

CT 2907

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT

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

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

COUNTY NUMBER A516063

ST/CO USE ONLY DATE RECEIVED

DATE WELL COMPLETED 3 31 06

Depth of Well 22 210' 26 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" Ho 95 0263

OWNER Houston R. D. STREET OR RFD Heather Glen Way TOWN Clarksville Md SUBDIVISION Turnberry Lane SECTION LOT 29 20

WELL LOG table with columns for DESCRIPTION, FEET (FROM, TO), and check if water bearing. Includes entries for Sand and Gray mica Rock.

GROUTING RECORD: WELL HAS BEEN GROUTED (Y), TYPE OF GROUTING MATERIAL (CM), NO. OF BAGS 12, NO. OF POUNDS 1128, DEPTH OF GROUT SEAL 0 to 50 ft.

CASING RECORD: casing types insert appropriate code below (ST, CO, PL, OT)

MAIN CASING TYPE: Nominal diameter top (main) casing 6 inch, Total depth of main casing 54 feet.

OTHER CASING (if used) table with columns for diameter and depth.

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

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED (Y)

CIRCLE APPROPRIATE LETTER: A, E, P

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...

DRILLERS LIC. NO. 1 M SD 024 1

DRILLERS SIGNATURE (Must match signature on application)

LIC. NO. 1 D 1

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

DEPTH (nearest ft.) table with columns for casing height and depth.

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

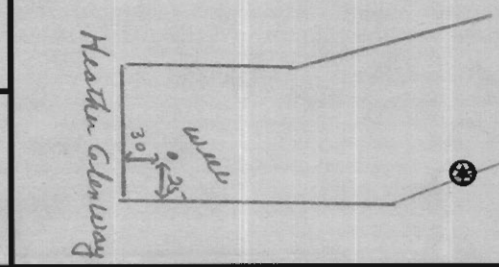
PUMPING TEST: HOURS PUMPED 3, PUMPING RATE 15 gal. per min., METHOD USED TO MEASURE PUMPING RATE Bucket, WATER LEVEL 23 ft. before, 29 ft. when pumping.

PUMP INSTALLED: DRILLER INSTALLED PUMP YES (NO), 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 (nearest foot) 50 51

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)



B 1 1464
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-95-0263
70 fill in this form completely 79

Date Received (APA) 01 20 06
8 MM DD YY 13
OWNER INFORMATION
Horton R. D
15 Last Name Owner First Name 34
1370 Piccard Drive
36 Street or RFD 55
Rockville Md. 20850
57 Town 70 State 72 Zip 76

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

DRILLER INFORMATION
Joseph L. Mayne M S D 024
76 Driller's Name 81 License No.
Joseph L Mayne Well Drilling
5512 Ridge Rd Mt. Airy Md 21771
Address
Joseph L Mayne 1-6-06
Signature Date

B 4
1 2 DIRECTION OF WELL FROM TOWN (CIRCLE BOX)
Heather Glen Way
11 NEAR WHAT ROAD 30
ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)
NORTH N
WEST W EAST E
SOUTH S
34 25 37
DISTANCE FROM ROAD FT
ENTER FT OR MI 38 39
TAX MAP: 34 BLK: 17 PARCEL 77

B 2 WELL INFORMATION
1 2 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)
22 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
HOWARD (13) A516063
COUNTY NAME COUNTY NO.
STATE SIGNATURE INSERT S
DATE ISSUED 2/24/06
43 MM DD YY 48 CO SIGNATURE EXP. DATE
NORTH GRID 497 000 EAST GRID 814 000
50 55 57 63

APPROXIMATE DEPTH OF WELL 300 FEET
24 28
APPROXIMATE DIAMETER OF WELL 6 INCH
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
3/31/06
Grout and Yield Done - Sample Taken for Radium
BB

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)
APPROP. PERMIT NUMBER HO 2006G.003(01)
PERMIT No. HO-95-0263
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 & VOC at the yield test
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: _____ Telephone #: _____
Address: _____

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

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

Name (Print): _____ License# _____

***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: _____ Telephone #: _____
Subdivision: _____ Lot #: _____ Well Tag #: HO - 95 - 0243
Site Address: _____

Submersible Pump Data

Pitless Adapter

Well Cap and Electric Conduit

Make: _____ Make: _____ Two piece watertight cap: _____
Model #: _____ Model#: _____ Screened, vented well cap: _____
Pump Capacity _____ GPM Depth: _____ (36" min) Cap secured to casing: _____
Well Yield: _____ GPM NSF/WSC approved: _____ Conduit min 18" B.G.: _____
Depth of well encountered at time of pump installation: _____ (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

House Connection

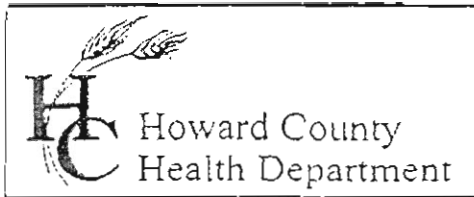
Type: _____ PVC sleeve to undisturbed soil at wall penetration: _____
PSI: _____ (160 psi min) Length of sleeve(5' minimum from foundation): _____
Depth of supply line: _____ (36" min) Sleeve sealed properly: _____

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 _____

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

Date Insp. Requested: _____ Date Insp. Approved: 9/17/12 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 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



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

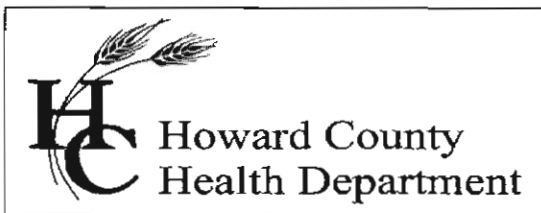
When submitting a well permit application for a proposed well for new construction, please indicate one of the following:

- 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 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., Acting Health Officer

INTERIM CERTIFICATE OF POTABILITY
Expiration Date – May 26, 2013

November 26, 2012

Homeowner
6259 Heather Glen Way
Clarksville, MD 21029

**RE: The Preserve at Clarksville, Lot 20
6259 Heather Glen Way
Building Permit: B11002383
Well Permit: HO-95-0263**

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 **7/2/2012**. Final approval of the well line connection to the dwelling was granted on **9/17/2012**. The well construction was completed on **3/31/2006**. Water samples were collected on **11/5/2012**.

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 **3/31/2006**. Results showed a Gross Alpha level of 7.6 ± 1.9 pCi/L and **Gross Beta** level of 12.0 ± 1.9 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-95-0263. 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 "Robert Bricker". The signature is written in a cursive style with a large initial "R".

Robert Bricker, REHS/R.S.
Environmental Sanitarian
Well & Septic Program

cc: Howard County Dept. of Inspections, Licenses, and Permits
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: 87170-2

Report Date: November 19, 2012

Treated Sample

Property Sampled: 6259 Heather Glen Way, 21029
Sample Location: Reverse Osmosis (R/O) Tap
Residual Chlorine: <0.1 mg/L

Building Permit #: B11002383
Sampler ID #: 7483AM
Samples Iced: Yes

County: Howard
Map: 34

Subdivision: Preserve at Clarksville
Parcel: 77

Lot#: 20

Date/Time Collected in Field: November 5, 2012 @ 11:34 am
Date/Time Received in Lab: November 5, 2012 @ 12:25 pm

Well Tag #: HO-95-0263
Well Condition: 2-Piece Cap, Satisfactory

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

PARAMETER	METHOD	MDL (pCi/L)	MCL* (pCi/L)	RESULT (pCi/L)	ACCEPTABILITY
Gross Alpha (Short-Term)	EPA 900.0	1.0	15	<1.0 ± 0.7	Acceptable
Gross Beta (Short-Term)	EPA 900.0	2.0	50	<2.0 ± 1.2	Acceptable
Gross Alpha (Long-Term)	EPA 900.0	0.6	15	0.7 ± 0.5	Acceptable
Gross Beta (Long-Term)	EPA 900.0	1.7	50	<1.7 ± 1.1	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 and the acceptability of this sample is based on these requirements. Gross Alpha levels under 5 pCi/L are acceptable. Levels between 5 and 15 pCi/L are considered moderate, and levels greater than 15 pCi/L are considered high. When levels are moderate or high, treatment or further testing is recommended and in certain cases may be required by the health department.

The results in this report relate only to those items tested. If any additional information or clarification of this report is required, please contact us. This test report shall not be reproduced except in full without the written approval of Trace Laboratories Inc.


 Katherine C. Higgs
 Manager - Drinking Water Testing

MDL: Method Detection Limit
 MCL: Maximum Contamination Level, an enforceable level established by the EPA
 Analyzed by Lab # 278



TRACE LABORATORIES, INC

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

Maryland State Certified Laboratory #318

CERTIFICATE OF ANALYSIS

Requester:

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

S/O Number: 87170-1

Report Date: November 19, 2012

Raw Sample

Property Sampled: 6259 Heather Glen Way, 21029
Sample Location: Pressure Tank Tap
Residual Chlorine: <0.1 mg/L

Building Permit #: B11002383
Sampler ID #: 7483AM
Samples Iced: Yes

County: Howard
Map: 34

Subdivision: Preserve at Clarksville
Parcel: 77

Lot#: 20

Date/Time Collected in Field: November 5, 2012 @ 11:23 am
Date/Time Received in Lab: November 5, 2012 @ 12:25 pm

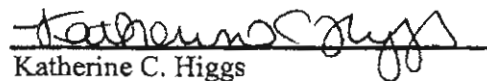
Well Tag #: HO-95-0263
Well Condition: 2-Piece Cap, Satisfactory

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

PARAMETER	METHOD	MDL (pCi/L)	MCL* (pCi/L)	RESULT (pCi/L)	ACCEPTABILITY
Gross Alpha (Short-Term)	EPA 900.0	1.2	15	3.7 ± 1.3	Acceptable
Gross Beta (Short-Term)	EPA 900.0	2.0	50	10.9 ± 1.7	Acceptable
Gross Alpha (Long-Term)	EPA 900.0	1.0	15	2.7 ± 1.1	Acceptable
Gross Beta (Long-Term)	EPA 900.0	1.9	50	10.5 ± 1.6	Acceptable

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Report 1 of 2 Page 2 of 2



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Sampler ID #: 7483AM
Samples Iced: Yes

County: Howard
Map: 34

Subdivision: Preserve at Clarksville
Parcel: 77

Lot#: 20

Date/Time Collected in Field: November 5, 2012 @ 11:34 am
Date/Time Received in Lab: November 5, 2012 @ 12:25 pm

Well Tag #: HO-95-0263
Well Condition: 2-Piece Cap, Satisfactory

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

PARAMETER	METHOD	MDL (pCi/L)	MCL* (pCi/L)	RESULT (pCi/L)	ACCEPTABILITY
Radium 226	EPA 903.1	0.2	5 pCi/L Combined	0.2 ± 0.1	Acceptable
Radium 228	EPA Ra-05	0.9		<0.9 ± 0.5	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 and the acceptability of this sample is based on these requirements. Gross Alpha levels under 5 pCi/L are acceptable. Levels between 5 and 15 pCi/L are considered moderate, and levels greater than 15 pCi/L are considered high. When levels are moderate or high, treatment or further testing is recommended and in certain cases may be required by the health department.

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Katherine C. Higgs
 Manager - Drinking Water Testing



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Date/Time Received in Lab: November 5, 2012 @ 12:25 pm

Well Tag #: HO-95-0263
Well Condition: 2-Piece Cap, Satisfactory

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

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	2.6 mg/L as N ✓	Pass
Turbidity	EPA 180.1	10 NTU	6.3 NTU ✓	Pass
pH	EPA 150.1	*6.5-8.5 Units	6.0 Units ✓	***
Sand		Absent	Absent ✓	Pass

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Katherine C. Higgs
 Manager – Drinking Water Testing

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.

May 10, 2006

D.R. Horton
1370 Piccard Drive
Rockville, MD 20850

RE: Turnberry Grove, Lot #19
Well Tag: HO-95-0263

Lot #20
(2012)

To Whom It May Concern,

A sample was collected from a yield test on March 31, 2006 and submitted Florida Radiochemistry Services 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 area of development within the County.

Results from this screening revealed a **Gross Alpha** of 7.6 ± 1.9 picocuries per liter (pCi/L); while the **Gross Beta** level was 12.0 ± 1.9 pCi/L. The **Gross Alpha** result was below the **maximum contamination level (MCL)** of **15 pCi/L**, while the **Gross Beta** was below the **MCL** of **50 pCi/L**. At the time of testing and with respect to these parameters, your well water supply is safe for all uses.

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

Sincerely,

Bert Nixon, Deputy Director
Bureau of Environmental Health

cc: Eric Dougherty, MDE, Water Mgmt., Groundwater

Send Report To:
Howard County
Environmental
Health

State of Maryland
DHMH - Laboratories A
Division of Environmental Chemistry
RADIATION LABORATORY

201 W. Preston Street, Baltimore, Maryland 21201
J. Mehser Joseph, Ph.D., Director

D.R. Horton 301-670-6144
1370 Piccard Drive 410-939-8793
Rockville, MD 20850

LABORATORY ANALYSIS REQUEST

HOTG19BB950263
Sample Bottle No. A: 1 No. B: _____ Field Blank Bottle No. 1: _____ No. 2: _____

Plant/Site Name: Turnberry Grove-Lot 19 County: Howard
Sample Source: Heather Glen Way Location: Well # HO-95-0263
(well no., lab sink, sample tap, etc.)

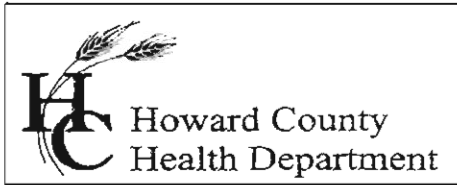
County: 1 2 3 Plant No.
Collector: Brian Baker Telephone No.: (410) 313-2643
Date Collected: 3/31/2006 Time Collected: 10:30 a.m. _____ p.m.

Nitric Acid Preserved: Yes No Iced: Yes No
Submitters Code: Federal Project: S Field Data: _____ pH _____ Chlorine _____

Remarks: Taken During Yield Test

✓	Test	EPA Code	Laboratory No.	Results (pCi/L)	Date Reported
✓	Gross Alpha	4000	<u>604014-04</u>	<u>7.6 ± 1.9</u>	
✓	Gross Beta	4100		<u>12.0 ± 1.9</u>	
	Radon-222 Bottle A	4004			
	Radon-222 Bottle B	4004			
	Field Blank #1	4004			
	Field Blank #2	4004			
	Tritium				
	Ra - 226	4020			
	Ra - 228	4030			
	Total Uranium	4006			

Date Received: _____ / _____ / _____
Section Chief: _____



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

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

May 10, 2006

D.R. Horton
1370 Piccard Drive
Rockville, MD 20850

Now lot 20
RE: Turnberry Grove, Lot #19
Well Tag: HO-95-0263

To Whom It May Concern,

A sample was collected from a yield test on March 31, 2006 and submitted Florida Radiochemistry Services 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 area of development within the County.

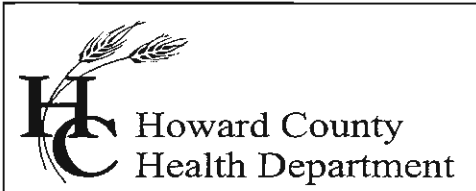
Results from this screening revealed a **Gross Alpha** of 7.6 ± 1.9 picocuries per-liter (pCi/L); while the **Gross Beta** level was 12.0 ± 1.9 pCi/L. The **Gross Alpha** result was below the **maximum contamination level (MCL)** of 15 pCi/L, while the **Gross Beta** was below the **MCL** of 50 pCi/L. At the time of testing and with respect to these parameters, your well water supply is safe for all uses.

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

Sincerely,

Bert Nixon, Deputy Director
Bureau of Environmental Health

cc: Eric Dougherty, MDE, Water Mgmt., Groundwater



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

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

July 7, 2006

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

RE: Water Sample Results
~~20~~ Lot ~~19~~ Turnbury Grove
HO - 95 - 0263

To Whom this May Concern:

During the recent "yield test" of the well serving the future Lot 19 (located on Heather Glen Way), a sample was collected for volatile organic compounds (VOC's) on March 31, 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. Similar findings were noted for the corresponding Field and Trip Blank samples. 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 19 Turnbury Grove Property File

Send Report To:

Howard County
Environmental
Health

State of Maryland
DHMH - Laboratories Administration
Division of Environmental Chemistry
TRACE ORGANICS SECTION
201 W. Preston Street, Baltimore, Maryland 21201
J. Mehsen Joseph, Ph.D., Director

Lab No. Date Received

961503 APR-48

Do not write above this line

LABORATORY ANALYSIS REQUEST

Bottle No: 7 Plant/Site Name: HOTG19BB950263 Well Turnberry Grove - Lot #20 County: Howard

Sample Source: Heather Glenway Clarksville Location: Well #40-95-0263
Street Town or City (well no., lab sink, sample tap, etc.)

Sampler ID: 7 4 8 5 E E PWSID: Plant ID:

Collector: Brian Baker (410)313-2643
(include telephone number)

Date Collected: 3/31/2006 Time Collected: 10:30 a.m. _____ p.m.

Field Preserved: Yes No Preservative Used: Ascorbic acid Na₂SO₄ 6 mg NH₄Cl

Sample Type: Drinking Water Landfill Source (Raw Water) Liquid
 Community Stream Distribution (Treated) Solid
 Non-Community Sediment Water Treatment Plant POE Other _____
 Private

Specify Program: SDWA NPDES CWA RCRA Consumer Products Other _____

Test Requested: Trihalomethanes Volatiles Semi-volatiles ? Haloacetic Acids

FIELD DATA: pH Free Cl Total Cl

Field Blank Bottle No.: HOTG19BB950263Field
Trip Blank Bottle No.: HOTG19BB950263Trip

Remarks: Taken at Yield Test
Please Run Full Drinking Water Scan Including MTBE
" Only one sample collected on 4/3/06
* Sample analyzed past holding time due to
instrumental problems. Dmt
Section Chief: Deborah Miller Date Reported: 4-24-06

•Phone: (410) 767 - 5643 •Fax: (410) 333 - 5237

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: 961503 HOTG1BB950263WELL Method: EPA 524.2
 Date Analyzed: 04/17/06

<u>Contaminants</u>	<u>DL*</u>	<u>MCL*</u>	<u>Result*</u>	<u>Contaminants</u>	<u>DL*</u>	<u>MCL*</u>	<u>Result*</u>
TRihalOMETHANES				UNREGULATED			
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
REGULATED				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: Deborah Miller Date Approved: 4/24/06

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: 961503 FB
 Date Analyzed: 04/17/06

Method: EPA 524.2

Contaminants	DL*	MCL*	Result*	Contaminants	DL*	MCL*	Result*
TRIALOMETHANES				UNREGULATED			
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
REGULATED				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 Miller Date Approved: 4/24/06

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: 961503 TB
 Date Analyzed: 04/17/06

Method: EPA 524.2

Contaminants	DL*	MCL*	Result*	Contaminants	DL*	MCL*	Result*
TRIHALOMETHANES				UNREGULATED			
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
REGULATED				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

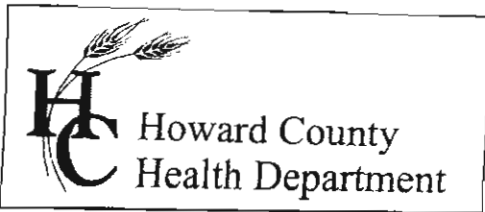
Section Chief: Richard Miller Date Approved: 4/24/06



Florida Radiochemistry Services, Inc.

Analysis Report

Lab Sample I.D.	0604014-01	0604014-02	0604014-03	0604014-04
Client I.D.	HW-237-03	HOTG20BB950264	HOBF43BB950278	HOTG19BB950263
Gross Alpha	50.4	21.1	17.1	7.6
Error +/-	6.2	3.0	3.0	1.9
MDL	2.7	1.5	1.8	1.4
EPA Method	900.0	900.0	900.0	900.0
Prep Date	04/04/06	04/04/06	04/04/06	04/04/06
Analysis Date	04/05/06	04/05/06	04/05/06	04/05/06
Analyst	MJN	MJN	MJN	MJN
Gross Beta	22.6	17.7	6.8	12.0
Error +/-	2.3	2.0	1.6	1.9
MDL	2.3	2.1	2.1	2.2
EPA Method	900.0	900.0	900.0	900.0
Prep Date	04/04/06	04/04/06	04/04/06	04/04/06
Analysis Date	04/05/06	04/05/06	04/05/06	04/05/06
Analyst	MJN	MJN	MJN	MJN
Units	pCi/l	pCi/l	pCi/l	pCi/l



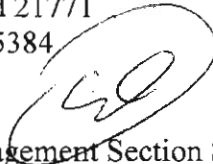
7178 Columbia Gateway Drive, Columbia MD 21046
(410) 313-2640 Fax (410) 313-2648
TDD (410) 313-2323 Toll Free 1-866-313-6300
website: www.hchealth.org

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

February 8, 2006

MEMORANDUM

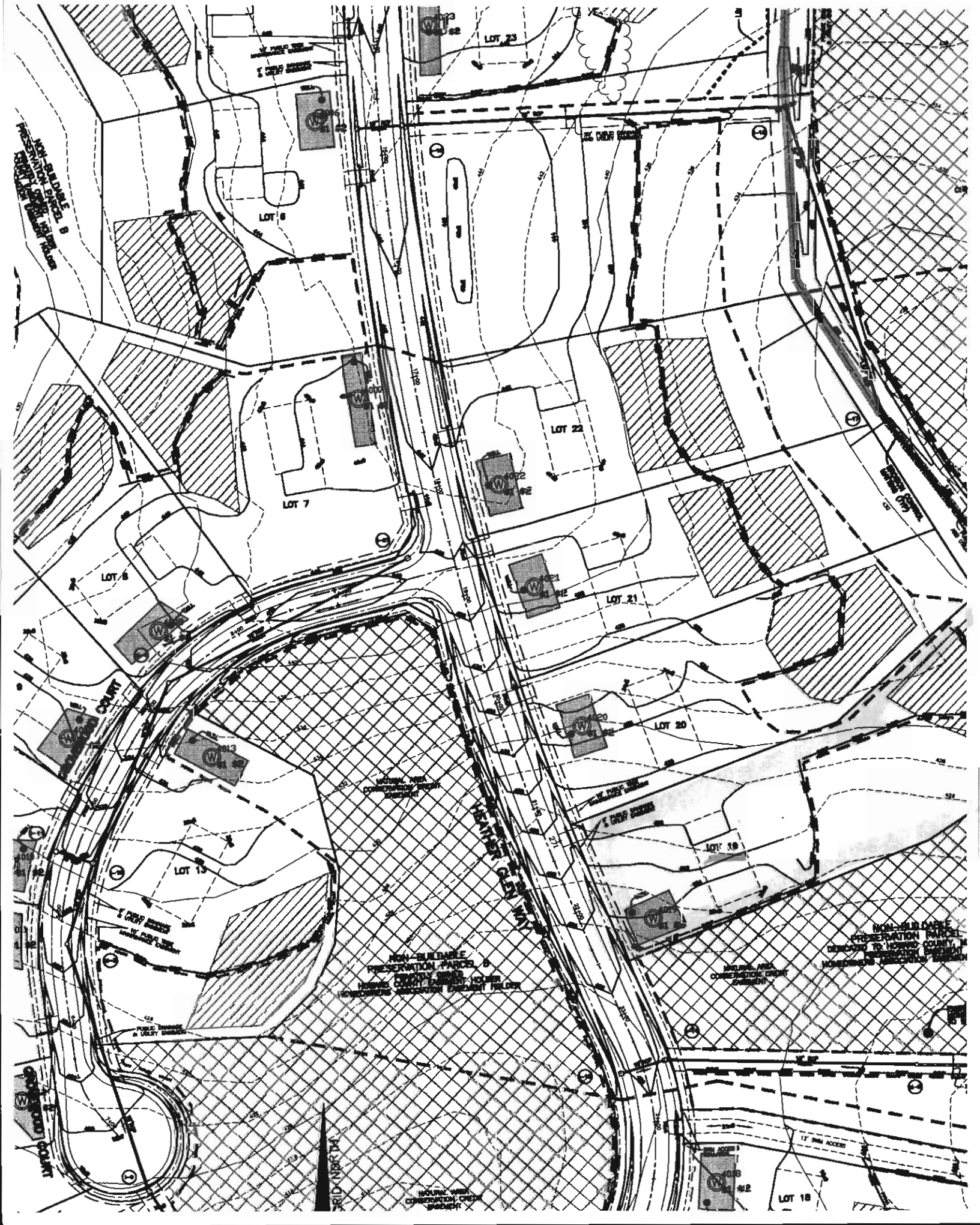
TO: Joseph L. Mayne Well Drilling
5512 Ridge Road
Mt. Airy, Maryland 21771
Faxed to 301-829-5384

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

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

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



NON-BUILDABLE PRESERVATION PARCEL

LOT 25

LOT 6

LOT 22

LOT 7

LOT 21

LOT 8

LOT 20

COUNTY

LOT 19

LOT 15

LOT 18

NON-BUILDABLE PRESERVATION PARCEL

NATURAL AND COMPLEMENTARY OPEN SPACE

NATURAL AND COMPLEMENTARY OPEN SPACE

LOT 18

COUNTY

W. GREEN ST.

S. CHERRY ST.

S. MAIN ST.

15' SWM ACCESS