SEQUENCE NO. THIS REPORT MUST BE SUBMITTED WITHIN STATE OF MARYLAND 569 (MDE USE ONLY) 45 DAYS AFTER WELL IS COMPLETED. WELL COMPLETION REPORT COUNTY FILL IN THIS FORM COMPLETELY (THIS NUMBER IS TO BE PUNCHED NUMBER IN COLS. 3-6 ON ALL CARDS) PLEASE TYPE ST/CO USE ONLY PERMIT NO. DATE WELL COMPLETED Depth of Well Approved FROM "PERMIT TO DRILL WELL" DATE Received 5 to-18 005C ST 12130 122 N 26 -0 (TO NEAREST FOOT) 32 33 37 31 OWNER Hall Shop Ro first name harsville TOWN WELL SITE ADDRESS 12210 LOT SECTION SUBDIVISION. WELL LOG GROUTING RECORD C 3 Ν WELL HAS BEEN GROUTED (Circle Appropriate Box) Not required for driven wells PUMPING TEST STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING TYPE OF GROUTING MATERIAL (Circle one) HOURS PUMPED (nearest hour) CEMENT CM BENTONITE CLAY BC check if water bearing FEET **DESCRIPTION (Use** additional sheets if a FROM TO 35 NO. OF POUNDS 3240 NO. OF BAGS PUMPING RATE (gal. per min.) ellaw 45 210 GALLONS OF WATER METHOD USED TO MEASURE PUMPING RATE 0 85 DEPTH OF GROUT SEAL (to nearest foot) 99 BOTTOM from ft. to _____ ft. 59 WATER LEVEL (distance from land surface) elou 200 85 (enter 0 if from surface) **BEFORE PUMPING** CASING RECORD casing types CO SIT insert 500 WHEN PUMPING CONCRETE appropriate STEEL code OT PL TYPE OF PUMP USED (for test) below PLASTIC OTHER A turbine Total depth Nominal diameter MĂIN CASING top (main) casing of main casing (nearest inch)! TYPE (nearest foot) centrifugal 0 scribe man 21 06 Och 60 61 63 64 66 * 70 S J submersible sid: OTHER CASING (If used) diameter depth (feet) ĉ inch from to g PUMP INSTALLED DRILLER INSTALLED PUMP YES NO (CIRCLE) (YES or NO) G IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS. 23 SCREEN RECORD TYPE OF PUMP INSTALLED screen type or open hole PLACE (A,C,J,P,R,S,T,O) 20. e l BR HO ST IN BOX 29. insert CAPACITY: appropriate BRONZE HOLE GALLONS PER MINUTE code 100 OT PIL 35 (to nearest gallon) below Storage 699 PUMP HORSE POWER an in C 2 DEPTH (nearest ft.) PUMP COLUMN LENGTH 27.2 0 NUMBER OF UNSUCCESSFUL WELLS: (nearest ft.) (circle appropriate box and enter casing height) CASING HEIGHT **NO** Ε 21 WELL HYDROFRACTURED Y N + above C LAND SURFACE CIRCLE APPROPRIATE LETTER .96 36 24 30 23 32 A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED 9 (nearest) A below C foot) 50 -51 E ELECTRIC LOG OBTAINED 39 41 47 51 45 TEST WELL CONVERTED TO PRODUCTION P LATITUDE 39. 177603 E WELL SLOT SIZE 1 3 I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN LONGITUDE 76. 935923 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 DIAMETER (NEAREST OF SCREEN INCH) (DEFAULT COORD. WGS 84) 56 60 KNOWLEDGE from Pursuant to \$10-624 of the State Govt. Article of to the Maryand Code personal info. requested on MSD2 this form is used in processing this form pursuant DRILLERS MC. NO.I GRAVEL PACK to COMAR 26.04.04. Failure to provide the info. WAS FLOWING WELL may result in this form not being processed. You * "68 INSERT F IN BOX 68 DRILLERS SIGNATURE have the right to inspect, amend, or correct this (MUST MATCH SIGNATURE ON APPLICATION) MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER) form. The Maryland Department of the Environment is subject to the Maryland Public _ .D (E.R.O.S.) WQ LIC. NO.I _ T 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 70 72 part, by the pulic and other governmental 74 75 76 SITE SUPERVISOR (sign. of driller or journeyman TELESCOPE LOG INDICATOR agencies, if not protected by federal or state law, responsible for sitework if different from permittee) OTHER DATA CASING MDEMMAPER 071 COUNTY

EMERGENCY/TEMP NO. IF ANY STATE PERMIT NUMBER SEQUENCE NO. STATE OF MARYLAND 1 (MDE USE ONLY) APPLICATION FOR PERMIT TO DRILL WELL 59762 please type fill in this form completely 2 LOCATION OF WELL Date Received (APA B 3 OWNER INFORMATION COUN First Name 34 SUBDIVISION 42 23 55 SECTION I OT Zip State 71 DRILLER INFORMATION SD 22 M License No. B 4 12210 Hall Shop SOURCES OF DRILLING WATER Well water Firm ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX) 512 N W 32 E still no H20 SOUTH 2275'dup Signature Date 37 0 allnud 2 WELL INFORMATION DISTANCE FROM ROAD B 53.9onler Still trilla ARPROX. PUMPING RATE 40 ENTER FT OR MI 38 39 (GAL PER MIN.) 12 - casing they n 00 TAX MAP: 0040 BLK: 0006 PARCEL0095 AVERAGE DAILY QUANTITY NEEDED 20 (GAL. PER DAY) NOT TO BE FILLED IN BY DRILLER USE FOR WATER (CIRCLE APPROPRIATE BOX) HEALTH DEPARTMENT APPROVAL DOMESTIC POTABLE SUPPLY & RESIDENTIAL D IRRIGATION FARMING (LIVESTOCK WATERING & AGRICULTURAL F IRRIGATION) NA STATE INDUSTRIAL, COMMERCIAL, DEWATERING \square 22 INSERT S PUBLIC WATER SUPPLY WELL Ρ DATE ISSUED T TEST, OBSERVATION, MONITORING OI 20 SIGNATURE OPEN LOOP GEOTHERMAL DD EXP. DATE 0 CLOSED LOOP GEOTHERMAL С PROPOSED LOCATION OF WELL ON LOT SHOW PERMANENT STRUCTURES SUCH AS BUILDINGS, SEPTIC SYSTEM, J FEET APPROXIMATE DEPTH OF WELL ROADS AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCE MEASUREMENTS TO WELL NEAREST APPROXIMATE DIAMETER OF WELL INCH METHOD OF DRILLING (circle one) JETTED Jetted & DRIVEN BORED (or Augered) 10 AIR-ROTary IR-PERcussion ROTARY (Hydraulic Rotary) **DRive-POINT** CABLE **REVerse-ROTary** other REPLACEMENT OR DEEPENED WELLS (CIRCLE APPROPRIATE BOX) NO N S WELL WILL NOT REPLACE AN EXISTING WELL THIS WELL WILL REPLACE A WELL THAT WILL BE Y ABANDONED AND SEALED THIS WELL WILL REPLACE A WELL THAT WILL BE USED S 39 AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY Pursuant to § 10-624 of the State Govt. Article of the asir 0 FOR POLICY ON STANDBY WELLS 2019 Maryland Code, personal info requested on this form £1. 16 D THIS WELL WILL DEEPEN AN EXISTING WELL is used in processing this form pursuant to COMAR Thed 26.04.04. Failure to provide the info may result in PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPENED N this form not being processed. You have the right to (IF AVAILABLE) 41 52 inspect, amend, or correct this form. The Maryland Not to be filled in by driller (MDE OR COUNTY USE ONLY) 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 APPROP, PERMIT NUMBER is subject to inspection or copying, in whole or in part, by the public and other governmental agencies, if not 0 PERMIT NO protected by federal or State Law. SPECIAL CONDITIONS AMPL E 0 NOTE APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED MDE/WMA/PER.071

© COUNTY

3

2:15

425'

FOGLE'S WELL DRILLING, LLC P.O. Box 202 Woodbine, Md 21797 443-609-4195 <u>FIELD DATA SHEET</u> <u>HOWARD COUNTY WELL YIELD TEST</u>

Well Permit No. HO-18-0050

Location of Property: <u>12210 Hall Shop Rd Clarksville, Md 21029</u> Well Driller/Tech: <u>Fogles Andrew Houseman MSD224</u> Owner: <u>Dorothy Stull</u>

Depth of Well:500'Casing:102' of 6" Steel Casing & 265' of 5" Steel CasingDistance of measuring point (M.P.) above ground:3'Static water level (S.W.L.) below M.P.:24'High rate pumping -reservoir DrawdownTime pump started:6:45Pumping rate:12Total time75 Mins_ to reach pumping water level475

Recovery pump test data – observations to be recorded every 15 minutes FLOW METER **CALCULATED FLOW** TIME (in 15 WATER LEVEL **PUMPING RATE** READING minute intervals) Below M.P. Time to fill 1 (gallons per (if used) gallon bucket minute) 24' 6:45 5 Seconds 12 gpm 7:00 146' 6 Seconds 10 gpm 7:15 231' 8 Seconds 7.5 gpm 7:30 302' 7 Seconds 8.5 gpm 7:45 380' 7 Seconds 8.5 gpm 429' 59 Seconds 8:00 1.1 gpm 8:15 429' 59 Seconds 1.1 gpm 8:30 429' 59 Seconds 1.1 gpm 59 Seconds 8:45 429' 1.1 gpm 9:00 429' 59 Seconds 1.1 gpm 9:15 429' 59 Seconds 1.1 gpm 9:30 429' 59 Seconds 1.1 gpm 429' 9:45 59 Seconds 1.1 gpm 59 Seconds 10:00 429' 1.1 gpm 10:15 429' 59 Seconds 1.1 gpm 427' 59 Seconds 10:30 1.1 gpm 427' 59 Seconds 10:45 1.1 gpm 11:00 427' 59 Seconds 1.1 gpm 427' 59 Seconds 11:15 1.1 gpm 11:30 427' 59 Seconds 1.1 gpm 11:45 426' 59 Seconds 1.1 gpm 12:00 426' 59 Seconds 1.1 gpm 426' 12:15 59 Seconds 1.1 gpm 12:30 426' 59 Seconds 1.1 gpm 12:45 426' 59 Seconds 1.1 gpm 426' 59 Seconds 1:00 1.1 gpm 59 Seconds 1:15 425' 1.1 gpm 425' 59 Seconds 1:30 1.1 gpm 425' 1:45 59 Seconds 1.1 gpm 2:00 425' 59 Seconds 1.1 gpm

59 Seconds

1.1 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: Robert L. Feezer Co., Address: 6321 Barnett Avenue Sykesville, MD 21784	Telephone #: 410-781-46	55
licensed journeyman or master plumb		ust be under the supervision of a enses may be subjected to field
Name of Property Owner: Envision Homes Subdivision: Site Address: 12204 Hallshop Road Clarksville, Maryland	Telephone #: 410-6	
If pump capacity exceeds well yield, a lo Torque arrestors, Cable guards, or other Safety rope, if used, attached to brass <u>Piping to house</u> Type: <u>Poly</u> PSI: <u>200</u> (160 psi min) Depth of supply line: <u>42"</u> (36" min) The water supply line is required to be	Make: Campbell Two piece Model#: PT800 Screened Depth: 42" (36" min) Cap secu NSF/WSC approved: Yes Conduit model mp installation: (feet) Conduit secure ow water cut off switch is required by NS acceptable method used- Must circle one rope adapter or other acceptable method Must circle one PVC sleeve to undisturbed soil at water Length of sleeve(5" minimum from found	PC 1990 Section 17.8.4 od <u>inside of well casing N/A</u> all penetration: Yes ation): 10' pump chamber, sewage piping,
	ponsible for installation date	
For Health Depa	rtment Use Only – Not to be completed	by Installer
Two piece cap installe Elec. conduit extends Safety rope not outsid Correct well tag attach Water supply line slee	ght & water supply line at least 36" below d and attached to casing securely at least 18" below grade/attached to cap p	properly28"

3

AND



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

MEMORANDUM

TO:	Fogle's Well Drilling, LLC Attn: Andrew R Houseman MSD 00224 PO Box 202 Woodbine, MD 21797
FROM:	Joseph Cabahug Jo H 26 Jor Licensed Environmental Health Specialist 001997 Howard County Health Department Well & Septic Program
RE:	12210 Hall Shop Road – Well Permit Special Conditions
DATE:	04/26/2019

This memorandum serves to inform the driller serving 12210 Hall Shop Road for construction of a new potable well for residential use of the special conditions associated with the release of the well permit 564813.

The proposed well at the above address is within the Baltimore Gneiss formation. Radium sample collection will be required at the yield test.

Additional water samples to be collected are Sodium, Chloride, and Total Dissolved Solids.

Please reach out to the Howard County Health Department – Bureau of the Environment with further questions.

Cc: 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:

Subdivision/Property Name

Lot #

12210 Hall Shop Ro-Road Name

- The well site has been staked by <u>FISher Collins</u>, <u>+Carker</u>, InC. (professional land surveyor or company employing professional land surveyors) on <u>March</u> 14, 2019 (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.



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

INTERIM CERTIFICATE OF POTABILITY

Expiration Date - August 26, 2020

February 26, 2020

Homeowner 12204 Hall Shop Road Clarksville, MD 21029

RE: Stull Property, P. 95 12204 Hall Shop Road Building Permit: B19003015 Well Permit: HO-18-0500

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 12/6/2019. Final approval of the well line connection to the dwelling was granted on 12/19/2019. The well construction was completed on 5/10/2019. Water samples were collected on 2/7/2020, 2/11/2020, 2/20/2020.

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 5/10/2019. Results showed a Gross Alpha level of $4.5 \pm 1.9 \text{ pCi/L}$ and Gross Beta level of $7.3 \pm 2.0 \text{ pCi/L}$. The Gross Alpha was below the maximum contaminant level (MCL) of 15 pCi/L and the Gross Beta was below the target level of 50 pCi/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-18-0500. 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: <u>http://www.mde.state.md.us/assets/document/WSP-Labs-2010apr16.pdf</u>

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,

fin h. Val

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 1413 Old Taneytown Rd. Westminster, MD (410) 848-1014 (410) 876-4554 FAX (410) 848-0298

REPORT OF ANALYSIS

Laboratory ID #:	135603			Account #:	1920	
Reference:	Envision Homes			Company:	Robert L Feeze	r Co- New Homes
Location:	12204 Hall Shop	Road		Requested By:	Rick Cross	
	Clarksville, MD	21029		Source:	Well Water	
Date/ Time Collected	: 2/7/2020	1302		Site:	Pressure Tank	
Date/Time Rec'd:	2/7/2020	1519		Treatment:	Prior to Sedime	ent Filter
Chlorine ppm:	Free: ND	Total:	ND	pH:	7.3	
Collected By:	R. Ott	0266H	RO	Well #:	HO-18-0050	
al his lieu an anna 2000 anna 10 marta anna 2000 anna 10 marta						
PARAMETERS	RES	ULTS	UNITS F	REFERENCE	METHOD D	ATE/TIME/ANALYST
PARAMETERS Bacteria, Coliform, Total		ULTS	UNITS F MPN/ 100 ml		METHOD D SM20 9223B	ATE/TIME/ANALYST 2/8/2020 / 1000 / LLO
54. 1949 - 1947 - 194	, MPN <1			<1.0		
Bacteria, Coliform, Total	, MPN <1 <1	.0	MPN/ 100 ml	<1.0	SM20 9223B	2/8/2020 / 1000 / LLO
Bacteria, Coliform, Total Bacteria, E. coli, MPN	, MPN <1 <1	0 0	MPN/ 100 ml MPN/ 100 ml	<1.0 <1.0	SM20 9223B SM20 9223B	2/8/2020 / 1000 / LLO 2/8/2020 / 1000 / LLO
Bacteria, Coliform, Total Bacteria, E. coli, MPN Nitrate	, MPN <1 <1	1.0 1.0 1.0	MPN/ 100 ml MPN/ 100 ml mg/L	<1.0 <1.0 10	SM20 9223B SM20 9223B 601	2/8/2020 / 1000 / LLO 2/8/2020 / 1000 / LLO 2/7/2020 / 1610 / RER

NOTES

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

Reason for Test :	Use & Occupancy
Building Permit # :	19003015

Date Reported: <u>2/10/2020</u>

1413 Old Taneytown Rd. Westminster, MD (410) 848-1014 (410) 876-4554 FAX (410) 848-0298

REPORT OF ANALYSIS

Laboratory ID #:	135645			Account #:	1920	
Reference:	Envision Homes			Company:	Robert L Feez	zer Co- New Homes
Location:	12204 Hall Shop	Road		Requested By:	Rick Cross	
	Clarksville, MD	21029		Source:	Well Water	
Date/ Time Collected	: 2/11/2020	1144		Site:	Pressure Tank	ζ.
Date/Time Rec'd:	2/11/2020	1320		Treatment:	Prior to Sedin	nent Filter
Chlorine ppm:	Free: ND	Total	: ND	pH:	7.2	
Collected By:	J. Yeager	0819	JY	Well #:	HO-18-0050	
PARAMETERS	RES	ULTS	UNITS I	REFERENCE	METHOD I	DATE/TIME/ANALYST
Turbidity	48	.8	NTU	<10	SM20 2130B	2/11/2020 / 1640 / RER
Hardness	14	2	mg/L CaCO3	***	SM20 2340 C.	2/12/2020 / 1145 / CRS

NOTES

- 1 ***Hardness Range: Soft 0-75; Moderately Hard 75-150; Hard 150-300; Very Hard >300 mg CaCO3/L = milligrams of Calcium Carbonate per Liter
- 2 NTU = Nephelometric Turbidity Units
- 3 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 4 ND:None Detected
- 5 Visual well check: Sealed, vented cap
- 6 pH & Chlorine level tested on site

Reason for Test :Use & OccupancyBuilding Permit # :19003015

Date Reported: <u>2/12/2020</u>

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

1413 Old Taneytown Rd. Westminster, MD (410) 848-1014 (410) 876-4554 FAX (410) 848-0298

REPORT OF ANALYSIS

Company: Robert L Feezer Co- New Homes Requested By: Rick Cross	
Source:Well WaterSite:Kitchen Sink TapTreatment:Softener/Neutralizer/Sediment FilterpH:7.2Well #:HO-18-0050	
S REFERENCE METHOD DATE/TIME/ANALYST 0.3* FR, 45 (126) 2/20/2020 / 1630 / RER	
	pH: 7.2 Well #: HO-18-0050 S REFERENCE METHOD DATE/TIME/ANALYST

NOTES

- 1 *SMCL = Secondary Maximum Contaminant Level
- 2 mg/L = milligrams per liter (also, parts per million)
- 3 NTU = Nephelometric Turbidity Units
- 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 Visual well check: Sealed, vented cap
- 7 pH & Chlorine level tested on site

Reason for Test :Use & OccupancyBuilding Permit # :19003015



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

July 11, 2019

Ms. Holly Schmidt 12210 Hall Shop Road Clarksville, Maryland 21029

> RE: 12210 Hall Shop Road Clarksville, Maryland 21029 Well Tag: HO – 18 – 0050

Dear Ms. Schmidt:

A sample was collected during a yield test on May 10, 2019 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 4.5 ± 1.9 picocuries/liter (pCi/L), while the Gross Beta level was 7.3 ± 2.0 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 well water supply is **within** EPA regulatory standards. Additional testing **for these parameters** does not appear necessary to secure the future Use & Occupancy. Please **note** that other standard testing parameters (bacteria, nitrate, turbidity and sand) will still be needed to help secure Use & 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 or to schedule additional testing.

Sincerely

Bert Nixon, Director Bureau of Environmental Health

Enclosure Cc: Property file

<u>Howard County Health De</u> Bureau of Environmental 3930 Stanford Blvd. Columbia, Maryland 2104	Health	t Divi	State of Ma MH - Laboratories sion of Environm ADIATION LAI 1770 Ashland Baltimore, Mary	Administration ental Sciences BORATORY Avenue		,-3684	30 30
Plant/Site Name:		LAD		Cour	. 1	ARI	
Sample Source: 12210		I SAL D	V.AD		1	8-005	0
Radon-222 Bottle A	Hoje	00502	CLARR Rador	VILLS 2102	Bottle	ell no., lab sink, san	nple tap, etc.)
County 13			Plant	No.			
CHECK (one per Box)		· · · · ·					
Type Drinking Water Image: Comparison of the comparis	Commu Non-Co Private Other	ommunity		Point of Collection arce (Raw) tribution (treated) CL		Testin Emergency Routine Recheck Special	
Submitters Code:	F			Federal Project:			
Collector: CASA		0010		Telephone No.:	111 21	3261	Z
Date Collected:	Hull In	001	1 1 1			a.m.	
Date Collected:	1019			Time Collected:		a.m	p.m.
Field pH: X.O			·	Field Chlorine:	NEG		
Nitric Acid Preserved:	Yes	V No		Iced: Yes	s No	-	
Remarks:	ale i	e lice	al al	Mield.		······································	
Remarks: TEST	EPA Code	Lab No.	Method No.	Results (pCi/L)	Date Analyzed	Analyst	Date Reported
 ✓ TEST ✓ Gross Alpha 	EPA Code 4000	Lab No.	1	Results (pCi/L)		·	Date Reported
Image: Construction TEST Image: Construction Gross Alpha Image: Construction Gross Beta	Code 4000 4100	Lab No.	1	Results (pCi/L)		·	
 ✓ TEST ✓ Gross Alpha ✓ Gross Beta □ Radium-226 	Code 4000 4100 4020	Lab No.	1	Results (pCi/L) 4.5 ± 1.9 7.3 ± 2.0		·	
Image: Weight of the second system TEST Image: Weight of the second system Gross Alpha Image: Weight of the second system Gross Beta Image: Weight of the second system Radium-226 Image: Weight of the second system Radium-228	Code 4000 4100 4020 4030	Lab No.	1	Results (pCi/L)		·	
 ✓ TEST ✓ Gross Alpha ✓ Gross Beta □ Radium-226 □ Radium-228 □ Total Uranium 	Code 4000 4100 4020 4030 4006	Lab No.	1	Results (pCi/L) 4.5 ± 1.9 7.3 ± 2.0		·	
☑ TEST ☑ Gross Alpha ☑ Gross Beta □ Radium-226 □ Radium-228 □ Total Uranium □ Radon-222 (Bottle A)	Code 4000 4100 4020 4030 4006 4004	Lab No.	1	Results (pCi/L) 4.5 ± 1.9 7.3 ± 2.0		·	
 ✓ TEST ✓ Gross Alpha ✓ Gross Beta ✓ Radium-226 □ Radium-228 □ Total Uranium □ Radon-222 (Bottle A) □ Radon-222 (Bottle B) 	Code 4000 4100 4020 4030 4006 4004	Lab No.	1	Results (pCi/L)		·	
☑ TEST ☑ Gross Alpha ☑ Gross Beta □ Radium-226 □ Radium-228 □ Total Uranium □ Radon-222 (Bottle A) □ Radon-222 (Bottle B) □ Radon Field Blank A	Code 4000 4100 4020 4030 4006 4004	Lab No.	1	Results (pCi/L)		·	
☑ TEST ☑ Gross Alpha ☑ Gross Beta □ Radium-226 □ Radium-228 □ Total Uranium □ Radon-222 (Bottle A) □ Radon-222 (Bottle B) □ Radon Field Blank A	Code 4000 4100 4020 4030 4006 4004 4004	Lab No.	1	Results (pCi/L) 4.5 ± 1.9 7.3 ± 2.0		·	
Image: Market Structure TEST Image: Market Structure Gross Alpha Image: Market Structure Radium-226 Image: Market Structure Radium-228 Image: Market Structure Total Uranium Image: Market Structure Radon-222 (Bottle A) Image: Market Structure Radon-222 (Bottle B) Image: Market Structure Radon Field Blank A Image: Market Structure Radon Field Blank B	Code 4000 4100 4020 4030 4006 4004 4004	Lab No.	1	Results (pCi/L) 4.5 ± 1.9 7.3 ± 2.0		·	
 ✓ TEST ✓ Gross Alpha ✓ Gross Beta ○ Radium-226 ○ Radium-228 ○ Total Uranium ○ Radon-222 (Bottle A) ○ Radon-222 (Bottle B) ○ Radon Field Blank A ○ Radon Field Blank B ○ Tritium 	Code 4000 4100 4020 4030 4006 4004 4004	Lab No.	1	Results (pCi/L)		·	
 ✓ TEST ✓ Gross Alpha ✓ Gross Beta □ Radium-226 □ Radium-228 □ Total Uranium □ Radon-222 (Bottle A) □ Radon-222 (Bottle B) □ Radon Field Blank A □ Radon Field Blank B □ Tritium □ 1 	Code 4000 4100 4020 4030 4006 4004 4004	Lab No.	1	Results (pCi/L)		·	
 ✓ TEST ✓ Gross Alpha ✓ Gross Beta □ Radium-226 □ Radium-228 □ Total Uranium □ Radon-222 (Bottle A) □ Radon-222 (Bottle B) □ Radon Field Blank A □ Radon Field Blank B □ Tritium □ 	Code 4000 4100 4020 4030 4006 4004 4004	Lab No.	Method No.) 4.5 ± 1.9 7.3 ± 2.0		·	
☑ TEST ☑ Gross Alpha ☑ Gross Beta □ Radium-226 □ Radium-228 □ Total Uranium □ Radon-222 (Bottle A) □ Radon-222 (Bottle B) □ Radon Field Blank A □ Radon Field Blank B □ Tritium	Code 4000 4100 4020 4030 4006 4004 4004	Lab No.	1) 4.5 ± 1.9 7.3 ± 2.0		·	
☑ TEST ☑ Gross Alpha ☑ Gross Beta □ Radium-226 □ Radium-228 □ Total Uranium □ Radon-222 (Bottle A) □ Radon-222 (Bottle B) □ Radon Field Blank A □ Radon Field Blank B □ Tritium □ Date Received: Data Release Signature:	Code 4000 4100 4020 4030 4006 4004 4004 4004 4004 5/13/1 - Au	Lab No.	Method No.	4.5 ± 1.9 7.3 ± 2.0	Date Analyzed	·	
 ✓ TEST ✓ Gross Alpha ✓ Gross Beta Radium-226 Radium-228 □ Total Uranium □ Radon-222 (Bottle A) □ Radon-222 (Bottle B) □ Radon Field Blank A □ Radon Field Blank B □ Tritium □ □ Date Received: □ Data Release Signature: 	Code 4000 4100 4020 4030 4006 4004 4004	Lab No.	Method No.) 4.5 ± 1.9 7.3 ± 2.0	Date Analyzed	·	
☑ TEST ☑ Gross Alpha ☑ Gross Beta □ Radium-226 □ Radium-228 □ Total Uranium □ Radon-222 (Bottle A) □ Radon-222 (Bottle B) □ Radon-222 (Bottle B) □ Radon Field Blank A □ Tritium □ Date Received: Data Release Signature: Lab Sample Intact upon arrival?	Code 4000 4100 4020 4030 4006 4004 4004 4004 4004 5/13/1 - Au	Lab No.	Method No.	4.5 ± 1.9 7.3 ± 2.0	Date Analyzed	·	
✓ TEST ✓ Gross Alpha ✓ Gross Beta □ Radium-226 □ Radium-228 □ Total Uranium □ Radon-222 (Bottle A) □ Radon-222 (Bottle B) □ Radon-222 (Bottle B) □ Radon Field Blank A □ Tritium □ Tritium □ Date Received: Data Release Signature: Lab Sample Intact upon arrival? Sample pH <2.0?	Code 4000 4100 4020 4030 4006 4004 4004 4004 4004 5/13/1 - Au	Lab No.	Method No.	4.5 ± 1.9 7.3 ± 2.0	Date Analyzed	·	
 ✓ TEST ✓ Gross Alpha ✓ Gross Beta ⊂ Radium-226 ⊂ Radium-228 ⊂ Total Uranium ⊂ Radon-222 (Bottle A) ⊂ Radon-222 (Bottle B) ⊂ Radon Field Blank A ⊂ Radon Field Blank B ⊂ Tritium ⊂ ⊂ ⊂ Date Received: _ _ Data Release Signature: Lab 	Code 4000 4100 4020 4030 4006 4004 4004 4004 4004 5/13/1 - Au	Lab No.	Method No.	4.5 ± 1.9 7.3 ± 2.0	Date Analyzed	·	

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SAMPLE TESTED AS RECEIV

ward County Health Dep reau of Environmental F `0 Stanford Blvd. Jumbia, Maryland 21045	lealth	Div	State of Maryl MH - Laboratories A ision of Environmen RADIATION LABO 1770 Ashland A Baltimore, Marylan ORATORY ANAL	Administration Ital Sciences DRATORY venue nd 21205	Lab No	<u>2251 2</u>	132
Plant/Site Name: HCH	D	-		Coun	ty: 1-00	H-HKL	
Sample Source: F13	EID	GAN	uk	Locat	ion: (Arf	E EII	2
Radon-222 Bottle A			Radon=2	22 Field Blank	Bottle	AB	
County 17			Plant No).			
CHECK (one per Box)							
Type Drinking Water Image: Constraint of the second seco	Comm Non-C Private Other	Community e		Point of Collection ee (Raw) bution (treated)		Testing Emergency Routine Recheck Special	
Submitters Code:	Í		Fe	ederal Project:			
Collector:	1 1	<u></u>		elephone No.: ime Collected:		a.m.	p.m.
Date Collected: Field pH: Nitric Acid Preserved: Remarks:	Yes [No	Fi	eld Chlorine:	No [p.m.
Field pH: Nitric Acid Preserved: Remarks:	Yes [Fi	eld Chlorine: ed: Yes	No [Date
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Field pH: Nitric Acid Preserved: Remarks: Gross Alpha Gross Beta Radium-226	Yes EPA Code 4000 4100 4020	Lab No.	Fi Ic Method No.	eld Chlorine: ed: Yes	No [Analyst	Date
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Field pH: Nitric Acid Preserved: Remarks: ✓ <t< td=""><td>Yes EPA Code 4000 4100 4020 4030 4006 4004</td><td>Lab No.</td><td>Fi Ic Method No.</td><td>eld Chlorine: ed: Yes</td><td>No</td><td>Analyst</td><td>Date</td></t<>	Yes EPA Code 4000 4100 4020 4030 4006 4004	Lab No.	Fi Ic Method No.	eld Chlorine: ed: Yes	No	Analyst	Date
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Field pH: Nitric Acid Preserved: Remarks: ✓ <t< td=""><td>Yes EPA Code 4000 4100 4020 4030 4006 4004 4004 4004 4004</td><td>Lab No.</td><td>Fi Ic Method No.</td><td>eld Chlorine: ed: Yes</td><td>No</td><td>Analyst</td><td>Date</td></t<>	Yes EPA Code 4000 4100 4020 4030 4006 4004 4004 4004 4004	Lab No.	Fi Ic Method No.	eld Chlorine: ed: Yes	No	Analyst	Date
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