

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:

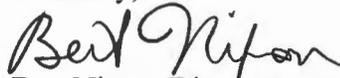
A sample was collected on August 6, 2019 and submitted to the Maryland Department of Health Laboratories to assess the possible presence of **Gross Alpha** and **Gross Beta** in the replacement well water supply. **Gross Alpha** and **Gross Beta** measure the total alpha and beta particle activity in 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 ± 2.0 picocuries/liter (pCi/L), while the **Gross Beta** level was 3.0 ± 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

05-598887
Lab No.

LABORATORY ANALYSIS REQUEST FORM

Plant/Site Name: Sarah McConnell (PATRICK) County: Howard 4

Sample Source: 5024 Lindera Ct. Location: ELlicott City 21042 tank tap
(Well no., lab sink, sample tap, etc.)

Radon-222 Bottle A HC5024 Radon-222 Field Blank Bottle A _____
Bottle B _____ Bottle B _____

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: 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	7.4 ± 1.9	8/7/19	KH	8/13/19

Date Received: 08/06/19 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

FORM REVISED 05/15
DHMH 4540 05/17

PROGRAM COPY

SAMPLE TESTED AS RECEIVED

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 McConnell County: Howard

Sample 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.

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

CHECK (one per Box)

Type	Service	Point of Collection	Testing
Drinking Water <input 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 <u>DIW</u> <input checked="" type="checkbox"/>	Other <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.

TEST	EPA Code	Lab No.	Method No.	Results (pCi/L)	Date Analyzed	Analyst	Date Reported
<input checked="" type="checkbox"/> Gross Alpha	4000	262	EPH900.0	0.4 ± 0.6	8/7/19	RH	8/13/19
<input checked="" type="checkbox"/> Gross Beta	4100	262	EPH900.0	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 T... Date: 8/14/19

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 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