

C1 6920

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 AS20414

1 2 3 4 5 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

ST/CO USE ONLY DATE RECEIVED MM DD YY

DATE WELL COMPLETED MM DD YY 11 12 2009

Depth of Well 22 220 26 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" No - 95 - 0701

OWNER Winchester Homes Inc STREET OR RFD Hunters View Rd TOWN Elliott City SUBDIVISION Renwood Phase 2 SECTION LOT 56

WELL LOG

Not required for driven wells

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

DESCRIPTION (Use additional sheets if needed) FEET FROM TO check if water bearing

Sand

0 36

check if water bearing

Gray Granite

36 220

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 40 NO. OF POUNDS 3760

GALLONS OF WATER 240

DEPTH OF GROUT SEAL (to nearest foot) from 8 ft. to 36 ft. (enter 0 if from surface)

CASING RECORD

ST CO PL OT STEEL CONCRETE PLASTIC OTHER

MAIN CASING TYPE ST Nominal diameter top (main) casing (nearest inch)! 6 Total depth of main casing (nearest foot) 40

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

SCREEN RECORD

ST BR HO PL OT STEEL BRASS BRONZE PLASTIC OPEN HOLE OTHER

DEPTH (nearest ft.) 38 220

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

TELESCOPE CASING LOG INDICATOR OTHER DATA

C 3

PUMPING TEST

HOURS PUMPED (nearest hour) 3

PUMPING RATE (gal. per min.) 20

METHOD USED TO MEASURE PUMPING RATE Bucket

WATER LEVEL (distance from land surface)

BEFORE PUMPING 17 24 20 ft.

WHEN PUMPING 22 30 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 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)

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 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. MS D 024

DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO. D

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

B 1 9866

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL

STATE PERMIT NUMBER

40-95-0701 fill in this form completely

Date Received (APA)

OWNER INFORMATION

8 MM DD YY 13

Last Name: mea Inc, Owner: mea Inc, First Name: [blank], Street or RFD: [blank], Suite 800, Bethesda Md 20817

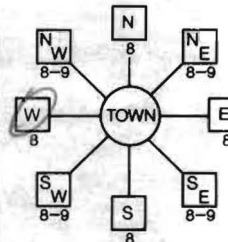
LOCATION OF WELL

COUNTY: Howard, SUBDIVISION: Riverwood Phase 2, SECTION: [blank], LOT: 56, NEAREST TOWN: Elliott City, MILES FROM TOWN: 5 MI

DRILLER INFORMATION

Driller's Name: Joseph Maayne, License No.: M S D 024, Firm Name: Joseph & Maayne Well Drilling, Address: 5512 Ridge Rd Mt. Airy Md 21228, Signature: Joseph & Maayne, Date: 1-30-07

DIRECTION OF WELL FROM TOWN (CIRCLE BOX)



NEAR WHAT ROAD: Huntersview Rd

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX): NORTH, WEST, SOUTH, EAST, DISTANCE FROM ROAD: 50 FT, ENTER FT OR MI: 38 39, TAX MAP: 29 BLK: 4 PARCEL: 20

WELL INFORMATION: APPROX. PUMPING RATE: 5 GAL. PER MIN., AVERAGE DAILY QUANTITY NEEDED: 500 GAL. PER DAY

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 NO.: 13, STATE SIGNATURE: A 520414, DATE ISSUED: 2/13/07, CO SIGNATURE: [blank], EXP. DATE: 2/13/08, NORTH GRID: 514 000 55, EAST GRID: 0228 000 63

APPROXIMATE DEPTH OF WELL: 300 FEET

APPROXIMATE DIAMETER OF WELL: 6 INCH, NEAREST TOWN: [blank]

METHOD OF DRILLING (circle one)

BORED (or Augered) AIR-ROTary, JETTED AIR-PERCussion, Jetted & DRIVEN ROTARY (Hydraulic Rotary), CABLE REVERSE-ROTary, Drive-POINT

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 [blank] 52

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

APPROX. PERMIT NUMBER: HQ 2 009 G007, PERMIT No.: 40-95-0701

SPECIAL CONDITIONS

NOTE: APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED

NEED RADIUM SAMPLE

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

SOURCES OF DRILLING WATER

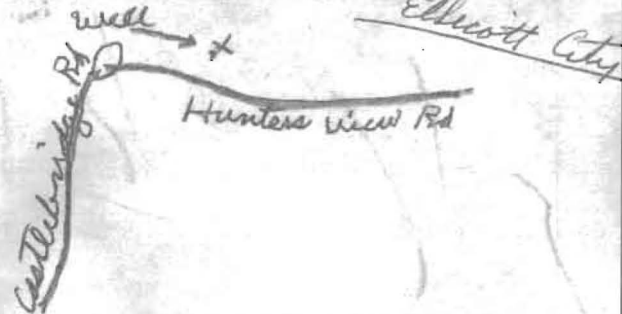
- 1. well, 2., 3.

WRITE THE BOX-NUMBER FROM THE MAP HERE

E 520 B, N 514 4

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

N



NON-BUILDABLE
SERVATION HOWARD
SOCIATION COUNTY
1.27 AC. EASEMENT
MARYLAND
PARCEL T
HOLDER

LOT 56
49,776 S.F.
COMMUNITY SEPTIC LOT

WEL

OK (KW) 2/13/07
staked by
BM

HUNTERS VIEW ROAD
EX. PUBLIC ACCESS STREET
(50' R/W, 22' PAVING, F-04-82)

RIVERWOOD, PHASE 2
LOT 56

FORTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE: 1" = 50' DATE: 1/24/07

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\1132\1132.dwg LRP 1/24/2007 5:02:20 PM
imc. Kyocera Mita KM-2530 KX.pc3

**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 Serv 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 #: 301-803-4174
Subdivision: Riverwood Lot #: 56 Well Tag #: HO-95-0701
Site Address: 11040 Hunters View Rd
Ellicott City, MD 21042

<u>Submersible Pump Data</u>	<u>Pitless Adapter</u>	<u>Well Cap and Electric Conduit</u>
Make: <u>Grundfos</u>	Make: <u>Campbell</u>	Two piece watertight cap: <input checked="" type="checkbox"/>
Model #: <u>ISSAE-07480</u>	Model#: <u>PA 800</u>	Screened, vented well cap: <input checked="" type="checkbox"/>
Pump Capacity: <u>15</u> GPM	Depth: <u>48</u> (36" min)	Cap secured to casing: <input checked="" type="checkbox"/>
Well Yield: <u>20</u> GPM	NSF approved: <u>YES</u>	Conduit min 18" B.G.: <input checked="" type="checkbox"/>
Depth of well encountered at time of pump installation: <u>220</u> (feet)		Conduit secured to well cap: <input checked="" type="checkbox"/>
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 <u>QPS</u>		
Safety rope, if used, attached to inside of well casing with eye bolt <u>N/A</u>		

<u>Piping to house</u>	<u>House Connection</u>
Type: <u>Poly</u>	PVC sleeved to undisturbed soil at wall penetration: <u>YES</u>
PSI: <u>160</u> (160 psi min)	Approximate length of sleeve: <u>5'</u>
Depth of supply line: <u>4'</u> (36" min)	Sleeve caulked and sealed properly: <u>YES</u>

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 2-22-13

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

Date Insp. Requested: 12/14/2012 Date Insp. Approved: (KW)

Inspection Data: Pitless adapter and water supply line at least 36" below grade

Two piece cap installed and attached to casing securely

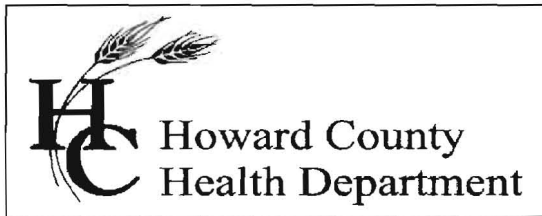
Elec. conduit extends at least 18" below grade/attached to cap properly

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 Under Footer

Adequate grout observed below pitless adapter



Bureau of Environmental Health

7178 Columbia Gateway Drive, Columbia, MD 21046-2147

Main: 410-313-6300 | Fax: 410-313-6303

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., Health Officer

INTERIM CERTIFICATE OF POTABILITY

Expiration Date – September 11, 2013

March 11, 2013

Homeowner
11040 Hunters View Road
Ellicott City, MD 21042

RE: Riverwood II, Lot 56
11040 Hunters View Road
Building Permit: B12003514
Well Permit: HO-95-0701

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 **3/4/2013**. Final approval of the well line connection to the dwelling was granted on **12/14/2012**. The well construction was completed on **7/12/2007**. Water samples were collected on **2/13/2013**.

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.

Gross Alpha and Beta samples were also collected on **7/12/2007**. Results showed a Gross Alpha level of **1.4 ± 1.3 pCi/L** and **Gross Beta** level of **2.4 ± 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.

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-95-0701. 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.**

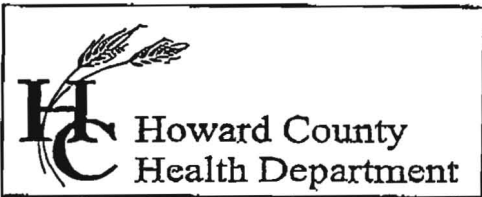
Please contact (410) 313-1773 to schedule a final water sample appointment or contact a certified water quality laboratory to schedule a water sample. A list of laboratories certified by the state of Maryland may be found at the following website:
<http://www.mde.state.md.us/assets/document/WSP-Labs-2010apr16.pdf>

Approving Authority,

A handwritten signature in black ink, appearing to read "Heidi Scott". The signature is written in a cursive style with a long horizontal stroke at the end.

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

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



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(s)
OPEN RUN ROAD & Whitman 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

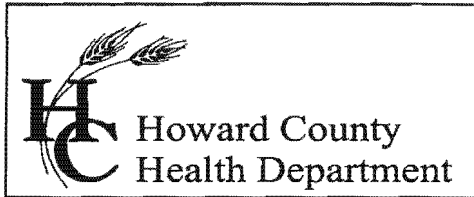
Contact is:

Easterday

301-829-1440

2006 DE 18 PM 2:32

ENVIRONMENTAL HEALTH



Bureau of Environmental Health
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

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

August 24, 2007

Winchester of Howard County
6905 Rockledge Dr.
Suite 800
Bethesda, MD 20817

RE: Riverwood II Subdivison, Lot# 56
Well Tag: HO-95-0701

To Whom It May Concern:

A sample was collected from a yield test July 12, 2007 and submitted to GPL Laboratories 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. In turn, this can provide information regarding naturally occurring radiation (i.e., Radionuclides) that may exist in your area of development within the County.

Results from this screening revealed a **Gross Alpha** of 1.4 ± 1.3 picocuries/liter (pCi/L); while the **Gross Beta** level was 2.4 ± 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 target 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 (potability) testing will still be necessary.

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.

Sincerely,

Bert Nixon, Deputy Director
Bureau of Environmental Health

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

Send Report To:

State of Maryland

DHMH - Laboratories Administration

Division of Environmental Chemistry

RADIATION LABORATORY

201 W. Preston Street, Baltimore, Maryland 21201

John M. DeBoy, Dr. P.H., Director

LABORATORY ANALYSIS REQUEST

Sample Bottle No. A: HO-95-070 No. B: _____ Field Blank Bottle No. A: _____ No. B: _____

Plant/Site Name: Riverswood 2 lot 56 County: Howard

Sample Source: Hunter View Ln Location: HO-95-070
(well no., lab sink, sample tap, etc.)

County: Plant No.

CHECK (one per box)

Drinking Water
Landfill
Stream
Other

Community
Non-community
Private
Other

Source (raw water)
Distribution (treated)
MCL

Emergency
Routine
Recheck
Special

Collector: K. Wolf

Telephone No: 410-313-2415

Date Collected: 7/12/07

Time Collected: 10:30 a.m. _____ p.m.

Nitric Acid Preserved: Yes No

Iced: Yes No

Submitters Code: Federal Project: Field Data: _____

Remarks: Sample collected @ end of yield pH _____ Chlorine _____

✓	Test	EPA Code	Laboratory No.	Results (pCi/L)	Date Reported
✓	Gross Alpha	4000	<u>707077-004</u>	<u>1.4 ± 13</u>	<u>7/17/07</u>
✓	Gross Beta	4100		<u>2.4 ± 20</u>	
	Radon-222 Bottle A	4004			
	Radon-222 Bottle B	4004			
	Field Blank A	4004			
	Field Blank B	4004			
	Tritium				
	Ra - 226	4020			
	Ra - 228	4030			
	Total Uranium	4006			

Date Received: _____ / _____ / _____

Supervisor: _____

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 #: 88092 Account #: 3123
Reference: Riverwood Lot 56 Company: National Water Servicing
Location: 11040 Hunters View Road Requested By: Dave Rycke
Ellicott City, MD 21042 Source: Well Water
Date/ Time Collected: 2/13/2013 1400 Site: Pressure Tank ✓
Date/Time Rec'd: 2/13/2013 1530 Treatment: None
Chlorine ppm: Free: ND ✓ Total: ND ✓ pH: 5.8
Collected By: C. Mooshian 7268CM Well #: HO-95-0701

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	✓ <1.0	MPN/ 100 ml	<1.0	SM18 9223	2/14/2013 / 1030 / CCH
Bacteria, E. coli, MPN	✓ <1.0	MPN/ 100 ml	<1.0	SM18 9223	2/14/2013 / 1030 / CCH
Nitrate	✓ 6.36	mg/L	10	601	2/13/2013 / 1645 / CCH
Turbidity	✓ 1.36	NTU	<10	SM18 2130B	2/14/2013 / 1045 / CCH
Sand	✓ NS	mg/L	5	Visual/Gravimetric	2/14/2013 / 0800 / CCH

'OK' reB 2/21/2013

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 & Chlorine level tested on site

Reason for Test : Use & Occupancy
Building Permit # : B12003514

Date Reported: 2/14/2013

Baker, Brian

From: Pickett, Tom
Sent: Monday, March 04, 2013 1:01 PM
To: Day, Lori; Wolf, Kevin; Tuder, Matt; Hart, Amy; Rocco, Anthony; Martin, Sharhonda; Baker, Brian
Cc: Pickett, Tom
Subject: U & O Release 11040

This morning, I observed the start-up of a Sewage Grinder Pump at the Riverwood Shared Septic System:

Riverwood, Contract 50-4287
Winchester Homes
11040 Hunters View Road, Lot #56
Ellicott City, MD 21042

The Sewage Grinder Pump test was successful ; the Bureau of Utilities releases its hold on this property for U & O.

This is the 9th lot on the shared septic system at this location.

Matt
410-313-4934 office
410-978-1320 mobile