

1236
(THIS NUMBER IS TO BE PUNCHED
IN COLS. 3-6 ON ALL CARDS)

SEQUENCE NO.
(MDE USE ONLY)

STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE TYPE

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

COUNTY
NUMBER

ST/CO USE ONLY
DATE Received
MM 07 DD 20 YY 12

DATE WELL COMPLETED
MM 06 DD 18 YY 12

Depth of Well
22 300 26
(TO NEAREST FOOT)

PERMIT NO.
FROM "PERMIT TO DRILL WELL"
40-95-2275

OWNER
last name Williamsburg first name Homes

WELL SITE ADDRESS
Hall street rd TOWN clarksburg

SUBDIVISION BLUEWINS PRO. SECTION LOT 4

WELL LOG
Not required for driven wells

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

DESCRIPTION (Use additional sheets if needed)	FEET		check if water bearing
	FROM	TO	
red x Brown loamy	0	68	
Gray Gneiss	68	300	✓

GROUTING RECORD
WELL HAS BEEN GROUTED
(Circle Appropriate Box)
TYPE OF GROUTING MATERIAL (Circle one)
CEMENT ☒ CM BENTONITE CLAY ☒ BC
NO. OF BAGS 27 NO. OF POUNDS 2538
GALLONS OF WATER 162
DEPTH OF GROUT SEAL (to nearest foot)
from 0 ft. to 76 ft.
(enter 0 if from surface)

CASING RECORD
casing
types
insert
appropriate
code
below
☒ ST STEEL ☒ CO CONCRETE
☒ PL PLASTIC ☐ OT OTHER
MAIN CASING TYPE PL Nominal diameter top (main) casing (nearest inch) 06 Total depth of main casing (nearest foot) 78
60 61 63 64 66 70

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

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

C 3
1 2
PUMPING TEST
HOURS PUMPED (nearest hour) 03
PUMPING RATE (gal. per min.) 12
METHOD USED TO MEASURE PUMPING RATE 1946
WATER LEVEL (distance from land surface)
BEFORE PUMPING 70 ft.
WHEN PUMPING 110 ft.
TYPE OF PUMP USED (for test)
☒ A air ☒ P piston ☐ T turbine
☒ C centrifugal ☒ R rotary ☐ O other (describe below)
☒ J jet ☒ S submersible

PUMP INSTALLED
DRILLER INSTALLED PUMP YES 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 LAND SURFACE
☐ - below 01 (nearest foot)

LATITUDE 39.111259
LONGITUDE 76.565781
(DEFAULT COORD. WGS 84)
NOTES:

NUMBER OF UNSUCCESSFUL WELLS: 0
WELL HYDROFRACTURED yes Y no 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 SD 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
70 72 74 75 76
TELESCOPE CASING LOG INDICATOR OTHER DATA

B 1 1 2 3 6	SEQUENCE NO. (MDE USE ONLY) 0644	STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL 536792 please type	STATE PERMIT NUMBER Ho - 95 - 2275 fill in this form completely 79
Date Received (APA) 040512 8 MM DD YY 13 15 Last Name 36 First Name 57 Street or RFD 70 Town 72 State 74 Zip 76		B 3 LOCATION OF WELL 8 COUNTY 21 23 SUBDIVISION 42 SECTION 44 46 LOT 48 50 52 NEAREST TOWN	
OWNER INFORMATION 15 Last Name 36 First Name 57 Street or RFD 70 Town 72 State 74 Zip 76		B 4 SOURCES OF DRILLING WATER 11 STREET ADDRESS 30 ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX) NORTH WEST EAST SOUTH 34 DISTANCE FROM ROAD 37 ENTER FT OR MI 38 39 TAX MAP: 35 BLK: 19 PARCEL 310	
DRILLER INFORMATION 15 Driller's Name 36 Firm Name 57 Address 70 Signature 72 Date 74		B 2 WELL INFORMATION 1 APPROX. PUMPING RATE 2 (GAL. PER MIN.) 8 12 AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 14 20	
USE FOR WATER (CIRCLE APPROPRIATE BOX) 22 <input checked="" type="radio"/> DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION <input type="radio"/> FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION) <input type="radio"/> INDUSTRIAL, COMMERCIAL, DEWATERING <input type="radio"/> PUBLIC WATER SUPPLY WELL <input type="radio"/> TEST, OBSERVATION, MONITORING <input type="radio"/> OPEN LOOP GEOTHERMAL <input type="radio"/> CLOSED LOOP GEOTHERMAL		NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL COUNTY NAME COUNTY NO. STATE SIGNATURE DATE ISSUED 43 MM DD YY 48 CO SIGNATURE 41 EXP. DATE	
APPROXIMATE DEPTH OF WELL 24 28 FEET APPROXIMATE DIAMETER OF WELL 6 INCH NEAREST INCH		PROPOSED LOCATION OF WELL ON LOT SHOW PERMANENT STRUCTURES SUCH AS BUILDINGS, SEPTIC SYSTEM, ROADS AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCE MEASUREMENTS TO WELL Guilford rd. 6/18/2012 Radium Sample Collected BB Hall shop rd. N	
METHOD OF DRILLING (circle one) 30 BORED (or Augered) 37 AIR-ROTARY CABLE other JETTED AIR-PERCussion REVerse-ROTary Jettied & DRIVEN ROTARY (Hydraulic Rotary) Drive-POINT		REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX) 39 <input checked="" type="radio"/> THIS WELL WILL NOT REPLACE AN EXISTING WELL <input type="radio"/> THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED <input type="radio"/> THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS <input type="radio"/> THIS WELL WILL DEEPEM AN EXISTING WELL PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED (IF AVAILABLE) 41 52	
Not to be filled in by driller (MDE OR COUNTY USE ONLY) APPROP. PERMIT NUMBER PERMIT No. HO - 95 - 2275 70 71 72 73 74 75 76 77 78 79			
SPECIAL CONDITIONS Radium Sample Needed. NOTE: APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED.			

Depth of well 300'
Distance of measuring point (M.P.) above ground 1'
Static water level (S.W.L.) below M.P. 70'

HD-224

HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH
WELL & SEPTIC PROGRAM
TEL: (410)313-1771 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: Fogles Well Drilling LLC Telephone #: 410-795-5670
Address: PO Box 202
Woodbine, MD 21797

(Must circle one) Licensed Plumber Licensed Well Driller Licensed Well Pump Installer
License # and name of individual responsible for the field installation:

Name (Print): David C. Fogle License # MSD 2226

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

Name of Property Owner: Williamsburg Group Telephone #: 410-977-3345
Subdivision: Estates at Clarksville Lot #: 4 Well Tag #: HO-95-2250
Site Address: 11023 Blevins Dr 2275
Clarksville, MD 21029

Submersible Pump Data Pitless Adapter Well Cap and Electric Conduit
Make: Grundfos Make: Campbell Two piece watertight cap: YES
Model #: 1550E07-180 Model #: N/A Screened, vented well cap: YES
Pump Capacity 07 GPM Depth: 36" (36" min) Cap secured to casing: YES
Well Yield: 8 GPM NSF/WSC approved: YES Conduit min 18" B.G.: YES
Depth of well encountered at time of pump installation: 293 (feet) Conduit secured to well cap: YES
If pump capacity exceeds well yield, a low water cut off switch is required by NSPC 1990 Section 17.8.4
Torque arrestors, Cable guards, or other acceptable method used—Must circle one
Safety rope, if used, attached to brass rope adapter or other acceptable method inside of well casing N/A

Piping to house House Connection
Type: 1" poly pipe PVC sleeve to undisturbed soil at wall penetration: YES
PSI: 200 (160 psi min) Length of sleeve (5' minimum from foundation): 6'
Depth of supply line: 36" (36" min) Sleeve 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: David C. Fogle date: 9-15-15

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

Date Insp. Requested: 9/15/15 Date Insp. Approved: 9/15/15 Inspector: SC
Inspection Data: Pitless adapter watertight & water supply line at least 36" below grade ✓
Two piece cap installed and attached to casing securely ✓
Elec. conduit extends at least 18" below grade/attached to cap properly ✓
Safety rope not outside of well cap/casing ✓
Correct well tag attached properly and casing 8" above finished grade ✓
Water supply line sleeved adequately at house connection ✓
Adequate grout observed below pitless adapter ✓

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

1413 Old Taneytown Rd. Westminster, MD (410) 848-1014 (410) 876-4554 FAX (410) 848-0298

REPORT OF ANALYSIS

Laboratory ID #: 103938 Account #: 4470
Reference: Estates at Clarksville Lot 4 Company: Williamsburg Homes LLC
Location: 11023 Blevins Drive Requested By: Bob Corbett
Clarksville, MD 21029 Source: Well Water
Date/ Time Collected: 10/27/2015 1238 Site: Pressure Tank
Date/Time Rec'd: 10/27/2015 1620 Treatment: Prior to Softener
Chlorine ppm: Free: ND Total: ND pH: 6.9
Collected By: C. Mooshian 7268CM Well #: HO-95-2275

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	10/28/2015 / 1115 / LLO
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	10/28/2015 / 1115 / LLO
Nitrate	<1.0	mg/L	10	601	10/28/2015 / 1330 / CRS
Turbidity	0.72	NTU	<10	SM18 2130B	10/28/2015 / 1350 / CRS
Sand	NS	mg/L	5	Visual/Gravimetric	10/28/2015 / 1350 / CRS

OK
Kand

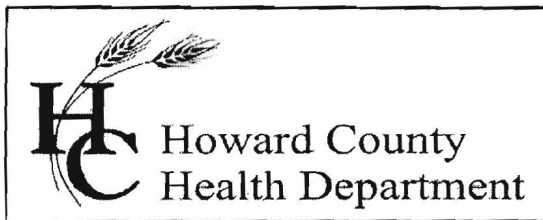
NOTES

- 1 mg/L = milligrams per liter (also, parts per million)
- 2 MPN/ 100 ml = Most Probable Number [of viable bacteria] per 100 ml of sample.
- 3 NS = None Seen (NS indicates less than 5 mg/L)
- 4 NTU = Nephelometric Turbidity Units
- 5 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 6 ND:None Detected
- 7 pH & Chlorine level tested on site
- 8 Visual well check: Sealed, vented cap

Reason for Test : Use & Occupancy

Building Permit # : B15001229

Date Reported: 10/28/2015



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 – MAY 24, 2016

November 24, 2015

Homeowner
11023 Blevins Drive
Clarksville, MD 21029

**RE: Blevins Property, Lot 4
11023 Blevins Drive
Building Permit: B15001229
Well Permit: HO-95-2275**

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 **11/5/2015**. Final approval of the well line connection to the dwelling was granted on **9/15/2015**. The well construction was completed on **6/18/2015**. Water samples were collected on **10/27/2015**.

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 **11/12/2015**. Results showed a Gross Alpha of 1.6 ± 0.0 pCi/L and Gross Beta of 2.0 ± 0.0 pCi/L. The Gross Alpha was below the maximum contaminant level (MCL) of 15 pCi/L and the Gross Beta was below the target level of 50pCi/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.

Volatile organic compound (VOC) sample was collected on **6/8/2012** respectively. This testing was performed to establish a baseline evaluation of the well water supply in the area due to known VOC ground water contamination concerns. Results from this sampling did not show any presence of VOC contamination. With respect to the parameters and guidelines of the EPA National Primary Drinking Water Regulations, the future well water supply is currently 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-95-2275. 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,



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
enclosures



Howard County
Health Department

Bureau of Environmental Health
7178 Gateway Drive Columbia, MD 21046
(410) 313-2640 Fax (410) 313-2643
TDD (410) 313-2323 Toll Free 1-866-313-6300
website: www.hchealth.org

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

July 26, 2012

Williamsburg Homes
Attn. Bob Corbett
5485 Harpers Farm Road, Suite 200
Columbia, Maryland 21044

RE: Blevin's Property Lot 5 **4**
Hall Shop Road
Well Tag: HO - 95 - 2275

Dear Mr. Corbett:

A sample was collected during a yield test on June 18, 2012 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 1079.6 ± 24.3 picocuries/liter (pCi/L), while the **Gross Beta** level was 100.0 ± 4.9 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. Additional testing **for these parameters, plus Radium 226 and Radium 228** will be required to secure the future Use & Occupancy. Given the **highly** elevated findings for both **Gross Alpha** and **Gross Beta, at a minimum**, the installation of a water softener system and a reverse osmosis system will be necessary. **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. Given that it typically takes up to one month to perform and receive back the **Radium** analyses, plan accordingly. Given these levels, the possibility that treatment won't be able to adequately treat these levels has to be considered. Please also 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.

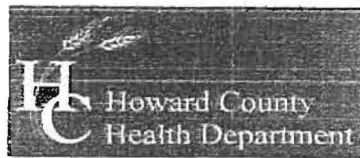
Sincerely,

Bert Nixon, Director
Bureau of Environmental Health

Enclosure

cc: Barry Glotfelty, MDE Water Mgmt.

✓ Well & Septic property file



Bureau of Environmental Health
7178 Columbia Gateway Drive, Columbia, MD 21046-2147
(410) 313-2640 Fax (410) 313-2645
TDD (410) 313-2323 Toll Free 1-886-313-6300
website: www.hchealth.org

Peter L. Beilenson, 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:

Blevins 1-3-5-6-7
Subdivision/Property Name Lot# Road Name

☒ The well site has been staked by Bill Adcock & Assoc.
(professional land surveyor or company employing professional land surveyors)
on 4-4-12 (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

Send Report To: Bert Nixon
Howard Co. Env. Health

7178 Columbia Gateway Dr.
Columbia, MD 21046

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

E003034 3212

LABORATORY ANALYSIS REQUEST

Sample Bottle No. A: 952275BB No. B: _____ Field Blank Bottle No. 1: 2275A No B: _____

Plant/Site Name: Blevins Property - Lot 5 County: Howard

Sample Source: Hall Shop Road Location: HO-95-2275
(well no, lab sink, sample tap, etc.)

County: ☒ 1 ☒ 3 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: B. Baker

Telephone No.: (410) 313-2643

Date Collected: 6/18/2012

Time Collected: 11:00 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 Analyzed	Date Reported
✓	Gross Alpha	4000	3034	< 2.0	06/22/12	06/25/12
✓	Gross Beta	4100	3034	< 4.0	#	1.1
	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: 06/21/12

Supervisor: [Signature]

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

Send Report To: Bert Nixon
Howard Co. Env. Health
7178 Columbia Gateway Dr.
Columbia, MD 21046

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

E003035 #212

LABORATORY ANALYSIS REQUEST

Sample Bottle No. A: 952275BB No. B: _____ Field Blank Bottle No. 1: 2275A No B: _____

Plant/Site Name: Blevins Property - Lot 5 County: Howard

Sample Source: Hall Shop Road Location: H0-95-2275
(well no, lab sink, sample tap, etc.)

County: ☒ 1 ☒ 3 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: B. Baker

Telephone No.: (410) 313-2643

Date Collected: 6/18/2012

Time Collected: 11:00 a.m. _____ p.m.

Nitric Acid Preserved: Yes ☒ No ☐

Iced: Yes ☐ No ☒

Submitters Code: ☐ ☐

Federal Project: ☐

Field Data: _____
pH _____ Chlorine _____

Remarks: Sample Collected During Yield Test
Duplicate 2 918.7 ± 21.0 B 118.0 ± 5.0

✓	Test	EPA Code	Laboratory No.	Results (pCi/L)	Date Analyzed	Date Reported
✓	Gross Alpha	4000	3035	1079.6 ± 243	06/22/12	06/25/12
✓	Gross Beta	4100	3035	116.0 ± 4.9		
	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: 06/21/12

Supervisor: [Signature]

Results confirmed.
Collector contacted 6/24/12

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

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

1413 Old Taneytown Rd. Westminster, MD (410) 848-1014 (410) 876-4554 FAX (410) 848-0298

REPORT OF ANALYSIS

Laboratory ID #: 104217 Account #: 4470
Reference: Estates at Clarksville Lot 4 Company: Williamsburg Homes LLC
Location: 11023 Blevins Drive Requested By: Bob Corbett
Clarksville, MD 21029 Source: Well Water
Date/ Time Collected: 11/12/2015 1240 Site: Laundry Room Sink
Date/Time Rec'd: 11/12/2015 1450 Treatment: Softener/Dual Carbon Tanks
Chlorine ppm: Free: ND Total: ND pH: 6.3
Collected By: J. Yeager 6176JY Well #: HO-95-2275

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Radium-226	0.2	pCi/L	****	903.1	11/19/2015 / 1059 / MJN
Radium-228	<0.9	pCi/L	****	Ra-05	11/19/2015 / 1134 / SN
Gross Alpha, Short Term	<1.1	pCi/L	15	900.0	11/14/2015 / 1522 / MJN
Gross Beta, Short Term	<1.5	pCi/L	50	900.0	11/14/2015 / 1522 / MJN
Gross Alpha, Long Term	<1.6	pCi/L	15	900.0	11/19/2015 / 0657 / MJN
Gross Beta, Long Term	<2.0	pCi/L	50	900.0	11/19/2015 / 0657 / MJN

NOTES

- 1 ****Radium 226 and Radium 228 combined have a reference of 5 pCi/L
- 2 Long Term Gross Alpha Detection Limit: 1.6 pCi/L; Long Term Gross Beta Detection Limit: 2.0 pCi/L
- 3 pCi/L = picocuries per liter
- 4 Radium 226 Detection Limit: 0.2 pCi/L; Radium 228 Detection Limit: 0.9 pCi/L
- 5 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 6 Short Term Gross Alpha Detection Limit: 1.1 pCi/L; Short Term Gross Beta Detection Limit: 1.5 pCi/L
- 7 Sub-contracted to Reference Lab #278
- 8 ND:None Detected
- 9 Visual well check: Sealed, vented cap
- 10 pH & Chlorine level tested on site

Reason for Test : Use & Occupancy
Building Permit # : B15001229

Date Reported: 11/20/2015

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

1413 Old Taneytown Rd. Westminster, MD (410) 848-1014 (410) 876-4554 FAX (410) 848-0298

REPORT OF ANALYSIS

Laboratory ID #: 84819 Account #: 4470
Reference: Williamsburg Group LLC Company: Williamsburg Group LLC
Location: 11986 Hall Shop Road Requested By: Bob Corbett
Clarksville, MD 21029 Source: Test Well Water Lot # 4
Date/Time Collected: 6/18/2012 1135 Site: Pump Hose
Date/Time Rec'd: 6/18/2012 1355 Treatment: None
Chlorine ppm: Free: ND Total: ND pH: 7.7
Collected By: C. Mooshian 7268CM Well #: HO-95-2275

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Gross Alpha, Short Term	830	pCi/L	15	900.0	6/20/2012 / 0957 / MJN
Gross Beta, Short Term	87.9	pCi/L	50	900.0	6/20/2012 / 0957 / MJN
Radium-226	5.1	pCi/L	****	903.1	6/28/2012 / 0804 / MJN
Radium-228	1.8	pCi/L	****	Ra-05	6/27/2012 / 1227 / SN

NOTES

- ****Radium 226 and Radium 228 combined have a reference of 5 pCi/L
- Gross Alpha Detection Limit: 1.2 pCi/L; Gross Beta Detection Limit: 2.1 pCi/L
- pCi/L = picocuries per liter
- Radium 226 Detection Limit: 0.2 pCi/L; Radium 228 Detection Limit: 0.8 pCi/L
- Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- Sub-contracted to Reference Lab #192
- ND = None Detected
- Subcontracted to Reference Lab #128
- pH and Chlorine level tested on site

Reason for Test: Client's Information

Reported: 6/29/2012

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

1413 Old Taneytown Rd. • Westminster, MD 21158 • MD State Certification #133

(410) 848-1014 • (410) 876-4554 • FAX (410) 848-0298

VOLATILE ORGANIC WATER ANALYSIS REPORT**LAB ID # 84820**

Location:	Lot <i>W</i> 11986 Hall Shop Road Clarksville, MD 21029	Work Order # 46879 Company Williamsburg Group LLC Requested by Bob Corbett Source: Well, HO-95-2275
Date & Time Collected:	06/18/12 1135	Site: Raw Pump Hose
Collected by:	C. Mooshian 7268CM	Treatment: None

CONTAMINANT	EPA CONT ID	MCL (PPB)	ACTUAL LEVEL	CONTAMINANT	EPA CONT ID	ACTUAL LEVEL
REGULATED				UNREGULATED		
Benzene	2990	5	ND	Bromobenzene	2993	ND
Carbon Tetrachloride	2982	5	ND	Bromochloromethane	2430	ND
o-Dichlorobenzene	2968	600	ND	Bromomethane	2214	ND
p-Dichlorobenzene	2969	75	ND	n-Butylbenzene	2422	ND
1,2-Dichloroethane	2980	5	ND	Sec-butylbenzene	2428	ND
1,1-Dichloroethene	2977	7	ND	Tert-butylbenzene	2426	ND
cis-1,2-Dichloroethene	2380	70	ND	Chloroethane	2216	ND
trans-1,2-Dichloroethene	2979	100	ND	o-Chlorotoluene	2965	ND
Dichloromethane	2964	5	ND	p-Chlorotoluene	2966	ND
1,2-Dichloropropane	2983	5	ND	m-Dichlorobenzene	2967	ND
Ethylbenzene	2992	700	ND	1,1-Dichloroethane	2978	ND
Monochlorobenzene	2989	100	ND	1,3-Dichloropropane	2412	ND
Styrene	2996	100	ND	2,2-Dichloropropane	2416	ND
Tetrachloroethene (PCE)	2987	5	ND	1,1-Dichloropropene	2410	ND
Toluene	2991	1000	ND	cis-1,3-Dichloropropene	2413	ND
1,2,4-Trichlorobenzene	2378	70	ND	trans-1,3-Dichloropropene	2413	ND
1,1,1-Trichloroethane	2981	200	ND	Dichlorodifluoromethane	2212	ND
1,1,2-Trichloroethane	2985	5	ND	Hexachlorobutadiene	2246	ND
Trichloroethene (TCE)	2984	5	ND	Isopropylbenzene	2994	ND
Vinyl Chloride	2976	2	ND	p-Isopropyltoluene	2030	ND
Xylenes (Total)	2955	10000	ND	MTBE	2251	ND
TRihalOMETHANES				Naphthalene	2248	ND
Bromodichloromethane	2943		ND	n-Propylbenzene	2998	ND
Bromoform	2942		ND	1,1,1,2-Tetrachloroethane	2986	ND
Chloroform	2941		ND	1,1,2,2-Tetrachloroethane	2988	ND
Dibromochloromethane	2944		ND	1,2,3-Trichlorobenzene	2420	ND
ADDITIONAL COMPOUNDS				Trichlorofluoromethane	2218	ND
TAME			ND	1,2,3-Trichloropropane	2414	ND
Chloromethane			ND	1,2,4-Trimethylbenzene	2418	ND
				1,3,5-Trimethylbenzene	2424	ND
				m, p-xylene	2995	ND
				o-xylene	2997	ND

NOTES:

- 1) MCL: Maximum Contaminant Level
- 2) Detection limit: 0.50 PPB (except for Xylenes, meta/para:1.0 PPB; and Xylenes total:1.5 PPB)
- 3) ND: None Detected
- 4) PPB: Parts Per Billion (micrograms per liter)
- 5) Sub-contracted to Lab #128, method EPA 524.2, Date Analyzed: 06/28/12, Time Analyzed: 0718, Tech: DD

Date Reported: 06/28/12



Bureau of Environmental Health
7178 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

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

July 26, 2012

Williamsburg Homes
Attn. Bob Corbett
5485 Harpers Farm Road, Suite 200
Columbia, Maryland 21044

RE: Blevin's Property Lot 5
Hall Shop Road
Well Tag: HO - 95 - 2275

Dear Mr. Corbett:

A sample was collected during a yield test on June 18, 2012 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 1079.6 ± 24.3 picocuries/liter (pCi/L), while the **Gross Beta** level was 100.0 ± 4.9 pCi/L. The **Gross Alpha** result was above its **maximum contaminant level (MCL)** of **15 pCi/L**, while the **Gross Beta** level was above 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. Additional testing **for these parameters, plus Radium 226 and Radium 228** will be required to secure the future Use & Occupancy. Given the **highly** elevated finding for both **Gross Alpha** and **Gross Beta**, **at a minimum**, the installation of a water softener system and a reverse osmosis system will be necessary. **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. Given that it typically takes up to one month to perform and receive back the **Radium** analyses, plan accordingly. Given these levels, the possibility that treatment won't be able to adequately treat these levels has to be considered. Please also 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,

Bert Nixon, Director
Bureau of Environmental Health

Enclosure

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



Bureau of Environmental Health

7178 Columbia Gateway Drive, Columbia, MD 21046-2147

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

Williamsburg Homes

Attn. Bob Corbett

5485 Harpers Farm Road, Suite 200

Columbia, Maryland 21044

RE: Blevin's Property Final Lot 4

Hall Shop Road

Well Tag: HO - 95 - 2275

Dear Mr. Corbett:

Samples were collected during a follow-up field test on February 10, 2015 and submitted to the Department of Health & Mental Hygiene (DHMH) and Florida Radiochemistry (FRC) Laboratories to reassess / affirm the presence of **Gross Alpha**, **Gross Beta** and **Radium 226/228** in the future well water supply. This testing was performed to determine the potential viability of the well and the likely ability of treatment to sufficiently mitigate these naturally occurring radioactive nuclides that have been demonstrated to be present in a certain type of geologic formation known as the Baltimore Gneiss which exists in this area of development within the County.

Results from this screening revealed a **Gross Alpha** of 34.9 ± 3.7 picocuries/liter (pCi/L), while the **Gross Beta** level was 7.2 ± 2.2 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**).

Results from this long term screening revealed a **Gross Alpha** of 25.2 ± 3.1 picocuries/liter (pCi/L), while the **Gross Beta** level was 12.5 ± 1.7 pCi/L. The **Gross Alpha** result was again above its **MCL** of **15 pCi/L**, while the **Gross Beta** level was below its targeted value of **50 pCi/L**.

Additionally, a pre-treated **Radium 226 / 228** sample was collected and submitted to FRC. 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 3.6 ± 0.3 pCi/L, while the **Radium 228** level was 1.4 ± 0.6 pCi/L. Here the **combined Radium 226 / 228** was at the **MCL** of **5 pCi/L**.

At the time of this testing and with respect to these parameters, the future well water supply still **does not** meet EPA regulatory standards. However, the short term **Gross Alpha and Beta** findings were significantly lower than the initial testing back in 2012. Though still elevated and now with confirming **Radium 226 / 228** findings, if these results are indicative of future levels in this well, treatment should be able to effectively address these contaminant levels. **At a minimum**, the installation of a water softener system will be necessary. **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. Given that it typically takes up to one month to perform and receive back the **Radium** analyses, plan accordingly. Please also note that other standard testing parameters (bacteria, nitrate, turbidity and sand) will still be required to help secure

March 4, 2015

Use & Occupancy.

A copy of each test report is enclosed for your information. Please call this office at **410-313-1773** if you have any further questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Bert Nixon". The signature is written in a cursive, flowing style.

Bert Nixon, Director
Bureau of Environmental Health

Enclosure

cc: Well & Septic property file

SEND REPORT TO:

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

Bert + Nixon
8930 Stanford Blvd
Columbia MD 21045

Laboratories Administration
 201 W. Preston St., Baltimore, MD 21201
 Robert A. Myers, Ph.D., Director

Lab No.

RADIATION ANALYSIS REQUEST FORM

Plant/Site Name: Blevins Prop - lot (4)County: HowardSample Source: Hall ship Rd.Location: HO-95-2275

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

Radon-222 Bottle A HO KW 2275 STRadon-222 Field BlankBottle A MOFB 21015

Bottle B

Bottle B

County 13

Plant No.

CHECK (one per Box)

Type	
Drinking Water	<input checked="" type="checkbox"/>
Landfill	<input type="checkbox"/>
Stream	<input type="checkbox"/>
Other	<input type="checkbox"/>

Service	
Community	<input type="checkbox"/>
Non-Community	<input type="checkbox"/>
Private	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>

Point of Collection	
Source (Raw)	<input checked="" type="checkbox"/>
Distribution (treated)	<input type="checkbox"/>
MCL	<input type="checkbox"/>

Testing	
Emergency	<input type="checkbox"/>
Routine	<input checked="" type="checkbox"/>
Recheck	<input type="checkbox"/>
Special	<input type="checkbox"/>

Submitters Code: Federal Project: Collector: K. WolfTelephone No.: 410 313 2645Date Collected: 2/10/15Time Collected: 11:30 a.m. p.m.Field pH: Field Chlorine: Nitric Acid Preserved: Yes ☒ No ☐Iced: Yes ☐ No ☐Remarks: Raw sample gross & B Short Term. Taken @ Yield

<input checked="" type="checkbox"/>	TEST	EPA Code	Lab No.	Method No.	Results (pCi/L)	Date Analyzed	Analyst	Date Reported
<input checked="" type="checkbox"/>	Gross Alpha	4000	1566	EPA 900.0	349 ± 3.7	02/19/15	MS	02/24/15
<input checked="" type="checkbox"/>	Gross Beta	4100	1566	EPA 900.0	7.2 ± 2.2	02/19/15	MS	02/24/15
<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 - Conf		1566	EPA 900.0	357 ± 3.8	2/19/15	MS	02/24/15
<input checked="" type="checkbox"/>	Gross Beta - Conf		1566	EPA 900.0	9.9 ± 2.3	02/19/15	MS	02/24/15

Date Received: 2/12/15Received By: Kathryn JonesData Release Signature: William Miller - JWRDate: 2/24/15

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



Florida Radiochemistry Services, Inc.

Analysis Report

Lab Sample I.D.	1502109-03	1502109-04
Client I.D.	HOKW2275LT	HOKW227RAD
Gross Alpha	25.2	
Error +/-	3.1	
MDL	1.1	
EPA Method	900.0	
Prep Date	02/18/15	
Prep Time	06:03	
Analysis Date	02/19/15	
Analysis Time	06:38	
Analyst	MJN	
Gross Beta	12.5	
Error +/-	1.7	
MDL	1.8	
EPA Method	900.0	
Prep Date	02/18/15	
Prep Time	06:03	
Analysis Date	02/19/15	
Analysis Time	06:38	
Analyst	MJN	
Radium 226		3.6
Error +/-		0.3
MDL		0.1
EPA Method		903.1
Prep Date		02/18/15
Prep Time		07:55
Analysis Date		02/25/15
Analysis Time		09:55
Analyst		MJN
Radium 228		1.4
Error +/-		0.6
MDL		0.8
EPA Method		Ra-05
Prep Date		02/18/15
Prep Time		07:55
Analysis Date		02/25/15
Analysis Time		10:22
Analyst		SN
Units	pCi/l	pCi/l



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.

RADIATION ANALYSIS REQUEST FORM

Plant/Site Name: BURNS Pop Lot (4)County: HowardSample Source: Hall Shp RdLocation: HU-95-2275

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

Radon-222 Bottle A HOKW 2275 RAD

Radon-222 Field Blank

Bottle A

Bottle B

Bottle B

County 13Plant 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: 1Federal Project: 1Collector: K. WolfTelephone No.: 410 313 2645Date Collected: 4/10/15Time Collected: 11:30 a.m. p.m.Field pH: Field Chlorine: Nitric Acid Preserved: Yes ☒ No ☐Iced: Yes ☐ No ☐Remarks: Raw sample for Radium 226 228

<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						
<input type="checkbox"/>	Gross Beta	4100						
<input checked="" type="checkbox"/>	Radium-226	4020						
<input checked="" type="checkbox"/>	Radium-228	4030						
<input type="checkbox"/>	Total Uranium	4006						
<input type="checkbox"/>	Radon-222 (Bottle A)	4004						
<input type="checkbox"/>	Radon-222 (Bottle B)	4004						
<input type="checkbox"/>	Radon Field Blank A	4004						
<input type="checkbox"/>	Radon Field Blank B	4004						
<input type="checkbox"/>	Tritium							
<input type="checkbox"/>								
<input type="checkbox"/>								

Date Received: Received By: Data Release Signature: Date:

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



SEND REPORT TO:

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

Bert Nidon
8930 Stanford Blvd
Columbia MD 21045

Laboratories Administration
201 W. Preston St., Baltimore, MD 21201
Robert A. Myers, Ph.D., Director

Lab No.

RADIATION ANALYSIS REQUEST FORM

Plant/Site Name: Blevins Prop - lot (4)County: HowardSample Source: Hall shop Rd.Location: HO-95-2275

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

Radon-222 Bottle A HO KW 2275 STRadon-222 Field Blank →Bottle A HO FB 21015

Bottle B _____

Bottle B _____

County 13

Plant No. _____

CHECK (one per Box)

Type
Drinking Water <input checked="" type="checkbox"/>
Landfill <input type="checkbox"/>
Stream <input type="checkbox"/>
Other <input type="checkbox"/>

Service
Community <input type="checkbox"/>
Non-Community <input type="checkbox"/>
Private <input checked="" type="checkbox"/>
Other <input type="checkbox"/>

Point of Collection
Source (Raw) <input checked="" type="checkbox"/>
Distribution (treated) <input type="checkbox"/>
MCL <input type="checkbox"/>

Testing
Emergency <input type="checkbox"/>
Routine <input checked="" type="checkbox"/>
Recheck <input type="checkbox"/>
Special <input type="checkbox"/>

Submitter's Code: _____

Federal Project: _____

Collector: K. WolfTelephone No.: 410 313 2645Date Collected: 2/10/15Time Collected: 11:30 a.m. _____ p.m.

Field pH: _____

Field Chlorine: _____

Nitric Acid Preserved: Yes ☒ No ☐Iced: Yes ☐ No ☐Remarks: Raw Sample gross <β Short Term. Taken @ Yield

<input type="checkbox"/>	TEST	EPA Code	Lab No.	Method No.	Results (pCi/L)	Date Analyzed	Analyst	Date Reported
<input checked="" type="checkbox"/>	Gross Alpha	4000						
<input checked="" type="checkbox"/>	Gross Beta	4100						
<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: _____

Received By: _____

Data Release Signature: _____

Date: _____

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



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.

RADIATION ANALYSIS REQUEST FORM

Plant/Site Name:

~~HC HD~~ ~~Regulatory~~

County:

Howard

Sample Source:

Distilled H₂O

Location:

Lab

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

Radon-222

Bottle A

Radon-222

Field Blank

Bottle A

HOFB 21015

Bottle B

Bottle B

County

13

Plant No.

CHECK (one per Box)

Type	
Drinking Water	<input checked="" type="checkbox"/>
Landfill	<input type="checkbox"/>
Stream	<input type="checkbox"/>
Other	<input type="checkbox"/>

Service	
Community	<input type="checkbox"/>
Non-Community	<input type="checkbox"/>
Private	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>

Point of Collection	
Source (Raw)	<input checked="" type="checkbox"/>
Distribution (treated)	<input type="checkbox"/>
MCL	<input type="checkbox"/>

Testing	
Emergency	<input type="checkbox"/>
Routine	<input checked="" type="checkbox"/>
Recheck	<input type="checkbox"/>
Special	<input type="checkbox"/>

Submitters Code:

Federal Project:

Collector:

K. Wolf

Telephone No.:

410 313 2645

Date Collected:

2/10/15

Time Collected:

a.m.

4 p.m.

Field pH:

-

Field Chlorine:

-

Nitric Acid Preserved:

Yes

☒

No

☐

Iced:

Yes

☐

No

☐

Remarks:

Field Blank for Gross & B

<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						
<input type="checkbox"/>	Gross Beta	4100						
<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"/>	Field Blank							

Date Received:

Received By:

Data Release Signature:

Date:

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



SEND REPORT TO:

Bert Nicker
3930 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.

RADIATION ANALYSIS REQUEST FORM To FRC - Shipped out

Plant/Site Name: Blevin's Prep - Lot (4)

County: Howard

Sample Source: Hall Ship Rel

Location: HO-95-2275

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

Radon-222 Bottle A 140KW2275 LT

Radon-222 Field Blank

Bottle A

Bottle B

Bottle B

County 13

Plant No.

--	--	--	--	--	--	--	--	--	--

CHECK (one per Box)

Type	
Drinking Water	<input checked="" type="checkbox"/>
Landfill	<input type="checkbox"/>
Stream	<input type="checkbox"/>
Other	<input type="checkbox"/>

Service	
Community	<input type="checkbox"/>
Non-Community	<input type="checkbox"/>
Private	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>

Point of Collection	
Source (Raw)	<input checked="" type="checkbox"/>
Distribution (treated)	<input type="checkbox"/>
MCL	<input type="checkbox"/>

Testing	
Emergency	<input type="checkbox"/>
Routine	<input checked="" type="checkbox"/>
Recheck	<input type="checkbox"/>
Special	<input type="checkbox"/>

Submitters Code:

--	--

Federal Project:

--

Collector: Kevin Wolf

Telephone No.: 410 313 2645

Date Collected: 2/10/15

Time Collected: 11:30 a.m. p.m.

Field pH:

Field Chlorine:

Nitric Acid Preserved: Yes ☒ No ☐

Iced: Yes ☐ No ☐

Remarks: Raw sample for gross α & β long term

<input checked="" type="checkbox"/>	TEST	EPA Code	Lab No.	Method No.	Results (pCi/L)	Date Analyzed	Analyst	Date Reported
<input checked="" type="checkbox"/>	Gross Alpha <u>Long Term</u>	4000						
<input checked="" type="checkbox"/>	Gross Beta <u>Long Term</u>	4100						
<input type="checkbox"/>	Radium-226	4020						
<input type="checkbox"/>	Radium-228	4030						
<input type="checkbox"/>	Total Uranium	4006						
<input type="checkbox"/>	Radon-222 (Bottle A)	4004						
<input type="checkbox"/>	Radon-222 (Bottle B)	4004						
<input type="checkbox"/>	Radon Field Blank A	4004						
<input type="checkbox"/>	Radon Field Blank B	4004						
<input type="checkbox"/>	Tritium							
<input type="checkbox"/>								
<input type="checkbox"/>								

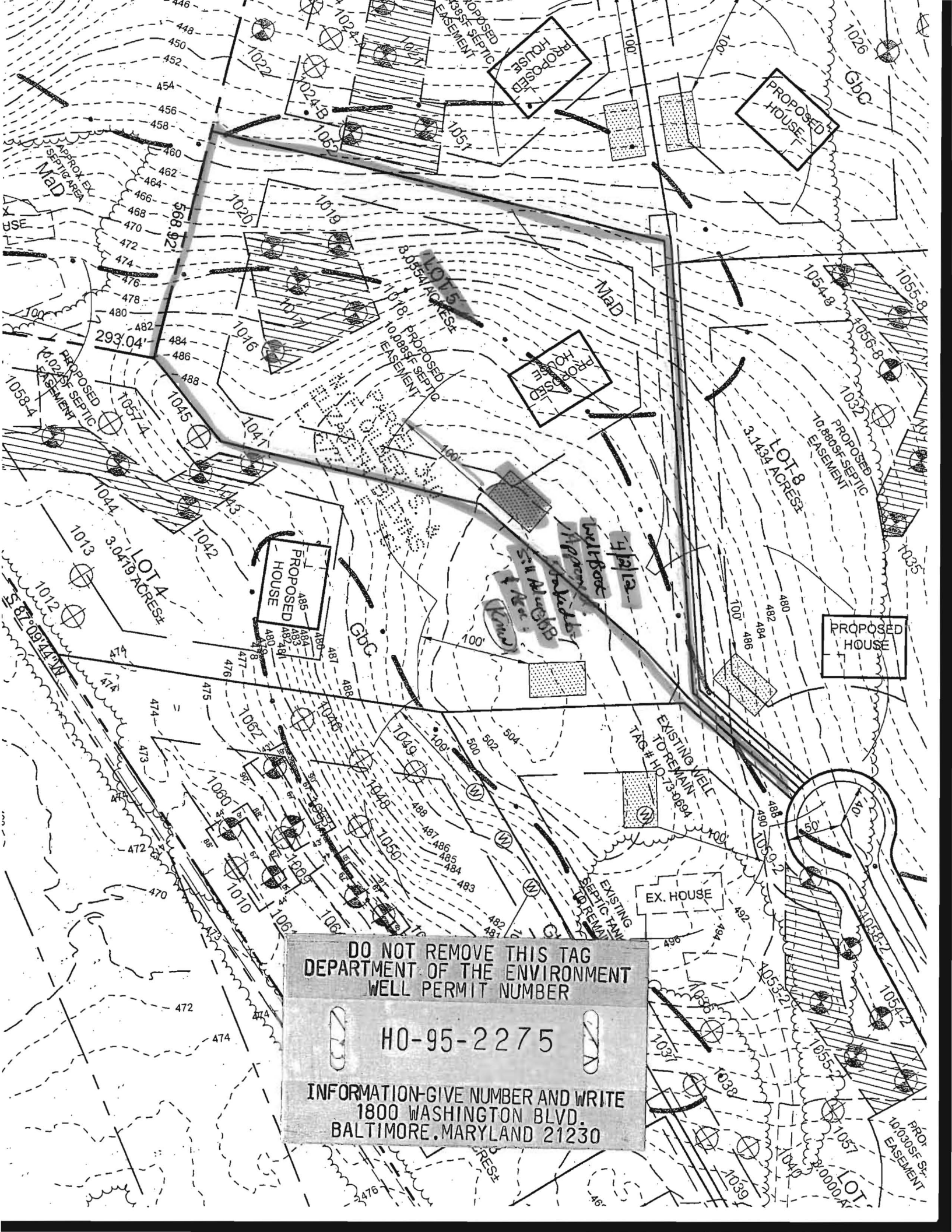
Date Received:

Received By:

Data Release Signature:

Date:

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



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

HO-95-2275

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

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.

1564 212

RADIATION ANALYSIS REQUEST FORM

Plant/Site Name:

~~XXXXXX~~ HCHD

County:

Howard

Sample Source:

Distilled H₂O

Location:

Lab

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

Radon-222

Bottle A

Radon-222 Field Blank →

Bottle A

HDFB 21015

Bottle B

Bottle B

County

13

Plant No.

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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:

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Federal Project:

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Collector:

K. Wolf

Telephone No.:

410 313 2645

Date Collected:

2/10/15

Time Collected:

4 a.m. 4 p.m.

Field pH:

Field Chlorine:

Nitric Acid Preserved:

Yes

☒

No

☐

Iced:

Yes

☐

No

☐

Remarks:

Field Blank for Gross & B

<input checked="" type="checkbox"/>	TEST	EPA Code	Lab No.	Method No.	Results (pCi/L)	Date Analyzed	Analyst	Date Reported
<input checked="" type="checkbox"/>	Gross Alpha	4000	1564	EPA900.0	22.0	02/19/15	MS	02/24/15
<input checked="" type="checkbox"/>	Gross Beta	4100	1564	EPA900.0	4.0	02/19/15	MS	02/24/15
<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"/>	Field Blank							

Date Received:

2/12/15

Received By:

Kathryn Jones

Data Release Signature:

Robert A. Myers, Ph.D.

Date:

2/24/15

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

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

1413 Old Taneytown Rd. Westminster, MD (410) 848-1014 (410) 876-4554 FAX (410) 848-0298

REPORT OF ANALYSIS

Laboratory ID #: 84818 Account #: 4470
Reference: Williamsburg Group LLC Company: Williamsburg Group LLC
Location: 11986 Hall Shop Road Requested By: Bob Corbett
Clarksville, MD 21029 Source: Test Well Water Lot 5/4
Date/ Time Collected: 6/18/2012 1135 Site: Pump Hose
Date/Time Rec'd: 6/18/2012 1355 Treatment: None
Chlorine ppm: Free: ND Total: ND pH: 7.7
Collected By: C. Mooshian 7268CM Well #: HO-95-2275

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	6/19/2012 / 0930 / CCH
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	6/19/2012 / 0930 / CCH
Nitrate	<1.0	mg/L	10	601	6/18/2012 / 1500 / CCH
Turbidity	1.23	NTU	<10	SM18 2130B	6/19/2012 / 1129 / JKW
Sand	NS	mg/L	5	Visual/Gravimetric	6/19/2012 / 1129 / JKW

NOTES

- 1 mg/L = milligrams per liter (also, parts per million)
- 2 MPN/ 100 ml = Most Probable Number [of viable bacteria] per 100 ml of sample.
- 3 NS = None Seen (NS indicates less than 5 mg/L)
- 4 NTU = Nephelometric Turbidity Units
- 5 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 6 ND = None Detected
- 7 Visual well check: Sealed, vented cap
- 8 pH and Chlorine level tested on site

Reason for Test : Client's Information

Date Reported: 6/26/2012