

C1 6990

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 A520414

ST/CO USE ONLY DATE RECEIVED MM DD YY

DATE WELL COMPLETED MM DD YY 06 25 2007

Depth of Well 22 260 26 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" HO-95-0710

OWNER Winchester Homes Inc last name first name STREET OR RFD Open Run Rd TOWN Elkville City SUBDIVISION Riverview Phase 2 SECTION LOT 65

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. Sandstone 0 36 Gray Granite 36 260

GROUTING RECORD yes no WELLS HAS BEEN GROUTED (Circle Appropriate Box) Y N TYPE OF GROUTING MATERIAL (Circle one) CEMENT CM BENTONITE CLAY BC NO. OF BAGS 45 46 12 NO. OF POUNDS 45 46 1128 GALLONS OF WATER 22 DEPTH OF GROUT SEAL (to nearest foot) from 0 48 TOP 52 ft. to 37 54 BOTTOM 58 ft.

CASING RECORD casing types insert appropriate code below MAIN CASING TYPE ST 6 Nominal diameter top (main) casing (nearest inch)! Total depth of main casing (nearest foot) 40

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

SCREEN RECORD screen type or open hole insert appropriate code below ST BR HO PL OT

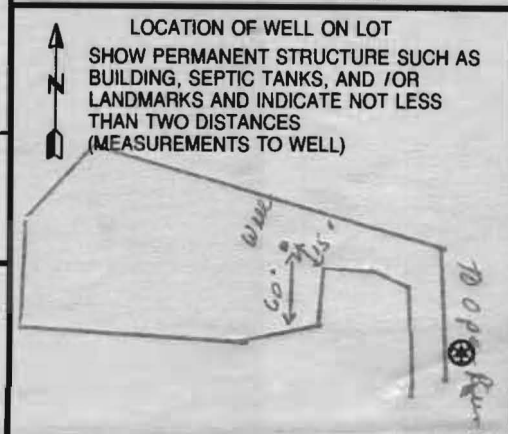
DEPTH (nearest ft.) 1 HO 38 260 2 8 9 11 15 17 21 3 23 24 26 30 32 36 4 38 39 41 45 47 51

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

PUMPING TEST 3 HOURS PUMPED (nearest hour) 8 9 PUMPING RATE (gal. per min.) 10 11 15 METHOD USED TO MEASURE PUMPING RATE Bucket WATER LEVEL (distance from land surface) BEFORE PUMPING 24 17 20 ft. WHEN PUMPING 88 22 25 ft. TYPE OF PUMP USED (for test) 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 2 (nearest foot)



NUMBER OF UNSUCCESSFUL WELLS: 0 WELL HYDROFRACTURED yes Y no N

- CIRCLE APPROPRIATE LETTER A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED E ELECTRIC LOG OBTAINED P TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO. 1 M S D 0 2 4 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 9875

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL

STATE PERMIT NUMBER

525693 please type

40-95-0710 fill in this form completely

Date Received (APA)

2/1/07

OWNER INFORMATION

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

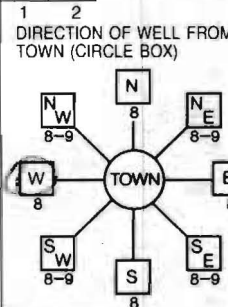
LOCATION OF WELL

Howard County, Riverwood Phase 2, Section 65, Elliott City, 5 miles from town

DRILLER INFORMATION

Joseph L. Mayne, MSD 024, Joseph L. Mayne Well Drilling Co., 5512 Ridge Rd Mt. Airy Md 21771, 1-30-07

DIRECTION OF WELL FROM TOWN (CIRCLE BOX)



open Run Rd, 300 feet from road, Tax Map 29, Blk 4, Parcel 20

WELL INFORMATION

Approx. Pumping Rate 5 gal/min, Average Daily Quantity Needed 500 gal/day

USE FOR WATER (CIRCLE APPROPRIATE BOX)

- DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION (circled), FARMING, INDUSTRIAL, PUBLIC WATER SUPPLY WELL, TEST, OBSERVATION, MONITORING, GEO-THERMAL

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Howard County, State Signature, Date Issued 2/14/07, CO Signature, Exp Date 2/14/08, North Grid 515, East Grid 0829

APPROXIMATE DEPTH OF WELL 300 FEET

APPROXIMATE DIAMETER OF WELL 6 INCH

METHOD OF DRILLING (circle one)

AIR-ROTary (circled), AIR-PERcussion, ROTARY (Hydraulic Rotary), REVerse-ROTary, DRive-POINT

REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX)

- THIS WELL WILL NOT REPLACE AN EXISTING WELL (circled), 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 H02024G007, PERMIT No 40-95-0710

SPECIAL CONDITIONS

NEED RADIUM SAMPLE

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

SOURCES OF DRILLING WATER

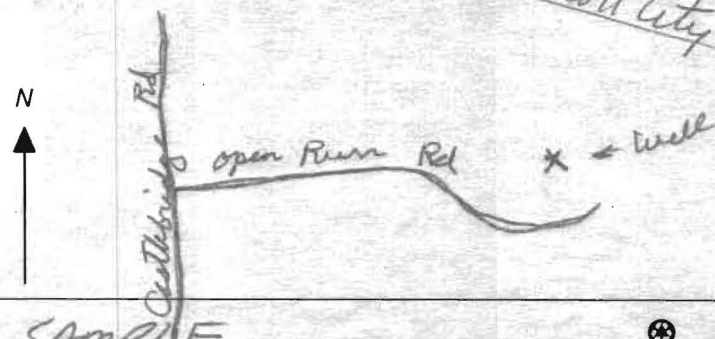
- well, 2., 3.

WRITE THE BOX NUMBER FROM THE MAP HERE

E 8209

N 5105

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





**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: NATIONAL WATER SVC Telephone #: 301-854-1333  
Address: PO BOX 138  
ASHTON, MD 20861

(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 RYCKE License# PI 0145

\*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: WINCHESTER HOMES Telephone #: 301-803-4174  
Subdivision: RIVERWOOD Lot #: 65 Well Tag #: HO-95-0710  
Site Address: 12028 OPEN RUN RD  
ELLICOTT CITY MD

<b>Submersible Pump Data</b>	<b>Pitless Adapter</b>	<b>Well Cap and Electric Conduit</b>
Make: <u>GRUNDFOS</u>	Make: <u>Campbell</u>	Two piece watertight cap: <input checked="" type="checkbox"/>
Model #: <u>1530IE10-220</u>	Model#: <u>PA 800</u>	Screened, vented well cap: <input checked="" type="checkbox"/>
Pump Capacity <u>15</u> GPM	Depth: <u>48"</u> (36" min)	Cap secured to casing: <input checked="" type="checkbox"/>
Well Yield: <u>10</u> GPM	NSF approved: <u>YES</u>	Conduit min 18" B.G.: <input checked="" type="checkbox"/>
Depth of well encountered at time of pump installation: <u>260</u> (feet)		Conduit secured to well cap: <input checked="" type="checkbox"/>

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 CPS  
Safety rope, if used, attached to inside of well casing with eye bolt N/A

**Piping to house**  
Type: Poly  
PSI: 160 (160 psi min)  
Depth of supply line: 4' (36" min)

**House Connection**  
PVC sleeved to undisturbed soil at wall penetration: YES  
Approximate length of sleeve: 5'  
Sleeve caulked and 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 \_\_\_\_\_ date 4-21-11

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

Date Insp. Requested: \_\_\_\_\_ Date Insp. Approved: 2/25/11 (MS)  
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

NON-BUILDABLE  
PRESERVATION PARCEL  
ATED TO HOWARD COUNTY, MARYLAND  
WNERS ASSOCIATION EASEMENT HOLDER  
1.80 AC.

THE PARTNER NUMBER 1004

LOT 65  
57,699 S.F.

LOT 66  
45,193 S.F.  
COMMUNITY SEPTIC LOT



sketched by  
BM

S86°52'50"E 163.94'

S 03°07'10" W 5.02'

To Open  
Run Road

470

L=121.57'  
L=141'

BENCHMARK

RIVERWOOD, PHASE 2

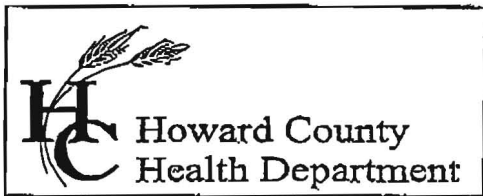
LOT 65

ENGINEERS • LAND SURVEYORS • PLANNERS  
**ENGINEERING, INC.**

FORTH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
SCALE: 1" = 50' DATE: 1/24/07

8480 BALTIMORE NATIONAL PIKE • SUITE 418 • ELLICOTT CITY, MD 21043

PHONE: 410-465-6195 FAX: 410-465-6644  
P:\1132 Homewood\1025119.dwg, LRP, 1/25/2007 8:19 AM  
mc, Kyocera Mita KM-2530 KX.pc3



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 & Withorn 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.

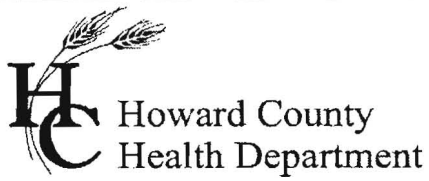
Revised 3/11/05

*Contact is:*

*Easterday*

*301-829-1440*

2006 DE 18 PM 2:32



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

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

June 9, 2011

Homeowner  
12028 Open Run Road  
Ellicott City, MD 21042

RE: Riverwood - Lot 79  
12028 Open Run Road  
Ellicott City, MD 21042  
BP #B10003715  
Well Permit #HO-95-0710

Dear Sir/Madam,

This is to advise you that the septic system for the above referenced property has been installed and inspected. **Final approval of the septic system was granted on 03/28/2011. Final approval of the well line connection to the dwelling was approved on 02/25/2011.**

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.

The raw nitrate sample results were previously documented to be 12.1 ppm. **A nitrate removal device (Reverse Osmosis) has been installed to treat the excessive nitrate contamination. The nitrate treatment device appears to be operating properly as evidenced by the water sample results taken on 05/25/2011 which indicates a nitrate level of <1.0 ppm.**

Gross Alpha and Beta samples were also collected on 06/25/2007. Results showed a Gross Alpha level of **6.0+- 2.0 pCi/L** and **Gross Beta level of 5.0+- 2.0 pCi/L**. The **Gross Alpha** was below the maximum contaminant level (MCL) of 15 pCi/L, while the Gross Beta was below the MCL of 50pCi/L. Future well water supply appears safe for all uses.

## **Permanent Deviation for Nitrates**

COMAR 26.04.04.09 prohibits approval of any water supply with a nitrate-nitrogen contaminant level in excess of 10 parts per million. **This department will grant a permanent deviation to that section of the regulation on condition that the nitrate removal system effectively maintains the nitrate-nitrogen contaminant level of 10 ppm 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 laboratory certified for water testing perform a yearly nitrate analysis. (Certified to test for nitrates)
3. If you decide to sell or rent your home in the future, you must make any potential buyer/tenant aware of the above condition.

**INTERIM CERTIFICATE OF POTABILITY**  
**(Permanent Deviation for Nitrates)**

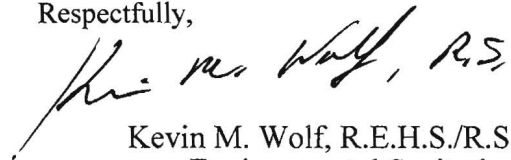
This certifies that **the initial** sampling requirements of COMAR 26.04.04 "Well Regulations" have been met for the water supply system installed under well permit #HO-95-0710. **Although the submitted sample results are in compliance with COMAR standards, the Health Department does not guarantee water supplies.** Based upon satisfactory investigation and evaluation, the Howard County Health Department as authorized by the Maryland Department of the Environment accepts this well system as required by COMAR 26.04.04.

Furthermore, under COMAR 26.04.04.09 E. *Disclosure*, any and all special conditions to this interim certificate of potability shall be disclosed to any purchaser of the property served by the well HO-95-0710 before entering into a contract of sale or lease. A person who fails to make this disclosure is subject to the penalties set out in Regulation .12F *Enforcement* and Environment Article 9-1311, Annotated Code of Maryland.

**This certificate may become final upon completion of the second bacteriological and nitrate tests, which may be taken by the health department within six months of the date of this letter. Please contact (410) 313-1773 to schedule a final water sample appointment. Currently, there is no charge for this final sampling.**

Date of Water Sample(s): 5/18/2011, 5/24/2011 & 05/25/2011  
Date of Radium Test: 06/25/2007  
Date of Well Completion: 06/25/2007

Respectfully,



Kevin M. Wolf, R.E.H.S./R.S.  
Environmental Sanitarian  
Well & Septic Program

cc: Building Inspector's office  
Community Health Services  
File



## REPORT OF ANALYSIS

Laboratory ID #:	79528	Account #:	3123
Reference:	Riverwood Lot 65	Company:	National Water Servicing
Location:	12028 Open Run Road Ellicott City, MD 21042	Requested By:	Dave Rycke
Date/ Time Collected:	5/18/2011 0950	Source:	Well Water
Date/Time Rec'd:	5/18/2011 1140	Site:	Pressure Tank
Chlorine ppm:	Free: ND Total: ND	Treatment:	**Softener/Neutralizer/Sediment Filter
Collected By:	J.Yeager 6176JY	pH:	6.0
		Well #:	HO-95-0710

PARAMETER	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME ANALYSIS
Bacteria, Coliform, Total, MPN	5.3	MPN/ 100 ml	<1.0	SM18 9223	5/19/2011 / 0830 / CCH
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	5/19/2011 / 0830 / CCH
Nitrate	12.1	mg/L	10	601	5/18/2011 / 1530 / CCH
Turbidity	10.1	NTU	<10	SM18 2130B	5/18/2011 / 1200 / KME
Sand	NS	mg/L	5	Visual/Gravimetric	5/18/2011 / 1200 / KME

*Failed  
Bacteria  
Nitrate -> Need Agreement Form  
Turbidity ->*

**NOTES**

- 1 \*\*Sample collected prior to treatment
  - 2 mg/L = milligrams per liter (also, parts per million)
  - 3 MPN/ 100 ml = Most Probable Number [of viable bacteria] per 100 ml of sample.
  - 4 NS = None Seen (NS indicates less than 5 mg/L)
  - 5 NTU = Nephelometric Turbidity Units
  - 6 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
  - 7 ND:None Detected
  - 8 Visual well check: Sealed, vented cap
  - 9 pH and Chlorine level tested on site
- Reason for Test : Use & Occupancy  
 Building Permit # : B10003715

Date Reported: 5/19/2011

# 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 #: 79637 Account #: 3123  
Reference: Riverwood Lot 65 Company: National Water Servicing  
Location: 12028 Open Run Road Requested By: Dave Rycke  
Ellicott City, MD 21042 Source: Well Water  
Date/ Time Collected: 5/24/2011 1240 Site: Pressure Tank  
Date/Time Rec'd: 5/24/2011 1343 Treatment: \*\*  
Chlorine ppm: Free: ND Total: ND pH: 5.8  
Collected By: J.Yeager 6176JY Well #: HO-95-0710

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN <u>OK</u>	<1.0	MPN/ 100 ml	<1.0	SM18 9223	5/25/2011 / 0830 / CCH
Bacteria, E. coli, MPN <u>-</u>	<1.0	MPN/ 100 ml	<1.0	SM18 9223	5/25/2011 / 0830 / CCH
Turbidity <u>OK</u>	2.11	NTU	<10	SM18 2130B	5/25/2011 / 0830 / KME
Sand <u>OK</u>	NS	mg/L	5	Visual/Gravimetric	5/25/2011 / 0830 / KME

### NOTES OK

- 1 \*\*Sample collected prior to Softener/Neutralizer/Sediment Filter/Reverse Osmosis
- 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 # : B10003715

Date Reported: 5/25/2011

# 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 #: 79643 Account #: 3123  
Reference: Riverwood Lot 64 Company: National Water Servicing  
Location: 12027 Open Run Road Requested By: Dave Rycke  
Ellicott City, MD 21042 Source: Well Water  
Date/ Time Collected: 5/25/2011 1040 Site: Reverse Osmosis Test Port  
Date/Time Rec'd: 5/25/2011 1325 Treatment: \*\*Soft./Neutralizer/Reverse Osmosis  
Chlorine ppm: Free: ND Total: ND pH: 6.1  
Collected By: K. Eichstedt 2870KE Well #: HO-95-0709

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Nitrate	<1.0	mg/L	10	601	5/25/2011 / 1545 / CCH

### NOTES

- 1 \*\*Sample collected after Reverse Osmosis prior to Softener/Neutralizer
- 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 level tested on site

Reason for Test : Use & Occupancy

Building Permit # : B11000174

Date Reported: 5/26/2011

REQUEST FOR PERMANENT DEVIATION TO  
NITRATE STANDARDS FOR CERTIFICATE OF POTABILITY

DATE: JUNE 6, 2011 WELL PERMIT #: HO-95 - 0710

PROPERTY OWNER: JUAN STEPTER / JENENE WASHINGTON  
SUBDIVISION & LOT #: RIVERWOOD LOT #65  
PROPERTY ADDRESS: 12028 OPEN RUN ROAD  
ELLCOTT CITY, MD 21042

CONDITIONS:

- 1) The well installed under permit # HO-95 -0710 has been documented to have a nitrate level of 12.1 ppm which exceeds the MCL of 10 ppm. As a result of installation and operation of a nitrate filtration system, this nitrate contamination has been reduced to 1.0 ppm at the primary dnking tap.

I hereby request that a Permanent Deviation to COMAR 26.04.04.09 be granted for the well installed under permit HO-95 -0710. 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]

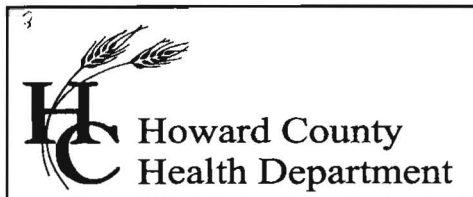
Juan Stepter

Jenene Washington

Prospective Owner's Day Time Phone Number(s)

410-241-0884

443-255-2126



Bureau of Environmental Health  
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

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

August 24, 2007

Winchester of Howard County  
6905 Rockledge Dr.  
Suite 800  
Bethesda, MD 20817

RE: Riverwood Subdivison, Lot# 65  
Well Tag: HO-95-0710

To Whom It May Concern:

A sample was collected from a yield test on June 25, 2007 and submitted to Department of Health and Mental Hygiene Laboratories to assess the possible presence of **Gross Alpha** and **Gross Beta** in the future well water supply. **Gross Alpha** and **Gross Beta** measure the total alpha and beta particle activity in a water supply. In turn, this can provide information regarding naturally occurring radiation (i.e., Radionuclides) that may exist in your area of development within the County.

Results from this screening revealed a **Gross Alpha** of  $6.0 \pm 2.0$  picocuries/liter (pCi/L); while the **Gross Beta** level was  $5.0 \pm 2.0$  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 target 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 (potability) testing will still be necessary.

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

Sincerely,

Bert Nixon, Deputy Director  
Bureau of Environmental Health

cc: Eric Dougherty, MDE Water Mgmt., Groundwater  
✓ Well & Septic 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: HO-95-0710 No. B: \_\_\_\_\_ Field Blank Bottle No. A: \_\_\_\_\_ No. B: \_\_\_\_\_

Plant/Site Name: Riverwood 2 Lot 65 County: Howard

Sample Source: Open Run Rd Location: HO-95-0710  
(well no., lab sink, sample tap, etc.)

County:  1  3 Plant No.

CHECK (one per box)

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

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

Source (raw water)	<input checked="" type="checkbox"/>
Distribution (treated)	<input type="checkbox"/>
MCL	<input type="checkbox"/>

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

Collector: K. Wolf

Telephone No: 410-313-2645

Date Collected: 6/25/07

Time Collected: \_\_\_\_\_ a.m. 12:00 p.m.

Nitric Acid Preserved: Yes  No

Iced: Yes  No

Submitters Code:   Federal Project:  Field Data: \_\_\_\_\_

Remarks: Sample collected @ Yelch L. f pH \_\_\_\_\_ Chlorine \_\_\_\_\_

✓	Test	EPA Code	Laboratory No.	Results (pCi/L)	Date Reported
✓	Gross Alpha	4000			
✓	Gross Beta	4100			
	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: \_\_\_\_\_