

C1 63487 SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT

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

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

FILL IN THIS FORM COMPLETELY PLEASE TYPE

COUNTY NUMBER

ST/CO USE ONLY DATE RECEIVED MM DD YY

DATE WELL COMPLETED MM DD YY

Depth of Well 22 300 26 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" HO-20-0125

OWNER: Caron Custom Homes; WELL SITE ADDRESS: 13429 Highland Rd; TOWN: Highland; SUBDIVISION: ; SECTION: ; LOT: ;

WELL LOG Not required for driven wells

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

Table with columns: DESCRIPTION, FEET (FROM, TO), check if water bearing. Includes handwritten entries: Hard Gray Limestone (70-225), Quartz (225-226), Hard Gray Limestone (226-300). Note: Drilled well deeper 70' to 300'.

GROUTING RECORD

WELL HAS BEEN GROUTED (Y/N); TYPE OF GROUTING MATERIAL (Cement CM, Bentonite Clay BC); NO. OF BAGS; NO. OF POUNDS; GALLONS OF WATER; DEPTH OF GROUT SEAL.

CASING RECORD

MAIN CASING TYPE (Steel ST, Concrete CO, Plastic PL, Other OT); Nominal diameter; Total depth.

OTHER CASING (if used) diameter and depth.

SCREEN RECORD

screen type or open hole (Steel ST, Brass BR, Open Hole HO, Plastic PL, Other OT); DEPTH (nearest ft.)

PUMPING TEST

HOURS PUMPED (3); PUMPING RATE (5.25 gal/min); METHOD USED TO MEASURE PUMPING RATE (1 gal); WATER LEVEL (32 ft before, 104 ft when pumping); TYPE OF PUMP USED (Submersible S).

PUMP INSTALLED

DRILLER INSTALLED PUMP (YES/NO); TYPE OF PUMP INSTALLED PLACE; CAPACITY: GALLONS PER MINUTE; PUMP HORSE POWER; PUMP COLUMN LENGTH; CASING HEIGHT (2 feet below land surface).

NUMBER OF UNSUCCESSFUL WELLS: 0; WELL HYDROFRACTURED (Y/N).

CIRCLE APPROPRIATE LETTER: A (Well abandoned), E (Electric log), P (Test well converted).

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04...

DRILLERS LIC. NO.: M S D 324; DRILLERS SIGNATURE; LIC. NO.: D

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

DEPTH (nearest ft.) table with rows A-C, S-E, N; DIAMETER OF SCREEN (NEAREST INCH) 56-60; 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; TELESCOPE CASING; LOG INDICATOR; OTHER DATA.

LATITUDE 39.192312; LONGITUDE 76.922402 (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.

B 1 32591

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL

STATE PERMIT NUMBER

HO-20-0125

570112 please type

fill in this form completely

Date Received (APA) 08/11/21

OWNER INFORMATION

8 MM DD YY 13
15 Last Name Owner First Name 34
36 Street or RFD 55
57 Town 70 State 72 Zip 76

B 3

LOCATION OF WELL

8 COUNTY 21
23 SUBDIVISION 42
SECTION 44 46 LOT 48 50
52 NEAREST TOWN 71

DRILLER INFORMATION

Driller's Name Andrew Houseman M SD 224 License No. 76 81
Firm Name Foakes Well Drilling, LLC
Address P.O. Box 202 Woodbine, Md 21797
Signature Date 8-3-21

B 4

SOURCES OF DRILLING WATER

1. Well water
2. 4/12/21
3. 5.7 GPM
static 32' level 104' pump 280' no tag, deepened

13429 Highland Rd
11 STREET ADDRESS 30

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)



34 50 37 DISTANCE FROM ROAD ENTER FT OR MI 38 39

TAX MAP: 0034 BLK: 0015 PARCEL 0101

B 2 WELL INFORMATION
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)

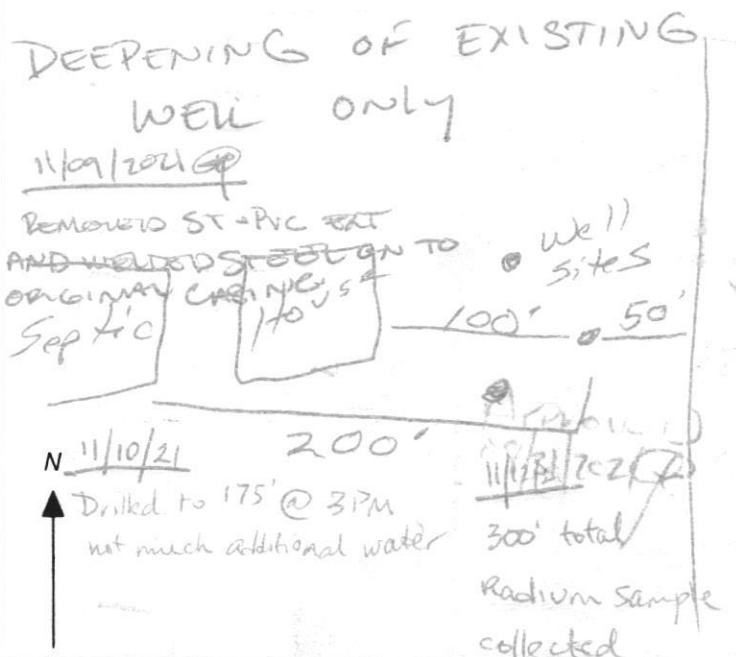
- D DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION
F FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)
I INDUSTRIAL, COMMERCIAL, DEWATERING
P PUBLIC WATER SUPPLY WELL
T TEST, OBSERVATION, MONITORING
O OPEN LOOP GEOTHERMAL
C CLOSED LOOP GEOTHERMAL

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

County Name Howard County No.
State Signature INSERT S
Date Issued 08/31/2021
CO Signature EXP. DATE 08/31/22

DOB: 11/09/2001 DOY: 11/12/2001

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



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

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 DEEPEMED WELLS (CIRCLE APPROPRIATE BOX)

- N THIS WELL WILL NOT REPLACE AN EXISTING WELL
Y THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
S THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS
D THIS WELL WILL DEEPEM AN EXISTING WELL No tag on well

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

APPROX. PERMIT NUMBER G
PERMIT No. HO-20-0125

SPECIAL CONDITIONS

NOTE APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED

RADIUM SAMPLES REQUIRED

B 1 32591

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL

STATE PERMIT NUMBER

HO-20-0125

570112 please type

OWNER INFORMATION: Date Received (APA) 08/11/21, Last Name: Cairn, First Name: Custom Homes, Street or RFD: 10548 Gorman Rd, Town: Laurel, Md, State: 20723

LOCATION OF WELL: COUNTY: Howard, SUBDIVISION: Highland, NEAREST TOWN: Highland

DRILLER INFORMATION: Driller's Name: Andrew Houseman, License No.: M SD 224, Firm Name: Fooks Well Drilling, LLC, Address: P.O. Box 202 Woodbine, Md 21797, Signature: Andrew Houseman, Date: 8-3-21

SOURCES OF DRILLING WATER: 1. Well water, 2. 4/12/21, 3. 5.7 GPM state 32' level 104' pump 280' negot deepener!

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX): NORTH, WEST, EAST, SOUTH. DISTANCE FROM ROAD: 50 FT. TAX MAP: 0034, BLK: 0015, PARCEL: 0101

WELL INFORMATION: APPROX. PUMPING RATE (GAL. PER MIN.): 5, AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY): 500

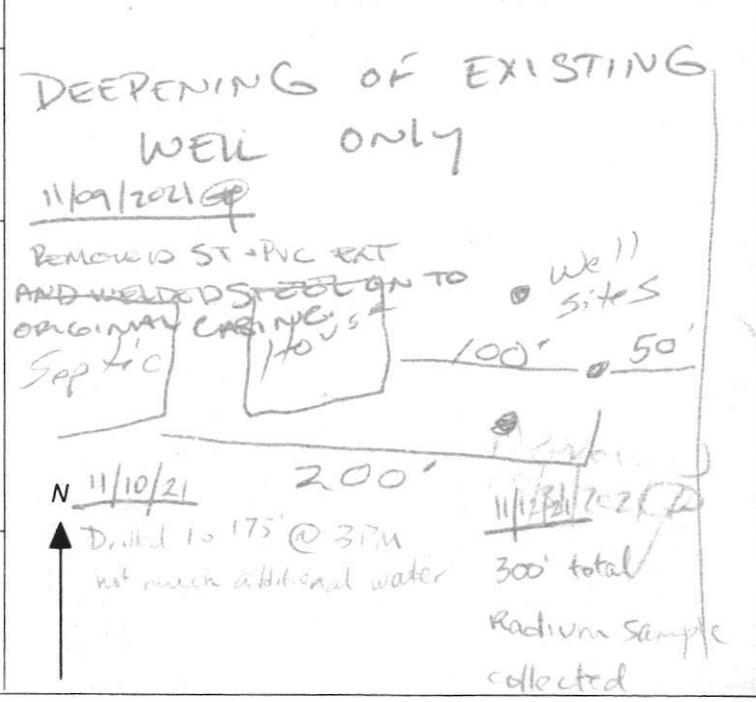
USE FOR WATER (CIRCLE APPROPRIATE BOX): D DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL: COUNTY NAME: Howard, COUNTY NO.: 24, STATE SIGNATURE: [Signature], DATE ISSUED: 08/31/2021, CO SIGNATURE: [Signature], EXP. DATE: 08/31/2022

APPROXIMATE DEPTH OF WELL: 300 FEET, APPROXIMATE DIAMETER OF WELL: 6 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) AIR-ROTary, JETTED AIR-PERCussion, Jetted & DRIVEN ROTARY (Hydraulic Rotary), REVerse-ROTary, DRive-POINT



REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX): D THIS WELL WILL DEEPEM AN EXISTING WELL. PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED (IF AVAILABLE): 41

Not to be filled in by driller (MDE OR COUNTY USE ONLY): APPROX. PERMIT NUMBER: G, PERMIT No.: HO-20-0125

SPECIAL CONDITIONS: RADIUM SAMPLES REQUIRED

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

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: Fogles Well Pump & Water Treatment, LLC Telephone #: 410.795.1535
Address: J PO Box 63
Woodbine, MD 21797

Must circle one: Licensed Plumber / Licensed Well Driller / Licensed Well Pump Installer

License # and name of individual responsible for the field installation:
Name (Print): David C Fogle License# MSD226

*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: Cairn Custom Homes Telephone #: _____
Subdivision: _____ Lot #: _____ Well Tag #: HO-20-0125 (ST)
Site Address: 13429 Highland Rd
Highland, MD 20777

Submersible Pump Data

Make: Grundfos
Model #: ESBE07-180
Pump Capacity: 15
Well Yield: 5.75
Depth of well encountered at time of pump installation: 308 (feet)

Pitless Adapter

Make: Campbell +
Model #: NA
GPM Depth: 36" (36" min)
GPM NSF/WSC approved: NA

Well Cap and Electric Conduit

Two piece watertight cap: YS
Screened, vented well cap: YS
Cap secured to casing: YS
Conduit min 18" B.G.: YS
Conduit secured to well cap: YS

If pump capacity exceeds well yield, a low water cut off switch is required by NSPC 1990 Section 17.8.4

Must circle one: Torque arrestors / Cable guards / Other acceptable method used

Safety rope, if used, attached to brass rope adapter or other acceptable method inside of well casing NA

Piping to house

Type: 1" poly pipe
PSI: 200 (160 psi min)
Depth of supply line: 36" (36" min)

House Connection

PVC sleeve to undisturbed soil at wall penetration: YS
Length of sleeve (5' minimum from foundation): 6'
Sleeve sealed properly: YS

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.

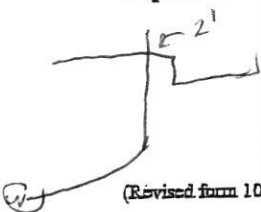
Signature of company representative responsible for installation: [Signature] date: 3/24/22

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

Date Insp. Requested: 3/24/2022 Date Insp. Approved: 3/24/22 Inspector: _____
Inspection Data: Pitless adapter watertight & water supply line at least 36" below grade
Two piece cap installed and attached to casing securely
Elec. conduit extends at least 18" below grade/attached to cap properly
Safety rope not outside of well cap/casing
Correct well tag attached properly and casing 8" above finished grade
Water supply line sleeved adequately at house connection
Adequate grout observed below pitless adapter

(ST) 48"
✓ 40"
✓ 16"
✓ 15"

no grout observed -
6' steel casing welded on
to original well by
Fogles



(Revised form 10/24/2018)

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

INTERIM CERTIFICATE OF POTABILITY
PERMANENT DEVIATION FOR RADIUM
Expiration Date – March 16, 2022

September 16, 2022

Homeowner
13429 Highland Road
Highland, MD 20777

RE: Sterkis Property, P. 101
13429 Highland Road
Building Permit: B21003588
Well Permit: HO-20-0125

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 **8/19/2022**. Final approval of the well line connection to the dwelling was granted on **3/24/2022**. The well construction was completed on **11/12/2021**. Water samples were collected on **7/26/2022**.

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 **11/21/2021**. Results showed a Gross Alpha level of **23.7 ± 4.0 pCi/L** and a Gross Beta level of **12.5 ± 2.4 pCi/L**. **This exceeds the maximum contaminant level (MCL)** of 15 pCi/L for Gross Alpha and the Gross Beta was below the target level of 50pCi/L (roughly equivalent to the annual dose rate of 4 millirems per year).

After installation of a radionuclide removal device (Reverse Osmosis), post-treatment water samples were collected on **8/30/2022** and indicated a combined Radium 226/228 level of **1.1 pCi/L** which is below the MCL of 5 pCi/L.

This Department will grant a **permanent deviation** to the Interim Certificate of Potability on condition that the radionuclide removal system effectively maintains a Gross Alpha level of less than **15 pCi/L**, a Gross Beta level of less than **50 pCi/L**, and a Radium 226/228 level of less than **5 pCi/L**.

Furthermore, it will be necessary for you to comply with the following conditions:

1. The system must be properly operated and maintained continuously in accordance with the service contract for the life of the residence.
2. It is recommended that a Maryland certified water laboratory certified for radionuclide analysis perform a yearly radionuclide analysis.

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

3. If you decide to sell or rent your home in the future, you must make any potential buyer/tenant aware of this permanent deviation. **A person who fails to make this disclosure is subject to the penalties set out in COMAR 26.04.04.12F Enforcement and Environment Article 9-1311, Annotated Code of Maryland.**

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-20-0125. 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.**

Please contact (410) 313-1773 to schedule a final water sample appointment or contact a Maryland 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](#)" which illustrates a better understanding for your onsite sewage disposal system. You will also find a link to Maryland Department of the Environments website which describes in further detail operation and maintenance of your septic system.

Approving Authority,



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

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

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

MEMORANDUM

March 7th, 2022

Homeowner
13429 Highland Road
Highland, MD 20777

RE: **Well Sampling of deepened well**
13429 Highland Road
Highland, MD 20777
Well Permit # HO-20-0125

JP 03/07/2022

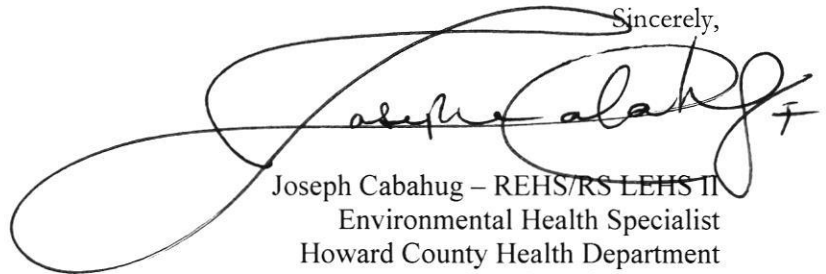
Homeowner:

According to our records, your well has been deepened and is to be connected to a rebuilt dwelling. **We recommend tested for potability and gross alpha and gross beta radium** as the property is within the radium buffer area of Howard County. Please contact us about the status of your old well. We also request that you contact the Community Hygiene Program at **(410) 313-1773** to schedule initial water sampling for the above referenced well, as required by the Maryland Well Construction Regulation (COMAR 26.04.04). This sampling includes testing for bacteria, nitrates, turbidity, and sand, as well as gross alpha radium and gross beta radium.

It is preferred that the sample be collected from the primary indoor drinking tap, but if suitable scheduling is not possible, the sample may be taken from an outside tap to complete your sampling obligation. However, the potential for unsuccessful sample results increases when samples are collected from taps exposed to the outside environment.

If sampling has already been performed by an outside lab, please help us by forwarding the results of the samples to our office. Otherwise, call Community Hygiene at 410-313-1773 to schedule or arrange for them to collect the subsequent water samples and call us at 410-313-6287 to verify the well line installation and the status of the old well.

Sincerely,



Joseph Cabahug – REHS/RS LEHS II
Environmental Health Specialist
Howard County Health Department
Well and Septic Program

Cc: Community Hygiene Program
File



Bureau of Environmental Health
8930 Stanford Blvd | Columbia, MD 21045
410.313.2640 - Voice/Relay
410.313.2648 - Fax
1.866.313.6300 - Toll Free

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

December 20, 2021

LEV & NATALYA STERKIS
5605 FOXCROFT WAY
COLUMBIA MD 21045

← accidentally mailed
to this address (37) 12/20/21

RE: Replacement Well
13429 HIGHLAND RD
HIGHLAND 20777
Well Tag: HO-20-0125

Dear Lev & Natalya Sterkis:

A sample was collected during a yield test on November 12, 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 23.7 ± 4.0 picocuries/liter (pCi/L), while the **Gross Beta** level was 12.5 ± 2.4 pCi/L. The **Gross Alpha** result was above the targeted standard 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 received laboratory result slip, a second analysis shows a **Gross Alpha** of 19.5 ± 3.6 picocuries/liter (pCi/L), while the **Gross Beta** level was 15.0 ± 2.4 pCi/L and with respect to the initial test results and parameters, the well water supply **does** meet EPA regulatory standards for **Gross Alpha**.

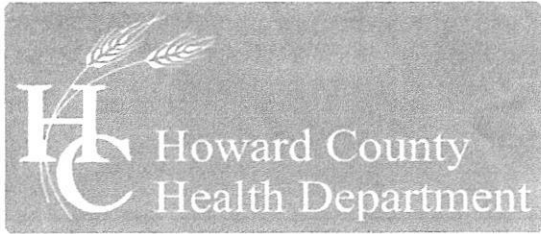
At the time of testing and with respect to the initial screening analysis, your "untreated" replacement well water supply **does not meet** EPA regulatory standards. Given these initial readings, some additional testing to further evaluate long-term **Gross Alpha**, **Gross Beta** and **Radium 226/228** 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. In addition, to help secure your **Final Certificate of Potability (FCOP)**, additional samples for bacteria, nitrate and sand will be needed for analysis.

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



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 # _____ Road Name 13429 Highland Rd

The well site has been staked by Existing well (Drilling Deeper
(professional land surveyor or company employing professional land surveyors) no tag
on _____ (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.

HOME LAND ENVIRONMENTAL HEALTH LABS

Understanding the Results

This narrative is intended to help the recipient to understand the results. The results listed below are only for tests commonly sampled or analyzed by Home Land Environmental Health Labs. For a full list of the Environmental Protection Agency's (EPA) Primary and Secondary Standards, go to: https://www.epa.gov/sites/production/files/201606/documents/npwdr_complete_table.pdf

Definitions and Acronyms

Analyst: Refers to the individual whom conducted the test.

Maximum Contamination Level (MCL): A level established by the EPA which is the "highest level of a contaminate that is allowed in drinking water." Any level that exceeds the MCL is considered not safe for human consumption.

Method: The type of analysis used to determine the results.

Not Detected (ND): Any level below the reporting limit.

Primary Drinking Water Standard: Enforceable standards developed by the EPA. Levels that exceed the MCL for a particular standard are considered to unsafe for human consumption.

Reporting Limit (RL): The lowest level that can be detected by the method used for the analysis.

Secondary Drinking Water Standard: Standards developed by the EPA. Secondary standards are generally not considered to be dangerous to human health. They may cause aesthetic or cosmetic problems to the water quality or plumbing distribution system.

*Parameter analyzed by **MSS:** Maryland Spectral Services, **FRC:** Florida Radiochemistry, **ECL:** Enviro-Chem Laboratories

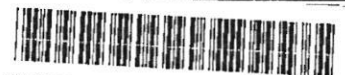
This table is for informational purposes only. See page 1 for your results

| Parameter | MCL | Type | Effects | Source | Treatment |
|----------------------------------|-------------------------|-----------|--|--|--|
| Total Coliform | Present | Primary | Used to indicate whether potentially harmful bacteria are present | Naturally Present | Well Repair and Chlorination, UV light |
| E. coli | Present | Primary | Stomach illness | Human and Animal Fecal Waste | Well Repair and Chlorination, UV light |
| Nitrates | 10.0 mg/L | Primary | Blue-Baby Syndrome | Fertilizers and Sewage | Reverse Osmosis |
| Nitrites | 1.0 mg/L | Primary | Blue-Baby Syndrome | Fertilizers and Sewage | Reverse Osmosis |
| Lead | 0.015 mg/L | Primary | Slowed Mental Development, Kidney Problems, High Blood Pressure | Corrosion of household plumbing systems; Erosion of natural deposits | Acid Neutralizer, Chemical Feeder (soda ash), Pipe Replacement |
| Gross Alpha | 15.0 pCi/L | Primary | Increased risk of cancer | Naturally Occurring | Water Softener |
| Radium 226 & 228 | 5.0 pCi/L | Primary | Increased risk of cancer | Naturally Occurring | Water Softener |
| Volatile Organic Compounds (VOC) | Varies | Primary | Increased risk of cancer | Gas and Chemical leaks | Charcoal Filter |
| Arsenic | 0.010 mg/L | Primary | Skin Damage, Circulatory Problems, Cancer | Natural Deposits, Orchards, Industrial Waste | Reverse Osmosis |
| Cadmium | 0.005 mg/L | Primary | Kidney Damage | Pipes, Natural Deposits, Industrial Waste | Reverse Osmosis |
| Copper | 1.3 mg/L | Primary | Gastrointestinal distress, Liver or Kidney Damage | Corrosion of household plumbing systems; Erosion of natural deposits | Acid Neutralizer, Reverse Osmosis, Pipe Replacement |
| Iron | 0.3 mg/L | Secondary | Possible staining on plumbing fixtures and laundry | Naturally Occurring | Water Softener |
| Turbidity | 10.0 NTU | Secondary | Interferes with filtration | Naturally Occurring | Sediment Filter |
| pH | 6.5-8.5 (Neutral range) | Secondary | Low pH: Bitter metallic taste, Corrosion High pH: Slippery feel; Soda taste; Deposits | Naturally Occurring | Acid Neutralizer |

Chain of Custody Form

HOME LAND

L A B S



201585 Date Due: 3/30/20
 Client: Well Water Solutions, Inc.
 Project:

9106 Philadelphia Road, Suite 106
 Rosedale, MD 21237
 (443) 505-8375
 MD Lab # 353

108 Old Solomons Island Road, Suite L2
 Annapolis, MD 21401
 (410) 224-4304
 MD Lab # 106

3430 Rockefeller Court
 Waldorf, MD 20602
 (410) 224-4304
 MD Lab # 139

Client Name:
Well Water Solutions, Inc.

Email Address:
jemoseman@wellwatersolutions.net & jblober@wellwatersolutions.net

Phone Number:
410-835-7185 or 301-674-3137

Property Address:
13429 HIGHLAND RD
HIGHLAND MD 20777

Field Collection Information

| | |
|------------------------|------------------|
| Sampler Name: | John Moseman |
| Sampler ID #: | 0189JM |
| Date and Time Sampled: | 3/25/2021 @ 1:00 |
| Well Tag Number: | |

| | |
|------------------------|---|
| Field pH: | 5 |
| Field Chlorine (mg/L): | Present / <input checked="" type="radio"/> Absent |
| Sand: | Present / <input checked="" type="radio"/> Absent |
| Clarity: | <input checked="" type="radio"/> Clear / Un-Clear |

Well Casing and Cap Condition

| | | | |
|---------------------------------------|---|-------------------------------|--|
| Height Above Grade: <u>2 FT</u> | Cap Type: <input checked="" type="radio"/> 1 piece / <input type="radio"/> 2 piece / | Casing: <u>Steel (PVC)</u> | Conduit: <input checked="" type="radio"/> PVC / |
| Sample Point: <u>PRESSURE TANK</u> | Water Conditioning: <u>NONR</u> | | |

Requested Testing: (Please check all that apply)

Potability (Bacteria, Nitrates, pH, Turbidity)

FHA/VA (Bacteria, Nitrates, Nitrites, pH, Turbidity, Lead and Iron)

| | | |
|--|-------------------------------------|--|
| <input type="checkbox"/> Bacteria | <input type="checkbox"/> Arsenic | <input type="checkbox"/> Other: <small>Radium Short Term</small> |
| <input type="checkbox"/> Lead | <input type="checkbox"/> Cadmium | <input type="checkbox"/> Other: <small>Gross Alpha & Gross Beta</small> |
| <input type="checkbox"/> Nitrates | <input type="checkbox"/> Fluoride | <input type="checkbox"/> Other: <small>Radium Long Term</small> |
| <input type="checkbox"/> Iron | <input type="checkbox"/> Pesticides | <input type="checkbox"/> Other: <small>TDS</small> <input type="checkbox"/> Sodium |
| <input type="checkbox"/> Gross Alpha | <input type="checkbox"/> VOC | <input type="checkbox"/> Other: <small>Chlorides</small> |
| <input type="checkbox"/> Saltwater Intrusion | <input type="checkbox"/> Hardness | <input type="checkbox"/> Other: |

List rush samples below

Refer to table for rush turnaround times and fees

Release Signatures

Released By: [Signature]
 John Moseman

Released By: [Signature]

Released By: Jason Kim

Received in lab by: Jason Kim

Date/Time: 3/25/2021 @ 1:00

Date/Time: 3/26 @ 8:30

Date/Time: 3-26-21 11:00AM

Date/Time: 3-26-21 11:00AM

HOMELAND LABS

9106 Philadelphia Road, Suite 106
 Rosedale, MD 21237
 Phone 443.505.8375
 lab@homelandhealthyhomes.com
 State Certified Water Quality Lab 353

108 Old Solomons Island Road, Suite 12
 Annapolis, MD 21401
 Phone 443.505.8375
 lab@homelandhealthyhomes.com
 State Certified Water Quality Lab 106

3430 Rockefeller Court
 Waldorf, MD 20602
 Phone 443.505.8375
 lab@homelandhealthyhomes.com
 State Certified Water Quality Lab 139

Certificate of Analysis

Report Date: 3/29/2021

Client: Well Water Solutions, Inc.
 Property Address: 13429 Highland Rd
 Highland, MD 20777

Chlorine Residual: 0.0
 Field pH: 5.0
 Well Type: N/A
 Well Height: 2'
 Cap Type: 1-Piece
 Casing: PVC
 Conduit: PVC
 Clarity: Clear
 Sand: None Observed
 Well Tag Number: N/A

Report No: 201585
 Sample Time: 03/25/21 13:00
 Date & Time Received: 03/26/21 11:00
 Sampled By: John Moseman 0189JM (Exp. 3/14/2022)
 Preservation: Ice
 Sample Point(s): Pressure Tank
 Water Conditioning Appears to be: None

| Primary Contaminants | | | | | | | | |
|-------------------------|--------------|--------|------------------|-----------|---------|-----|---------|------------------|
| Parameter | Method | Result | Pass/Fail | Units | MCL | RL | Analyst | Date of Analysis |
| Bacteria-Total Coliform | Colitag Test | Absent | Pass | Per/100ml | Present | 1 | ERW-353 | 03/27/2021 |
| Bacteria-E.coli | Colitag Test | Absent | Pass | Per/100ml | Present | 1 | ERW-353 | 03/27/2021 |
| Nitrate + Nitrite as N | EPA 353.2 | 6.5 | Pass | mg/l | 10 | 0.5 | AND-353 | 03/26/2021 |
| Secondary Contaminants | | | | | | | | |
| Parameter | Method | Result | Acceptable /High | Units | SMCL | RL | Analyst | Date of Analysis |
| Turbidity | EPA 180.1 | 22.7 | High | NTU | 10 | 0.5 | AND-353 | 03/26/2021 |

Approved By Kevin Barnaba Kevin Barnaba, Lab Director



Date: 10/8/2020
 Customer Name: Carin Custom Homes
 Job Location: 13429 Highland Rd
 Technician: Jason
 Well Tag: No tag
 Well Depth: 78'
 Static Water Level Before: 34'
 Well Casing Type: PVC
 Well Casing Height: 22"
 Well Casing Condition: Good
 Type of Well Cap: Conduit

NOTES/RECOMMENDATIONS:

| TIME | WATER LEVEL | PUMPING RATE (TIME TO FILL 1 GAL BUCKET) | CALCULATED FLOW (GALLONS PER MIN) |
|-------|-------------|--|--------------------------------------|
| 8:15 | 34 | 12 | 5 |
| 8:30 | 47 | Slowed to 16 | 3.75 |
| 8:45 | 42 | Adjusted to 14 | 4.28 |
| 9:00 | 43 | 14 | 4.28 |
| 9:15 | 44 | 14 | 4.28 |
| 9:30 | 45 | 14 | 4.28 |
| 9:45 | 45 | 14 | 4.28 |
| 10:00 | 45 | 14 | 4.28 |
| 10:15 | 45 | 14 | 4.28 |
| 10:30 | 45 | 14 | 4.28 |
| 10:45 | 45 | 14 | 4.28 |
| 11:00 | 45 | 14 | 4.28 |
| 11:15 | 45 | 14 | 4.28 |
| | | | |
| | | | |

Based on what we were able to observe and our experience with on-site well water delivery technology, we submit this report based on the present condition of the system. Fogle's WPWT, LLC has not been retained to warrant, guarantee, or certify the proper functioning of the system for any period of time in the future. Because of the numerous factors (usage, soil characteristics, previous failures, etc.) which may affect the proper operation of the system, as well as the inability of our company to supervise or monitor the use or maintenance of the system, this report shall not be construed as a warranty by our company that the system will function properly for any particular buyer. Fogle's WPWT LLC, has been retained to arrange for the testing recorded above and uses licensed service professionals to complete these tests. Fogle's WPWT, LLC. DISCLAIMS ANY WARRANTY either expressed or implied, arising from the inspection of the system or this report.

SEND REPORT TO: Ramon 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. ✓

LABORATORY ANALYSIS REQUEST FORM

Plant/Site Name: 13429 Highland Rd County: Howard
 Sample Source: _____ Location: HO-20-0125
(Well no., lab sink, sample tap, etc.)
 Radon-222 Bottle A H05T0125RA Radon-222 Field Blank Bottle A _____
 Bottle B _____ Bottle B _____
 County 13 Plant No.

| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|

CHECK (one per Box)

| Type | Service | Point of Collection | Testing |
|--|---|--|---|
| Drinking Water <input checked="" type="checkbox"/> | Community <input type="checkbox"/> | Source (Raw) <input checked="" type="checkbox"/> | Emergency <input type="checkbox"/> |
| Landfill <input type="checkbox"/> | Non-Community <input type="checkbox"/> | Distribution (treated) <input type="checkbox"/> | Routine <input checked="" type="checkbox"/> |
| Stream <input type="checkbox"/> | Private <input checked="" type="checkbox"/> | MCL <input type="checkbox"/> | Recheck <input type="checkbox"/> |
| Other <input type="checkbox"/> | Other <input type="checkbox"/> | | Special <input type="checkbox"/> |

Submitters Code: 415 Federal Project:
 Collector: Susan Thomas Telephone No.: 410-313-6287
 Date Collected: 11/12/21 Time Collected: 10:18 a.m. _____ p.m.
 Field pH: 5.5 Field Chlorine: neg
 Nitric Acid Preserved: Yes No Iced: Yes No

Remarks: collected at middle of yield, rep well

| TEST | EPA Code | Lab No. | Method No. | Results (pCi/L) | Date Analyzed | Analyst | Date Reported |
|---|----------|-----------|------------|-----------------|---------------|---------|---------------|
| <input checked="" type="checkbox"/> Gross Alpha | 4000 | 1054 | EPA 9000 | 23.7 ± 4.0 | 11/16/21 | L.R. | 11/16/21 |
| <input checked="" type="checkbox"/> Gross Beta | 4100 | 1054 | EPA 9000 | 10.5 ± 2.4 | 11/16/21 | L.R. | 11/16/21 |
| <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 checked="" type="checkbox"/> Gross Alpha | 4000 | 1054 Cont | EPA 9000 | 19.0 ± 3.6 | 11/19/21 | L.R. | 11/22/21 |
| <input checked="" type="checkbox"/> Gross Beta | 4100 | 1054 Cont | EPA 9000 | 10.0 ± 2.4 | 11/19/21 | L.R. | 11/22/21 |

Date Received: 11/15/2021 Received By: L Reed
 Data Release Signature: _____ Date: 11/22/21

| Lab Use Only | Yes | No | N/A |
|-------------------------------|-----|----|-----|
| Sample Intact upon arrival? | ✓ | | |
| Sample pH < 2.0? | ✓ | | |
| Received within holding time? | ✓ | | |

HoCo Health Depart
 NOV 24 2021
Environmental Health

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

SAMPLE TESTED AS RECEIVED

SEND REPORT TO: Rama 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. 1000 1300

LABORATORY ANALYSIS REQUEST FORM

Plant/Site Name: 75429 Highland Rd County: Howard

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

Radon-222 Bottle A _____ Radon-222 Field Blank Bottle A H0510125FB
 Bottle B _____ Radon Bottle B _____

County Howard 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: Suzanne Thomas Telephone No.: 410-313-6287

Date Collected: 11/12/21 Time Collected: 9:15 a.m. p.m.

Field pH: 6.5 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 | <u>105 B</u> | <u>EP19002</u> | <u>22</u> | <u>11/16/21</u> | <u>L.R.</u> | <u>11/17/21</u> |
| <input checked="" type="checkbox"/> Gross Beta | 4100 | <u>105 B</u> | <u>EP19002</u> | <u>54</u> | <u>11/16/21</u> | <u>L.R.</u> | <u>11/17/21</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: 11/15/2021 Received By: L Reed

Data Release Signature: _____ Date: 11/17/21

| 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"/> |

HoCo Health Depart
 NOV 24 2021
Environmental Health

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

SAMPLE TESTED AS RECEIVED

Thomas, Susan

From: Theresa Miller <Theresa@foglesinc.com>
Sent: Thursday, March 24, 2022 12:34 PM
To: Thomas, Susan
Subject: 13429 Highland Rd
Attachments: 13429 Highland Rd Completion.pdf

[Note: This email originated from outside of the organization. Please only click on links or attachments if you know the sender.]

Susan,

I have attached the revised completion report that was mailed out back in November 2021. I spoke with Carrie and her guys went out with the mini excavator on November 4, 2021 and dug up the casing and welded on 6' of 6" Steel casing and installed a bug proof well cap. Does this info help? Let me know if you have any further questions or concerns.

Thanks
Theresa
443-609-4195

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

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

REPORT OF ANALYSIS

Laboratory ID #: 153521 Account #: 1933
Reference: Cairn Custom Homes Client: Fogle's Well Pump & Treatment
Location: 13429 Highland Road Requested By: Dave Fogle
Highland, MD 20777 Source: Well Water
Date/ Time Collected: 7/26/2022 0900 Site: Kitchen Sink
Date/Time Rec'd: 7/26/2022 1154 Treatment: ~~None~~ → *POV RO.*
Chlorine ppm: Free: ND Total: ND pH: 6.1
Collected By: J. Evans 0309JE Well #: HO-20-0125

| PARAMETERS | RESULTS | UNITS | REFERENCE | METHOD | DATE/TIME/ANALYST |
|--------------------------------|---------|-------------|-----------|--------------------|------------------------|
| Bacteria, Coliform, Total, MPN | <1.0 | MPN/ 100 ml | <1.0 | SM20 9223B | 7/27/2022 / 0830 / CRS |
| Bacteria, E. coli, MPN | <1.0 | MPN/ 100 ml | <1.0 | SM20 9223B | 7/27/2022 / 0830 / CRS |
| Nitrate. | 3.98 | mg/L | 10 | EPA 300.0 | 7/26/2022 / 1731 / TSD |
| Turbidity | 0.51 | NTU | <10 | SM2130B | 7/26/2022 / 1615 / TSD |
| Sand | ND | mg/L | 5 | Visual/Gravimetric | 7/26/2022 / 1440 / TSD |

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 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 Sample collected by client, analyzed as received
- 6 ND = None Detected; N/A: Not Available
- 7 Visual well check: Sealed, vented cap
- 8 pH and Chlorine level tested in lab (pH tested after recommended holding time)

Reason for Test : Use & Occupancy

Building Permit # : 21003588

Date Reported: 7/27/2022

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

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

REPORT OF ANALYSIS

Laboratory ID #: 154188 Account #: 1933
Reference: Cairn Custom Homes Client: Fogle's Well Pump & Treatment
Location: 13429 Highland Road Requested By: Dave Fogle
Highland, MD 20777 Source: Well Water
Date/ Time Collected: 8/30/2022 1130 Site: Reverse Osmosis Faucet
Date/Time Rec'd: 8/30/2022 1320 Treatment: Reverse Osmosis
Chlorine ppm: Free: ND Total: ND pH: 5.8
Collected By: J. Evans 0309JE Well #: HO-20-0125

| PARAMETERS | RESULTS | UNITS | REFERENCE | METHOD | DATE/TIME/ANALYST |
|------------|---------|-------|-----------|--------|------------------------|
| Radium-226 | 0.5 | pCi/L | **** | 903.0 | 9/14/2022 / 1300 / MJN |
| Radium-228 | <0.8 | pCi/L | **** | Ra-05 | 9/13/2022 / 1256 / MJN |

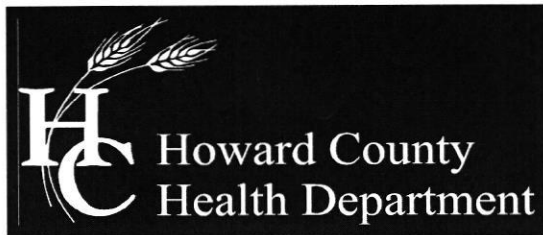
NOTES:

- ****Radium 226 and Radium 228 combined have a reference of 5 pCi/L
- pCi/L = picocuries per liter
- Radium 226 Detection Limit: 0.1 pCi/L; Radium 226 Error: +/- 0.2 pCi/L
- Radium 228 Detection Limit: 0.8 pCi/L; Radium 228 Error: +/- 0.6 pCi/L
- Sample collected by client, analyzed as received
- Sub-contracted to Reference Lab #278
- ND = None Detected; N/A: Not Available
- Visual well check: Sealed, vented cap
- pH and Chlorine level tested in lab (pH tested after recommended holding time)

Reason for Test : Use & Occupancy

Building Permit # : 21003588

Date Reported: 9/15/2022



Bureau of Environmental Health

8930 Stanford Blvd, 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

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

MEMORANDUM

Sent via email to jasmine@cairncustomhomes.com

TO: Jasmine Strain

FROM: **Susan Thomas**
Environmental Health Specialist
Well & Septic Program
Bureau of Environmental Health

DATE: June 14, 2021 

RE: **13429 Highland Rd**
Highland, MD 20777
(Demolition of existing structure, new home construction)

This is to advise that the **Howard County Health Department** recommends issuance of the demolition permit for the above referenced property.

A site inspection was made on 06/07/2021 to confirm works done.

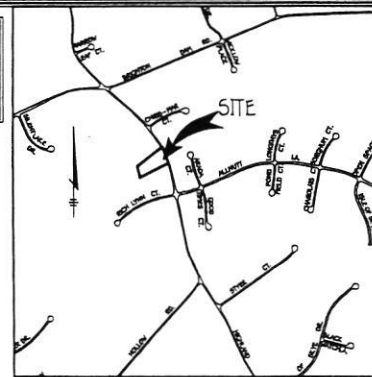
The current well, no tag, was a pit well previously connected to the dwelling. Fogles added PVC casing to the well via Fernco to bring it into accordance with COMAR on 5/28/2021. The pump was pulled from the well and the pitless connector was sealed off at this time. After construction this well may be connected to the new home.

The existing septic system was abandoned and sealed in accordance with COMAR and HOCO Codes by Freedom Septic Services, Inc. on 5/25/2021

IF ANY WELL OR SEPTIC COMPONENTS ARE FOUND DURING SITE WORK, YOU MUST NOTIFY THIS OFFICE IMMEDIATELY!!

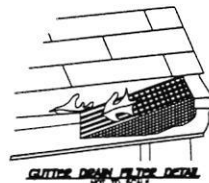
Cc: file
ST

| STORMWATER MANAGEMENT PRACTICES | | | | | | |
|---------------------------------|-------------------|-------------------------------|--|--|-------------------------------|---|
| LOT | ADDRESS | DRYWELLS (M-5) Y/N, NUMBER | ROOFTOP DISCONNECTION (M-1) Y/N, NUMBER | NON-ROOFTOP DISCONNECTION (M-2) Y/N, NUMBER | MICRO-BI (M-3) Y/N, NUMBER | IMPERVIOUS REMOVAL (M-4) Y/N, NUMBER |
| MVA | 13429 HIGHLAND RD | Y-6 | Y-1 | Y-1 | N | Y-1 |



Howard County ADC, Map Map #16, Grid D7

VICINITY MAP
SCALE: 1" = 1200'



GENERAL NOTES

- SUBJECT PROPERTY ZONED RS-200
- TOTAL AREA OF PROPERTY: 87,122 SQ. FT. OR 2 Acs
- ONE SINGLE FAMILY HOUSE IS PROPOSED FOR THIS LOT.
- SEPTIC BASIN SUBJECT TO HOWARD COUNTY HEALTH DEPARTMENT REVIEW.
- LENGTH OF TRENCH TO BE DETERMINED AT TIME OF SEPTIC PERMIT ISSUANCE.
- CONTRACTOR/SUBSIDER TO VERIFY ELEVATION IN THE FIELD BEFORE BEGINNING ANY CONSTRUCTION.
- TOPOGRAPHIC INFORMATION IS BASED ON DIGITAL HOWARD COUNTY AERIAL ALONG WITH FIELD RUN TOPOGRAPHY BY PEHNER, COLLINS & CARTER, INC., FEBRUARY, 2021.
- NO WETLANDS CURRENTLY EXIST ON THE PROPERTY.
- DREWNWAY CURBSETS SHALL BE CONSTRUCTED AT THE PLOT PLAN.
- STORMWATER MANAGEMENT IS IN ACCORDANCE WITH THE M.D.E. STORM WATER DESIGN MANUAL VOLUMES I & II, REVISED 2009. WE ARE PROVIDING STORM WATER MANAGEMENT BY THE USE OF 6 DRYWELLS (M-5), DISCONNECTION OF ROOFTOP CREDIT, NON-ROOFTOP CREDIT AND IMPERVIOUS AREA REMOVAL. ALL ARE TO BE MAINTAINED BY THE HOMEOWNER.
- WATER WILL BE PROVIDED BY PRIVATE ON-SITE WELL SEWER WILL BE PROVIDED BY PRIVATE SEPTIC SYSTEM.
- SOILS SHOWN HEREON ARE BASED ON NRCS WEB SOIL SURVEY.
- ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- REVIEW OF THIS PROJECT FOR COMPLIANCE WITH THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS SHALL OCCUR AT THE SUBDIVISION PLAN/PLAT AND/OR SITE DEVELOPMENT PLAN STAGES AND/OR RED-LINE REVISION PROCESS.

SOILS LEGEND

| SOIL | NAME | CLASS | 'C' VALUE |
|------|-------------------------------------|-------|-----------|
| Cgb | Genesee loam, 3 to 8 percent slopes | B | .37 |

STORMWATER MANAGEMENT NOTES

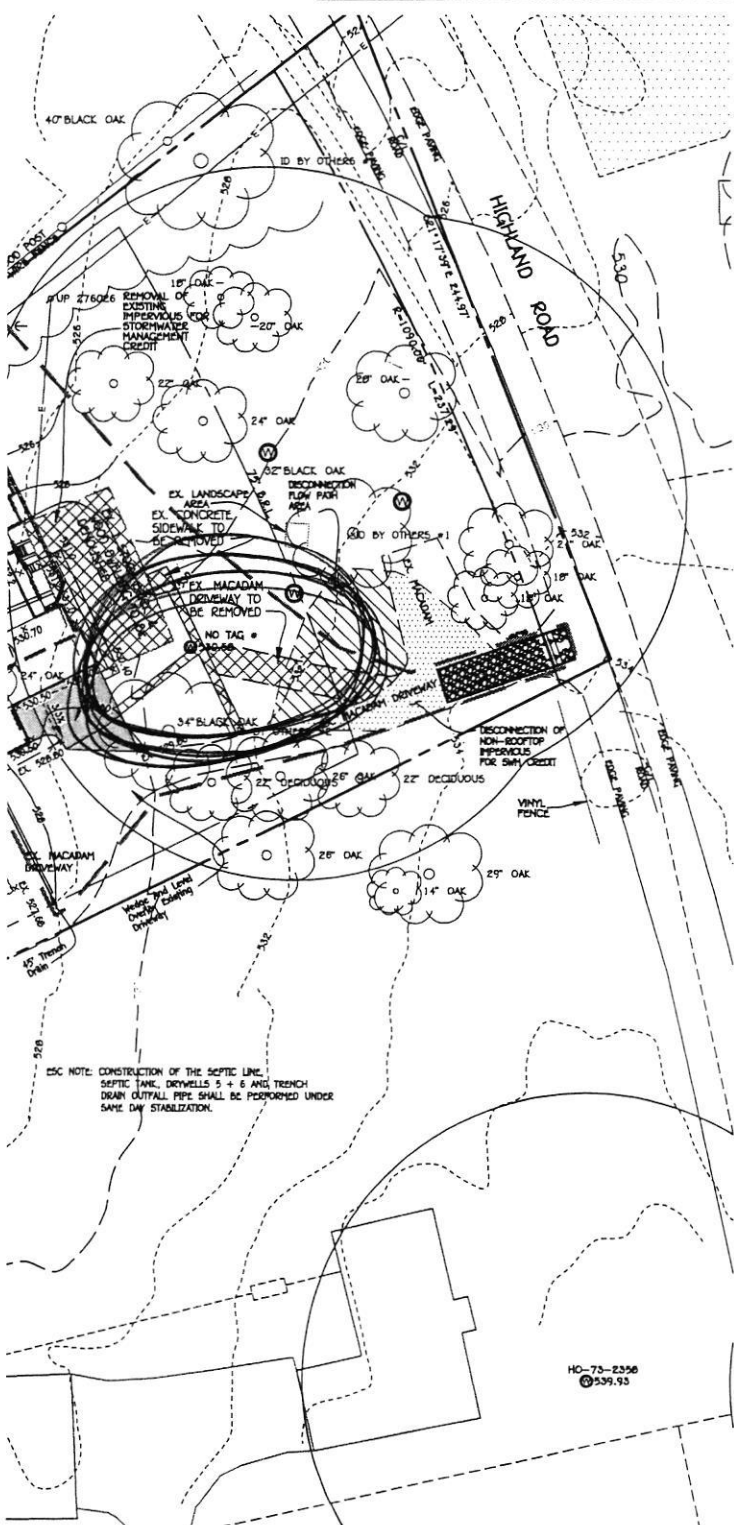
- STORMWATER MANAGEMENT IS PROVIDED IN ACCORDANCE WITH THE 2000 MARYLAND STORMWATER DESIGN MANUAL.
- CREDITS ARE GIVEN FOR DISCONNECTION OF IMPERVIOUS COVERS.
- MAXIMUM CONTRIBUTING ROOF TOP AREA TO EACH DOWNSPOUT SHALL BE LESS THAN 1000 SQ. FT.
- DRYWELLS SHALL BE PROVIDED AT LOCATIONS WHERE THE LENGTH OF DISCONNECTION IS LESS THAN 75' AT 5% THE SIZE AND CONSTRUCTION OF THE DRYWELL SHALL BE IN ACCORDANCE WITH THE FIGURE 9.2 OF THE MANUAL AND THE DETAIL SHOWN ON THIS SHEET.
- FINAL GRADING IS SHOWN ON THIS SIMPLIFIED ENVIRONMENTAL CONCEPT PLAN.
- DISCONNECTION OF NON-ROOFTOP IMPERVIOUS: DREWNWAY SHALL REMAIN OPEN SECTION ALONG NORTH (DOWNSTREAM) SIDE. DISCONNECTION FLOW PATH AREA SHALL REMAIN CONTIGUOUS DOWNSTREAM FLOW TOWARD NORTH AND REMAIN PERVIOUS.
- REMOVAL OF EXISTING IMPERVIOUS FOR SWM CREDIT: THESE AREAS SHALL CONSIST OF THE EXISTING IMPERVIOUS REMOVED WHERE THEY WILL BE REPLACED BY PERVIOUS LAND USE.
- DISCONNECTION OF ROOFTOP IMPERVIOUS: THE DISCONNECTION FLOW PATH SHALL MAINTAIN MINIMUM SHEET FLOW, 75' LENGTH AND FLATTER THAN 5% LONGITUDINAL SLOPE. IN THE EVENT THAT A PATIO OR OTHER OUTDOOR USE SURFACE IS INSTALLED, THE DISCONNECTION FLOW PATH SHALL BE MANIPULATED SO THAT A MINIMUM CONTIGUOUS PORTION OF THE FLOW PATH MEETS THE APPOINTMENTED REQUIREMENTS.

13429 HIGHLAND ROAD
APPROVED 08/26/2021
EXISTING WELL DEEPEN (NO TAG)

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

HO-20-0125

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



THIS DEVELOPMENT IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
APPROVED: _____
HOWARD SOIL CONSERVATION DISTRICT _____ DATE _____

OWN
CAIN C
C/O
109
LAW
4

