| 1 2 3 (THIS NUMBER IS TO BE IN COLS. 3-6 ON ALL CAP ST/CO USE ONLY DATE Received MM DO YY | | WELL COMPLETION REPORT FILL IN THIS FORM COMPLETELY | COUNTY NEAC 100 |
|--|---|---|---|
| DATE Received | | PLEASE TYPE | NUMBER A525 198 |
| 8 13 | DATE WELL COMP | Depth of Well 22 100 (TO NEAREST FOOT) 20 (TO NEAREST FOOT) | PERMIT NO. FROM "PERMIT TO DRILL WELL" |
| OWNER | oscol | es George | |
| STREET OR RFD | lest name Mac C | lintock Ds fret name TOWN | Allnutta |
| SUBDIVISION | L LOG | SECTIONSECTION | LOT3 |
| The state of the s | for driven wells | WELL HAS BEEN GROUTED (Circle Appropriate Box) | C 3 |
| STATE THE KIND OF FORM | ATIONS PENETRATED, THEIR SS AND IF WATER BEARING | TYPE OF GROUTING MATERIAL (Circle one) | PUMPING TEST |
| DESCRIPTION (Use | FEET check if water | CEMENT (CM) BENTONITE CLAY BC | HOURS PUMPED (nearest hour) |
| additional sheets if needed) | FROM TO bearing | NO. OF BAGS 15 NO. OF POUNDS 45,460 | PUMPING RATE (gal. per min.) |
| Sand | 0 41 | GALLONS OF WATER DEPTH OF GROUT SEAL (to nearest foot) | METHOD USED TO Bucket |
| Cray Mica Rock | 41 185 | from 48 TOP 52 ft. to 54 BOTTOM 58 ft. | WATER LEVEL (distance from land surface) |
| Ceray Mica | | (enter 0 if from surface) Casing CASING RECORD | BEFORE PUMPING 17 tt. |
| KOCK | 1 1/4 | types insert appropriate ST CONCRETE | WHEN PUMPING 22 25 ft. |
| | | code below PL OT | TYPE OF PUMP USED (for test) |
| | | PLASTIC OTHER | A air P piston T turbine |
| | 東計 三 | MÅIN Nominal diameter Total depth CASING top (main) casing of main casing TYPE (nearest inch)! (nearest foot) | C centrifugal R rotary O other (describ |
| | | 60 61 63 64 66 70 | J jet S submersible |
| | | E OTHER CASING (if used) | 27 27 27 |
| | 100 | A diameter depth (feet) H inch from to | PUMP INSTALLED |
| | | C | DRILLER INSTALLED PUMP YES NO (CIRCLE) (YES or NO) |
| | | Å | IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS. |
| | | screen type SCREEN RECORD | TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) 29 |
| | | insert appropriate ST BRASS BRONZE HOLE | IN BOX 29. CAPACITY: |
| | | code below PL OT | (to nearest gallon) GALLONS PER MINUTE (15 nearest gallon) 31 35 |
| | 31 | PLASTIC OTHER | PUMP HORSE POWER 37 41 |
| NUMBER OF UNSUCCESS | SFUL WELLS: | C 2 DEPTH (nearest ft.) | PUMP COLUMN LENGTH (nearest ft.) |
| WELL HYDROFRACTURED | yes no | E A 8 9 11 15 17 21 | CASING HEIGHT (circle appropriate box and enter casing height) |
| | PRIATE LETTER | C 2 23 24 26 30 32 36 | LAND SURFACE |
| A WELL WAS ABANDO | | S C 3 | below (nearest foot) |
| P TEST WELL CONVERT | | R 38 39 41 45 47 51 E E SLOT SIZE 1 2 3 | A LOCATION OF WELL ON LOT |
| I HEREBY CERTIFY THAT THIS W ACCORDANCE WITH COMAR 26.0 | VELL HAS BEEN CONSTRUCTED IN M-0.04 "WELL CONSTRUCTION" AND INDITIONS STATED IN THE ABOVE | DIAMETER (NEAREST | SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND /OR |
| CAPTIONED PERMIT, AND THAT | THE INFORMATION PRESENTED OMPLETE TO THE BEST OF MY | OF SCREEN INCH) from to | LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL) |
| DRILLERS LIC., NO. 1 | MSD024 1 | GRAVEL PACK | 345.13 272.18 |
| DRILLERS SIGNATURE | - L Mayre | IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68 68 | 115 040 7 |
| (MUST MATCH SIGNATURE | ON APPLICATION) | MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER) | will (|
| LIC. NO.1 | D | T (E.R.O.S.) W Q | |
| SITE SUPERVISOR (sign. | of driller or journeyman | 70 72 74 75 76 | \ ● |
| | different from permittee) | TELESCOPE LOG CASING INDICATOR OTHER DATA | |

| B 1 SEQUENCE NO. (MDE USE ONLY) | STATE OF M | MARYLAND | STATE PERMIT NUMBER |
|--|--------------------------------|--|--|
| 1 263363 6 | APPLICATION FOR PE | The state of the s | HO-95-1831 |
| | 531953 please | | ⁷⁰ fill in this form completely ⁷⁹ |
| Date Received (APA) | DIMITION | B 3 | LOCATION OF WELL |
| 8 MM DD YY 13 | RMATION | 8 COUNTY | 21 |
| Roscoe S. | Leonge | G. Rosco | e Property |
| 15 Last Name Owner | First Name 34 | 23 SUBDIVISION | 42 |
| 36 Street or RFD | 55 | SECTION 44 46 | LOT 48 50 |
| Glenwood Md | 21738 | Hlenw | ood |
| 57 Town 70 State | 72 Zip 76 | 52 NEAREST TOWN | 71 |
| DRILLER INFORMATION | | MILES FROM TOWN (enter | |
| | M S D 02/ 76 License No. 81 | B 4 | 73 76 77 78 |
| Con al & Marine Will | De flan | 1 2 | Mac elistock Dr. |
| From Name | · Miles | DIRECTION OF WELL FROM TOWN (CIRCLE BOX) | 11 NEAR WHAT ROAD 30 |
| 5512 Ridge Rd Tht. a | esyMa 2mi | | ON WHICH SIDE OF ROAD |
| Address | | N 8 N E 8-9 | (CIRCLE APPROPRIATE BOX) |
| Signature Jay | Date | W TOWN E | 34 / 200 37 SOUTH |
| B 2 WELL INFORMATION | 4 | | DISTANCE FROM ROAD |
| 1 2 APPROX. PUMPING RATE - (GAL. PER MIN.) | 8 . 12 | SW SE | ENTER FT OR MI 38 39 |
| AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 14 | 20 | | TAX MAP: $\frac{21}{}$ BLK: $\frac{4}{}$ PARCEL $\frac{183}{}$ |
| USE FOR WATER (CIRCLE AF | 100 Species | NOT TO | BE FILLED IN BY DRILLER |
| DOMESTIC POTABLE SUPPLY & RESIDE | * | HEALTH | DEPARTMENT APPROVAL |
| IRRIGATION | | Howard | (3) A525/98 |
| F FARMING (LIVESTOCK WATERING & AGE | RICULTURAL | COUNTY NAME STATE | COUNTY NO. |
| 22 INDUSTRIAL, COMMERICIAL, DEWATERI | NG | SIGNATURE | INSERT S —— |
| P PUBLIC WATER SUPPLY WELL | | DATE ISSUED | 13 rean 13 aker 10/20/29 |
| T TEST, OBSERVATION, MONITORING | | 43 MM DD YY 48 | CO SIGNATURE EXP. DATE |
| G GEO-THERMAL | | NORTH 524 0 (| 0 0 GRID 57 63 |
| | | SHOW MAJOR FEATURES | |
| APPROXIMATE DEPTH OF WELL 26 | FEET . | BOX & LOCATE WELL ' | |
| 24 | 28 | WITH AN X SOURCES OF DRILLING W | VATER |
| APPROXIMATE DIAMETER OF WELL | NEAREST INCH | 1. bull | e du |
| METHOD OF DRILLING | (circle one) | 2. | s 5.00 |
| BORED (or Augered) JETTED | Jetted & DRIVEN | 3. | X |
| 30 AIR-ROTary AIR-PERcussion | ROTARY (Hydraulic Rotary) | WRITE THE BOX NUMBER | 12.7% |
| CABLE REVerse-ROTary | DRive-POINT | FROM THE MAP HERE | F-9 |
| other | | 7964 | 1 10 |
| REPLACEMENT OR DEEPL (CIRCLE APPROPRIATE | | | 000 |
| THIS WELL WILL NOT REPLACE AN EXIST | , | N 520 | 4 |
| THIS WELL WILL REPLACE A WELL THAT | WILL BE | | SHOWING LOCATION OF WELL IN |
| ABANDONED AND SEALED | WILL BE LISED | | DWNS AND ROADS AND GIVE D NEAREST ROAD JUNCTION |
| 39 S AS A STANDBY-CONTACT LOCAL APPROV | | / Me | energed N |
| FOR POLICY ON STANDBY WELLS THIS WELL WILL DEEPEN AN EXISTING W | ÆLL | 1 22 10 | |
| PERMIT NUMBER OF WELL TO BE REPLACED C | | N N | 13 |
| (IF AVAILABLE) 41 | - - - - - - - - - | 1 | 4 3 - |
| Not to be filled in by driller (MDE OR C | COUNTY USE ONLY) | me Clip | et a Sixon |
| APPROP. PERMIT NUMBER | G | 70 | |
| H-0 | 95 1021 | Y | X |
| PERMIT No. 70 71 7 | 72 73 74 75 76 77 78 79 | | well |
| SPECIAL CONDITIONS NOTE - AMPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED a | and area | | |
| The state of the s | | | |

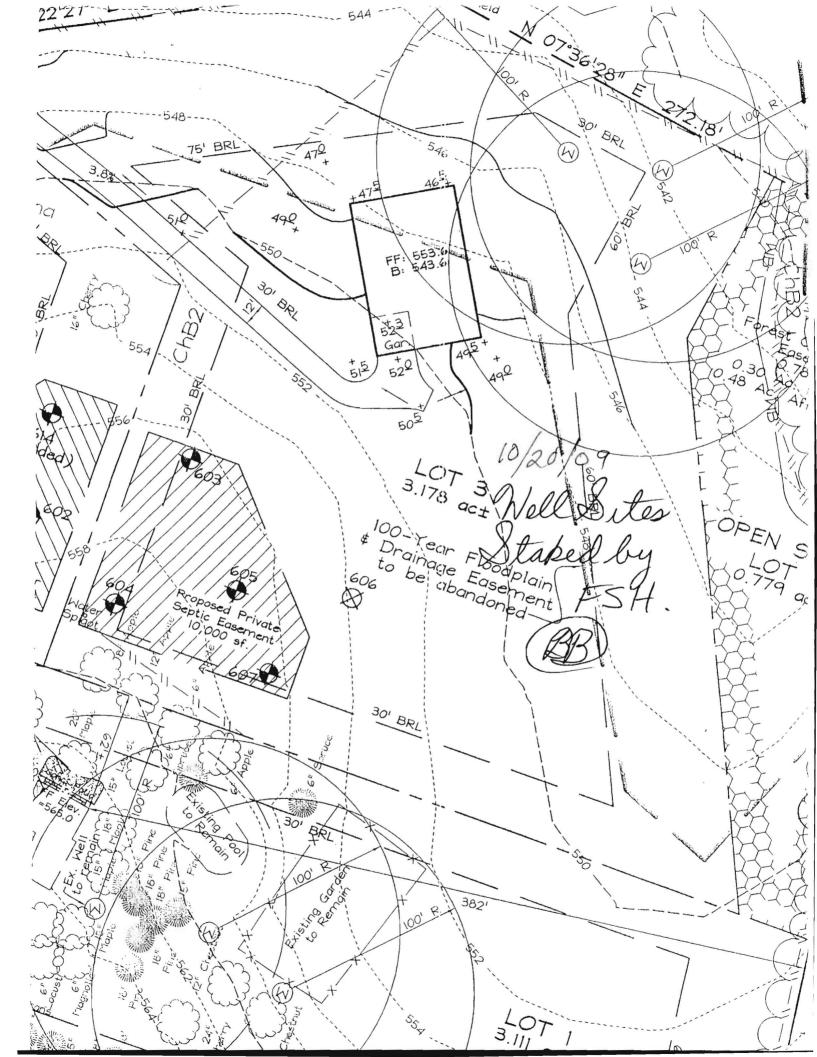
| Review | |
|--------|--|
| | |

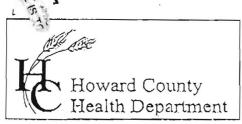
FIELD DATA SHEET . HOWARD COUNTY WELL YIELD TEST

| Well Permit No. HO - 95-183/ iccation of property (road) MacClintonk | Q ₁ |
|--|---|
| Estivision G. Rossae Property | Lot 3 Block Plat Sec. |
| Well Oriller Joseph & Marine | Owner George & Dana Roseal |
| Depth of well Discance of measuring point (M.P.) about static water level (S.W.L.) below M.P. | |
| I High rate pumping reservoir drawdown | |
| Total time 5 to reach pumping | Pumping rate 2090m water level 20 ft. below M.P. |

II. Recovery pump test data - observations to be recorded every 15 minutes

| DIMS (in 15 minute in- tervals | WATER LEVEL below M.P. | PUMPING RATE time to fill & / gallon bucket | FLOW METER READING (if used) | CALCULATED FLOW (gallons per minute) |
|--------------------------------------|---------------------------|---|--|--------------------------------------|
| 7:15 | 20 | 3 sec | | 209pm |
| 7:30 | 20 | 3 | | 20 |
| 7:45 | 20 | | | 20 |
| 8:00 | 20 | 3 | | 20 |
| 8:15 | 20 | 3 | | 20 |
| 8:30 | 20 | 3 | | 20 |
| 8:45 | 20 | 3 | | 20 |
| 9:00 | 20 | 3 | | 20 |
| 9: 15 | 20 | 3 | | 20 |
| 9:30 | 20 | 3 | | 20 |
| 9:45 | 20 | 3 | | 20 |
| 10:00 | 20 | 3 | | 20 |
| 10:15 | 20 | 3 | | 20. |
| | | | | 14,, |
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| | | | The state of the s | The Carlotte Control |
| | | | | |
| | | e-Harris | | |
| | | | | |





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

Penny E. Borenstein, M.D., M.P.H., Health Officer

TO ALL INTERESTED PARTIES

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

| Well Site Location: | |
|--------------------------------|-----------------|
| G. Rossoe Property 3 | Mar Clintock Dr |
| Subdivision/Property Name Lot# | Road Name |

Of 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

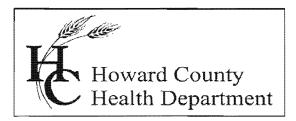
Rove 410-489-5615

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

Information Form for the Installation of the Well Pump, Piffess 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 26.94.04 (MD Well Construction Regulations). Submission of a complete form is required prior to Use and Occupancy approval. Company Name: Address: (Must circle one) Licensed Plumber Licensed Well Driller Licensed Well Pump Installer License #and name of individual responsible for the field installation: David Foole License# most 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 Will amsin Subdivision Site Address Submersible Pump Data Pitless Adapter Well Cap and Electric Conduit Make Gruni FUS Make: Compbell Two piece waterfight cap: Model # 1550 E Screened wented well cap: Depth: 301 (36" min) GPM Cap secured to casing: Pump Capacity **GPM** NSF/WSC approved: Conduit min 18" B.G. Well Yield: 7 () Depth of well encountered at time of pump installation 145 (feet) Conduit secured to well cap If pump capacity exceeds well yield, a low water cutoff switch is required by NSPC 1990 Section 17.8. 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 Piping to house Type: 1 100 PVC sleeve to undisturbed soil at wall penetration: PSI: 2(1) (160 psi min Length of sleevers minimum from foundation): Sleeve sealed properly: US Depth of supply lines (36" min) 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 justalization. Signature of company representative responsible for installation For Health Department Use Only - Not to be completed by Installer 8/9/16 Date Insp. Approved: 8/9/16 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 caplcasing Correct well tag attached properly and casing \$" above finished grade Water supply line sleeved adequately at house connection

Adequate grout observed below pitless adapter



Bureau of Environmental Health

8930 Stanford Blvd., Columbia, MD 21045 Main: 410-313-2640 | Fax: 410-313-2648 TDD 410-313-2323 | Toll Free 1-866-313-6300 www.hchealth.org

Facebook: www.facebook.com/hocohealth
Twitter: HowardCoHealthDep

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

INTERIM CERTIFICATE OF POTABILITY

Expiration Date - MAY 15, 2017

November 15, 2016

Homeowner 3411 Warfield Pond Overlook Glenwood, MD 21738

RE:

Warfield Pond Overlook, Lot 3 3411 Warfield Pond Overlook Building Permit: B16001258 Well Permit: HO-95-1831

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 11/4/2016. Final approval of the well line connection to the dwelling was granted on 8/9/2016. The well construction was completed on 11/6/2009. Water samples were collected on 10/18/2016, 10/27/2016 & 11/4/2016.

The water sample results indicate that the water samples submitted for testing were free of coliform and fecal coliform bacteria at the time of sampling and are bacteriologically safe for drinking. 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-95-1831. 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 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 "<u>Homeowner Fact Sheet</u>" which illustrates a better understanding for your Best Available Technology (BAT). You will also find a link to Maryland Department of the Environments website which describes in further detail operation and maintenance of your BAT.

Approving Authority,

Kevin M. Wolf, L.E.H.S., REHS/RS, Supervisor

1h. m. Wall

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 #:

111103

Account #:

Reference:

Lot 3

Company:

4470

Requested By:

Williamsburg Homes LLC

Location:

3411 Warfield Pond Overlook

Bob Corbett

Glenwood, MD 21738 Date/ Time Collected: 11/4/2016

0825

Source: Site:

Well Water

Date/Time Rec'd:

11/4/2016

1100

Treatment:

Pressure Tank None

Chlorine ppm:

Free: ND

Total: ND

pH:

5.5

Collected By:

J. Yeager

6176JY

Well#:

HO-95-1831

| PARAMETERS | RESULTS | UNITS | REFERENCE | METHOD | DATE/TIME/ANALYST |
|--------------------------------|---------|------------|-----------|-----------|------------------------|
| Bacteria, Coliform, Total, MPN | <1.0 | MPN/ 100 r | nl <1.0 | SM18 9223 | 11/5/2016 / 0915 / LLO |
| Bacteria, E. coli, MPN | <1.0 | MPN/ 100 r | ml <1.0 | SM18 9223 | 11/5/2016 / 0915 / LLO |

NOTES

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

Reason for Test:

Use & Occupancy

Building Permit #:

16-001258

Date Reported:

11/7/2016

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

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

REPORT OF ANALYSIS

110964

Laboratory ID #:

Account #:

4470

Reference:

Lot 3

Company:

Williamsburg Homes LLC

Location:

3411 Warfield Pond Overlook

Requested By:

Bob Corbett

Glenwood, MD 21738

Source:

Well Water

Date/ Time Collected: 10/27/2016

1055

Site:

Pressure Tank

Date/Time Rec'd:

10/27/2016

1251 Total: ND

Treatment:

None 5.9

Chlorine ppm: Collected By:

Free: ND J. Yeager

6176JY

pH: Well #:

HO-95-1831

| PARAMETERS | RESULTS | UNITS I | REFERENCE | METHOD | DATE/TIME/ANALYST |
|--------------------------------|---------|------------|-----------|-----------|-------------------------|
| Bacteria, Coliform, Total, MPN | 1.0 | MPN/ 100 m | 1 <1.0 | SM18 9223 | 10/28/2016 / 1015 / LLO |
| Bacteria, E. coli, MPN | <1.0 | MPN/ 100 m | <1.0 | SM18 9223 | 10/28/2016 / 1015 / LLO |

NOTES

- MPN/ 100 ml = Most Probable Number [of viable bacteria] per 100 ml of sample. 1
- 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
- pH & Chlorine level tested on site
- Visual well check: Sealed, vented cap

Reason for Test:

Use & Occupancy

Building Permit #:

16-001258

Date Reported:

10/28/2016

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 #:

110753

Account #:

4470

Reference:

Lot 3

Company:

Williamsburg Homes LLC

Location:

Requested By:

Bob Corbett

3411 Warfield Pond Overlook

Glenwood, MD 21738 Date/ Time Collected: 10/18/2016

Source: Site:

Well Water Pressure Tank

Date/Time Rec'd:

1133 1222

Treatment:

None

10/18/2016

Total: ND

pH:

5.7

Chlorine ppm: Collected By:

Free: ND J. Yeager

6176JY

Well #:

HO-95-1831

| PARAMETERS | RESULTS | UNITS RI | EFERENCE | METHOD | DATE/TIME/ANALYST |
|--------------------------------|---------|-------------|----------|-------------------|---------------------------|
| Bacteria, Coliform, Total, MPN | 65.9 | MPN/ 100 ml | <1.0 | SM18 9223 | 10/19/2016 / 1000 / BCD |
| Bacteria, E. coli, MPN | <1.0 | MPN/ 100 ml | <1.0 | SM18 9223 | 10/19/2016 / 1000 / BCD |
| Nitrate | 5.73 | mg/L | 10 | 601 | 10/19/2016 / 0900 / CRS |
| Turbidity | 5.55 | NTU | <10 | SM18 2130B | 10/19/2016 / 0930 / CRS |
| Sand | NS | mg/L | 5 | Visual/Gravimetri | c 10/19/2016 / 0930 / 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
- Results less than or within the reference range are considered satisfactory and within potable water limits at the time of 5 sampling.
- ND:None Detected
- pH & Chlorine level tested on site 7
- Visual well check: Sealed, vented cap

Reason for Test:

Use & Occupancy

Building Permit#:

16-001258

Date Reported:

10/19/2016