

1 2 3 4 5 6
 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

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.

ST/CO USE ONLY
 DATE RECEIVED
 MM DD YY
 12 12 09

DATE WELL COMPLETED
 MM DD YY
 5-8-19

PERMIT NO.
 FROM "PERMIT TO DRILL WELL"
 28 29 30 31 32 33 34 35 36 37
 10/6/21 HO-17-0383

OWNER Charlesville NC LLC
 WELL SITE ADDRESS Charlesville Pkwy TOWN Highland MD
 SUBDIVISION Charlesville Crossing SECTION _____ LOT 9

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	
Top Soil	0	8	
Brown Sand & Clay	8	58	
Watered back	58	70	
Gray Soil	70	40	
water @ 83'	70	83	

GROUTING RECORD yes no
 WELL HAS BEEN GROUTED (Circle Appropriate Box)
 TYPE OF GROUTING MATERIAL (Circle one)
 CEMENT BENTONITE CLAY
 NO. OF BAGS 8 NO. OF POUNDS 400
 GALLONS OF WATER 200
 DEPTH OF GROUT SEAL (to nearest foot)
 from 0 ft. to 73 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
 Nominal diameter top (main) casing (nearest inch)
 Total depth of main casing (nearest foot)
PL 6 583

OTHER CASING (if used)
 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
 DEPTH (nearest ft.)
 1 73 2 400

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED YES NO

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. M D 104
 DRILLERS SIGNATURE _____
 (MUST MATCH SIGNATURE ON APPLICATION)
 LIC. NO. D

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

E A C H S R E E N	DEPTH (nearest ft.)	
	1	2
1	<u>73</u>	<u>400</u>
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		
32		
33		
34		
35		
36		
37		
38		
39		
40		
41		
42		
43		
44		
45		
46		
47		
48		
49		
50		
51		
52		
53		
54		
55		
56		
57		
58		
59		
60		
61		
62		
63		
64		
65		
66		
67		
68		
69		
70		
71		
72		
73		
74		
75		
76		

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 _____
 TELESCOPE CASING LOG INDICATOR OTHER DATA

C 3
PUMPING TEST
 HOURS PUMPED (nearest hour) 3
 PUMPING RATE (gal. per min.) 16.6
 METHOD USED TO MEASURE PUMPING RATE Bucket
 WATER LEVEL (distance from land surface)
 BEFORE PUMPING 18 ft.
 WHEN PUMPING 71 ft.
 TYPE OF PUMP USED (for test)
 A air P piston T turbine
 C centrifugal R rotary O (describe below)
 J jet S submersible

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.) 43 _____ 47 _____
 CASING HEIGHT (circle appropriate box and enter casing height)
 + above } LAND SURFACE
 - below } (nearest foot)

LATITUDE 39.189321
 LONGITUDE 76.963285
 (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.

B 1	SEQUENCE NO. (MDE USE ONLY) 62077	STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL 501059-C please type	STATE PERMIT NUMBER HO-17-0383 70 <u>fill in this form completely</u> 79
------------	--	--	---

OWNER INFORMATION

Date Received (APA) **11/02/18**
8 MM DD YY 13

Clarksville NL LLC
15 Last Name Owner First Name 34

6800 Deerpath Rd Ste 100
36 Street or RFD 55

Elkridge MD 21075
57 Town 70 State 72 Zip 76

LOCATION OF WELL

Howard
8 COUNTY 21

Clarksville Crossing
23 SUBDIVISION 42

SECTION **44** 46 LOT **4** 48 50

Highland
52 NEAREST TOWN 71

DRILLER INFORMATION

Mark Smith **M.S.D. 106**
Driller's Name 76 License No. 81

Allied Well Drilling
Firm Name

PO Box 129 Annapolis Junction MD 20701
Address

Mark Smith **11/01/18**
Signature Date

SOURCES OF DRILLING WATER

1. **Public**

Clarksville Rte
11 STREET ADDRESS 30

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)

NORTH WEST EAST SOUTH

34 **36** 37 DISTANCE FROM ROAD

ENTER FT OR MI **4** 38 39

TAX MAP: **34** BLK: **23** PARCEL **301**

WELL INFORMATION

APPROX. PUMPING RATE **10**
(GAL. PER MIN.) 8 12

AVERAGE DAILY QUANTITY NEEDED **1,000**
(GAL. PER DAY) 14 20

USE FOR WATER (CIRCLE APPROPRIATE BOX)

DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION

FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)

INDUSTRIAL, COMMERCIAL, DEWATERING

PUBLIC WATER SUPPLY WELL

TEST, OBSERVATION, MONITORING

OPEN LOOP GEOTHERMAL

CLOSED LOOP GEOTHERMAL

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Howard COUNTY NAME COUNTY NO. **21**

STATE SIGNATURE _____ INSERT S → 41

DATE ISSUED **12/17/18** 43 MM DD YY 48 CO SIGNATURE **[Signature]** EXP. DATE **12/17/19**

APPROXIMATE DEPTH OF WELL **400** FEET
24 28

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

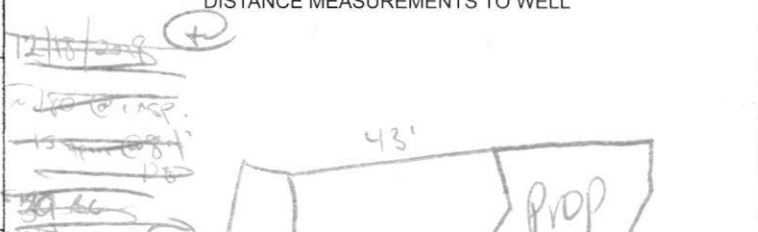
METHOD OF DRILLING (circle one)

BORED (or Augered) JETTED Jetted & DRIVEN

AIR-ROTary AIR-PERCussion ROTARY (Hydraulic Rotary)

CABLE REVerse-ROTary DRive-POINT

other _____



REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX)

THIS WELL WILL NOT REPLACE AN EXISTING WELL

THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED

THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS

THIS WELL WILL DEEPEM 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.

TIM JACOBS
12/20/2018
BR @ 70'
273' CASING
DRILLING
12/21/2018

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

APPROP. PERMIT NUMBER _____ **G** _____

PERMIT No. **HO-17-0383**
70 71 72 73 74 75 76 77 78 79

SPECIAL CONDITIONS

NOTE: APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED: **SEE MEMO**

Columbia Blars

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

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: Foales Well Pump + Water Treatment, LLC Telephone #: 410-795-1535
 Address: NPO Box 63
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 Foale License #: MSD2726

*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 #: _____
 Subdivision: Clarksville Crossing Lot #: 4 Well Tag #: HO-17-0383 (S)
 Site Address: 6501 Old Hill Top Ct
Highland, MD 20777

Submersible Pump Data
 Make: Syntron
 Model #: 1550210-220
 Pump Capacity: 15
 Well Yield: 10
 Depth of well encountered at time of pump installation: 470 (feet)

Pitless Adapter
 Make: Campbell+
 Model #: NA
 GPM Depth: 36 (36" min)
 GPM 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

If pump capacity exceeds well yield, a low water cut off switch is required by NSPC 1990 Section 17.8.4
 Must circle one: Torque wrenches / Cable guards / Other acceptable method used
 Safety rope, if used, attached to brass rope adapter or other acceptable method inside of well casing NA

Piping to house
 Type: 1" poly pipe
 PSI: 200 (160 psi min)
 Depth of supply line: 36" (36" min)

House Connection
 PVC sleeve to undisturbed soil at wall penetration: YES
 Length of sleeve (5' minimum from foundation): 16'
 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: [Signature] date: 6/23/2022

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

Date Insp. Requested: 6/24/22 Date Insp. Approved: 6/24/22 Inspector: [Signature]
 Inspection Data: Pitless adapter watertight & water supply line at least 36" below grade 42"
 Two piece cap installed and attached to casing securely ✓
 Elec. conduit extends at least 18" below grade/attached to cap properly 36"
 Safety rope not outside of well cap/casing ✓
 Correct well tag attached properly and casing 8" above finished grade 24"
 Water supply line sleeved adequately at house connection 9"
 Adequate grout observed below pitless adapter ✓

(Revised form 10/24/2018)

INTERIM CERTIFICATE OF POTABILITY
PERMANENT DEVIATION FOR RADIUM

Expiration Date – May 3, 2023

November 3, 2022

Homeowner
6501 Old Hilltop Court
Clarksville, MD 21029

RE: Clarksville Crossing, Lot 4
6501 Old Hilltop Court
Building Permit: B21003902
Well Permit: HO-17-0383

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 **6/22/2022**. Final approval of the well line connection to the dwelling was granted on **6/24/2022**. The well construction was completed on **5/8/2022**. Water samples were collected on **9/7/2022**, **9/14/2022**, **10/3/2022**, **10/18/2022**.

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.

Radium samples were also collected on **17-0383**. Results showed a Radium 226 level of **3.1 ± 0.0 pCi/L** and a Radium 228 level of **2.7 ± 0.0 pCi/L**. **This exceeds the maximum contaminant level (MCL) combined Radium 226 and 228 of 5.0 pCi/L.**

After installation of a radionuclide removal device (water softener), post-treatment water samples were collected on **10/3/2022** and indicated a combined Radium 226/228 level of **<1.6 pCi/L** which is below the MCL of 5 pCi/L.

This Department will grant a **permanent deviation** to the Interim Certificate of Potability on condition that the radionuclide removal system effectively maintains a Gross Alpha level of less than **15 pCi/L**, a Gross Beta level of less than **50 pCi/L**, and a Radium 226/228 level of less than **5 pCi/L**.

Furthermore, it will be necessary for you to comply with the following conditions:

1. The system must be properly operated and maintained continuously in accordance with the service contract for the life of the residence.
2. It is recommended that a Maryland certified water laboratory certified for radionuclide analysis perform a yearly radionuclide analysis.

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

3. If you decide to sell or rent your home in the future, you must make any potential buyer/tenant aware of this permanent deviation. **A person who fails to make this disclosure is subject to the penalties set out in COMAR 26.04.04.12F Enforcement and Environment Article 9-1311, Annotated Code of Maryland.**


This certifies that the initial sampling requirements of COMAR 26.04.04 "Well Regulations" have been met for the water supply system installed under well permit HO-17-0383. Although the submitted sample results are in compliance with COMAR standards, the Health Department does not guarantee water supplies.

This Interim Certificate of Potability will expire **six months** from the date of issuance. Submission of a second bacteriological test indicating the water is free of coliform and fecal coliform bacteria is required prior to the expiration date, after which time a Final Certificate of Potability will be issued. **Failure to submit an additional sample and obtain a Final Certificate of Potability will result in a Notice of Violation and is punishable as a misdemeanor under the Annotated Code of Maryland, Environment Article, 9-1311, subject to a fine of up to \$500 or imprisonment not to exceed three months.**

Please contact (410) 313-1773 to schedule a final water sample appointment or contact a Maryland certified water quality laboratory to schedule a water sample. A list of laboratories certified by the state of Maryland may be found at the following website:
<http://www.mde.state.md.us/assets/document/WSP-Labs-2010apr16.pdf>

In closing, please refer to our "[Homeowner Fact Sheet](#)" which illustrates a better understanding for your onsite sewage disposal system. You will also find a link to Maryland Department of the Environments website which describes in further detail operation and maintenance of your septic system.

Approving Authority,



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

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

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

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

REPORT OF ANALYSIS

Laboratory ID #: 154936 Account #: 4470
Reference: Clarksville Crossing Lot 4 Client: Williamsburg Homes LLC
Location: 6501 Old Hill Top Court Requested By: Bill McBride
Highland, MD 20777 Source: Well Water
Date/ Time Collected: 10/3/2022 1039 Site: Sample Port after Softener
Date/Time Rec'd: 10/3/2022 1509 Treatment: Softener
Chlorine ppm: Free: ND Total: ND pH: 6.5
Collected By: R. Ott 0266RO Well #: HO-17-0383

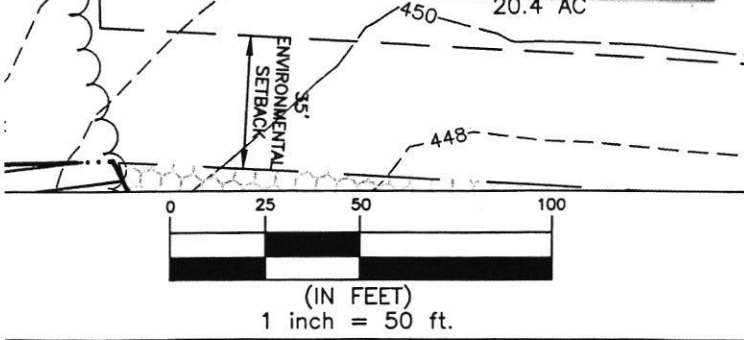
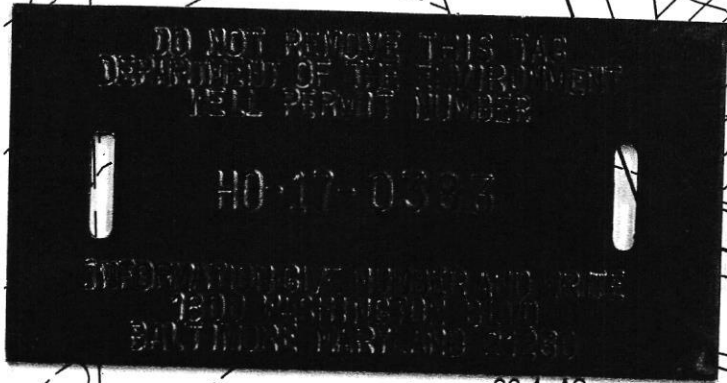
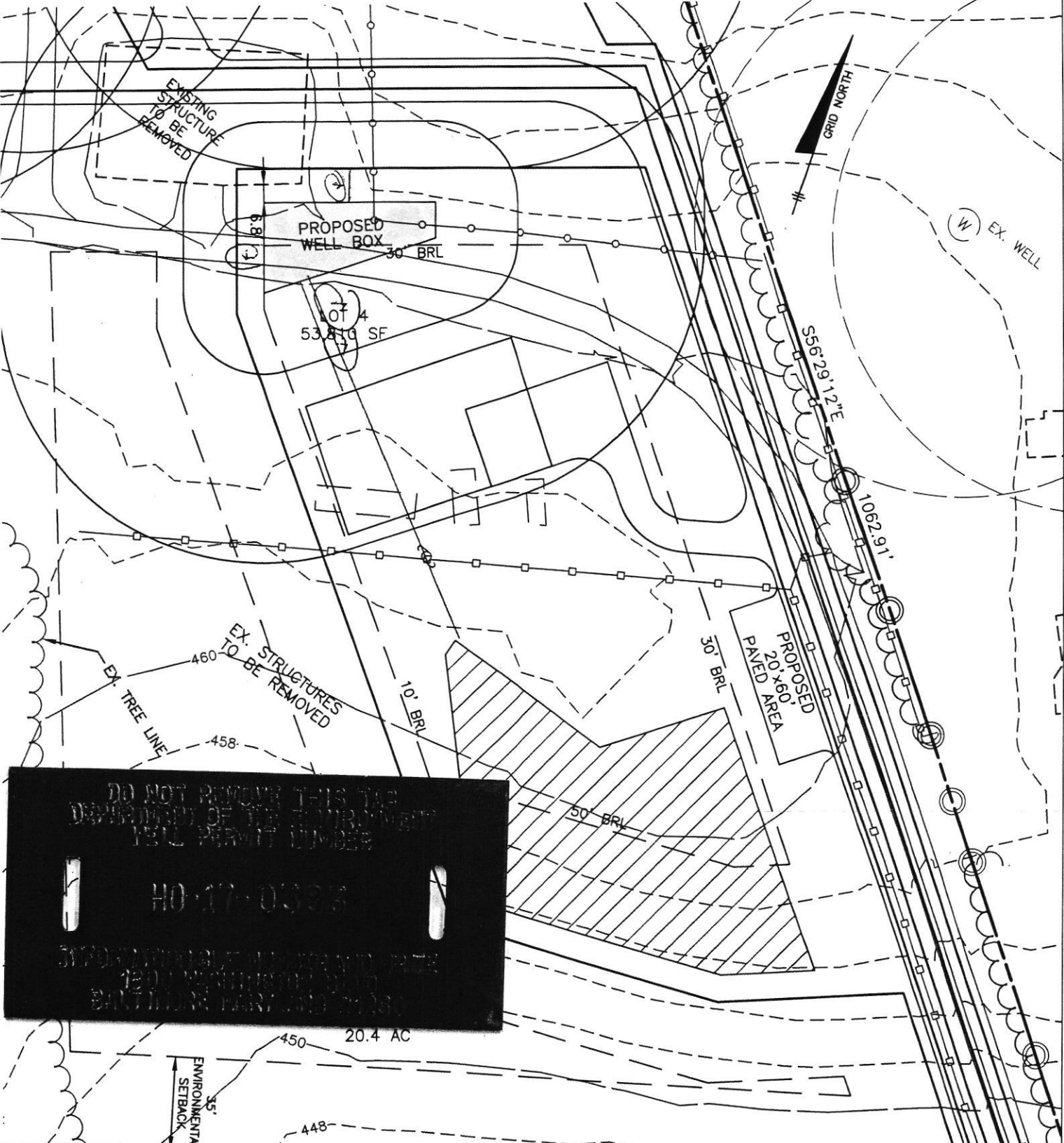
PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Radium-226	0.9 ✓	pCi/L	****	903.0	10/20/2022 / 0930 / MJN
Radium-228	<0.7 ✓	pCi/L	****	Ra-05	10/19/2022 / 1152 / SN

NOTES:

- ****Radium 226 and Radium 228 combined have a reference of 5 pCi/L
- pCi/L = picocuries per liter
- Radium 226 Detection Limit: 0.1 pCi/L; Radium 226 Error: +/- 0.3 pCi/L
- Radium 228 Detection Limit: 0.7 pCi/L; Radium 228 Error: +/- 0.5 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 #278
- ND:None Detected
- Visual well check: Sealed, vented cap
- pH & Chlorine level tested on site

Reason for Test : Use & Occupancy
Building Permit # : B21003902

Date Reported: 10/20/2022

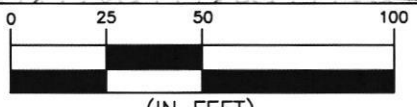
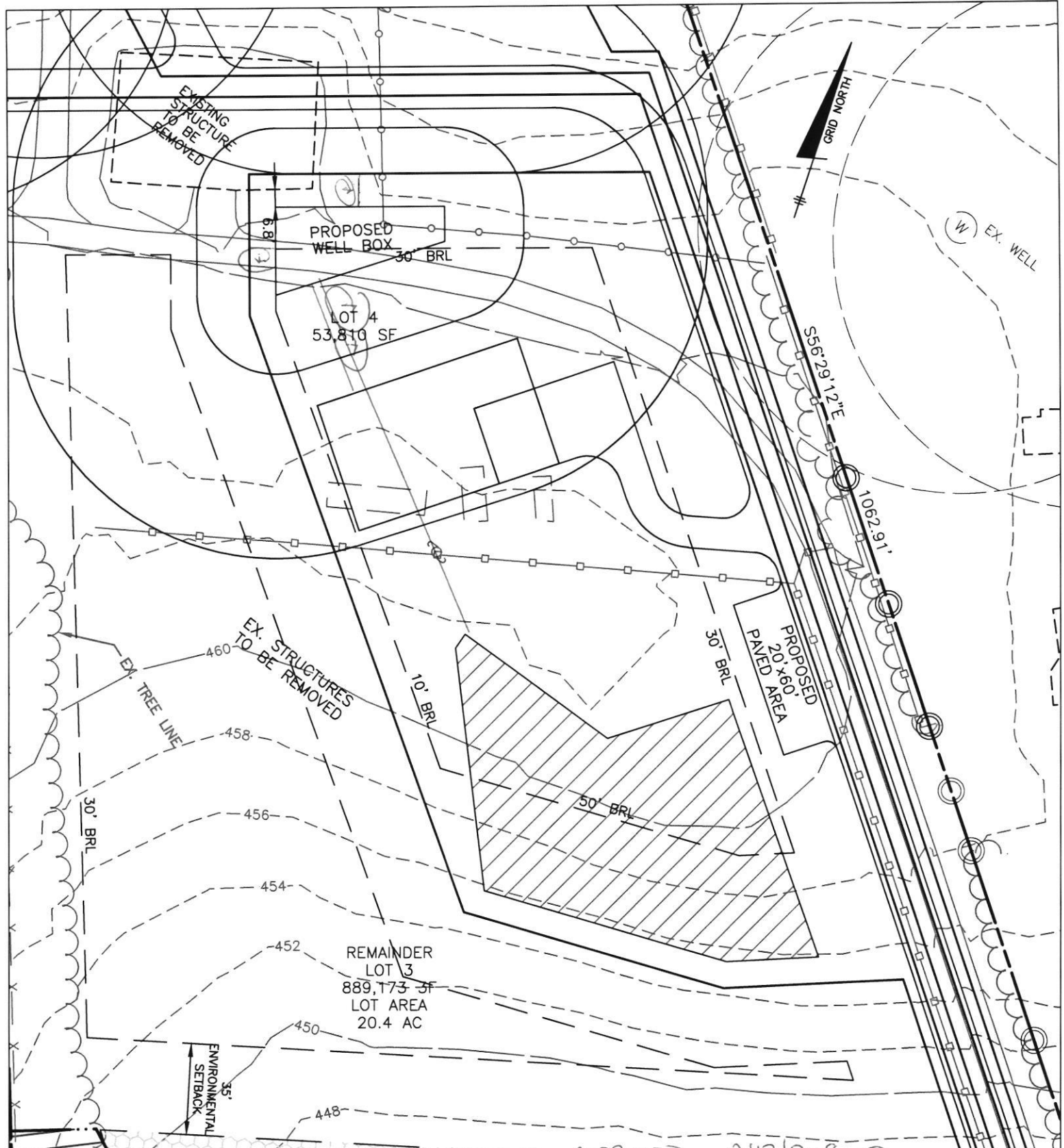


APPROVED 12/17/2018 © 001997
 STAMPED BY BENCHMARK
 Hb-17-0383

BENCHMARK
 ENGINEERS ▲ LAND SURVEYORS ▲ PLANNERS
ENGINEERING, INC.
 6480 BALTIMORE NATIONAL PIKE & SUITE 315 A ELLICOTT CITY, MARYLAND 21043
 (P) 410-485-8105 (F) 410-485-8844
 WWW.BE-CVLENGINEERING.COM

CLARKSVILLE CROSSING
 LOT 4 (WELL EXHIBIT)

DATE: NOVEMBER, 2018
 SCALE: 1" = 50'



(IN FEET)
1 inch = 50 ft.



8480 BALTIMORE NATIONAL PIKE ▲ SUITE 315 ▲ ELIJAH CITY, MARYLAND 21043
(P) 410-485-8105 (F) 410-485-8844
WWW.BEI-CIVLENGINEERING.COM

APPROVED 2/17/2018 © 001997
STAKED BY BENCHMARK
Hb-17-0383

CLARKSVILLE CROSSING

LOT 4 (WELL EXHIBIT)

DATE: NOVEMBER, 2018
SCALE: 1" = 50'

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

MEMORANDUM

TO: Allied Well Drilling
Attn: Marshal E. Arnette MSD106
PO Box 129
Annapolis Junction, MD 21701

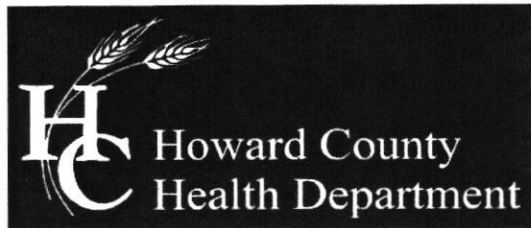
FROM: **Joseph Cabahug**
Licensed Environmental Health Specialist **001997**
Howard County Health Department
Well & Septic Program

RE: Clarksville Crossing Subdivision – Well Permit Special Conditions

DATE: December 14th, 2018

(Signature) 12/17/2018

-
- **Lots 1 – 4** are within the Baltimore Gneiss formation and will require **Radium Samples** to be collected during the yield test.
 - If well on **Lot 4** is drilled prior to the razing of the nearby barn, the initial well site location to be drilled is to be the farthest from the existing barn and the existing access road. In the event that the initial well location is a dry hole, the well box must be changed such that any subsequent well drilled in the box will meet set current setbacks to existing structures (which will require a revised Percolation Certification) or the existing barn must be demolished prior to drilling in another location within the existing well box.



Bureau of Environmental Health

8930 Stanford Boulevard, Columbia, MD 21045

Main: 410-313-2640 | Fax: 410-313-2648

TDD 410-313-2323 | Toll Free 1-866-313-6300

www.hchealth.org

Facebook: www.facebook.com/hocohealth

Twitter: HowardCoHealthDep

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:

Clarksouth Crossing H4 Clarksouth Pike
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 11/12/18 (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.

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

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

REPORT OF ANALYSIS

Laboratory ID #: 154388 Account #: 4470
Reference: Clarksville Crossing Lot 4 Client: Williamsburg Homes LLC
Location: 6501 Old Hill Top Court Requested By: Bill McBride
Highland, MD 20777 Source: Well Water
Date/ Time Collected: 9/7/2022 1350 Site: Pressure Tank
Date/Time Rec'd: 9/7/2022 1540 Treatment: None
Chlorine ppm: Free: ND Total: ND pH: 6.1
Collected By: J. Yeager 0819JY Well #: HO-17-0383

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Gross Alpha, Short Term	14.0	pCi/L	15	900.0	9/12/2022 / 0653 / MJN
Gross Beta, Short Term	9.9	pCi/L	50	900.0	9/12/2022 / 0653 / MJN
Radium-226	3.1 ^{-5.8}	pCi/L	****	903.0	9/21/2022 / 1130 / MJN
Radium-228	2.7 ^{-5.8}	pCi/L	****	Ra-05	9/20/2022 / 1345 / MJN

** Need Treatment
post treatment samples +
Radium agreement +*

NOTES:

- ****Radium 226 and Radium 228 combined have a reference of 5 pCi/L
- Gross Alpha Detection Limit: 2.7 pCi/L; Gross Alpha Error: +/- 3.6 pCi/L
- Gross Beta Detection Limit: 1.8 pCi/L; Gross Beta Error: +/- 1.5 pCi/L
- pCi/L = picocuries per liter
- Radium 226 Detection Limit: 0.2 pCi/L; Radium 226 Error: +/- 0.5 pCi/L
- Radium 226 Detection Limit: 0.8 pCi/L; Radium 226 Error: +/- 0.7 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 #278
- ND:None Detected
- Visual well check: Sealed, vented cap
- pH & Chlorine level tested on site

Reason for Test : Use & Occupancy

Building Permit # : B21003902

Date Reported: 9/21/2022

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

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

REPORT OF ANALYSIS

Laboratory ID #:	154388	Account #:	4470
Reference:	Clarksville Crossing Lot 4	Client:	Williamsburg Homes LLC
Location:	6501 Old Hill Top Court Highland, MD 20777	Requested By:	Bill McBride
Date/ Time Collected:	9/7/2022 1350	Source:	Well Water
Date/Time Rec'd:	9/7/2022 1540	Site:	Pressure Tank
Chlorine ppm:	Free: ND Total: ND	Treatment:	None
Collected By:	J. Yeager 0819JY	pH:	6.1
		Well #:	HO-17-0383

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Gross Alpha, Short Term	14.0	pCi/L	15	900.0	9/12/2022 / 0653 / MJN
Gross Beta, Short Term	9.9	pCi/L	50	900.0	9/12/2022 / 0653 / MJN

NOTES:

- 1 Gross Alpha Detection Limit: 2.7 pCi/L; Gross Alpha Error: +/- 3.6 pCi/L
- 2 Gross Beta Detection Limit: 1.8 pCi/L; Gross Beta Error: +/- 1.5 pCi/L
- 3 pCi/L = picocuries per liter
- 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 # : B21003902

Date Reported: 9/12/2022

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

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

REPORT OF ANALYSIS

Laboratory ID #: 154387 Account #: 4470
Reference: Clarksville Crossing Lot 4 Client: Williamsburg Homes LLC
Location: 6501 Old Hill Top Court Requested By: Bill McBride
Highland, MD 20777 Source: Well Water
Date/ Time Collected: 9/7/2022 1350 Site: Pressure Tank
Date/Time Rec'd: 9/7/2022 1540 Treatment: None
Chlorine ppm: Free: ND Total: ND pH: 6.1
Collected By: J. Yeager 0819JY Well #: HO-17-0383

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	12.4	MPN/ 100 ml	<1.0	SM20 9223B	9/8/2022 / 1030 / TSD
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	9/8/2022 / 1030 / TSD
Nitrate.	2.72	mg/L	10	EPA 300.0	9/7/2022 / 2242 / CRS
Turbidity	0.51	NTU	<10	SM2130B	9/7/2022 / 1720 / MEW
Sand	ND	mg/L	5	Visual/Gravimetric	9/8/2022 / 0900 / TSD

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 NTU = Nephelometric Turbidity Units
- 4 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 5 ND:None Detected
- 6 Visual well check: Sealed, vented cap
- 7 pH & Chlorine level tested on site

Reason for Test : Use & Occupancy

Building Permit # : B21003902

Date Reported: 9/8/2022

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

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

REPORT OF ANALYSIS

Laboratory ID #:	154559	Account #:	4470
Reference:	Clarksville Crossing Lot 4	Client:	Williamsburg Homes LLC
Location:	6501 Old Hill Top Court Highland, MD 20777	Requested By:	Bill McBride
Date/ Time Collected:	9/14/2022 1130	Source:	Well Water
Date/Time Rec'd:	9/14/2022 1450	Site:	Pressure Tank
Chlorine ppm:	Free: ND Total: ND	Treatment:	None
Collected By:	J. Yeager 0819JY	pH:	6.1
		Well #:	HO-17-0383

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	101.3	MPN/ 100 ml	<1.0	SM20 9223B	9/15/2022 / 1015 / TSD
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	9/15/2022 / 1015 / TSD

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 # : B21003902

Date Reported: 9/15/2022

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

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

REPORT OF ANALYSIS

Laboratory ID #: 154935 Account #: 4470
Reference: Clarksville Crossing Lot 4 Client: Williamsburg Homes LLC
Location: 6501 Old Hill Top Court Requested By: Bill McBride
Highland, MD 20777 Source: Well Water
Date/ Time Collected: 10/3/2022 1047 Site: Pressure Tank
Date/Time Rec'd: 10/3/2022 1509 Treatment: **
Chlorine ppm: Free: ND Total: ND pH: 6.1
Collected By: R. Ott 0266RO Well #: HO-17-0383

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	144.5	MPN/ 100 ml	<1.0	SM20 9223B	10/4/2022 / 1015 / CRS
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	10/4/2022 / 1015 / CRS

NOTES:

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

Reason for Test : Use & Occupancy

Building Permit # : B21003902

Date Reported: 10/4/2022

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

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

REPORT OF ANALYSIS

Laboratory ID #: 155281 Account #: 4470
Reference: Clarksville Crossing Lot 4 Client: Williamsburg Homes LLC
Location: 6501 Old Hill Top Court Requested By: Bill McBride
Highland, MD 20777 Source: Well Water
Date/ Time Collected: 10/18/2022 1139 Site: Pressure Tank
Date/Time Rec'd: 10/18/2022 1433 Treatment: **
Chlorine ppm: Free: ND Total: ND pH: 6.6
Collected By: R. Ott 0266RO Well #: HO-17-0383

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	10/19/2022 / 1020 / MEW
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	10/19/2022 / 1020 / MEW

NOTES:

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

Reason for Test : Use & Occupancy

Building Permit # : B21003902

Date Reported: 10/19/2022

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

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

REPORT OF ANALYSIS

Laboratory ID #: 155459 Account #: 4470
Reference: McCann Farm Estates Lot 2 West Client: Williamsburg Homes LLC
Location: 14775 McCann Farm Road Requested By: Bill McBride
Woodbine, MD 21797 Source: Well Water
Date/ Time Collected: 10/28/2022 1141 Site: Pressure Tank
Date/Time Rec'd: 10/28/2022 1255 Treatment: None
Chlorine ppm: Free: ND Total: ND pH: 5.9
Collected By: R. Ott 0266RO Well #: HO-20-0099

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	10/29/2022 / 0930 / TSD
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	10/29/2022 / 0930 / TSD
Nitrate.	0.92	mg/L	10	EPA 300.0	10/28/2022 / 1735 / MEW
Turbidity	0.66	NTU	<10	SM2130B	10/28/2022 / 1500 / MEW
Sand	ND	mg/L	5	Visual/Gravimetric	10/28/2022 / 1510 / MEW

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 NTU = Nephelometric Turbidity Units
- 4 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 5 ND:None Detected
- 6 Visual well check: Sealed, vented cap
- 7 pH & Chlorine level tested on site

Reason for Test : Use & Occupancy

Building Permit # : B21004405

Date Reported: 10/31/2022

