

C1	56793	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	XIII			
1 2 3 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)		DATE RECEIVED MM DD YY 02 05 19		DATE WELL COMPLETED MM DD YY 02 04 19		Depth of Well 22 300 26 (TO NEAREST FOOT)		PERMIT NO. FROM "PERMIT TO DRILL WELL" HO-17-0396	

OWNER	Kestore Homes			
WELL SITE ADDRESS	1811 Woodstock Road	TOWN	Woodstock	
SUBDIVISION	Valley Anne Estates	SECTION	LOT	2

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 FROM TO	check if water bearing
Soil	0 4	
Brown shale		
w/ Granite		
Boulders	4 25	
Granite	25 300	
	150	
	240	

GROUTING RECORD	
WELL HAS BEEN GROUTED (Circle Appropriate Box)	yes no Y N
TYPE OF GROUTING MATERIAL (Circle one)	
CEMENT CM	BENTONITE CLAY BC
NO. OF BAGS 45 46 15	NO. OF POUNDS 45 46 125
GALLONS OF WATER 75	
DEPTH OF GROUT SEAL (to nearest foot)	
from 0	ft. to 30
48 TOP	52 54 BOTTOM 58
(enter 0 if from surface)	

CASING RECORD		
casing types insert appropriate code below	ST STEEL	CO CONCRETE
	PL PLASTIC	OT OTHER
MAIN CASING TYPE	Nominal diameter top (main) casing (nearest inch)	Total depth of main casing (nearest foot)
ST	6	30
60 61	63 64	66 70

E A C H C A S I N G	OTHER CASING (if used)	
	diameter inch	depth (feet) from to

screen type or open hole insert appropriate code below	ST STEEL	BR BRASS	HO OPEN HOLE
	PL PLASTIC	OT OTHER	

C2	DEPTH (nearest ft.)
1 2	30 300
E 1	8 9 11 15 17 21
A 2	23 24 26 30 32 36
C 3	38 39 41 45 47 51
R	
E	
N	
SLOT SIZE 1 2 3	
DIAMETER OF SCREEN (NEAREST INCH)	
56	60
from to	

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 66	66
--	----

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

C3	PUMPING TEST	
1 2	3	
HOURS PUMPED (nearest hour)		
8 9 10.0		
PUMPING RATE (gal. per min.)		
11 15		
METHOD USED TO MEASURE PUMPING RATE		
Water Bucket		
WATER LEVEL (distance from land surface)		
BEFORE PUMPING		
5 17 20 ft.		
WHEN PUMPING		
190 22 25 ft.		
TYPE OF PUMP USED (for test)		
A air	P piston	T turbine
27	27	27
C centrifugal	R rotary	O other (describe below)
27	27	27
J jet	S submersible	
27	27	

PUMP INSTALLED	
DRILLER INSTALLED PUMP (CIRCLE) (YES or NO)	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.)	
48 47	
CASING HEIGHT (circle appropriate box and enter casing height)	
+ above	
LAND SURFACE	
- below	
1 (nearest foot)	
49 50 51	

LATITUDE	39.32168
LONGITUDE	76.8788
(DEFAULT COORD. WGS 84)	

Pursuant to §10-624 of the State Govt. Article of the Maryland Code personal info. requested on this form is used in processing this form pursuant to COMAR 26.04.04. Failure to provide the info. may result in this form not being processed. You have the right to inspect, amend, or correct this form. The Maryland Department of the Environment is subject to the Maryland Public Information Act. This form may be made available on the Internet via MDE's website and is subject to inspection or copying, in whole or in part, by the public and other governmental agencies, if not protected by federal or state law.

DRILLERS LIC. NO.	M WD 355
DRILLERS SIGNATURE	(MUST MATCH SIGNATURE ON APPLICATION)
LIC. NO.	WRG 113
SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)	

<b>B 1</b> <div style="font-size: 2em; font-weight: bold; margin-top: 10px;">62787</div>	SEQUENCE NO. (MDE USE ONLY)  	<b>STATE OF MARYLAND</b> <b>APPLICATION FOR PERMIT TO DRILL WELL</b> please type <div style="font-size: 1.5em; margin-top: 10px;">504708</div>	STATE PERMIT NUMBER <div style="font-size: 1.5em; margin-top: 10px;">Ho-17-0396</div> <div style="font-size: 0.8em; margin-top: 5px;">fill in this form completely</div>
<b>OWNER INFORMATION</b> Date Received (APA) <u>01/02/19</u> <div style="display: flex; justify-content: space-between;"> <div>             8 MM DD YY 13  <u>KeyStone Homes</u>              15 Last Name  <u>227 Granite Run Dr, Suite 100</u>              36 Street or RFD  <u>Lancaster PA 17601</u>              57 Town 70 State 72 Zip 76           </div> <div>             34 First Name              Owner              76 License No. 81  <u>MW D 355</u>              Firm Name  <u>Barlow Well Drilling</u>              Address  <u>522 Underwood Lane 21011</u>              Signature <u>[Signature]</u> Date <u>12/26/18</u> </div> </div>		<b>LOCATION OF WELL</b> <div style="display: flex; justify-content: space-between;"> <div>             8 COUNTY  <u>Howard</u>              23 SUBDIVISION  <u>Valley Anne Estates</u>              SECTION 44 46 LOT 48 50  <u>2</u>              52 NEAREST TOWN  <u>Woodstock</u> </div> <div>             21              42              71           </div> </div>	
<b>DRILLER INFORMATION</b> Driller's Name <u>Michael Barlow</u> License No. <u>81</u> Firm Name <u>Barlow Well Drilling</u> Address <u>522 Underwood Lane 21011</u> Signature <u>[Signature]</u> Date <u>12/26/18</u>		<b>SOURCES OF DRILLING WATER</b> 1. <u>Well</u> 2. 3.	
<b>WELL INFORMATION</b> APPROX. PUMPING RATE (GAL. PER MIN.) 1 <u>5</u> 2 AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 14 <u>750</u> 20		<b>ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)</b> <div style="text-align: center;"> <div style="display: flex; justify-content: space-around;"> <div>11</div> <div>30</div> </div> <div style="display: flex; justify-content: space-around;"> <div>34</div> <div>37</div> </div> <div style="display: flex; justify-content: space-around;"> <div>38</div> <div>39</div> </div> </div> DISTANCE FROM ROAD <u>25</u> FT ENTER FT OR MI TAX MAP: <u>10</u> BLK: <u>24</u> PARCEL <u>287</u>	
<b>USE FOR WATER (CIRCLE APPROPRIATE BOX)</b> <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		<b>NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL</b> <div style="display: flex; justify-content: space-between;"> <div>             COUNTY NAME  <u>Howard</u>              STATE SIGNATURE  <u>[Signature]</u>              DATE ISSUED  <u>01/18/19</u> </div> <div>             COUNTY NO.  <u>41</u>              CO SIGNATURE  <u>[Signature]</u>              EXP. DATE  <u>02/04/2019</u> </div> </div>	
APPROXIMATE DEPTH OF WELL <u>300</u> FEET APPROXIMATE DIAMETER OF WELL <u>4</u> INCH <b>METHOD OF DRILLING (circle one)</b> BORED (or Augered) <u>JETTED</u> Jetted & DRIVEN AIR-ROTARY <u>AIR-PERCUSION</u> ROTARY (Hydraulic Rotary) CABLE <u>REVERSE-ROTARY</u> DRIVE-POINT other _____		<b>PROPOSED LOCATION OF WELL ON LOT</b> SHOW PERMANENT STRUCTURES SUCH AS BUILDINGS, SEPTIC SYSTEM, ROADS AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCE MEASUREMENTS TO WELL <div style="text-align: center;"> </div>	
<b>REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX)</b> <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 DEEPEMED AN EXISTING WELL PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED (IF AVAILABLE) 41 _____ 52		Pursuant to § 10-624 of the State Govt. Article of the Maryland Code, personal info requested on this form is used in processing this form pursuant to COMAR 26.04.04. Failure to provide the info may result in this form not being processed. You have the right to inspect, amend, or correct this form. The Maryland Department of the Environment is subject to the Maryland Public Information Act. This form may be made available on the Internet via MDE's website and is subject to inspection or copying, in whole or in part, by the public and other governmental agencies, if not protected by federal or State Law.	
<b>Not to be filled in by driller (MDE OR COUNTY USE ONLY)</b> APPROX. PERMIT NUMBER _____ G _____ PERMIT No. <u>Ho-17-0396</u> <div style="font-size: 0.8em;">70 71 72 73 74 75 76 77 78 79</div>			
<b>SPECIAL CONDITIONS</b> NOTE APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED <div style="font-size: 1.5em; margin-top: 10px;">RADIUM SAMPLES AT YIELD</div>			

**MICHAEL BARLOW WELL DRILLING & SERVICE, INC.****522 Underwood Lane  
(410) 838-6910****Bel Air, Maryland 21014  
Fax (410) 838-3582****WELL YIELD REPORT**

Date Test Completed:

February 4, 2019

Well Depth: 300 feetCustomer Keystone Homes  
Road 1811 Woodstock Rd  
City Woodstock  
State MarylandPermit # HO-17-0396  
Subdivision Valley Anne Estates  
Section \_\_\_\_\_  
Lot # 2

Time	Water Level feet Pump set at 280'	Time to Fill 1-gallon bucket seconds	G.P.M.
12:00 PM	5	6	10.00
12:15 PM	20	6	10.00
12:30 PM	60	6	10.00
12:45 PM	81	6	10.00
1:00 PM	105	6	10.00
1:15 PM	122	6	10.00
1:30 PM	138	6	10.00
1:45 PM	150	6	10.00
2:00 PM	158	6	10.00
2:15 PM	162	6	10.00
2:30 PM	177	6	10.00
2:45 PM	186	6	10.00
3:00 PM	190	6	10.00
This yield test report is for informational purposes only. Please note the yield may increase or decrease over time and the GPM indicated above is not a guarantee.			



**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: Robert L. Feazer Co. Telephone #: 410-781-4655  
Address: 6321 Barnett Avenue  
Sykesville, MD 21784

(Must circle one) Licensed Plumber      Licensed Well Driller      Licensed Well Pump Installer

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

Name (Print): Russel C. George License# PI0148

**\*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: Keylana Homes Telephone #: \_\_\_\_\_  
Subdivision: Marriotts Ridge Lot #: 2 Well Tag #: HO - 95 - 1178  
Site Address: 1811 Woodstock Road  
Woodslock, Maryland 21163

**Submersible Pump Data**

Make: \_\_\_\_\_  
Model #: \_\_\_\_\_  
Pump Capacity \_\_\_\_\_ GPM  
Well Yield: 15 \_\_\_\_\_ GPM

**Pitless Adapter**

Make: Boshart  
Model#: P-100-SS  
Depth: 42" (36" min)  
NSF/WSC approved: Yes

**Well Cap and Electric Conduit**

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

Depth of well encountered at time of pump installation: 100 (feet)

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**

Type: Poly  
PSI: 200 (160 psi min)  
Depth of supply line: 42" (36" min)

**House Connection**

PVC sleeve to undisturbed soil at wall penetration: Yes  
Length of sleeve (5' minimum from foundation): 10'  
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.

Russell C. George      09/01/2019  
Signature of company representative responsible for installation      date

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

Date Insp. Requested: \_\_\_\_\_ Date Insp. Approved: \_\_\_\_\_ Inspector: \_\_\_\_\_

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



**HOWARD COUNTY HEALTH DEPARTMENT  
BUREAU OF ENVIRONMENTAL HEALTH  
WELL & SEPTIC PROGRAM  
TEL: (410)313-1771 FAX: (410)313-2648**

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Company Name: Robert L. Feezer Co. Telephone #: (410) 781-4053

Address: 6321 Barnett Avenue  
Sykesville, MD 21784

(Must circle one) Licensed Plumber      Licensed Well Driller      Licensed Well Pump Installer

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

Name (Print): Russell C. George

License# PI0148

**\*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: Keystone Homes

Telephone #: \_\_\_\_\_

Subdivision: \_\_\_\_\_

Lot #: \_\_\_\_\_

Well Tag #: HO -85 -1778

Site Address: 1811 Woodstock Road

Woodstock, Maryland 21163

17-0396

**Submersible Pump Data**

Make: \_\_\_\_\_

Model #: \_\_\_\_\_

Pump Capacity \_\_\_\_\_ GPM

Well Yield: 15 GPM

Depth of well encountered at time of pump installation: 100 (feet)

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

**Pitless Adapter**

Make: Boshart

Model#: P-100-SS

Depth: 42" (36" min)

NSF/WSC approved: Yes

**Well Cap and Electric Conduit**

Two piece watertight cap: Yes

Screened, vented well cap: Yes

Cap secured to casing: Yes

Conduit min 18" B.G.: Yes

Conduit secured to well cap: Yes

**Piping to house**

Type: Poly

PSI: 200 (160 psi min)

Depth of supply line: 42" (36" min)

**House Connection**

PVC sleeve to undisturbed soil at wall penetration: Yes

Length of sleeve (5' minimum from foundation): 10'

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.

Russell C. George  
Signature of company representative responsible for installation

09/01/2019

date

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

Date Insp. Requested: 9/25/19 Date Insp. Approved: 9/25/19 Inspector: ST

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 ✓

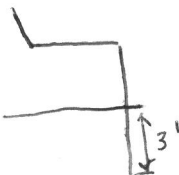
Adequate grout observed below pitless adapter ✓

44"

24"

24"

9'



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

April 5, 2019

Keystone Homes  
227 Granite Run Drive  
Suite 100  
Lancaster, Pennsylvania 17601

RE: Valley Anne Estates Lot 2  
1811 Woodstock Road  
Well Tag: HO - 17 - 0396

Dear Keystone Homes:

A sample was collected during a yield test on February 4, 2019 and submitted to the Maryland Department of Health 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  $11.4 \pm 5.2$  picocuries/liter (pCi/L), while the **Gross Beta** level was  $12.9 \pm 4.1$  pCi/L. With the Margin of Error, the **Gross Alpha** result was above its **maximum contaminant level (MCL)** of **15 pCi/L**, while the **Gross Beta** level was below its targeted standard of **50 pCi/L** (roughly equivalent to the **annual dose rate** of **4 millirems/year**).

At the time of testing and with respect to these parameters, the well water supply **may not meet** EPA regulatory standards. Additional testing **for these parameters** will be required to secure the future Use & Occupancy. Additional raw water samples for **short and long term Gross Alpha and Gross Beta**, plus **Radium 226 / 228** will be needed to assess any future treatment needs. Alternatively, treatment such as a water softener system or point of use reverse osmosis (R/O) could be considered. If installed, post-treated sampling for **short and long term Gross Alpha, Gross Beta and Radium 226 / 228** will be **required**. Please **note** that other standard testing parameters (bacteria, nitrate, turbidity and sand) will still be needed 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 or to schedule additional testing.

Sincerely,



Bert Nixon, Director  
Bureau of Environmental Health

✓ Enclosure

cc: Property file

SEND REPORT TO: BERT NIXON

State of Maryland

DHMH - Laboratories Administration

Division of Environmental Sciences

RADIATION LABORATORY

1770 Ashland Avenue

Baltimore, Maryland 21205

Lab No.

Howard County Health Department

Bureau of Environmental Health

8930 Stanford Blvd.

Columbia, Maryland 21045

## LABORATORY ANALYSIS REQUEST FORM

Plant/Site Name: 1811 WOODSTOCK ROADCounty: HOWARDSample Source: VALLEY ANNE EST - LOT 2Location: HO-17-0396

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

Radon-222

Bottle A

HOJC0396RA

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:

4 F

Federal Project:

☐

Collector:

CARROLL, J

Telephone No.:

410 313 2643

Date Collected:

02/04/2019

Time Collected:

13:00 a.m. 13:00 p.m.

Field pH:

6.0

Field Chlorine:

NEG

Nitric Acid Preserved:

Yes

☒

No

☐

Iced:

Yes

☐

No

☐

Remarks:

SAMPLED AT 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	1675	EPA900.0	11.4 ± 5.2	02/17/19	RH	02/15/19
<input checked="" type="checkbox"/>	Gross Beta	4100	1675	EPA900.0	12.9 ± 4.1	02/17/19	RH	02/15/19
<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"/>			1675					
<input checked="" type="checkbox"/>			1675					

Date Received:

02/17/19

Received By:

[Signature]

Data Release Signature:

[Signature]

Date:

02/17/19

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

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



SEND REPORT TO: Bert NixonState of Maryland  
DHMH - Laboratories Administration  
Division of Environmental Sciences  
**RADIATION LABORATORY**  
1770 Ashland Avenue  
Baltimore, Maryland 21205

Lab No.

**Howard County Health Department**  
**Bureau of Environmental Health**  
8930 Stanford Blvd.  
Columbia, Maryland 21045**LABORATORY ANALYSIS REQUEST FORM**Plant/Site Name: 1811 HCHDCounty: HowardSample Source: GIANT DISTILLEDLocation: LAB E113

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

Radon-222 Bottle A \_\_\_\_\_

Radon-222 Field Blank 0396

Bottle A \_\_\_\_\_

Bottle B \_\_\_\_\_

Bottle B \_\_\_\_\_

County 113Plant No. 

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

CHECK (one per Box)

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

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

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

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

Submitters Code: 4 FFederal Project: Collector: CABRILLO, JTelephone No.: 410 313 7643Date Collected: 02/14/2019Time Collected: 0715 a.m. 1500 p.m.Field pH: 7.0Field Chlorine: NEGNitric Acid Preserved: Yes ☒ No ☐Iced: Yes ☐ No ☐

Remarks: \_\_\_\_\_

<input checked="" type="checkbox"/>	TEST	EPA Code	Lab No.	Method No.	Results (pCi/L)	Date Analyzed	Analyst	Date Reported
<input checked="" type="checkbox"/>	Gross Alpha	4000	1674	EPA500.0	<2.0	02/16/19	WT	02/12/19
<input checked="" type="checkbox"/>	Gross Beta	4100	1674	EPA500.0	<4.0	02/16/19	WT	02/12/19
<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: 02/15/19 Received By: [Signature]Data Release Signature: [Signature] Date: 1/17/19

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



# Invoice

Bureau of Environmental Health  
Attn: Bert Nixon, Director

DATE: MARCH 1, 2019  
DATE OF SERVICE: FEBRUARY 4, 2019  
INVOICE #: 2019-004

8930 Stanford Boulevard, Columbia, MD 21045  
Phone 410-313-2640 Fax 410-313-2648  
www.hchealth.org

BILL TO Keystone Homes  
227 Granite Run Dr.  
Suite 100  
Lancaster, PA 17601

COMMENTS Payment due upon receipt. Letter and results will be released upon receipt of payment.

DATE	DESCRIPTION	BALANCE	AMOUNT
2/4/19	Gross Alpha/Beta testing performed for Lot 2 Valley Anne Estates (1811 Woodstock Road) HO - 17 - 0396		\$45.00
			AMOUNT DUE
			\$45.00

Please detach and return with payment.

REMITTANCE	
Invoice #	2019-004
Site Information	Valley Anne Estates Lot 2
Amount Due	\$45.00

*Receipt 64815  
4/1/19*

Make Checks Payable to: **Director of Finance** Mail Payments to: **Bureau of Env. Health**

MARYLAND DEPARTMENT OF THE ENVIRONMENT, WATER MANAGEMENT ADMINISTRATION  
1800 Washington Blvd., Baltimore, Maryland 21230 (410) 537-3784

WATER WELL ABANDONMENT-SEALING REPORT FORM

SUBMIT COPIES OF COMPLETED FORM TO:

- \* COUNTY ENVIRONMENTAL AGENCY (contact MDE, WMA if address needed)
- \* WELL OWNER
- \* MDE, WATER MANAGEMENT ADMINISTRATION, WELL PROGRAM

DATE WELL ABANDONED: 2/4/19 (month/day/year)

\* PERMIT NUMBER OF ABANDONED WELL (if any)

\* PERMIT NUMBER OF REPLACEMENT WELL:

\* PERSON ABANDONING WELL: Michael Barlow

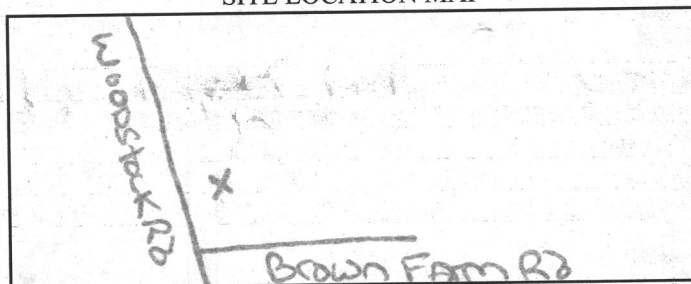
WELL DRILLER'S LICENSE NUMBER: 355

CIRCLE: MWD / MSD / MGD

\* OWNER'S NAME: Keystone Homes

SITE LOCATION MAP

\* WELL LOCATION:  
COUNTY: HOWARD  
NEAREST TOWN: WOODSTOCK  
TAX MAP 10 BLOCK 24 PARCEL 287  
SUBDIVISION: VALLEY ANNE ESTATES  
SECTION: \_\_\_\_\_ LOT: 2  
STREET ADDRESS: 1811 WOODSTOCK ROAD



LOG OF SEALING MATERIAL

MATERIAL	FEET	
	FROM	TO
Cement	25	0
VOLUME OF MATERIAL USED		
900 lbs cement		

\* TYPE OF WELL BEING ABANDONED:

☒ DRILLED ☐ JETTED  
☐ BORED ☐ HAND DUG  
☐ OTHER (specify) \_\_\_\_\_

\* USE CODE:

☒ DOMESTIC ☐ MUNICIPAL/PUBLIC  
☐ IRRIGATION ☐ INDUSTRIAL  
☐ TEST/OBSERVATION ☐ GEOTHERMAL

\* TYPE OF CASING:

☐ STEEL ☐ PLASTIC  
☐ CONCRETE ☒ OTHER (specify)

NONE - Dry Hole

SIZE OF CASING: 6 INCHES IN DIAMETER

DEPTH OF WELL: 25 FEET DEEP

WAS ANY CASING REMOVED? ☐ YES ☒ NO  
If yes, length removed, in feet: \_\_\_\_\_

WAS CASING RIPPED OR PERFORATED? ☐ YES ☒ NO

SIGNATURE-MASTER WELL DRILLER OR SUPERVISING SANITARIAN LICENSE#

COUNTY

CIRCLE ONE MWD / MSD / MGS

DATE

Pursuant to § 10-624 of the State Govt. Article of the Maryland Code, personal info requested on this form is used in processing this form pursuant to COMAR 26.04.04. Failure to provide the info may result in this form not being processed. You have the right to inspect, amend, or correct this form. The Maryland Department of the Environment is subject to the Maryland Public Information Act. This form may be made available on the Internet via MDE's website and is subject to inspection or copying, in whole or in part, by the public and other governmental agencies, if not protected by federal or State Law.





# HOWARD COUNTY HEALTH DEPARTMENT

64708

WS

DATE  
1/12/19

Received  
From

Michael Barlow Well Drilling Service PHONE # 410-838-6910

For

Well Permit

1811 Woodstock Rd.

☐ CASH

☒ CHECK

NO. 3718

One Hundred Sixty

Dollars

\$

160 | 00

Received By

Shirley Beatty

**INTERIM CERTIFICATE OF POTABILITY**

**Expiration Date – APRIL 11, 2020**

October 11, 2019

Homeowner  
1811 Woodstock Road  
Woodstock, MD 21163

**RE: Valley Anne Est., Lot 2  
1811 Woodstock Road  
Building Permit: B19000479  
Well Permit: HO-17-0396**

Dear Homeowner:

This is to advise you that the septic system installation and water well construction for the above referenced property have been inspected and approved. Final approval of the septic system was granted on **9/20/2019**. Final approval of the well line connection to the dwelling was granted on **9/25/2019**. The well construction was completed on **2/4/2019**. Water samples were collected on **9/20/2019, 9/23/2019, 10/4/2019**.

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. 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-17-0396. Although the submitted sample results are in compliance with COMAR standards, the Health Department does not guarantee water supplies.

Furthermore, testing for sodium, chlorides, and total dissolved solids (TDS) indicated elevated levels above the SMCL. The results were sent on 3/6/2019 respectively to Keystone Homes and copies of the results are collected by the Health Department. Please be aware that these high levels (if not treated) may have adverse effects with individuals on low-salt diets as well as the plumbing inside the dwelling.

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***

---

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

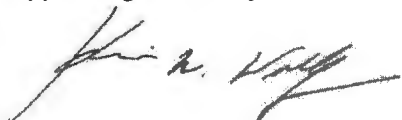
***Maryland, Environment Article, 9-1311, subject to a fine of up to \$500 or imprisonment not to exceed three months.***

Please contact (410) 313-1773 to schedule a final water sample appointment or contact a Maryland certified water 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 septic system. You will also find a link to Maryland Department of the Environments website which describes in further detail operation and maintenance of your septic system.

Approving Authority,



Kevin M. Wolf, LEHS, R.S./REHS, Supervisor  
Groundwater Management Section  
Well & Septic Program

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



**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 #: 132991 Account #: 1920  
Reference: Marriotts Ridge Lot 2 Company: Robert L Feezer Co- New Homes  
Location: 1811 Woodstock Road Requested By: Rick Cross  
Woodstock, MD 21163 Source: Well Water  
Date/ Time Collected: 9/20/2019 1120 Site: Pressure Tank  
Date/Time Rec'd: 9/20/2019 1503 Treatment: None  
Chlorine ppm: Free: ND Total: ND pH: 6.0  
Collected By: J. Yeager 6176JY Well #: HO-17-0396

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	>200.5	MPN/ 100 ml	<1.0	SM20 9223B	9/21/2019 / 0930 / CCH
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	9/21/2019 / 0930 / CCH
Nitrate	2.49	mg/L	10	601	9/20/2019 / 1545 / CRS
Turbidity	4.51	NTU	<10	SM20 2130B	9/20/2019 / 1600 / CRS
Sand	NS	mg/L	5	Visual/Gravimetric	9/20/2019 / 1600 / CRS

**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 & Chlorine level tested on site

Reason for Test : Use &amp; Occupancy

Building Permit # : B19000479

Date Reported: 9/23/2019

**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 #:	133324	Account #:	1920
Reference:	Marriotts Ridge Lot 2	Company:	Robert L Feezer Co- New Homes
Location:	1811 Woodstock Road	Requested By:	Rick Cross
	Woodstock, MD 21163	Source:	Well Water
Date/ Time Collected:	10/4/2019 1234	Site:	Pressure Tank
Date/Time Rec'd:	10/4/2019 1500	Treatment:	Prior to Neutralizer/Softener
Chlorine ppm:	Free: ND Total: ND	pH:	5.5
Collected By:	R. Ott 0266RO	Well #:	HO-17-0396

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	10/5/2019 / 1600 / CCH
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	10/5/2019 / 1600 / CCH

**NOTES**

- 1 MPN/ 100 ml = Most Probable Number [of viable bacteria] per 100 ml of sample.
- 2 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 3 ND:None Detected
- 4 Visual well check: Sealed, vented cap
- 5 pH & Chlorine level tested on site

**Reason for Test :** Use & Occupancy**Building Permit # :** B19000479Date Reported: 10/7/2019

**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 #:	133033	Account #:	1920
Reference:	Marriotts Ridge Lot 2	Company:	Robert L Feezer Co- New Homes
Location:	1811 Woodstock Road	Requested By:	Rick Cross
	Woodstock, MD 21163	Source:	Well Water
Date/ Time Collected:	9/23/2019 1105	Site:	Pantry Sink
Date/Time Rec'd:	9/23/2019 1518	Treatment:	Neutralizer/Softener
Chlorine ppm:	Free: ND Total: ND	pH:	7.6
Collected By:	R. Ott 0266RO	Well #:	HO-17-0396

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Gross Alpha, Short Term	<2.0	pCi/L	15	900.0	9/25/2019 / 1558 / MJN
Gross Beta, Short Term	<2.7	pCi/L	50	900.0	9/25/2019 / 1558 / MJN
Gross Alpha, Long Term	Pending	pCi/L	15	900.0	
Gross Beta, Long Term	Pending	pCi/L	50	900.0	

**NOTES**

- 1 pCi/L = picocuries per liter
- 2 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 3 Short Term Gross Alpha Detection Limit: 2.0 pCi/L; Short Term Gross Beta Detection Limit: 2.7 pCi/L
- 4 Sub-contracted to Reference Lab #278
- 5 ND:None Detected
- 6 Visual well check: Sealed, vented cap
- 7 pH & Chlorine level tested on site

Reason for Test : Use &amp; Occupancy

Building Permit # : B19000479

Date Reported: 9/26/2019



**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 #:	133036	Account #:	1920
Reference:	Marriotts Ridge Lot 2	Company:	Robert L Feezer Co- New Homes
Location:	1811 Woodstock Road	Requested By:	Rick Cross
	Woodstock, MD 21163	Source:	Well Water
Date/ Time Collected:	9/23/2019 1110	Site:	Pressure Tank
Date/Time Rec'd:	9/23/2019 1518	Treatment:	Prior to Neutralizer/Softener
Chlorine ppm:	Free: ND Total: ND	pH:	6.2
Collected By:	R. Ott 0266RO	Well #:	HO-17-0396

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Radium-226	0.8	pCi/L	****	903.1	10/2/2019 / 1437 / MJN
Radium-228	1.0	pCi/L	****	Ra-05	9/30/2019 / 1231 / MJN

**NOTES**

- 1 \*\*\*\*Radium 226 and Radium 228 combined have a reference of 5 pCi/L
- 2 pCi/L = picocuries per liter
- 3 Radium 226 Detection Limit: 0.1 pCi/L; Radium 228 Detection Limit: 0.7 pCi/L
- 4 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 5 Sub-contracted to Reference Lab #278
- 6 ND:None Detected
- 7 Visual well check: Sealed, vented cap
- 8 pH & Chlorine level tested on site

Reason for Test : Use & Occupancy  
Building Permit # : B19000479

Date Reported: 10/7/2019

**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 #:	133034	Account #:	1920
Reference:	Marriotts Ridge Lot 2	Company:	Robert L Feezer Co- New Homes
Location:	1811 Woodstock Road	Requested By:	Rick Cross
	Woodstock, MD 21163	Source:	Well Water
Date/ Time Collected:	9/23/2019 1105	Site:	Pantry Sink
Date/Time Rec'd:	9/23/2019 1518	Treatment:	Neutralizer/Softener
Chlorine ppm:	Free: ND Total: ND	pH:	7.2
Collected By:	R. Ott 0266RO	Well #:	HO-17-0396

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Radium-226	0.3	pCi/L	****	903.1	10/2/2019 / 1437 / MJN
Radium-228	<0.7	pCi/L	****	Ra-05	9/30/2019 / 1231 / MJN

**NOTES**

- 1 \*\*\*\*Radium 226 and Radium 228 combined have a reference of 5 pCi/L
- 2 pCi/L = picocuries per liter
- 3 Radium 226 Detection Limit: 0.2 pCi/L; Radium 228 Detection Limit: 0.7 pCi/L
- 4 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 5 Sub-contracted to Reference Lab #278
- 6 ND:None Detected
- 7 Visual well check: Sealed, vented cap
- 8 pH & Chlorine level tested on site

Reason for Test : Use &amp; Occupancy

Building Permit # : B19000479

Date Reported: 10/7/2019

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

March 6, 2019

Keystone Homes  
227 Granite Run Drive  
Suite 100  
Lancaster, PA 17601

Re: Water sample results for well #HO-17-0396 at 1811 Woodstock Road

Dear Keystone Homes,

The Health Department received results from testing for sodium, chloride, and total dissolved solids (TDS) from the well #HO-17-0396 at 1811 Woodstock Road.

Elevated sodium levels in drinking water may affect individuals on low-salt diets. The action level for sodium is 20 milligrams per liter (mg/L); **sodium from the well measured 176.70 mg/L.**

Chloride and TDS are both considered secondary contaminants, meaning high concentrations can affect taste, color, odor, or corrosive properties of water but present no risk to health. The secondary maximum contaminant level for chloride is 250 mg/L; **chloride from the well measured 450 mg/L.** The secondary maximum contaminant level for TDS is 500 mg/L; **TDS from the well measured 991 mg/L.**

Sodium, chloride, and TDS are all secondary contaminants and will not affect the issuance of a Certificate of Potability for the well. Given the elevated levels of sodium, chloride, and TDS Keystone Homes or the future homeowner may want to consult a plumber and/or water treatment company to discuss options. Please be aware that any backwash generated from a treatment system must be disposed of in a subsurface disposal system. Prior to installing a system that generates backwash, please contact the Health Department to ensure that all regulatory requirements are met.

Please contact me at the number or email below with any questions regarding the results of water sampling.

Sincerely,



Sarah Collins, L.E.H.S.  
Howard County Health Department  
Well & Septic Program  
[SCollins@howardcountymd.gov](mailto:SCollins@howardcountymd.gov)  
410-313-6287

Cc: Community Hygiene Program  
File

Send Report To:

COLLINS, S

State of Maryland

DHMH - Laboratories Administration

Howard County Health Department

Bureau of Environmental Health

930 Stanford Blvd.

Columbia, Maryland 21045

Division of Environmental Sciences

## TRACE METALS LABORATORY

1770 Ashland Avenue  
Baltimore, Maryland 21205

Lab No. Date Received



E19002419001

Received: 02/05/2019

Metals

HOJC0396Na

## LABORATORY ANALYSIS REQUEST

Do not write above this line

## SAMPLE TESTED AS RECEIVED

Please Print

Sample ID No: H0C0396NA Site Name: H0-17-0396 County: HOWARDSample Source: 7818 1811 WOODSTOCK ROAD Collector: CABALLUG, J  
Street Town or City NameDate Collected: 02/04/2019 Time Collected: 13:00 a.m. / p.m. Phone #: 410.313.2643Sample Preserved By: ☒ Field ☐ ESRL ☐ WMRL ☐ Central LabPreservative Used: ☒ HNO<sub>3</sub> 2 mL pH: < 2.545, 2/5/19Sample Type: ☒ Drinking Water ☐ Landfill ☒ Source (Raw Water) ☐ LiquidData Category: ☐ Community ☐ Stream ☐ Distribution (Treated) ☐ SolidCode ☒ ☐ Non-Community ☐ Sediment ☐ Other ☐ PrivateSpecify Program: ☐ SDWA ☐ NPDES ☐ CWA ☐ RCRA ☐ Consumer Products ☐ OtherType of Sample Preparation: ☐ Total Metals ☐ Total Metals TCLP ☐ Dissolved Metals  
(field preparation required)Remarks: SAMPLED AT YIELD

✓	Element	Lab Use	✓	Element	Lab Use	✓	Element	Lab Use
	Antimony (Sb)			Aluminum (Al)			Uranium (U)	
	Arsenic (As)			Calcium (Ca)			Vanadium (V)	
	Barium (Ba)			Cobalt (Co)			Zinc (Zn)	
	Beryllium (Be)			Copper (Cu)				
	Cadmium (Cd)			Iron (Fe)				
	Chromium (Cr)			Lead (Pb)				
	Mercury (Hg)			Magnesium (Mg)				
	Nickel (Ni)			Manganese (Mn)				
	Selenium (Se)			Molybdenum (Mo)				
✓	Sodium (Na)	SHS		Potassium (K)			RECEIVED	
	Thallium (Tl)			Silver (Ag)				

Lab Supervisor: \_\_\_\_\_

Date Reported: MAR 01 2019

•Phone: (443) 681 - 4596

•Fax: (443) 681 - 450

DHMH 4432 (05/17)

HOWARD COUNTY HEALTH DEPT.  
COMMUNITY HYGIENE PROGRAM

SUBMITTER'S COPY



State of Maryland  
Department of Health  
Laboratories Administration  
Division of Environmental Sciences  
**TRACE METALS LABORATORY**  
1770 Ashland Avenue, Baltimore, Maryland 21205  
Robert Myers, Ph.D., Director



## Certificate of Analysis

HOWARD CO ENVIRONMENTAL HLTH  
8930 STANFORD BLVD  
COLUMBIA, MD 21045

Lab Project No: E19002419 Date Coll.: 02/04/2019 Date Received: 02/05/2019 Submitted By: Cabahug J

Field ID: HOJC0396Na  
Lab No.: E19002419001

<u>Method</u>	<u>Element</u>	<u>Result</u>	<u>Units</u>	<u>Date Analyzed</u>
EPA 200.7	Sodium	176.70	ppm	02/14/2019

### Comments:

Approved by: Sadia Muneer

Approval date: 02/21/2019

\*\*The following methods are included in our A2LA Scope of Accreditation: EPA 200.7, EPA 200.8, EPA 245.1. Samples are tested as received.

This document contains confidential health information that is privileged, confidential and exempt from disclosure under law. If you have received this information in error, please call (410) 767-6944 and arrange for return or destruction.



**Howard County Health Department  
Bureau of Environmental Health  
8930 Stanford Blvd.  
Columbia, Maryland 21045**

State of Maryland  
MDH-Laboratories Administration  
Division of Environmental Sciences  
**INORGANICS ANALYTICAL LABORATORY**  
1770 Ashland Avenue  
Baltimore, Maryland 21205  
**WATER ANALYSIS**



**E19002410001**

Received: 02/05/2019

Inorganic

HOJC0396TD

SAMPLE ID	Bottle Number	HOJC0396TD	Name	HO-17-0396	County	Howard	County Code	13																															
	Location	1811 WOODSTOCK ROAD				Data Category Code	48																																
	Collected: Date	02/04/2019	Time	13:00	Collector & Phone	NAME LEHS 001997 410 313 2643																																	
	CHECK (one per box)	<table border="1"> <tr> <td>Drinking Water</td> <td><input checked="" type="checkbox"/></td> <td>Community</td> <td><input type="checkbox"/></td> <td>Source (raw water)</td> <td><input checked="" type="checkbox"/></td> <td>Emergency</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Landfill</td> <td><input type="checkbox"/></td> <td>Non-community</td> <td><input type="checkbox"/></td> <td>Distribution (treated)</td> <td><input type="checkbox"/></td> <td>Routine</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>Stream</td> <td><input type="checkbox"/></td> <td>Private</td> <td><input type="checkbox"/></td> <td>MCL</td> <td><input type="checkbox"/></td> <td>Recheck</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Other</td> <td><input type="checkbox"/></td> <td>Other</td> <td><input type="checkbox"/></td> <td></td> <td></td> <td>Special</td> <td><input type="checkbox"/></td> </tr> </table>							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 type="checkbox"/>	MCL	<input type="checkbox"/>	Recheck	<input type="checkbox"/>	Other	<input type="checkbox"/>	Other	<input type="checkbox"/>			Special
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 type="checkbox"/>	MCL	<input type="checkbox"/>	Recheck	<input type="checkbox"/>																																
Other	<input type="checkbox"/>	Other	<input type="checkbox"/>			Special	<input type="checkbox"/>																																
							Federal Project	<input type="checkbox"/>																															

FIELD	Plant No.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Sampling Station	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Preservation: Iced	<input checked="" type="checkbox"/>	Acid	<input type="checkbox"/>	Type of Acid	<input type="text"/>			
	pH	<input type="text"/>	6	0		Chlorine: Free	<input type="text"/>	0	0	Total	<input type="text"/>	0	0	Specific Conductance	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	Notes to Lab/Remarks: SAMPLED AT YIELD																		

[illegible]

\* Results reported in Units, all others in milligrams per liter (ppm)

### Number of Tests Requested

Section Chief

SUBMITTER'S COPY

**SAMPLE TESTED AS RECEIVED**

Date  
Reported



State of Maryland  
Department of Health  
Laboratories Administration  
Division of Environmental Sciences  
**INORGANICS ANALYTICAL LABORATORY**  
1770 Ashland Avenue, Baltimore, Maryland 21205  
Robert Myers, Ph.D., Director



## Certificate of Analysis

HOWARD CO ENVIRONMENTAL HLTH  
8930 STANFORD BLVD  
COLUMBIA, MD 21045

Lab Project NoE19002410 Date Coll. 02/04/2019 Date Received 02/05/2019

Submitted By: <sup>CABAHUG</sup>  
~~Collins~~

Field ID: HOJC0396TD  
Lab No.: E19002410001

<u>Analyte</u>	<u>Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Analyzed</u>
Chloride	SM 4500-Cl E	450	mg/L	02/11/2019
Total Dissolved Solids	SM 2540C	991	mg/L	02/11/2019

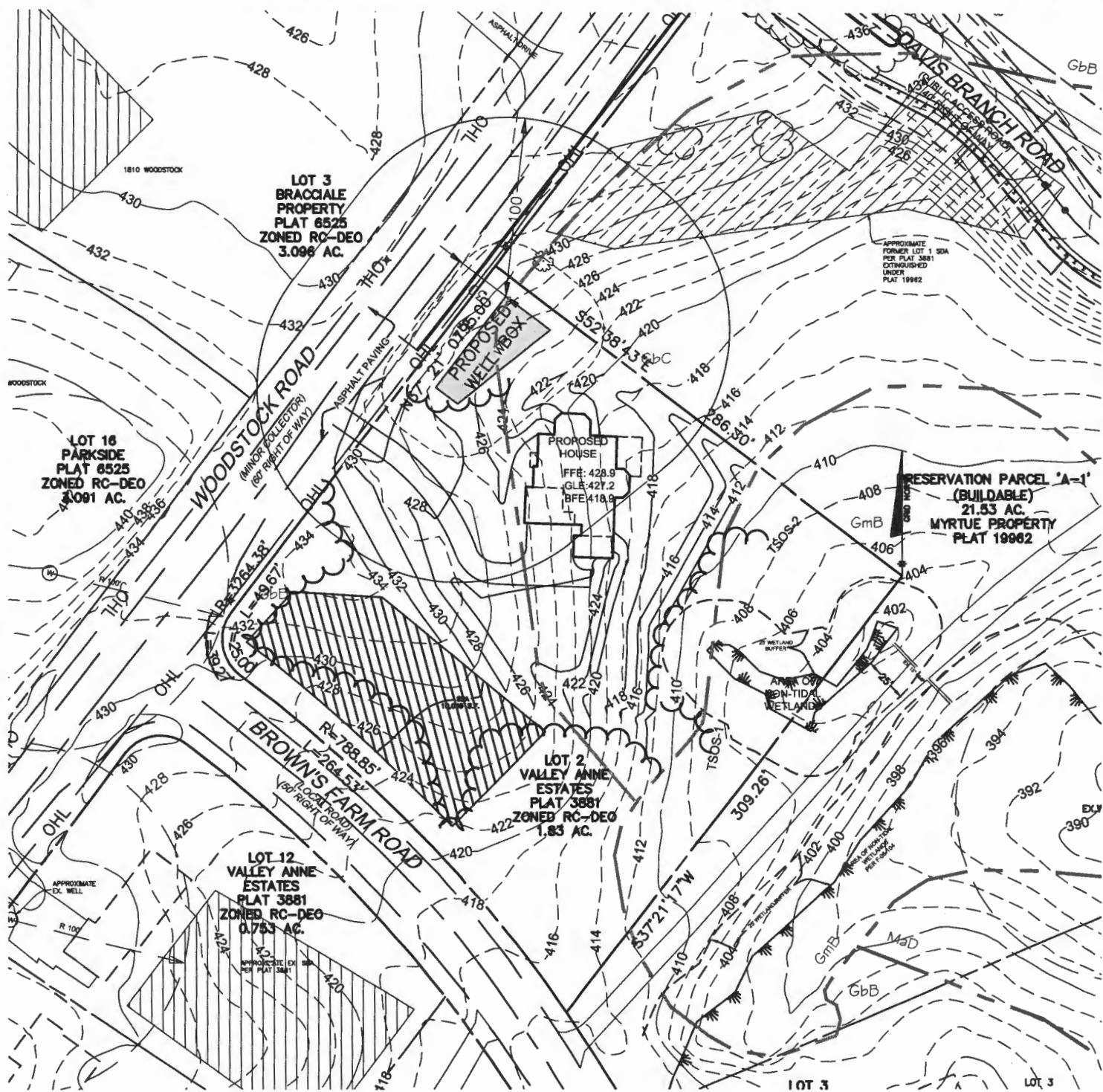
### Comments:

Approved by:

Approval date: 02/14/2019

\*The following methods are included in our A2LA Scope of Accreditation: EPA150.1, EPA 353.2, EPA 375.2, SM4500F C, SM 4500-CN G & QCM-CN, QCM-CN. Samples are tested as received.

This document contains confidential health information that is privileged, confidential and exempt from disclosure under law. If you have received this information in error, please call (410) 767-6190 and arrange for return or destruction.



APPROVED 01/18/19 @  
 STAKED BY BENCHMARK  
 HO-17-0396  
 1811 WOODSTOCK RD  
 LOT 2

**BENCHMARK**

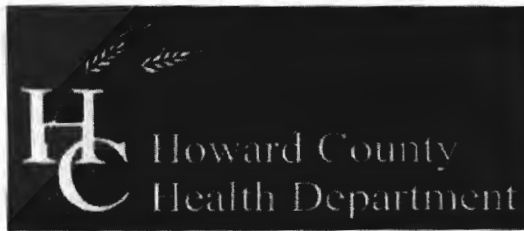
ENGINEERS ▲ LAND SURVEYORS ▲ PLANNERS

**ENGINEERING, INC.**

8480 BALTIMORE NATIONAL PIKE ▲ SUITE 315 ▲ ELLICOTT CITY, MARYLAND 21043  
 (P) 410-465-6105 (F) 410-465-6644

WWW.BEI-CIVILENGINEERING.COM

WELL EXHIBIT LOT 2  
 VALLEY ANNE ESTATES  
 1811 WOODSTOCK ROAD  
 SCALE: 1" = 80'



**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](http://www.hchealth.org)

Facebook: [www.facebook.com/hocohealth](https://www.facebook.com/hocohealth)

Twitter: HowardCoHealthDep

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

**TO ALL INTERESTED PARTIES**

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

Well Site Location:

1811 WOODSTOCK ROAD

VALLEY ANNE ESTATES

2

Subdivision/Property Name

Lot #

Road Name

☒ The well site has been staked by BENCHMARK ENGINEERING  
(professional land surveyor or company employing professional land surveyors)  
on 1/3/2019 (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.

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

**MEMORANDUM**

**TO:** Michael Barlow MWD 355  
522 Underwood Lane  
Bel Air, MD 21011

**FROM:** Joseph Cabahug  
Licensed Environmental Health Specialist 001997  
Howard County Health Department  
Well & Septic Program *Jan 18/2019*

**RE:** Well Permit Special Condition – 1811 Woodstock Road

**DATE:** January 18<sup>th</sup>, 2019

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The following comments apply to the above referenced Well Permit Application. Please read through and complete as needed.

**All wells are in the Baltimore Gneiss Formation and Will require Radium Samples at the Yield.**

If you have any questions regarding the above mentioned information, please feel free to contact me at 410-313-2643 or email [jcabahug@howardcountymd.gov](mailto:jcabahug@howardcountymd.gov).

JCC