

C1 6579

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

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

COUNTY NUMBER A516084

ST/CO USE ONLY DATE RECEIVED

DATE WELL COMPLETED

Depth of Well

PERMIT NO. FROM "PERMIT TO DRILL WELL"

OWNER Winchester Homes last name first name STREET OR RFD TOWN SUBDIVISION SECTION LOT

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, FEET (FROM, TO), check if water bearing. Includes entries like Top Soil, Sand stone, Brown mica, etc.

GROUTING RECORD

WELL HAS BEEN GROUTED (Y/N) TYPE OF GROUTING MATERIAL (Cement, Bentonite Clay) NO. OF BAGS, NO. OF POUNDS, GALLONS OF WATER, DEPTH OF GROUT SEAL

CASING RECORD

MAIN CASING TYPE (ST, PL), Nominal diameter, Total depth of main casing

OTHER CASING (if used)

Table for other casing with columns for diameter and depth

SCREEN RECORD

screen type or open hole (ST, BR, HO, PL, OT)

DEPTH (nearest ft.)

Table for depth measurements with columns for casing height and slot size

C 3

PUMPING TEST

HOURS PUMPED, PUMPING RATE, METHOD USED TO MEASURE PUMPING RATE, WATER LEVEL, TYPE OF PUMP USED

PUMP INSTALLED

DRILLER INSTALLED PUMP (YES/NO), TYPE OF PUMP INSTALLED, CAPACITY, PUMP HORSE POWER, PUMP COLUMN LENGTH, CASING HEIGHT

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 (Y/N)

CIRCLE APPROPRIATE LETTER A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 28.04.04 "WELL CONSTRUCTION"

DRILLERS LIC. NO. 1 MWD 040 DRILLERS SIGNATURE

LIC. NO. 1 AWD 788

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)

TELESCOPE CASING, LOG INDICATOR, OTHER DATA

B 1 1455

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL

STATE PERMIT NUMBER

HD-95-0014

522426 please type

fill in this form completely

Date Received (APA)

8 MM DD YY 13

OWNER INFORMATION 9973

Winchester Homes, Inc

15 Last Name Owner First Name 34

6905 Rockledge Drive, Suite 800

36 Street or RFD 55

Bethesda, Md 20817

57 Town 70 State 72 Zip 76

DRILLER INFORMATION

George F. Easterday M W D 040

Driller's Name 76 License No. 81

L. Franklin Easterday, Inc.

Firm Name

9265 Brown Church Rd., MT. Airy, Md. 21771

Address

Signature Date 4/25/05

Signature Date

B 2 WELL INFORMATION

APPROX. PUMPING RATE (GAL. PER MIN.) 5

AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 14 500 20

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

APPROXIMATE DEPTH OF WELL 300 FEET

APPROXIMATE DIAMETER OF WELL 6 INCH NEAREST

METHOD OF DRILLING (circle one)

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

REPLACEMENT OR 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

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

APPROP. PERMIT NUMBER

PERMIT No. HD-95-0014

SPECIAL CONDITIONS

NOTE - APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED -

B 3

LOCATION OF WELL

Howard CO# 21

Riverwood Phase I

23 SUBDIVISION 42

SECTION 1 LOT 29

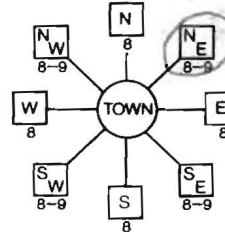
Clarksville

52 NEAREST TOWN 71

MILES FROM TOWN (enter 0 if in town) 3 MI 73 76 77 78

B 4

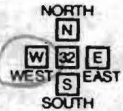
DIRECTION OF WELL FROM TOWN (CIRCLE BOX)



Castlebridge Road

11 NEAR WHAT ROAD 30

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)



34 30 37 DISTANCE FROM ROAD FL

ENTER FT OR MI 38 39

TAX MAP: 29 BLK: 4 PARCEL 20

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Howard COUNTY NAME AS16094 COUNTY NO.

STATE SIGNATURE INSERT S

DATE ISSUED 6/1/05 EXP. DATE 6/1/06

43 MM DD YY 48 CO SIGNATURE EXP. DATE

NORTH GRID 514 000 EAST GRID 828 000

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

SOURCES OF DRILLING WATER

- 1. wells
2.
3.

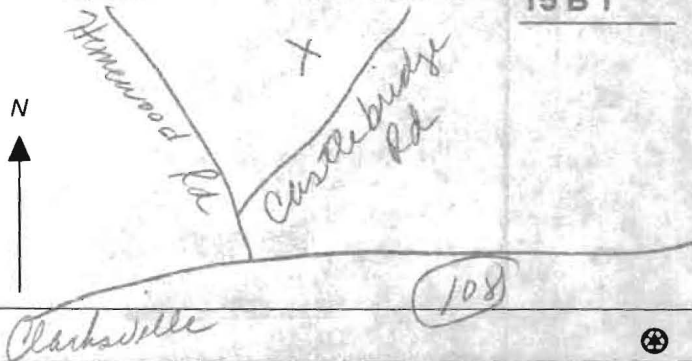
WRITE THE BOX NUMBER FROM THE MAP HERE

510 828

820 514

000 000

DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION 15 B 1



621-05 Tuesday

Review

Page _____ of _____
Date _____

FIELD DATA SHEET
HOWARD COUNTY WELL YIELD TEST

Well Permit No. HO - 95-0014
Location of property (road) Castlebridge Rd
Subdivision Riverwood I Lot 29 Block 4 Plat 29 Sec 34 20
Well Driller Eastday's Owner Winchester Homes

Depth of well 600 1 1/2
Distance of measuring point (M.P.) above ground 2'
Static water level (S.W.L.) below M.P. 28.2

I. High rate pumping -- reservoir drawdown

Pump set 380'

Time pump started 9:15 Pumping rate 156 gpm
Total time 30 to reach pumping water level 200 ft. below M.P.

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

TIME (in 15 minute intervals)	WATER LEVEL below M.P.	PUMPING RATE time to fill 5-gallon bucket	FLOW METER READING (if used)	CALCULATED FLOW (gallons per minute)
945	200'	25 sec	1 gal bucket	2 1/2 gpm
1000	200'	25"		2 1/2"
1015	200'	25"		2 1/2"
1030	200'	25"		2 1/2"
1045	200'	25"		2 1/2"
1100	200'	25"		2 1/2"
1115	201'	25"		2 1/2"
1130	201'	25"		2 1/2"
1145	201'	25"		2 1/2"
1200	201'	25"		2 1/2"
1215	201'	25"		2 1/2"
1230	201'	25"		2 1/2"
1245	202'	25"		2 1/2"
100	202'	25"		2 1/2"
115	202'	25"		2 1/2"
130	202'	25"		2 1/2"
145	202'	25"		2 1/2"
200	202'	25"		2 1/2"
215	203'	25"		2 1/2"
230	203'	25"		2 1/2"
245	203'	25"		2 1/2"
300	203'	25"		2 1/2"
315	203'	25"		2 1/2"
330	203'	25"		2 1/2"
HD-345	203'	25"		2 1/2"

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 SERVICE Telephone #: 301-854-1537
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 KYCKE License# PL0145

*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 #: 301-805-4174
Subdivision: RIVERWOOD Lot #: 29 Well Tag #: HO-95-0014
Site Address: 11200 KINGSALE CT
ELICOTT CITY 21042

Submersible Pump Data Pitless Adapter Well Cap and Electric Conduit
Make: 15 SQE 15-290 Make: Campbell Two piece watertight cap:
Model #: GRIND FOR Model #: PA 800 Screened, vented well cap:
Pump Capacity 15 GPM Depth: 48" (36" min) Cap secured to casing:
Well Yield: 2.5 GPM NSF approved: YES Conduit min 18" B.G.:
Depth of well encountered at time of pump installation: 600 (feet) Conduit secured to well cap:
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: P014
PSI: 160 (160 psi min)
Depth of supply line: 4' (36" min)

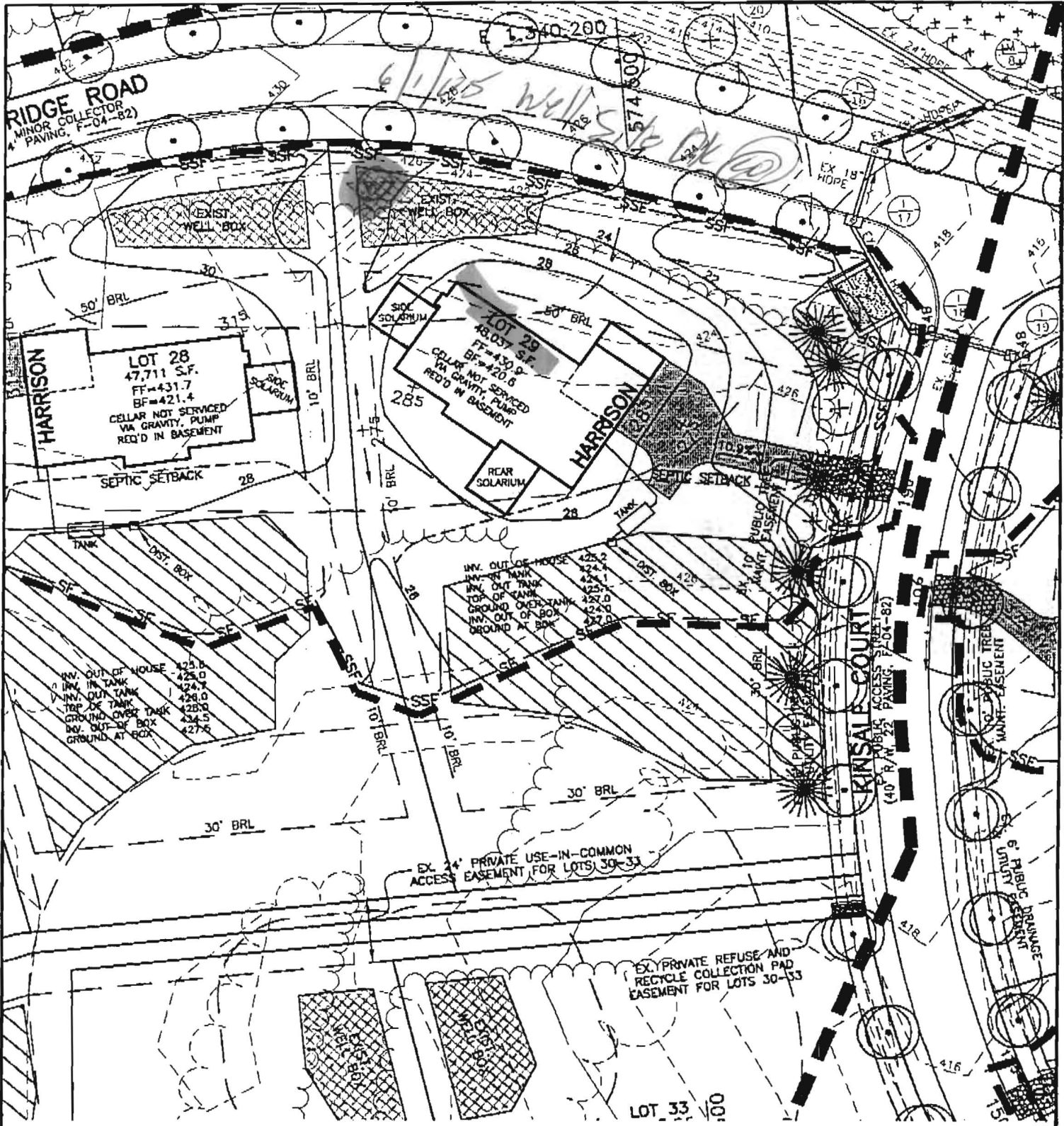
House Connection
PVC sleeved to undisturbed soil at wall penetration: YES
Approximate length of sleeve: 5'
Sleeve caulked and sealed properly: YES

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 4/12/10

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

Date Insp. Requested: _____ Date Insp. Approved: 1/7/2010 RB
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



RIVERWOOD

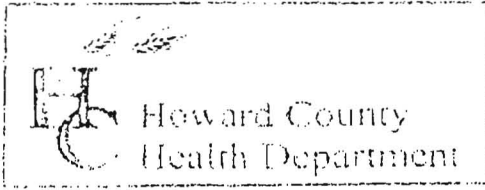
LOT 29

BENCHMARK
 ENGINEERS • LAND SURVEYORS • PLANNERS
ENGINEERING, INC.

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

THIRD ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 SCALE: 1" = 50' DATE: 10/12/04
 REVISED: 3/29/05, 5/25/05

PHONE: 410-455-6105 FAX: 410-465-6644
 P:\1132 Homewood\DWG\7091.dwg Ent: 5/25/2005 4:38:05 PM
 Inc. Kvoecra Mita KM-2530.KX.nc3



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

TO ALL INTERESTED PARTIES

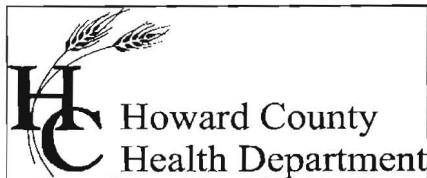
When submitting a well permit application for a proposed well for new construction, please indicate one of the following:

- The well site has been staked by Engineer Benchmark,
 (professional land surveyor or company employing professional land surveyors)
 on 4/11/05 (date) and does not require a site inspection.
- 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 6/10/03

Riverwood Phase I
 Lots 11, 24-33, 42
 preservation parcel P



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 12, 2010

Occupant
11200 Kinsale Court
Ellicott City, MD 21042

RE: Riverwood I, Lot 29
11200 Kinsale Court
BP# B09002665
Well Tag #: HO-95-0014

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 02/04/2010. Final approval of the well line connection to the dwelling was approved on 01/07/2010.**

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 06/21/2005. 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.

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-95-0014. 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: 04/05/2010 & 04/08/2010
Date of Samples for Gross Alpha & Gross Beta: 06/21/2005
Date of Well Completion: 06/20/2005

Approving Authority,



Brian Baker, R. S.
Well & Septic Program

cc: Building Inspector's Office
Community Health Services
File

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

142 Old Lane, P.O. Box 111, Esposito, MD 21048-0111 (410) 766-3531 FAX (410) 766-0228

REPORT OF ANALYSIS

Laboratory ID #:	74825	Account #:	3123
Reference:	Riverwood Lot 29	Company:	National Water Servicing
Location:	11200 Kinsale Court Ellicott City, MD 21042	Requested By:	Dave Rycke
Date/ Time Collected:	4/8/2010 1120	Source:	Well Water
Date/Time Rec'd:	4/8/2010 1349	Site:	Pressure Tank
Chlorine ppm:	Free: ND Total: ND	Treatment:	Softener/Neutralizer/Sed. Filter **
Collected By:	J.Yeager 6176JY	pH:	6.8
		Well #:	HO-95-0014

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME ANALYSIS
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

NOTES

- 1 **Sample collected prior to treatment
- 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 retest

Building Permit # : B-09-002665

Date Reported: 4/9/2010

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

1443 Old Daneytown Rd. Westminster, MD 21157-2014 TEL: (410) 876-4554 FAX: (410) 848-0298

REPORT OF ANALYSIS

Laboratory ID #: 74766 Account #: 3123
 Reference: Riverwood Lot 29 Company: National Water Servicing
 Location: 11200 Kinsale Court Requested By: Dave Rycke
 Ellicott City, MD 21042 Source: Well Water
 Date/ Time Collected: 4/5/2010 0910 Site: Pressure Tank
 Date/Time Rec'd: 4/5/2010 1253 Treatment: Softener/Neutralizer/Sed. Filter **
 Chlorine ppm: Free: ND Total: ND pH: 7.5
 Collected By: J. Yeager 6176JY Well #: HO-95-0014

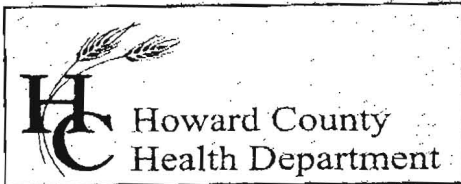
PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME	ANALYST
Bacteria, Coliform, Total, MPN	15.0	MPN/ 100 ml	<1.0	SM18 9223	4/6/2010 / 0930	CCH
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM18 9223	4/6/2010 / 0930	CCH
Nitrate	<1.0	mg/L	10	601	4/5/2010 / 2210	CCH
Turbidity	5.60	NTU	<10	SM18 2130B	4/5/2010 / 1420	KME
Sand	NS	mg/L	5	Visual/Gravimetric	4/5/2010 / 1420	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 Visual well check: Sealed, vented cap
- 9 pH and Chlorine level tested in lab

Reason for Test : Use & Occupancy
 Building Permit # : B-09-002665

Date Reported: 4/6/2010



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 29
Castlebridge Road

To Whom It May Concern:

Samples were taken from a yield test on June 21, 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 2.9 ± 1.4 picocuries/liter (pCi/L); while the **Gross Beta** level was 4.9 ± 1.8 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

110-95-6019

Sample Bottle No. A: _____ No. B: _____ Field Blank Bottle No. 1: _____ No. 2: _____

Plant/Site Name: RIVERWOOD Phase I lot 29 County: HOWARD

Sample Source: Well Location: 110-95-6019
(well no., lab sink, sample tap, etc.)

County: 1 3 Plant No.

Collector: G. Crighton Telephone No.: 410 313 2775

Date Collected: 6/21/2005 Time Collected: 7:45 a.m. _____ p.m.

Nitric Acid Preserved: Yes No Iced: Yes No

Submitters Code: Federal Project: S Field Data: ~6 N/A
pH Chlorine

Remarks:

✓	Test	EPA Code	Laboratory No.	Results (pCi/L)	Date Reported
✓	Gross Alpha	4000	2139	2.9 ± 1.4	6/23/05
✓	Gross Beta	4100	2139	4.9 ± 1.8	"
	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: 06/21/05

Section Chief: S. Wise