

C1 1155 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)

FILL IN THIS FORM COMPLETELY PLEASE TYPE

COUNTY NUMBER A516063

ST/CO USE ONLY DATE RECEIVED

DATE WELL COMPLETED

Depth of Well 2200'

PERMIT NO. FROM "PERMIT TO DRILL WELL" Ho-95-0231

OWNER Horton R. D. STREET OR RFD Greenwood Ct. TOWN Clarksville md SUBDIVISION Fummary Grove SECTION LOT X9

WELL LOG Not required for driven wells

GROUTING RECORD WELL HAS BEEN GROUTED (Y) (N)

PUMPING TEST

Table with columns: DESCRIPTION, FEET (FROM, TO), check if water bearing. Rows: Sand (0-67), Gray Mica Rock (67-200)

TYPE OF GROUTING MATERIAL (Cement, Bentonite Clay) NO. OF BAGS, NO. OF POUNDS, GALLONS OF WATER

HOURS PUMPED (3), PUMPING RATE (8.5), METHOD USED TO MEASURE PUMPING RATE (Bucket)

CASING RECORD (Steel, Concrete, Plastic, Other)

WATER LEVEL (distance from land surface) BEFORE PUMPING, WHEN PUMPING, TYPE OF PUMP USED

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

PUMP INSTALLED DRILLER INSTALLED PUMP (YES/NO)

OTHER CASING (if used) diameter, depth

TYPE OF PUMP INSTALLED PLACE, CAPACITY: GALLONS PER MINUTE, PUMP HORSE POWER, PUMP COLUMN LENGTH

SCREEN RECORD (Steel, Brass, Plastic, Open Hole, Other)

NUMBER OF UNSUCCESSFUL WELLS: 0

DEPTH (nearest ft.) 69, 200

CASING HEIGHT (circle appropriate box and enter casing height) LAND SURFACE

CIRCLE APPROPRIATE LETTER A WELL WAS ABANDONED AND SEALED, ELECTRIC LOG OBTAINED, TEST WELL CONVERTED TO PRODUCTION WELL

ELECTRIC LOG SLOTS (A, C, J, P, R, S, T, O) IN BOX 29

LOCATION OF WELL ON LOT SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND/OR LANDMARKS

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION"

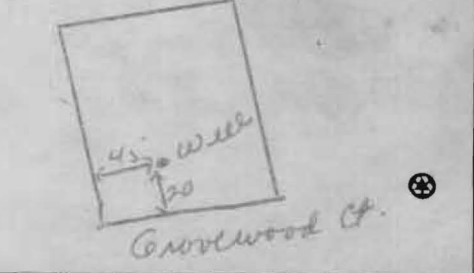
DIAMETER OF SCREEN (NEAREST INCH)

DRILLERS LIC. NO. MSD 024, DRILLERS SIGNATURE, LIC. NO. D

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68, MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)

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

TELESCOPE CASING, LOG INDICATOR, OTHER DATA



B 1 1488  
1 2 3 6

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND  
APPLICATION FOR PERMIT TO DRILL WELL  
523944 please type

STATE PERMIT NUMBER  
HO - 95 - 0231  
70 fill in this form completely 79

Date Received (APA) 01 20 06  
8 MM DD YY 13  
OWNER INFORMATION  
15 Last Name Horton R Owner First Name D.  
36 Street or RFD 1370 Piccard Drive 55  
57 Town Rockville Md 70 State 72 Zip 76 20850

B 3 LOCATION OF WELL  
8 COUNTY Howard 21  
23 SUBDIVISION Jumping Grove 42  
SECTION 44 46 LOT 48 X 9 50  
52 NEAREST TOWN Clarksville 71  
MILES FROM TOWN (enter 0 if in town) 1/2 M I 73 76 77 78

DRILLER INFORMATION  
Driller's Name Joseph L. Mayne M 5 D 024 76 License No. 81  
Firm Name Joseph L Mayne Well Drilling  
Address 5512 Ridge Rd Mt. Airy, Md. 21791  
Signature Joseph L Mayne 1-6-06 Date

B 4 DIRECTION OF WELL FROM TOWN (CIRCLE BOX)  
11 NEAR WHAT ROAD Greenwood Ct. 30  
ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)  
34 25 37 DISTANCE FROM ROAD FT  
ENTER FT OR MI 38 39  
TAX MAP: 34 BLK: 17 PARCEL 77

B 2 WELL INFORMATION  
APPROX. PUMPING RATE (GAL. PER MIN.) 5 8 12  
AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 500 14 20

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

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL  
COUNTY NAME HOWARD (13) COUNTY NO. A518063  
STATE SIGNATURE INSERT S  
DATE ISSUED 2/8/06 41  
43 MM DD YY 48 CO SIGNATURE [Signature] EXP. DATE 2/9/07  
NORTH GRID 497 000 EAST GRID 814 000  
50 55 57 63

APPROXIMATE DEPTH OF WELL 300 24 28 FEET  
APPROXIMATE DIAMETER OF WELL 6 NEAREST INCH

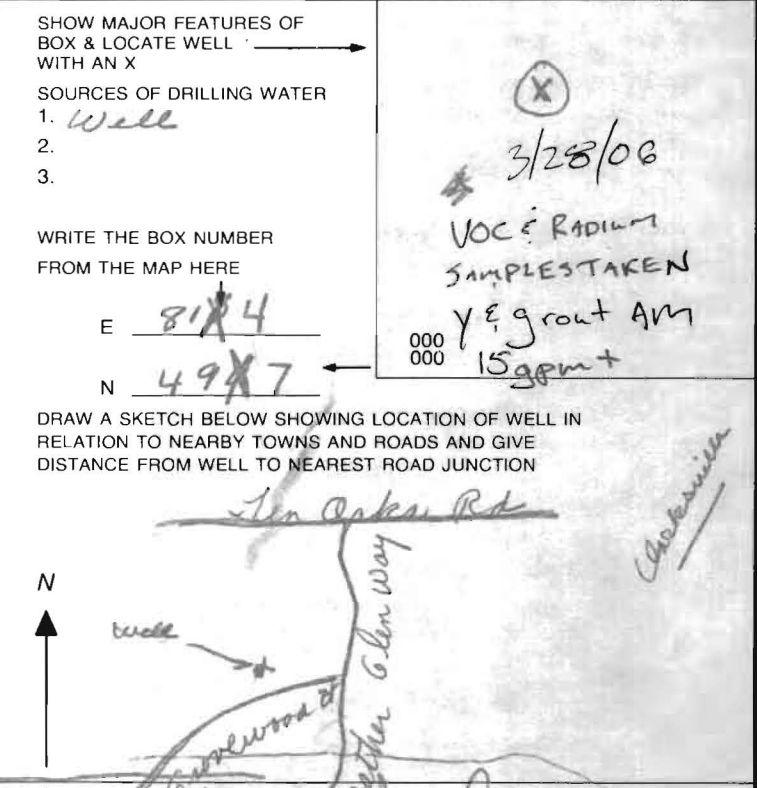
SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X  
SOURCES OF DRILLING WATER  
1. Well  
2.  
3.  
WRITE THE BOX NUMBER FROM THE MAP HERE  
E 814  
N 497  
DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION

METHOD OF DRILLING (circle one)  
BORED (or Augered) JETTED Jetted & DRIVEN  
36 AIR-ROTary AIR-PERCussion ROTARY (Hydraulic Rotary)  
37 CABLE REVerse-ROTary DRive-POINT  
other

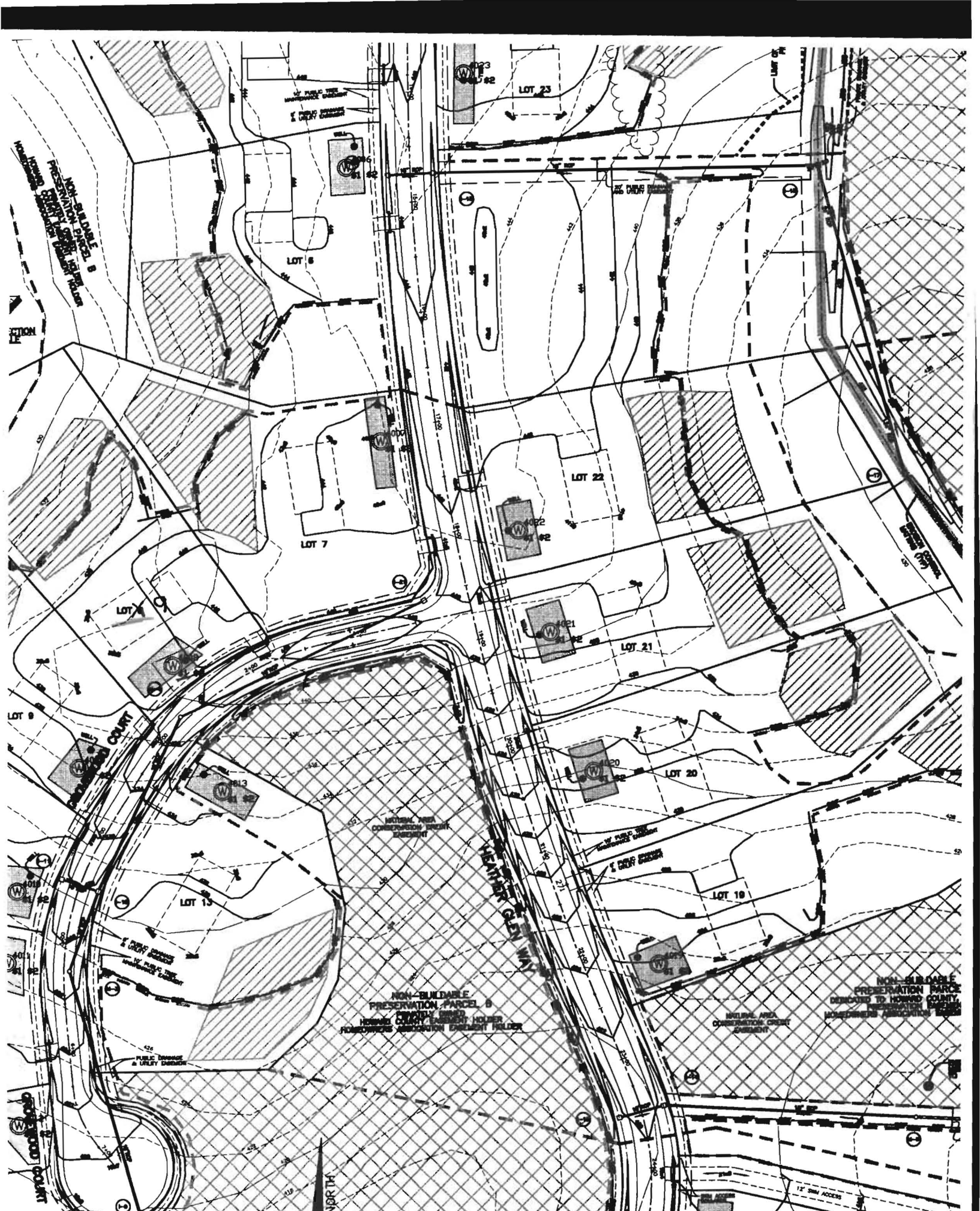
REPLACEMENT OR DEEPENED WELLS (CIRCLE APPROPRIATE BOX)  
 THIS WELL WILL NOT REPLACE AN EXISTING WELL  
 THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED  
39  THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS  
 THIS WELL WILL DEEPEN AN EXISTING WELL  
PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPENED (IF AVAILABLE) 41 52

Not to be filled in by driller (MDE OR COUNTY USE ONLY)  
APPROP. PERMIT NUMBER H02006G003(01)  
PERMIT No. HO - 95 - 0231  
70 71 72 73 74 75 76 77 78 79

SPECIAL CONDITIONS  
NOTE - APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED  
This Well Must be tested for Radium & V.O.C.s @ yield test







BY PUBLIC USE  
WATERWAY EASEMENT  
& OPEN SPACE

LOT 8

LOT 23

LOT 7

LOT 22

LOT 6

LOT 21

LOT 5

LOT 20

LOT 13

LOT 19

NON-BUILDABLE  
PRESERVATION PARCEL 8  
WOOD COUNTY ENGINEER HOLMES  
FORBOWNERS ASSOCIATION CREDIT HOLDER

NON-BUILDABLE  
PRESERVATION PARCEL  
DEDICATED TO WOOD COUNTY  
ENGINEER HOLMES  
FORBOWNERS ASSOCIATION

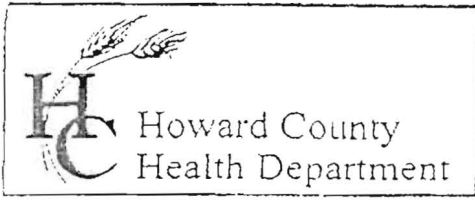
NATURAL AREA  
CONSERVATION CREDIT  
AGREEMENT

PUBLIC EASEMENT  
& OPEN SPACE

WOOD COUNTY

NORTH

12' SIDE ACCESS



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

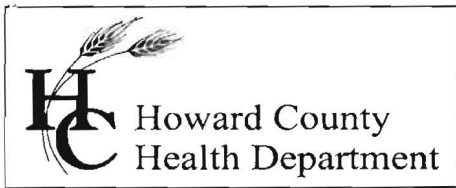
When submitting a well permit application for a proposed well for new construction, please indicate one of the following:

- The well site has been staked by Benchmark Engineering  
(professional land surveyor or company employing professional land surveyors)  
on 12-14-05 (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

.33 Lots for D. R. Horton  
Surnbury Grove



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

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

July 9<sup>th</sup>, 2010

Thomas E. Young  
12606 Grovewood Court  
Clarksville, MD 21029

RE: Preserve @ Clarksville, Lot 9  
12606 Grovewood Ct.  
BP #: B09001642  
Well Permit # HO-95-0231

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 06/10/2010. Final approval of the well line connection to the dwelling was approved on 07/8/2010.**

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.

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

This is a **Temporary Deviation** to allow additional time for radium testing and for the levels to meet 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.**

Gross Alpha and Gross Beta samples were collected on 03/28/2006. Results showed a Gross Alpha level was 52.5 +/- 2.6 pCi/L and Gross Beta level was 7 +/- 1.0 pCi/L. This is explained in more detail from the Radium letter issued 05/09/2006 for the aforementioned property. In addition, a pretreatment device (i.e. reverse osmosis, water softener) needs to be installed.

This temporary deviation is good for **45 days** to allow time for radium testing. An Interim Certificate of Potability will be issued upon submission of a water sample report that documents **Gross Alpha and Gross Beta, short and long term, radium 226 and 228 after treatment, that are within the EPA 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-95-0231. 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.**

**The Health Department has no objection to the issuance of temporary Use and Occupancy for the above referenced property.**

Date of Water Samples: 06/24/2010, 06/30/2010  
Date of Radium Tests: 05/28/2006, **Pending gross alpha, beta and radium 226, 228**  
Date of Well Completion: 03/28/2006

Approving Authority,

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

cc: Building Inspector's Office  
Community Hygiene Program  
File



**Requester:**  
 Compass Homes  
 6206 Heather Glen Way  
 Clarksville, MD 21029

**S/O Number:** 77991  
**Report Date:** June 24, 2010

**Property Sampled:** 12606 Grovewood Court, 21029

**County:** Baltimore  
**Subdivision:** Preserve @ Clarksville **Tax Map #:** 34  
**Lot #:** PC 9 **Parcel #:** 77  
**Building Permit #:** B 09001642

**Date/Time Collected:** June 23, 2010 at 12:40 pm  
**Date/Time Received:** June 23, 2010 at 3:34 pm

**Sample Location:** Pressure Tank  
**Sampler ID:** 9813AM  
**Samples Iced:** Yes  
**Residual Cl<sub>2</sub> <0.1 mg/L:** Yes

**Well Tag Number:** HO-95-0231  
**Well Condition:** 2-Piece Cap  
 Satisfactory  
**Water Conditioning/Treatment:** None

PARAMETER	RESULT	METHOD	MCL/*SMCL	
Nitrate	3.9 mg/L as N	SM 4500D	10 mg/L as N	Pass
Turbidity	22.3 NTU	EPA 180.1	10 NTU	HIGH
Iron	0.75 mg/L		*0.3 mg/L	HIGH
pH	6.7 Units	EPA 150.1	*6.5-8.5 Units	***
Sand	Negative		Negative	
Total Coliform	Absent	SM 9223B	Absent	Pass
E.coli	Absent	SM 9223B	Absent	Pass

Note: The high turbidity in this water sample is most likely caused by the elevated iron level.

*Kara Waltmyer*  
 Kara Waltmyer  
 Drinking Water Testing Division

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.



TRACE LABORATORIES, INC  
 A Methode Electronics, Inc. Company  
 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:**  
 Compass Homes  
 6206 Heather Glen Way  
 Clarksville, MD 21029

**S/O Number:** 78047  
**Report Date:** June 30, 2010

**Property Sampled:** 12606 Grovewood Court, 21029 RETEST

**County:** Baltimore  
**Subdivision:** Preserve @ Clarksville **Tax Map #:** 34  
**Lot #:** PC 9 **Parcel #:** 77  
**Building Permit #:** B 09001642

**Date/Time Collected:** June 29, 2010 at 11:15 am  
**Date/Time Received:** June 29, 2010 at 3:54 pm

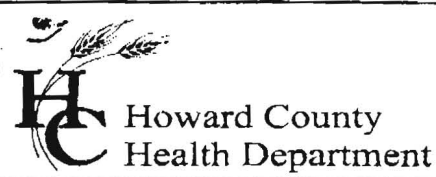
**Sample Location:** Kitchen Tap  
**Sampler ID:** 9813AM  
**Samples Iced:** Yes  
**Residual Cl<sub>2</sub> <0.1 mg/L:** Yes

**Well Tag Number:** HO-95-0231  
**Well Condition:** 2-Piece Cap/Satisfactory  
**Water Conditioning/Treatment:** None

PARAMETER	RESULT	METHOD	MCL*/SMCL	
Turbidity	2.1 NTU	EPA 180.1	10 NTU	Pass

*Kara Waltmyer*  
 Kara Waltmyer  
 Drinking Water Testing Division

MCL=Maximum Contamination Level  
 \*SMCL=Secondary Maximum Contamination Level  
 \*\*\*A non-enforceable parameter that may cause cosmetic effects or aesthetic effects (such as taste, color or odor) in drinking water.



Bureau of Environmental Health  
7178 Columbia Gateway Drive, Columbia, MD 21046  
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website: www.hchealth.org

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

May 9, 2006

JTS Corporation  
8808 Centre Park Drive  
Suite 209  
Columbia, Maryland 21045

RE: MacBeth Farm Lot 26  
Well Tag: HO-95-0231

To Whom It May Concern:

A sample was collected from a yield test on March 28, 2006 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. These naturally occurring radioactive nuclides have been demonstrated to be present in a certain type of geologic formation known as the Baltimore Gneiss which exists in your area of development within the County.

Results from this screening revealed a **Gross Alpha** of  $52.5 \pm 2.6$  picocuries/liter (pCi/L); while the **Gross Beta** level was  $7.0 \pm 1.0$  pCi/L. The **Gross Alpha** result exceeded its maximum contaminant level (MCL) of 15 pCi/L, while the **Gross Beta** level was below its MCL of 50 pCi/L.

Since the **Gross Alpha** finding exceeded its MCL, additional testing for **Radium** will be necessary prior to occupancy to verify existing levels. Alternatively, you may install treatment designed to reduce **Gross Alpha**, **Gross Beta** and **Radium**, plus provide post treated results confirming that levels are in conformance with existing standards.

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 to discuss additional testing requirements.

Sincerely,

Bert Nixon, Deputy Director  
Bureau of Environmental Health

cc: Eric Dougherty, MDE Water Mgmt., Groundwater  
Well & Septic property file



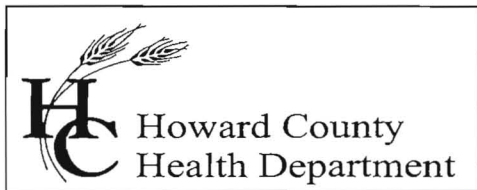
Analytical Summary Report

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Client Name:	Howard County Health Department	Client Sample ID:	HOGCMBF26328
Sample Date/Time:	03/28/2006	Lab Sample ID:	603203-010-010-1/1
Receipt Date/Time:	03/28/2006	Sample Matrix:	WATER
Prepared Date/Time:		Analytical Method:	ALPHA/BETA BY METHOD 900.0

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Isotope	Result	Uncertainty $1\sigma$	MDA	Q
Gross Alpha	52.5479 pCi/L	$\pm 2.5866$ pCi/L	1.9374 pCi/L	
Gross Beta	6.8188 pCi/L	$\pm 0.9896$ pCi/L	2.7364 pCi/L	



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website: www.hchealth.org

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

July 12, 2006

D. R. Horton, Inc.  
1370 Picardi Drive  
Rockville, Maryland 20850

RE: Water Sample Results  
Lot 8 Turnbury Grove  
HO - 95 - 0231  
*Now Lot 9 F-06-72*

To Whom this May Concern:

During the recent "yield test" of the well serving the future Lot 8 (located on Grovewood Court), a sample was collected for volatile organic compounds (VOC's) on March 28, 2006. This testing was performed to establish a baseline evaluation of the well water supply due to known VOC ground water contamination concerns previously documented (during the 1990's and earlier) in properties nearby this development.

Results from this sampling were free of all tested VOC's to the limit of detection for the test method employed. With respect to these parameters, the future well water supply is **currently** safe for all uses.

A copy of the VOC test report is enclosed for your records.

If questions should arise, you may contact Stuart Oster of the Well & Septic Program at (410) 313 - 1771 or me at (410) 313 - 1773.

Sincerely,

Bert Nixon, Assistant Director  
Bureau of Environmental Health

Enclosure

cc: Lot 8 Turnbury Grove Property File



State of Maryland  
 DHMH - Laboratories Administration  
 Division of Environmental Chemistry  
**TRACE ORGANICS SECTION**  
 201 W. Preston Street, Baltimore, MD 21201  
 John M. DeBoy, Dr. P.H., Director

## Certificate of Analysis - Volatiles

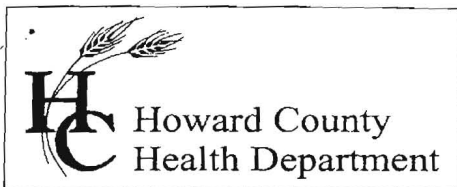
Sample Name: 961468 HOGCTGO8328S (A) Method: EPA 524.2  
 Date Analyzed: 04/12/06

<u>Contaminants</u>	<u>DL*</u>	<u>MCL*</u>	<u>Result*</u>	<u>Contaminants</u>	<u>DL*</u>	<u>MCL*</u>	<u>Result*</u>
<b>TRIHALOMETHANES</b>				<b>UNREGULATED</b>			
Bromodichloromethane	0.5	na	ND	Dichlorodifluoromethane	0.5	na	ND
Bromoform	0.5	na	ND	Chloromethane	0.5	na	ND
Chloroform	0.5	na	ND	Bromomethane	0.5	na	ND
Dibromochloromethane	0.5	na	ND	Chloroethane	0.5	na	ND
TOTAL THMs	-	80	-	Trichlorofluoromethane	0.5	na	ND
<b>REGULATED</b>				1,1-Dichloroethane	0.5	na	ND
Benzene	0.5	5	ND	1,3-Dichlorobenzene	0.5	na	ND
Carbon Tetrachloride	0.5	5	ND	Dibromomethane	0.5	na	ND
Chlorobenzene	0.5	100	ND	1,1-Dichloropropene	0.5	na	ND
1,4-Dichlorobenzene	0.5	75	ND	trans-1,3-Dichloropropene	0.5	na	ND
1,1-Dichloroethene	0.5	7	ND	1,1,2,2-Tetrachloroethane	0.5	na	ND
1,2-Dichloroethane	0.5	5	ND	1,3-Dichloropropane	0.5	na	ND
1,2-Dichlorobenzene	0.5	600	ND	2,2-Dichloropropane	0.5	na	ND
1,2-Dichloropropane	0.5	5	ND	cis-1,3-Dichloropropene	0.5	na	ND
cis-1,2-Dichloroethene	0.5	70	ND	2-Chlorotoluene	0.5	na	ND
trans-1,2-Dichloroethene	0.5	100	ND	4-Chlorotoluene	0.5	na	ND
Ethylbenzene	0.5	700	ND	Bromobenzene	0.5	na	ND
Styrene	0.5	100	ND	1,3,5-Trimethylbenzene	0.5	na	ND
Tetrachloroethene	0.5	5	ND	1,2,4-Trimethylbenzene	0.5	na	ND
Trichloroethene	0.5	5	ND	1,2,3-Trichlorobenzene	0.5	na	ND
1,1,1-Trichloroethane	0.5	200	ND	n-Propylbenzene	0.5	na	ND
Toluene	0.5	1000	ND	n-Butylbenzene	0.5	na	ND
Vinyl Chloride	0.5	2	ND	Naphthalene	0.5	na	ND
o-Xylene	0.5	na	ND	Hexachlorobutadiene	0.5	na	ND
m+p-Xylene	1.0	na	ND	Isopropylbenzene	0.5	na	ND
Total Xylenes	1.5	10000	ND	1,2,3-Trichloropropane	0.5	na	ND
Methylene Chloride	0.5	5	ND	1,2-Dibromo-3-Chloropropane	0.5	na	ND
1,1,2-Trichloroethane	0.5	5	ND	p-Isopropyltoluene	0.5	na	ND
1,2,4-Trichlorobenzene	0.5	70	ND	tert-Butylbenzene	0.5	na	ND
				sec-Butylbenzene	0.5	na	ND
				Bromochloromethane	0.5	na	ND
				1,1,1,2-Tetrachloroethane	0.5	na	ND
				1,2-Dibromoethane	0.5	na	ND
				Methyl-tert-Butyl Ether (MTBE)	0.5	na	ND
				Ethyl-tert-Butyl Ether (ETBE)	0.5	na	ND
				tert-Amyl Methyl Ether (TAME)	0.5	na	ND

\*All results are in parts per billion (ppb)  
 ND = Less than the detection limit  
 na = not applicable  
 e = estimated value

Section Chief: Richard Melara Date Approved: 4/17/06

OBJECTID	Shape	Address_of	Subdivisio	Lot	Well_Tag_ID	Water_Use	Type_of_We	Condition	Well	Comment	Collec	Date	Time
663	Point ZM	12451 petrillo dr		0	HO-88-0763	Domestic Potable	Drilled Well 6" case	Satisfactory		Tag Number from W		6/9/2006	12:
666	Point ZM	12453 Watkins Bridge Ln	walnut grove	0	HO-95-0428	Domestic Potable	Drilled Well 6" case	Satisfactory				10/24/2006	12:
665	Point ZM	12457 petrillo dr		0	HO-88-0612	Domestic Potable	Drilled Well 6" case	Satisfactory		Tag Number from W		6/9/2006	12:
666	Point ZM	12464 Petrillo Rd		0	HO-88-0614	Domestic Potable	Drilled Well 6" case	Satisfactory				6/9/2006	12:
1294	Point ZM	12480 Frederick Rd.		0	HO-00-0000	Domestic Potable	Hand Dug	Unsatisfactory	Pit Wel		sb	5/27/2009	11:38:08am
1171	Point ZM	12480 Hall Shop Rd		0	HO-00-0000	Domestic Potable	Drilled Well 6" case	Unsatisfactory	one pi	tag missing	sb	7/15/2009	09:34:12am
675	Point ZM	12486 HALL SHOP ROAD		0	HO-00-0000	Domestic Potable	Drilled Well 6" case	Satisfactory				8/11/2006	12:
1205	Point ZM	12492 Indian Hill dr.		0	HO-73-3167	Domestic Potable	Drilled Well 6" case	Satisfactory	2 pc c		kw	1/8/2009	01:14:59pm
667	Point ZM	12492 petrillo dr		0	HO-00-0000	Domestic Potable	Drilled Well 6" case	Satisfactory		not visible		8/9/2006	12:
668	Point ZM	12494 West Nugget Ct		0	HO-00-0000	Domestic Potable	Drilled Well 6" case	Unsatisfactory	2 pc c	no tag, HO-95-1128,	kw	3/7/2007	10:26:46am
646	Point ZM	12586 highland road		0	HO-00-0000	Domestic Potable	Drilled Well 6" case	Satisfactory		tag number not visibl		8/21/2006	12:
557	Point ZM	12606 Grovewood Ct		0	HO-95-0231	Domestic Potable	Drilled Well 6" case	Satisfactory				6/15/2006	12:
559	Point ZM	12610 Grovewood Ct		0	HO-95-0232	Domestic Potable	Drilled Well 6" case	Satisfactory				6/15/2006	12:
1196	Point ZM	12614 Grovewood Ct		0	HO-95-0233	Domestic Potable	Drilled Well 6" case	Satisfactory	2 pc c		sb	6/30/2009	12:04:47pm
558	Point ZM	12615 Grovewood Ct		0	HO-95-0257	Domestic Potable	Drilled Well 6" case	Satisfactory				6/15/2006	12:
1195	Point ZM	12618 Grovewood Ct		0	HO-95-0234	Domestic Potable	Drilled Well 6" case	Satisfactory	2 pc c		sb	6/30/2009	12:03:14pm
205	Point ZM	12621 Howard Lodge Drive		0	HO-00-0000	Domestic Potable	Drilled Well 6" case	Unsatisfactory	one pi	Well cap unsecure, t	Kerrie	6/25/2007	09:55:31am
1194	Point ZM	12622 Grovewood Ct		0	HO-95-9248	Domestic Potable	Drilled Well 6" case	Satisfactory	2 pc c	7" above grade	sb	6/30/2009	12:02:56pm
1158	Point ZM	12652 Frederick Rd	terrapin pres	5	HO-95-0217	Domestic Potable	Drilled Well 6" case	Satisfactory	2 pc c		kw	6/26/2008	10:07:03am
1157	Point ZM	12656 Frederick Rd	terrapin pres	4	HO-95-0216	Domestic Potable	Drilled Well 6" case	Satisfactory	2 pc c		kw	6/26/2008	10:00:52am
1272	Point ZM	12660 Frederick Road	Terrapin Pre	3	HO-95-0215	Domestic Potable	Drilled Well 6" case	Satisfactory	2 pc c	New Well	B Bake	12/18/2007	01:05:55pm
1159	Point ZM	12664 Frederick Rd	terrapin pres	2	HO-95-0214	Domestic Potable	Drilled Well 6" case	Satisfactory	2 pc c		kw	6/26/2008	10:15:31am
1160	Point ZM	12668 Frederick Rd	terrapin pres	1	HO-95-0213	Domestic Potable	Drilled Well 6" case	Satisfactory	2 pc c		kw	6/26/2008	10:19:52am
1336	Point ZM	12672 Frederick rd.	Terrapin pre	0	HO-95-0128	Domestic Potable	Drilled Well 6" case	Satisfactory	2 pc c	p.p.a	kw	7/10/2008	02:10:45pm
1042	Point ZM	12704 Scaggsville Rd		0	HO-94-3243	Domestic Potable	Drilled Well 6" case	Unsatisfactory	cap br		kw	12/12/2007	10:52:25am
674	Point ZM	12709 Hall Shop Rd		0	HO-94-0828	Domestic Potable	Drilled Well 6" case	Satisfactory				8/11/2006	12:
451	Point ZM	12737 Chapel Chase Drive		0	HO-94-4019	Domestic Potable	Drilled Well 6" case	Satisfactory	2 pc c		Kerrie	12:00:00 AM	08:06:14am
452	Point ZM	12737 Chapel Chase Drive		0	HO-94-0060	Domestic Potable	Drilled Well 6" case	Satisfactory	2 pc c		Kerrie	12:00:00 AM	08:17:50am
115	Point ZM	12761 Lime Kiln Rd	lime kiln valle	0	HO-95-1195	Domestic Potable	Drilled Well 6" case	Satisfactory	2 pc c		kw	9/19/2007	02:22:02pm
116	Point ZM	12767 Lime Kiln Rd	lime kiln valle	0	HO-95-1196	Domestic Potable	Drilled Well 6" case	Satisfactory	2 pc c		kw	9/19/2007	02:26:46pm
121	Point ZM	12773 Lime Kiln Rd	lime kiln valle	3	HO-95-1197	Domestic Potable	Drilled Well 6" case	Satisfactory	2 pc c		kw	9/19/2007	03:10:06pm
54	Point ZM	12776 A. E. Mullinix Road	A. E. Mullinix	1	HO-95-0185	Domestic Potable	Drilled Well 6" case	Satisfactory	2 pc c		IBB	5/13/2009	11:04:32am
122	Point ZM	12779 Lime Kiln Rd	lime kiln valle	4	HO-00-0000	Domestic Potable	Drilled Well 6" case	Satisfactory	2 pc c		kw	9/19/2007	03:17:41pm
1253	Point ZM	12780 Lime Kiln Road	Lime Kiln Vall	39	HO-95-1288	Domestic Potable	Drilled Well 6" case	Satisfactory	2 pc c	New Lot	BB	4/29/2008	02:49:14pm
37	Point ZM	12781 Folly Quarter Road	Glenselg Man	13	HO-81-0981	Domestic Potable	Drilled Well 6" case	Satisfactory	2 pc c		BB	1/21/2009	02:53:50pm
1143	Point ZM	12785 Folly Quarter rd.		0	HO-81-0981	Domestic Potable	Drilled Well 6" case	Unsatisfactory	2 pc c	conduit not sch 40	kw	4/13/2009	12:26:47pm
123	Point ZM	12785 Lime Kiln Rd	lime kiln valle	5	HO-00-0000	Domestic Potable	Drilled Well 6" case	Satisfactory	2 pc c		kw	9/19/2007	03:23:05pm
120	Point ZM	12791 Lime Kiln Rd	lime kiln valle	6	HO-00-0000	Domestic Potable	Drilled Well 6" case	Satisfactory	2 pc c		kw	9/19/2007	03:01:02pm



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*

**AGREEMENT FOR APPROVAL OF AN INDIVIDUAL DRINKING WELL WITH AN  
ON-SITE TREATMENT SYSTEM**

This agreement is entered into by and between the Howard County Health Department (“the Health Department”) and \_\_\_\_\_ (“the Owner”).

WHEREAS, the Owner owns a tract of land at street address \_\_\_\_\_, \_\_\_\_\_ and the deed and subdivision plat of the property is recorded among the Land Records of Howard County, Maryland, Tax Map # \_\_\_\_\_, Block # \_\_\_\_\_, Parcel # \_\_\_\_\_, Deed Reference # \_\_\_\_\_ and Tax Account # \_\_\_\_\_ (“the Property”).

WHEREAS, the Property lacks an available public drinking water source and is required to have an individual well as the source of drinking water for the residence of the property.

WHEREAS, the Owner has installed a residential drinking well under well permit \_\_\_\_\_ that has been tested by the Health Department (or a private laboratory certified to perform testing) for radionuclide particles. The results of the tests have shown that the gross alpha particle content and/or the gross beta particle content and/or the combined radium 226/228 levels exceeds the standards of 15 picocuries per liter (pCi /L), 4 millirems per year (mrem/yr) and/or 5pCi/L respectively.

WHEREAS, The Maryland Department of the Environment (MDE) has promulgated rules and regulations under which a Certificate of Potability may be issued and has delegated the authority to issue such Certificate to the Health Department.

WHEREAS, MDE regulations permit the Health Department to issue as a special condition, a permanent deviation to the Certificate of Potability for individual wells where treatment has been installed to meet the maximum contaminate levels (MCL’s) for radionuclides.

WHEREAS, MDE has determined that radium can be effectively removed from the drinking water by the use of treatment devices (e.g., ion exchange or reverse osmosis).

WHEREAS, the Owner is requesting that the Health Department issue a Certificate of Potability contingent upon installation and maintenance of a water treatment device to reduce radionuclides.

WHEREAS, neither the Owner nor the Health Department has knowledge of an alternative safe source of water for the Property.

NOW THEREFORE, the parties have agreed to the following terms and conditions:

1. The Owner will record this Agreement among the Land Records of Howard County, Maryland and provide confirmation to the Health Dept.
2. The Owner agrees to install and maintain a water treatment device, which effectively reduces the gross alpha, gross beta and radium levels to below their respective MCL. The Health Department shall verify that the treatment device is operating effectively and the Owner agrees to allow access to the Health Department to collect a follow-up sample(s).
3. The Health Department shall issue a Certificate of Potability for the well once follow-up sampling shows acceptable gross alpha, gross beta (short and long term) and radium 226 / 228 levels.
4. The Owner agrees that there shall be no liability on part of the Health Department for any immediate or long term impacts to health or property, under any circumstance or including, but not limited to, treatment device failure, improper maintenance or installation, or defect. The Health Department does not warrant nor guarantee that the device will adequately or properly function and the Owner agrees to implement and pay for any necessary changes or corrections.
5. The Owner acknowledges and agrees that neither the Health Department nor any of its agents or employees, either officially or individually, underwrites the operation of any system or treatment device.
6. This Agreement shall not be construed to limit any authority of the Health Department to protect the public health, safety or enjoyment of property or to issue any other orders to take any other action, which is now or may hereafter be within its authority.
7. This agreement contains the entire agreement and understanding between the Health Department and the Owner. There are no additional terms other than as contained in this Agreement. This Agreement may not be modified except in writing signed by each of the parties or their authorized representatives.
8. The Agreement shall run with the land and binds the Owner, his heirs, successors, and assigns. The owner agrees to provide a copy of this agreement to any purchaser or lessee of the property.
9. The laws of the State of Maryland govern the provisions of all transactions.

The parties have signed and sealed this Agreement on the dates set forth below.

\_\_\_\_\_  
Date

7/8/10

\_\_\_\_\_  
Date

7/8/10

\_\_\_\_\_  
Date

  
\_\_\_\_\_  
Builder

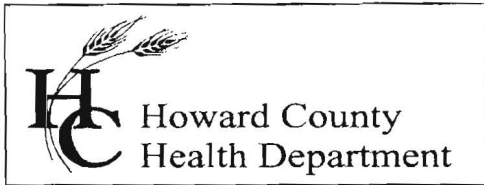
Print Name: Dale Thompson Sr

  
\_\_\_\_\_  
Owner

Print Name: Thomas E. Yang

  
\_\_\_\_\_  
Howard County Health Department

Witness



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

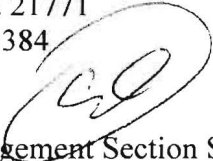
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**Penny E. Borenstein, M.D., M.P.H., Health Officer**

February 8, 2006

**MEMORANDUM**

TO: Joseph L. Mayne Well Drilling  
5512 Ridge Road  
Mt. Airy, Maryland 21771  
Faxed to 301-829-5384

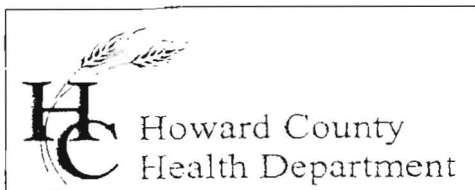
FROM: Stuart Oster, R.S.   
Groundwater Management Section Supervisor  
Well and Septic Program

RE: File Number: P-05-013  
Title: Turnbery Grove

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The Health Department requires that all the wells in this subdivision be tested for radium and V.O.C.'s (Volatile Organic Contaminants). The optimum time to sample would be when the yield test is being completed. When contacting this office about the yield test, please mention that these water test need to be collected. Also, attached is a letter dated November 21, 2005 from Bert Nixon further explaining the radium testing.

Cc: D. R. Horton, Inc.  
File



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

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

November 21, 2005

**RE:**

To Whom It May Concern:

Previous findings from a pilot study conducted by Maryland Geological Survey and Maryland Department of the Environment (MDE) have found elevated levels of naturally occurring radioactive elements in groundwater from and underground rock formation, the Baltimore Gneiss. As a result of this study, we have verified that your subdivision is located within the Baltimore Gneiss testing area. We are in the process of notifying existing properties of this study, plus developers building developments within this formation.

All wells within this area are being sampled for Gross Alpha and Gross Beta particles. These particles measure the 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. These particles are measured in picocuries per liter (pCi/L) and several have EPA established maximum contaminant levels (MCL's). The standards define the maximum permissible level of a contaminant legally allowed in water taking into account the public health risk, available treatment technology and costs of treatment.

From this point forward, we will require that all new subdivisions and properties within this formation to be tested during yield tests or prior to issuance of the Intern Certificate of Potability (ICOP). In the event that elevated levels are detected, appropriate treatment will be needed to help secure the ICOP and occupancy by the resident(s).

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