

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

January 12, 2009

Occupant
4835 Castlebridge Road
Ellicott City, MD 21042

RE: Riverwood I, Lot 42
4835 Castlebridge Road
BP# B07001633
Well Tag #: HO-94-4199

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 12/16/2008. Final approval of the well line connection to the dwelling was approved on 11/21/2007.**

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.

Gross Alpha and Beta samples were also collected on 06/07/2005. The Gross Alpha sample result showed findings were above the maximum contaminant level of (MCL) of 15 pCi/L suggested by the EPA. Also a softener, sediment filter and neutralizer were installed. Radium-226 and Radium-228 samples were taken on 10/30/2007 and the results were below the targeted value of 5 pCi/L. 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, is a copy of the septic permit and the as-built along with important information regarding the well and 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 410-313-1792.

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-94-4199. Although the submitted sample results are in compliance with COMAR standards, the Health Department does not guarantee water supplies. Based upon

6554

SEQUENCE NO. (MAKE 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. 3-8 ON ALL CARDS)

COUNTY
NUMBER

PERMIT NO.
FROM "PERMIT TO DRILL WELL"
2005-04-11/12

Depth of Well
200'

DATE WELL COMPLETED
5/7/05

STICU USE ONLY
DATE RECEIVED
MM DD YY

OWNER
STREET OR RFD
SUBDIVISION
SECTION
TOWN
LOT

WELL LOG

Not required for driven wells

STATE THE KIND OF FORMATIONS REVEALED, THEIR
COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional space if needed)	FEET	
	FROM	TO
Top Soil	0	5
Brown mica	5	25
Gray mica	25	100
Dark mica	100	125
Gravel	125	150
Gravel	150	200

GROUTING RECORD

WELL HAS BEEN GROUTED
(Circle Appropriate Box)

TYPE OF GROUTING MATERIAL (Circle one)
CEMENT BENTONITE CLAY

NO. OF BAGS 33
GALLONS OF WATER 198
DEPTH OF GROUT SEAL (to nearest foot) 32

from 0 ft. to 32 ft. BOTTOM

CASING RECORD

MAIN CASING TYPE
STEEL
Nominal diameter of main casing (nearest inch) 6
Total depth of main casing (nearest foot) 42

OTHER CASING (if used)
diameter inch
depth feet

SCREEN RECORD
screen type or open hole
STEEL BRASS PLASTIC

DEPTH (nearest ft.)
140' - N3
500'

DIAMETER OF SCREEN (NEAREST INCH)
2 1/2"

LOCATION OF WELL ON LOT
SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANK, AND FOR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)

CASING HEIGHT (circle appropriate box and enter casing height)

LAND SURFACE

TYPE OF PUMP USED (for test)
A air B piston C centrifugal J jet S submersible

TYPE OF PUMP INSTALLED
FACE (A.C., P.R., S.T.O.) IN BOX 28

CAPACITY: GALLONS PER MINUTE (to nearest gallon)

PUMP HORSE POWER

PUMP COLUMN LENGTH (nearest ft.)

DRILLER INSTALLED PUMP YES NO

DRILLER INSTALS PUMP THIS SECTION MUST BE COMPLETED FOR ALL WELLS

(CIRCLE) YES or NO

PUMPING TEST
HOURS PUMPED (nearest hour) 3
PUMPING RATE (gal. per min.) 12
METHOD USED TO MEASURE PUMPING RATE *Bucket*

WATER LEVEL (distance from land surface) BEFORE PUMPING 2.3 ft. WHEN PUMPING 2.8 ft.

RECEIVED 0.81
WARD COUNTY HEALTH DEPARTMENT
2005 JUN 21 PM 3:06

DRILLERS LIC. NO. M 140 040
DRILLER SIGNATURE
LIC. NO. 440788

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

PUMPING TEST

WELL HAS BEEN GROUTED
(Circle Appropriate Box)

TYPE OF GROUTING MATERIAL (Circle one)
CEMENT BENTONITE CLAY

NO. OF BAGS 33
GALLONS OF WATER 198
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SCREEN RECORD
screen type or open hole
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DEPTH (nearest ft.)
140' - N3
500'

DIAMETER OF SCREEN (NEAREST INCH)
2 1/2"

LOCATION OF WELL ON LOT
SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANK, AND FOR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)

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HOURS PUMPED (nearest hour) 3
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2005 JUN 21 PM 3:06

DRILLERS LIC. NO. M 140 040
DRILLER SIGNATURE
LIC. NO. 440788

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

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL

STATE PERMIT NUMBER

B 1 1460

522426 please type

40-94-4199 fill in this form completely

Date Received (APA)

OWNER INFORMATION 9978

8 MM DD YY 13 Winchester Homes, Inc 15 Last Name Owner First Name 34 36 6905 Rockledge Drive, Suite 800 Street or RFD 55 57 Bethesda, Md. 20817 Town 70 State 72 Zip 76

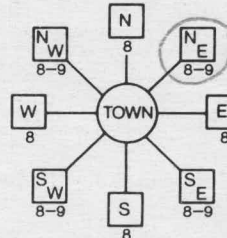
B 3 LOCATION OF WELL

8 COUNTY Howard 21 CC# 23 SUBDIVISION Riverwood Phase I 42 52 NEAREST TOWN Clarksville 71 52 MILES FROM TOWN (enter 0 if in town) 3 M I 73 76 77 78

DRILLER INFORMATION

Driller's Name George F. Easterday M W D 040 76 License No. 81 Firm Name L. Franklin Easterday, Inc. 9265 Brown Church Rd., MT. Airy, Md. 21771 Address George F. Easterday Signature Date 4/25/05

B 4 DIRECTION OF WELL FROM TOWN (CIRCLE BOX)



Castlebridge Road 11 NEAR WHAT ROAD 30 ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX) NORTH N WEST W EAST E SOUTH S 34 225 37 DISTANCE FROM ROAD ENTER FT OR MI 38 39 TAX MAP: 23 BLK: 21 PARCEL 866

B 2 WELL INFORMATION

APPROX. PUMPING RATE 5 GAL. PER MIN. 8 12 AVERAGE DAILY QUANTITY NEEDED 500 GAL. PER DAY 14 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

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

County Name Howard County Name AS16094 STATE SIGNATURE DATE ISSUED 5/24/05 CO SIGNATURE EXP. DATE 5/24/08 NORTH GRID 513 000 EAST GRID 027 000

APPROXIMATE DEPTH OF WELL 300 FEET 24 28

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 RE:Verse-ROTary DRive-POINT other

REPLACEMENT OR DEEPEMED 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 DEEPEM AN EXISTING WELL

PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED (IF AVAILABLE) 41 52

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

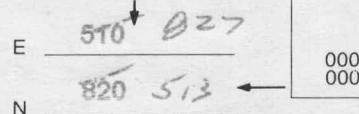
APPROP. PERMIT NUMBER HO 2004-G-007 PERMIT No. HO-94-4199

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

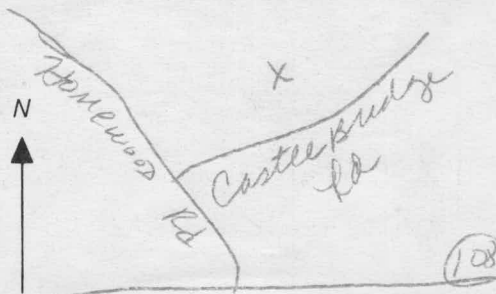
SOURCES OF DRILLING WATER

- 1. wells
2.
3.

WRITE THE BOX NUMBER FROM THE MAP HERE



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



SPECIAL CONDITIONS

NOTE - APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED

SEQUENCE NO. 1460

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL

STATE PERMIT NUMBER 10-01-1122

Date Received (APA) 09/28/07

OWNER INFORMATION Winchester Homes, Inc.

8905 Rockledge Drive, Suite 800 Bethesda, MD 20817

DRILLER INFORMATION George F. Easterday L. Franklin Easterday, Inc.

3255 Brown Church Rd., Mt. Airy, Md. 21771

WELL INFORMATION APPROX PUMPING RATE 5 GAL PER MINUTE

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

APPROXIMATE DEPTH OF WELL 300 FEET

METHOD OF DRILLING (CIRCLE ONE) REVERSE ROTARY AIR PERMEATION JETTED

REPLACEMENT OR DEEPENED WELLS (CIRCLE APPROPRIATE BOX) THIS WELL WILL NOT REPLACE AN EXISTING WELL THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED

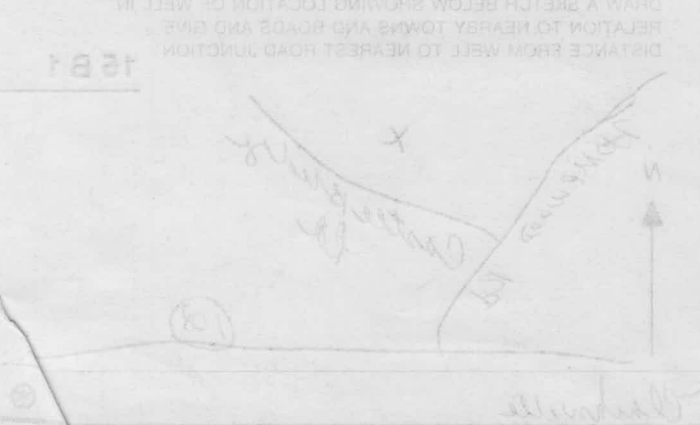
APPROX PERMIT NUMBER 2005 AP 26 PM 1:01

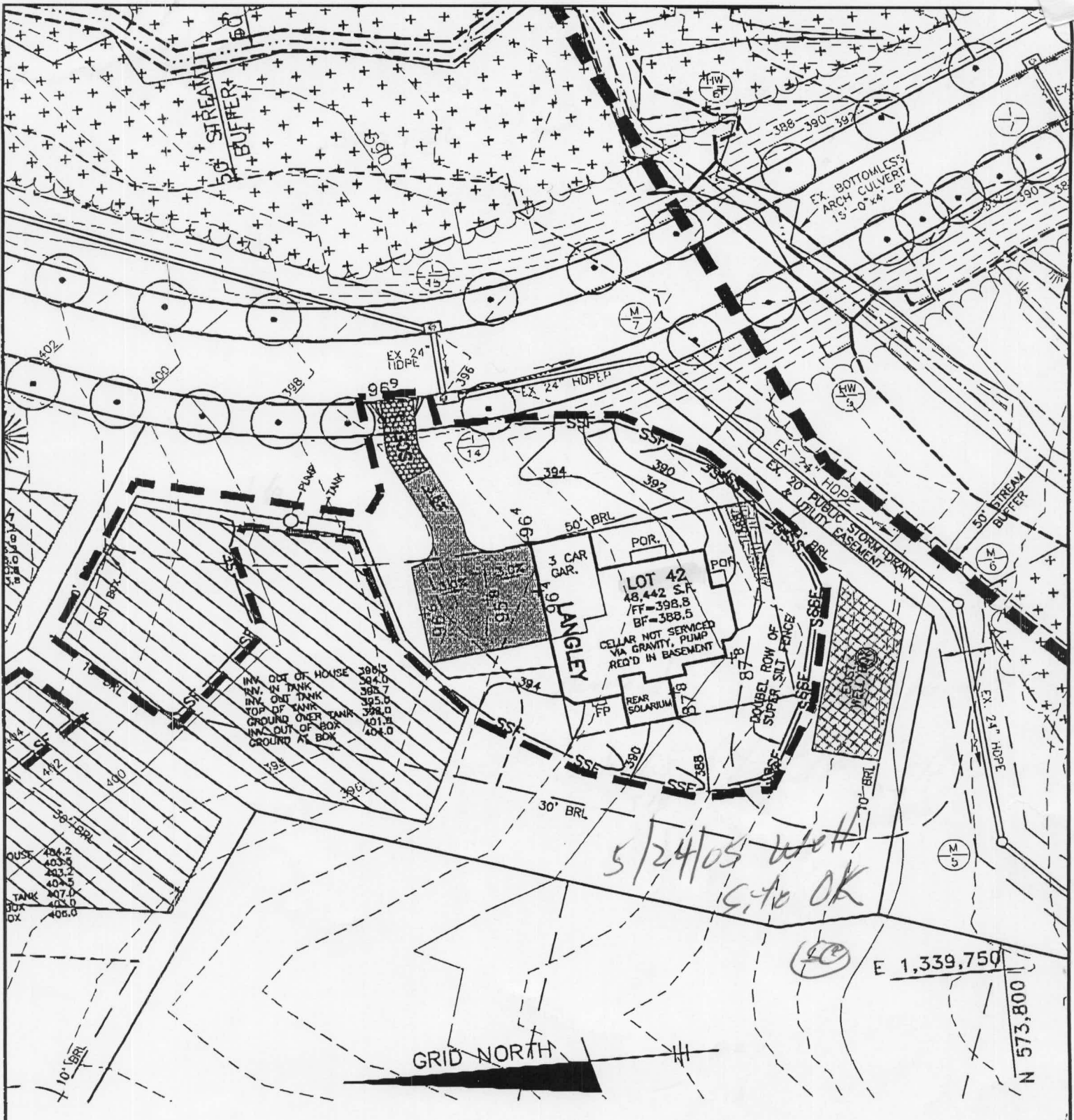
LOCATION OF WELL HOWARD COUNTY Riverwood Phase I SECTION 1 LOT 42 CLARKSVILLE



NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X SOURCES OF DRILLING WATER wells





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
P:\1132 Homewood\11327051.dwg, 29/05, 5/29/2005 12:02:48 PM, fmc, Kvoocra Mita KM-2510 KX.nc 3

RIVERWOOD

LOT 42

THIRD ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE: 1" = 50' DATE: 10/12/04
REVISED: 3/29/05



RIVERWOOD

LOT 42

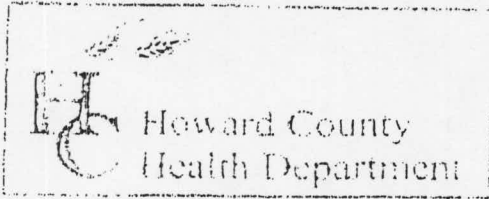
11711 LESBON DISTRICT
HOWARD COUNTY, MARYLAND
DATE: 11/30/13
REVISED: 11/30/13

BENCHMARK
ENGINEERING, INC.

11711 LESBON DISTRICT
HOWARD COUNTY, MARYLAND
DATE: 11/30/13
REVISED: 11/30/13

2003 AP 26 PM 1:01

HOWARD COUNTY HEALTH DEPT.
ENVIRONMENTAL HEALTH



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 @



Bureau of Environmental Health
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Peter L. Beilenson, M.D., M.P.H., Health Officer

Temporary Radium Agreement

A review of records indicates that required sampling for Gross Alpha & Gross Beta was not performed during the well yield test for 4835 CASTLE BRIDGE Rd

Properties not tested or initially found to have an elevated Gross Alpha and/or Gross Beta, are required to have appropriate treatment installed and additional testing performed.

Pre-or post-treatment sampling for Gross Alpha, Gross Beta and Radium was conducted on OCT. 30, 2007 and the Radium sample results are pending.

Since all other sampling, construction and inspection requirements have been satisfied, an Initial Certificate of Potability (ICOP) will be issued with the following addendum and agreement:

If the results for the initial Gross Alpha, Gross Beta and Radium are all within established standards, then the ICOP remains valid and only testing for standard potability parameter(s) will be needed to secure the Final Certificate of Potability (FCOP).

If any of these parameters are found to exceed existing standards, then further measures including the possible need for additional treatment and/or further testing shall occur until the Gross Alpha, Gross Beta and Radium results are within established standards. At that time, the ICOP will be deemed valid and only testing for standard potability parameter(s) will be needed to secure the FCOP.

The undersigned have read and agreed with the provisions as established above.

[Signature] 11/12/07
Owner Date

[Signature] 11/12
Owner Date

[Signature] 11/15/07
Builder/Representative Date

Health Department Representative Date

Division of Environmental Health
175 Columbia Street, Columbus, OH 43207
614.265.2300
614.265.2301
614.265.2302
www.doh.state.oh.us



John L. Beckwith, MD, MPH, Health Officer

Temporary Testing Agreement

A review of records indicated that required sampling for Gross Alpha & Gross Beta was not performed during the well test for W-22 WATER SOURCE 1

Proposed sampling at initial 15 days to have an elevated Gross Alpha Beta in the Gross Beta and Gross Alpha Beta sampling results are not included in the initial testing protocol.

Under the current sampling protocol for Gross Alpha, Gross Beta and Radon, the sampling protocol for W-22 is to sample the Wellhead sample results are pending.

Since all required sampling, monitoring and reporting requirements have been satisfied, an initial Gross Alpha Beta (GAB) will be performed with the following sampling protocol:

If the results indicate that Gross Alpha, Gross Beta and Radon are all within established limits, then the GAB sampling will be completed as scheduled. If the results indicate that the GAB sampling will be needed to ensure the final compliance of Radon (RCR).

If any of these parameters are found to exceed existing standards, the GAB sampling will be completed as scheduled. If the results indicate that the GAB sampling will be needed to ensure the final compliance of Radon (RCR), then the GAB sampling will be completed as scheduled.

Only testing for standard sampling parameter(s) will be needed to occur for a GAB.

The indicated sampling protocol is in accordance with the sampling protocol above.

<p><i>[Signature]</i> Date: 11/15/07</p>	<p><i>[Signature]</i> Date: 11/15/07</p>
<p><i>[Signature]</i> Date: 11/15/07</p>	<p><i>[Signature]</i> Date: 11/15/07</p>

Feb 27 04 11:03A

HO CO FNV HFRI TH

14103182648

P.1

HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH
WATER AND SEWERAGE PROGRAM
TEL: (410)313-2640 FAX: (410)313-2645

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 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 HOMES Telephone #:
Subdivision: RIVERWOOD Lot #: 42 Well Tag #: HO-91-4199
Site Address: 4935 CASTLE BRIDGE RD.

Submersible Pump Data

Make: GRUNDOS
Model #: 15 SQE 07-180
Pump Capacity: 15 GPM
Well Yield: 15 GPM

Pitless Adapter

Make: BLI
Model #: PA100
Depth: 40 (36" min)
NSF/WSC approved: ✓

Well Cap and Electric Conduit

Two piece watertight cap: ✓
Screened, vented well cap: ✓
Cap secured to casing: ✓
Conduit min 1 1/2" B.G.: 3/4"
Conduit secured to well cap: ✓

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 wrenches, 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: Blackberry AQUA JET
PSI: 160 (160 psi min)
Depth of supply line: 40 (36" min)

House Connection

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

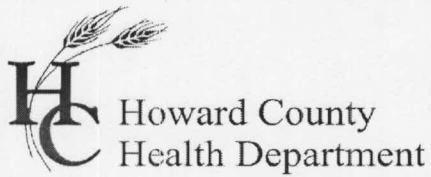
The water supply line is required to be at least ten feet from the septic tank, pump chamber, sewage piping, distribution box, drainfields, and sewage reserve area. If this cannot be accomplished, contact this office for approval prior to installation.

Signature of company representative responsible for installation

10/23/07
date

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

Date Insp. Requested: _____ Date Insp. Approved: 11/21/07 Inspector: (Signature)
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 6" above finished grade ✓
Water supply line sleeved adequately at house connection ✓
Adequate ground observed below pitless adapter ✓



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website: www.hchealth.org

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

November 26, 2007

Camberley Homes
6905 Rockledge Drive, #800
Bethesda, MD 20817

RE: Riverwood I, Lot 42
4835 Castlebridge Road
Ellicott City, MD 21042
BP #: B07001633
Well Permit # HO-94-4199

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 10/18/2007.** **Final approval of the well line connection to the dwelling was approved on 11/21/2007.**

TEMPORARY DEVIATION

This is a **Temporary Deviation** to allow additional time for radium testing and installation of a water treatment device if the radium levels exceed the EPA recommendations. **Until the water sample results are obtained or a treatment device is installed it is recommended that all water that is used for cooking or drinking be bottled.** If the water sample indicates that the radium levels are above the EPA standards then a treatment device will have to be installed and an additional water sample will have to be collected to make sure the treatment device is working properly.

The water sample results indicate that the water samples submitted for testing were free of coliform and fecal coliform bacteria at the time of the second sampling and are bacteriologically safe for drinking. The nitrate, sand and turbidity levels were all acceptable. The water sample results were found to be in compliance with COMAR water quality standards.

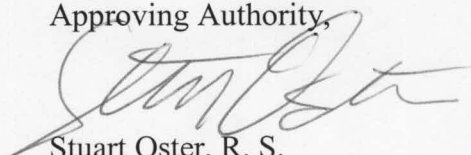
This certifies that the initial sampling requirements of COMAR 26.04.04 "Well Regulations" have been met for the water supply system installed under well permit #HO-94-4199. Although the submitted sample results are in compliance with COMAR standards, the Health Department does not guarantee water supplies. 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.

Date of Water Samples: 07/02/2007 & 10/18/2007

PENDING RADIUM TESTING

Date of Well Completion: 06/07/2005

Approving Authority,



Stuart Oster, R. S.
Well & Septic Program

cc: Building Inspector's Office
Community Health Services
File

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

1415 Old Pineytown Rd. Westminster, MD (410) 848-1014 (410) 876-4554 FAX (410) 848-0298

REPORT OF ANALYSIS

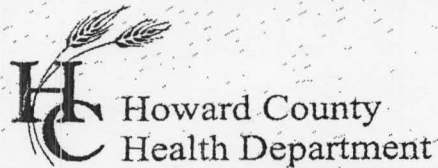
Laboratory ID #:	65667	Account #:	3123
Reference:	Riverwood Lot 42	Company:	National Water Servicing
Location:	4835 Castle Bridge Road Ellicott City, MD 21042	Requested By:	Dave Rycke
Date/ Time Collected:	10/30/2007 1230	Source:	Well Water
Date/Time Rec'd:	10/30/2007 1335	Site:	Pressure Tank
Chlorine ppm:	Free: ND Total: ND	Treatment:	Softener/Sediment Filter/Neutralizer**
Collected By:	J. Yeager 6176JY	pH:	6.4
		Well #:	HO-94-4199

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Radium-226	0.9	pCi/L	****	Georgia Tech	12/3/2007 / --- / GPL
Radium-228	1.6	pCi/L	****	Georgia Tech	12/3/2007 / --- / GPL

NOTES

- 1 ****Radium 226 and Radium 228 combined have a reference of 5 pCi/L
 - 2 **Sample collected prior to treatment
 - 3 MDA= Minimum Detection Activity
 - 4 pCi/L = picocuries per liter
 - 5 pH tested on-site
 - 6 Radium 226: MDA 1.6 pCi/L
 - 7 Radium 228: MDA 1.5 pCi/L
 - 8 The compound was analyzed for but not detected at or above the reporting limit.
 - 9 ND:None Detected
 - 10 Visual well check: Sealed, vented cap
 - 11 Subcontracted to Reference Lab #110
- Reason for Test : Use & Occupancy

Date Reported: 12/3/2007



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website: www.hchealth.org

Penny E. Borenstein, M.D., M.P.H., Health Officer

June 15, 2005

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

RE: Riverwood Subdivision, lot 42
Open Run Road

To Whom It May Concern:

Samples were taken from a yield test on June 7, 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 16 ± 3 picocuries/liter (pCi/L); while the **Gross Beta** level was 7 ± 2 pCi/L. The **Gross Alpha** result was above the respective **maximum contaminant level (MCL)** of 15 pCi/L, while the **Gross Beta** was below the MCL of 50 pCi/L.

Since the results of the yield test were above the MCL, additional testing of the well water will be necessary to determine if radium is the primary contributor to the elevated **Gross Alpha** in your water supply. This additional information will be useful in determining appropriate and effective treatment **AND** will be required prior to any use and occupancy approval. Please schedule a retest for gross alpha/gross beta and a sample for Radium 226/228 prior to the time the ICOP is issued for this property.

A copy of the test results is enclosed for your information. Please call this office at 410-313-1773 number 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

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
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: 65719
Report Date: October 19, 2007

Property Sampled: 4835 Castlebridge Drive

County: Howard
Subdivision: Riverwood
Lot #: 42
Tax Map #: 29
Parcel #: 20

Date/Time Collected: October 18, 2007 at 9:52 am
Date/Time Received: October 18, 2007 at 2:30 pm

Sample Location: Pressure Tank
Sampler ID: 6308KW
Samples Iced: Yes
Residual Cl₂ <0.1 mg/L: Yes

Well Tag Number: HO-94-4199
Well Condition: 2-Piece Cap
Satisfactory

Water Conditioning/Treatment: None

PARAMETER	RESULT	METHOD	MCL	
Turbidity	3.6 NTU	EPA 180.1	10 NTU	Pass
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.

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No. 318

ISO 9001:2000


Registered Firm



Cert No. C2005-01504

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

S/O Number: 64169
Report Date: July 3, 2007

Property Sampled: Riverwood

County: Howard
Subdivision: Riverwood
Lot #: 42
Building Permit #: Not Provided

Tax Map #: 29
Parcel #: 20

Date/Time Collected: July 2, 2007 at 2:55 pm
Date/Time Received: July 2, 2007 at 3:30 pm

Sample Location: Pump
Sampler ID: 6308KW
Samples Iced: Yes
Residual Cl₂ <0.1 mg/L: Yes

Well Tag Number: N/A - Pump Test
Well Condition: N/A - Pump Test

Water Conditioning/Treatment: None

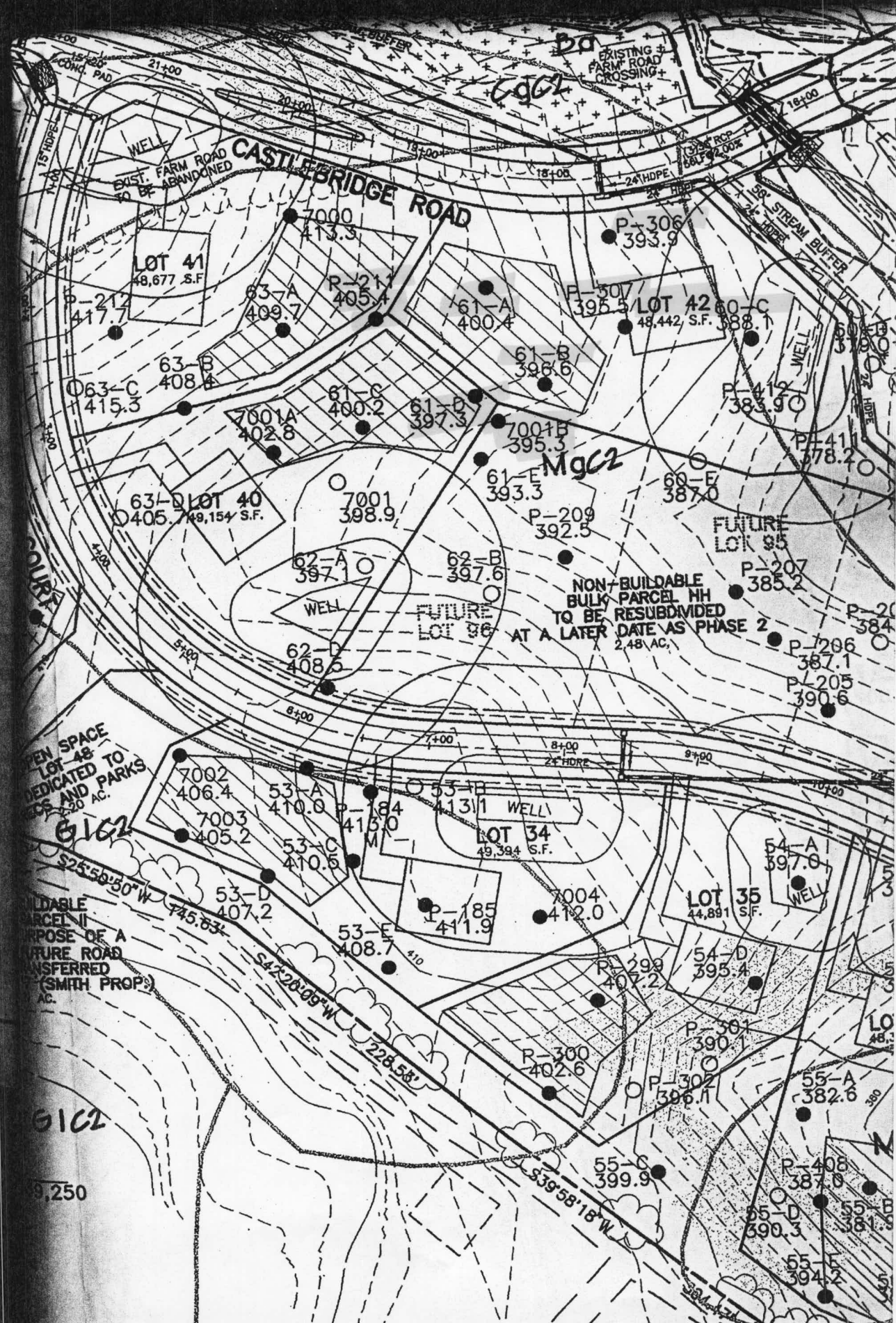
PARAMETER	RESULT	METHOD	MCL/*SMCL	
Nitrate ✓	<1.0 mg/L as N	SM 4500D	10 mg/L as N	Pass
Turbidity ✓	62 NTU	EPA 180.1	10 NTU	HIGH
pH	7.3 Units	EPA 150.1	*6.5-8.5 Units	***
Sand ✓	Negative		Negative	
Total Coliform ✓	PRESENT	SM 9223B	Absent	FAIL
E.coli ✓	Absent	SM 9223B	Absent	

Allison R. Milburn
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.



CASTLE BRIDGE ROAD

LOT 41
48,677 S.F.

LOT 40
49,154 S.F.

LOT 42
48,442 S.F.

LOT 34
49,394 S.F.

LOT 35
44,891 S.F.

OPEN SPACE
LOT 48
DEDICATED TO
TRAILS AND PARKS
2.30 AC.

NON-BUILDABLE
PARCEL II
PURPOSE OF A
FUTURE ROAD
TRANSFERRED
(SMITH PROP)
AC.

NON-BUILDABLE
BULKY PARCEL HH
TO BE RESUBDIVIDED
AT A LATER DATE AS PHASE 2
2.48 AC.

G1C2

9,250

M9C2

G9C2

EXISTING FARM ROAD CROSSING

FUTURE LOT 95

FUTURE LOT 96

LOT 48

15 HOPE

15 HOPE

15 HOPE

15 HOPE

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