

C1 3842 (MDE USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT

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 AS16 DB4

ST/CO USE ONLY DATE RECEIVED MM DD YY

DATE WELL COMPLETED MM DD YY 5 5 05

Depth of Well 22 200 26 (TO NEAREST FOOT) PERMIT NO. FROM "PERMIT TO DRILL WELL" MD 94 - 4062

OWNER Winchester Homes last name first name STREET OR RFD Kingsley Ct TOWN Ellicott City SUBDIVISION Riverview SECTION 1 LOT 40

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. Rows include Top Soil, Brown mica, Grey mica, Grey mica w/ quartz, Quartz, Grey mica w/ quartz.

GROUTING RECORD

WELL HAS BEEN GROUTED (Circle Appropriate Box) YES Y NO N TYPE OF GROUTING MATERIAL (Circle one) CEMENT CM BENTONITE CLAY BC NO. OF BAGS 25 NO. OF POUNDS 2500 GALLONS OF WATER 150 DEPTH OF GROUT SEAL (to nearest foot) from 0 85 ft. to 54 BOTTOM 58 ft.

CASING RECORD

MAIN CASING TYPE ST Nominal diameter top (main) casing (nearest inch)! 6 Total depth of main casing (nearest foot) 92'

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

SCREEN RECORD

screen type or open hole ST BR HO insert appropriate code below

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. Row 1: H0 90 200

DIAMETER OF SCREEN (NEAREST INCH) 56 60

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

PUMPING TEST

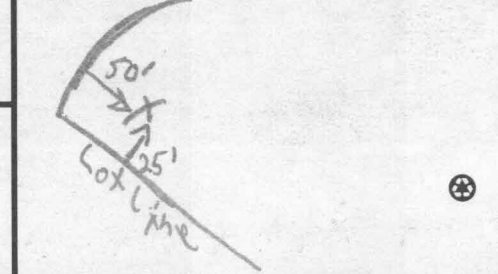
HOURS PUMPED (nearest hour) 3/8 9 PUMPING RATE (gal. per min.) 15 METHOD USED TO MEASURE PUMPING RATE Bucket WATER LEVEL (distance from land surface) BEFORE PUMPING 36/17 20 ft. WHEN PUMPING 65/22 25 ft. TYPE OF PUMP USED (for test) A air P piston T turbine C centrifugal R rotary O other (describe below) J jet 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 - below LAND SURFACE 2 (nearest foot)

LOCATION OF WELL ON LOT

SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND /OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)



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 MWD 040

DRILLERS SIGNATURE George F. Eadealey (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO. 1 AWD 788

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

B 1 9732

SEQUENCE NO. (MDE USE ONLY)

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

STATE PERMIT NUMBER HO-94-4062 fill in this form completely

DATE RECEIVED (APA) 01/01/04 OWNER INFORMATION 9781 Winchester Homes, Inc 6905 Rockledge Drive, Suite 800 Bethesda, Md 20817

LOCATION OF WELL Howard Riverwood 23 SUBDIVISION 1 LOT 40 Clarksville Ellicott City

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

Kinsale Court ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX) DISTANCE FROM ROAD 40 FT. TAX MAP: 23 BLK: 21 PARCEL 26

WELL INFORMATION APPROX. PUMPING RATE 500 AVERAGE DAILY QUANTITY NEEDED 500

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL Howard (13) A516084 COUNTY NAME COUNTY NO. STATE SIGNATURE DATE ISSUED 10/27/04 CO-SIGNATURE EXP. DATE 10/27/05

USE FOR WATER (CIRCLE APPROPRIATE BOX) D DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION

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

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X SOURCES OF DRILLING WATER wells WRITE THE BOX NUMBER FROM THE MAP HERE

METHOD OF DRILLING (circle one) BORED (or Augered) AIR-ROTary

REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX) N THIS WELL WILL NOT REPLACE AN EXISTING WELL

DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION 14K1

Not to be filled in by driller (MDE OR COUNTY USE ONLY) APPROX. PERMIT NUMBER HO 2004 G 007 PERMIT No. HO-94-4062

SPECIAL CONDITIONS



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

= 6/26/07 FAXED

**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 SERVICE Telephone #: 301-854-1333  
Address: P.O. Box 138  
Ashbn, 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

**\*A licensed individual must perform the actual installation. Apprentices must be under the supervision of a licensed journeyman or master plumber, pump installer or well driller. Licenses may be subjected to field verification. Unlicensed individuals may be reported to the appropriate licensing agency.**

Name of Property Owner: WINCHESTER / CAMBERLEY Telephone #: \_\_\_\_\_  
Subdivision: RIVERWOOD Lot #: 40 Well Tag #: HO-94-4062  
Site Address: 11215 KINSALE CT  
ELICOTT CITY

**Submersible Pump Data**

Make: GRUNDFOS  
Model #: 15 SQE10-220  
Pump Capacity 15 GPM  
Well Yield: 15 GPM

**Pitless Adapter**

Make: Bil  
Model#: PA100  
Depth: 47" (36" min)  
NSF/WSC approved: YES

**Well Cap and Electric Conduit**

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

Depth of well encountered at time of pump installation: 200 (feet)

If pump capacity exceeds well yield, a low water cut off switch is required by NSPC 1990 Section 17.8.4

Torque arrestors, Cable guards, or other acceptable method used- Must circle one

Safety rope, if used, attached to brass rope adapter or other acceptable method inside of well casing

**Piping to house**

Type: AQUA SET  
PSI: 160 (160 psi min)  
Depth of supply line: 47" (36" min)

**House Connection**

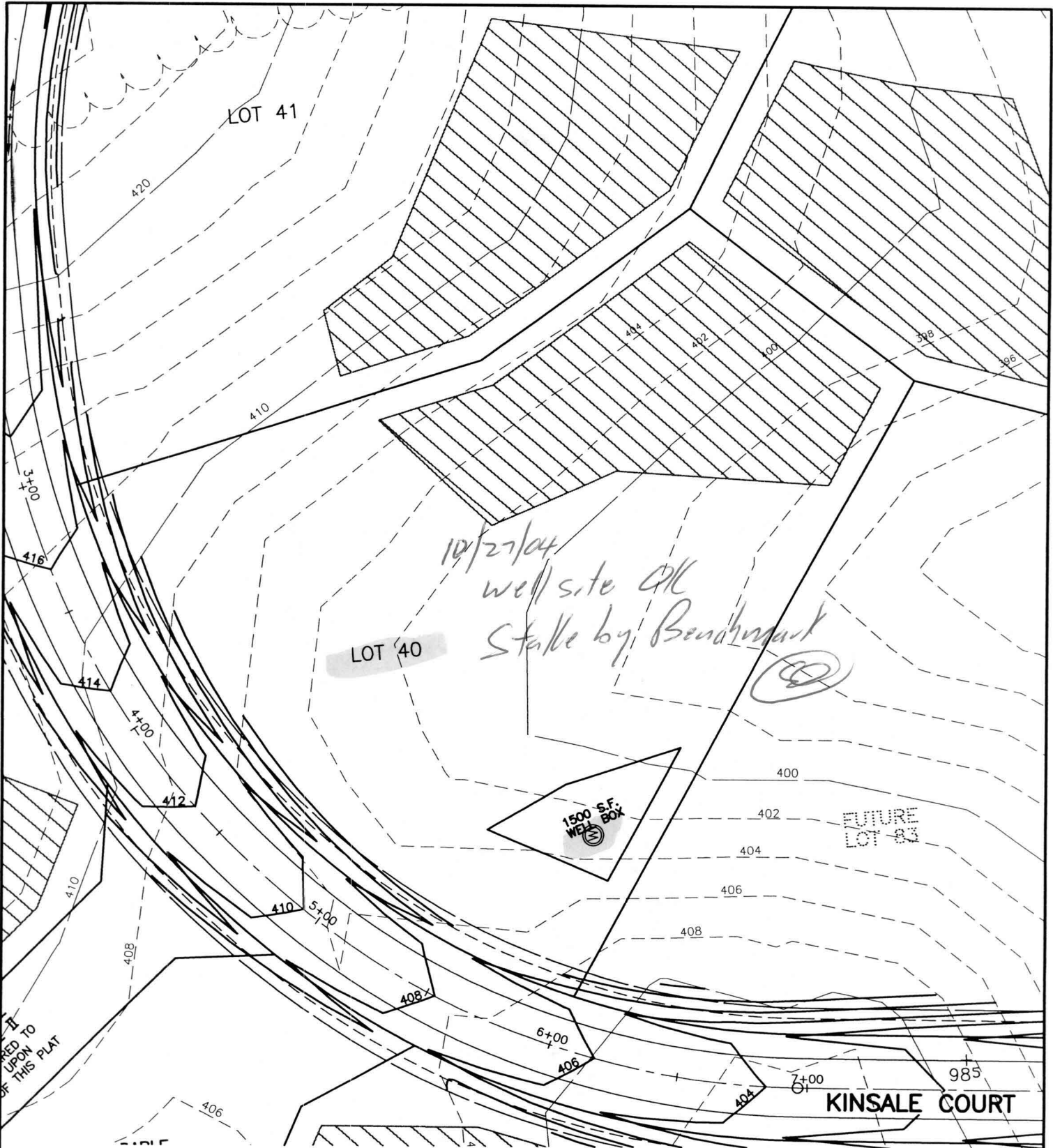
PVC sleeve to undisturbed soil at wall penetration: YES  
Approximate length of sleeve: 5  
Sleeve caulked and sealed properly: YES

**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: 6/26/07

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

Date Insp. Requested: \_\_\_\_\_ Date Insp. Approved: 3/15/07 Inspector: KW  
Inspection Data: Pitless adapter watertight & water supply line at least 36" below grade ✓  
Two piece cap installed and attached to casing securely ✓  
Elec. conduit extends at least 18" below grade/attached to cap properly ✓  
Safety rope not seen outside of well cap/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 ✓



**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



Howard County  
Health Department

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*

*LOTS*

*1-10*

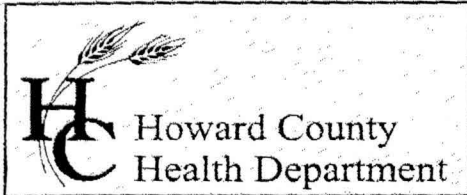
*Phase I*

*12-23*

*Riverwood*

*34-41*

*All are staked*



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

July 19, 2005

Winchester Homes, Inc.  
6905 Rockledge Drive, Suite 800  
Bethesda, MD 20817

RE: Riverwood Subdivision, lot 40  
Open Run Road

To Whom It May Concern:

Samples were taken from a yield test on June 27, 2005 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 activity in a water supply. In turn, this can provide information regarding naturally occurring radiation (i.e. Radionuclides) that may exist in your water supply.

Results from this screening revealed a **Gross Alpha** of  $9 \pm 3$  picocuries/liter (pCi/L); while the **Gross Beta** level was  $6 \pm 2$  pCi/L. The **Gross Alpha** result was below the respective maximum contaminant level (MCL) of 15 pCi/L, while the **Gross Beta** was below the MCL of 50 pCi/L.

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 or concerns.

Sincerely,

Bert Nixon, Assistant Director  
Bureau of Environmental Health

Eric Dougherty, MDE, Water Mgmt., Groundwater  
Well & Septic Property File

Send Report To:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

State of Maryland  
 DHMH - Laboratories Administration  
 Division of Environmental Chemistry  
**RADIATION LABORATORY**  
 201 W. Preston Street, Baltimore, Maryland 21201  
 J. Mehsen Joseph, Ph.D., Director

**LABORATORY ANALYSIS REQUEST**

Sample Bottle No. A: 40-040-27 No. B: \_\_\_\_\_ Field Blank Bottle No. 1: \_\_\_\_\_ No. 2: \_\_\_\_\_

Plant/Site Name: Riverwood Subdivision County: Howard

Sample Source: lot 40 Location: field test  
 (well no., lab sink, sample tap, etc.)

County:   Plant No.

Collector: A Buse # Telephone No.: (410) 333-1773

Date Collected: 06/27/05 Time Collected: 10:30 a.m. \_\_\_\_\_ p.m.

Nitric Acid Preserved: Yes  No  Iced: Yes  No

Submitters Code:   Federal Project:  S Field Data: 7.5 0.0  
 pH Chlorine

Remarks: \_\_\_\_\_

✓	Test	EPA Code	Laboratory No.	Results (pCi/L)	Date Reported
✓	Gross Alpha	4000	2467	9±3	06/29/05
✓	Gross Beta	4100	2467	6±2	06/29/05
	Radon-222 Bottle A	4004			
	Radon-222 Bottle B	4004			
	Field Blank #1	4004			
	Field Blank #2	4004			
	Tritium				
	Ra - 226	4020			
	Ra - 228	4030			
	Total Uranium	4006			

Date Received: 06/27/05  
 Section Chief: A. Uhlir

Send Report To:

State of Maryland

DHMH - Laboratories Administration  
Division of Environmental Chemistry  
**RADIATION LABORATORY**

Howard County Health Department  
Bureau of Environmental Health  
7178 Columbia Gateway Drive  
Columbia, Maryland 21046

201 W. Preston Street, Baltimore, Maryland 21201  
J. Mehsen Joseph, Ph.D., Director

LABORATORY ANALYSIS REQUEST

HO-040-27

HO-040-27A

HO-040-27B

Radium 226/228

Sample Bottle No. A: Short Term No. B: Long Term Field Blank Bottle No. 1: \_\_\_\_\_ No. 2: \_\_\_\_\_

Plant/Site Name: Riverwood Subdivision County: Howard

Sample Source: lot 40 Location: Yield Test  
(well no., lab sink, sample tap, etc.)

County:  1  3 Plant No.

Collector: Abusch Telephone No.: 410 313 1773

Date Collected: June / 27 / 2005 Time Collected: 10<sup>30</sup> a.m. \_\_\_\_\_ p.m.

Nitric Acid Preserved: Yes  No  Iced: Yes  No

Submitters Code:   Federal Project:  S Field Data: 7.5 00  
pH Chlorine

Remarks: \_\_\_\_\_

✓	Test	EPA Code	Laboratory No.	Results (pCi/L)	Date Reported
✓	Gross Alpha	4000	2468	13 ± 3	06/29/05
✓	Gross Beta	4100	2468	7 ± 2	06/29/05
	Radon-222 Bottle A	4004			
	Radon-222 Bottle B	4004			
	Field Blank #1	4004			
	Field Blank #2	4004			
	Tritium				
✓	Ra - 226	4020	2468		
✓	Ra - 228	4030	2468		
	Total Uranium	4006			

Date Received: 06/27/05

Section Chief: A. Wise

## CERTIFICATE OF ANALYSIS



**Trace Laboratories, Inc.  
Maryland**

5 North Park Drive  
Hunt Valley, MD 21030  
Telephone: 410/252-7742  
Telephone: 410/584-9099  
Fax: 410/584-9117  
Email: [tracelab@connxt.net](mailto:tracelab@connxt.net)  
[www.tracelabs.com](http://www.tracelabs.com)

Maryland State Certified  
Water Quality Laboratory  
No. 318

ISO 9001:2000



PERRY JOHNSON  
REGISTRARS, INC.

Cert No. C2005-01504

**Requester:**  
National Water Service  
PO Box 138  
Ashton, Maryland 20861

**S/O Number:** 63428  
**Report Date:** May 31, 2007

**Property Sampled:** Kingsale Court

**County:** Howard  
**Subdivision:** Riverwood  
**Lot #:** 40  
**Building Permit #:** Not Provided  
**Tax Map #:** N/A  
**Parcel #:** N/A

**Date/Time Collected:** May 14, 2007 at 12:24 am  
**Date/Time Received:** May 14, 2007 at 2:50 pm

**Sample Location:** Pump  
**Sampler ID:** 6308KW  
**Samples Iced:** Yes  
**Residual Cl<sub>2</sub> <0.1 mg/L:** Yes

**Well Tag Number:** N/A – Pump Test  
**Well Condition:** N/A – Pump Test

**Water Conditioning/Treatment:** None

PARAMETER	RESULT	METHOD	DETECTION LIMIT
Radon 222	811 +/- 46.2 pCi/L	EPA 600/2-87-082	13.8 pCi/L

Allison R. Milburn  
 Manager-Drinking Water Testing

Sample analyzed by Laboratory #E83033

# CERTIFICATE OF ANALYSIS



**Trace Laboratories, Inc.**  
**Maryland**

5 North Park Drive  
Hunt Valley, MD 21030  
Telephone: 410/252-7742  
Telephone: 410/584-9099  
Fax: 410/584-9117  
Email: [tracelab@connext.net](mailto:tracelab@connext.net)  
[www.tracelabs.com](http://www.tracelabs.com)

Maryland State Certified  
Water Quality Laboratory  
No. 318

**ISO 9001:2000**



Cert No. C2005-01504

**Requester:**  
National Water Service  
PO Box 138  
Ashton, Maryland 20861

**S/O Number:** 63428  
**Report Date:** May 15, 2007

**Property Sampled:** Kingsale Court

**County:** Howard  
**Subdivision:** Riverwood  
**Lot #:** 40  
**Building Permit #:** Not Provided

**Tax Map #:** N/A  
**Parcel #:** N/A

**Date/Time Collected:** May 14, 2007 at 12:27 am  
**Date/Time Received:** May 14, 2007 at 2:50 pm

**Sample Location:** Pump  
**Sampler ID:** 6308KW  
**Samples Iced:** Yes  
**Residual Cl<sub>2</sub> <0.1 mg/L:** Yes

**Well Tag Number:** N/A – Pump Test  
**Well Condition:** N/A – Pump Test

**Water Conditioning/Treatment:** None

PARAMETER	RESULT	METHOD	MCL/*SMCL	
Nitrate	<1.0 mg/L as N	SM 4500D	10 mg/L as N	Pass
Turbidity	9.5 NTU	EPA 180.1	10 NTU	Pass
pH	7.3 Units	EPA 150.1	*6.5-8.5 Units	***
Sand	Negative		Negative	
Total Coliform	Absent	SM 9223B	Absent	Pass
E.coli	Absent	SM 9223B	Absent	Pass

Allison R. Milburn  
Manager-Drinking Water Testing

MCL=Maximum Contamination Level

\*SMCL=Secondary Maximum Contamination Level

\*\*\*A non-enforceable parameter that may cause cosmetic effects or aesthetic effects (such as taste, color or odor) in drinking water.



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

July 9, 2007

Camberley Homes  
690 S Rockledge Drive, #800  
Bethesda, MD 20817

RE: Riverwood, Lot 40  
11215 Kinsale Court  
Ellicott City, MD 21042  
BP #: B06008777  
Well Permit # HO-94-4062

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 07/06/2007.**  
**Final approval of the well line connection to the dwelling was approved on 03/15/2007.**

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.

Also, a Gross Alpha and Beta sample was collected on 06/27/2005. 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.

#### 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-94-4062. 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: 05/14/2007  
Date of Samples for Gross Alpha and Gross Beta: 06/27/2005  
Date of Well Completion: 05/05/2005

Approving Authority,



Brian Baker, R. S.

Well & Septic Program

cc: Building Inspector's Office  
Community Health Services  
File