

C-1 7059 SEQUENCE NO. (MDE USE ONLY)

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 AS16087

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

ST/CO USE ONLY DATE Received MM DD YY 05 02 07

DATE WELL COMPLETED MM DD YY 05 02 07

Depth of Well 22 480 26 (TO NEAREST FOOT) PERMIT NO. FROM "PERMIT TO DRILL WELL" 10-95-1087

OWNER Thompson last name first name Bn. Idrus TOWN Clarksville SUBDIVISION SECTION 3411/07 LOT 2

WELL LOG Not required for driven wells

Table with columns: DESCRIPTION (Use additional sheets if needed), FEET (FROM, TO), check if water bearing. Rows include Top Soil, Sandy, Sand Stone, MICKA, Sand Stone, MICKA, Flint Rock, MICKA.

GROUTING RECORD

WELL HAS BEEN GROUTED (Y) (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 to 30 ft.

CASING RECORD casing types insert appropriate code below (ST) STEEL (CO) CONCRETE (PL) PLASTIC (OT) OTHER

MAIN CASING TYPE (ST) Nominal diameter top (main) casing (nearest inch) 6 Total depth of main casing (nearest foot) 84

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

SCREEN RECORD screen type or open hole (ST) STEEL (BR) BRASS (PL) PLASTIC (HO) OPEN HOLE (OT) OTHER

C 3 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 15 ft. WHEN PUMPING 38 ft. TYPE OF PUMP USED (for test) A air P piston T turbine C centrifugal R rotary O other J jet S submersible

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED (Y) (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. 1 M D 1127 DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION) LIC. NO. 1 D

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

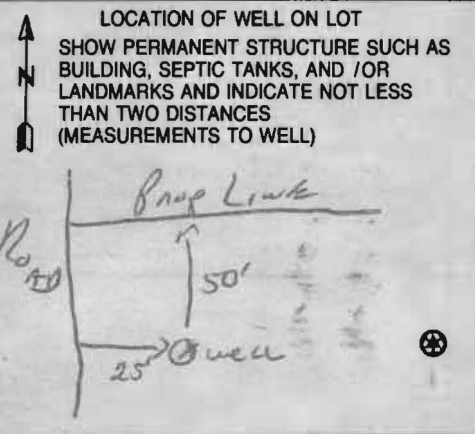
C 2 DEPTH (nearest ft.) 1 2 HO 82 480 E A C H S R E N 8 9 11 15 17 21 23 24 26 30 32 36 38 39 41 45 47 51 SLOT SIZE 1 2 3 DIAMETER OF SCREEN (NEAREST INCH) 56 60 from to

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

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)



B 1	<b>8450</b>	SEQUENCE NO. (MDE USE ONLY)	STATE OF MARYLAND <b>APPLICATION FOR PERMIT TO DRILL WELL</b>	STATE PERMIT NUMBER <b>HO-95-1087</b>
1 2 3 6			526280 please type	70 fill in this form completely 79

**OWNER INFORMATION**

Date Received (APA) \_\_\_\_\_

8 MM DD YY 13

15 Last Name Thompson Owner DALE Builders First Name \_\_\_\_\_ 34

36 6300 WOODSIDE CT. Street or RFD Suite A 55

57 Columbin Town MD. State 21046 Zip 76

**LOCATION OF WELL**

B 3

8 COUNTY Howard 21

23 SUBDIVISION Juan Bay Grove 42

SECTION 44 46 LOT 24 50

52 NEAREST TOWN CLARKSVILLE 71

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

**DRILLER INFORMATION**

76 Driller's Name Ralph E. Mayne M S D 117 License No. 81

Firm Name Ralph E. Mayne Inc.

Address 2024 Hardy Road Mt Airy MD. 21771

Signature Ralph E. Mayne Date 2-11-07

**DIRECTION OF WELL FROM TOWN (CIRCLE BOX)**

11 NEAR WHAT ROAD Heather Glen way 30

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)

34 25 37 DISTANCE FROM ROAD ENTER FT OR MI 38 39

TAX MAP: 34 BLK: 11 PARCEL 27

**WELL INFORMATION**

APPROX. PUMPING RATE (GAL. PER MIN.) 5 8 500 12

AVERAGE DAILY QUANTITY NEEDED (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 No. 9516063

STATE SIGNATURE \_\_\_\_\_ INSERT S \_\_\_\_\_ 41

DATE ISSUED 4/18/07 John Doe 4/18/06 41

43 MM DD YY 48 CO SIGNATURE EXP. DATE

NORTH GRID 498 0 0 0 EAST GRID 814 0 0 0

50 55 57 63

APPROXIMATE DEPTH OF WELL 150 FEET 24 28

APPROXIMATE DIAMETER OF WELL 64 INCH NEAREST

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

SOURCES OF DRILLING WATER

- well
- 
- 

WRITE THE BOX NUMBER FROM THE MAP HERE

E 814 498

N 814 498

000 000

Sample collected on 5/2/07 during yield test.

(Kew)

**METHOD OF DRILLING (circle one)**

BORED (or Augered) JETTED Jetted & DRIVEN

30  AIR-ROTary AIR-PERcussion ROTARY (Hydraulic Rotary)

37  CABLE REVerse-ROTary DRive-POINT

other \_\_\_\_\_

**REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX)**

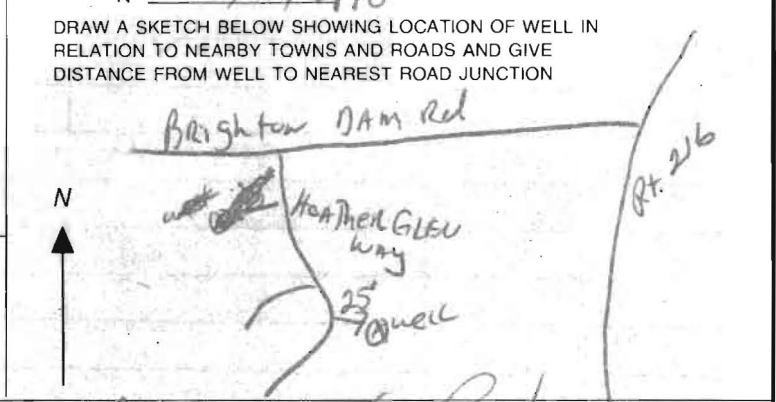
N THIS WELL WILL NOT REPLACE AN EXISTING WELL

Y THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED

39  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 DEEPEN 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)**

APPROX. PERMIT NUMBER HO 2006 G 003

PERMIT No. HO-95-1087

70 71 72 73 74 75 76 77 78 79

**SPECIAL CONDITIONS**

NOTE - APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED

Need to test for VOC's & Radon at yield test

DENV-Permit 97 © COUNTY



**HOWARD COUNTY HEALTH DEPARTMENT  
BUREAU OF ENVIRONMENTAL HEALTH  
WELL & SEPTIC PROGRAM  
TEL: (410)313-1771 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: R & G WATER SYSTEMS Telephone #: 410-239-0700  
Address: 4322 OPALS CHOICE DR.  
MANCHESTER, MD. 21102

(Must circle one) Licensed Plumber      Licensed Well Driller      Licensed Well Pump Installer

License # and name of individual responsible for the field installation:

Name (Print): RICKEY L. BOOS, SR. License# P10141

**\*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: COMPASS HOMES Telephone #: 301-596-7280  
Subdivision: PRESERVES AT CLARKSVILLE Lot #: 24 Well Tag #: HO-95-1087  
Site Address: 6243 HUNTER GLEN WAY  
CLARKSVILLE, MD. 21029

**Submersible Pump Data**

Make: ERWOOD'S  
Model #: 153QETD-220  
Pump Capacity 15 GPM  
Well Yield: 12 GPM

**Pitless Adapter**

Make: HAZARD  
Model #: PT800  
Depth: 42" (36" min)  
NSF/WSC approved:

**Well Cap and Electric Conduit**

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

Depth of well encountered at time of pump installation: 480' (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, 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: PVC  
PSI: 160 (160 psi min)  
Depth of supply line: 42" (36" min)

**House Connection**

PVC sleeve to undisturbed soil at wall penetration:   
Length of sleeve (5' minimum from foundation): 10'  
Sleeve sealed properly: FEFALOS

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: RICKEY L. BOOS, SR. date: 2/28/11

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

Date Insp. Requested: \_\_\_\_\_ Date Insp. Approved: 10/25/11 Inspector: (KG)  
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 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

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

## ATTENTION WELL DRILLERS!!!

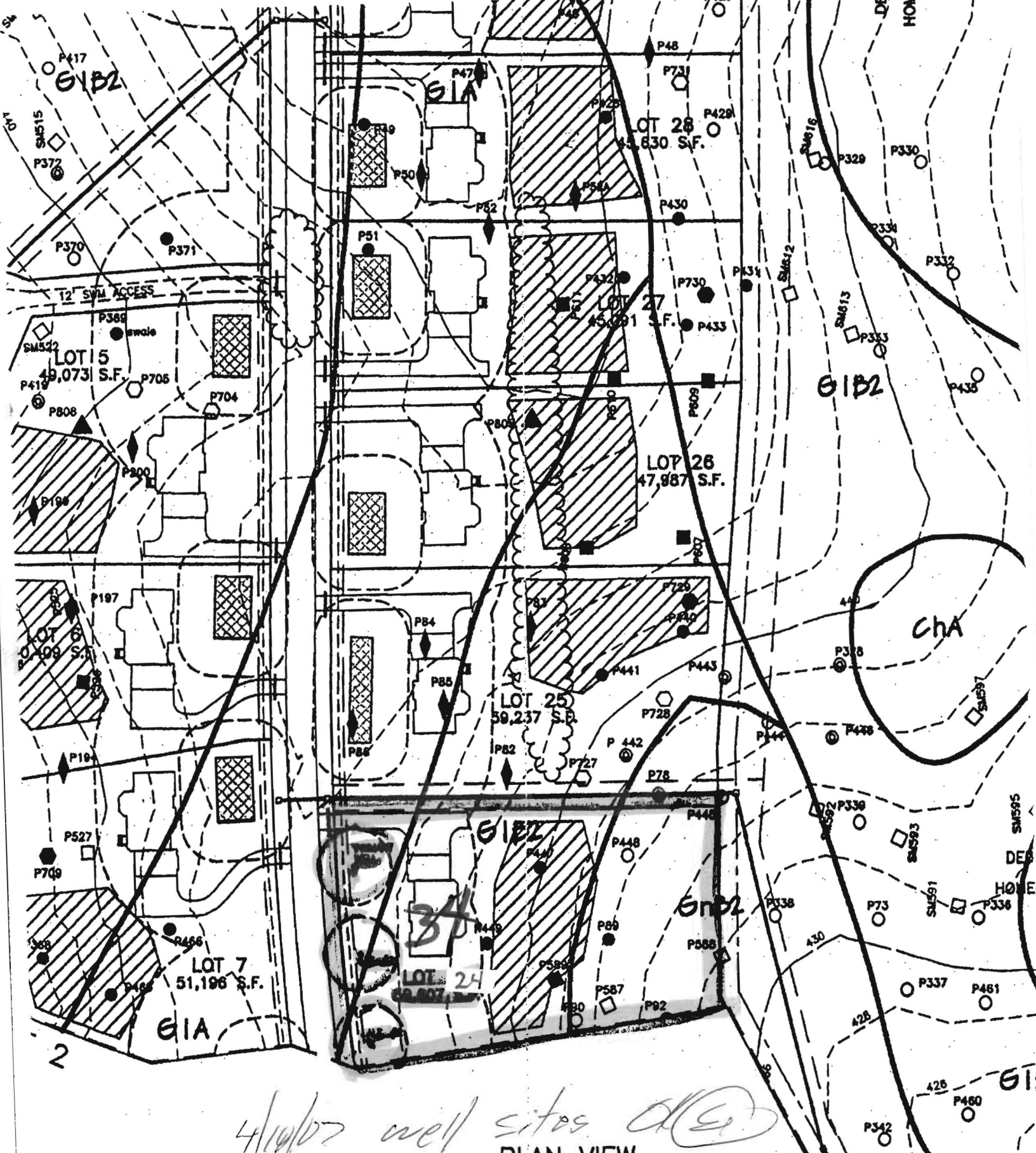
When submitting a well application for a new or replacement well, please indicate one of the following:

- The well site has been staked by Benchmark Engineering, Inc. on 2/16/2007 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.

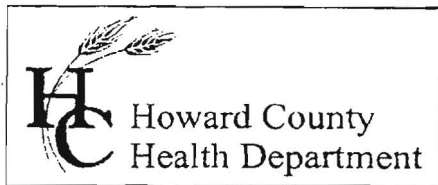
Please attach this sheet when submitting your green application. This should help improve communication allowing a more timely service for our citizens.

KN

*From - Dale Thompson Builders, Inc.  
Lot # - 24  
Sub Division - Turnbury Grove*



PLAN VIEW  
 SCALE: 1" = 100'



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

October 4, 2011

Mr. Andy Sun  
6243 Heather Glen Way  
Clarksville, Maryland 21029

RE: 6243 Heather Glen Way  
Lot 24, Preserve @ Clarksville  
Clarksville, MD. 21029

Dear Mr. Sun:

Follow-up testing was performed on September 1, 2011 and samples submitted to Florida Radiochemistry (FRC) to assess the possible presence of **Gross Alpha** and **Gross Beta** in your well water supply. Long term **Gross Alpha** and **Gross Beta** along with **Radium 226 / 228** samples were collected to assess the need for additional treatment.

Results from this pre-long term screening (sample collected from pressure tank) revealed a **Gross Alpha** of  $9.4 \pm 2.2$  picocuries/liter (pCi/L); while the **Gross Beta** level was  $9.5 \pm 1.6$  pCi/L. The **Gross Alpha** result was below the **maximum contaminant level (MCL)** of 15 pCi/L, while the **Gross Beta** level was below the targeted value of 50 pCi/L (roughly equivalent to the annual dose rate of 4 millirems per year).

Post-long term results (sample collected from powder room sink) revealed a **Gross Alpha** of  $< 1.0 \pm 0.7$  pCi/L; while the **Gross Beta** level was  $< 1.8 \pm 1.1$  pCi/L. The **Gross Alpha** result was below the MCL of 15 pCi/L, while the **Gross Beta** level was below the targeted value of 50 pCi/L (roughly equivalent to the annual dose rate of 4 millirems per year).

Results from the post-**Radium 226 / 228** (sample also collected from the powder room sink) revealed a **Radium 226** level of  $< 0.2 \pm 0.1$  pCi/L; while the **Radium 228** level was  $< 0.9 \pm 0.5$  pCi/L. These naturally occurring isotopes of radium are considered the most important due to their longer half-lives and health significance. Here the **combined Radium 226 / 228** was below the MCL of 5 pCi/L.

At the time of testing and based upon the reported results, with respect to these parameters, your treated well water supply is safe for all uses. Since post-long term levels are significantly lower, as well as below detection level findings for **Radium 226 / 228**, current treatment appears to be effectively removing **Gross Alpha**, **Gross Beta** and more importantly, **Radium 226 / 228**. To help ensure continued safe levels, regular maintenance of your treatment is recommended.

A copy of the test report is enclosed for your information. Please call this office at 410-313-1773 if you have any further questions.

Sincerely,  
  
Bert Nixon, Director  
Bureau of Environmental Health

Enclosure  
cc: Barry Glotfelty, MDE, Water Mgmt.



Analysis Report

Lab Sample I.D.	1109016-01	1109016-02	1109016-03	1109016-04
Client I.D.			HC6243 PRE	HC6243 POST
Gross Alpha			9.4	<1.0
Error +/-			2.2	0.7
MDL			1.3	1.0
EPA Method			900.0	900.0
Prep Date			09/08/11	09/08/11
Prep Time			06:19	06:19
Analysis Date			09/09/11	09/09/11
Analysis Time			08:22	08:22
Analyst			MJN	MJN
Gross Beta			9.5	<1.8
Error +/-			1.6	1.1
MDL			1.9	1.8
EPA Method			900.0	900.0
Prep Date			09/08/11	09/08/11
Prep Time			06:19	06:19
Analysis Date			09/09/11	09/09/11
Analysis Time			08:22	08:22
Analyst			MJN	MJN
Radium 226				<0.2
Error +/-				0.1
MDL				0.2
EPA Method				903.1
Prep Date				09/07/11
Prep Time				08:43
Analysis Date				09/15/11
Analysis Time				11:11
Analyst				MJN
Radium 228				<0.9
Error +/-				0.5
MDL				0.9
EPA Method				Ra-05
Prep Date				09/07/11
Prep Time				08:43
Analysis Date				09/15/11
Analysis Time				12:26
Analyst				SN
Units			pCi/l	pCi/l

Send Report To:

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

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: HC 6243 No. B: \_\_\_\_\_ Field Blank Bottle No. 1: \_\_\_\_\_ No B: \_\_\_\_\_

Plant/Site Name: ANDY SUN County: HOWARD

Sample Source: 6243 HEATHER GLEN WAY Location: \_\_\_\_\_  
(well no, lab sink, sample tap, etc.)

County:  1  3 Plant No.

CHECK (one per box)

Drinking Water	<input checked="" type="checkbox"/>
Landfill	<input type="checkbox"/>
Stream	<input type="checkbox"/>
Other	<input type="checkbox"/>

Community	<input type="checkbox"/>
Non-community	<input type="checkbox"/>
Private	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>

Source (raw water)	<input checked="" type="checkbox"/>
Distribution (treated)	<input type="checkbox"/>
MCL	<input type="checkbox"/>

Emergency	<input type="checkbox"/>
Routine	<input checked="" type="checkbox"/>
Recheck	<input type="checkbox"/>
Special	<input type="checkbox"/>

Collector: DOWU ORESANYA

Telephone No.: 410-313-4259

Date Collected: 09/01/2011

Time Collected: 10:00 (a.m.) \_\_\_\_\_ p.m.

Nitric Acid Preserved: Yes  No

Iced: Yes  No

Submitters Code:

Federal Project:

Field Data: \_\_\_\_\_ pH \_\_\_\_\_ Chlorine \_\_\_\_\_

Remarks: SAMPLE IS TAKEN FROM TAP DIRECTLY FROM WELL.

✓	Test	EPA Code	Laboratory No.	Results (pCi/L)	Date Analyzed	Date Reported
✓	Gross Alpha <u>LONG</u> { <u>PRE</u>	4000	1109016-03	9.4	9-9-11	9-16-11
✓	Gross Beta <u>LONG</u> { <u>PRE</u>	4100	1109016-03	9.5	9-9-11	9-16-11
	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: \_\_\_\_\_

•Tel. No.: (410) 767-5537 •Fax No.: (410) 333-5373

Send Report To:

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

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: HC6243 No. B: \_\_\_\_\_ Field Blank Bottle No. 1: \_\_\_\_\_ No B: \_\_\_\_\_

Plant/Site Name: ANDY SUN County: HOWARD

Sample Source: 6243 HEATHER GLEN WAY Location: \_\_\_\_\_  
(well no, lab sink, sample tap, etc.)

County:  1  3 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: Idowu ORESANYA

Telephone No.: 410-313-4259

Date Collected: 09/01/2011

Time Collected: 10:00  a.m. \_\_\_\_\_ p.m.

Nitric Acid Preserved: Yes  No

Iced: Yes  No

Submitters Code:

Federal Project:  5

Field Data: 7.3 0.00  
pH Chlorine

Remarks: SAMPLE IS TAKEN FROM POWDER ROOM SINK.


✓	Test	EPA Code	Laboratory No.	Results (pCi/L)	Date Analyzed	Date Reported
✓	Gross Alpha } LONG (post)	4000	1109016-04	<1.0	9-9-11	9-16-11
✓	Gross Beta } (post)	4100	1109016-04	<1.8	9-9-11	9-16-11
	Radon-222 Bottle A	4004				
	Radon-222 Bottle B	4004				
	Field Blank #A	4004				
	Field Blank #B	4004				
	Tritium					
✓	Ra - 226	4020	1109016-04	<0.2	9-15-11	9-16-11
✓	Ra - 228	4030	1109016-04	<0.9	9-15-11	9-16-11
	Total Uranium	4006				

Date Received: \_\_\_/\_\_\_/\_\_\_

Supervisor: \_\_\_\_\_

•Tel. No.: (410) 767-5537 •Fax No.: (410) 333-5373

Chain of Custody

		Florida Radiochemistry Services, Inc.			FL Certification E83033		
		5456 Hoffner Ave., Suite 201 Orlando, FL. 32812					
		Ph.(407)382-7733					
		Fax(407)382-7744					
		Email: flradiochemistry@cfl.rr.com					
Company Name:	<b>Howard County Health Dept</b>			Phone #	( 410) 313-1773		
Address:	<b>7178 Columbia Gateway Dr</b>			Fax #	( 410) 313-2648		
City / State / Zip	<b>Columbia, MD 20146</b>						
Send Report to:	<b>Bert Nixon, bnixon@howardcountymd.gov</b>						
Additional Report:							
Invoice to:	<b>Bert Nixon</b>						
Project I.D.							
P.O. #							
Sample I. D.	Date / Time Sampled	Sample Type	# of Btls	Pres.	Analysis Requested	Remarks	
(Sample Location)							
1	<b>HC6804</b>	08/31/2011 - 10:00AM	TREAT	1	HNO3	Alpha/Beta Long	Post/ H2O Softner
2	<b>HC6804</b>	08/31/2011 - 10:00AM	TREAT	1	HNO3	Radium 226/228	Post / H2O Softner
3	<b>HC6804</b>	09/01/2011 - 8:30AM	RAW	1	HNO3	Alpha/Beta Long	Pre Treat
4	<b>HC6243</b>	09/01/2011 - 10:00AM	RAW	1	HNO3	Alpha/Beta Long	Pre Treat
5	<b>HC6243</b>	09/01/2011 - 10:00AM	TREAT	1	HNO3	Alpha/Beta Long	Post / H2O Softner
6	<b>HC6243</b>	09/01/2011 - 10:00AM	TREAT	1	HNO3	Radium 226/228	Post / H2O Softner
7							
8							
9							
10							
Relinquished by:	Date/Time			Sampled By:			
				Boleslav Shklyar		410-313-1787	
Received by:	Date/Time			Idowu Oresanya		410-313-4259	



**Bureau of Environmental Health**  
7178 Columbia Gateway Drive  
Columbia, MD 21046-2147  
(410) 313-2640 Fax (410) 313-2648  
TDD (410) 313-2323 Toll Free 1-866-313-6300  
website: [www.hchealth.org](http://www.hchealth.org)

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

September 08, 2011

Andy Sun  
6243 HEATHER GLEN WAY  
CLARKSVILLE, MD 21029

**RE: Water Sample Results  
6243 HEATHER GLEN WAY**

Dear Andy Sun,

We have received the results from the testing of the water sample(s) taken from the above referenced property on September 01, 2011. A description of the results and the established standards for each test is included below. Standards such as maximum contaminant levels (MCL), secondary maximum contaminant levels (SMCL), and drinking water equivalency levels (DWEL) are established by the EPA and other agencies to provide a reference for determining when action should be taken. These standards help to improve the overall quality of your water or ensure that steps are taken to treat the water to prevent you and your family from getting sick. Typically, no water is completely free of contamination but you should be concerned if the level of contamination for a particular test exceeds the standard.

The results from the **Bacteria** testing found that your well water sampled from the powder room faucet contains no bacteria at this time and is considered safe for all uses. According to drinking water standards there should be no bacteria present.

Please contact the Health Department at (410) 313-1773 between 8:30 a.m. and 4:30 p.m., Monday through Friday if you have any questions regarding these test results.

Sincerely,

Hank Oswald, R.S.  
Community Hygiene Program

Enclosures

**STATE OF MARYLAND  
DEPARTMENT OF HEALTH AND MENTAL HYGIENE  
LABORATORIES ADMINISTRATION**

201 W. Preston Street  
P.O. Box 2355, Baltimore, MD 21203  
John M. DeBoy, Dr. P.H., Director

155757

Category Code 4F Lab. No. \_\_\_\_\_

**Bacteriological Drinking Water Report**

**Field Record**

<b>Sample Type:</b> Community <input type="checkbox"/> Non-Community <input type="checkbox"/> Non-Transient <input type="checkbox"/> Private <input checked="" type="checkbox"/> Check Sample <input type="checkbox"/> C.O.P. <input type="checkbox"/>	Source <u>ANDY SUN</u>
	Location <u>6243 HEATHER GLEN WAY POWDER ROOM SINK</u>
	Iced: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> <span style="float:right"><input checked="" type="checkbox"/> a.m. <input type="checkbox"/> p.m.</span>
	Treated: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Time Collected <u>10:00</u>
	Collector# <u>656910</u> Bottle No. <u>HC 6243</u>
Collector Name <u>LORESANYA</u> County <u>HOWARD</u>	

<b>Test Requested:</b>	<u>13</u>			<u>09</u>	<u>01</u>	<u>11</u>
Quantitative <input checked="" type="checkbox"/>	County	Plant No.	Sampling Station	Date Collected		
P/A <input type="checkbox"/>						
MTF <input type="checkbox"/>						
SPC <input type="checkbox"/>	pH <u>7.3</u>	Res. Cl: Free <u>000</u>	Total <u>00</u>	Card#		

**LABORATORY RECORD**

Thiosulfate: Pres.  Absent  Undetermined

**PRESUMPTIVE MTF • P/A TEST\***

**CONFIRMED • P/A TEST**

ml of Sample	10 ml.				100 ml.				No. of +
Gas 24 hours									
Gas 48 hours									

**P/A TEST (CONFIRMED) \*\*\***

ml. of Sample	100 ml.
Total Coliforms	
<i>E. coli</i>	

**QUANTITATIVE TEST (CONFIRMED) \*\*\***

100 ml. of Sample	No. of Pos	MPN
Total Coliforms	0	21
<i>E. coli</i>	0	21

SPC Plate: A  B

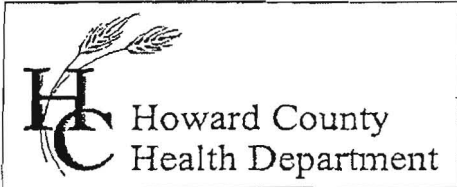
24.48.72 hrs/Heterotrophic Plate Count (HPC/ml)§ =

Temp. Control 3.5 °C

- \* using Lauryl Sulfate Trypticase Broth at 35° C incubation
- † using Brilliant Green Lactose Rik- Broth at 35° C incubation
- ‡ using EC Broth at 44.5° C incubation
- § using Plate Count Agar at 35° C incubation
- \*\*\* using ONPG-MCG at 35° C incubation

Remarks COL-18

Date & Hour	Laboratory
SEP 1 '11 PM 2:28	E. SHORE REG. <input type="checkbox"/>
SEP 1 '11 PM 6:37	CENTRAL <input checked="" type="checkbox"/> W. MD. REG. <input type="checkbox"/>
SEP 2 '11 PM 3:36	Bacteriologist <u>J. G. [Signature]</u>



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](http://www.hchealth.org)

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

## *Drinking Water – Maryland’s most precious resource!*

Howard County Health Department, Bureau of Environmental Health recommends that anyone who obtains their water supply from a private well have their well water tested regularly. Although private well water can provide excellent quality drinking water, the water can also become tainted with bacteria and chemicals from unseen sources.

### *You are responsible for maintaining the safety of your drinking water supply*

#### What should you test for?

Although it is impractical to test for all possible contaminants, two inexpensive tests can serve as indicators of the overall condition of your well:

- **Coliform Bacteria:** Coliform bacteria doesn't usually cause illness, but serve as an indicator that disease – causing organisms could get into your well.
- **Nitrate:** Nitrate passes very easily through soil to groundwater from sources such as fertilizers, septic systems and animal wastes.

#### When should you have your well water tested?

Generally, every 3 to 5 years, or:

- If a family member is experiencing recurrent gastrointestinal problems.
- Whenever you notice a change in taste or color of the water.
- After any type of well repairs or if you notice that the well cap is not secure.
- Prior to selection and installation of any treatment system.
- For nitrate, if you have a pregnant women or newborn baby drinking the water.

- To have your water tested, log onto <http://dhmh.maryland.gov/labs> (click on *Drinking Water Certification* for a List of Approved Drinking Water Laboratories Certified in Maryland), or...
- Contact the Howard County Health Department at 410-313-1773 for assistance, or go to [www.hchealth.org](http://www.hchealth.org) (click on *Bureau of Environmental Health* then *Community Hygiene Program for more information*)
- Additional well information can be obtained at <http://www.aonr.umd.edu/water/>

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

March 4, 2011

Homeowner  
6243 Heather Glen Way  
Clarksville, MD 21029

RE: The Preserve at Clarksville, Lot 24  
6243 Heather Glen Way  
BP #: B10000503  
Well Tag: HO-95-1087

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 09/01/2010. Final approval of the well line connection to the dwelling was approved on 10/25/2010.**

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 02/22/2011. Results showed a post-treated Gross Alpha level of **<1.0 +- 0.7 pCi/L** and **Gross Beta** level of **<1.7 +- 1.0 pCi/L**. The **Gross Alpha** was below the maximum contaminant level (MCL) of 15 pCi/L, while the Gross Beta was below the MCL of 50pCi/L. Your Reverse Osmosis (R.O.) water conditioning unit appears to be working as it should to effectively treat the high levels of Radium in your water supply.

Enclosed with this certificate, is a copy of the septic permit and the 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.

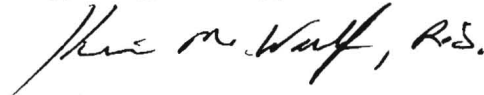
#### **INTERIM CERTIFICATE OF POTABILITY**

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-95-1087. 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: 02/17/2011, 02/22/2011  
Date of Radium Samples: 02/22/2011  
Date of Well Completion: 05/02/2007

Approving Authority,



Kevin M. Wolf, R.E.H.S./R.S.  
Environmental Sanitarian  
Well & Septic Program

cc: Building Inspector's Office  
Community Hygiene Program  
File



**TRACE LABORATORIES, INC**  
 5 North Park Drive  
 Hunt Valley, MD 21030 USA  
 Telephone: 410/584-9099 / Fax: 410/584-9117  
 Website: www.tracelabs.com / Email: info@tracelabs.com

Maryland State Certified Laboratory #318

**CERTIFICATE OF ANALYSIS**

**Requester:**

Amy Ferrer  
 Compass Homes  
 6206 Heather Glen Way  
 Clarksville, Maryland 21029

**S/O Number:** 80422

**Report Date:** February 21, 2011

*Potability Testing*

**Property Sampled:** 6243 Heather Glen Way, 21029  
**Sample Location:** Laundry Sink  
**Residual Chlorine:** ~~<0.1 mg/L~~

**Building Permit #:** B10000503  
**Sampler ID #:** 9813AM  
**Samples Iced:** Yes

**County:** Howard  
**Map:** 34

**Subdivision:** Preserve at Clarksville  
**Parcel:** 77

**Lot #:** 24

**Date/Time Collected in Field:** February 17, 2011 @ 11:00 am  
**Date/Time Received in Lab:** February 17, 2011 @ 3:30 pm

**Well Tag #:** HO-95-1087  
**Well Condition:** 2-Piece Cap, 3 Bolts Missing, Cap Tight

**Water Treatment/Conditioning:** None

PARAMETER	METHOD	MCL/*SMCL	RESULT	PASS/FAIL
Total Coliform	SM 9223B	Absent	Absent	Pass
<i>E. coli</i>	SM 9223B	Absent	Absent	Pass
Nitrate	SM 4500D	10 mg/L as N	<1.0 mg/L as N	Pass
Turbidity	EPA 180.1	10 NTU	<1.0 NTU	Pass
pH	EPA 150.1	*6.5-8.5 Units	6.8 Units	***
Sand		Negative	Negative	

Katherine C. Higgs  
 Katherine C. Higgs  
 Administrative Assistant

MCL: Maximum Contamination Level, an enforceable level established by the EPA  
 \*SMCL: Secondary Maximum Contamination Level, a level recommended by the EPA  
 \*\*\*A non-enforceable parameter that may cause cosmetic effects or aesthetic effects (such as taste, color or odor) in drinking water.



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Maryland State Certified Laboratory #318

CERTIFICATE OF ANALYSIS

Requester: Amy Ferrer  
 Compass Homes  
 6206 Heather Glen Way  
 Clarksville, Maryland 21029

S/O Number: 80474  
 Report Date: February 28, 2011

Property Sampled: 6243 Heather Glen Way, 21029  
 Sample Location: Reverse Osmosis (R/O) Tap  
 Residual Chlorine: <0.1 mg/L

Building Permit #: B10000503  
 Sampler ID #: 9813AM  
 Samples Iced: Yes

County: Howard  
 Map: 140034

Subdivision: Preserve at Clarksville  
 Parcel: 0077 Lot #: 24

Date/Time Collected in Field: February 22, 2011 @ 12:20 pm  
 Date/Time Received in Lab: February 22, 2011 @ 3:50 pm

Well Tag #: HO-95-1087  
 Well Condition: 2-Piece Cap, 3 Bolts Missing, Cap Tight

Water Treatment/Conditioning: Reverse Osmosis (R/O)

*\* Call Lab if this  
 find out if this  
 test is long term?*

PARAMETER	METHOD	DETECTION LIMIT	MCL*	RESULT	ACCEPTABILITY
Gross Alpha	EPA 900.0	1.0 pCi/L	15 pCi/L	<1.0 ± 0.7 pCi/L	Acceptable
Gross Beta	EPA 900.0	1.7 pCi/L	50 pCi/L	<1.7 ± 1.0 pCi/L	Acceptable

\*Note: There are no established limits set forth by the EPA for radionuclide particles in private well water. The limits for public water are instead provided as MCLs in this report. The acceptability of this sample is based on these requirements.

*Katherine C. Higgs*  
 Katherine C. Higgs  
 Administrative Assistant



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Maryland State Certified Laboratory #318

CERTIFICATE OF ANALYSIS

Requester:

Amy Ferrer  
Compass Homes  
6206 Heather Glen Way  
Clarksville, Maryland 21029

S/O Number: 80422

Report Date: February 21, 2011

Radium Testing

Property Sampled: 6243 Heather Glen Way, 21029  
Sample Location: Laundry Sink  
Residual Chlorine: <0.1 mg/L

Building Permit #: B10000503  
Sampler ID #: 9813AM  
Samples Iced: Yes

County: Howard  
Map: 34

Subdivision: Preserve at Clarksville  
Parcel: 77

Lot #: 24

Date/Time Collected in Field: February 17, 2011 @ 11:00 am  
Date/Time Received in Lab: February 17, 2011 @ 3:30 pm

Well Tag #: HO-95-1087  
Well Condition: 2-Piece Cap, 3 Bolts Missing, Cap Tight

Water Treatment/Conditioning: None

*Handwritten notes:*  
- OK  
- 10K  
- NEED the Treatment  
- Radium 226 + 228  
- Gross alpha Beta short & long term

PARAMETER	METHOD	DETECTION LIMIT	MCL*	RESULT	ACCEPTABILITY
Gross Alpha	EPA 900.0	1.3 pCi/L	15 pCi/L	22.2 ± 3.3 pCi/L	HIGH
Gross Beta	EPA 900.0	2.3 pCi/L	50 pCi/L	11.5 ± 1.9 pCi/L	Acceptable

\*Note: There are no established limits set forth by the EPA for radionuclide particles in private well water. The limits for public water are instead provided as MCLs in this report. The acceptability of this sample is based on these requirements.

*Katherine C. Higgs*  
Katherine C. Higgs  
Administrative Assistant



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**CERTIFICATE OF ANALYSIS**

**Requester:**

Amy Ferrer  
 Compass Homes  
 6206 Heather Glen Way  
 Clarksville, Maryland 21029

**S/O Number:** 80422

**Report Date:** February 21, 2011

*Potability Testing*

**Property Sampled:** 6243 Heather Glen Way, 21029  
**Sample Location:** Laundry Sink  
**Residual Chlorine:** <0.1 mg/L

**Building Permit #:** B10000503  
**Sampler ID #:** 9813AM  
**Samples Iced:** Yes

**County:** Howard  
**Map:** 34

**Subdivision:** Preserve at Clarksville  
**Parcel:** 77

**Lot #:** 24

**Date/Time Collected in Field:** February 17, 2011 @ 11:00 am  
**Date/Time Received in Lab:** February 17, 2011 @ 3:30 pm

**Well Tag #:** HO-95-1087  
**Well Condition:** 2-Piece Cap, 3 Bolts Missing, Cap Tight

**Water Treatment/Conditioning:** None

PARAMETER	METHOD	MCL/*SMCL	RESULT	PASS/FAIL
Total Coliform	SM 9223B	Absent	Absent	Pass
<i>E. coli</i>	SM 9223B	Absent	Absent	Pass
Nitrate	SM 4500D	10 mg/L as N	<1.0 mg/L as N	Pass
Turbidity	EPA 180.1	10 NTU	<1.0 NTU	Pass
pH	EPA 150.1	*6.5-8.5 Units	6.8 Units	***
Sand		Negative	Negative	

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MCL: Maximum Contamination Level, an enforceable level established by the EPA  
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