

C1 22500

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)

COUNTY NUMBER

ST/CO USE ONLY DATE Received MM DD YY

DATE WELL COMPLETED MM DD YY

Depth of Well (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL"

OWNER M.B. Highland Reserve LLC WELL SITE ADDRESS 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 (Use additional sheets if needed), FEET (FROM, TO), check if water bearing. Includes handwritten entries: Brown shale, Gray limestone, Gray & White.

GROUTING RECORD

WELL HAS BEEN GROUTED (Circle Appropriate Box) TYPE OF GROUTING MATERIAL (Circle one) CEMENT [CM] BENTONITE CLAY [BC] NO. OF BAGS NO. OF POUNDS GALLONS OF WATER DEPTH OF GROUT SEAL (to nearest foot)

CASING RECORD

MAIN CASING TYPE Nominal diameter top (main) casing (nearest inch)! Total depth of main casing (nearest foot) [ST] [CO] [PL] [OT]

OTHER CASING (if used)

Table with columns: diameter inch, depth (feet) from, to

SCREEN RECORD

screen type or open hole (insert appropriate code below) [ST] [BR] [HO] [PL] [OT]

DEPTH (nearest ft.)

Table with columns: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED [Y] [N]

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

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

DRILLERS LIC. NO. 1 M D 009 DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO. 1 D

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

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

C 3

PUMPING TEST

HOURS PUMPED (nearest hour) 03 8 9 PUMPING RATE (gal. per min.) 11 15 METHOD USED TO MEASURE PUMPING RATE 196L WATER LEVEL (distance from land surface) BEFORE PUMPING 17 20 ft. WHEN PUMPING 22 25 ft. TYPE OF PUMP USED (for test) [A] air [P] piston [T] turbine [C] centrifugal [R] rotary [O] other [J] jet [S] submersible

PUMP INSTALLED

DRILLER INSTALLED PUMP YES NO (CIRCLE) (YES or NO) IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS. TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29. CAPACITY: GALLONS PER MINUTE (to nearest gallon) 31 35 PUMP HORSE POWER 37 41 PUMP COLUMN LENGTH (nearest ft.) 43 47 CASING HEIGHT (circle appropriate box and enter casing height) [+] above [-] below LAND SURFACE 01 (nearest foot)

LATITUDE 39.1858749 LONGITUDE 76.7413681 (DEFAULT COORD. WGS 84)

NOTES:

B 1- 20785

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL

STATE PERMIT NUMBER

Ho - 14 - 0005

546306K please type

fill in this form completely

Date Received (APA)

04/10/14

OWNER INFORMATION

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

B 3

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

B 4

SOURCES OF DRILLING WATER

Well

Pleasant Spring & Point Ridge Dr, 400 FT, 34 24 200

B 2 WELL INFORMATION

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

USE FOR WATER (CIRCLE APPROPRIATE BOX)

- DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION, FARMING, INDUSTRIAL, COMMERCIAL, DEWATERING, PUBLIC WATER SUPPLY WELL, TEST, OBSERVATION, MONITORING, OPEN LOOP GEOTHERMAL, CLOSED LOOP GEOTHERMAL

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Howard A530307 13, STATE SIGNATURE, DATE ISSUED 05/27/2014, CO SIGNATURE, EXP. DATE 5/27/15

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 DEEPEMED AN EXISTING WELL

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



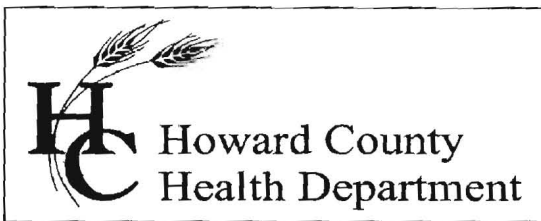
Not to be filled in by driller (MDE OR COUNTY USE ONLY)

APPROP. PERMIT NUMBER Ho 2014G002, PERMIT No. Ho - 14 - 0005

SPECIAL CONDITIONS

NOTE APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED-

Radium Sample required @ the field test



Bureau of Environmental Health

8930 Stanford Blvd., Columbia, MD 21046-2147

Main: 410-313-1774 | 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

INTERIM CERTIFICATE OF POTABILITY

Expiration Date – April 6, 2017

October 6, 2016

Homeowner
12206 Pleasants Springs Court
Fulton, MD 20759

**RE: Highland Reserve, Lot 13
12206 Pleasant Springs Court
Building Permit: B16000709
Well Permit: HO-14-0005**

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 **9/19/2016**. Final approval of the well line connection to the dwelling was granted on **9/13/2016**. The well construction was completed on **6/9/2014**. Water samples were collected on **9/15/2016**.

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 **10/3/2016**. Results showed a Radium 226 level of **0.4 pCi/L** and a Radium 228 level of **0.0 pCi/L**. The results were below the combined maximum contaminant level (MCL) of 5 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-14-0005. 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 certified water quality laboratory to schedule a water sample. A list of laboratories certified by the state of Maryland may be found at the following website:
<http://www.mde.state.md.us/assets/document/WSP-Labs-2010apr16.pdf>

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

Approving Authority,

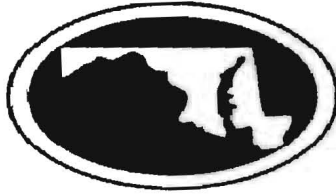
A handwritten signature in cursive script that reads "Dana Bernard".

Dana Bernard, L.E.H.S.,RS
Groundwater Management Section
Well & Septic Program

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

Environmental Testing Lab Inc.

108 Old Solomons Island Rd
Annapolis, MD 21401



3430 Rockefeller Ct
Waldorf, MD 20602

State Certified Water Quality
Laboratory # 106

State Certified Water Quality
Laboratory # 139

Certificate of Analysis

Well Water Solutions, Inc.
5163 Darting Bird Lane
Columbia, MD 20144

Project
Date Received 9/22/2016
Date Reported 10/4/2016

Sample No: 142602-01 Sampled: 9/22/2016 11:30:0 Sampler: JWalker9006JW (Exp. 8/6/2018)
Location: 12206 Pleasant Spring Court Preservation: HNO₃, pH < 2
Fulton, MD Sample Point: Kitchen

Parameter	Method	Result	Qualifiers	Units	RL	Test Date	Analyst
Radium 226	EPA 903.1	0.40		pCi/l	0.2	10/03/2016	FRC-
Radium 228	EPA Ra-05	Not Detected		pCi/l	0.8	10/03/2016	FRC-
Gross Alpha-Radium	EPA 900.0	8.1		pCi/l	1.5	09/27/2016	FRC-

If Gross Alpha Radium results are below 5 pCi/L no further action is recommended. If between 5-15 pCi/L further testing for Radium 226 and 228 is recommended. If Gross Alpha Radium result exceeds 15 pCi/L consider a water treatment system. The combined MCL for R-226 and R-228 is 5 pCi/L

OK
DB
10-6-16

Approved By

Daniel J. Brumsted, Laboratory Director

Annapolis

Waldorf

Ph 410-224-4304 Fax 443-926-0586

Ph 410-224-4304 Fax 443-926-0586

Environmental Testing Lab Inc.

108 Old Solomons Island Rd
Annapolis, MD 21401



3430 Rockefeller Ct
Waldorf, MD 20602

State Certified Water Quality
Laboratory # 106

State Certified Water Quality
Laboratory # 139

Certificate of Analysis

Well Water Solutions, Inc.
5163 Darting Bird Lane
Columbia, MD 20144

Project
Date Received 9/15/2016
Date Reported 9/19/2016

Sample No: 142363-01

Sampled: 9/15/2016 1:00:00

Sampler: JMoseman0130J (Exp. 3/9/2019)
M


Location: 12206 Pleasant Springs Ct.
Fulton, MD 20738

Preservation: Ice
Sample Point: Kitchen

Parameter	Method	Result	Qualifiers	Units	RL	Test Date	Analyst
Bacteria-Total Coliform	Colitag Test	Absent/Pass		Per/100ml		09/15/2016	CT-106
Bacteria-E.coli	Colitag Test	Absent/Pass		Per/100ml		09/15/2016	CT-106
Nitrate + Nitrite as N	EPA 353.2	Not Detected		mg/l	1	09/16/2016	DB-139
Turbidity	EPA 180.1	Not Detected		NTU	0.5	09/16/2016	RM-139

Field Test for chlorine are reported on the attached COC form. "NT" means Not Tested.

Approved By


Daniel J. Brumsted, Laboratory Director

OK
DB
10-6-16

Annapolis

Waldorf

Ph 410-224-4304 Fax 443-926-0586

Ph 410-224-4304 Fax 443-926-0586

ENVIRONMENTAL TESTING LAB, INC - CHAIN OF C

ANNAPOLIS
410-224-4304 FAX 443-926-0586

WALDOF
410-224-4304

142363
Client: Well Water Solutions, Inc.
Project
Date Due: 9/20/2016

Company Name, Address Phone & Fax

Testing Address

WWS

12206 PLEASANT SPRING CT
STREET
FULTON MD 20738
CITY STATE ZIP

Send Report By: Fax Postal Service Email

THIS FORM WILL BE ATTACHED AS A PERMANENT PART OF YOUR FINAL REPORT

FIELD COLLECTION INFORMATION

Collected: Date 9/15 Time 1:00 Well Tag #:

Collectors Name: JOHN ROSEMAN Certification # 0130 JRM Expires 3/19

Collectors Signature: [Signature] Circle One: PRIVATE WELL or CITY WATER

pH: 6.6 Chlorine, Total mg/L: Results for U & O Permit? YES NO Sample Clear when drawn? YES NO

Sand present? YES NO If "YES" submit one liter of sample to lab for testing

Sample Tap Bacteria: Ketchu Chemicals: Lead:

Bacteriological Test Next Day 11:30 Next Day 3:30 2 Day

FULL Chemical Analysis (Iron, Nitrite/Nitrate, Turbidity, Lead) Next Day 2 Day 3 Day

BASIC Chemical Analysis (Iron, Nitrite/Nitrate, Turbidity) Next Day 2 Day 3 Day Waldorf

Lead Arsenic Next Day 2 Day 3 Day

Cadmium 2 Day 4 Day 6 Day

Radium Gross Alpha One Week 2 Week

Special Instructions :

Released By: [Signature] Date: 9/15 Time 1:00 Received By: _____
Released By: [Signature] Date: 9/15 Time 2:30 Received By: _____

(* TAT: is by Close of Business; Samples for chemical analysis received at 1:30 or later cannot be guaranteed "Next Day" results. TAT's are a good faith estimate and are not guaranteed.

LABORATORY SAMPLE RECEIPT INFORMATION

Samples Delivered on ICE: YES NO N/A Add Qualifiers: Non-Certified Holding Time Sample Volume Frozen

Received in LAB By: [Signature] Date: 9/16 Time 14:20

**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
License # and name of individual responsible for the field installation:

Licensed Well Pump Installer

Name (Print): DAVID RYCKLE

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 #:
Subdivision: HIGHLAND RESERVE Lot #: 13 Well Tag #: HO-14-0005 ✓
Site Address: 12206 PLEASANT SPRINGS CT
HIGHLAND MD 20777

Submersible Pump Data

Pitless Adapter

Well Cap and Electric Conduit

Make: GRUNDFOSS

Make: Campbell

Two piece watertight cap:

Model #:

Model #: PA 800

Screened, vented well cap:

Pump Capacity 7 GPM

Depth: 48" (36" min)

Cap secured to casing:

Well Yield: 4 GPM

NSF approved:

Conduit min 18" B.G.:

Depth of well encountered at time of pump installation: 225 (feet)

Conduit secured to well cap:

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

Torque arrestors or Cable guards are required - Must circle one

Safety rope, if used, attached to inside of well casing with eye bolt N/A

Piping to house

House Connection

Type: POLY

PVC sleeved to undisturbed soil at wall penetration: YES

PSI: 160 (160 psi min)

Approximate length of sleeve: 5

Depth of supply line: 4' (36" min)

Sleeve caulked and sealed properly: YES

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

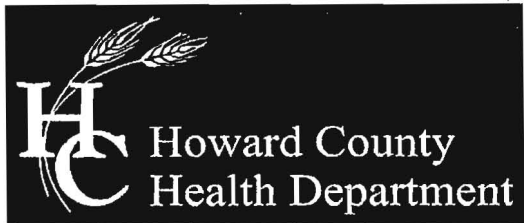
8-12-16
date

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

Date Insp. Requested: 9/13/16 Date Insp. Approved: 10/6/16 SC

- | | |
|---|-------------------------------------|
| Inspection Data: Pitless adapter and water supply line at least 36" below grade | <input checked="" type="checkbox"/> |
| Two piece cap installed and attached to casing securely | <input checked="" type="checkbox"/> |
| Elec. conduit extends at least 18" below grade/attached to cap properly | <input checked="" type="checkbox"/> |
| Safety rope installed inside of well casing | <input checked="" type="checkbox"/> |
| Correct well tag attached properly and casing 8" above finished grade | <input checked="" type="checkbox"/> |
| Water supply line sleeved adequately at house connection | <input checked="" type="checkbox"/> |
| Adequate grout observed below pitless adapter | <input checked="" type="checkbox"/> |

100% with 9/13/16
9/13/16



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

Lot 13

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

AGREEMENT FOR APPROVAL OF AN INDIVIDUAL DRINKING WELL WITH AN ON-SITE TREATMENT SYSTEM

This agreement is entered into by and between the Howard County Health Department ("the Health Department") and _____ ("the Owner").

WHEREAS, the Owner owns a tract of land at street address 12206 Pleasant Springs Court, Fulton, MD 20759 and the deed and subdivision plat of the property is recorded among the Land Records of Howard County, Maryland, Tax Map # 34, Block # 24, Parcel # 200, Deed Reference # _____ and Tax Account # 05-597446 ("the Property").

WHEREAS, the Property lacks an available public drinking water source and is required to have and individual well as the source of drinking water for the residence of the property.

WHEREAS, the Owner has installed a residential drinking well under well permit HO14-0005 that has been tested by the Health Department (or a private laboratory certified to perform testing) for radionuclide particles. The results of the tests have shown that the gross alpha particle content and/or the gross beta particle content and/or the combined radium 226/228 levels exceeds the standards of 15 picocuries per liter (pCi/L), 4 millirems per year (mrem/yr) and/or 5pCi/L respectively.

WHEREAS, The Maryland Department of the Environment (MDE) has promulgated rules and regulations under which a Certificate of Potability may be issued and has delegated the authority to issue such Certificate to the Health Department.

WHEREAS, MDE regulations permit the Health Department to issue as a special condition, a permanent deviation to the Certificate of Potability for individual wells where treatment has been installed to meet the maximum contaminate levels (MCL's) for radionuclides.

WHEREAS, MDE has determined that radium can be effectively removed from the drinking water by the use of treatment devices (e.g., ion exchange or reverse osmosis).

WHEREAS, the Owner is requesting that the Health Department issue a Certificate of Potability contingent upon installation and maintenance of a water treatment device to reduce radionuclides.

WHEREAS, neither the Owner nor the Health Department has knowledge of an alternative safe source of water for the Property.

NOW THEREFORE, the parties have agreed to the following terms and conditions:

1. The Owner will record this Agreement among the Land Records of Howard County, Maryland and provide confirmation to the Health Dept.
2. The Owner agrees to install and maintain a water treatment device, which effectively reduces the gross alpha, gross beta and radium levels to below their respective MCL. The Health Department

M. W. A.

J. M.



ENVIRONMENTAL TESTING LAB, INC - CHAIN C

ANNAPOLIS
410-224-4304 FAX 443-926-0586

142602
Client: Well Water Solutions, Inc.
Project
WA Date Due: 9/29/2016

Company Name, Address Phone & Fax

Well Water Solutions
5163 Darling bird Lane
Columbia, MD 21044

Testing Address

12206 Pleasant Springse
STREET
Fulton, MD 20759
CITY Lot 13 STATE ZIP

Send Report By: Fax Postal Service X Email jemoseman@wellwatersolutions.net/
jbieber@wellwatersolutions.net

THIS FORM WILL BE ATTACHED AS A PERMANENT PART OF YOUR FINAL REPORT

FIELD COLLECTION INFORMATION

Collected: Date 9/22/16 Time 11:30 Well Tag #: _____

Collectors Name: Janet Walker Certification # 9006JW Expires 08/7/18

Collectors Signature: [Signature] Circle One: PRIVATE WELL or CITY WATER

pH: NT Chlorine Total mg/L: 0 Results for U & O Permit? YES ~~NO~~ Sample Clear when drawn? YES ~~NO~~

Sand present? YES ~~NO~~ If "YES" submit one liter of sample to lab for testing

Sample Tap Bacteria: NT Chemicals: Kitchensink Lead: NT

Bacteriological Test Next Day 11:30 Next Day 3:30 2 Day

FULL Chemical Analysis (Iron, Nitrite, Nitrite/Nitrate, Nitrate, Turbidity, Lead) Next Day 3:30 2 Day 3 Day

BASIC Chemical Analysis (Iron, Nitrite, Nitrite/Nitrate, Nitrate, Turbidity) Next Day 3:30 2 Day 3 Day

Lead Arsenic Next Day 3:30 2 Day 3 Day

Cadmium 2 Day 4 Day 6 Day

Radium Gross Alpha X2 X One Week 2 Week

Special Instructions: Treated/softener Radium short term Gross Alpha
and Radium Long term 226 + 228

Released By: [Signature] Date: 9/22/16 Time: 12:15 Received By: _____

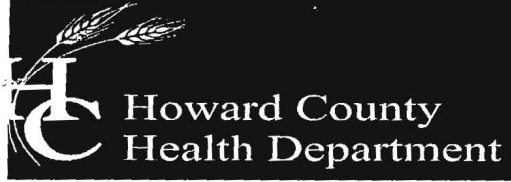
Released By: _____ Date: _____ Time: _____ Received By: _____

(* TAT: is by Close of Business; Samples for chemical analysis received at 1:30 or later cannot be guaranteed "Next Day" results.
TAT's are a good faith estimate and are not guaranteed. ALL SAMPLES FOR BACTERIOLOGICAL TESTING MUST BE
DELIVERED BY 2:30 pm ON FRIDAY'S & HOLIDAY'S.

LABORATORY SAMPLE RECEIPT INFORMATION

Samples Delivered on ICE: YES NO N/A Add Qualifiers: Non-Certified Holding Time Sample Volume Frozen

Received in LAB By: [Signature] Date: 9/24/16 Time: 12:30



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

February 12, 2015

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

**RE: Regan Property Lot 13
Pleasant Springs Court
Well Tag: HO - 14 - 0005**

To Whom it May Concern:

A sample was collected during a yield test on June 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 42.0 ± 4.3 picocuries/liter (pCi/L), while the **Gross Beta** level was 13.6 ± 2.5 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 (both initial and confirmatory) 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. E002771 #10

RADIATION ANALYSIS REQUEST FORM

Plant/Site Name: Regan Property-Lot 13 County: Howard
 Sample Source: Pleasant Springs Ct. Location: HO-14-0005
(Well no., lab sink, sample tap, etc.)
 Radon-222 Bottle A Lot 13 Radon-222 Field Blank Bottle A Radium Blank
 Bottle B _____ Bottle B _____
 County 113 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: _____ Federal Project: _____
 Collector: Brian Telephone No.: (410) 313-2643
 Date Collected: 6/9/2014 Time Collected: 10:30 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	2771	EPA 900.0	42.0 ± 4.3	6/11/14	CWB	6/13/14
<input checked="" type="checkbox"/> Gross Beta	4100	2771	"	13.6 ± 2.5	↓	↓	↓
<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 - Confirmation		2771	EPA 900.0	40.8 ± 4.3	6/12/14	CWB	6/13/14
<input checked="" type="checkbox"/> Gross Beta Confirmation		2771	↓	12.1 ± 2.4	↓	↓	↓

Date Received: 06/10/14 Received By: C Watty-Boyd
 Data Release Signature: Radia' Muneem Date: 6/13/14

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

SEND REPORT TO:

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

Laboratories Administration

201 W. Preston St., Baltimore, MD 21201

Robert A. Myers, Ph.D., Director

Lab No.

2002770 3102

RADIATION ANALYSIS REQUEST FORM

Plant/Site Name: _____

County: HOWARD

Sample Source: FIELD BLANK

Location: _____

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

Radon-222 Bottle A _____

Radon-222 Field Blank

Bottle A _____

Bottle B _____

Bottle B _____

County

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 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:

Federal Project:

Collector: BRIAN

Telephone No.: _____

Date Collected: 06/09/14

Time Collected: 10:30 a.m. _____ p.m.

Field pH: _____

Field Chlorine: _____

Nitric Acid Preserved: Yes No

Iced: Yes No

Remarks: _____

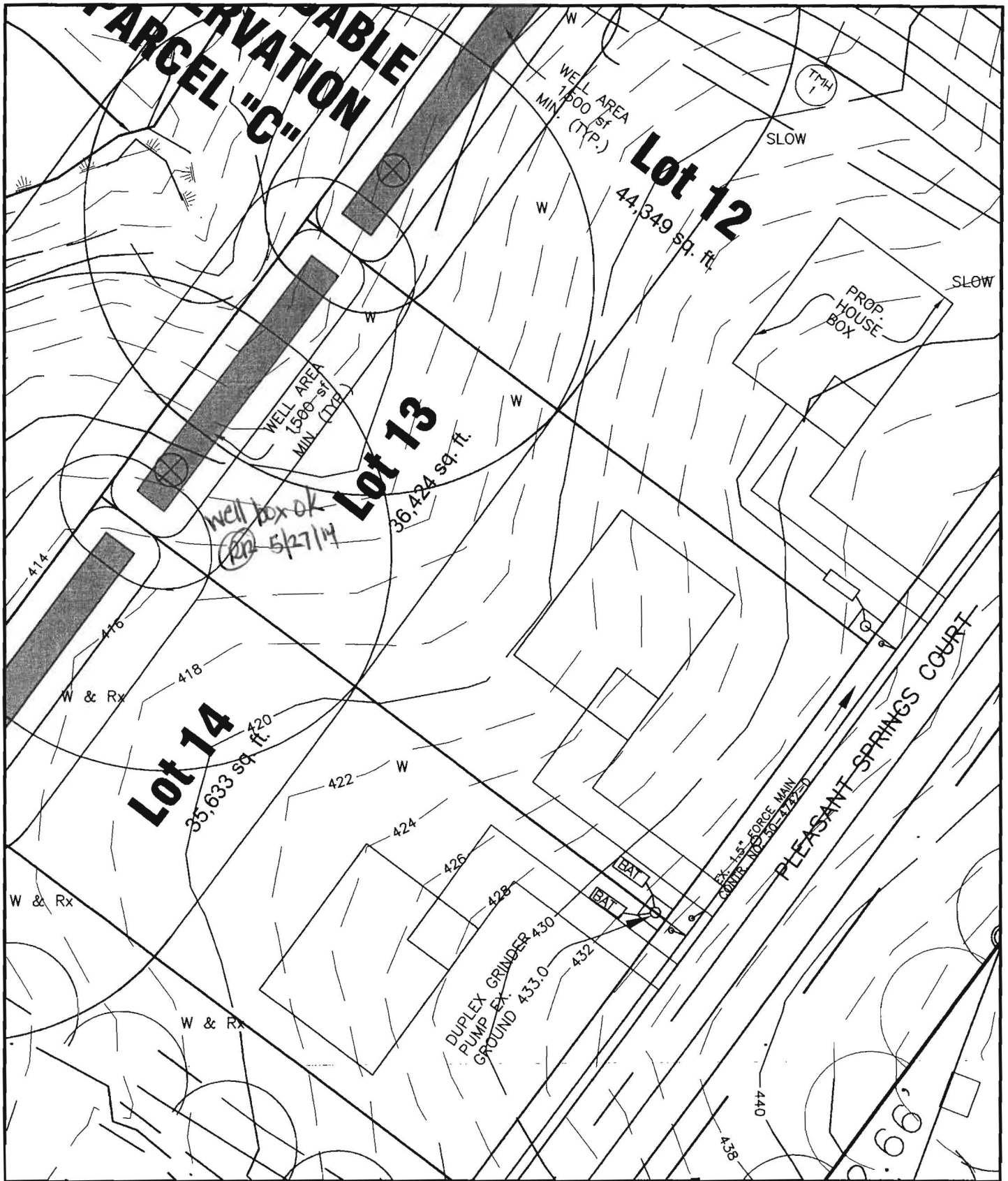
<input checked="" type="checkbox"/>	TEST	EPA Code	Lab No.	Method No.	Results (pCi/L)	Date Analyzed	Analyst	Date Reported
<input type="checkbox"/>	Gross Alpha	4000	2770	EPA 900.0	<2.0	6/11/14	CWB	6/13/14
<input type="checkbox"/>	Gross Beta	4100	2770	"	<4.0	↓	↓	
<input type="checkbox"/>	Radium-226	4020						
<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"/>								

Date Received: 06/10/14 Received By: Cwatty-Boyd

Data Release Signature: Sadia Khuram Date: 6/13/14

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



BENCHMARK
 ENGINEERS • LAND SURVEYORS • PLANNERS
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 13

FIFTH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 SCALE: 1" = 50' DATE: 3/11/2014