

C1 2972 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.

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

COUNTY NUMBER A 520414

ST/CO USE ONLY DATE RECEIVED MM DD YY 8 13

DATE WELL COMPLETED MM DD YY 7 2 2007

Depth of Well 22 200 26 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" Ho 95-0697

OWNER Winchester Homes Inc STREET OR RFD Hunters View Rd TOWN Elliott City SUBDIVISION Riverwood Phase 2 SECTION LOT 52

WELL LOG

Not required for driven wells

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

Table with columns: DESCRIPTION (Use additional sheets if needed), FEET (FROM, TO), check if water bearing. Entries: Sand (0-54), Gray Granite (54-200).

GROUTING RECORD

WELL HAS BEEN GROUTED (Y) (N) TYPE OF GROUTING MATERIAL (Circle one) CEMENT (CM) BENTONITE CLAY (BC) NO. OF BAGS 15 NO. OF POUNDS 1410 GALLONS OF WATER 90 DEPTH OF GROUT SEAL (to nearest foot) from 0 ft. to 54 ft.

CASING RECORD

casings types insert appropriate code below (ST) (CO) (PL) (OT) MAIN CASING TYPE (ST) Nominal diameter top (main) casing (nearest inch)! 6 Total depth of main casing (nearest foot) 60

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

SCREEN RECORD

screen type or open hole (ST) (BR) (HO) (PL) (OT) insert appropriate code below

C3

PUMPING TEST

HOURS PUMPED (nearest hour) 3 PUMPING RATE (gal. per min.) 20 METHOD USED TO MEASURE PUMPING RATE bucket WATER LEVEL (distance from land surface) BEFORE PUMPING 24 WHEN PUMPING 27 TYPE OF PUMP USED (for test) (S) submersible

PUMP INSTALLED

DRILLER INSTALLED PUMP (CIRCLE) (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 (49) LAND SURFACE (-) below (4) (nearest foot)

C2

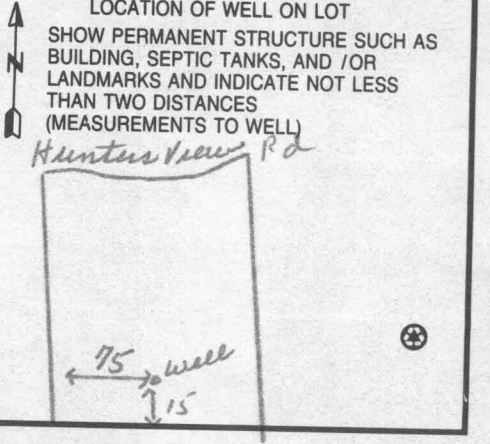
DEPTH (nearest ft.)

Table with columns: 1, 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, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100. Entry: Ho 56 200

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



DRILLERS LIC. NO. 1 MSD024 DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION) LIC. NO. 1 D

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

B 1 9862

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL

STATE PERMIT NUMBER

525693 please type

Ho - 95 - 0697 fill in this form completely

Date Received (APA)

2/1/07

OWNER INFORMATION

Winchester Homes, Inc
6905 Rockledge Dr. Suite 800
Bethesda Md. 20817

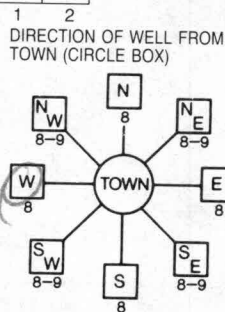
LOCATION OF WELL

Howard COUNTY
Riverwood Phase 2
SECTION 44 46 LOT 48 50
Elliott City
MILES FROM TOWN 5

DRILLER INFORMATION

Joseph L. Mayne MS D 024
Joseph L. Mayne Well Drilling
5512 Ridge Rd Mt. Airy Md 21771
Signature Date 1-30-07

DIRECTION OF WELL FROM TOWN



Hunters View Rd NEAR WHAT ROAD

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)



260 DISTANCE FROM ROAD FT

TAX MAP: 29 BLK: 4 PARCEL 20

WELL INFORMATION

APPROX. PUMPING RATE 5 (GAL. PER MIN.)
AVERAGE DAILY QUANTITY NEEDED 500 (GAL. PER DAY)

USE FOR WATER (CIRCLE APPROPRIATE BOX)

- DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION
FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)
INDUSTRIAL, COMMERCIAL, DEWATERING
PUBLIC WATER SUPPLY WELL
TEST, OBSERVATION, MONITORING
GEO-THERMAL

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Howard COUNTY NAME
13 COUNTY NO.
STATE SIGNATURE
DATE ISSUED 2/13/07
CO SIGNATURE
NORTH GRID 513 000 EAST GRID 0828 000

APPROXIMATE DEPTH OF WELL 300 FEET

APPROXIMATE DIAMETER OF WELL 6 INCH

METHOD OF DRILLING (circle one)

BORED (or Augered) JETTED Jetted & DRIVEN
AIR-ROTARY AIR-PERCussion ROTARY (Hydraulic Rotary)
CABLE REVerse-ROTary DRive-POINT

REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX)

- THIS WELL WILL NOT REPLACE AN EXISTING WELL
THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS
THIS WELL WILL DEEPEMED AN EXISTING WELL

PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED (IF AVAILABLE)

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

APPROP. PERMIT NUMBER Ho 204 G 007

PERMIT No. Ho - 95 - 0697

SPECIAL CONDITIONS

NOTE - APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED

NEED RADIUM SAMPLE

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

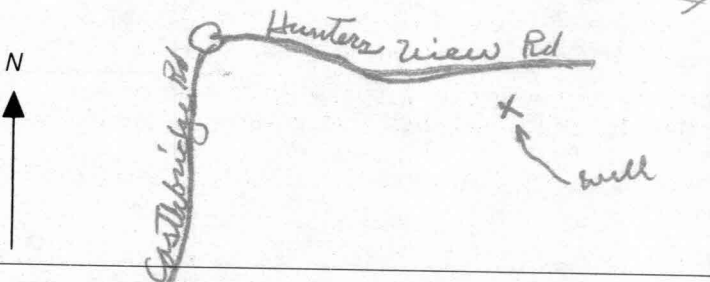
SOURCES OF DRILLING WATER

- 1. well
2.
3.
WRITE THE BOX NUMBER FROM THE MAP HERE

E 828 8

N 510 3

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



B 1 9862

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL please type 525693

STATE PERMIT NUMBER

Ho-95-0697 fill in this form completely

Date Received (APA) 2/1/07

OWNER INFORMATION

Winchester Homes, Inc. 6905 Rockledge Dr. Suite 800 Bethesda Md 20817

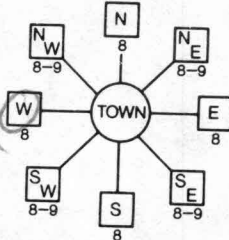
LOCATION OF WELL

Howard COUNTY Riverwood Phase 2 SECTION 44 46 LOT 52 Ellicott City NEAREST TOWN 5 MILES FROM TOWN

DRILLER INFORMATION

Joseph L. Mayne MS D 024 Driller's Name License No. 81 Joseph L. Mayne Well Drilling Firm Name 5512 Ridge Rd Mt. Airy Md 21771 Address Joseph L. Mayne 1-30-07 Signature Date

DIRECTION OF WELL FROM TOWN (CIRCLE BOX)



Hunters View Rd NEAR WHAT ROAD

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX) NORTH SOUTH

34 260 37 DISTANCE FROM ROAD ENTER FT OR MI 38 39

TAX MAP: 29 BLK: 4 PARCEL 20

WELL INFORMATION APPROX. PUMPING RATE 5 (GAL. PER MIN.) AVERAGE DAILY QUANTITY NEEDED 500 (GAL. PER DAY)

USE FOR WATER (CIRCLE APPROPRIATE BOX)

- DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION) INDUSTRIAL, COMMERCIAL, DEWATERING PUBLIC WATER SUPPLY WELL TEST, OBSERVATION, MONITORING GEO-THERMAL

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Howard COUNTY NAME 13 #520414 COUNTY NO. STATE SIGNATURE INSERT S DATE ISSUED 2/13/07 CO SIGNATURE RIN WALKER EXP. DATE 2/13/07 NORTH GRID 513 000 EAST GRID 0828 000

APPROXIMATE DEPTH OF WELL 300 FEET

APPROXIMATE DIAMETER OF WELL 6 INCH NEAREST

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 DEEPEMED AN EXISTING WELL

PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED (IF AVAILABLE)

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

APPROP. PERMIT NUMBER Ho 204-G007

PERMIT No. Ho-95-6697

SPECIAL CONDITIONS

NOTE - APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED

AIR RADIUM SAMPLE

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

SOURCES OF DRILLING WATER

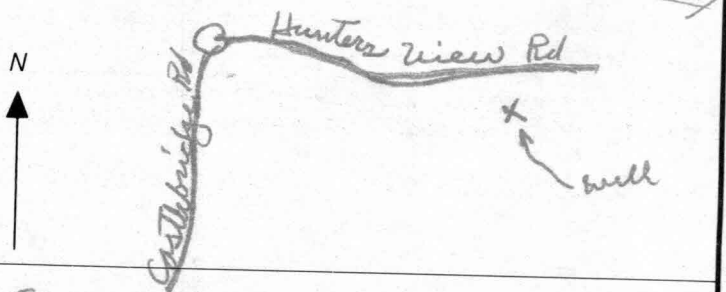
- 1. well 2. 3.

WRITE THE BOX NUMBER FROM THE MAP HERE

E 828

N 513

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



Vertical stamp: RECEIVED FEBRUARY 13 2007

Handwritten note: 7/2/07 Sample collected during field (Kue)

**HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH
WATER AND SEWERAGE PROGRAM
TEL: (410)313-2640 FAX: (410)313-2648**

Information Form for the Installation of the Well Pump, Pitless Adapter, and Supply Piping

NOTE: The installer is responsible for requesting an inspection prior to 9 am on the day of the desired inspection. No work is to be covered until approved by the Health Department. All installations must comply with the National Standard Plumbing Code (NSPC, as amended locally) and COMAR 26.04.04 (MD Well Construction Regulations). Submission of a complete form is required prior to Use and Occupancy approval.

Company Name: _____ Telephone #: _____
Address: _____

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

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

Name of Property Owner: _____ Telephone #: _____
Subdivision: Riverwood Lot #: 52 Well Tag #: HO - 95 - 0697 ✓
Site Address: 11021 Hunters View Rd

Submersible Pump Data

Make: _____
Model #: _____
Pump Capacity _____ GPM
Well Yield: _____ GPM

Pitless Adapter

Make: _____
Model#: _____
Depth: _____ (36" min)
NSF approved: _____

Well Cap and Electric Conduit

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

Depth of well encountered at time of pump installation: _____ (feet)
If pump capacity exceeds well yield, a low water cut off switch is required by NSPC 1990 Section 17.8.4
Torque arrestors or Cable guards are required - Must circle one

Safety rope, if used, attached to inside of well casing with eye bolt _____

Piping to house

Type: _____
PSI: _____ (160 psi min)
Depth of supply line: _____ (36" min)

House Connection

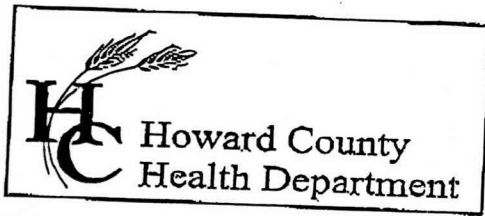
PVC sleeved to undisturbed soil at wall penetration: _____
Approximate length of sleeve: _____
Sleeve caulked and sealed properly: _____

The water supply line is required to be at least ten feet from the septic tank, pump chamber, sewage piping, distribution box, drainfields, and sewage reserve area. If this cannot be accomplished, contact this office for approval prior to installation.

Signature of company representative responsible for installation _____ date _____

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

Date Insp. Requested: 6/25/12 Date Insp. Approved: 6/27/12 (KW)
Inspection Data: Pitless adapter and 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 installed inside of well 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 ✓



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:

Riverwood Phase II 43-77 Castlebridge Rd, Hunters View Road
 Subdivision/Property Name Lot# Road Name
Open Run Road & Whitford Way

The well site has been staked by Benchmark Eng
 (professional land surveyor or company employing professional land surveyors)
 on _____ (date) and does not require a site inspection.

All lots will be staked by 12/29/06

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

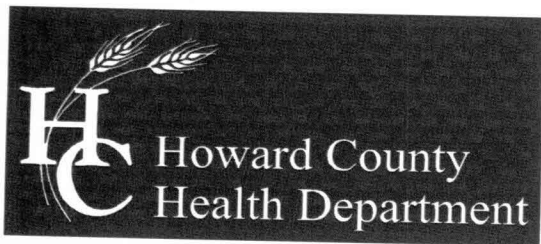
Contact is:

Easterday

301-829-1440

2006 DE 18 PM 2:32

HOWARD COUNTY HEALTH DEPARTMENT



Bureau of Environmental Health

7178 Columbia Gateway Drive, Columbia, MD 21046-2147

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

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

www.hchealth.org

Facebook: www.facebook.com/hocohealth

Twitter: HowardCoHealthDep

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

INTERIM CERTIFICATE OF POTABILITY PERMANENT DEVIATION FOR NITRATES

Expiration Date – April 3rd, 2013

October 3rd, 2012

Homeowner
11021 Hunters View Road
Ellicott City, MD 21042

RE: Riverwood, Lot #52
11021 Hunters View Road
Building Permit: B12001425
Well Permit: HO-95-0697

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 **10/3/2012**. Final approval of the well line connection to the dwelling was granted on **6/25/2012**. The well construction was completed on **7/2/2007**. Water samples were collected on **9/14/2012, 9/7/2012**.

The water sample results indicate that the water samples submitted for testing were free of coliform and fecal coliform bacteria at the time of sampling and are bacteriologically safe for drinking.

Gross Alpha and Beta samples were also collected on **7/2/2007**. Results showed a Gross Alpha level of **4.3 ± 2.0 pCi/L** and **Gross Beta** level of **8.1 ± 2.7 pCi/L**. The Gross Alpha was below the maximum contaminant level (MCL) of 15 pCi/L and the Gross Beta was below the target level of 50pCi/L (roughly equivalent to the annual dose rate of 4 millirems per year). At the time of testing and with respect to these parameters, the well water is safe for all uses.

The untreated water sample collected on **9/7/2012** indicated a nitrate level of **12.7 mg/L**. **This exceeds the maximum contaminant limit of 10 mg/L set forth in COMAR 26.04.04.09**. After installation of a nitrate removal device (kitchen tap reverse osmosis system), a post-treatment water sample was collected on **9/14/2012** and indicated a nitrate level of **2.7 mg/L**.

This Department will grant a **permanent deviation** to the Interim Certificate of Potability on condition that the nitrate removal system effectively maintains a nitrate-nitrogen contaminant level of **10 mg/L or less**.

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

This certifies that the initial sampling requirements of COMAR 26.04.04 "Well Regulations" have been met for the water supply system installed under well permit HO-95-0697. 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>

Approving Authority,



Heidi Scott, R.S.
Environmental Sanitarian
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 #:	86250	Account #:	3123
Reference:	Riverwood Lot 52	Company:	National Water Servicing
Location:	11021 Winter's View Road Ellicott City, MD 21042	Requested By:	Dave Rycke
Date/Time Collected:	9/14/2012 1015	Source:	Well Water
Date/Time Rec'd:	9/14/2012 1230	Site:	Test Port after Treatment
Chlorine ppm:	Free: ND Total: ND	Treatment:	**
Collected By:	B. Dutcher 4717BD	pH:	7.1
		Well #:	HO-95-0097

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Nitrate	2.57	mg/L	10	601	9/14/2012 / 1530 / CCH

*Nitrates
OK
DB 9-19-12*

NOTES

- 1 **Sotener Neutralizer Sediment Filter/ Nitrate Removal
- 2 mg/L = milligrams per liter (also, parts per million)
- 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 pH and Chlorine levels tested on site

Reason for Test: Use & Occupancy
Building Permit #: B-01425

Date Reported: 9/17/2012

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 #	86249	Account #:	3123
Reference:	Riverwood Lot 52	Company:	National Water Servicing
Location:	11021 Hunter's View Road Ellicott City, MD 21042	Requested By:	Dave Ryoce
Date/ Time Collected:	9/14/2012 1015	Source:	Well Water
Date/Time Rec'd:	9/14/2012 1230	Site:	Pressure Tank
Chlorine ppm:	Free: ND Total: ND	Treatment:	**
Collected By:	B. Duttner 4717BD	pH:	6.2
		Well #:	HO-95-0097

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	1.0	MPN/ 100 ml	<1.0	SM18 9223	9/15/2012 / 0945 / CCH
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	9/15/2012 / 0945 / CCH

9-19-12
Bacteria
OK
DB

NOTES

- 1 **Sample collected prior to treatment (Softener/ Neutralizer/ Sediment Filter/ Nitrate Removal)
- 2 MPN/ 100 ml = Most Probable Number [of viable bacteria] per 100 ml of sample.
- 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 pH and Chlorine level tested on site

Reason for Test: Use / Occupancy

Building Permit #: B1701425

Date Reported: 9/17/2012

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 #	86132	Account #:	3123
Reference:	Riverwood Lot 52	Company:	National Water Servicing
Location:	11021 Hunter's View Road Ellicott City, MD 21042	Requested By:	Dave Rycke
Date/ Time Collected:	9/7/2012 1041	Source:	Well Water
Date/Time Rec'd:	9/7/2012 1234	Site:	Pressure Tank
Chlorine ppm:	Free: ND Total: ND	Treatment:	Prior to Sediment Filter
Collected By:	J. Yeager 6176JY	pH:	5.7
		Well #:	HO-95-0097

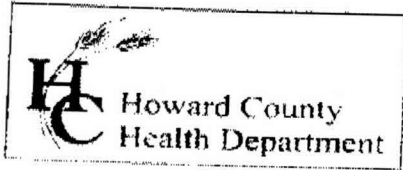
PARAMETER	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	11.1	MPN/ 100 ml	<1.0	SM18 9223	9/8/2012 / 0815 / CCH
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	9/8/2012 / 0815 / CCH
Nitrate	12.7	mg/L	10	601	9/7/2012 / 1600 / CCH
Turbidity	1.29	NTU	<10	SM18 2130R	9/7/2012 / 1430 / JKW
Sand	NS	mg/L	5	Visual/Gravimetric	9/7/2012 / 1430 / JKW

*Bad bacteria! High Nitrate!
 Rest; OK
 9-10-12 HS E-mailed
 Builder*

NOTES

- 1 mg/L = milligrams per liter (also, parts per million)
 - 2 MPN/ 100 ml = Most Probable Number [of viable bacteria] per 100 ml of sample.
 - 3 NS = None Seen (NS indicates less than 5 mg/L)
 - 4 NTU = Nephelometric Turbidity Units
 - 5 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
 - 6 ND:None Detected
 - 7 Visual well check: Sealed, vented cap
 - 8 pH and Chlorine level tested on site
- Reason for Test : Use & Occupancy
 Building Permit # : B12001425

Date Reported: 9/10/2012



Bureau of Environmental Health
 7178 Columbia Gateway Drive Columbia, MD 21046
 (410) 313-2640 Fax (410) 313-2648
 TDD (410) 313-2325 Toll Free 1-866-313-6300
 website: www.hchealth.org

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

**REQUEST FOR PERMANENT DEVIATION TO
 NITRATE STANDARDS FOR CERTIFICATE OF POTABILITY**

DATE: 9-18-12 WELL PERMIT #: HO - 95-0697
 PROPERTY OWNER: Tieluo Li + Huijun Huang
 SUBDIVISION & LOT #: RIVERWOOD # 52
 PROPERTY ADDRESS: 11021 HUNTERS VIEW RD

CONDITIONS:

- 1) The well installed under permit # HO - 95-0697 has been documented to have a nitrate level of 12.7 ppm, which exceeds the MCL of 10 ppm.
- 2) After installation and operation of a nitrate filtration system, water samples collected on 9/14/12 indicated that the nitrate contamination has been reduced to 2.57 ppm at the primary drinking tap.

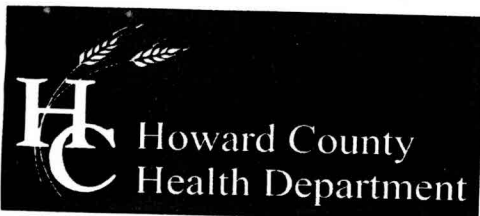
I hereby request that a Permanent Deviation to COMAR 26.04.04.09 be granted for the well installed under permit HO - 95-0697 I am fully aware of the conditions under which this deviation will be granted, and of my responsibilities as the well owner, which include advising any future buyer/ tenant of the installation, condition and maintenance responsibilities of the nitrate removal device.

Prospective Owner's Original Signature(s) [Person(s) that intend to live in the dwelling]

Tieluo Li Huijun Huang

Prospective Owner's Day Time Phone Number(s)

09122112 410-227-4288
443-220-9277



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

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

November 7, 2007

Winchester of Howard County
6905 Rockledge Drive
Suite 800
Bethesda, Maryland 20817

RE: Riverwood II Lot 52
Well Tag: HO - 95 - 0697

To Whom It May Concern:

A sample was collected from a yield test on July 2, 2007 and submitted to GPL 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 4.3 ± 2.0 picocuries/liter (pCi/L); while the **Gross Beta** level was 8.1 ± 2.7 pCi/L. The **Gross Alpha** result was below its **maximum contaminant level (MCL)** of **15 pCi/L**, while the **Gross Beta** level was below its targeted value of **50 pCi/L** (roughly equivalent to the **annual dose rate of 4 millirems/year**).

At the time of testing and with respect to these parameters, the future well water supply appears safe for all uses. No additional testing **for these parameters** will be required to secure the future Use & Occupancy. However, other standard testing will still be necessary.

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

Sincerely,

A handwritten signature in cursive script that reads 'Bert Nixon'.

Bert Nixon, Director
Bureau of Environmental Health

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

Send Report To:

Bert Nixon

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

201 W. Preston Street, Baltimore, Maryland 21201
John M. DeBoy, Dr. P.H., Director

LABORATORY ANALYSIS REQUEST

Sample Bottle No. A: H0-95-0697 No. B: _____ Field Blank Bottle No. A: _____ No. B: _____

Plant/Site Name: Riverwood II Lot 52 County: _____

Sample Source: Hunters' View Rd. Location: H0-95-0697
(well no., lab sink, sample tap, etc.)

County: 1 3 Plant No.

CHECK (one per box)

Drinking Water
Landfill
Stream
Other

Community
Non-community
Private
Other

Source (raw water)
Distribution (treated)
MCL

Emergency
Routine
Recheck
Special

Collector: K. Wolf

Telephone No: 410-313-2645

Date Collected: 7/2/07

Time Collected: _____ a.m. 1:02 p.m.

Nitric Acid Preserved: Yes No

Iced: Yes No

Submitters Code: Federal Project: Field Data: _____

Remarks: Sample collected @ end of ^{pH} Yield ^{Chlorine} test

✓	Test	EPA Code	Laboratory No.	Results (pCi/L)	Date Reported
✓	Gross Alpha	4000	<u>707013-008</u>	<u>4.3 ± 2.0</u>	<u>7/10/07</u>
✓	Gross Beta	4100		<u>8.1 ± 2.7</u>	
	Radon-222 Bottle A	4004			
	Radon-222 Bottle B	4004			
	Field Blank A	4004			
	Field Blank B	4004			
	Tritium				
	Ra - 226	4020			
	Ra - 228	4030			
	Total Uranium	4006			

Date Received: _____ / _____ / _____

Supervisor: _____