



Bureau of Environmental Health

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Maura Rossman, M.D., Health Officer

December 15, 2014

Michael Balakirsky
11755 Bragdon Wood
Clarksville, Maryland 21029

RE: Chapel Estates Lot 2
Bragdon Woods Drive
Well Tag: HO - 14 - 0047

Dear Mr. Balakirsky:

A sample was collected during a yield test on October 31, 2014 and submitted to the Department of Health & Mental Hygiene 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 6.0 ± 1.9 picocuries/liter (pCi/L), while the **Gross Beta** level was 10.5 ± 2.1 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 value 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 future well water supply is **within** EPA regulatory standards. Additional testing **for these parameters** will not be required to secure Use & Occupancy approval. Please also note that other standard testing parameters (bacteria, nitrate, turbidity and sand) will still be required to help secure final approval for the replacement 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 follow-up testing.

Sincerely,

Bert Nixon, Director
Bureau of Environmental Health

Enclosure
cc: Property 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 #:	130847	Account #:	1919
Reference:	Nasha Patel	Company:	Robert L. Feezer Co. Inc.
Location:	11811 Chapel Estates Drive	Requested By:	Rusty George
	Clarksville, MD 21029	Source:	Well Water
Date/ Time Collected:	6/18/2019 1155	Site:	Pressure Tank
Date/Time Rec'd:	6/18/2019 1426	Treatment:	Neutralizer/Softener/Sediment Filter*
Chlorine ppm:	Free: ND Total: ND	pH:	6.8
Collected By:	J. Yeager 6176JY	Well #:	HO-14-0047

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Gross Alpha, Short Term	21.6	pCi/L	15	900.0	6/20/2019 / 0752 / MJN
Gross Beta, Short Term	27.8	pCi/L	50	900.0	6/20/2019 / 0752 / MJN

NOTES

- 1 Gross Alpha Detection Limit: 2.3 pCi/L; Gross Beta Detection Limit: 2.8 pCi/L
- 2 pCi/L = picocuries per liter
- 3 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 4 Sub-contracted to Reference Lab #278
- 5 Visual well check: Sealed, vented cap
- 6 ND:None Detected
- 7 pH & Chlorine level tested on site
- 8 *Sample collected prior to treatment

Reason for Test : Use & Occupancy
Building Permit # : 18000473

Date Reported: 6/21/2019

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 #:	130849	Account #:	1919
Reference:	Nasha Patel	Company:	Robert L. Feezer Co. Inc.
Location:	11811 Chapel Estates Drive	Requested By:	Rusty George
	Clarksville, MD 21029	Source:	Well Water
Date/ Time Collected:	6/18/2019 1215	Site:	Downstairs Bar Tap
Date/Time Rec'd:	6/18/2019 1426	Treatment:	Neutralizer/Softener/Sediment Filter
Chlorine ppm:	Free: ND Total: ND	pH:	7.5
Collected By:	J. Yeager 6176JY	Well #:	HO-14-0047

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Gross Alpha, Short Term	<2.0	pCi/L	15	900.0	6/20/2019 / 0929 / MJN
Gross Beta, Short Term	<2.4	pCi/L	50	900.0	6/20/2019 / 0929 / MJN

NOTES

- 1 Gross Alpha Detection Limit: 2.0 pCi/L; Gross Beta Detection Limit: 2.4 pCi/L
- 2 pCi/L = picocuries per liter
- 3 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 4 Sub-contracted to Reference Lab #278
- 5 ND:None Detected
- 6 pH & Chlorine level tested on site
- 7 Visual well check: Sealed, vented cap

Reason for Test : Use & Occupancy

Building Permit # : 18000473

Date Reported: 6/21/2019

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 #:	131094	Account #:	1919
Reference:	Nasha Patel	Company:	Robert L. Feezer Co. Inc.
Location:	11811 Chapel Estates Drive	Requested By:	Rusty George
	Clarksville, MD 21029	Source:	Well Water
Date/ Time Collected:	6/27/2019 1238	Site:	Pressure Tank
Date/Time Rec'd:	6/27/2019 1507	Treatment:	Neutralizer/Softener/Sediment Filter*
Chlorine ppm:	Free: ND Total: ND	pH:	6.9
Collected By:	J. Yeager 6176JY	Well #:	HO-14-0047

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Gross Alpha, Long Term	9.6	pCi/L	15	900.0	7/5/2019 / 0654 / MJN
Gross Beta, Long Term	22.1	pCi/L	50	900.0	7/5/2019 / 0654 / MJN

NOTES

- 1 *Sample collected prior to treatment
- 2 Gross Alpha Detection Limit: 1.7 pCi/L; Gross Beta Detection Limit: 2.7 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 ND:None Detected
- 6 pH & Chlorine level tested on site
- 7 Subcontracted to Reference Lab #278

Reason for Test : Use & Occupancy

Building Permit # : 18000473

Date Reported: 7/8/2019

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 #: 131095 Account #: 1919
Reference: Nasha Patel Company: Robert L. Feezer Co. Inc.
Location: 11811 Chapel Estates Drive Requested By: Rusty George
Clarksville, MD 21029 Source: Well Water
Date/ Time Collected: 6/27/2019 1238 Site: Pressure Tank
Date/Time Rec'd: 6/27/2019 1507 Treatment: Neutralizer/Softener/Sediment Filter*
Chlorine ppm: Free: ND Total: ND pH: 6.9
Collected By: J. Yeager 6176JY Well #: HO-14-0047

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Radium-226	2.4	pCi/L	****	903.1	7/10/2019 / 1305 / MJN
Radium-228	4.1	pCi/L	****	Ra-05	7/9/2019 / 1240 / SN

NOTES

- 1 ****Radium 226 and Radium 228 combined have a reference of 5 pCi/L
- 2 pCi/L = picocuries per liter
- 3 pH & Chlorine level tested on site
- 4 Radium 226 Detection Limit: 0.2 pCi/L; Radium 228 Detection Limit: 0.7 pCi/L
- 5 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 6 Sub-contracted to Reference Lab #278
- 7 ND:None Detected
- 8 Visual well check: Sealed, vented cap
- 9 *Sample collected prior to treatment

Reason for Test : Use & Occupancy

Building Permit # : 18000473

Date Reported: 7/11/2019