

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

September 30, 2019

**Mr. and Mrs. Patrick McConnell**  
**5024 Lindera Court**  
**Ellicott City, Maryland 21042**

**RE: Walnut Creek Lot 134 Phase 4**  
**5024 Lindera Court**  
**Ellicott City, Maryland 21042**  
**Replacement Well**  
**HO - 18 - 0025**

Dear Mr. and Mrs. McConnell:

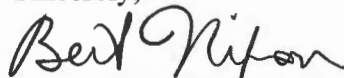
A sample was collected on August 6, 2019 and submitted to the Maryland Department of Health Laboratories to assess the possible presence of **Gross Alpha** and **Gross Beta** in the replacement well water supply. **Gross Alpha** and **Gross Beta** measure the total alpha and beta particle activity in 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 (sample collected from the water tank – no treatment referenced) revealed a **Gross Alpha** of  $2.9 \pm 2.0$  picocuries/liter (pCi/L), while the **Gross Beta** level was  $3.0 \pm 1.7$  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 results **meets** EPA regulatory standards. Additional testing **for these parameters** will not be required. Treatment for these contaminants does not appear necessary. Other samples collected for compliance with potability standards are included in a separate letter enclosed with this correspondence.

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 testing to satisfy final potability requirements.

Sincerely,



Bert Nixon, Director  
Bureau of Environmental Health

Enclosure

✓cc: Property file

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.

05-598887

## LABORATORY ANALYSIS REQUEST FORM

Plant/Site Name: Sarah McConnell (PATRICK) County: Howard 4  
 Sample Source: 5024 Lindera Ct. Location: ELlicott City 21042  
 Radon-222 Bottle A HC5024 Radon-222 Field Blank Bottle A \_\_\_\_\_  
 Bottle B \_\_\_\_\_ Bottle B \_\_\_\_\_

County 13

Plant No.

CHECK (one per Box)

Type	
Drinking Water	<input checked="" type="checkbox"/>
Landfill	<input type="checkbox"/>
Stream	<input type="checkbox"/>
Other	<input type="checkbox"/>

Service	
Community	<input type="checkbox"/>
Non-Community	<input type="checkbox"/>
Private	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>

Point of Collection	
Source (Raw)	<input checked="" type="checkbox"/>
Distribution (treated)	<input type="checkbox"/>
MCL	<input type="checkbox"/>

Testing	
Emergency	<input type="checkbox"/>
Routine	<input checked="" type="checkbox"/>
Recheck	<input type="checkbox"/>
Special	<input type="checkbox"/>

Submitters Code: 4 F Federal Project: 5  
 Collector: T. Kechan Telephone No.: 410 313 1784  
 Date Collected: 8-6-2019 Time Collected: 9:30 a.m. \_\_\_\_\_ p.m.  
 Field pH: 7.0 Field Chlorine: 0.0  
 Nitric Acid Preserved: Yes ☒ No ☐ Iced: Yes ☒ No ☐  
 Remarks: replacement well ICOP.

✓	TEST	EPA Code	Lab No.	Method No.	Results (pCi/L)	Date Analyzed	Analyst	Date Reported
<input checked="" type="checkbox"/>	Gross Alpha	4000	261	EPA900.0	2.9 ± 2.0	8/7/19	KH	8/13/19
<input checked="" type="checkbox"/>	Gross Beta	4100	261	EPA900.0	3.0 ± 1.7	8/7/19	KH	8/13/19
<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 checked="" type="checkbox"/>	Gross Alpha	4000	261	EPA900.0	1.0 ± 0.7	8/7/19	KH	8/13/19
<input checked="" type="checkbox"/>	Gross Beta	4100	261	EPA900.0	2.4 ± 1.9	8/7/19	KH	8/13/19

Date Received: 8/6/19 Received By: Administrative Technician  
 Data Release Signature: \_\_\_\_\_ Date: 8/14/19

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

SEND REPORT TO:

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: Sarah McConnellCounty: HowardSample Source: 5024 Lindera Ct.Location: near tank tap

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

Radon-222

Bottle A

HC5024-FB

Radon-222 Field Blank

Bottle A

Bottle B

Bottle B

County

13

Plant No.

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CHECK (one per Box)

Type	
Drinking Water	<input type="checkbox"/>
Landfill	<input type="checkbox"/>
Stream	<input type="checkbox"/>
Other <u>DIW</u>	<input checked="" type="checkbox"/>

Service	
Community	<input type="checkbox"/>
Non-Community	<input type="checkbox"/>
Private	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>

Point of Collection	
Source (Raw)	<input checked="" type="checkbox"/>
Distribution (treated)	<input type="checkbox"/>
MCL	<input type="checkbox"/>

Testing	
Emergency	<input type="checkbox"/>
Routine	<input checked="" type="checkbox"/>
Recheck	<input type="checkbox"/>
Special	<input type="checkbox"/>

Submitters Code:

4 F

Federal Project:

S

Collector:

T. Keenan

Telephone No.:

410 313 1784

Date Collected:

8-6-2019

Time Collected:

9:40 a.m. \_\_\_\_\_ p.m.

Field pH:

7.0

Field Chlorine:

0.0

Nitric Acid Preserved:

Yes

☒

No

☐

Iced:

Yes

☒

No

☐

Remarks:

field blank. Replacement well ICOP.

<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	262	EPH 900.0	0.4 ± 0.6	8/7/19	RH	8/13/19
<input checked="" type="checkbox"/>	Gross Beta	4100	262	EPH 900.0	0.6 ± 1.4	8/7/19	RH	8/13/19
<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:

8/14/19

Received By:

ASubmit

Data Release Signature:

Wanda Tuck

Date:

8/14/19

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"/>		

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