\_ p.m.

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

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

Nitric Acid Preserved: Yes ☒ No ☐Iced: Yes ☐ No ☒Remarks: \* Sample taken during yield test

<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	2154	EPA700.0	<2.0	5/8/19	HA	5/9/19
<input checked="" type="checkbox"/>	Gross Beta	4100	2154	EPA900.0	5.4 ± 1.8	5/8/19	HA	5/9/19
<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: 5/3/2019Received By: R. HolmesData Release Signature: AdministrativeDate: 5/9/19

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

FORM REVISED 05/15  
DHMH 4540 05/17

PROGRAM COPY

SAMPLE TESTED AS RECEIVED

SEND REPORT TO:

Bert Nixon

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

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

Lab No.

202153 E-3

## LABORATORY ANALYSIS REQUEST FORM

Plant/Site Name: Howard County Health DeptCounty: HowardSample Source: HC-0000 (Field blank)Location: Lab

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

Radon-222 Bottle A \_\_\_\_\_  
Bottle B \_\_\_\_\_

Radon-222 Field Blank

Bottle A \_\_\_\_\_  
Bottle B \_\_\_\_\_County 13Plant No. 

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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: 

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Federal Project: 5Collector: R. RappaportTelephone No.: 410-313-1781Date Collected: 5/2/2019Time Collected: \_\_\_\_\_ a.m. 12:00 p.m.Field pH: 7.1 Field Chlorine: 0.1Nitric Acid Preserved: Yes ☒ No ☐Iced: Yes ☐ No ☒Remarks: Sample taken in lab w/ distilled H<sub>2</sub>O

<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	2153	EM500.0	<2.0	5/8/19	MM	5/9/19
<input checked="" type="checkbox"/>	Gross Beta	4100	2153	EM500.0	<4.0	5/8/19	MM	5/9/19
<input type="checkbox"/>	Radium-226	4020						
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<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: 5/3/2019Received By: R. HolmesData Release Signature: W. W. T. T. T.Date: 5/9/19

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

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