

C1-3815 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.

COUNTY NUMBER (13) A516084

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

DATE WELL COMPLETED MM DD YY 11/11/04

Depth of Well 22 640 26 (TO NEAREST FOOT) 1/24/05

PERMIT NO. FROM "PERMIT TO DRILL WELL" HO-94-4036

OWNER Winchester Homes, Inc. STREET OR RFD Open Run Road TOWN Ellicott City SUBDIVISION Riverwood SECTION 1 LOT 15

WELL LOG table with columns: DESCRIPTION, FEET (FROM, TO), check if water bearing. Includes entries for topsoil, brown rocky clay, brown sandstone, grayish/blue mica, tan sandstone, blueish/gray mica, tan sandstone, gray mica, sandstone, gray mica, sandstone, and cobblestone.

GROUTING RECORD section including: WELL HAS BEEN GROUTED (Y), TYPE OF GROUTING MATERIAL (CM, BC), NO. OF BAGS (69), NO. OF POUNDS (6900), GALLONS OF WATER (414), DEPTH OF GROUT SEAL (45 ft).

CASING RECORD section including: casing types insert appropriate code below (ST, CO, PL, OT), MAIN CASING TYPE (ST), Nominal diameter top (main) casing (6 inch), Total depth of main casing (89 feet).

OTHER CASING (if used) section with diameter and depth fields.

SCREEN RECORD section including: screen type or open hole (ST, BR, HO, PL, OT), DEPTH (nearest ft.) (87, 640).

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED (Y) (N)

CIRCLE APPROPRIATE LETTER: A (well abandoned and sealed), 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...

DRILLERS LIC. NO. MWD 040, DRILLERS SIGNATURE (Beate J. Estabrook), LIC. NO. JWD 727.

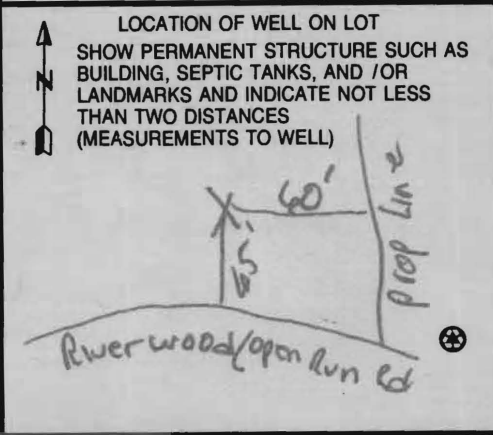
SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

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 74 75 76 TELESCOPE CASING LOG INDICATOR OTHER DATA

PUMPING TEST section including: PUMPING TEST (C3), HOURS PUMPED (3), PUMPING RATE (8.5 gal. per min.), METHOD USED TO MEASURE PUMPING RATE (Bucket), WATER LEVEL (distance from land surface) BEFORE PUMPING (42 ft), WHEN PUMPING (233 ft), TYPE OF PUMP USED (S submersible).

PUMP INSTALLED section including: DRILLER INSTALLED PUMP (YES NO), IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS, TYPE OF PUMP INSTALLED (S), CAPACITY: GALLONS PER MINUTE (31), PUMP HORSE POWER (37), PUMP COLUMN LENGTH (43), CASING HEIGHT (49) above LAND SURFACE (2 feet).



B 1 9717 SEQUENCE NO. (MDE USE ONLY)

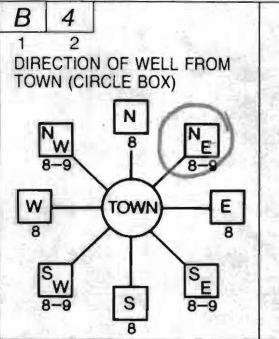
STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL please type 520762

STATE PERMIT NUMBER HO-94-4036 fill in this form completely

DATE RECEIVED (APA) 9766 OWNER INFORMATION Winchester Homes, Inc 6905 Rockledge Drive, Suite 800 Bethesda, Md 20817

LOCATION OF WELL HOWARD COUNTY 21 RIVERWOOD SUBDIVISION 1 CLARKSVILLE NEAREST TOWN 3 MILES FROM TOWN

DRILLER INFORMATION George F. Easterday MWD 040 L. Franklin Easterday, Inc. 9265 Brown Church Rd., MT. Airy, Md. 21771



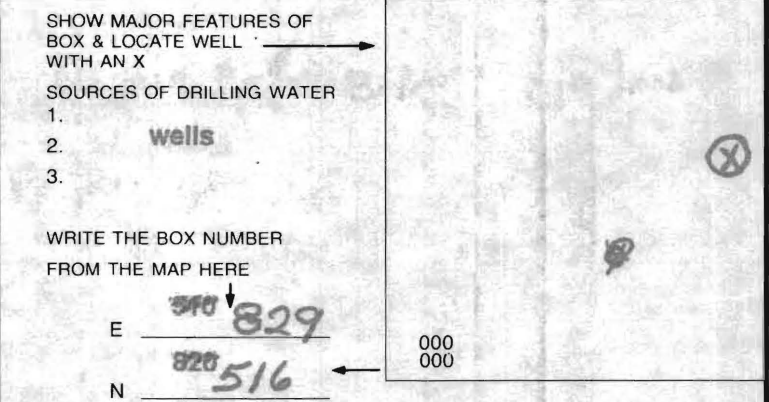
Open Run Road NEAR WHAT ROAD 30 ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX) WEST EAST SOUTH DISTANCE FROM ROAD Ft. 50 ENTER FT OR MI 38 39 TAX MAP: 29 BLK: 4 PARCEL 20

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

USE FOR WATER (CIRCLE APPROPRIATE BOX) D DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION F FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION) I INDUSTRIAL, COMMERCIAL, DEWATERING P PUBLIC WATER SUPPLY WELL T TEST, OBSERVATION, MONITORING G GEO-THERMAL

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL HOWARD COUNTY NAME 13 A516084 STATE SIGNATURE DATE ISSUED 10/14/2004 Brian Baber 10/14/2005 CO SIGNATURE EXP. DATE NORTH GRID 516 000 EAST GRID 829 000

APPROXIMATE DEPTH OF WELL 300 FEET APPROXIMATE DIAMETER OF WELL 6 INCH NEAREST INCH



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 DEEPEINED WELLS (CIRCLE APPROPRIATE BOX) N THIS WELL WILL NOT REPLACE AN EXISTING WELL Y THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED S THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS D THIS WELL WILL DEEPEIN AN EXISTING WELL PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEINED (IF AVAILABLE) 41 52

Not to be filled in by driller (MDE OR COUNTY USE ONLY) APPROP. PERMIT NUMBER HO2004G007 PERMIT No. HO-94-4036

SPECIAL CONDITIONS NOTE - APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED



**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: P.O. 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 #: \_\_\_\_\_  
Subdivision: RIVERWOOD Lot #: 15 Well Tag #: HO-94-4036  
Site Address: 12044 OPEN RUN RD  
ELICOTT CITY

<b><u>Submersible Pump Data</u></b>	<b><u>Pitless Adapter</u></b>	<b><u>Well Cap and Electric Conduit</u></b>
Make: <u>GRUND FOS</u>	Make: <u>CAMPBELL</u>	Two piece watertight cap: <u>Y</u>
Model #: <u>15 SQS 10.250</u>	Model#: _____	Screened, vented well cap: <u>Y</u>
Pump Capacity: <u>15</u> GPM	Depth: <u>50</u> (36" min)	Cap secured to casing: <u>Y</u>
Well Yield: <u>650</u> GPM	NSF approved: <u>Y</u>	Conduit min 18" B.G.: <u>Y</u>
Depth of well encountered at time of pump installation: <u>640</u> (feet)		Conduit secured to well cap: <u>Y</u>

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: POLY  
PSI: 160 (160 psi min)  
Depth of supply line: 42 (36" min)

**House Connection**  
PVC sleeved to undisturbed soil at wall penetration: Yes  
Approximate length of sleeve: 18 FT  
Sleeve caulked and sealed properly: Yes

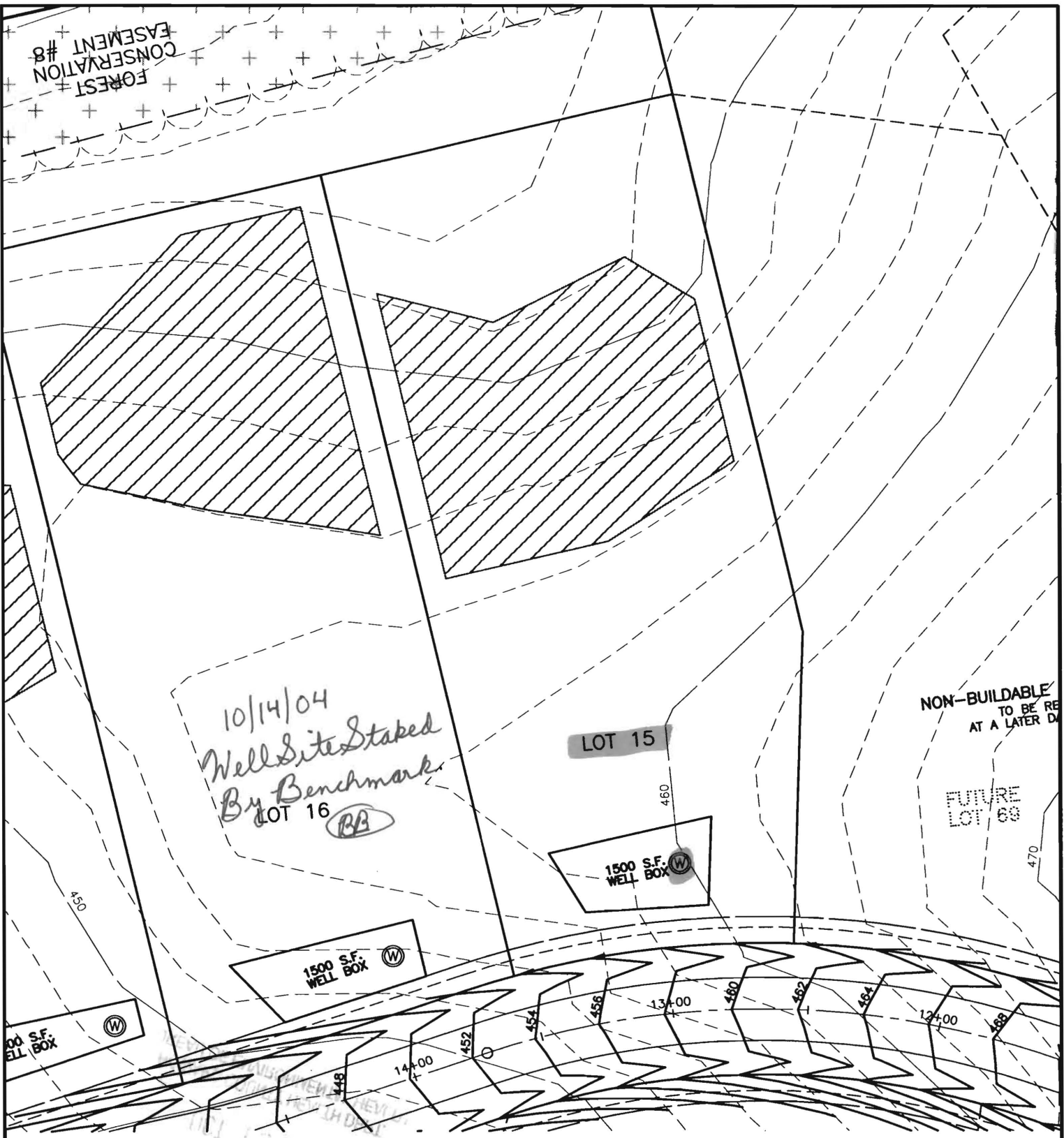
The water supply line is required to be at least ten feet from the septic tank, pump chamber, sewage piping, distribution box, drainfields, and sewage reserve area. If this cannot be accomplished, contact this office for approval prior to installation.

Signature of company representative responsible for installation \_\_\_\_\_ date 4/1/10

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

Date Insp. Requested: \_\_\_\_\_ Date Insp. Approved: 1/14/2010 B3  
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

FOREST CONSERVATION EASEMENT #8



10/14/04  
Well Site Staked  
By Benchmark  
LOT 16 (BB)

LOT 15

NON-BUILDABLE  
TO BE RE  
AT A LATER D

FUTURE  
LOT 68

1500 S.F.  
WELL BOX

1500 S.F.  
WELL BOX

1500 S.F.  
WELL BOX

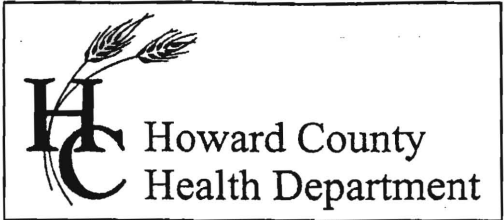
RIVERWOOD

LOT 15

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

8480 BALTIMORE NATIONAL PIKE • SUITE 418 • ELLICOTT CITY, MD 21043  
PHONE: 410-465-6105 FAX: 410-465-6644

THIRD ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
SCALE: 1" = 50' DATE: 10/12/04



3525 H Ellicott Mills Drive • Ellicott City, MD 21043  
(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

### ATTENTION WELL DRILLERS!!!

When submitting a well application for a new or replacement well, please indicate ~~one of~~ the following:

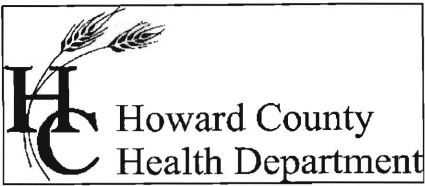
- The well site has been staked by Benchmark Engineering on June '04 and is ready for site inspection.
- \_\_\_\_\_ will call the Health Department for a time to meet in the field to verify a well location.
- Site plan for new well is attached to well permit application.

Please attach this sheet when submitting your green application. This should help improve communication allowing a more timely service for our citizens.

KN      Winchester Homes

<u>LOTS</u>	<u>1-10</u>	<u>Phase I</u>
	<u>12-23</u>	<u>Riverwood</u>
	<u>34-41</u>	

All are staked



Bureau of Environmental Health  
7178 Columbia Gateway Drive Columbia, Maryland 21046-2132  
(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

April 19, 2010

Homeowner  
12044 Open Run Road  
Ellicott City, MD 21042

RE: Riverwood I, Lot 15  
12044 Open Run Road  
BP# B09002805  
Well Tag #: HO-94-4036

Dear Sir:

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 01/20/2010. Final approval of the well line connection to the dwelling was approved on 01/14/2010.**

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 water sample results were found to be in compliance with COMAR water quality standards.

Gross Alpha and Beta samples were also collected on 04/08/2010. Both findings were below the maximum limit suggested by the EPA. At the time of the 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 and Occupancy.

Enclosed with this certificate are copies of the septic permit and the septic as-built, along with important information regarding the use and maintenance of your septic system. Please read through carefully and thoroughly. Any questions regarding your well and/or septic, please call this office for guidance 410-313-1771.

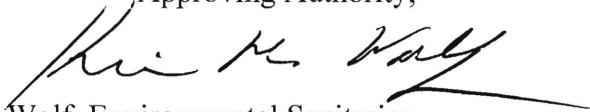
#### INTERIM CERTIFICATE OF POTABILITY

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-94-4036. 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.

This certificate may become final upon completion of the second bacteriological test, which is to be taken by the county health department within six months of receipt 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 Samples: 04/08/2010  
Date of Samples for Gross Alpha & Beta: 04/08/2010  
Date of Well Completion: 11/11/2004

Approving Authority,



Kevin M. Wolf, Environmental Sanitarian  
Bureau of Environmental Health

# FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

1413 Old Taneytown Rd. Westminster, MD (410) 848-1014 (410) 876-4534 FAX (410) 848-0298

## REPORT OF ANALYSIS

Laboratory ID #: 74826 Account #: 3123  
Reference: Riverwood Lot #15 Company: National Water Servicing  
Location: 12044 Open Run Road Requested By: Dave Rycke  
Ellicott City, MD 21042 Source: Well Water  
Date/ Time Collected: 4/8/2010 1100 Site: Pressure Tank  
Date/Time Rec'd: 4/8/2010 1349 Treatment: Neutralizer/Softener/Sediment Filter\*\*  
Chlorine ppm: Free: ND Total: ND pH: 6.8  
Collected By: J. Yeager 6176JY Well #: HO-94-4036

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	4/9/2010 / 0900 / KME
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	4/9/2010 / 0900 / KME
Nitrate	2.25	mg/L	10	601	4/9/2010 / 1000 / CCH
Turbidity	3.68	NTU	<10	SM18 2130B	4/9/2010 / 0950 / KME
Sand	NS	mg/L	5	Visual/Gravimetric	4/9/2010 / 0945 / KME

### 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 pH and Chlorine level tested on site
- 9 Visual well check: Scaled, vented cap

Reason for Test : Use & Occupancy  
Building Permit # : B-09-002805

Date Reported: 4/9/2010

# FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

1413 Old Taneytown Rd. Westminster, MD (410) 848-1044 (410) 870-4554 FAX (410) 848-0298

## REPORT OF ANALYSIS

Laboratory ID #: 74827 Account #: 3123  
Reference: Riverwood Lot #15 Company: National Water Servicing  
Location: 12044 Open Run Road Requested By: Dave Rycke  
Ellicott City, MD 21042 Source: Well Water  
Date/ Time Collected: 4/8/2010 1100 Site: Pressure Tank  
Date/Time Rec'd: 4/8/2010 1349 Treatment: Neutralizer/Softener/Sediment Filter\*\*  
Chlorine ppm: Free: ND Total: ND pH: 6.8  
Collected By: J.Yeager 6176JY Well #: HO-94-4036

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Gross Alpha	3.9	pCi/L	15	900.0	4/10/2010 / 1039 / MJN
Gross Beta	5.2	pCi/L	50	900.0	4/10/2010 / 1039 / MJN
Radon	341	pCi/L	----	600/2-87-082	4/9/2010 / 0936 / MJN

### NOTES

- 1 \*\*\*Sample collected prior to treatment
- 2 Gross Alpha Detection Limit: 1.3 pCi/L; Gross Beta Detection Limit: 1.8 pCi/L; Radon Detection Limit: 7.8 pCi/L
- 3 pCi/L = picocuries per liter
- 4 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 5 Sub-contracted to Lab # 128
- 6 ND:None Detected
- 7 pH and Chlorine level tested on site
- 8 Visual well check: Sealed, vented cap

Reason for Test : Use & Occupancy  
Building Permit # : B-09-002805

Date Reported: 4/12/2010