

B 1 0546

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL

STATE PERMIT NUMBER

HO-95-0584

525642 please type

fill in this form completely

Date Received (APA)

OWNER INFORMATION

Land Manulating Consultants
3060 Rt. 92
Glenwood MD 21738

B 3 HOWARD LOCATION OF WELL

8 COUNTY HOWARD
23 SUBDIVISION WALNUT GROVE
SECTION 44 46 LOT 48 50 30
52 NEAREST TOWN CLARKSVILLE

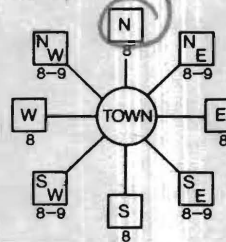
MILES FROM TOWN (enter 0 if in town) 2 M I

DRILLER INFORMATION

RAPHAEL E. MAYNE M S D 117
Raph E. Mayne Inc
17024 Handy Rd Mt Airy MD 21771
11-11-06

B 4

DIRECTION OF WELL FROM TOWN (CIRCLE BOX)



DANIEL CIOCCOLA
11 NEAR WHAT ROAD 30

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)

34 250 37
DISTANCE FROM ROAD 14
ENTER FT OR MI 38 39

TAX MAP: 28 BLK: 18 PARCEL 74

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

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

Howard 13 A517422
COUNTY NAME COUNTY NO.

STATE SIGNATURE INSERT S

DATE ISSUED 12/4/2006
CO SIGNATURE Brian Baber 12/4/2007
EXP. DATE

NORTH GRID 507 000 EAST GRID 815 000

APPROXIMATE DEPTH OF WELL 150 FEET
APPROXIMATE DIAMETER OF WELL 64 INCH

METHOD OF DRILLING (circle one)

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

REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX)

- THIS WELL WILL NOT REPLACE AN EXISTING WELL
THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
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 DEEPEMED AN EXISTING WELL

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

APPROX. PERMIT NUMBER H02005G006
PERMIT No. HO-95-0584

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

SOURCES OF DRILLING WATER

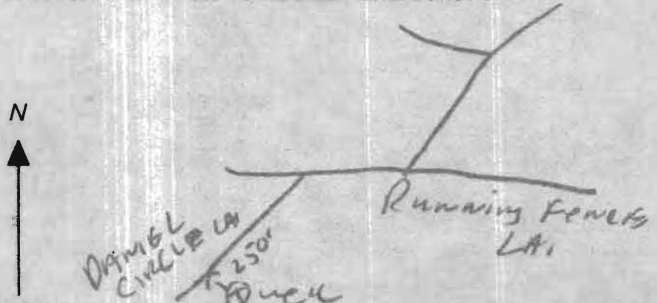
- 1. well
2.
3.

WRITE THE BOX NUMBER FROM THE MAP HERE

E 815
N 5087

Radium sample taken @ well
lost on 1/17/07

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



SPECIAL CONDITIONS

NOTE - APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED -

Need Radium Sample

**HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH
WATER AND SEWERAGE PROGRAM
TEL: (410)313-2640 FAX: (410)313-2648**

Information Form for the Installation of the Well Pump, Pitless Adapter, and Supply Piping

NOTE: The installer is responsible for requesting an inspection prior to 9 am on the day of the desired inspection. No work is to be covered until approved by the Health Department. All installations must comply with the National Standard Plumbing Code (NSPC, as amended locally) and COMAR 26.04.04 (MD Well Construction Regulations). Submission of a complete form is required prior to Use and Occupancy approval.

Company Name: NATIONAL WATER SVC Telephone #: 301-854-1333
Address: P.O. Box 138
HASTON, MD 20861

(Must circle one) Licensed Plumber Licensed Well Driller Licensed Well Pump Installer
License # and name of individual responsible for the field installation:
Name (Print): DAVID KYCKE License# PI 0145

*A licensed individual must perform the actual installation. Apprentices must be under the direct supervision of a licensed journeyman or master plumber, pump installer or well driller. Licenses may be subjected to field verification.

Name of Property Owner: Selfridge Builders Telephone #: 410-531-8930
Subdivision: WALNUT GROVE Lot #: 30 Well Tag #: HO-25-0584
Site Address: 12313 DANIEL Circle LA
CLARKSVILLE

<u>Submersible Pump Data</u>	<u>Pitless Adapter</u>	<u>Well Cap and Electric Conduit</u>
Make: <u>GRUNDFO</u>	Make: <u>Campbell</u>	Two piece watertight cap: <input checked="" type="checkbox"/>
Model #: <u>1559G10-220</u>	Model#: <u>PA 800</u>	Screened, vented well cap: <input checked="" type="checkbox"/>
Pump Capacity <u>15</u> GPM	Depth: <u>48"</u> (36" min)	Cap secured to casing: <input checked="" type="checkbox"/>
Well Yield: <u>7.5</u> GPM	NSF approved: <u>YES</u>	Conduit min 18" B.G.: <input checked="" type="checkbox"/>
Depth of well encountered at time of pump installation: <u>248</u> (feet)		Conduit secured to well cap: <input checked="" type="checkbox"/>
If pump capacity exceeds well yield, a low water cut off switch is required by NSPC 1990 Section 17.8.4		
Torque arrestors or Cable guards are required - Must circle one <u>CPS</u>		
Safety rope, if used, attached to inside of well casing with eye bolt <u>N/A</u>		

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

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

Signature of company representative responsible for installation _____ date 5-15-12

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

Date Insp. Requested: _____	Date Insp. Approved: _____
Inspection Data: Pitless adapter and water supply line at least 36" below grade	_____
Two piece cap installed and attached to casing securely	_____
Elec. conduit extends at least 18" below grade/attached to cap properly	_____
Safety rope installed inside of well casing	_____
Correct well tag attached properly and casing 8" above finished grade	_____
Water supply line sleeved adequately at house connection	_____
Adequate grout observed below pitless adapter	_____

**HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH
WATER AND SEWERAGE PROGRAM
TEL: (410)313-2640 FAX: (410)313-2648**

Information Form for the Installation of the Well Pump, Pitless Adapter, and Supply Piping

NOTE: The installer is responsible for requesting an inspection prior to 9 am on the day of the desired inspection. No work is to be covered until approved by the Health Department. All installations must comply with the National Standard Plumbing Code (NSPC, as amended locally) and COMAR 26.04.04 (MD Well Construction Regulations). Submission of a complete form is required prior to Use and Occupancy approval.

Company Name: _____ 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 direct supervision of a licensed journeyman or master plumber, pump installer or well driller. Licenses may be subjected to field verification.**

Name of Property Owner: _____ Telephone #: _____
Subdivision: _____ Lot #: _____ Well Tag #: HO - _____
Site Address: 12313 Daniel Circle Ln.

<u>Submersible Pump Data</u>	<u>Pitless Adapter</u>	<u>Well Cap and Electric Conduit</u>
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 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 or Cable guards are required – Must circle one
Safety rope, if used, attached to inside of well casing with eye bolt _____

Piping to house

Type: _____

PSI: _____ (160 psi min)

Depth of supply line: _____ (36" min)

House Connection

PVC sleeved to undisturbed soil at wall penetration: _____

Approximate length of sleeve: _____

Sleeve caulked and 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: 5/9/2012 **(BB)**

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

Two piece cap installed and attached to casing securely

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

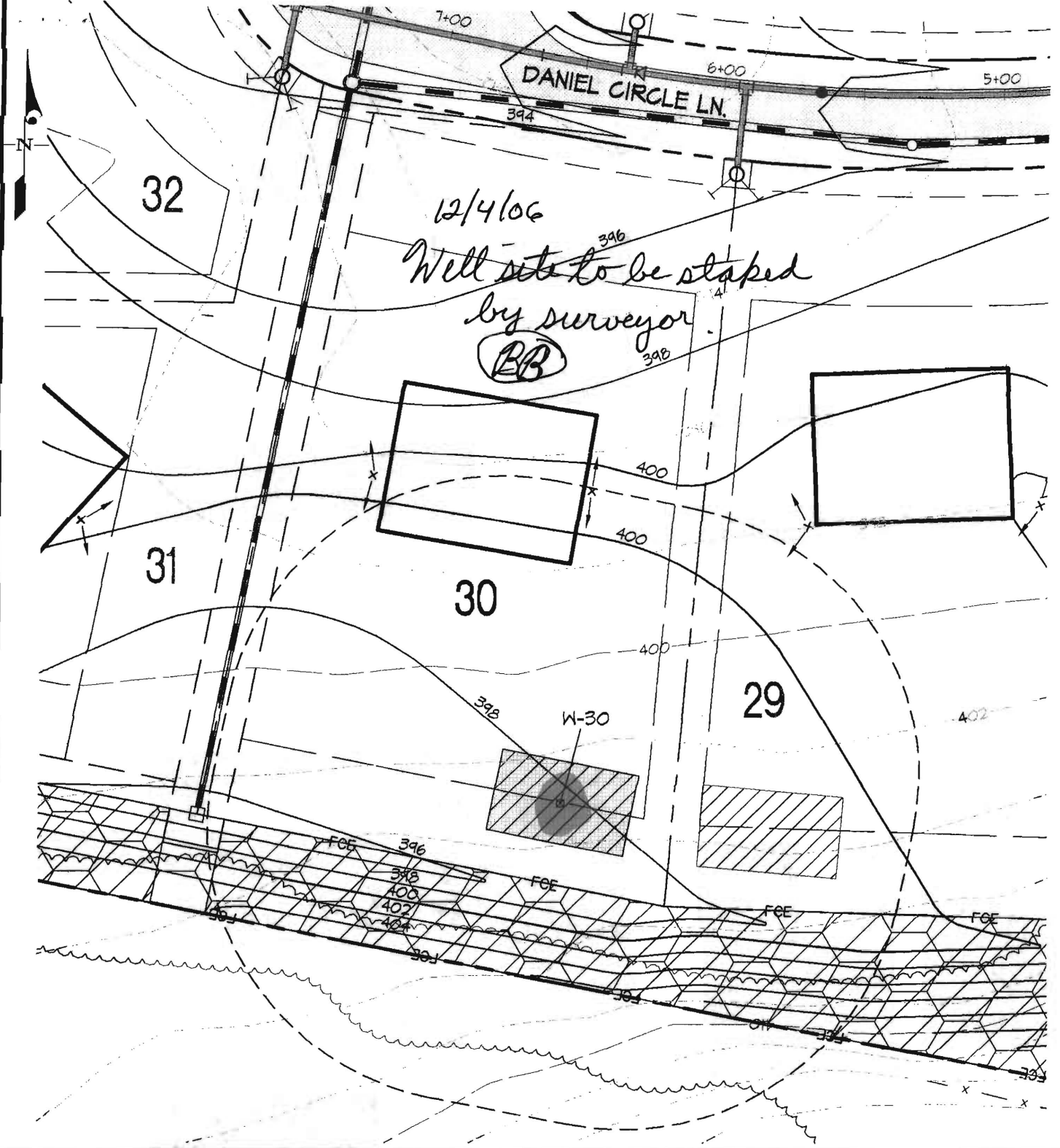
Safety rope installed inside of well casing

Correct well tag attached properly and casing 3" above finished grade

Water supply line sleeved adequately at house connection

Adequate grout observed below pitless adapter

Fill Around Casing



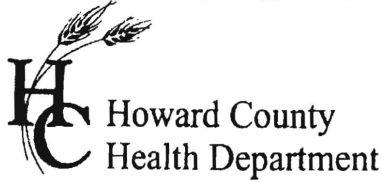
LEGEND	PROPOSED LPSS	HOUSE BOX	WELL BOX	SURVEY POINT
	PROPOSED STORM DRAIN			

WELL LOCATION EXHIBIT - LOT 30

WALNUT GROVE
 Lots 1 thru 88, Buildable Preservation Parcel "A",
 Non-Buildable Preservation Parcels "B" Thru "I" And
 and Non-Buildable Bulk Parcel "J"

GLW GUTSCHICK LITTLE & WEBER, P.A.

CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
 BURTONSVILLE, MARYLAND 20866
 TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186



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

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

TO ALL INTERESTED PARTIES

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

Well Site Location:

<u>Walnut Grove</u>	<u>30</u>	<u>Daniel Circle Lane</u>
Subdivision/Property Name	Lot #	Road Name

- Staking to take place after initial review (as discussed with Bob Weber).
- The well site has been staked by _____ ,
 (professional land surveyor or company employing professional land surveyors)
 on _____ (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 3/11/05



Bureau of Environmental Health
7178 Columbia Gateway Drive, Columbia, MD 21046-2147
Main: 410-313-2640 | Fax: 410-313-2648
TDD 410-313-2323 | Toll Free 1-866-313-6300
www.hchealth.org
Facebook: www.facebook.com/hocohealth
Twitter: HowardCoHealthDep

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

INTERIM CERTIFICATE OF POTABILITY
PERMANENT DEVIATION FOR RADIUM
Expiration Date – February 15, 2013

8/15/2012

Ameet and Sarangi Parikh
12313 Daniel Circle Lane
Clarksville, MD 21029

RE: Walnut Grove, Lot 30
12313 Daniel Circle lane
Building Permit: B11002803
Well Permit: HO-95-0584

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 7/18/2012. Final approval of the well line connection to the dwelling was granted on 5/9/2012. The well construction was completed on 1/17/2007. Water samples were collected on 7/23/2012.

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 7/25/2011. Results showed a Gross Alpha level of 17.8 ± 3.0 pCi/L and Gross Beta level of 11.8 ± 1.7 pCi/L. This exceeds the maximum contaminant level (MCL) of 15 pCi/L and/or 50 pCi/L, respectively.

After installation of a radionuclide removal device (softener, sediment filter and nitrogen removal system), post-treatment water samples were collected on 8/2/2012 and indicated a Gross Alpha level of 2.5 ± 1.7 pCi/L, a Gross Beta level of 2.2 ± 1.4 pCi/L, and a Radium 226/228 level of $<0.9 \pm 0.5$ pCi/L.

This Department will grant a **permanent deviation** to the Interim Certificate of Potability on condition that the radionuclide removal system effectively maintains a Gross Alpha level of less than 15 pCi/L, a Gross Beta level of less than 50 pCi/L, and a Radium 226/228 level of less than 5 pCi/L.

Furthermore, it will be necessary for you to comply with the following conditions:

1. The system must be properly operated and maintained continuously in accordance with the service contract for the life of the residence.

2. It is recommended that a Maryland certified water laboratory certified for radionuclide analysis perform a yearly radionuclide analysis.
3. If you decide to sell or rent your home in the future, you must make any potential buyer/tenant aware of this permanent deviation. **A person who fails to make this disclosure is subject to the penalties set out in COMAR 26.04.04.12F Enforcement and Environment Article 9-1311, Annotated Code of Maryland.**

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-95-0584. 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 Maryland 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,



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

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



Howard County
Health Department

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

TEMPORARY INTERIM CERTIFICATE OF POTABILITY
TEMPORARY DEVIATION FOR RADIUM

Expiration Date – September 15th, 2012

August 1st, 2012

Homeowner
12313 Daniel Circle Lane
Clarksville, MD 21029

RE: Walnut Grove, Lot 30
12313 Daniel Circle Lane
Building Permit: B11002803
Well Permit: HO-95-0584

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 **7/18/2012**. Final approval of the well line connection to the dwelling was granted on **5/9/2012**. The well construction was completed on **1/17/2007**. Water samples were collected on **7/23/2012**.

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 **7/25/2012**. Results showed a Gross Alpha level of **17.8 ± 3.0 pCi/L** and Gross Beta level of **11.8 ± 1.7 pCi/L**. **This exceeds the maximum contaminant limit (MCL) of 15 pCi/L and/or 50 pCi/L, respectively.**

This is a **temporary deviation** to allow additional time for installation of a radionuclide removal system and submission of water sample results indicating that the treated water meets EPA recommendations.

This Department will grant a **temporary deviation** to the Interim Certificate of Potability on condition that water sample results for pre- and post-treatment short term and long term gross alpha/beta and radium 226/228 are submitted to this Department **within 45 days**. Those results must indicate that the radionuclide removal system is effectively maintaining a Gross Alpha level of less than **15 pCi/L**, a Gross Beta level of less than **50 pCi/L**, and a Radium 226/228 level of less than **5 pCi/L**.

Furthermore, it will be necessary for you to comply with the following conditions:

1. The system must be properly operated and maintained continuously in accordance with the service contract for the life of the residence.
2. It is recommended that a Maryland certified water laboratory certified for radionuclide analysis perform a yearly radionuclide analysis.
3. If you decide to sell or rent your home in the future, you must make any potential buyer/tenant aware of this deviation. **A person who fails to make this disclosure is**

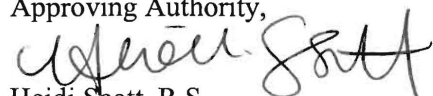
subject to the penalties set out in COMAR 26.04.04.12F *Enforcement and Environment Article 9-1311, Annotated Code of Maryland.*

This Temporary Interim Certificate of Potability will expire 45 days from the date of issuance. Failure to submit the required radium sample results and obtain an Interim Certificate of Potability before the expiration date 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 water sample appointment or contact a Maryland 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,



Heidi Scott, 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:

S/O Number: 86122

Selfridge Builders
 4781 Ten Oaks Road
 Dayton, MD 21036

Report Date: August 14, 2012

Property Sampled: 12313 Daniel Circle Lane, 21029
Sample Location: Tap After Softener ✓
Residual Chlorine: <0.1 mg/L

Building Permit #: B11002803
Sampler ID #: 4723TL
Samples Iced: Yes

County: Howard
Map: 28

Subdivision: Walnut Grove
Parcel: 74

Lot #: 30

Date/Time Collected in Field: August 2, 2012 @ 11:49 am
Date/Time Received in Lab: August 2, 2012 @ 1:56 pm

Well Tag #: HO-95-0584
Well Condition: 2-Piece Cap, Satisfactory

OK! not 8/15/2012

Water Treatment/Conditioning: Softener, Sediment Filter, Nitrogen Removal System

PARAMETER	METHOD	MDL (pCi/L)	MCL* (pCi/L)	RESULT (pCi/L)	ACCEPTABILITY
Gross Alpha (Short-Term)	EPA 900.0	1.7	15	2.3 ± 1.3	Acceptable
Gross Beta (Short-Term)	EPA 900.0	2.2	50	<2.2 ± 1.4	Acceptable
Gross Alpha (Long-Term)	EPA 900.0	2.5	15	<2.5 ± 1.7	Acceptable
Gross Beta (Long-Term)	EPA 900.0	2.2	50	<2.2 ± 1.4	Acceptable
Radium 226	EPA 903.1	0.1	5 pCi/L Combined	0.2 ± 0.1	Acceptable
Radium 228	EPA Ra-05	0.7		<0.7 ± 0.4	

*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
 Katherine C. Higgs
 Manager – Drinking Water Testing

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



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:

James H. Selfridge Builders Inc.
 4781 Ten Oaks Road
 Dayton, Maryland 21036

S/O Number: 85990

Report Date: July 24, 2012

Property Sampled: 12313 Daniel Circle Lane, 21029
Sample Location: Pressure Tank Tap ✓
Residual Chlorine: <0.1 mg/L ✓

Building Permit #: B11002803
Sampler ID #: 7483AM
Samples Iced: Yes

County: Howard
Map: 28

Subdivision: Walnut Grove ✓
Parcel: 74

Lot#: 30

Date/Time Collected in Field: July 23, 2012 @ 12:01 pm
Date/Time Received in Lab: July 23, 2012 @ 12:54 pm

Well Tag #: HO-95-0584
Well Condition: 2-Piece Cap, Satisfactory

Water Treatment/Conditioning: Sediment Filter

PARAMETER	METHOD	MCL/*SMCL	RESULT	PASS/FAIL
Total Coliform	SM 9223B	Absent	Absent ✓	Pass
E. coli	SM 9223B	Absent	Absent ✓	Pass
Nitrate	SM 4500D	10 mg/L as N	1.2 mg/L as N ✓	Pass
Turbidity	EPA 180.1	10 NTU	1.3 NTU ✓	Pass
pH	EPA 150.1	*6.5-8.5 Units	7.6 Units ✓	***
Sand		Absent	Absent ✓	Pass

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.

'OK' MB 7/29/12

Katherine C. Higgs
 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.

CERTIFICATE OF ANALYSIS



Requester:
Heritage Realty & Land Development
Attn: Jeremy Rutter
P.O. Box 482
Lisbon, MD 21765

S/O Number: 64290-3
Report Date: July 31, 2007

Trace Laboratories, Inc.
Maryland

5 North Park Drive
Hunt Valley, MD 21030
Telephone: 410/252-7742
Telephone: 410/584-9099
Fax: 410/584-9117
Email: tracelab@connext.net
www.tracelabs.com

Maryland State Certified
Water Quality Laboratory
No. 318

ISO 9001:2000



Cert No. C2005-01504

Property Sampled: Walnut Grove Property

County: Howard
Subdivision: Walnut Grove
Lot #: 30
Tax Map #: N/A
Parcel #: N/A

Date/Time Collected: July 11, 2007 at 12:35 pm
Date/Time Received: July 11, 2007 at 3:40 pm

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

Well Tag Number: HO-95-0584
Well Condition: N/A

Water Conditioning/Treatment: None

PARAMETER	RESULT	METHOD	DETECTION LIMIT
Radium 226	3.2 +/- 0.5 pCi/L	EPA 903.1	0.2 pCi/L
Radium 228	<0.8 +/- 0.5 pCi/L	EPA Ra-05	0.8 pCi/L
Uranium	10.6 +/- 2.1 pCi/L	EPA 908.0	0.7 pCi/L

Allison R. Milburn
Allison R. Milburn
Manager-Drinking Water Testing

Samples analyzed by Laboratory #E83033



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: James H. Selfridge Builders Inc.
 4781 Ten Oaks Road
 Dayton, Maryland 21036

S/O Number: 86017

Report Date: July 31, 2012

Property Sampled: 12313 Daniel Circle Lane, 21029
Sample Location: Pressure Tank Tap
Residual Chlorine: <0.1 mg/L

Building Permit #: B11002803
Sampler ID #: 4723TL
Samples Iced: Yes

County: Howard **Subdivision:** Walnut Grove
Map: 28 **Parcel:** 74 **Lot#:** 30

Date/Time Collected in Field: July 25, 2012 @ 1:46 pm
Date/Time Received in Lab: July 25, 2012 @ 2:40 pm

Well Tag #: HO-95-0584
Well Condition: 2-Piece Cap, Satisfactory

Water Treatment/Conditioning: Sediment Filter

Radium Testing

PARAMETER	METHOD	MDL (pCi/L)	MCL* (pCi/L)	RESULT (pCi/L)	ACCEPTABILITY
Gross Alpha	EPA 900.0	1.9	15	17.8 ± 3.0	HIGH
Gross Beta	EPA 900.0	2.0	50	11.8 ± 1.7	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
 Katherine C. Higgs
 Manager - Drinking Water Testing

MDL: Method Detection Limit
 MCL: Maximum Contamination Level, an enforceable level established by the EPA
 Analysis completed by Laboratory #278

Circuit Court for
HOWARD COUNTY
Clerk of the Court,
MARGARET D. RAPPAPORT
8360 COURT AVENUE
ELLICOTT CITY, MD 21043-
(410) 313-2111

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

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

Transaction Block: 1643
Ret: 173
AGREEMENT AMOUNT
IMP FD SURE \$5 40.00
RECORDING FEE \$20.00 20.00
SUBTOTAL: 60.00
TOTAL CHARGES: 60.00
PAYMENTS
CHECK 60.00
TOTAL TENDERED: 60.00

**OVAL OF AN INDIVIDUAL DRINKING WELL WITH AN
ON-SITE TREATMENT SYSTEM**

done by and between the Howard County Health Department
Ameet + Savanji Parikh ("the Owner").

owns a tract of land at street address 12313 Daniel Circle Lane
The deed and subdivision plat of the property is recorded among
Howard County, Maryland, Tax Map # 28, Grid # 18, Parcel # 74,
and District # 05, Tax Account # 448905, Block # 9999,
Lot # 30. ("the Property").

Property lacks an available public drinking water source and is required
to have an on-site source of drinking water for the residence of the property.

Owner has installed a residential drinking well under well permit HO-95-
Howard County Health Department (or a private laboratory certified to perform
tests). The results of the tests have shown that the gross alpha particle

gross alpha 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.

Circuit Court for
HOWARD COUNTY
Clerk of the Court,
MARGARET D. RAPPAPORT
8360 COURT AVENUE
ELLCOTT CITY, MD 21043-
(410) 313-2111

Transaction Block: 1643

Ref: 178

AGREEMENT

AMOUNT

IMP FD SURE \$5

40.00

RECORDING FEE \$20.00

20.00

SUBTOTAL:

60.00

TOTAL CHARGES:

60.00

PAYMENTS

CHECK

60.00

TOTAL TENDERED:

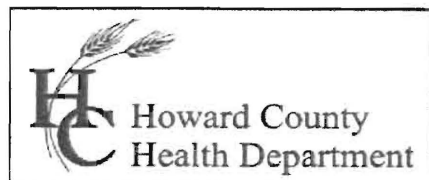
60.00

Cashier: NTN Reg # CH06

Rept # 79779

Date: Jul 31, 2012

Time: 01:50 pm



Bureau of Environmental Health
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(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 Amcet + Swamy's Parikh ("the Owner").

WHEREAS, the Owner owns a tract of land at street address 12313 Daniel Circle Lane, Clarksville, MD 21029 and the deed and subdivision plat of the property is recorded among the Land Records of Howard County, Maryland, Tax Map # 28, Grid # 18, Parcel # 74, Deed Reference # 13494/020 and District # 05, Tax Account # 448905, Block # 9999, Walnut Grove subdivision, Lot 30. ("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 HO-95-0584 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.

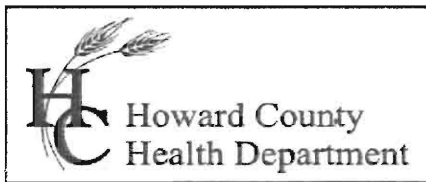
WHEREAS, The Maryland Department of the Environment (MDE) has promulgated rules and regulations under which a Certificate of Potability may be issued and has delegated the authority to issue such Certificate to the Health Department.

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.



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

**REQUEST FOR TEMPORARY DEVIATION TO
 RADIUM STANDARDS FOR CERTIFICATE OF POTABILITY**

DATE: 7/30/2012 WELL PERMIT #: HO - 95 - 0584
 PROPERTY OWNER: Ameet & Sarangi Parikh
 SUBDIVISION & LOT #: Walnut Grove - Lot 30
 PROPERTY ADDRESS: 12313 Daniel Circle Lane, Clarksville, MD 21029

TESTIMONIAL: Steps that will be taken, or that have already been taken, by the well owner or agent to bring the well into compliance with COMAR 26.04.04.09 (B) within forty-five (45) days. If post-treatment water samples have been taken, state the specific analyses that will be reported in results, e.g. Gross Alpha and Gross Beta and/or Radium.


Install a whole house water softening system

CONDITIONS:

- 1) Within forty-five (45) days, the well installed under permit # HO - 95- 0584 will be documented to have Gross Alpha level of 15 pCi/l, Gross Beta level 50 pCi/l, and/or sum of Radium 226 and Radium 228 at level 5 pCi/l or less (including reported margin of error) at the primary drinking tap as a result of installation of a water softener system, or at the reverse osmosis tap.
- 2) If the radium condition cannot be remediated to a level of Gross Alpha level of 15 pCi/l, Gross Beta level 50 pCi/l, and/or sum of Radium 226 and Radium 228 at level 5 pCi/l or less (including reported margin of error) via installation of a water softener treatment or reverse osmosis system, then drilling a replacement well would likely be necessary. Issuance of a Final Certificate of Potability will be delayed until the issue is resolved.

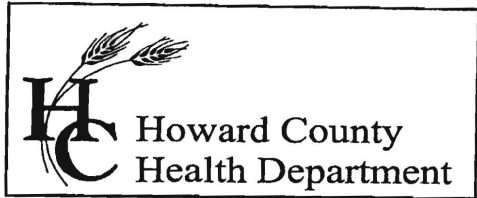
I hereby request that a Forty-five Day Temporary Deviation to COMAR 26.04.04.09 be granted for the well installed under permit # HO -95-0584. I am fully aware of the conditions under which this deviation will be granted, and of my responsibilities as the well owner which include advising any future buyer/tenant of the installation, condition and maintenance responsibilities of the radium removal device.

Prospective Owner's Original Signature(s) [Person(s) that intend to live in the dwelling

 Ameet Parikh 7/31/12

Prospective Owner's Day Time Phone Number(s)

(410) 999- 9224



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

January 30 2007

Walnut Grove, LLC
10705 Charter Drive
Suite 320
Columbia, Maryland 21044

Daniel C. Lin

RE: Walnut Grove Subdivision, Lot 30
Well Tag: HO - 95 - 0584

To Whom It May Concern:

A sample was collected during a yield test on January 17, 2007 and submitted to GPL Laboratories to assess the possible presence of **Gross Alpha** and **Gross Beta** in the future well water supply. **Gross Alpha** and **Gross Beta** measure the total alpha and beta particle activity in a water supply. 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 15.3 ± 2.2 picocuries/liter (pCi/L); while the **Gross Beta** level was 10.0 ± 1.4 pCi/L. The **Gross Alpha** result was above its **maximum contaminant level (MCL)** of 15 pCi/L, while the **Gross Beta** level was below its target value of 50 pCi/L (roughly equivalent to the **MCL** of 4 millirem/year).

Since the **Gross Alpha** finding exceeded its **MCL**, additional testing for **Radium** will be necessary to verify existing levels prior to occupancy. Alternatively, you may install treatment designed to reduce **Gross Alpha**, **Gross Beta** and **Radium**, plus provide post treated results (short and long term **GAGB**, plus **Radium**) confirming that levels are in conformance with existing standards. **Additionally**, the owners will be required to sign an "AGREEMENT FOR APPROVAL OF AN INDIVIDUAL DRINKING WELL WITH AN ON-SITE TREATMENT SYSTEM" as part of the Use and Occupancy process. Moreover, keep in mind that the standard potability parameters required for occupancy will still be needed.

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

Bert Nixon, Deputy Director
Bureau of Environmental Health

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

Send Report To:

Port Nixon

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: KW433WG0584 No. B: _____ Field Blank Bottle No. A: _____ No. B: _____

Plant/Site Name: Waldorf Grove Lot 30 County: Howard

Sample Source: Daniel G. Co. Location: 40-95-0584
(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: K. Wolf

Telephone No: 410-713-2645

Date Collected: 1/17/07

Time Collected: 11 a.m. _____ p.m.

Nitric Acid Preserved: Yes No

Iced: Yes No

Submitters Code: Federal Project: Field Data: _____

Remarks: sample taken @ Yield test pH _____ Chlorine _____

✓	Test	EPA Code	Laboratory No.	Results (pCi/L)	Date Reported
✓	Gross Alpha	4000	<u>761095-005</u>	<u>15.3 ± 2.2</u>	<u>1/23/07</u>
✓	Gross Beta	4100		<u>10.0 ± 1.4</u>	
	Radon-222 Bottle A	4004			
	Radon-222 Bottle B	4004			
	Field Blank A	4004			
	Field Blank B	4004			
	Tritium				
	Ra - 226	4020			
	Ra - 228	4030			
	Total Uranium	4006			

Date Received: _____ / _____ / _____

Supervisor: _____



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Peter L. Beilenson, M.D., M.P.H., Health Officer
December 19, 2007

Jeremy Rutter
Heritage Realty & Land Development
P.O. Box 482
Lisbon, Maryland 21765

RE: Radium & Uranium Results for:
Walnut Grove Lot 15, HO – 95 – 0572
Walnut Grove Lot 19, HO – 95 – 0575
✓ Walnut Grove Lot 30, HO – 95 – 0584
Walnut Grove Lot 41, HO – 95 – 0594
Walnut Grove Lot 45, HO – 94 – 4187
Walnut Grove Lot 51, HO – 94 – 4181
Walnut Grove Lot 53, HO – 95 – 0598
Walnut Grove Lot 63, HO – 94 – 4183
Walnut Grove Lot 87, HO – 95 – 0618

Dear Mr. Rutter:

You have requested that I review and comment upon sample results from the aforementioned lots at the Walnut Grove Sub Division, all taken on July 11, 2007 and sent to Trace Laboratories for analysis of Radium 226 / 228 and Uranium. My comments would be used to help confirm whether or not treatment to address these parameters, would be needed on any of these well water supplies.

Let me first state that no information was provided on how long the wells were purged prior to the sample being collected. From looking at the sample reports, wells were sampled at 10 – 15 minute intervals, suggesting little to no purging on some (or all) of these wells. Additionally, without the benefit of short and long term Gross Alpha & Beta components, the interpretation of some results is less clear. Because of this, I will “err” on the side of caution in my conclusions.

In general, my interpretation of these results is similar to those reached by Allison Milburn, Manager – Drinking Water Testing for Trace Laboratories. **Lots 19, 45, 53 and 87** are water supplies in which no additional treatment for these parameters would be anticipated. Alternatively, **Lots 15 (based upon Uranium), 51 and 63** are lots that additional treatment (i.e., softeners and/or reverse osmosis systems) will be needed. The remaining two lots (**30 and 41**), though not strictly reaching or exceeding the maximum contaminant level (MCL) of 5 picocuries/liter, are close enough that with variability (and a lack of additional information), will at this point be required to have treatment.

If you have questions or wish to discuss further, please contact me at (410) 313 – 1774.

Sincerely,

Bert Nixon, Director
Bureau of Environmental Health

CERTIFICATE OF ANALYSIS



Trace Laboratories, Inc.
Maryland

5 North Park Drive
Hunt Valley, MD 21030
Telephone: 410/252-7742
Telephone: 410/584-9099
Fax: 410/584-9117
Email: tracelab@connect.net
www.tracelabs.com

Maryland State Certified
Water Quality Laboratory
No. 318

ISO 9001:2000



Cert No. C2005-01504

Requester:
Heritage Realty & Land Development
Attn: Jeremy Rutter
P.O. Box 482
Lisbon, MD 21765

S/O Number: 64290-3
Report Date: July 31, 2007

Property Sampled: Walnut Grove Property

County: Howard
Subdivision: Walnut Grove
Lot #: 30
Tax Map #: N/A
Parcel #: N/A

Date/Time Collected: July 11, 2007 at 12:35 pm
Date/Time Received: July 11, 2007 at 3:40 pm

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

Well Tag Number: HO-95-0584
Well Condition : N/A

Water Conditioning/Treatment: None

PARAMETER	RESULT	METHOD	DETECTION LIMIT
Radium 226	3.2 +/- 0.5 pCi/L	EPA 903.1	0.2 pCi/L
Radium 228	<0.8 +/- 0.5 pCi/L	EPA Ra-05	0.8 pCi/L
Uranium	10.6 +/- 2.1 pCi/L	EPA 908.0	0.7 pCi/L

Allison R. Milburn
Manager-Drinking Water Testing

Samples analyzed by Laboratory #E83033