

DENV-CR00

|   |             |   |  |  |
|---|-------------|---|--|--|
| B 1   | <b>9880</b> | SEQUENCE NO.<br>(MDE USE ONLY)                    | STATE OF MARYLAND<br><b>APPLICATION FOR PERMIT TO DRILL WELL</b><br>please type<br><b>525693</b> | STATE PERMIT NUMBER<br><b>HO-95-0715</b><br>fill in this form completely |
| Date Received (APA)<br><b>2/1/07</b><br>8 MM DD YY  |             | OWNER INFORMATION                                 |  |  |
| 15 Last Name<br><b>Winchester Homes Inc</b>   |             | 34 First Name                                     |  |  |
| 36 Street or RFD<br><b>6905 Rockledge Dr Suite 800</b>  |             | 55  |  |  |
| 57 Town<br><b>Bethesda</b>  |             | 76 Zip<br><b>20817</b>                            |  |  |
| 70 State<br><b>MD</b>   |             | 72  |  |  |
| DRILLER INFORMATION   |             |   |  |  |
| Driller's Name<br><b>Joseph L Mayne</b>   |             | 76 License No.<br><b>MSD024</b>                   |  |  |
| Firm Name<br><b>Joseph L Mayne Well Drilling</b>  |             | 81  |  |  |
| Address<br><b>5512 Ridge Rd Mt. Airy Md 21771</b>   |             |   |  |  |
| Signature<br><b>Joseph L Mayne</b>  |             | Date<br><b>1-30-07</b>                            |  |  |
| B 2 WELL INFORMATION  |             |   |  |  |
| APPROX. PUMPING RATE<br>(GAL. PER MIN.)   |             | 8 <b>5</b> 12                                     |  |  |
| AVERAGE DAILY QUANTITY NEEDED<br>(GAL. PER DAY)   |             | 14 <b>500</b> 20                                  |  |  |
| USE FOR WATER (CIRCLE APPROPRIATE BOX)  |             |   |  |  |
| <input checked="" type="checkbox"/> DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION<br><input type="checkbox"/> FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)<br><input type="checkbox"/> INDUSTRIAL, COMMERCIAL, DEWATERING<br><input type="checkbox"/> PUBLIC WATER SUPPLY WELL<br><input type="checkbox"/> TEST, OBSERVATION, MONITORING<br><input type="checkbox"/> GEO-THERMAL           |             |   |  |  |
| NOT TO BE FILLED IN BY DRILLER<br>HEALTH DEPARTMENT APPROVAL  |             |   |  |  |
| COUNTY NAME <b>Howard</b> COUNTY NO. <b>13</b><br>STATE SIGNATURE _____ INSERT S _____<br>DATE ISSUED <b>2/14/07</b> CO SIGNATURE <b>Kim Wall</b> EXP. DATE <b>2/14/08</b><br>NORTH GRID <b>515</b> 0 0 0 EAST GRID <b>0826</b> 0 0 0   |             |   |  |  |
| APPROXIMATE DEPTH OF WELL <b>300</b> FEET   |             | NEAREST TOWN                                      |  |  |
| APPROXIMATE DIAMETER OF WELL <b>6</b> INCH  |             | MILES FROM TOWN (enter 0 if in town) <b>5</b> M I |  |  |
| METHOD OF DRILLING (circle one)   |             |   |  |  |
| BORED (or Augered)  |             | JETTED  |  |  |
| AIR-ROTary  |             | AIR-PERCussion                                    |  |  |
| CABLE   |             | ROTARY (Hydraulic Rotary)                         |  |  |
| other _____   |             | DRive-POINT                                       |  |  |
| REPLACEMENT OR DEEPEMED WELLS<br>(CIRCLE APPROPRIATE BOX)   |             |   |  |  |
| <input checked="" type="checkbox"/> THIS WELL WILL NOT REPLACE AN EXISTING WELL<br><input type="checkbox"/> THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED<br><input type="checkbox"/> THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS<br><input type="checkbox"/> 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)   |             |   |  |  |
| APPROX. PERMIT NUMBER <b>HO 2004-000</b>  |             |   |  |  |
| PERMIT No. <b>HO-95-0715</b>  |             |   |  |  |
| SPECIAL CONDITIONS<br>NOTE: APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED<br><b>NEED RADIUM SAMPLE</b>  |             |   |  |  |

B 3 LOCATION OF WELL  
 8 COUNTY **Howard**  
 23 SUBDIVISION **Riverwood Phase 2**  
 SECTION **44** LOT **70**  
 52 NEAREST TOWN **Ellicott City**  
 11 NEAR WHAT ROAD **Whithorn Way**  
 ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)  
 DISTANCE FROM ROAD **630** ENTER FT OR MI  
 TAX MAP: **29** BLK: **3** PARCEL **20**

DIRECTION OF WELL FROM TOWN (CIRCLE BOX)

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 **824 6**  
 N **518 5**

8/13/07  
 Radium Sample  
 Collected During  
 Yield Test.  
 (BB)

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

Date 8-13-2007

FIELD DATA SHEET  
HOWARD COUNTY WELL YIELD TEST

Well Permit No. HO - 95-0715  
Location of property (road) W. Kithorn Way  
Subdivision Rainwood Phase 2 Lot 70 Block        Plat        Sec.         
Well Driller Joseph Mayne Owner Winchester Homes Inc

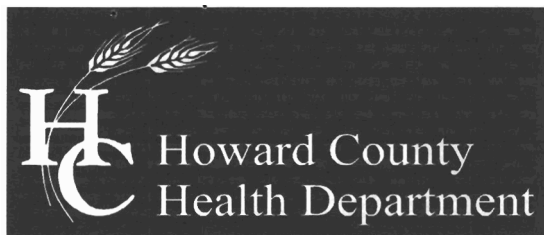
Depth of well 210'  
Distance of measuring point (M.P.) above ground 25'  
Static water level (S.W.L.) below M.P. 22'

## 1. High rate pumping -- reservoir drawdown

Time pump started 10:15 am Pumping rate 20 gpm.  
Total time 1 min to reach pumping water level 25 ft./below M.P.

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

[illegible]



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](http://www.hchealth.org)  
Facebook: [www.facebook.com/hocohealth](http://www.facebook.com/hocohealth)  
Twitter: HowardCoHealthDep

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

**INTERIM CERTIFICATE OF POTABILITY**  
**PERMANENT DEVIATION FOR BACTERIA**

Expiration Date – June 7<sup>th</sup>, 2013

December 7<sup>th</sup>, 2012

Homeowner  
11241 Whithorn Way  
Ellicott City, MD 21042

**RE: Riverwood II, Lot 70**  
**11241 Whithorn Way**  
**Building Permit: B12002674**  
**Well Permit: HO-95-0715**

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 11/29/2012. Final approval of the well line connection to the dwelling was granted on 9/11/2012. The well construction was completed on 8/13/2007. Water samples were collected on 12/5/2012, 11/28/2012 & 11/16/2012.

Gross Alpha and Beta samples were also collected on 8/13/2007. Results showed a Gross Alpha level of  $12.0 \pm 2.0$  pCi/L and Gross Beta level of  $8.0 \pm 2.0$  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 results indicate that the water samples submitted for testing contained elevated levels of coliform bacteria at the time of sampling and the untreated water is **NOT** bacteriologically safe for drinking.

After installation of a water disinfection device (UV light disinfection system), a post-treatment water sample was collected on 12/5/2012 and indicated that the treated water was free from coliform bacteria and is bacteriologically safe for drinking.

This Department will grant a **permanent deviation** to the Interim Certificate of Potability on condition that the water disinfection system effectively maintains the water free from bacteria.

**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.

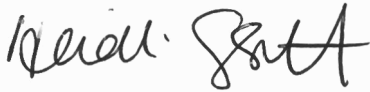
2. It is recommended that a Maryland certified water laboratory certified for bacteriological analysis perform a yearly potability analysis.
3. If you decide to sell or rent your home in the future, you must make any potential buyer/tenant aware of this permanent deviation. **A person who fails to make 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-95-0715. 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>

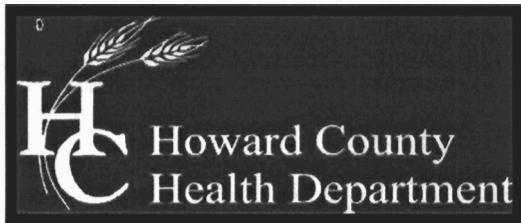
Approving Authority,



Heidi Scott, R.S.  
Environmental Sanitarian  
Well & Septic Program

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





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

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

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

DATE: 12/6/2012 WELL PERMIT #: HO - 95 - 0715

PROPERTY OWNER: Winchester Homes

SUBDIVISION & LOT #: Riverwood #70

PROPERTY ADDRESS: 11241 Whithorn Wy - Ellicott City, MD 21042

**CONDITIONS:**

- 1) Results for water samples collected on <sup>SEE</sup> Attached for the well installed under permit #HO-95-0715 indicated that the water samples contained coliform bacteria. This bacteria is used as an indicator species which can help measure the sanitary protection of the well and water supply. Coliform bacteria by themselves do not usually cause disease, but their presence may indicate that surface contamination (insects, organic material, surface water, etc.) may have entered the water supply and the water may be potentially unsafe.
- 2) Repeated chlorination of the well failed to eliminate the presence of coliform bacteria in subsequent water samples.
- 3) After installation and operation of an ultraviolet light disinfection system, water samples collected on 12-5-12 indicated that the coliform contamination has been reduced to "absent" 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 - 0715. 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 water disinfection device.

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

Dan & Cynthia Pate

Daniel T Pate / Cpate

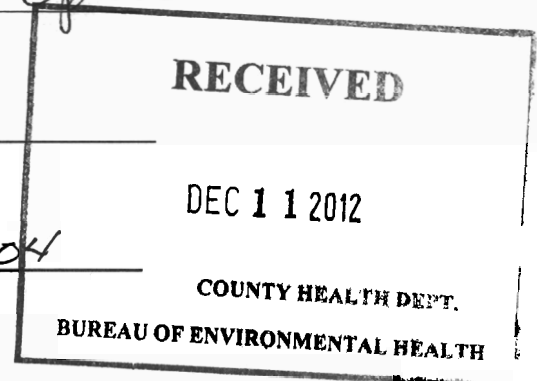
Prospective Owner's Printed Name(s)

240-899-2204

Prospective Owner's Day Time Phone Number(s)

410/531-4784

240-899-2204



**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 #: 87299 Account #: 3123  
Reference: Riverwood Lot 70 Company: National Water Servicing  
Location: 11241 Whithorn Road Requested By: Dave Rycke  
Ellicott City, MD 21042 Source: Well Water  
Date/ Time Collected: 12/5/2012 1050 Site: Port after UV Light  
Date/Time Rec'd: 12/5/2012 1229 Treatment: \*\*\*  
Chlorine ppm: Free: ND Total: ND pH: 6.7  
Collected By: J. Yeager 6176JY Well #: HO-95-0715

| PARAMETERS                     | RESULTS | UNITS       | REFERENCE | METHOD    | DATE/TIME/ANALYST      |
|--------------------------------|---------|-------------|-----------|-----------|------------------------|
| Bacteria, Coliform, Total, MPN | <1.0    | MPN/ 100 ml | <1.0      | SM18 9223 | 12/6/2012 / 1000 / BCD |
| Bacteria, E. coli, MPN         | <1.0    | MPN/ 100 ml | <1.0      | SM18 9223 | 12/6/2012 / 1000 / BCD |

**NOTES**

- 1 \*\*\*Softener/ Neutralizer/ Sediment Filter/ UV Light
- 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 # : 12002674

Date Reported: 12/6/2012

MD State Certification # 135

**RECEIVED**

DEC 11 2012

HOWARD COUNTY HEALTH DEPT.  
BUREAU OF ENVIRONMENTAL HEALTH

**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 #:      | 87298                   | Account #:    | 3123                     |
| Reference:            | Riverwood Lot 70        | Company:      | National Water Servicing |
| Location:             | 11241 Whithorn Road     | Requested By: | Dave Rycke               |
|                       | Ellicott City, MD 21042 | Source:       | Well Water               |
| Date/ Time Collected: | 12/5/2012 1050          | Site:         | Pressure Tank            |
| Date/Time Rec'd:      | 12/5/2012 1229          | Treatment:    | ***                      |
| Chlorine ppm:         | Free: ND Total: ND      | pH:           | 6.4                      |
| Collected By:         | J. Yeager 6176JY        | Well #:       | HO-95-0715               |

| PARAMETERS                     | RESULTS | UNITS       | REFERENCE | METHOD    | DATE/TIME/ANALYST      |
|--------------------------------|---------|-------------|-----------|-----------|------------------------|
| Bacteria, Coliform, Total, MPN | 94.5    | MPN/ 100 ml | <1.0      | SM18 9223 | 12/6/2012 / 1000 / BCD |
| Bacteria, E. coli, MPN         | <1.0    | MPN/ 100 ml | <1.0      | SM18 9223 | 12/6/2012 / 1000 / BCD |

**NOTES**

- 1 \*\*\*Prior to Softener/ Neutralizer/ Sediment Filter/ UV Light
- 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 &amp; Occupancy

Building Permit # : 12002674

Date Reported: 12/6/2012

MD State Certification # 133

**RECEIVED**

DEC 11 2012

HOWARD COUNTY HEALTH DEPT.  
BUREAU OF ENVIRONMENTAL HEALTH



**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 #:      | 87225                   | Account #:    | 3123                     |
| Reference:            | Riverwood Lot 70        | Company:      | National Water Servicing |
| Location:             | 11241 Whithorn Road     | Requested By: | Dave Rycke               |
|                       | Ellicott City, MD 21042 | Source:       | Well Water               |
| Date/ Time Collected: | 11/28/2012 1045         | Site:         | Pressure Tank            |
| Date/Time Rec'd:      | 11/28/2012 1510         | Treatment:    | None                     |
| Chlorine ppm:         | Free: ND Total: ND      | pH:           | 6.9                      |
| Collected By:         | B. Dutterer 4717BD      | Well #:       | HO-95-0715               |

| PARAMETERS                     | RESULTS | UNITS       | REFERENCE | METHOD    | DATE/TIME/ANALYST       |
|--------------------------------|---------|-------------|-----------|-----------|-------------------------|
| Bacteria, Coliform, Total, MPN | 129.8   | MPN/ 100 ml | <1.0      | SM18 9223 | 11/29/2012 / 1000 / CCH |
| Bacteria, E. coli, MPN         | <1.0    | MPN/ 100 ml | <1.0      | SM18 9223 | 11/29/2012 / 1000 / CCH |

**NOTES**

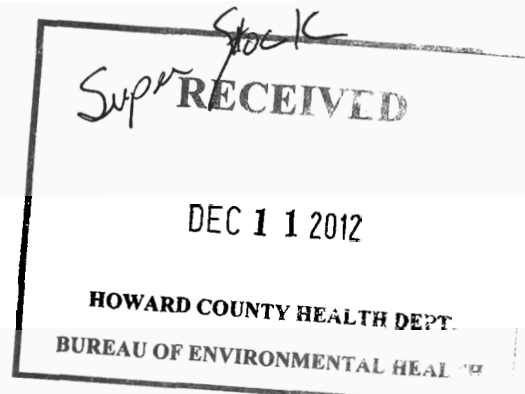
- 1 MPN/ 100 ml = Most Probable Number [of viable bacteria] per 100 ml of sample.
- 2 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 3 ND:None Detected
- 4 Visual well check: Sealed, vented cap
- 5 pH and Chlorine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

Reason for Test : Use &amp; Occupancy

Building Permit # : 12002674

Date Reported: 11/29/2012

MD State Certification # 133



**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 #: 87082 Account #: 3123  
Reference: Riverwood Lot 70 Company: National Water Servicing  
Location: 1241 Whithorn Road Requested By: Dave Rycke  
Ellicott City, MD 21042 Source: Well Water  
Date/ Time Collected: 11/16/2012 1112 Site: Pressure Tank  
Date/Time Rec'd: 11/16/2012 1320 Treatment: None  
Chlorine ppm: Free: ND Total: ND pH: 6.4  
Collected By: J. Yeager 6176JY Well #: HO-95-0715

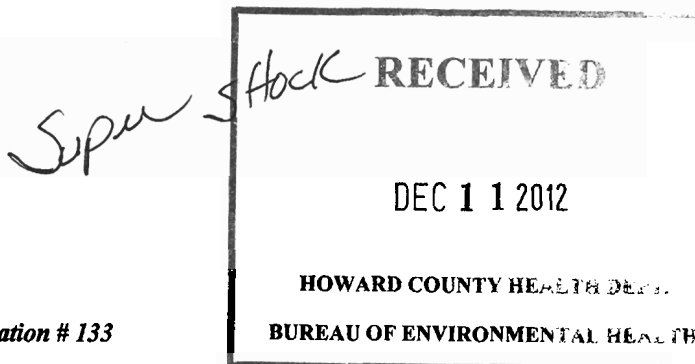
| PARAMETERS                     | RESULTS | UNITS       | REFERENCE | METHOD             | DATE/TIME/ANALYST       |
|--------------------------------|---------|-------------|-----------|--------------------|-------------------------|
| Bacteria, Coliform, Total, MPN | 34.4    | MPN/ 100 ml | <1.0      | SM18 9223          | 11/17/2012 / 1015 / SNZ |
| Bacteria, E. coli, MPN         | <1.0    | MPN/ 100 ml | <1.0      | SM18 9223          | 11/17/2012 / 1015 / SNZ |
| Nitrate                        | <1.0    | mg/L        | 10        | 601                | 11/16/2012 / 1615 / CCH |
| Turbidity                      | 4.56    | NTU         | <10       | SM18 2130B         | 11/16/2012 / 1346 / JKW |
| Sand                           | NS      | mg/L        | 5         | Visual/Gravimetric | 11/16/2012 / 1345 / JKW |

**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 # :** 12002674Date Reported: 11/19/2012

MD State Certification # 133



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**REPORT OF ANALYSIS**

|                       |                         |               |                          |
|-----------------------|-------------------------|---------------|--------------------------|
| Laboratory ID #:      | 87299                   | Account #:    | 3123                     |
| Reference:            | Riverwood Lot 70        | Company:      | National Water Servicing |
| Location:             | 11241 Whithorn Road     | Requested By: | Dave Rycke               |
|                       | Ellicott City, MD 21042 | Source:       | Well Water               |
| Date/ Time Collected: | 12/5/2012 1050          | Site:         | Port after UV Light      |
| Date/Time Rec'd:      | 12/5/2012 1229          | Treatment:    | ***                      |
| Chlorine ppm:         | Free: ND Total: ND      | pH:           | 6.7                      |
| Collected By:         | J. Yeager 6176JY        | Well #:       | HQ-95-0715               |

| PARAMETERS                     | RESULTS | UNITS       | REFERENCE | METHOD    | DATE/TIME/ANALYST      |
|--------------------------------|---------|-------------|-----------|-----------|------------------------|
| Bacteria, Coliform, Total, MPN | <1.0    | MPN/ 100 ml | <1.0      | SM18 9223 | 12/6/2012 / 1000 / BCD |
| Bacteria, E. coli, MPN         | <1.0    | MPN/ 100 ml | <1.0      | SM18 9223 | 12/6/2012 / 1000 / BCD |

Bacteria  
OK 12/7/12  
HS

**NOTES**

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Reason for Test : Use & Occupancy  
Building Permit # : 12002674

Date Reported: 12/6/2012

**FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.**

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**REPORT OF ANALYSIS**

|                       |                         |               |                          |
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*Bad coli form  
FAIL HS*

**NOTES**

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**REPORT OF ANALYSIS**

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| Date/Time Rec'd:      | 11/28/2012 1510         | Treatment:    | None                     |
| Chlorine ppm:         | Free: ND Total: ND      | pH:           | 6.9                      |
| Collected By:         | B. Dutterer 4717BD      | Well #:       | HO-95-0715               |

| PARAMETERS                     | RESULTS | UNITS       | REFERENCE | METHOD    | DATE/TIME/ANALYST       |
|--------------------------------|---------|-------------|-----------|-----------|-------------------------|
| Bacteria, Coliform, Total, MPN | 129.8   | MPN/ 100 ml | <1.0      | SM18 9223 | 11/29/2012 / 1000 / CCH |
| Bacteria, E. coli, MPN         | <1.0    | MPN/ 100 ml | <1.0      | SM18 9223 | 11/29/2012 / 1000 / CCH |

Coliform - FAIL  
HS

**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 and Chlorine level tested on site

Reason for Test : Use & Occupancy  
Building Permit #: 12002674

Super Stock

Date Reported: 11/29/2012

MD State Certification # 133

**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 #       | 87082                   | Account #:    | 3123                     |
| Reference:            | Riverwood Lot 70        | Company:      | National Water Servicing |
| Location:             | 1241 Whithorn Road      | Requested By: | Dave Rycke               |
|                       | Ellicott City, MD 21042 | Source:       | Well Water               |
| Date/ Time Collected: | 11/16/2012 1112         | Site:         | Pressure Tank            |
| Date/Time Rec'd       | 11/16/2012 1320         | Treatment:    | None                     |
| Chlorine ppm:         | Free: ND Total: ND      | pH:           | 6.4                      |
| Collected By:         | J. Yeager 6176JY        | Well #:       | HO-95-0115               |

| PARAMETERS                     | RESULTS | UNITS       | REFERENCE | METHOD             | DATE/TIME/ANALYST       |
|--------------------------------|---------|-------------|-----------|--------------------|-------------------------|
| Bacteria, Coliform, Total, MPN | 34.4    | MPN/ 100 ml | <1.0      | SM18 9223          | 11/17/2012 / 1015 / SNZ |
| Bacteria, E. coli, MPN         | <1.0    | MPN/ 100 ml | <1.0      | SM18 9223          | 11/17/2012 / 1015 / SNZ |
| Nitrate                        | <1.0    | mg/L        | 10        | 601                | 11/16/2012 / 1615 / CCH |
| Turbidity                      | 4.56    | NTU         | <10       | SM18 2130B         | 11/16/2012 / 1346 / JKW |
| Sand                           | NS      | mg/L        | 5         | Visual/Gravimetric | 11/16/2012 / 1345 / JKW |

*Coliform Fail  
others 'OK', need resample  
for Bacteria*

**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 #: 12002674

Date Reported: 11/19/2012



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



**FAXED**  
9-11-12

**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.**

: NATIONAL WATER SVC Telephone #: 301-854-1323  
P.O. BOX 138  
ASHTON, MD 20861

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

Licensed Well Pump Installer

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 #:

Subdivision: RIVERWOOD

Lot #: 70 Well Tag #: HO-95-0715

Site Address: 11241 WHITHORN WAY  
ELLICOTT CITY

**Submersible Pump Data**

Make: GRUNDFOS

Model #: 15566 07180

Pump Capacity: 15 GPM

Well Yield: 20 GPM

Depth of well encountered at time of pump installation: 210 (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 CPS

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

**Pitless Adapter**

Make: CAMPBELL

Model #: PA 800

Depth: 48" (36" min)

NSF approved: YES

**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: ☒

**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

9-11-12

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

Date Insp. Requested: \_\_\_\_\_

Date Insp. Approved: 9-11-12 OB 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



OK (K) 2/14/07  
 Bm staked

3" FM

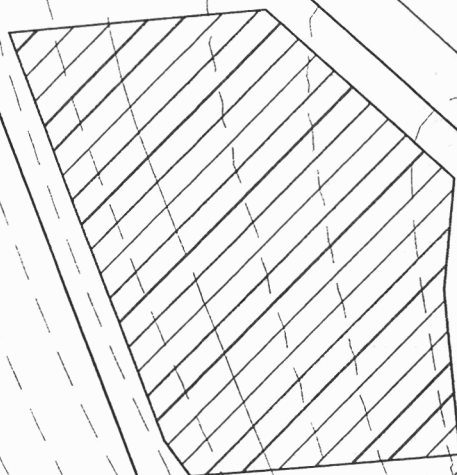
75' STREAM B

COMMUNITY SEPTIC LOT

LOT 70

53,412 S.F.

(P)



21.8'

LOT 71

48,779 S.F.

Sto wh. thors  
 valley



BENCHMARK

RIVERWOOD, PHASE 2

LOT 70

FORTH ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

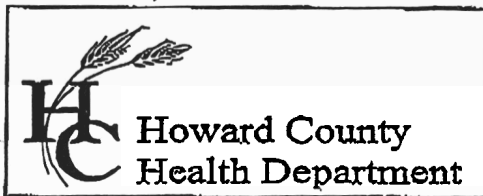
SCALE: 1" = 50' DATE: 1/24/07

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

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

PHONE 410-465-6105 FAX 410-465-6644  
 P:\1132 Homewood\DWG\701102519.dwg LOR 1/25/2007 8:20:12 AM  
 inc. Kycera Mita KM-2530 KX.pc3

NON-BUILDABLE  
 PRESERVATION PARCEL W  
 DEDICATED TO HOWARD COUNTY, MARYLAND  
 HOMEOWNERS ASSOCIATION EASEMENT UNDER



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 & Whitcomb 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.

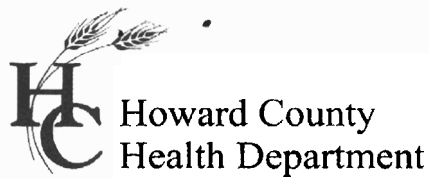
Revised 3/11/05

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

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

October 19, 2007

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

RE: Riverwood II Lot # 70  
Well Tag: HO - 95 - 0715

To Whom It May Concern:

A sample was collected from a yield test on August 13, 2007 and submitted to the Department of Health & Mental Hygiene Laboratory 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  $12.0 \pm 2.0$  picocuries/liter (pCi/L); while the **Gross Beta** level was  $8.0 \pm 2.0$  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 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,

Bert Nixon, Director  
Bureau of Environmental Health

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