

B 1 20713

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL

STATE PERMIT NUMBER

HO -95 -2698

546306-D please type

fill in this form completely

Date Received (APA) 04/10/14

OWNER INFORMATION

MB Highland Reserve LLC, 1686 E Gude Dr, Rockville MD 20850

LOCATION OF WELL

Howard County, Regan Property, Highland

DRILLER INFORMATION

Allen Compton MS D 009, FOGLE'S Well Drilling LLC, PO Box 202 Woodbine, MD 21797

SOURCES OF DRILLING WATER

Point Ridge Dr, 100, ON WHICH SIDE OF ROAD, DISTANCE FROM ROAD, ENTER FT OR MI

WELL INFORMATION

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

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Howard A530307, COUNTY NAME, COUNTY NO., STATE SIGNATURE, DATE ISSUED 05/27/2014, CO SIGNATURE, EXP. DATE 5/27/15

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

APPROXIMATE DEPTH OF WELL 300 FEET

APPROXIMATE DIAMETER OF WELL 6 INCH

METHOD OF DRILLING (circle one)

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

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

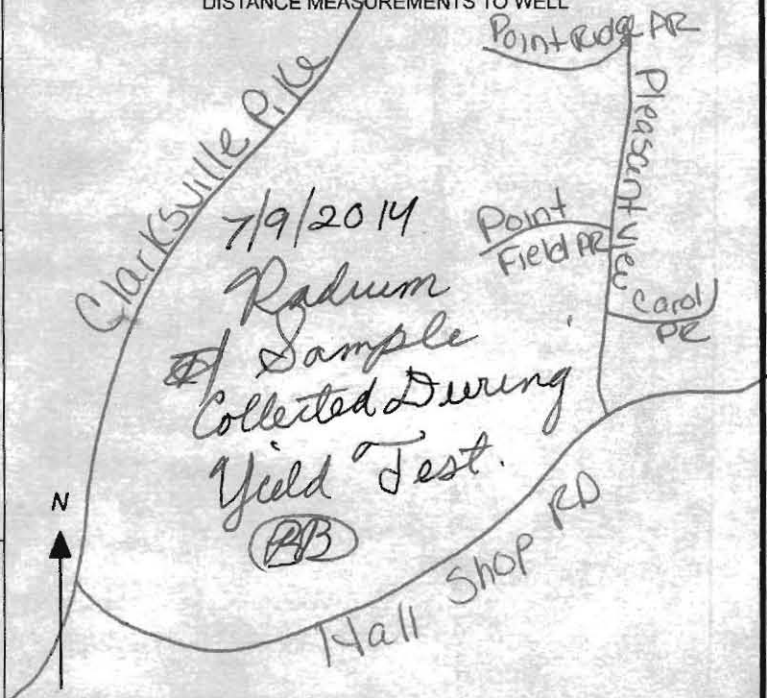
PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED (IF AVAILABLE)

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

APPROX. PERMIT NUMBER HO 2014G002

PERMIT No. HO -95 -2698

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



SPECIAL CONDITIONS

NOTE APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED

Radium Sample required @ the yield test

**HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH
WATER AND SEWERAGE PROGRAM
TEL: (410)313-2640 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: NATIONAL WATER SVC Telephone #: 301-854-1333
Address: P.O. Box 138
Ashton, MD 20861

(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 KYCKE License #: PE 0145

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

Name of Property Owner: Mitchell + Best Telephone #: 301-252-0126
Subdivision: HIGHLAND RESV Lot #: 6 Well Tag #: HO-95-2698 09/21/2018 ⊕
Site Address: 12349 POINT RIDGE DR
FULTON MD

<u>Submersible Pump Data</u>	<u>Pitless Adapter</u>	<u>Well Cap and Electric Conduit</u>
Make: <u>SCHAEFER</u>	Make: <u>CAMPBELL</u>	Two piece watertight cap: <u>✓</u>
Model #: _____	Model #: <u>PA 500</u>	Screened, vented well cap: <u>✓</u>
Pump Capacity <u>10</u> GPM	Depth: <u>48"</u> (36" min)	Cap secured to casing: <u>✓</u>
Well Yield: <u>12</u> GPM	NSF approved: <u>✓</u>	Conduit min 18" B.G.: <u>✓</u>
Depth of well encountered at time of pump installation: <u>30</u> (feet)		Conduit secured to well cap: <u>✓</u>

If pump capacity exceeds well yield, a low water cut off switch is required by NSPC 1990 Section 17.8.4
Torque arrestors or Cable guards are required - Must circle one
Safety rope, if used, attached to inside of well casing with eye bolt N/A

<u>Piping to house</u>	<u>House Connection</u>
Type: <u>PE</u>	PVC sleeved to undisturbed soil at wall penetration: <u>YES</u>
PSI: <u>200</u> (160 psi min)	Approximate length of sleeve: <u>5'</u>
Depth of supply line: <u>4'</u> (36" min)	Sleeve caulked and sealed properly: <u>YES</u>

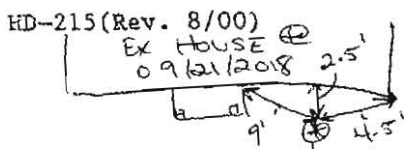
The water supply line is required to be at least ten feet from the septic tank, pump chamber, sewage piping, distribution box, drainfields, and sewage reserve area. If this cannot be accomplished, contact this office for approval prior to installation.

Signature of company representative responsible for installation _____ date 9-24-18

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

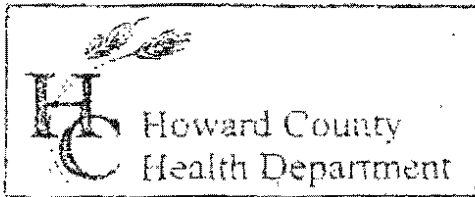
Date Insp. Requested: 09/21/2018 Date Insp. Approved: 09/21/2018

Inspection Data: Pitless adapter and water supply line at least 36" below grade	<u>✓</u>	<u>42"</u>	<u>09/21/2018</u> ⊕
Two piece cap installed and attached to casing securely	<u>✓</u>		
Elec. conduit extends at least 18" below grade/attached to cap properly	<u>✓</u>	<u>28"</u>	<u>09/21/2018</u> ⊕
Safety rope installed inside of well casing	<u>✓</u>		
Correct well tag attached properly and casing 8" above finished grade	<u>✓</u>	<u>29"</u>	<u>09/21/2018</u> ⊕
Water supply line sleeved adequately at house connection	<u>✓</u>		
Adequate grout observed below pitless adapter	<u>✓</u>		



WELL TIE IN TO HOUSE
w/ S.S. BARB COUPLING
+ 2 HOSE CLAMPS

09/21/2018 ⊕
CONNECTION UNDER FOOTER
SLEEVED FROM EARLING TO 5' FROM WELL.



3525 H Ellicott Mills Drive, Ellicott City, MD 21043
(410) 313-2640 Fax (410) 313-2648
TDD (410) 313-2323 Toll Free 1-866-313-6300
website: www.hchealth.org

Penny E. Borenstein, M.D., M.P.H., Health Officer

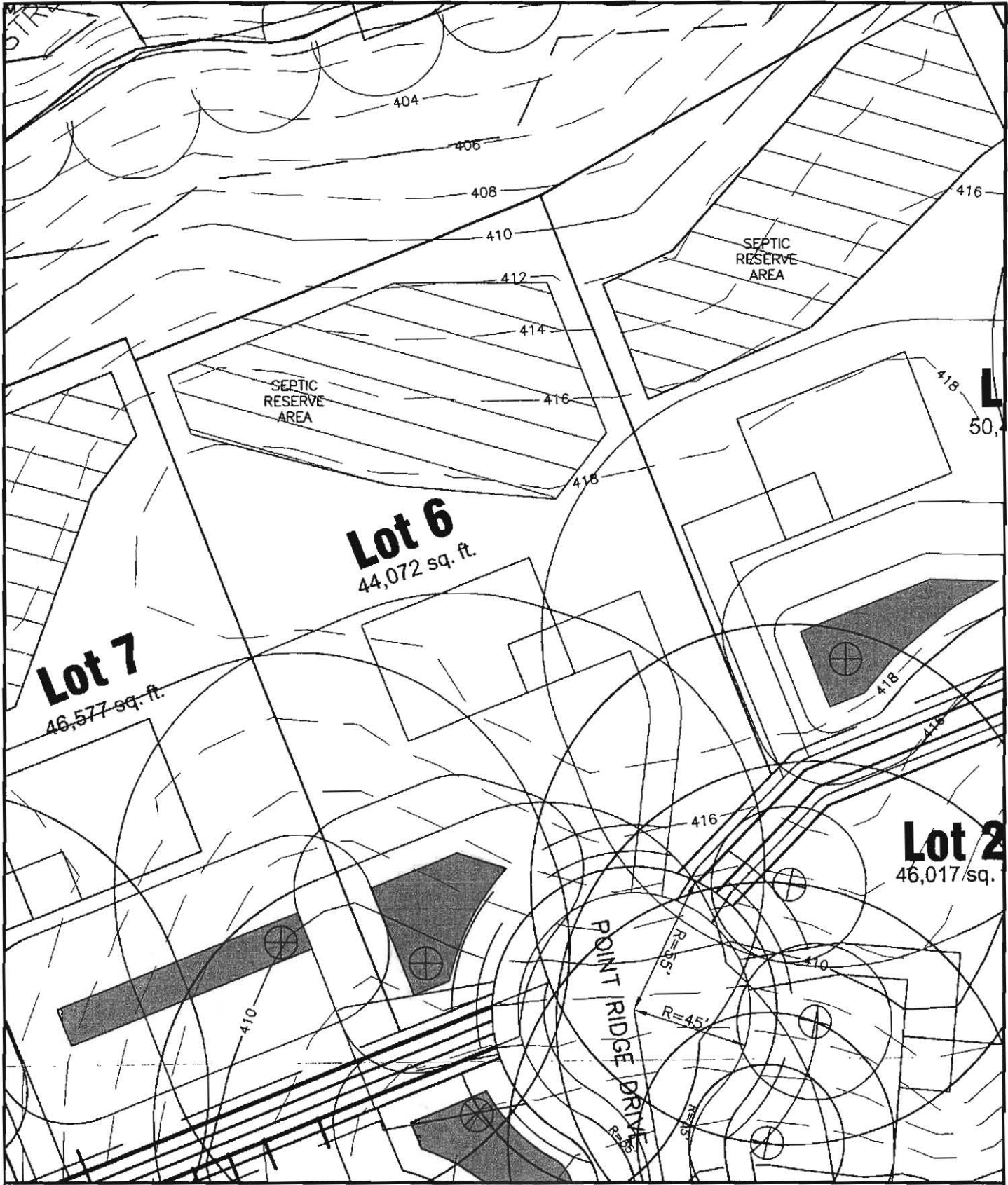
TO ALL INTERESTED PARTIES

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

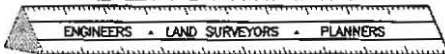
- The well site has been staked by Benchmark Engineering
(professional land surveyor or company employing professional land surveyors)
on 4-4-14 (date) and does not require a site inspection.
- The well driller, builder or property owner will call the Health Department to schedule a time to meet in the 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.

Revised 6/10/03



BENCHMARK



ENGINEERING, INC.

8480 BALTIMORE NATIONAL PIKE • SUITE 315 • ELLICOTT CITY, MD 21043
 PHONE: 410-465-6105 FAX: 410-465-6644

WELL EXHIBIT
 REGAN PROPERTY
 LOT 6

FIFTH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

SCALE: 1" = 50' DATE: 3/11/2014

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

INTERIM CERTIFICATE OF POTABILITY
PERMANENT DEVIATION FOR RADIUM
Expiration Date – *JUNE 11, 2018*

December 11, 2018

Homeowner
12349 Point Ridge Drive
Fulton, MD 20759

RE: Highland Reserve, Lot 6
12349 Point Ridge Drive
Building Permit: B18002130
Well Permit: HO-95-2698

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 **9/25/2018**. Final approval of the well line connection to the dwelling was granted on **9/21/2018**. The well construction was completed on **7/11/2014**. Water samples were collected on **11/26/2018**.

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 **11/26/2018**. Results showed a Gross Alpha level of **16.4 ± 2.7 pCi/L** and a Gross Beta level of **15.7 ± 2.4 pCi/L**. This exceeds the maximum contaminant level (MCL) combined Radium 226 and 228 of **5.0 pCi/L**.

After installation of a radionuclide removal device (Water Softener), post-treatment water samples were collected on **11/26/2018** and indicated a combined Radium 226/228 level of **1.2 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-95-2698. Although the submitted sample results are in compliance with COMAR standards, the Health Department does not guarantee water supplies.

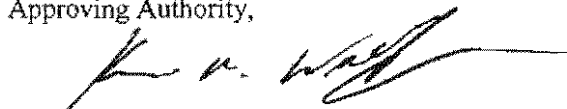
This Interim Certificate of Potability will expire **six months** from the date of issuance. Submission of a second bacteriological test indicating the water is free of coliform and fecal coliform bacteria is required prior to the expiration date, after which time a Final Certificate of Potability will 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 Environment website which describes in further detail operation and maintenance of your septic system.

Approving Authority,



Keyin 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



HOME LAND ENVIRONMENTAL HEALTH LABS

Healthy Homes Start Here

PH (443) 505-8375 FX (443) 267-0098
 9106 Philadelphia Road
 Suite 108B
 Rosedale, MD 21237
 lab@mdwellandseptic.com
 www.mdwellandseptic.com

Chain Of Custody Form

Well Water Solutions, Inc
 Client Name
 5163 Darting Bird Lane, Columbia, MD 21044
 Address
 410-935-7185
 Phone
 jemoseman@wellwatersolutions.net &
 Email jbieber@wellwatersolutions.net

Site Address:
 MB Lot- 6
12349 Point Ridge Drive
Fulton, MD 20759

Field Collection Information:

Collector's Name: Janet Walker Sampler ID #: 9006JW 9/5/21

Collected Date and Time: 11/26/18 @ 9:45

Well Tag Number: HO-95-2698 / Building Permit #B- 18002130 Sand: Yes/No

Field PH: 5.8 Field Chlorine: Present/Absent

Clear when Water Drawn: Yes/No Was Well Chlorinated? Yes/No

Requested Testing:

IMPURITY	SOURCE
<input checked="" type="checkbox"/> Bacteria	Bathroom Sink
<input checked="" type="checkbox"/> Nitrates	Kitchen Sink
<input type="checkbox"/> Nitrites	
<input type="checkbox"/> Lead	
<input type="checkbox"/> Iron	
<input checked="" type="checkbox"/> Turbidity	Kitchen Sink
<input checked="" type="checkbox"/> Other Radium Short Term Gross Alpha/Beta	Kitchen Sink
<input checked="" type="checkbox"/> Other Radium Long Term 226 & 228	Kitchen Sink

Well Casing/Cap Condition:

Height above grade: _____
 Cap Type: _____
 Casing: _____
 Conduit: _____

Water Conditioning:

None Water Softener
 Samples Collected Pre-Treatment

Samples Collected Post Treatment after Water Softener

Plumbing Notes: Please add note & attach Coe w/ Results when returned. Thanks

Release Signatures:

Released By: [Signature] Date/Time: 11/26/18 @ 3:30
 Released By: [Signature] Date/Time: 11/27 10:00
 Received in Lab By: [Signature] Date/Time: 11/27 10:00

9106 Philadelphia Road
Suite 106
Rosedale, MD 21237



**HOME LAND
ENVIRONMENTAL
HEALTH LABS**
"Healthy Homes Start Here"

State Certified
Water Quality
Laboratory #353

Certificate of Analysis

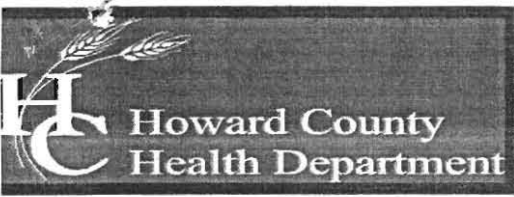
Property Information	Customer Information
Property Address: 12349 Point Ridge Drive Fulton, MD 20759 MB Lot – 6 Well Tag Number: HO-95-2698 Building Permit #B-18002130	Name: Well Water Solutions Phone Number: (410) 935-7185 Email: jemoseman@wellwatersolutions.net

Field Data		
Date & Time Sampled: 11/26/2018 9:45AM Date & Time Received: 11/27/2018 10:00AM Sampled By: Janet Walker Sampler ID: 9006JW Sample Location: Kitchen sink, Bacteria – Bathroom sink	pH: 5.8 Chlorine Residual: 0.0 Clarity: Clear Sand: None Preservation: Cool, 4°C	Well Type: Not noted Well Height: Not noted Cap Type: Not noted Casing: Not noted Conduit: Not noted
Water Conditioning: Water Softener (Samples collected post-treatment after Water Softener)		

Parameter	Method	Result	Pass/Fail	Units	MCL	RL	Analyst	Date of Analysis
Total Coliform	Colitag	Absent	Pass	Per/100mL	Present	1.0	KMB	11/28/2018
<i>E. Coli</i>	Colitag	Absent	Pass	Per/100mL	Present	1.0	KMB	11/28/2018
Nitrate-Nitrite	EPA 353.2	1.4	Pass	mg/L	10.0	0.5	KMB	11/27/2018
Turbidity	EPA 180.1	0.73	Pass	NTU	10.0	0.5	KMB	11/27/2018
Gross Alpha	EPA 900.0	1.4	Pass	pCi/L	15.0	1.0	FRC*	12/3/2018
Gross Beta	EPA 900.0	5.7	Pass	pCi/L	50.0	2.1	FRC*	12/3/2018
Radium 226	EPA 903.1	0.4	Pass	pCi/L	5.0	0.2	FRC*	12/5/2018
Radium 228	EPA Ra-05	<0.8	Pass	pCi/L	5.0	0.8	FRC*	12/4/2018

Approved By: Kevin Barnaba Kevin Barnaba, Lab Director

Report Date: 12/5/2018



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

Maura Rossman, M.D., Health Officer

August 21, 2014

MB Highland Reserve, LLC
1686 Gude Drive
Rockville, Maryland 20850

RE: Regan Property Lot 6
Point Ridge Drive
Well Tag: HO - 95 - 2698

To Whom it May Concern:

A sample was collected during a yield test on July 9, 2014 and submitted to the Department of Health & Mental Hygiene 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 16.4 ± 2.7 picocuries/liter (pCi/L), while the **Gross Beta** level was 15.7 ± 2.4 pCi/L. The **Gross Alpha** result was above its **maximum contaminant level (MCL)** of **15 pCi/L**, while the **Gross Beta** level was below its targeted value 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 future well water supply **does not meet** EPA regulatory standards. Given elevated readings for **Gross Alpha**, additional testing for **these parameters** will be required to secure the future Use & Occupancy. The installation of a water softener system and / or a reverse osmosis system may be necessary. If treatment is installed, **pre and post short and long term Gross Alpha and Beta, plus a post Radium 226 / 228** will be needed to properly evaluate the effectiveness of the installed treatment(s). Alternatively, you may collect raw water samples for **short and long term Gross Alpha and Beta, plus Radium 226 / 228** to see if all values are below existing standards. Given that it typically takes up to one month to perform and receive back the **Radium** analyses, plan accordingly. **Please note** that other standard testing parameters (bacteria, nitrate, turbidity and sand) will still be required 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.

Sincerely,

A handwritten signature in cursive script that reads 'Bert Nixon'.

Bert Nixon, Director

Bureau of Environmental Health

Enclosure

✓ cc: Property file

SEND REPORT TO: Bert Nixon
Howard Co. Env. Health
8930 Stanford Blvd.
Columbia, MD 21045

DEPARTMENT OF HEALTH AND MENTAL HYGIENE
 Laboratories Administration
 201 W. Preston St., Baltimore, MD 21201
 Robert A. Myers, Ph.D., Director

Lab No.
0000116 #11

RADIATION ANALYSIS REQUEST FORM

Plant/Site Name: Regan Property - Lot 6 County: Howard

Sample Source: Point Ridge Dr. Location: HO-95-2698

Radon-222 Bottle A HO-95-2698 Radon-222 Field Blank Bottle A Radium Blank
 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: _____ Federal Project: _____

Collector: B. Baker Telephone No.: (410) 313-2643

Date Collected: 7/9/2014 Time Collected: 10:00 a.m. _____ p.m.

Field pH: _____ Field Chlorine: _____

Nitric Acid Preserved: Yes No Iced: Yes No

Remarks: Sample Collected During Yield Test

TEST	EPA Code	Lab No.	Method No.	Results (pCi/L)	Date Analyzed	Analyst	Date Reported
<input checked="" type="checkbox"/> Gross Alpha	4000	0116	EPA 900.0	16.4 ± 2.7	7/16/14	CWB	7/21/14
<input checked="" type="checkbox"/> Gross Beta	4100	0116	"	15.7 ± 2.4	↓	↓	↓
<input type="checkbox"/> Radium-226	4020						
<input type="checkbox"/> Radium-228	4030						
<input type="checkbox"/> Total Uranium	4006						
<input type="checkbox"/> Radon-222 (Bottle A)	4004						
<input type="checkbox"/> Radon-222 (Bottle B)	4004						
<input type="checkbox"/> Radon Field Blank A	4004						
<input type="checkbox"/> Radon Field Blank B	4004						
<input type="checkbox"/> Tritium							
<input type="checkbox"/> Gross Alpha - Conf		0116	EPA 900.0	24.4 ± 1.3	7/17/14	CWB	7/21/14
<input type="checkbox"/> Gross Beta - Conf		0116	↓	16.9 ± 1.2	↓	↓	↓

Date Received: 07/11/14 Received By: CWATY Boyd
 Data Release Signature: Deborah Miller - JMR Date: 7/21/14

Lab Use Only	Yes	No	N/A
Sample Intact upon arrival?	<input checked="" type="checkbox"/>		
Sample pH < 2.0?	<input checked="" type="checkbox"/>		
Received within holding time?	<input checked="" type="checkbox"/>		

•Tel. No.: (410) 767-5537 •Fax No.: (410) 333-5373