

B 1	SEQUENCE NO. (MDE USE ONLY) 59705	STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL please type	STATE PERMIT NUMBER HO-17-0295 <small>fill in this form completely</small>
------------	---	--	---

OWNER INFORMATION

8 MM DD YY 13
 15 Last Name Raphael Homes Owner First Name. 34
 36 Street or RFD 110 Painters Mill Rd Suite 205 55
owens mills md. 21117
 57 Town 70 State 72 Zip 76

LOCATION OF WELL

8 COUNTY Howard 21
 23 SUBDIVISION Allnutt Farms Estates 42
 SECTION 44 46 LOT 21 48 50
 52 NEAREST TOWN Highland 71

DRILLER INFORMATION

Driller's Name Allen Campbell M S D 009
 76 License No. 81
 Firm Name Fogles Well Drilling, LLC
 Address P.O. Box 202 Woodbine Md 21797
 Signature [Signature] Date 5-4-18

SOURCES OF DRILLING WATER

1. well water
 2.
 3.

Allnutt Lane
 11 STREET ADDRESS 30
 ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)
 NORTH [] WEST [] EAST [] SOUTH []
 34 50 37
 DISTANCE FROM ROAD ENTER FT OR MI 38 39
 TAX MAP: 34 BLK: 15 PARCEL 315

WELL INFORMATION

1 2 APPROX. PUMPING RATE (GAL. PER MIN.) 5
 8 12
 AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 500
 14 20

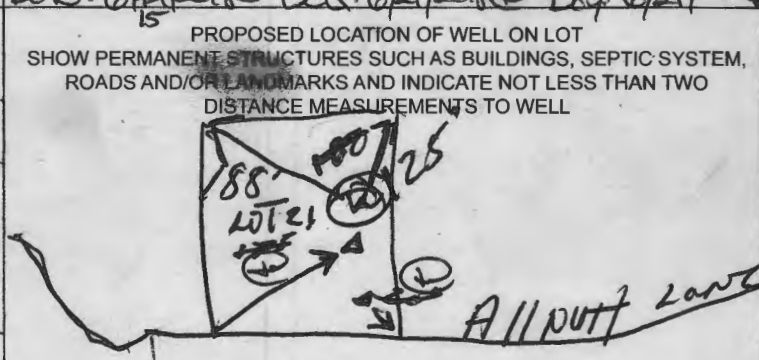
USE FOR WATER (CIRCLE APPROPRIATE BOX)

DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION
 FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)
 INDUSTRIAL, COMMERCIAL, DEWATERING
 PUBLIC WATER SUPPLY WELL
 TEST, OBSERVATION, MONITORING
 OPEN LOOP GEOTHERMAL
 CLOSED LOOP GEOTHERMAL

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

HOWARD COUNTY NAME
21 COUNTY NO.
 STATE SIGNATURE _____ INSERT S → 41
 DATE ISSUED 06/06/18 06/06/2019
 43 MM DD YY 48 CO SIGNATURE EXP. DATE
 DOW: 6/19/2018 DQG: 6/21/2018 Day: 6/21/2018

APPROXIMATE DEPTH OF WELL 300 FEET
 24 28
 APPROXIMATE DIAMETER OF WELL 6 NEAREST INCH



METHOD OF DRILLING (circle one)

BORED (or Augered) JETTED Jetted & DRIVEN
 AIR-ROTary AIR-PERCussion ROTARY (Hydraulic Rotary)
 CABLE REVERSE-ROTary DRIVE-POINT
 other _____

REPLACEMENT OR DEEPENED WELLS (CIRCLE APPROPRIATE BOX)

THIS WELL WILL NOT REPLACE AN EXISTING WELL
 THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
 THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS
 THIS WELL WILL DEEPEAN AN EXISTING WELL
 PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEANED (IF AVAILABLE) 41 _____ 52

6/19/2018
80' steel pipe
450' Deep
1 gpm
bedrock @ 370'
N
6/21/2018
yield test
grout notes on
yield sheet
sample taken
 Pursuant to § 10-624 of the State Govt. Article of the Maryland Code, personal info requested on this form is used in processing this form pursuant to COMAR 26.04.04. Failure to provide the info may result in this form not being processed. You have the right to inspect, amend, or correct this form. The Maryland Department of the Environment is subject to the Maryland Public Information Act. This form may be made available on the Internet via MDE's website and is subject to inspection or copying, in whole or in part, by the public and other governmental agencies, if not protected by federal or State Law.

Not to be filled in by driller (MDE OR COUNTY USE ONLY)

APPROX. PERMIT NUMBER _____ **G** _____
 PERMIT No. HO-17-0295
 70 71 72 73 74 75 76 77 78 79

SPECIAL CONDITIONS
 NOTE APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED
RADIUM SAMPLES REQUIRED

DRILLER: COMPLETE THIS FORM AND RETURN ALL PARTS OF THIS FORM INTACT TO THE ENVIRONMENTAL AGENCY IN THE COUNTY IN WHICH THE WELL IS TO BE DRILLED. PRESS FIRMLY FOR FIFTH COPY.

C1 56515 SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY PLEASE TYPE

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER 3

ST/CO USE ONLY DATE RECEIVED MM/DD/YY 07/09/18

DATE WELL COMPLETED MM/DD/YY 06/21/18 07/18/18 ²²

Depth of Well 500 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" HO 17-0295

OWNER Raphael Homes last name first name

WELL SITE ADDRESS Alloult Lane TOWN Highland

SUBDIVISION Alloult Farms Estates SECTION _____ LOT 21

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET		check if water bearing
	FROM	TO	
Red to brown spherulite	0	69	
Gray schist	69	325	
White	325	326	/
Gray schist	326	450	
White	450	451	/
Gray schist	451	500	

GROUTING RECORD (Circle appropriate box)

WELL HAS BEEN GROUTED Y N

TYPE OF GROUTING MATERIAL (Circle one)
CEMENT CM BENTONITE CLAY BC

NO. OF BAGS 35 NO. OF POUNDS 3290

GALLONS OF WATER 210

DEPTH OF GROUT SEAL (to nearest foot)
from 0 ft. to 77 ft.
(enter 0 if from surface)

CASING RECORD

caseing types insert appropriate code below

ST STEEL CO CONCRETE
 PL PLASTIC OT OTHER

MAIN CASING TYPE	Nominal diameter top (main) casing (nearest inch)	Total depth of main casing (nearest foot)
<u>ST</u>	<u>06</u>	<u>80</u>

OTHER CASING (if used)

EACH CASING	diameter inch	depth (feet) from to

SCREEN RECORD

screen type or open hole (insert appropriate code below)

ST STEEL BR BRASS HO OPEN HOLE
 PL PLASTIC OT OTHER

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED Y N

CIRCLE APPROPRIATE LETTER
A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
E ELECTRIC LOG OBTAINED
P TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO. 1 MS D001

DRILLERS SIGNATURE [Signature]

(MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO. D

C2 DEPTH (nearest ft.)

ASCSREEN	1	2	3
1	<u>HO</u>	<u>80</u>	<u>500</u>

SLOT SIZE 1 _____ 2 _____ 3 _____

DIAMETER OF SCREEN _____ (NEAREST INCH)
from _____ to _____

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)

T _____ (E.R.O.S.) W Q _____

C3 PUMPING TEST

HOURS PUMPED (nearest hour) 6

PUMPING RATE (gal. per min.) 3.1

METHOD USED TO MEASURE PUMPING RATE 1 gal

WATER LEVEL (distance from land surface)

BEFORE PUMPING 70 ft.
WHEN PUMPING 288 ft.

TYPE OF PUMP USED (for test)
 A air P piston T turbine
 C centrifugal R rotary O other (describe below)
 J jet S submersible

PUMP INSTALLED

DRILLER INSTALLED PUMP (CIRCLE) (YES or NO) YES NO

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29 29

CAPACITY: GALLONS PER MINUTE (to nearest gallon) 31 _____ 35 _____

PUMP HORSE POWER 37 _____ 41 _____

PUMP COLUMN LENGTH (nearest ft.) 43 _____ 47 _____

CASING HEIGHT (circle appropriate box and enter casing height)

(+) above } LAND SURFACE
 (-) below } 02 (nearest foot)

LATITUDE 39.196856
LONGITUDE 76.964705
(DEFAULT COORD. WGS 84)

Pursuant to §10-624 of the State Govt. Article of the Maryland Code personal info. requested on this form is used in processing this form pursuant to COMAR 26.04.04. Failure to provide the info. may result in this form not being processed. You have the right to inspect, amend, or correct this form. The Maryland Department of the Environment is subject to the Maryland Public Information Act. This form may be made available on the Internet via MDE's website and is subject to inspection or copying, in whole or in

FIELD DATE SHEET
HOWARD COUNTY WELL YIELD TEST

Well Permit No. HO-17-0295Location of Property: Allnutt Lane Highland, MdSubdivision: Allnutt Farms Estates Lot #: 21Well Driller/Tech: Fogles/Andrew Houseman Owner/Buyer: Raphael HomesDepth of Well: 500'Distance of measuring point (M.P.) above ground: 2'Static water level (S.W.L.) below M.P.: 70'

High rate pumping –reservoir Drawdown

Time pump started: 9:15 Pumping rate: 10Total time 120 mins to reach pumping water level 288 ft. below M.P.

Recovery pump test data – observations to be recorded every 15 minutes

TIME (in 15 minute intervals)	WATER LEVEL Below M.P.	PUMPING RATE Time to fill 1 gallon bucket	FLOW METER READING (if used)	CALCULATED FLOW (gallons per minute)
9:15	70'	6Seconds		10 gpm
9:30	93'	6 Seconds		10 gpm
9:45	122'	6 Seconds		10 gpm
10:00	164'	7 Seconds		8.5 gpm
10:15	212'	8 Seconds		7.5 gpm
10:30	230'	8 Seconds		7.5 gpm
10:45	255'	9 Seconds		6.1 gpm
11:00	288'	19 Seconds		3.1 gpm
11:15	288'	19 Seconds		3.1 gpm
11:30	286'	19 Seconds		3.1 gpm
11:45	285'	19 Seconds		3.1 gpm
12:00	284'	19 Seconds		3.1 gpm
12:15	283'	19 Seconds		3.1 gpm
12:30	282'	19 Seconds		3.1 gpm
12:45	281'	19 Seconds		3.1 gpm
1:00	281'	19 Seconds		3.1 gpm
1:15	281'	19 Seconds		3.1 gpm
1:30	280'	19 Seconds		3.1 gpm
1:45	280'	19 Seconds		3.1 gpm
2:00	279'	19 Seconds		3.1 gpm
2:15	279'	19 Seconds		3.1 gpm
2:30	279'	19 Seconds		3.1 gpm
2:45	279'	19 Seconds		3.1 gpm
3:00	278'	19 Seconds		3.1 gpm
3:15	278'	19 Seconds		3.1 gpm
3:30	278'	19 Seconds		3.1 gpm
3:45	277'	19 Seconds		3.1 gpm
4:00	277'	19 Seconds		3.1 gpm
4:15	277'	19 Seconds		3.1 gpm
4:30	276'	19 Seconds		3.1 gpm
4:45	276'	19 Seconds		3.1 gpm
5:00	276'	19 Seconds		3.1 gpm

**HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH
WELL & SEPTIC PROGRAM
TEL: (410)313-1771 FAX: (410)313-2648**

Information Form for the Installation of the Well Pump, Pitless Adapter, and Supply Piping

NOTE: The installer is responsible for requesting an inspection prior to 9 am on the day of the desired inspection. No work is to be covered until approved by the Health Department. All installations must comply with the National Standard Plumbing Code (NSPC, as amended locally) and COMAR 26.04.04 (MD Well Construction Regulations). Submission of a complete form is required prior to Use and Occupancy approval.

Company Name: _____ Telephone #: _____
Address: _____

(Must circle one) Licensed Plumber Licensed Well Driller Licensed Well Pump Installer
License # and name of individual responsible for the field installation:
Name (Print): _____ License# _____

***A licensed individual must perform the actual installation. Apprentices must be under the supervision of a licensed journeyman or master plumber, pump installer or well driller. Licenses may be subjected to field verification. Unlicensed individuals may be reported to the appropriate licensing agency.**

Name of Property Owner: _____ Telephone #: _____
Subdivision: _____ Lot #: _____ Well Tag #: HO-17 0295
Site Address: _____

<u>Submersible Pump Data</u>	<u>Pitless Adapter</u>	<u>Well Cap and Electric Conduit</u>
Make: _____	Make: _____	Two piece watertight cap: _____
Model #: _____	Model#: _____	Screened, vented well cap: _____
Pump Capacity _____ GPM	Depth: _____ (36" min)	Cap secured to casing: _____
Well Yield: _____ GPM	NSF/WSC approved: _____	Conduit min 18" B.G.: _____
Depth of well encountered at time of pump installation: _____ (feet)	Conduit secured to well cap: _____	
If pump capacity exceeds well yield, a low water cut off switch is required by NSPC 1990 Section 17.8.4		
Torque arrestors, Cable guards, or other acceptable method used- Must circle one		
Safety rope, if used, attached to brass rope adapter or other acceptable method <u>inside of well casing</u> _____		

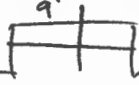
<u>Piping to house</u>	<u>House Connection</u>
Type: _____	PVC sleeve to undisturbed soil at wall penetration: _____
PSI: _____ (160 psi min)	Length of sleeve(5' minimum from foundation): _____
Depth of supply line: _____ (36" min)	Sleeve sealed properly: _____

The water supply line is required to be at least ten feet from the septic tank, pump chamber, sewage piping, distribution box, drainfields, and sewage reserve area. If this cannot be accomplished, contact this office for approval prior to installation.

Signature of company representative responsible for installation _____ date _____

For Health Department Use Only - Not to be completed by Installer

Date Insp. Requested: 3/27/2009 Date Insp. Approved: 3/27/2009 Inspector: [Signature]
 Inspection Data: Pitless adapter watertight & water supply line at least 36" below grade ✓ 40" 3/27/2009 [Signature]
 Two piece cap installed and attached to casing securely ✓
 Elec. conduit extends at least 18" below grade/attached to cap properly ✓ 34" 3/27/2009 [Signature]
 Safety rope not outside of well cap/casing ✓
 Correct well tag attached properly and casing 8" above finished grade ✓ 18" 3/27/2009 [Signature]
 Water supply line sleeved adequately at house connection ✓
 Adequate grout observed below pitless adapter ✓

EX. HOUSE 3/27/2009 [Signature]

 SLEEVED UNDER
 USE IN COMMON
 DRIVE. [Signature]

INTERIM CERTIFICATE OF POTABILITY

Expiration Date – March 26, 2019

September 26, 2019

Homeowner
13492 Allnutt Lane
Highland, MD 20777

RE: Dass Property, Lot 21
13492 Allnutt Lane
Building Permit: B18002744
Well Permit: HO-17-0295

Dear Homeowner:

This is to advise you that the septic system installation and water well construction for the above referenced property have been inspected and approved. Final approval of the septic system was granted on **7/17/2019**. Final approval of the well line connection to the dwelling was granted on **3/27/2019**. The well construction was completed on **6/21/2018**. Water samples were collected on **9/18/2019**.

The water sample results indicate that the water samples submitted for testing were free of coliform and fecal coliform bacteria at the time of sampling and are bacteriologically safe for drinking.

Gross Alpha and Beta samples were also collected on **6/20/2019**. Results showed a Gross Alpha level of **7.7 ± 2.4 pCi/L** and **Gross Beta** level of **12.9 ± 2.3 pCi/L**. The Gross Alpha was below the maximum contaminant level (MCL) of 15 pCi/L and the Gross Beta was below the target level of 50pCi/L (roughly equivalent to the annual dose rate of 4 millirems per year). At the time of testing and with respect to these parameters, the well water is safe for all uses.

This certifies that the initial sampling requirements of COMAR 26.04.04 "Well Regulations" have been met for the water supply system installed under well permit HO-17-0295. Although the submitted sample results are in compliance with COMAR standards, the Health Department does not guarantee water supplies.

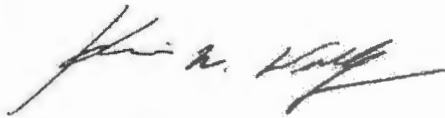
This Interim Certificate of Potability will expire **six months** from the date of issuance. Submission of a second bacteriological test indicating the water is free of coliform and fecal coliform bacteria is required prior to the expiration date, after which time a Final Certificate of Potability will be issued. **Failure to submit an additional sample and obtain a Final Certificate of Potability will result in a Notice of Violation and is punishable as a misdemeanor under the *Annotated Code of Maryland, Environment Article, 9-1311*, subject to a fine of up to \$500 or imprisonment not to exceed three months.**

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

Please contact (410) 313-1773 to schedule a final water sample appointment or contact a certified water quality laboratory to schedule a water sample. A list of laboratories certified by the state of Maryland may be found at the following website: <http://www.mde.state.md.us/assets/document/WSP-Labs-2010apr16.pdf>

In closing, please refer to our "Homeowner Fact Sheet" for understanding your onsite sewage disposal system. You will also find a link to Maryland Department of the Environments website which elaborates in further detail operation and maintenance of your Septic System.

Approving Authority,



Kevin M Wolf, L.E.H.S., REHS/R.S., Supervisor
Groundwater Management Section
Well & Septic Program

cc: Howard County Dept. of Inspections, Licenses, and Permits
Community Hygiene Program
File



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

Facebook: www.facebook.com/hocohealth

Twitter: HowardCoHealthDep

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

TO ALL INTERESTED PARTIES

When submitting a well permit application for a proposed well for new construction, please indicate one of the following:

Well Site Location:

Allnutt Farms Estates 21 Allnutt Lane
Subdivision/Property Name Lot # Road Name

The well site has been staked by Shamba Berger & Lane
(professional land surveyor or company employing professional land surveyors)
on May 24, 2018 (date) and does not require a site inspection.

The well driller, builder or property owner will call the Health Department to schedule a time to meet in the field to verify the proposed well site location.

This sheet, along with two copies of an acceptable well site plan, must be attached to the green well permit application.

13492 ALLNUTT LN
LOT 17

Ho-17-0295
MARIE DOBYNS

APPARENTLY DATED 2018
12180 OPEN SPACE CT.
TAX MAP 34, PARCEL 375, LOT 17

STAKED BY SHANABERGER
RADIUM SAMPLES REQUIRED

ROSEMARIE SCHULTZ
OPEN SPACE CT.
PARCEL 375, LOT 18

20' DRAINAGE & UTILITY BASEMENT
PLAT #3891

LOT 22

ROBERT AND SHARON DA
13496 ALLNUTT LN.
TAX MAP 34, PARCEL 375, L

LOT 18

LIMITS OF FIELD RUN TOPO

N 61° 13' 05" E
194.67'

LOT 21
40005 SQ. FT.

5

PROPOSED 4-B.R. HOUSE

GAR.

PROP. WELL

EX. WELL HO-94-2882

GbB

LOT 47
KULDEER AND ANJU SINGH
13488 ALLNUTT LN.
MAR 34, PARCEL 375, LOT 47

GbC

3

2

LIMITS OF FIELD RUN TOPO

LIMITS OF FIELD RUN TOPO

R=470.00'

L=72.11'

R=880.00'

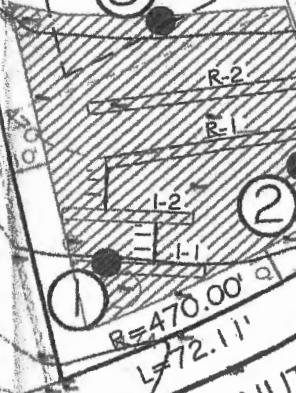
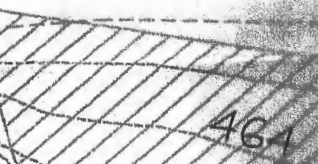
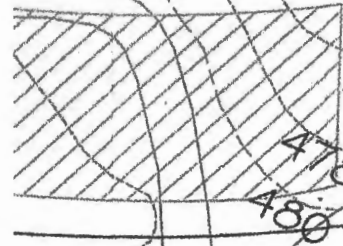
L=139.98'

ALLNUTT LANE
60' RW

LOT 28

EX. WELL

IFRFMY AND MARY KRUM



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

July 25, 2018

Mr. and Mrs. Robert Dass
13492 Allnut Lane
Highland, Maryland 20777-9743

RE: Lot 21 Allnut Farms Estates
13492 Allnut Lane
Highland, Maryland 20777
HO - 17 - 0295

Dear Mr. and Mrs. Dass:

A sample was collected during a yield test on June 20, 2018 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 $< 7.7 \pm 2.4$ picocuries/liter (pCi/L), while the **Gross Beta** level was $< 12.9 \pm 2.3$ 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, your future well water supply is within EPA regulatory standards. Given these initial readings, additional testing to further evaluate these parameters does not appear to be necessary. Please keep in mind that testing for other parameters (i.e., bacteria, nitrate and turbidity) will still be needed to secure a Certificate of Potability for the well water supply and to gain Use and Occupancy.

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.

Sincerely,



Bert Nixon, Director
Bureau of Environmental Health

✓ Enclosure

cc: Property file

SEND REPORT TO:

State of Maryland

DHMH - Laboratories Administration

Division of Environmental Sciences

RADIATION LABORATORY

1770 Ashland Avenue

Baltimore, Maryland 21205

Lab No. 05-384877
05-384796

Howard County Health Department

Bureau of Environmental Health

8930 Stanford Blvd.

Columbia, Maryland 21045

will need to be removed

LABORATORY ANALYSIS REQUEST FORM

LOT 280

ALLENUT FARMS EST.

Plant/Site Name:

13495 ALLENUT LN

ROBERT + SHARON DASS

County:

HOWARD

Sample Source:

LOT 21 - NEW WELL

Location:

HO-17-0295

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

Radon-222

Bottle A

BLANK

Radon-222 Field Blank

Bottle A

Bottle B

Bottle B

RADIUM

County

4 F

Plant No.

Plant No. grid

CHECK (one per Box)

Type: Drinking Water [checked], Landfill, Stream, Other

Service: Community, Non-Community, Private [checked], Other

Point of Collection: Source (Raw) [checked], Distribution (treated), MCL

Testing: Emergency, Routine [checked], Recheck, Special

Submitters Code:

4 F

Federal Project:

Federal Project box

Collector:

CABAHUG, JOSEPH

Telephone No.:

Date Collected:

6/20/18

Time Collected:

12:30 a.m. p.m.

Field pH:

7.0

Field Chlorine:

NEG

Nitric Acid Preserved:

Yes [] No []

Iced:

Yes [] No []

Remarks:

Sample collected at yard

Table with 9 columns: TEST, EPA Code, Lab No., Method No., Results (pCi/L), Date Analyzed, Analyst, Date Reported. Rows include Gross Alpha, Gross Beta, Radium-226, Radium-228, Total Uranium, Radon-222 (Bottle A/B), Radon Field Blank A/B, Tritium.

Date Received:

Received By:

Date Release Signature:

Date:

7/12/18

Lab Use Only table with columns: Yes, No, N/A. Rows: Sample Intact upon arrival?, Sample pH < 2.0?, Received within holding time?

Tel. No.: (443) 681-3766 Fax No.: (443) 681-4507

FORM REVISED 05/15 DHMH 4540 05/17

SAMPLE TESTED AS RECEIVED

PROGRAM COPY

SEND REPORT TO:

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

Lab No. 4-99

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

LABORATORY ANALYSIS REQUEST FORM

Plant/Site Name: RADIUM SAMPLE BLANK County: HOWARD

Sample Source: _____ Location: E113
(Well no., lab sink, sample tap, etc.)

Radon-222 Bottle A BLANK Radon-222 Field Blank Bottle A _____
RADIUM 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:

Collector: CABATUG, JOSEPH Telephone No.: _____

Date Collected: 06/20/2018 Time Collected: 15:45 a.m. _____ p.m.

Field pH: _____ Field Chlorine: _____

Nitric Acid Preserved: Yes No Iced: Yes No

Remarks: SINK FROM LAB

✓	TEST	EPA Code	Lab No.	Method No.	Results (pCi/L)	Date Analyzed	Analyst	Date Reported
<input checked="" type="checkbox"/>	Gross Alpha	4000	028	EPA 900.0	<2.0	7/10/18	JJ	7/12/18
<input checked="" type="checkbox"/>	Gross Beta	4100	028	EPA 900.0	<4.0	7/10/18	JJ	7/12/18
<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: 7/11/18 Received By: JJ
Data Release Signature: _____ Date: 7/12/18

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

FORM REVISED 05/15
DHMH 4540 05/17

PROGRAM COPY

SAMPLE TESTED AS RECEIVED

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 #:	132928	Account #:	3435
Reference:	Robert Dass	Company:	Raphael Custom Homes
Location:	13492 Alluntt Lane Highland, MD 20777	Requested By:	Lynette Voegtli
Date/ Time Collected:	9/18/2019 1040	Source:	Well Water
Date/Time Rec'd:	9/18/2019 1538	Site:	Pressure Tank
Chlorine ppm:	Free: ND Total: ND	Treatment:	None
Collected By:	J. Yeager 6176JY	pH:	7.3
		Well #:	HO-17-0295

RESULTS	UNITS	REFERENCE	METHOD	DATE
Gross Alpha, Short Term	10.9 pCi/L	15	900.0	9/22/2019 / 0538 / MJN
Gross Beta, Short Term	20.4 pCi/L	50	900.0	9/22/2019 / 0538 / MJN

NOTES

- 1 Gross Alpha Detection Limit: 1.0 pCi/L; Gross Beta Detection Limit: 1.5 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 Visual well check: Sealed, vented cap
- 7 pH & Chlorine level tested on site

Reason for Test : Use & Occupancy
Building Permit # : B18002744

Date Reported: 9/23/2019

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 #: 132927 Account #: 3435
Reference: Robert Dass Company: Raphael Custom Homes
Location: 13492 Alluntt Lane Highland, MD 20777 Requested By: Lynette Voegtli
Date/ Time Collected: 9/18/2019 1040 Source: Well Water
Date/Time Rec'd: 9/18/2019 1538 Site: Pressure Tank
Chlorine ppm: Free: ND Total: ND pH: 7.3
Collected By: J. Yeager 6176JY Well #: HO-17-0295

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME ANALYSIS
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	9/19/2019 / 1000 / RER
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	9/19/2019 / 1000 / RER
Nitrate	<1.0	mg/L	10	601	9/19/2019 / 0945 / RER
Turbidity	2.86	NTU	<10	SM20 2130B	9/19/2019 / 1010 / RER
Sand	NS	mg/L	5	Visual/Gravimetric	9/19/2019 / 1010 / RER

NOTES

- 1 mg/L = milligrams per liter (also, parts per million)
- 2 MPN/ 100 ml = Most Probable Number [of viable bacteria] per 100 ml of sample.
- 3 NS = None Seen (NS indicates less than 5 mg/L)
- 4 NTU = Nephelometric Turbidity Units
- 5 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 6 ND:None Detected
- 7 Visual well check: Sealed, vented cap
- 8 pH & Chlorine level tested on site

Reason for Test : Use & Occupancy
Building Permit # : B18002744

Date Reported: 9/19/2019

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 #: 132928 Account #: 3435
Reference: Robert Dass Company: Raphael Custom Homes
Location: 13492 Alluntt Lane Requested By: Lynette Voegtli
Highland, MD 20777 Source: Well Water
Date/ Time Collected: 9/18/2019 1040 Site: Pressure Tank
Date/Time Rec'd: 9/18/2019 1538 Treatment: None
Chlorine ppm: Free: ND Total: ND pH: 7.3
Collected By: J. Yeager 6176JY Well #: HO-17-0295

PARAMETER	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Gross Alpha, Short Term	10.9	pCi/L	15	900.0	9/22/2019 / 0538 / MJN
Gross Beta, Short Term	20.4	pCi/L	50	900.0	9/22/2019 / 0538 / MJN

NOTES

- 1 Gross Alpha Detection Limit: 1.0 pCi/L; Gross Beta Detection Limit: 1.5 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 Visual well check: Sealed, vented cap
- 7 pH & Chlorine level tested on site

Reason for Test : Use & Occupancy
Building Permit # : B18002744

Date Reported: 9/23/2019