

C1 3138

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 A520449-A

ST/CO USE ONLY DATE Received MM DD YY

DATE WELL COMPLETED MM DD YY 10 16 2007

Depth of Well 22 200 28 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" No. 95-1308

OWNER Demmitt Richard STREET OR RFD 2111 Daughters Lane TOWN Fulton SUBDIVISION Orchard Estates SECTION LOT 1

WELL LOG Table with columns: DESCRIPTION, FEET (FROM, TO), check if water bearing. Includes entries for Sand and Gray Mica Rocks.

GROUTING RECORD Form with fields for WELLS HAS BEEN GROUTED, TYPE OF GROUTING MATERIAL, NO. OF BAGS, NO. OF POUNDS, GALLONS OF WATER, DEPTH OF GROUT SEAL.

CASING RECORD Form with fields for casing types (ST, CO, PL, OT), MAIN CASING TYPE, Nominal diameter, Total depth.

OTHER CASING (if used) Form with fields for diameter, depth.

SCREEN RECORD Form with fields for screen type or open hole, SCREEN RECORD (ST, BR, HO, PL, OT).

Administrative fields: NUMBER OF UNSUCCESSFUL WELLS, WELL HYDROFRACTURED, CIRCLE APPROPRIATE LETTER (A, E, P).

DEPTH (nearest ft.) Table with columns for casing depth (1-3) and slot size (1-3).

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

PUMPING TEST Form with fields for HOURS PUMPED, PUMPING RATE, METHOD USED TO MEASURE PUMPING RATE, WATER LEVEL, TYPE OF PUMP USED.

PUMP INSTALLED Form with fields for DRILLER INSTALLED PUMP, IF DRILLER INSTALLS PUMP, TYPE OF PUMP INSTALLED, CAPACITY, PUMP HORSE POWER, PUMP COLUMN LENGTH, CASING HEIGHT.

LOCATION OF WELL ON LOT Form with instructions to show permanent structure and landmarks.

B 1 1033

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL

STATE PERMIT NUMBER

HD - 95 - 1308

527836

please type

fill in this form completely

Date Received (APA)

OWNER INFORMATION

8 MM DD YY 13

Demmitt Richard

P.O. Box 228

Clarksville Md 21029-0208

B 3 LOCATION OF WELL

Howard

Richmond Estates

Fulton

Fulton

MILES FROM TOWN (enter 0 if in town) 2 MI

DRILLER INFORMATION

Joseph L Mayne MS D024

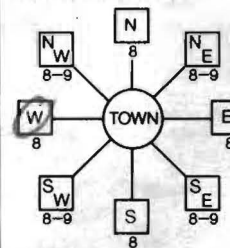
Joseph L Mayne Well Drilling

5512 Ridge Rd Mt Airy Md 21771

Joseph L Mayne 9-27-2007

B 4

DIRECTION OF WELL FROM TOWN (CIRCLE BOX)



all Daughters Lane

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)

45

DISTANCE FROM ROAD FT

TAX MAP: 40 BLK: 1B PARCEL 178

B 2 WELL INFORMATION

APPROX. PUMPING RATE (GAL. PER MIN.) 5 8 12

AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 500 14 20

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Howard AS 264498A

COUNTY NAME COUNTY NO.

DATE ISSUED 10/11/08

COUNTY SIGNATURE EXP. DATE

NORTH GRID 484 000 EAST GRID 816 000

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
GEO-THERMAL

APPROXIMATE DEPTH OF WELL 300 FEET

APPROXIMATE DIAMETER OF WELL 6 INCH

METHOD OF DRILLING (circle one)

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

REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX)

- THIS WELL WILL NOT REPLACE AN EXISTING WELL
THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS
THIS WELL WILL DEEPEMED 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 G
PERMIT No. HD - 95 - 1308

SPECIAL CONDITIONS

NOTE - APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED

Radium Sample needed @ 1/10 old time test

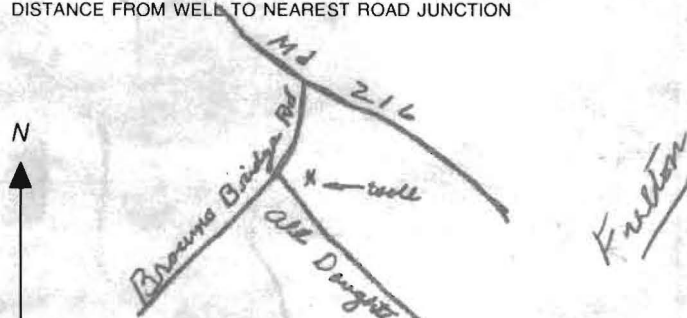
SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

SOURCES OF DRILLING WATER 1. well

WRITE THE BOX NUMBER FROM THE MAP HERE

E 816 N 484

DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION



**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 SERVICE 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 RYCKE License# PI 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: ORCHARD ESTATES Lot #: 1 Well Tag #: HO-95-1308 ✓
Site Address: ALL DAUGHTERS L.A
FULTON, MD 20759

Submersible Pump Data	Pitless Adapter	Well Cap and Electric Conduit
Make: <u>BRUND 705</u>	Make: <u>CAMPBELL</u>	Two piece watertight cap: <input checked="" type="checkbox"/>
Model #: <u>50E07-180</u>	Model#: <u>PA 800</u>	Screened, vented well cap: <input checked="" type="checkbox"/>
Pump Capacity <u>15</u> GPM	Depth: <u>48</u> (36" min)	Cap secured to casing: <input checked="" type="checkbox"/>
Well Yield: <u>20</u> GPM	NSF approved: _____	Conduit min 18" B.G.: <input checked="" type="checkbox"/>
Depth of well encountered at time of pump installation: <u>200</u> (feet)		Conduit secured to well cap: <input checked="" type="checkbox"/>

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: <u>P14</u>	PVC sleeved to undisturbed soil at wall penetration: <u>YES</u>
PSI: <u>160</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 12-30-16

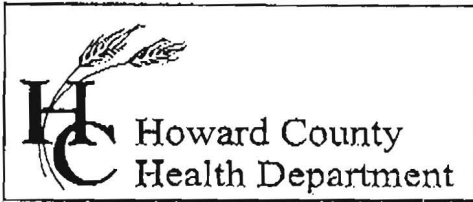
For Health Department Use Only - Not to be completed by Installer

Date Insp. Requested: 01/06/2017 Date Insp. Approved: 01/12/2017 (e)

- | | | |
|---|-------------------------------------|------------------------------|
| Inspection Data: Pitless adapter and water supply line at least 36" below grade | <input checked="" type="checkbox"/> | 30" (e) 01/06/2017 |
| Two piece cap installed and attached to casing securely | <input checked="" type="checkbox"/> | Loose cap (e) 01/06/2017 |
| Elec. conduit extends at least 18" below grade/attached to cap properly | <input checked="" type="checkbox"/> | 40" (e) 01/06/2017 |
| 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"/> | 16" above grade @ 01/06/2017 |
| Water supply line sleeved adequately at house connection | <input checked="" type="checkbox"/> | under locker |
| Adequate grout observed below pitless adapter | <input checked="" type="checkbox"/> | |



2 copies 1/12/17
Approved (e)



7178 Columbia Gateway Drive, Columbia, MD 21046
 (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:

Well Site Location: *Parcel A*
Orchard Est - 1, 2, 3, 4 all Daughters Lane
 Subdivision/Property Name Lot# Road Name
5, 6, 7, 8

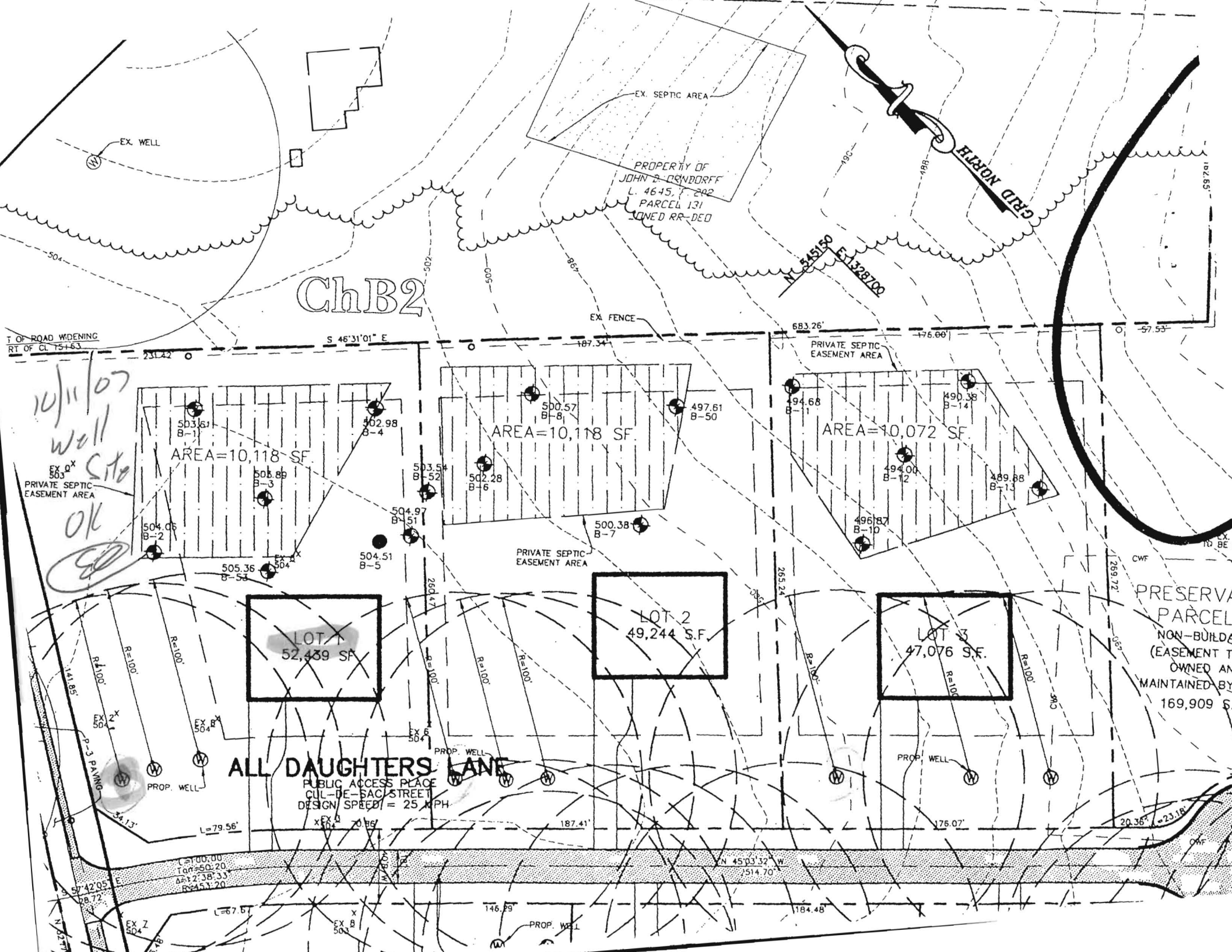
The well site has been staked by Patten Harris Rust + Ass -
 (professional land surveyor or company employing professional land surveyors)
 on Sept 2007 (date) and does not require a site inspection.

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 3/11/05

Richard Demmitt



ChB2

PROPERTY OF
JOHN B. DENBORFF
L. 46-45, 7-202
PARCEL 131
TOWNED RR-DEO

GRID NORTH

T OF ROAD WIDENING
RT OF CL 15+63

S 46°31'01" E

683.26'

176.60'

57.55'

AREA=10,118 SF

AREA=10,118 SF

AREA=10,072 SF

LOT 1
52,439 SF

LOT 2
49,244 SF

LOT 3
47,076 SF

ALL DAUGHTERS LANE

PUBLIC ACCESS PLACE
CUL-DE-SAC STREET
DESIGN SPEED = 25 MPH

PRESERVE
PARCEL
NON-BUILD
(EASEMENT T
OWNED AN
MAINTAINED BY
169,909 S

10/11/07
Well Site
OK

PRIVATE SEPTIC
EASEMENT AREA

PRIVATE SEPTIC
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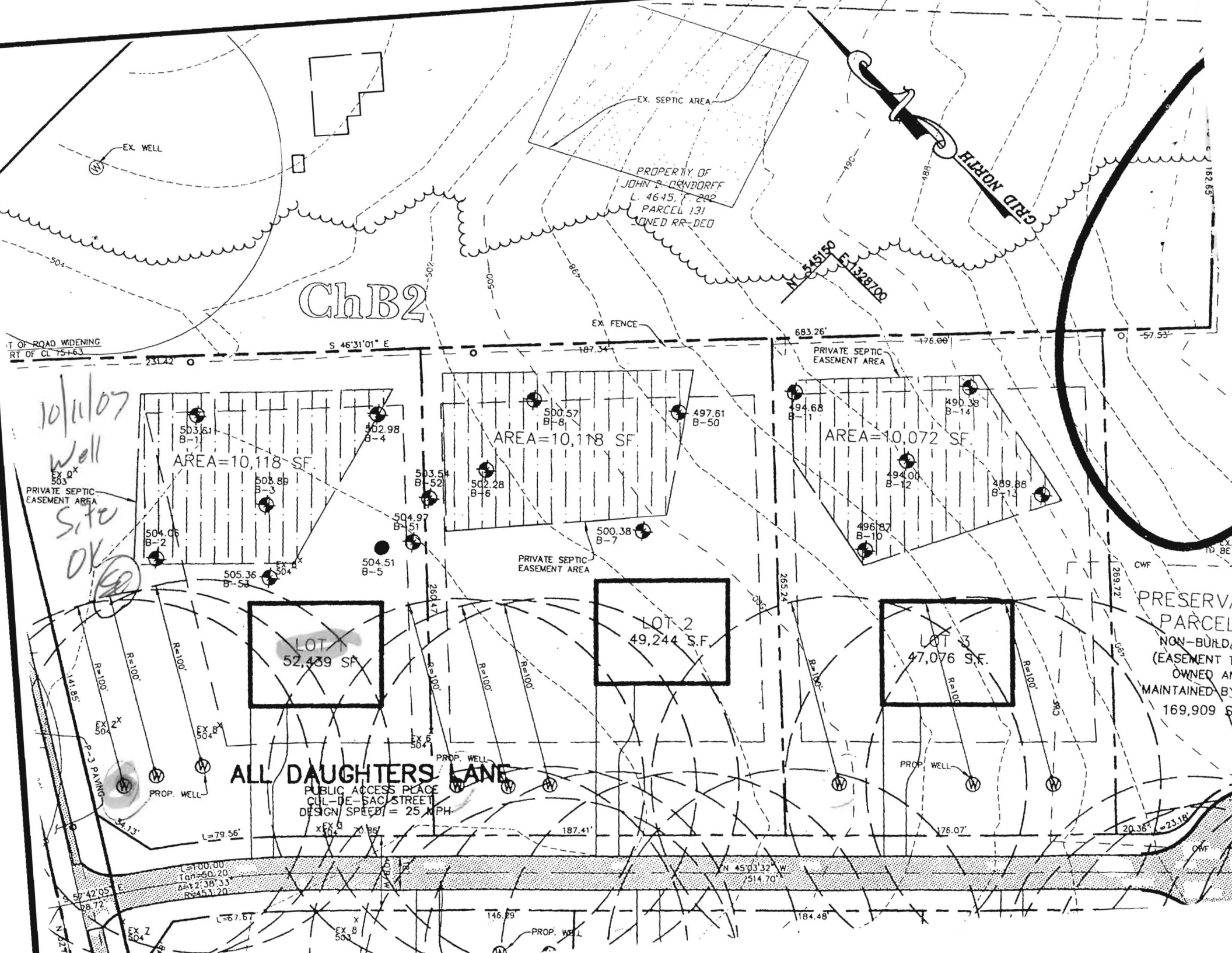
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ChB2

PROPERTY OF
JOHN S. DENDORFF
L. 4645, P. 202
PARCEL 131
UNED RR-DED

RT OF ROAD WIDENING
RT OF CL 75+63

S 46°31'01" E

EX FENCE

683.26'

176.00'

57.53'

10/11/07
Well
Site
OK

AREA=10,118 SF.

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LOT 1
52,439 SF.

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49,244 SF.

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47,076 SF.

ALL DAUGHTERS LANE

PUBLIC ACCESS PLACE
CUL-DE-SAC STREET
DESIGN SPEED = 25 MPH

PRESERVE
PARCEL
NON-BUILD
(EASEMENT T
OWNED AN
MAINTAINED B
169,909 S

L=100.00
Tan=50.20
AP=2°38'33"
R=451.20

N 45°03'32" W
7514.70

L=67.67

146.89

184.48'

20.36' = 23.18'



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

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

Lot 1

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 MB Browns Bridge Court LLC ("the Owner").

WHEREAS, the Owner owns a tract of land at street address 12403 All Daughters Lane, Fulton, MD 20759 and the deed and subdivision plat of the property is recorded among the Land Records of Howard County, Maryland, Tax Map # 40, Block # 24, Parcel # 178, Deed Reference # Liber 03395-Folio 00074 and Tax Account # 05-451051 ("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 HO95-2695 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

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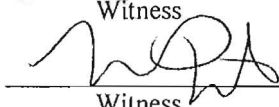

LR - Agreement
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 Name: mb browns bridge
 Court
 Ref: 104
 LR - Agreement
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 Subtotal
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 Total
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 Columbia
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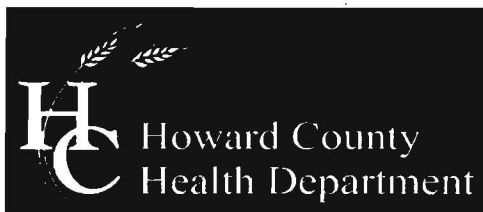
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shall verify that the treatment device is operating effectively and the Owner agrees to allow access to the Health Department to collect a follow-up sample(s).

3. The Health Department shall issue a Certificate of Potability for the well once follow-up sampling shows acceptable gross alpha, gross beta (short and long term) and radium 226 / 228 levels.
4. The Owner agrees that there shall be no liability on part of the Health Department for any immediate or long term impacts to health or property, under any circumstance or including, but not limited to, treatment device failure, improper maintenance or installation, or defect. The Health Department does not warranty or guarantee that the device will adequately or properly function and the Owner agrees to implement and pay for any necessary changes or corrections.
5. The Owner acknowledges and agrees that neither the Health Department nor any of its agents or employees, either officially or individually, underwrites the operation of any system or treatment device.
6. This Agreement shall not be construed to limit any authority of the Health Department to protect the public health, safety or enjoyment of property or to issue any other orders to take any other action, which is now or may hereafter be within its authority.
7. This agreement contains the entire agreement and understanding between the Health Department and the Owner. There are no additional terms other than as contained in this Agreement. This Agreement may not be modified except in writing signed by each of the parties or their authorized representatives.
8. The Agreement shall run with the land and binds the Owner, his heirs, successors, and assigns. The owner agrees to provide a copy of this agreement to any purchaser or lessee of the property.
9. The laws of the State of Maryland govern the provisions of all transactions.

The parties have signed and sealed this Agreement on the dates set forth below.

 Owner	<u>11/17/16</u> Date	_____	_____
		Witness	Date
<u>Martin J. Mitchell</u> Owner	_____	 Witness	<u>11/17/16</u> Date
 Howard County Health Department	<u>11/17/16</u> Date		



Bureau of Environmental Health
7178 Columbia Gateway Drive, Columbia, MD 21046-2147
(410) 313-2640 Fax (410) 313-2648
TDD (410) 313-2323 Toll Free 1-866-313-6300
website: www.hchealth.org

Peter L. Beilenson, M.D., M.P.H., Health Officer
February 20, 2008

Mr. Richard Demitt
P.O. Box 228
Clarksville, Maryland 21029

RE: Orchard Estates Lot 1
All Daughter's Lane
Well Tag: HO - 95 - 1308

Dear Mr. Demitt:

A follow-up sample was collected during a pump test on December 27, 2007 and submitted to the GPL Laboratories to further assess levels of **Gross Alpha**, **Gross Beta**, as well as **radium** in the future well water supply. Prior yield test results revealed an elevated level for **Gross Alpha** particle activity in a water supply.

Short term follow-up results from this screening revealed a **Gross Alpha** of 11.5 ± 4.5 picocuries/liter (pCi/L); while the **Gross Beta** level was 9.4 ± 2.0 pCi/L. With the margin of error, the **Gross Alpha** result exceeded 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).


Long term follow-up results from this screening revealed a **Gross Alpha** of 8.8 ± 3.6 picocuries/liter (pCi/L); while the **Gross Beta** level was 9.4 ± 2.1 pCi/L. The **Gross Alpha** result was below its **maximum contaminant level (MCL)** of 15 pCi/L, while the **Gross Beta** level was remained below its targeted value of 50 pCi/L (roughly equivalent to the annual dose rate of 4 millirems/year).

Additionally, a **Radium** sample was taken to assess the presence of **Radium 226** or **Radium 228**. These naturally occurring isotopes of radium are considered the most important due to their longer half-lives and health significance.

Results revealed a **Radium 226** level of 2.8 ± 0.5 pCi/L, while the **Radium 228** level was 2.2 ± 0.5 pCi/L. Here the **combined Radium 226 / 228** was at the MCL of 5 pCi/L.

Since the **Gross Alpha** and combined **Radium** findings are at or slightly above their respective **MCL's**, you will need to install treatment designed to reduce **Gross Alpha**, **Gross Beta** and **Radium**, plus provide post treated results (**for all 3 parameters**) confirming that levels are in conformance with existing standards. These tests are **in addition to** the standard parameters required for Use & Occupancy. **Additionally**, the owners will be required to sign an "AGREEMENT FOR APPROVAL OF AN INDIVIDUAL DRINKING WELL WITH AN ON-SITE TREATMENT SYSTEM" as part of the Use and Occupancy process.

A copy of the test results is enclosed for your information. Please call this office at 410-313-1773 if you have any further questions or to discuss additional testing requirements.

Sincerely,

Bert Nixon, Director
Bureau of Environmental Health

cc: Barry Glotfelty, MDE Water Mgmt.
✓ Well & Septic property file

Send Report To:

State of Maryland

DHMH - Laboratories Administration

Division of Environmental Chemistry

RADIATION LABORATORY

201 W. Preston Street, Baltimore, Maryland 21201

John M. DeBoy, Dr. P.H., Director

Relist

LABORATORY ANALYSIS REQUEST

Sample Bottle No. A: 140-95-1308 ST No. B: _____ Field Blank Bottle No. A: _____ No. B: _____

Plant/Site Name: Westroads Fed lot 1 County: Hawwood

Sample Source: _____ Location: 140-95-1308
(well no., lab sink, sample tap, etc.)

County: Plant No.

CHECK (one per box)

Drinking Water
Landfill
Stream
Other

Community
Non-community
Private
Other

Source (raw water)
Distribution (treated)
MCL

Emergency
Routine
Recheck
Special

Collector: R. Wolf

Telephone No: 410 313 2645

Date Collected: 12/27/07

Time Collected: 9:30 a.m. _____ p.m.

Nitric Acid Preserved: Yes No

Iced: Yes No

Submitters Code: Federal Project:

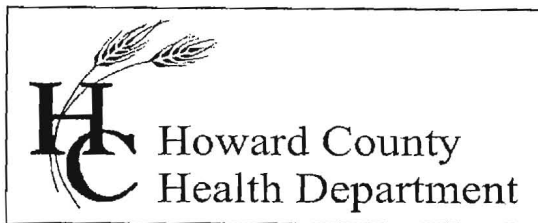
Field Data: _____
pH _____ Chlorine _____

Remarks:

✓	Test	EPA Code	Laboratory No.	Results (pCi/L)	Date Reported
✓	Gross Alpha	4000	<u>712100-003</u>	<u>11.5 ± 4.5</u>	<u>1/2/08</u>
✓	Gross Beta	4100		<u>9.4 ± 2.0</u>	
	Radon-222 Bottle A	4004			
	Radon-222 Bottle B	4004			
✓	Field Blank A <u>GROSS ALPHA</u>	4004	<u>712101-003</u>	<u>8.8 ± 3.6</u>	<u>1/8/08</u>
✓	Field Blank B <u>GROSS BETA</u>	4004		<u>9.4 ± 2.0</u>	
	Tritium				
✓	Ra - 226	4020	<u>712102-004</u>	<u>2.8 ± 0.5</u>	
✓	Ra - 228	4030		<u>2.2 ± 0.5</u>	
	Total Uranium	4006			

Date Received: _____/_____/_____

Supervisor: _____



Bureau of Environmental Health
7178 Columbia Gateway Drive, Columbia, MD 21046-2147
Main: 410-313-6300 | Fax: 410-313-6303
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
PERMANENT DEVIATION FOR RADIUM
Expiration Date – NOVEMBER 1, 2017

May 1, 2017

Homeowner
12403 All Daughters Lane
Highland, MD 20777

RE: Orchard Estates, Lot 1
12403 All Daughters Lane
Building Permit: B16003061
Well Permit: HO-95-1308

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 1/12/2017. Final approval of the well line connection to the dwelling was granted on 1/12/2017. The well construction was completed on 10/16/2007. Water samples were collected on 3/27/2017.

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 10/16/2017. Results showed a Radium 226 level of 14 ± 2.0 pCi/L and Radium 228 level of 7.0 ± 2.0 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 4/11/2017 and indicated a Radium 226 of 1.3 pCi/L, a Radium 228 of 1.9 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.
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-95-1308. 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 Best Available Technology (BAT). You will also find a link to Maryland Department of the Environments website which describes in further detail operation and maintenance of your BAT.

Approving Authority,



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

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

Wolf, Kevin

From: Wolf, Kevin
Sent: Tuesday, April 25, 2017 10:29 AM
To: 'Algie Risinger'
Subject: RE: U&O - Lot 1- 12403 All Daughters Lane, Highland, MD 20777
Attachments: Radium Agreement revised 6.19.15.pdf

Algie,
I have confirmed with Janet at Well Water Solutions that the radium samples taken were in fact post treatment. I will need you to have the radium agreement (attached) filled out and completed, bring original to our office for review and signature, then you will need to take it to Land Records for recordation. They will give you a receipt, please either bring this back to our office for confirmation or scan and email to me. We need this completed prior to release of the ICOP letter. Let me know if you have questions.

Thanks,

Kevin M. Wolf, LEHS, REHS/RS
Groundwater Mgmt. Sec. Supervisor
Well & Septic Program
Bureau of Environmental Health
8930 Stanford Blvd.
Columbia, MD 21045
(o) 410-313-2645
(f) 410-313-2648



kwolf@howardcountymd.gov

CONFIDENTIALITY NOTICE

This message and the accompanying documents are intended only for the use of the individual or entity to which they are addressed and may contain information that is privileged, confidential, or exempt from disclosure under applicable law. If the reader of this email is not the intended recipient, you are hereby notified that you are strictly prohibited from reading, disseminating, distributing, or copying this communication. If you have received this email in error, please notify the sender immediately and destroy the original transmission.

From: Algie Risinger [mailto:arisinger@mitchellbest.com]
Sent: Tuesday, April 25, 2017 8:16 AM
To: Wolf, Kevin
Cc: Algie Risinger
Subject: RE: U&O - Lot 1- 12403 All Daughters Lane, Highland, MD 20777

Thanks Kevin, I understand.

Thank You,
@.

Algie Risinger

Project Superintendent

Mitchell & Best Homes
Maple Lawn
11473 Iager Blvd.
Fulton, Md. 20759

(O) 301-362-6863

(C) 240-876-5860

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Mitchell & Best

The Name of Quality for Over 40 Years



2016
AVID CUP™
WINNER

Highest Customer Ratings in North America

From: Wolf, Kevin [<mailto:KWolf@howardcountymd.gov>]
Sent: Tuesday, April 25, 2017 7:51 AM
To: Algie Risinger <arisinger@mitchellbest.com>
Subject: RE: U&O - Lot 1- 12403 All Daughters Lane, Highland, MD 20777

I have 3 in front of you. 2 day requests are tough to get an immediate turnaround. I will look at the file today to see if all work is there and completed.

----- Original message -----

From: Algie Risinger <arisinger@mitchellbest.com>
Date: 4/25/17 7:10 AM (GMT-05:00)
To: "Wolf, Kevin" <KWolf@howardcountymd.gov>
Cc: "Martin, Sharhonda" <smmartin@howardcountymd.gov>, Algie Risinger <arisinger@mitchellbest.com>
Subject: FW: U&O - Lot 1- 12403 All Daughters Lane, Highland, MD 20777

Mr. Wolf,

Has the paperwork been processed to the point I can request the U&O for this house ??

Thank You,

@.

Algie Risinger

Project Superintendent

Mitchell & Best Homes

Maple Lawn

11473 Iager Blvd.

Fulton, Md. 20759

(O) 301-362-6863

(C) 240-876-5860

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Mitchell & Best

The Name of Quality for Over 40 Years



From: Janet Bieber [<mailto:jbieber@wellwatersolutions.net>]

Sent: Friday, April 21, 2017 2:06 PM

To: Howard County Martin, Sharhonda <smmartin@howardcountymd.gov>

Cc: Algie Risinger <arisinger@mitchellbest.com>; Mike Smith <msmith@mitchellbest.com>;
Jemoseman@wellwatersolutions.net

Subject: U&O - Lot 1- 12403 All Daughters Lane, Highland, MD 20777

Sharhonda,

Please refer to the attached passing water (Potability, Radium Short term Gross Alpha & Radium Long Te

for:

- Lot 1- 12403 All Daughters Lane, Highland, MD 20777

Mitchell and Best is looking to obtain a U&O Permit for this location.

Should you need any additional information please let us know as soon as you can.

Thank you,

Janet Bieber

Well Water Solutions, Inc.

301-674-3137

410-935-7185

www.wellwatersolutions.net

www.facebook.com/wellwatersolutions.net

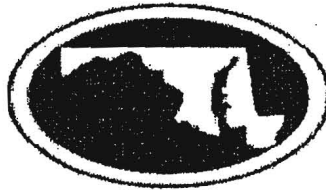
Well Water Solutions, Inc. is the answer for all of your well concerns.

Ask us about our Well Warranty, Inspections and Services for Residential and Real estate transactions

Environmental Testing Lab Inc.

108 Old Solomons Island Rd
Annapolis, MD 21401

State Certified Water Quality
Laboratory # 106



3430 Rockefeller Ct
Waldorf, MD 20602

State Certified Water Quality
Laboratory # 139

Certificate of Analysis

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

Project
Date Received 4/11/2017
Date Reported 4/21/2017
Well Permit No. HO-95-1308

This report is the sole property of Well Water Solutions, Inc.. Any questions about the report MUST be directed to Well Water Solutions, Inc. at (410) 935-7185.

Environmental Testing Lab is not at liberty to discuss this report without written consent from Well Water Solutions, Inc..

Sample No: 148649-01 Sampled: 4/11/2017 11:30:0 Sampler: JWalker9006JW (Exp. 8/6/2018)
Location: 12403 All Daughters Lane Preservation: HNO₃, pH < 2
Highland, MD 20777 Sample Point: Kitchen

Parameter	Method	Result	Qualifiers	Units	RL	Test Date	Analyst
Radium 226	EPA 903.1	1.3		pCi/l	0.2	04/20/2017	FRC-
Radium 228	EPA Ra-05	1.9		pCi/l	0.8	04/20/2017	FRC-
Gross Alpha-Radium	EPA 900.0	4.3		pCi/l	2.2	04/14/2017	FRC-
Turbidity	EPA 180.1	1		NTU	0.5	04/12/2017	RM-139

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

*Water
Sufficient
Whole House*

Approved By

Daniel J. Brumsted, Laboratory Director

Annapolis

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

Waldorf

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

ENVIRONMENTAL TESTING LAB, INC - CHAIN OF C



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

WALDORF
410-224-4304 E.

Client: Well Water Solutions, Inc.
Project:
Date Due: 4/18/2017

Company Name, Address Phone & Fax

Well Water Solutions
5163 Darling Bird Lane
Columbia, MD 21044

Testing Address

Lot 1
12403 All Daughters Lane
STREET
Highland, MD 20777
CITY STATE ZIP

Send Report By: Fax Postal Service 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 4/11/17 Time 11:30 Well Tag #: HO-95-1308

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

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

pH: 6 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: Kitchen Sink 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
Turbidity

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 2 samples One Week 2 Week

Special Instructions Radium Short-term Gross Alpha & Radium Long-term 226 & 228

Released By: [Signature] Date: 4/11/17 Time: 12:45 Received By: [Signature]

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: 4/11/17 Time: 12:45 pm

Environmental Testing Lab Inc.

108 Old Solomons Island Rd
Annapolis, MD 21401

State Certified Water Quality
Laboratory # 106



3430 Rockefeller Ct
Waldorf, MD 20602

State Certified Water Quality
Laboratory # 139

Certificate of Analysis

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

Project
Date Received 3/27/2017
Date Reported 3/29/2017
Well Permit No. HO 95 1308

This report is the sole property of Well Water Solutions, Inc.. Any questions about the report MUST be directed to Well Water Solutions, Inc. at (410) 935-7185.

Environmental Testing Lab is not at liberty to discuss this report without written consent from Well Water Solutions, Inc..

Sample No: 148014-01 Sampled: 3/27/2017 9:45:00 Sampler: JWalker9006JW (Exp. 8/6/2018)
Location: 12403 All Daughters Lane Preservation: Ice
Fulton, MD 20777 Sample Point: Kitchen

Parameter	Method	Result	Qualifiers	Units	RL	Test Date	Analyst
Bacteria-Total Coliform	Colitag Test	Absent/Pass		Per/100ml		03/27/2017	LC-106
Bacteria-E.coli	Colitag Test	Absent/Pass		Per/100ml		03/27/2017	LC-106
Nitrate + Nitrite as N	EPA 353.2	1.6		mg/l	1	03/29/2017	DB-139
Turbidity	EPA 180.1	43.5	X-Secondary	NTU	0.5	03/29/2017	RM-139

Field Test(s) such as chlorine and pH are reported on the attached COC form. "NT" means Not Tested

X A result qualified with an "X" DOES NOT meet EPA Drinking Water Standards. EPA has Primary Standards (health related, enforceable) and Secondary Standards (non-health related, non-enforceable). Refer to page two of this report, the case narrative, to see if the parameter with an "X" is a "Primary" or a "Secondary". The narrative is available online at www.MyWaterTesting.com under documents. We can only discuss these results with the person or Company that this report is address to.

Approved By

Daniel J. Brumsted, Laboratory Director

Annapolis

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

Waldorf

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



Bureau of Environmental Health
7178 Columbia Gateway Drive, Columbia, MD 21046-2147
(410) 313-2640 Fax (410) 313-2648
TDD (410) 313-2323 Toll Free 1-866-313-6300
website: www.hchealth.org

Peter L. Beilenson, M.D., M.P.H., Health Officer

November 30, 2007

Mr. Richard Demitt
P.O. Box 228
Clarksville, Maryland 21029

RE: Orchard Estates Lot 1
All Daughter's Lane
Well Tag: HO - 95 - 1308

Dear Mr. Demitt:

A sample was collected during a yield test on October 16, 2007 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 14.0 ± 2.0 picocuries/liter (pCi/L); while the **Gross Beta** level was 7.0 ± 2.0 pCi/L. With the margin of error, the **Gross Alpha** result exceeded 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).

Since the **Gross Alpha** finding exceeded its **MCL**, additional testing for **Gross Alpha** and **Gross Beta** (both short and long term components), plus **Radium** will be necessary prior to occupancy to verify existing levels and assess the need for appropriate treatment. Alternatively, you may install treatment designed to reduce **Gross Alpha**, **Gross Beta** and **Radium**, plus provide post treated results (**for all 3 parameters**) confirming that levels are in conformance with existing standards. These tests are **in addition to** the standard parameters required for Use & Occupancy.

Additionally, the owners will be required to sign an "AGREEMENT FOR APPROVAL OF AN INDIVIDUAL DRINKING WELL WITH AN ON-SITE TREATMENT SYSTEM" as part of the Use and Occupancy process.

A copy of the test results is enclosed for your information. Please call this office at 410-313-1773 if you have any further questions or to discuss additional testing requirements.

Sincerely,

A handwritten signature in black ink that reads "Bert Nixon".

Bert Nixon, Director
Bureau of Environmental Health

cc: Eric Dougherty, MDE Water Mgmt., Groundwater
✓ Well & Septic property file

Send Report To:

Beit Nixon

State of Maryland
DHMH - Laboratories Administration
Division of Environmental Chemistry
RADIATION LABORATORY

missed

201 W. Preston Street, Baltimore, Maryland 21201

John M. DeBoy, Dr. P.H., Director

LABORATORY ANALYSIS REQUEST

Sample Bottle No. A: 40-95-1308 No. B: _____ Field Blank Bottle No. A: _____ No. B: _____

Plant/Site Name: Orchard Est. Lot 1 County: Howard

Sample Source: All Daughters Ln. Location: 40-95-1308
(well no., lab sink, sample tap, etc.)

County: Plant No.

CHECK (one per box)

Drinking Water <input checked="" type="checkbox"/>	Community <input type="checkbox"/>	Source (raw water) <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"/>

Collector: K. Wolf Telephone No: 410-313-2645

Date Collected: 10/16/07 Time Collected: 10:30 a.m. _____ p.m.

Nitric Acid Preserved: Yes No Iced: Yes No

Submitters Code: Federal Project: Field Data: _____

Remarks: Sample collected @ end of field test pH _____ Chlorine _____

✓	Test	EPA Code	Laboratory No.	Results (pCi/L)	Date Reported
✓	Gross Alpha	4000			
✓	Gross Beta	4100			
	Radon-222 Bottle A	4004			
	Radon-222 Bottle B	4004			
	Field Blank A	4004			
	Field Blank B	4004			
	Tritium				
	Ra - 226	4020			
	Ra - 228	4030			
	Total Uranium	4006			

Date Received: _____ / _____ / _____

Supervisor: _____

Beit Nixon