

**Bureau of Environmental Health**  
 8930 Stanford Boulevard, Columbia, MD 21045  
 Main: 410-313-2640 | Fax: 410-313-2648  
 TDD 410-313-2323 | Toll Free 1-866-313-6300  
[www.hchealth.org](http://www.hchealth.org)  
 Facebook: [www.facebook.com/hocohealth](http://www.facebook.com/hocohealth)

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

RECEIPT DATE: 4/26/2022    **ONSITE SEWAGE DISPOSAL SYSTEM**    P 571515

APPROVAL DATE: 5/5/22    **PERMIT:**    **REPAIR**    A Repair

PROPERTY ADDRESS: 13416 Arada Court

SUBDIVISION: \_\_\_\_\_ LOT: \_\_\_\_\_ TAX ID: \_\_\_\_\_

CONTRACTOR: Freedom Septic    EMAIL: Christy@freedomseptic.com

CONTRACTOR ADDRESS: 2809 Liberty Rd, Sykesville, MD 21784    PHONE: 410-795-2947

PROPERTY OWNER: Vera Hendricks    EMAIL: \_\_\_\_\_

OWNER ADDRESS: Same    PHONE: \_\_\_\_\_

SEPTIC TANK SIZE: Existing    PUMP TANK CAPACITY: n/a    PUMP SIZE: n/a

DISTRIBUTION SYSTEM:     GRAVITY     PRESSURE DOSED    BEDROOMS: 3    APPLICATION RATE: 0.8

TRENCHES:	LINEAR FEET REQUIRED: <u>116</u>	INLET DEPTH: <u>2</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>6</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>11</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>3</u>
LOCATION:	<b>TO BE STAKED BY SANITARIAN DURING PRE-CONSTRUCTION INSPECTION.</b>	
NOTES:	Install 2 x 58 ft trenches on contour just below existing drive. Trenches staked out in field. Pump and collapse existing drywell.	

ISSUED BY: K. Wolf    ISSUE DATE: 4/26/22    EXPIRATION DATE: 4/26/23

- NOTE: CONTRACTOR MUST SCHEDULE A PRE-CONSTRUCTION INSPECTION PRIOR TO BEGINNING ANY INSTALLATION
- NOTE: CONTRACTOR MUST SCHEDULE AN INSPECTION AND GAIN APPROVAL OF ALL COMPONENTS PRIOR TO COVERING
- NOTE: STONE MUST BE APPROVED BY HEALTH DEPARTMENT AND GRAVEL TICKET MUST BE AVAILABLE FOR REVIEW.
- NOTE: WATERTIGHT SEPTIC TANKS REQUIRED
- NOTE: ALL PARTS OF SEPTIC SYSTEM SHALL BE AT LEAST 100 FEET DOWNGRADIENT FROM ANY WATER WELL
- NOTE: MANHOLE RISERS REQUIRED ON ALL SEPTIC TANKS AND PUMP CHAMBERS
- NOTE: AN ELECTRICAL PERMIT IS REQUIRED FOR INSTALLATION OF ANY ELECTRICAL COMPONENTS OF THE SYSTEM  
 ELECTRICAL PERMIT ISSUED    E n/a
- NOTE: THE HCHD DOES NOT WARRANTY ANY SYSTEM AND CANNOT GUARANTEE THE PERFORMANCE OF THIS SYSTEM AS DESIGNED. BY ACCEPTING THIS PERMIT, THE OWNER AND/OR APPLICANT ACKNOWLEDGE THAT THE SPECIFICATIONS DETAILED IN THIS DESIGN ARE ONE POSSIBLE OPTION AND THAT THE HCHD WILL REVIEW OTHER PROPOSALS. YOU HAVE THE OPTION TO SEEK THE ADVICE OF A QUALIFIED DESIGN CONSULTANT OR PROFESSIONAL ENGINEER FOR FURTHER GUIDANCE.
- NOTE: AN INDIVIDUAL CERTIFIED BY MDE AND THE MANUFACTURER FOR BAT INSTALLATION MUST BE PRESENT AT ALL TIMES DURING BAT INSTALLATION.
- NOTE: MDE RECOMMENDS SEPTIC TANKS, BAT, AND OTHER PRETREATMENT UNITS BE PUMPED AT A FREQUENCY ADEQUATE TO ENSURE THAT SOLIDS ARE NOT DISCHARGED TO THE DISPOSAL AREA

**NEITHER THE HOWARD COUNTY COUNCIL NOR THE HEALTH DEPARTMENT IS RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM.**  
**PERMITTEE RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT.**  
**CALL 410-313-1771 TO SCHEDULE INSPECTIONS.**

NOT TO SCALE

**TRENCH/DRAINFIELD DATA**

WIDTH	INLET	BOTTOM
3'	2'	6'
NUMBER OF TRENCHES		2
TOTAL LENGTH		116'
ABSORPTION AREA		348 sq ft + side well
DISTRIBUTION BOX LEVEL		speedy
DISTRIBUTION BOX BAFFLE		PVC
DISTRIBUTION BOX PORT		cement

**Ex. SEPTIC TANK DATA**

SEPTIC TANK 1 LEVEL Yes

MANUFACTURER N/A

CAPACITY \_\_\_\_\_ GAL

SEAM LOC mid

TANK LID DEPTH 6"

BAFFLES outlet

BAFFLE FILTER -

MANHOLE LOC outlet lid 6" BG

6" PORT LOC inlet

WATERTIGHT TEST OK ✓

SLOTTED no

DATE ON LID N/A

**PUMP/SEPTIC TANK LEVEL N/A**

MANUFACTURER \_\_\_\_\_

CAPACITY \_\_\_\_\_ GAL

SEAM LOC \_\_\_\_\_

TANK LID DEPTH \_\_\_\_\_

BAFFLES \_\_\_\_\_

BAFFLE FILTER \_\_\_\_\_

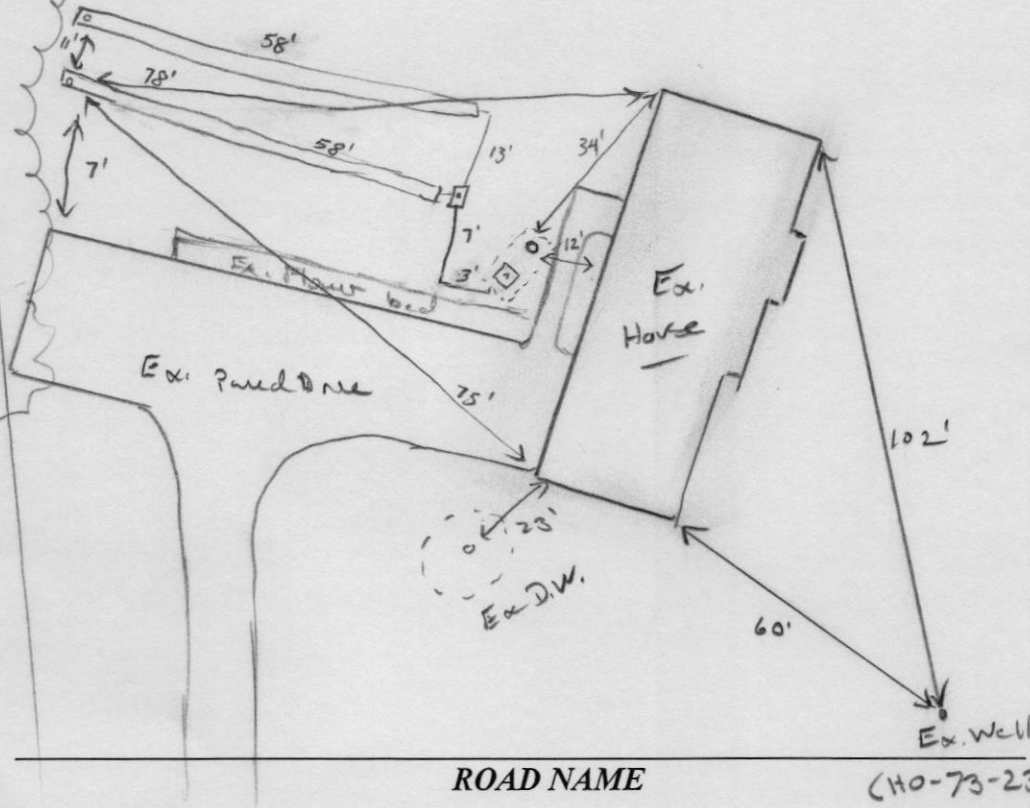
MANHOLE LOC \_\_\_\_\_

6" PORT LOC \_\_\_\_\_

WATERTIGHT TEST \_\_\_\_\_

SLOTTED \_\_\_\_\_

DATE ON LID \_\_\_\_\_



**PRE-CONSTRUCTION:**

4/14/22 Install 2x 58' trenches above porch on low side of ex drive. Pump/collection ex Drywell (KWD)

**INSTALLATION:**

5/5/22 Drywell abandoned. Outlet baffle added to tank. No manhole added to tank because lid is only 6" in ground. 2x 58' trenches installed. D-box level. (ST)

FINAL INSPECTOR

Susan Thomas

DATE OF APPROVAL

5/5/22



## Onsite Disposal Inspection

**Property Address:**  
13416 Arada Ct  
Highland MD 20777

MDE Certified Septic Inspector

David Hayes

PO Box 143  
Lusby, MD 20657  
443-771-3478

[Info@4CornersHomeInspect.com](mailto:Info@4CornersHomeInspect.com)

[4CornersHomeInspect.com](http://4CornersHomeInspect.com)

MD License #32489

# ☐☐☐ TABLE OF CONTENTS

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<b>Date:</b> 3/18/2022	<b>Time:</b> 09:00 AM	<b>Report ID:</b> 0318202213416S
<b>Property:</b> 13416 Arada Ct Highland MD 20777	<b>Customer:</b> Thomas Pinkiert Danielle Pinkiert	<b>Real Estate Professional:</b> Chelsie Clark C21

**SEPTIC INSPECTION****Property Type:**

Residential

**Age of Dwelling:**

1979

**Number of Bedrooms:**

3

**Occupancy:**

Occupied

**Rental:**

No

**Homeowner interview conducted?:**

Yes

**OSDS records requested from county?:**

Yes

**Were records available?:**

Yes

**County:**

Howard

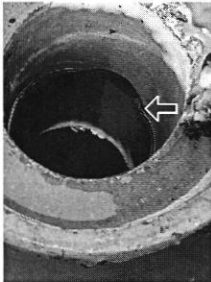
## GENERAL SUMMARY

### 4. FINDING AND COMMENTS

#### 4.1 SOIL ABSORPTION SYSTEM

##### UNACCEPTABLE

The soil absorption system and drywell have failed. Water backflowed into the septic tank after only 175 gallons of water. A normal septic inspection with an occupied home should take 300 gallons of water. Contact a licensed septic company for repairs.

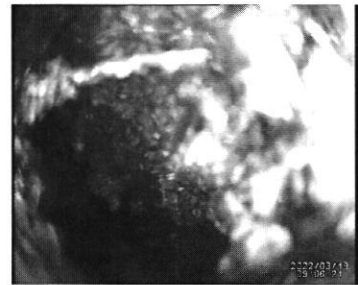


Water level in outlet baffle above operating level

#### 4.2 OTHER

##### UNACCEPTABLE

Damaged observed to driveway in the same areas the drain pipes from the septic run. Damage was observed to pipe between septic and drywell. There is no way to access the drain from the drywell to drainfield. Water was still making it to the drywell. Contact a licensed septic company for repairs.



Drain pipe to drywell



Water sitting in drain pipe to drywell

### 4.3 ADDITIONAL COMMENTS

Due to the age of the septic system and the failed soil absorption system and damaged drains a whole new system may be recommended by the county. Homeowner said septic company that pumped it mentioned there may be a problem with the septic. This is for your information.

*Prepared Using HomeGauge <http://www.HomeGauge.com> : Licensed To David Hayes*

## RESULTS AT A GLANCE

22

ITEMS INSPECTED

Total number in report.

3

SUMMARY COMMENTS

Total number in report.

14

PHOTOS

Total number in report.

## 1. OSDS HISTORY

### GENERAL INFORMATION: OSDS HISTORY

How Long Has Resident Lived

There:

Unknown

Number of People in Dwelling

Now:

1

Age of OSDS:

43 years

### ITEMS: OSDS HISTORY

#### 1.0 ANY HISTORY OF SEWAGE PROBLEMS? IF YES, DETAIL PROBLEMS BELOW

UNKNOWN

1.1 PUMPING FREQUENCY

☺ UNKNOWN

1.2 LAST DATE PUMPED

Homeowner said it was pumped last year.

1.3 ANY REPAIRS TO OSDS? IF YES, DETAIL REPAIRS (INCLUDE DATES)

☺ UNKNOWN

## 2. OSDS COMPONENTS

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### GENERAL INFORMATION: OSDS COMPONENTS

**Septic Tank Size:**

1000 gallons

**Septic Construction:**

Concrete

**Conveyance System Type:**

PVC  
Cast Iron  
Terra Cotta

### ITEMS: OSDS COMPONENTS

#### 2.0 TRENCHES

YES

#### 2.1 SEEPAGE PITS/DRYWELLS

YES

## 🏠 3. INSPECTION AND OBSERVATIONS

### ✂ GENERAL INFORMATION: INSPECTION AND OBSERVATIONS

**Liquid Level In Tank:**

Normal

**Total Liquid Depth:**

5 feet

**Scum (inches):**

1 inch

**Sludge (inches):**

6 inches

**Distribution Box Viewed:**

Not Available

**Soil Absorption Viewed:**

Probed  
Video

**Depth of Tank Below Grade:**

6 inches

**Volume of Water Introduced  
to System:**

175 gallons

### 👁 ITEMS: INSPECTION AND OBSERVATIONS

#### 3.0 WAS SEPTIC TANK LOCATED?

YES

Located in front yard.



#### 3.1 DESCRIBE ACCESS TO SEPTIC TANK

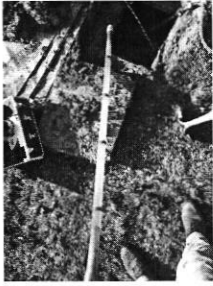
Inspection port on inlet side. Access lid 6 inches below grade on outlet side.

#### 3.2 ANY EVIDENCE OF ELEVATED LEVELS OF SEWAGE IN THE PAST?

YES

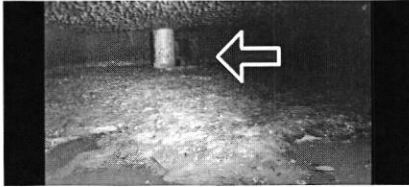
#### 3.3 WAS SLUDGE SAMPLE COLLECTED?

YES



3.4 PRESENCE OF INLET BAFFLE VERIFIED AND CONDITION ACCEPTABLE?

YES



3.5 PRESENCE OF OUTLET BAFFLE VERIFIED AND CONDITION ACCEPTABLE?

YES

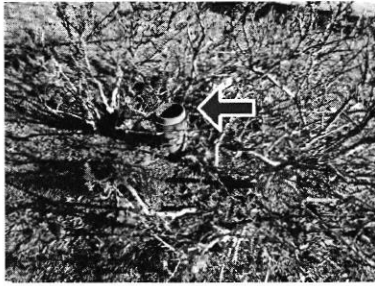


3.6 WAS SOIL ABSORPTION SYSTEM LOCATED?

YES

3.7 ARE OBSERVATION PORTS PRESENT / FUNCTIONAL?

YES



### 3.8 SOIL ABSORPTION SYSTEM OBSERVATIONS

UNACCEPTABLE

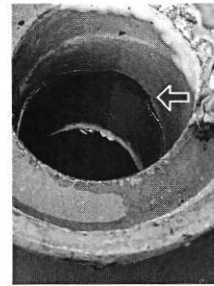
Seepage pit was filled with water at the beginning of the inspection. It filled up an extra 2 inches before backflowing into the septic tank.



Seepage Pit/Drywell



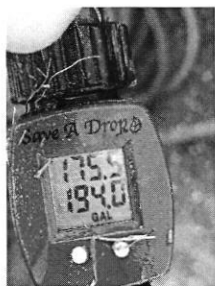
Water level low at the beginning of the inspection.



Water level in septic tank when it failed.

### 3.9 WAS HYDRAULIC LOAD TEST PERFORMED?

YES



### 3.10 HYDRAULIC LOAD TEST OBSERVATIONS

UNACCEPTABLE

### 3.11 WERE ALL PLUMBING FIXTURES AND APPLIANCES VERIFIED TO BE PLUMBED TO THE OSDS?

YES

## 🏠 4. FINDING AND COMMENTS

### 👁️ ITEMS: FINDING AND COMMENTS

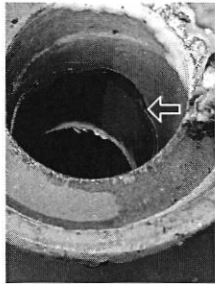
#### 4.0 SEPTIC TANK / PRE-TREATMENT UNIT

☑️ ACCEPTABLE

#### 4.1 SOIL ABSORPTION SYSTEM

❌ UNACCEPTABLE

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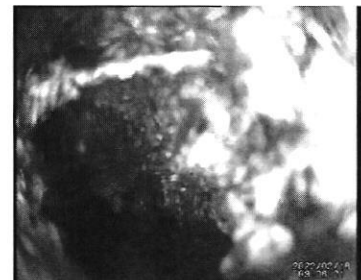


Water level in outlet baffle above operating level

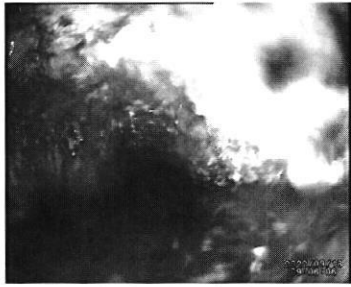
#### 4.2 OTHER

❌ UNACCEPTABLE

Damaged observed to driveway in the same areas the drain pipes from the septic run. Damage was observed to pipe between septic and drywell. There is no way to access the drain from the drywell to drainfield. Water was still making it to the drywell. Contact a licensed septic company for repairs.



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#### 4.3 ADDITIONAL COMMENTS

Due to the age of the septic system and the failed soil absorption system and damaged drains a whole new system may be recommended by the county. Homeowner said septic company that pumped it mentioned there may be a problem with the septic. This is for your information.

*I attest that the information contained herein and my assessment is honest, thorough, and, to my knowledge, correct. Furthermore, I have completed an MDE approved course in the proper inspection procedures and have applied the standards of practice taught in the course during this inspection.*

*THIS INSPECTION REPORT INDICATES THE PRESENT CONDITION OF THE PRIVATE ON-SITE SUBSURFACE SEWAGE DISPOSAL SYSTEM BASED ON RECOMMENDED INSPECTION PROCEDURES OUTLINED IN THIS REPORT. THE RESULTS OF THE INSPECTION DOES NOT GUARANTEE OR WARRANTY FUTURE PERFORMANCE.*

*The recipient of this report should discuss any deficiencies found by this inspection with the Inspector.*

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

June 10, 2022

Vera Hendricks  
13416 ARADA CT  
HIGHLAND, MD 20777

**RE: 13416 ARADA CT**  
**HIGHLAND, MD 20777**  
**Well Tag: HO-73-2315**  
**(Well Deepened)**

Dear Vera Hendricks;

A yield test sample was collected on April 14, 2022 and submitted to the Maryland Department of Health Laboratories to assess the possible presence of **Gross Alpha** and **Gross Beta** in the 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 the test screening revealed a **Gross Alpha** of  $49.8 \pm 5.0$  picocuries/liter (pCi/L), while the **Gross Beta** level was  $31.4 \pm 3.1$  pCi/L. The **Gross Alpha** result was above the **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**).

In addition, on the same laboratory result slip, a second lab analysis shows a **Gross Alpha** of  $47.9 \pm 4.9$  picocuries/liter (pCi/L), while the **Gross Beta** level was  $37.2 \pm 3.2$  pCi/L.

At the time of testing and with respect to the initial test screening and second lab analysis results, your “untreated” well water supply **does not meet** EPA regulatory standards for **Gross Alpha and Gross Beta**. Given these result readings, some additional testing to further evaluate **Gross Alpha and Gross Beta (long-terms)** as well as **Radium 226/228** are highly recommended to properly evaluate the **Gross Alpha and Gross Beta** particle presence in the well water supply.

In addition, given these findings, treatment to reduce /remove these naturally occurring radionuclides should be considered if the long-term test results are still above the MCL limits. Typically, a water softener system and /or a POU (point of use) reverse osmosis (R/O) unit in the kitchen are effective means of treating these types of contaminants.

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,



Ramar Martin, Program Supervisor  
Bureau of Environmental Health

Enclosure

cc: Property file, Well & Septic Program

Lab No.

E001970-188

LABORATORY ANALYSIS REQUEST FORM

Plant/Site Name: 13416 Arada Ct. County: Howard

Sample Source: \_\_\_\_\_ Location: HO-73-2315

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

Radon-222 Bottle A HOST 2315 RA Radon-222 Field Blank Bottle A \_\_\_\_\_

Radium Bottle B \_\_\_\_\_ Bottle B \_\_\_\_\_

County 113 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 checked="" type="checkbox"/>
Routine	<input checked="" type="checkbox"/>
Recheck	<input type="checkbox"/>
Special	<input type="checkbox"/>

Submitters Code: 41F Federal Project: \_\_\_\_\_

Collector: Susan Thomas Telephone No.: 410-313-6287

Date Collected: 4/14/22 Time Collected: \_\_\_\_\_ a.m. 3:10 p.m.

Field pH: 7.0 Field Chlorine: neg

Nitric Acid Preserved: Yes  No  Iced: Yes  No

Remarks: collect from deepened well; resident low on water

<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	1970	EPA900.0	49.8 ± 5.0	4/22/22	L.K/F.K	4/25/22
<input checked="" type="checkbox"/>	Gross Beta	4100	1970	EPA900.0	31.4 ± 3.1	4/22/22	L.K/F.K	4/25/22
<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"/>	Gross Alpha	4000	1970 Dup	EPA900.0	47.9 ± 4.9	4/22/22	L.K/F.K	4/25/22
<input type="checkbox"/>	Gross Beta	4100	1970 Dup	EPA900.0	37.2 ± 3.2	4/22/22	L.K/F.K	4/25/22

Date Received: 04/18/2022 Received By: L. Reed  
 Data Release Signature: \_\_\_\_\_ Date: 4/27/22

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:

Rannar Martin

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

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

Lab No.

E0019692108

LABORATORY ANALYSIS REQUEST FORM

Plant/Site Name: 13416 Arada Ct

County: Howard

Sample Source:

Location: HO-73-2315

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

Radon-222 Bottle A

Radon-222 Field Blank

Bottle A HO-73-2315 FB

Bottle B

Bottle B

Radium

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:

Collector: Susan Thomas

Telephone No.: 410-313-6287

Date Collected: 4/14/22

Time Collected: 10:00 a.m.

Field pH: 7.0

Field Chlorine: neg

Nitric Acid Preserved: Yes  No

Iced: Yes  No

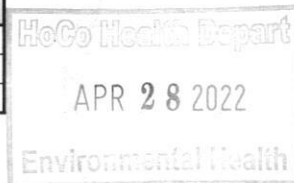
Remarks:

TEST	EPA Code	Lab No.	Method No.	Results (pCi/L)	Date Analyzed	Analyst	Date Reported
<input checked="" type="checkbox"/> Gross Alpha	4000	1969	EPA9000	<2	4/22/22	L.R/F.K	4/25/22
<input checked="" type="checkbox"/> Gross Beta	4100	1969	EPA9000	<4	4/22/22	L.R/F.K	4/25/22
<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: 04/18/2022 Received By: L Reed

Data Release Signature: [Signature] Date: 4/27/22

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 checked="" 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