



# HOWARD COUNTY HEALTH DEPARTMENT

69535

DATE 5/3/21

WS

Received From

Arnold Water Systems Inc

PHONE #

410 876-5100

For

Well Permit / 12230

Etchison Rd.

CASH

CHECK

NO.

2301

One hundred Sixty

Dollars

\$

160.00

Received By

Kemp

C 1 **63685** 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.

1 2 3 4 5 6  
 (THIS NUMBER IS TO BE PUNCHED  
 IN COLS. 3-6 ON ALL CARDS)

OWNER Mausser Ellen  
 WELL SITE ADDRESS 12230 Etchison Rd TOWN Ellicott City  
 SUBDIVISION \_\_\_\_\_ SECTION \_\_\_\_\_ LOT \_\_\_\_\_

ST/CO USE ONLY  
 DATE RECEIVED MM 02 DD 10 YY 22  
 DATE WELL COMPLETED MM 12 DD 10 YY 22  
 DEPTH OF WELL 22 400 26  
 (TO NEAREST FOOT)

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	
Brown Soil	0	2	
Tan/Brown Soil	2	63	
Med Hard Gray Rock	63	77	
Med Gray Rock	77	78	✓
Med Hard Gray Rock	78	365	
Med Gray Rock	365	366	✓
Med Hard Gray Rock	366	400	

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED  YES  NO

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. M D 553  
 DRILLERS SIGNATURE John Hen  
 (MUST MATCH SIGNATURE ON APPLICATION)  
 LIC. NO. D

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

GROUTING RECORD  YES  NO  
 WELL HAS BEEN GROUTED (Circle Appropriate Box) **Y** **N**  
 TYPE OF GROUTING MATERIAL (Circle one)  
 CEMENT **CM** BENTONITE CLAY **BC**  
 NO. OF BAGS 5 NO. OF POUNDS 230  
 GALLONS OF WATER 60  
 DEPTH OF GROUT SEAL (to nearest foot)  
 from 0 ft. to 69 ft.  
 (enter 0 if from surface)

CASING RECORD  
 casing types insert appropriate code below  
**ST** STEEL **CO** CONCRETE  
**PL** PLASTIC **OT** OTHER  
 MAIN CASING TYPE **PL** Nominal diameter top (main) casing (nearest inch)! 6 Total depth of main casing (nearest foot) 71

OTHER CASING (if used)  
 diameter depth (feet)  
 inch from to

SCREEN RECORD  
 screen type or open hole insert appropriate code below  
**ST** STEEL **BR** BRASS **HO** OPEN HOLE  
**PL** PLASTIC **OT** OTHER

DEPTH (nearest ft.) **C 2**  
 1 HO 2 69 3 400  
 E 1 8 9 11 15 17 21  
 A 23 24 26 30 32 36  
 C 38 39 41 45 47 51  
 S  
 R  
 E  
 N  
 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 \_\_\_\_\_ 68 \_\_\_\_\_

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)  
 T \_\_\_\_\_ (E.R.O.S.) W Q \_\_\_\_\_  
 70 \_\_\_\_\_ 72 \_\_\_\_\_  
 TELESCOPE LOG 74 75 76  
 CASING INDICATOR OTHER DATA

**C 3**  
 PUMPING TEST  
 HOURS PUMPED (nearest hour) 4  
 PUMPING RATE (gal. per min.) 4.62  
 METHOD USED TO MEASURE PUMPING RATE WATCH & BUCKET  
 WATER LEVEL (distance from land surface)  
 BEFORE PUMPING 200 ft.  
 WHEN PUMPING 220 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 285 g. 286

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 5  
 PLACE (A,C,J,P,R,S,T,O) IN BOX 29  
 CAPACITY: GALLONS PER MINUTE (to nearest gallon) 10  
 PUMP HORSE POWER 1  
 PUMP COLUMN LENGTH (nearest ft.) 380  
 CASING HEIGHT (circle appropriate box and enter casing height)  
 above } LAND SURFACE  
 below } 2 (nearest foot)

LATITUDE 39.296254  
 LONGITUDE 76.934367  
 (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 part, by the public and other governmental agencies, if not protected by federal or state law.



Carroll Water Systems  
 12047 Falls Road  
 Cockeyville, MD 21030  
 410-876-5100

### Water Well Yield Test Report

Well Tag No- HO-20-0116

Date Test Performed: 10/18/21

Address: 12230 Etchison Road

Well Driller / Tester:

Ellicott City, MD 21042

Well Depth 400 Ft

Subdivision:

Static Water Level Before Pumping: 200 Ft

Owner's Name: Ellen Mauser

CWS Acct #:

Time	Water Level (ft below surface)	PSI (existing pump)	Pumping Rate (time to fill 1 gallon bucket)	Additional Data	Calculated Flow (gal/minute)
1100	200 ft		5 sec		12.00
1115	210		6		6.00
1130	210		6		6.00
1145	210		6		6.00
1200	210		6		6.00
1215	210		6		6.00
1230	215		6		6.00
1245	215		6		6.00
1300	215		13		4.62
1315	215		13		4.62
1330	215		13		4.62
1345	220		13		4.62
1400	220		13		4.62
1415	220		13		4.62
1430	220		13		4.62
1445	220		13		4.62
1500	220		13		4.62
1515	220		13		4.62
1530	220		13		4.62
1545	220		13		4.62
1600	220		13		4.62

3PBLX 10/19/21(S) TAG# 10/19/21(S)

**B 1** SEQUENCE NO. (MDE USE ONLY) **44854** STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL STATE PERMIT NUMBER **HO-20-0116**  
 1 2 3 4 5 6 70 79 *fill in this form completely*

**OWNER INFORMATION**  
 Date Received (APA) **03/03/21**  
 8 MM DD YY 13  
 15 Last Name **Mauer** Owner **Ellen** First Name 34  
 36 Street or RFD **12230 Etchison Rd** 55  
 57 Town **Ellicott City** 70 State **MD** 72 Zip **21042** 76

**B 3** LOCATION OF WELL  
 8 COUNTY **Howard** 21  
 23 SUBDIVISION **2003** 42  
 SECTION 44 46 LOT **38** 48 50  
 52 NEAREST TOWN **Ellicott City** 71

**DRILLER INFORMATION**  
 76 Driller's Name **John Hess** M D License No. 81  
 Firm Name **Carroll Water Systems**  
 Address **12047 Falls Rd Cockeysville**  
 Signature \_\_\_\_\_ Date \_\_\_\_\_

**B 4** SOURCES OF DRILLING WATER  
 1. **12230 Etchison Rd** 11 STREET ADDRESS 30  
 2. \_\_\_\_\_  
 3. \_\_\_\_\_  
 ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)  
 NORTH N  
 WEST W EAST E  
 SOUTH S  
 34 105 37 DISTANCE FROM ROAD ENTER FT OR MI 38 39  
 TAX MAP: **0023** BLK: \_\_\_\_\_ PARCEL **0022**

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

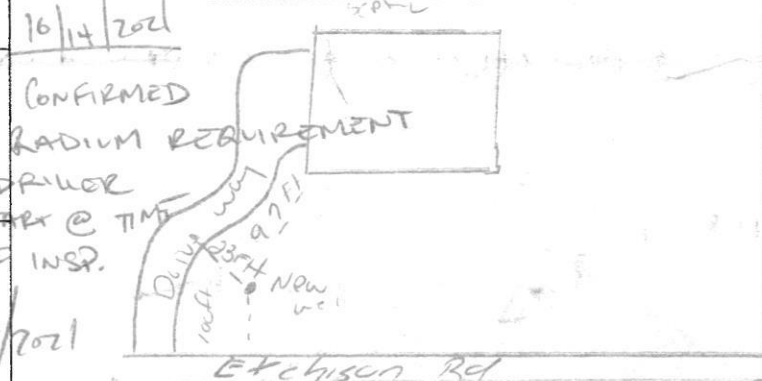
**USE FOR WATER (CIRCLE APPROPRIATE BOX)**  
 DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION  
 FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)  
 INDUSTRIAL, COMMERCIAL, DEWATERING  
 PUBLIC WATER SUPPLY WELL  
 TEST, OBSERVATION, MONITORING  
 OPEN LOOP GEOTHERMAL  
 CLOSED LOOP GEOTHERMAL

**NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL**  
 COUNTY NAME **Howard** COUNTY NO. **13**  
 STATE SIGNATURE \_\_\_\_\_ INSERT S → 41  
 DATE ISSUED **07/16/21** CO SIGNATURE **Arian Thomas** EXP. DATE **07/06/23**  
 43 MM DD YY 48

APPROXIMATE DEPTH OF WELL **400** FEET 24 28  
 APPROXIMATE DIAMETER OF WELL **6"** NEAREST INCH

PROPOSED LOCATION OF WELL ON LOT SHOW PERMANENT STRUCTURES SUCH AS BUILDINGS, SEPTIC SYSTEM, ROADS AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCE MEASUREMENTS TO WELL

**METHOD OF DRILLING (circle one)**  
 BORED (or Augered) JETTED Jetted & DRIVEN  
 30 AIR-ROTary AIR-PERCussion ROTARY (Hydraulic Rotary)  
 37 CABLE REVerse-ROTary Drive-POINT  
 other \_\_\_\_\_



**REPLACEMENT OR DEEPEMED 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 DEEPEM AN EXISTING WELL  
 PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED (IF AVAILABLE) 41 \_\_\_\_\_ 52

**Not to be filled in by driller (MDE OR COUNTY USE ONLY)**  
 APPROP. PERMIT NUMBER \_\_\_\_\_ G \_\_\_\_\_  
 PERMIT No. **HO-20-0116**  
 70 71 72 73 74 75 76 77 78 79

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**SPECIAL CONDITIONS** **RADIUM SAMPLE REQUIRED**  
 NOTE: APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED

DO NOT REMOVE THIS TAG  
DEPARTMENT OF THE ENVIRONMENT  
WELL PERMIT NUMBER

HO-20-01116

INFORMATION - GIVE NUMBER AND WRITE  
1800 WASHINGTON BLVD  
BALTIMORE MARYLAND 21230

12230 Ethrison Rd

Replacement well

Approved 7/6/21 SD

Staked by driller

woods

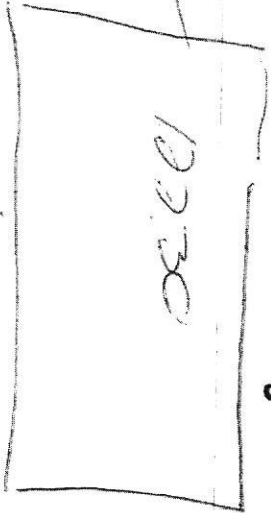
Paved way

Drill

xxxxx new well

new Pt.

gate



woods

Ethrison Rd

\*\*\*\*\*  
 WATER WELL ABANDONMENT-SEALING REPORT FORM  
 \*\*\*\*\*

SUBMIT COPIES OF COMPLETED FORM TO:

- \* COUNTY ENVIRONMENTAL AGENCY (contact MDE, WMA if address needed)
- \* WELL OWNER
- \* MDE, WATER MANAGEMENT ADMINISTRATION, WELL PROGRAM

APPROVED  
 02/23/2022

DATE WELL ABANDONED: Nov 17, 2021 (month/day/year)

\* PERMIT NUMBER OF ABANDONED WELL (if any) None

\* PERMIT NUMBER OF REPLACEMENT WELL: Ho - 20 - 0112

\* PERSON ABANDONING WELL: Mark Ketherford WELL DRILLER'S LICENSE NUMBER: 554

CIRCLE: MWD / MSD / MGD

\* OWNER'S NAME: Darlene Thews

SITE LOCATION MAP

\* WELL LOCATION:  
 COUNTY: Howard  
 NEAREST TOWN: Dayton  
 TAX MAP          BLOCK          PARCEL           
 SUBDIVISION: Linden Chapel Hill  
 SECTION:          LOT: 6  
 STREET ADDRESS: 4966 Morningstar Drive



LATITUDE 3 9.23341

LONGITUDE 7 6.98286

LOG OF SEALING MATERIAL

\* TYPE OF WELL BEING ABANDONED:  
 DRILLED                       JETTED  
 BORED                           HAND DUG  
 OTHER (specify)         

\* USE CODE:  
 DOMESTIC                       MUNICIPAL/PUBLIC  
 IRRIGATION                       INDUSTRIAL  
 TEST/OBSERVATION               GEOTHERMAL

\* TYPE OF CASING:  
 STEEL                               PLASTIC  
 CONCRETE                       OTHER (specify)         

MATERIAL	FEET	
	FROM	TO
<u>drill bentonite hole plug</u>	<u>0</u>	<u>63</u>
<u>clean fill</u>	<u>63</u>	<u>97</u>
VOLUME OF MATERIAL USED		
<u>12 cu ft bentonite</u>		

SIZE OF CASING: 6 INCHES IN DIAMETER

DEPTH OF WELL: 97 FEET DEEP

WAS ANY CASING REMOVED?  YES  NO  
 If yes, length removed, in feet:         

WAS CASING RIPPED OR PERFORATED?  YES  NO

SIGNATURE-MASTER WELL DRILLER OR SUPERVISING SANITARIAN LICENSE#

Darlene Kelly 304

MWD / MSD / MGS  
 CIRCLE ONE

11/29/21  
 DATE



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**Carroll Water**<sup>SM</sup>  
purifying the essential

Submitted to: Ellen Mauser

Date: 5/20/2021


Job Address: 12230 Etchison Rd, Ellicott City MD 21042

Cell: 443-629-5340

Email: [elmauser@comcast.net](mailto:elmauser@comcast.net)

### WELL ABANDONMENT

I agree to abandon the existing well upon completion of new well. The well will be abandoned to COMAR Regulations. All necessary paperwork will be submitted to the county.

  
\_\_\_\_\_  
Authorized Signature

DATE:   
\_\_\_\_\_



SEND REPORT TO: Ramar Martin

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

Lab No. EQ0006201195

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

**LABORATORY ANALYSIS REQUEST FORM**

Plant/Site Name: 12230 ETCHINSON

County: HOWARD

Sample Source: FIELD BLANK

Location: HO-20-0116

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

Radon-222 Bottle A HOTCO116 FB ← Radon-222 Field Blank

Bottle A \_\_\_\_\_

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: Joseph Cabanug

Telephone No.: 410 313 2643

Date Collected: 10/18/2021

Time Collected: \_\_\_\_\_ a.m. 1500 p.m.

Field pH: \_\_\_\_\_

Field Chlorine: NBC

Nitric Acid Preserved: Yes  No

Iced: Yes  No

Remarks: REP WELL FIELD BLANK

✓	TEST	EPA Code	Lab No.	Method No.	Results (pCi/L)	Date Analyzed	Analyst	Date Reported
<input checked="" type="checkbox"/>	Gross Alpha	4000	<u>820</u>	<u>EPA900.0</u>	<u>22</u>	<u>10/20/21</u>	<u>L.R</u>	<u>10/21/21</u>
<input checked="" type="checkbox"/>	Gross Beta	4100	<u>820</u>	<u>EPA900.0</u>	<u>&lt;4</u>	<u>10/20/21</u>	<u>L.R</u>	<u>10/21/21</u>
<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: 10/19/21 Received By: ABHuyt

Data Release Signature: Wendisha Treadwell Date: 10/21/21

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"/>

**HowCo Health Depart**  
**OCT 25 2021**  
**Environmental Health**

**SAMPLE TESTED AS RECEIVED**

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

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

December 3, 2021

Ellen & Eric Mauser  
12230 ETCHISON RD  
ELLCOTT CITY 21042

**RE: Replacement Well**  
12230 ETCHISON RD  
ELLCOTT CITY 21042  
**Well Tag: HO-20-0116**

Dear Ellen & Eric Mauser:

A sample was collected during a yield test on October 18, 2021 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 this screening revealed a **Gross Alpha** of  $12.0 \pm 3.0$  picocuries/liter (pCi/L), while the **Gross Beta** level was  $8.9 \pm 2.2$  pCi/L. The **Gross Alpha** result was exactly at the targeted standard of **15 pCi/L** (with the added " $\pm 3.0$ " margin of error), 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 received laboratory result slip, a second analysis shows a **Gross Alpha** of  $10.4 \pm 2.6$  picocuries/liter (pCi/L), while the **Gross Beta** level was  $11.9 \pm 2.2$  pCi/L and with respect to the initial test results and parameters, the well water supply **does meet** EPA regulatory standards for **Gross Alpha and Gross Beta**.

At the time of testing and with respect to the initial screening analysis, your "untreated" replacement well water supply **does not meet** EPA regulatory standards. Given these initial readings, some additional testing to further evaluate long-term **Gross Alpha, Gross Beta** and **Radium 226/228** is recommended. Both a water softener system and a kitchen tap point of use (POU) reverse osmosis (R/O) unit have been shown to be effective in reducing levels of these contaminants. If you currently have a softener system or R/O treatment on your water supply, you may wish to consider **post - treatment testing** levels for **Gross Alpha, Gross Beta** and **Radium 226/228** to ensure that the treatment is effective.

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