

C1 6519

SEQUENCE NO.
(MDE USE ONLY)STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE TYPETHIS REPORT MUST BE SUBMITTED WITHIN
45 DAYS AFTER WELL IS COMPLETED.COUNTY
NUMBER

A517420

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

ST/CO USE ONLY

DATE Received

MM DD YY
8 13

DATE WELL COMPLETED

MM DD YY
07 25 05

Depth of Well

22 220 26
(TO NEAREST FOOT)PERMIT NO.
FROM "PERMIT TO DRILL WELL"

HD - 44 - 4187

OWNER

STREET OR RFD

SUBDIVISION

SECTION

LOT

WELL LOG

Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR
COLOR, DEPTH, THICKNESS AND IF WATER BEARINGDESCRIPTION (Use
additional sheets if needed)

FEET

FROM

TO

check
if water
bearing

TOPSOIL

0

1

Clay

1

14

White mica

14

20

Sand Stone

20

25

White mica

25

95

Sand Stone

95

100

White mica

100

135

Sand Stone

135

140

White mica

140

220

GROUTING RECORD

yes no

WELL HAS BEEN GROUTED
(Circle Appropriate Box)

Y N

TYPE OF GROUTING MATERIAL (Circle one)

CEMENT CM

BENTONITE CLAY BC

NO. OF BAGS 9 NO. OF POUNDS 500

GALLONS OF WATER 54

DEPTH OF GROUT SEAL (to nearest foot)

from 48 TOP 52 ft. to 54 BOTTOM 58 ft.
(enter 0 if from surface)

CASING RECORD

casing
types
insert
appropriate
code
below

ST

STEEL

CO

CONCRETE

PL

PLASTIC

OT

OTHER

MAIN
CASING
TYPENominal diameter
top (main) casing
(nearest inch)Total depth
of main casing
(nearest foot)

PL

6

26

E
A
C
H
C
A
S
I
N
G

OTHER CASING (if used)

diameter

depth (feet)

inch

from

to

to

to

to

screen type
or open hole
(insert
appropriate
code
below)

SCREEN RECORD

ST

STEEL

BR

BRASS

PL

PLASTIC

HO

OPEN

HOLE

OT

OTHER

C 2

DEPTH (nearest ft.)

1 2

HO

24

220

E

A

C

H

S

C

R

E

E

N

SLOT SIZE 1 2 3

DIAMETER

OF SCREEN

56

60

from

to

68

MDE USE ONLY

(NOT TO BE FILLED IN BY DRILLER)

T

(E.R.O.S.)

W Q

70

72

TELESCOPE

CASING

LOG

INDICATOR

OTHER DATA

C 3

1 2

PUMPING TEST

HOURS PUMPED (nearest hour)

2

PUMPING RATE (gal. per min.)

10

METHOD USED TO

MEASURE PUMPING RATE

Bucket

WATER LEVEL (distance from land surface)

BEFORE PUMPING

20

ft.

WHEN PUMPING

220

ft.

TYPE OF PUMP USED (for test)

A

air

P

piston

T

turbine

C

centrifugal

R

rotary

O

other

J

jet

S

submersible

PUMP INSTALLED

DRILLER INSTALLED PUMP
(CIRCLE) (YES or NO)

YES

NO

IF DRILLER INSTALLS PUMP, THIS SECTION
MUST BE COMPLETED FOR ALL WELLS.

TYPE OF PUMP INSTALLED

PLACE (A,C,J,P,R,S,T,O)

IN BOX 29

CAPACITY:

GALLONS PER MINUTE

(to nearest gallon)

31

35

PUMP HORSE POWER

37

41

PUMP COLUMN LENGTH

(nearest ft.)

43

47

CASING HEIGHT

(circle appropriate box
and enter casing height)

+

above

LAND SURFACE

-

below

2

(nearest

foot)

LOCATION OF WELL ON LOT

SHOW PERMANENT STRUCTURE SUCH AS
BUILDING, SEPTIC TANKS, AND /OR
LANDMARKS AND INDICATE NOT LESS
THAN TWO DISTANCES
(MEASUREMENTS TO WELL)

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED

yes

Y

no

N

CIRCLE APPROPRIATE LETTER

A A WELL WAS ABANDONED AND SEALED
WHEN THIS WELL WAS COMPLETED

E ELECTRIC LOG OBTAINED

P TEST WELL CONVERTED TO PRODUCTION
WELLI HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN
ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND
IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE
CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED
HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY
KNOWLEDGE.

DRILLERS LIC. NO. 1

M SD 112

DRILLERS SIGNATURE

(MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO. 1

D

-

-

-

-

-

-

-

-

-

-

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

B 1	8985	SEQUENCE NO. (MDE USE ONLY)	STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL 522054 please type	STATE PERMIT NUMBER 40-94-4187 fill in this form completely
<div style="display: flex; justify-content: space-between;"> <div style="width:48%;"> <p>Date Received (APA) _____</p> <p style="text-align: center;">OWNER INFORMATION</p> <p>8 MM DD YY 13</p> <p>15 <u>Goodier Builders Inc</u> Last Name Owner First Name 34</p> <p>36 <u>10705 Charter Dr.</u> Street or RFD 55</p> <p>57 <u>Columbia MD 21044</u> Town 70 State 72 Zip 76</p> <p style="text-align: center;">DRILLER INFORMATION</p> <p>Driller's Name <u>Ralph E. Mayne</u> MS D 117 76 License No. 81</p> <p>Firm Name <u>Ralph E. Mayne Inc</u></p> <p>Address <u>12024 Hardy Rd. Mt Airy MD 21771</u></p> <p>Signature <u>Ralph E. Mayne</u> Date <u>3-26-05</u></p> </div> <div style="width:48%;"> <p style="text-align: center;">LOCATION OF WELL</p> <p>8 COUNTY <u>Howard</u> 21</p> <p>23 SUBDIVISION <u>WALNUT GROVE</u> 42</p> <p>SECTION <u>44</u> LOT <u>45</u> 44 46 48 50</p> <p><u>CLARKSVILLE</u> 52 NEAREST TOWN 71</p> <p>MILES FROM TOWN (enter 0 if in town) <u>2</u> M I 73 76 77 78</p> </div> </div>				
<div style="display: flex; justify-content: space-between;"> <div style="width:48%;"> <p style="text-align: center;">WELL INFORMATION</p> <p>APPROX. PUMPING RATE <u>5</u> GAL. PER MIN. 8 12</p> <p>AVERAGE DAILY QUANTITY NEEDED <u>500</u> GAL. PER DAY 14 20</p> <p style="text-align: center;">USE FOR WATER (CIRCLE APPROPRIATE BOX)</p> <p><input checked="" type="checkbox"/> DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION</p> <p><input type="checkbox"/> FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)</p> <p><input type="checkbox"/> INDUSTRIAL, COMMERCIAL, DEWATERING</p> <p><input type="checkbox"/> PUBLIC WATER SUPPLY WELL</p> <p><input checked="" type="checkbox"/> TEST, OBSERVATION, MONITORING</p> <p><input type="checkbox"/> GEO-THERMAL</p> </div> <div style="width:48%;"> <p style="text-align: center;">NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL</p> <p>COUNTY NAME <u>Howard</u> COUNTY NO. <u>1517420</u></p> <p>STATE SIGNATURE _____ INSERT S → 41</p> <p>DATE ISSUED <u>4/25/05</u> CO SIGNATURE <u>[Signature]</u> EXP. DATE <u>4/25/06</u></p> <p>43 MM DD YY 48</p> <p>NORTH GRID <u>509</u> 0 0 0 EAST GRID <u>816</u> 0 0 0</p> <p>50 55 57 63</p> </div> </div>				
<p>APPROXIMATE DEPTH OF WELL <u>150</u> FEET 24 28</p> <p>APPROXIMATE DIAMETER OF WELL <u>64</u> INCH NEAREST INCH</p> <p style="text-align: center;">METHOD OF DRILLING (circle one)</p> <p>BORED (or Augered) JETTED Jetted & DRIVEN</p> <p><input checked="" type="checkbox"/> AIR-ROTary AIR-PERCussion ROTARY (Hydraulic Rotary)</p> <p><input type="checkbox"/> CABLE REVERSE-ROTary DRIVE-POINT</p> <p>other _____</p> <p style="text-align: center;">REPLACEMENT OR DEEPEINED WELLS (CIRCLE APPROPRIATE BOX)</p> <p><input checked="" type="checkbox"/> THIS WELL WILL NOT REPLACE AN EXISTING WELL</p> <p><input type="checkbox"/> THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED</p> <p><input type="checkbox"/> THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS</p> <p><input type="checkbox"/> THIS WELL WILL DEEPEIN AN EXISTING WELL</p> <p>PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEINED (IF AVAILABLE) 41 _____ 52</p> <p style="text-align: center;">Not to be filled in by driller (MDE OR COUNTY USE ONLY)</p> <p>APPROP. PERMIT NUMBER _____ G _____</p> <p>PERMIT No. <u>40-94-4187</u> 70 71 72 73 74 75 76 77 78 79</p>				
<p style="text-align: center;">SPECIAL CONDITIONS</p> <p>NOTE - APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED.</p> <p style="font-size: 24pt; text-align: center;"><u>well to be converted to potable supply</u></p> <p style="font-size: 24pt; text-align: center;"><u>GAP will be needed</u></p>				

Well Permit No. HO - 94-4187
Location of property (road) Running Fence Ln
Subdivision W/Int Grove Lot 45 Block 14 Plat 28 Sec. 74
Well Driller Ralph Mayne Owner Gardner Builders

Depth of well 220 m
Distance of measuring point (M.P.) above ground 2 m
Static water level (S.W.L.) below M.P. 28 m

Time pump started 8:15 Pumping rate 15 Gpm
Total time 15 min to reach pumping water level 55 ft. below M.P.

[illegible]

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: Do It Plumbing & Heating LLC Telephone #: 240-882-0069
Address: 4955 Old Mill Rd.
Ellicott City, MD 21042

(Must circle one) Licensed Plumber Licensed Well Driller Licensed Well Pump Installer
License # and name of individual responsible for the field installation:

Name (Print): Duane Gilbert License# 21899

*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: TBI Telephone #: 410-480-0023
Subdivision: Walnut Grove Lot #: 45 Well Tag #: HO - 94- 4187
Site Address: 12248 Running Fence LN
Clarksville, MD 21029

Submersible Pump Data

Make: MVEIS
Model #: 25552-12 Plus-P4-1
Pump Capacity 12 GPM
Well Yield: 12 GPM

Pitless Adapter

Make: American Granby
Model#: 75800
Depth: yes (36" min)
NSF approved: yes

Well Cap and Electric Conduit

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

Depth of well encountered at time of pump installation: 260 (feet)
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 NO

Piping to house

Type: plastic - one inch
PSI: yes (160 psi min)
Depth of supply line: yes (36" min)

House Connection

PVC sleeved to undisturbed soil at wall penetration: yes
Approximate length of sleeve: 10 ft
Sleeve caulked and sealed properly: yes

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

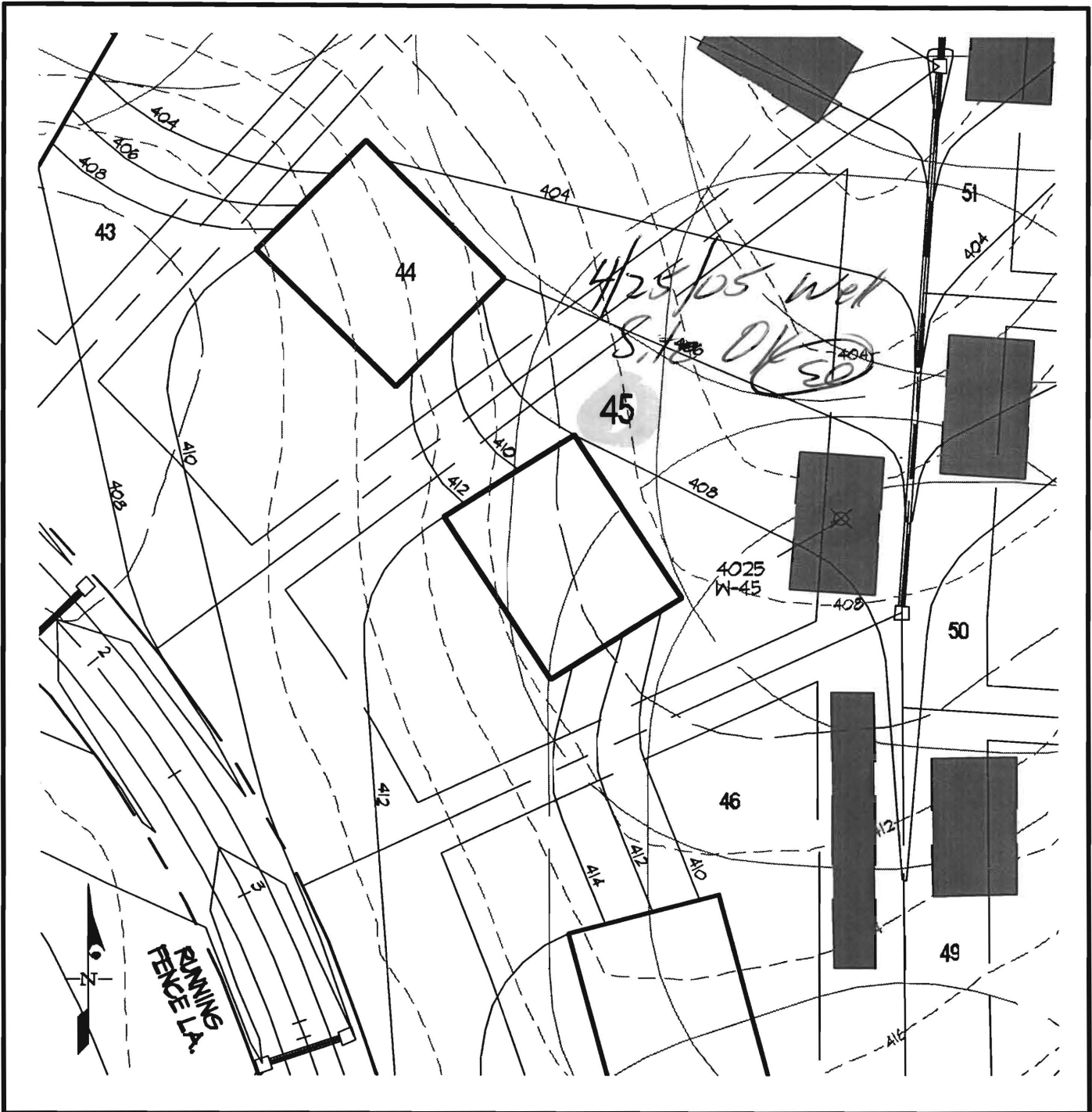
date

Nov-8-2011

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

Date Insp. Requested: _____ Date Insp. Approved: 6/8/11 (KW)
Inspection Data: Pitless adapter and water supply line at least 36" below grade

Two piece cap installed and attached to casing securely	<input checked="" type="checkbox"/>
Elec. conduit extends at least 18" below grade/attached to cap properly	<input checked="" type="checkbox"/>
Safety rope installed inside of well casing	<input checked="" type="checkbox"/>
Correct well tag attached properly and casing 8" above finished grade	<input checked="" type="checkbox"/>
Water supply line sleeved adequately at house connection	<input checked="" type="checkbox"/>
Adequate grout observed below pitless adapter	<input checked="" type="checkbox"/>



LEGEND



CONCEPTUAL HOUSE BOX

4022
W-05



WELL SURVEY POINT

WELL BOX

WELL LOCATION EXHIBIT - LOT 45

WALNUT GROVE

Lots 1 thru 88, and Preservation Parcels "A" thru "G"
and Non-Buildable Bulk Parcel "H"

GLWGUTSCHICK 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

SCALE: 1"=50'

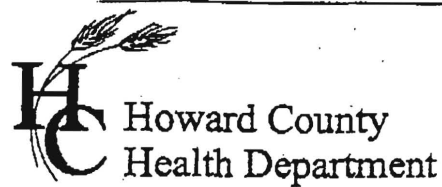
ZONING: RC/RR-DEO

TAX MAP/GRID: 28-18/17

GLW JOB NO: 00153

APR., 2005

1 OF 1



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

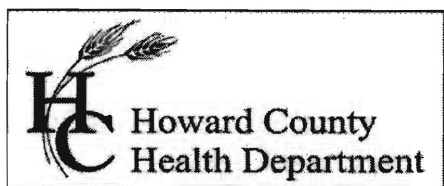
ATTENTION WELL DRILLERS!!!

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

- ☒ The well site has been staked by Gutschick, Little & Weber on 3/16/05 and is ready for site inspection.
- ☐ _____ will call the Health Department for a time to meet in the field to verify a well location.
- ☒ Site plan for new well is attached to well permit application.

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

KN



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

INTERIM CERTIFICATE OF POTABILITY

Expiration Date – May 1, 2012

November 1, 2011

Homeowner
12248 Running Fence Lane
Clarksville, MD 21029

**RE: Walnut Grove, Lot 45
12248 Running Fence lane
Building Permit: B11000147
Well Permit: HO-94-4187**

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 **10/28/2011**. Final approval of the well line connection to the dwelling was granted on **6/8/2011**. The well construction was completed on **7/25/2005**. Water samples were collected on **10/31/2011**.

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 **3/27/2007**. Results showed a Gross Alpha level of **13.9 ± 2.1 pCi/L** and **Gross Beta** level of **11.5 ± 1.5 pCi/L**. The Gross Alpha was within the margin of error for the maximum contaminant level (MCL) of 15 pCi/L and the Gross Beta was below the MCL of 50pCi/L. Subsequently, water samples were collected on **7/11/2007** and tested for Radium 226, Radium 228, and Uranium with results of **1.0 ± 0.3 pCi/L**, **0.8 ± 0.5 pCi/L**, and **1.8 ± 1.0 pCi/L** respectively. Those results are below the MCL of 5 pCi/L. 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-94-4187. 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,



Jeff Williams
Program Supervisor
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:**

Trinity Homes/TBI Homes
3675 Park Avenue Suite 301
Ellicott City, MD 21043

S/O Number: 83178**Report Date:** October 31, 2011

Property Sampled: 12248 Running Fence Lane, 21029
Sample Location: Hose Bib By Garage
Residual Chlorine: <0.1 mg/L

Building Permit #: B11000147
Sampler ID #: 5745KC
Samples Iced: Yes

County: Howard
Map: 28

Subdivision: Walnut Grove
Parcel: 74

Lot #: 45**Date/Time Collected in Field:** October 28, 2011 @ 11:41 am**Date/Time Received in Lab:** October 28, 2011 @ 12:35 pm**Well Tag #:** HO-95-4187**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
<i>E. coli</i>	SM 9223B	Absent	Absent	Pass
Nitrate+	SM 4500D	10 mg/L as N	0.3 mg/L as N	Pass
Turbidity	EPA 180.1	10 NTU	<1.0 NTU	Pass
pH	EPA 150.1	*6.5-8.5 Units	7.5 Units	***
Sand		Absent	Absent	Pass

Katherine C. Higgs

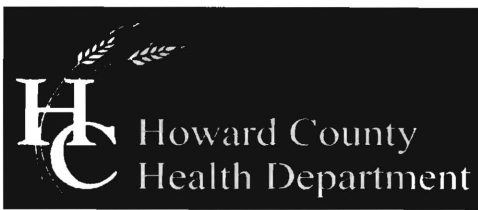
Manager – Drinking Water Testing

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.

+Analyzed by Lab 192



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

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



**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

CERTIFICATE OF ANALYSIS

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

S/O Number: 64290-5
Report Date: July 31, 2007

Property Sampled: Walnut Grove Property

County: Howard
Subdivision: Walnut Grove
Lot #: 45

Tax Map #: N/A
Parcel #: N/A

Date/Time Collected: July 11, 2007 at 1:01 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-94-4187
Well Condition: N/A

Water Conditioning/Treatment: None

PARAMETER	RESULT	METHOD	DETECTION LIMIT
Radium 226	1.0 +/- 0.3 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	1.8 +/- 1.0 pCi/L	EPA 908.0	0.8 pCi/L

Allison Milburn

Allison R. Milburn
Manager-Drinking Water Testing

Samples analyzed by Laboratory #E83033

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@connext.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: 64290-5
Report Date: July 31, 2007

Property Sampled: Walnut Grove Property

County: Howard
Subdivision: Walnut Grove
Lot #: 45
Tax Map #: N/A
Parcel #: N/A

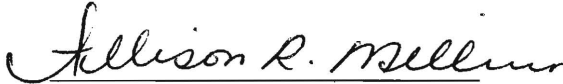
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Well Condition: N/A

Water Conditioning/Treatment: None

PARAMETER	RESULT	METHOD	DETECTION LIMIT
Radium 226	1.0 +/- 0.3 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	1.8 +/- 1.0 pCi/L	EPA 908.0	0.8 pCi/L


Allison R. Milburn
Manager-Drinking Water Testing

Samples analyzed by Laboratory #E83033



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

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

April 9, 2007

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

RE: Walnut Grove Subdivision, Lot 45
Well Tag: HO - 94 - 4187

To Whom It May Concern:

A sample was collected during a yield test on March 27, 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** (GAGB) 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 13.9 ± 2.1 picocuries/liter (pCi/L); while the **Gross Beta** level was 11.5 ± 1.5 pCi/L. With the margin of error, 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 annual dose rate 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, 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: H0-94-4187 No. B: _____ Field Blank Bottle No. A: _____ No. B: _____

Plant/Site Name: Walnut Grove Lot 415 County: Howard

Sample Source: Running Fence LN Location: H0-94-4187
(well no., lab sink, sample tap, etc.)

County: ☒ ☒ Plant No. ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

CHECK (one per box)

Drinking Water ☒
Landfill ☐
Stream ☐
Other ☐

Community ☐
Non-community ☐
Private ☒
Other ☐

Source (raw water) ☒
Distribution (treated) ☐
MCL ☐

Emergency ☐
Routine ☐
Recheck ☐
Special ☐

Collector: K. Wolf Telephone No: 410-313-2645

Date Collected: 3/27/07 Time Collected: 10:30 a.m. _____ p.m.

Nitric Acid Preserved: Yes ☒ No ☐ Iced: Yes ☐ No ☒

Submitters Code: ☐ ☐ Federal Project: ☐ Field Data: _____
pH _____ Chlorine _____

Remarks: Sample taken during Yield test

✓	Test	EPA Code	Laboratory No.	Results (pCi/L)	Date Reported
✓	Gross Alpha	4000	<u>703207-002</u>	<u>13.9 ± 2.1</u>	<u>4/2/07</u>
✓	Gross Beta	4100		<u>11.5 ± 1.5</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: _____