

B 1 26817 <small>1 2 3 6</small>	SEQUENCE NO. (MDE USE ONLY)	STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL please type 546363-T	STATE PERMIT NUMBER HO -14 -0037 <small>70 fill in this form completely 79</small>
Date Received (APA) 05/16/14 <small>8 MM DD YY 13</small> OWNER INFORMATION <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> 15 Last Name Bassler Venture LLC 36 Street or RFD PO Box 482 57 Town Lis Bow MD 21765 </div> <div style="width: 45%;"> Owner First Name 34 55 70 State 72 Zip 76 </div> </div>		B 3 3 LOCATION OF WELL <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> 8 COUNTY Howard 23 SUBDIVISION Walnut Creek Phase III SECTION 44 46 LOT 48 50 104 52 NEAREST TOWN Clarksville </div> <div style="width: 45%;"> 21 42 71 </div> </div>	
DRILLER INFORMATION <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> Driller's Name RALPH MAYNE Firm Name RALPH E MAYNE WELL DRILLING Address 17024 Handy Rd Mt. Airy MD 21771 Signature [Signature] </div> <div style="width: 45%;"> MS D 117 License No. 81 Date 5/15/14 </div> </div>		B 4 4 SOURCES OF DRILLING WATER <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> 11 STREET ADDRESS WILD OLIVE CT ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX) <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> NORTH <input type="checkbox"/> </div> <div style="text-align: center;"> WEST <input checked="" type="checkbox"/> </div> <div style="text-align: center;"> EAST <input type="checkbox"/> </div> <div style="text-align: center;"> SOUTH <input type="checkbox"/> </div> </div> 34 250 37 DISTANCE FROM ROAD ENTER FT OR MI 38 39 TAX MAP: 28 BLK: 11 PARCEL 49 </div> </div>	
B 2 2 WELL INFORMATION <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> APPROX. PUMPING RATE (GAL. PER MIN.) 5 AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 500 </div> <div style="width: 45%;"> 12 20 </div> </div>		NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> COUNTY NAME Howard STATE SIGNATURE [Signature] DATE ISSUED 06/11/2014 </div> <div style="width: 45%;"> COUNTY NO. 13 INSERT S → EXP. DATE 6/11/15 </div> </div>	
USE FOR WATER (CIRCLE APPROPRIATE BOX) <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <input checked="" type="radio"/> DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION <input type="radio"/> FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION) <input type="radio"/> INDUSTRIAL, COMMERCIAL, DEWATERING <input type="radio"/> PUBLIC WATER SUPPLY WELL <input type="radio"/> TEST, OBSERVATION, MONITORING <input type="radio"/> OPEN LOOP GEOTHERMAL <input type="radio"/> CLOSED LOOP GEOTHERMAL </div> <div style="width: 45%;"> 22 </div> </div>		PROPOSED LOCATION OF WELL ON LOT SHOW PERMANENT STRUCTURES SUCH AS BUILDINGS, SEPTIC SYSTEM, ROADS AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCE MEASUREMENTS TO WELL <div style="text-align: center;"> </div>	
APPROXIMATE DEPTH OF WELL 150 FEET <small>24 28</small> APPROXIMATE DIAMETER OF WELL 6" INCH <small>NEAREST</small>		METHOD OF DRILLING (circle one) <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> BORED (or Augered) <input checked="" type="radio"/> AIR-ROTARY <input type="radio"/> CABLE other _____ </div> <div style="width: 45%;"> JETTED AIR-PERCussion REVerse-ROTary Jettied & DRIVEN ROTARY (Hydraulic Rotary) DRive-POINT </div> </div>	
REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX) <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <input checked="" type="radio"/> THIS WELL WILL NOT REPLACE AN EXISTING WELL <input type="radio"/> THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED <input type="radio"/> THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS <input type="radio"/> THIS WELL WILL DEEPEN AN EXISTING WELL </div> <div style="width: 45%;"> 39 </div> </div> 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-2006-G020 PERMIT No. HO-14-0037 <small>70 71 72 73 74 75 76 77 78 79</small>	
SPECIAL CONDITIONS NOTE: APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED. all wells must be at least 100 feet apart			

C1 26555

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 #520 385
NUMBER A520 4481 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
08 01 14

DATE WELL COMPLETED

MM DD YY
06 24 14

Depth of Well

22 185 26
(TO NEAREST FOOT)PERMIT NO.
FROM "PERMIT TO DRILL WELL"110-14-0035
28 29 30 31 32 33 34 35 36 37

OWNER Basslen Venture LLC

WELL SITE ADDRESS last name WILD OLIVE CT first name

TOWN CLARKSVILLE

SUBDIVISION WALNUT CREEK PHASE III

SECTION

LOT 104

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

Top Soil	0	2	
Sandy	2	55	✓
Sand Stone	55	60	
MICKA	60	95	
Sand Stone	95	100	✓
MICKA	100	185	

GROUTING RECORD

WELL HAS BEEN GROUTED
(Circle Appropriate Box)yes no
Y N
44 44

TYPE OF GROUTING MATERIAL (Circle one)

CEMENT CM

BENTONITE CLAY BC

NO. OF BAGS 45 46 24

NO. OF POUNDS 2500

GALLONS OF WATER 144

DEPTH OF GROUT SEAL (to nearest foot)

from 48 0 TOP 52 ft. to 54 60+ 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
TYPE PLNominal diameter
top (main) casing
(nearest inch) 6Total depth
of main casing
(nearest foot) 20

60 61

63 64

66 70

E
A
C
H
C
A
S
I
N
G

OTHER CASING (if used)

diameter depth (feet)

inch from to

screen type
or open hole

SCREEN RECORD

insert
appropriate
code
below

ST

STEEL

BR

BRASS

HO

HOLE

PL

PLASTIC

OT

OTHER

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 8 D 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)

GRAVEL PACK

IF WELL DRILLED

WAS FLOWING WELL

INSERT F IN BOX 68

68

MDE USE ONLY

(NOT TO BE FILLED IN BY DRILLER)

T (E.R.O.S.) W Q

70 72

TELESCOPE

CASING

LOG

INDICATOR

74 75 76

OTHER DATA

C 3

1 2

PUMPING TEST

HOURS PUMPED (nearest hour) 3

8 9

PUMPING RATE (gal. per min.) 10

15

METHOD USED TO

MEASURE PUMPING RATE Bucket

WATER LEVEL (distance from land surface)

BEFORE PUMPING 38

17 20

WHEN PUMPING 65

22 25

TYPE OF PUMP USED (for test)

A air

P piston

T turbine

C centrifugal

R rotary

O other

(describe below)

J jet

S submersible

27 27

PUMP INSTALLED

DRILLER INSTALLED PUMP

YES

NO

(CIRCLE) (YES or 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)

49 50 51

LATITUDE 3 9.23861

LONGITUDE 7 6.95211

(DEFAULT COORD. WGS 84)

NOTES:

Owner BASLER Ventures LLC

Static water level (S.W.L.) below M.P. 38

Total time 15 min to reach pumping water level 65 ft. below M.P.

YD-224

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: Tri County Pump Service, Inc Telephone #: 301-932-0330
Address: 6711 Old National Rd
Boonshower, Md 21713

(Must circle one) Licensed Plumber Licensed Well Driller Licensed Well Pump Installer
License # and name of individual responsible for the field installation:
Name (Print): William Griffith License# 24135

*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: Craftmark Homes Telephone #: 703-932-0573
Subdivision: Walden Creek Lot #: 104 Well Tag #: HO-24-0037 ✓ 09/06/2018
Site Address: 4908 Wild Olive Ct
Ellicott City, Md 21042

<u>Submersible Pump Data</u>	<u>Pitless Adapter</u>	<u>Well Cap and Electric Conduit</u>
Make: <u>Spartan</u>	Make: <u>Johnson Grinder</u>	Two piece watertight cap: <u>✓</u>
Model #: <u>S7PHS0522-01</u>	Model#: <u>PT100</u>	Screened, vented well cap: <u>✓</u>
Pump Capacity: <u>7</u> GPM	Depth: <u>36</u> (36" min)	Cap secured to casing: <u>✓</u>
Well Yield: <u>10</u> GPM	NSP/WSC approved: <u>✓</u>	Conduit min 18" B.G.: <u>✓</u>
Depth of well encountered at time of pump installation: <u>185</u> (feet)		Conduit secured to well cap: <u>✓</u>
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 <u>inside of well casing</u>		

<u>Piping to house</u>	<u>House Connection</u>
Type: <u>PVC</u>	PVC sleeve to undisturbed soil at wall penetration: <u>✓</u>
PSI: <u>200</u> (160 psi min)	Length of sleeve (5' minimum from foundation): <u>200</u>
Depth of supply line: <u>36</u> (36" min)	Sleeve sealed properly: <u>✓</u>

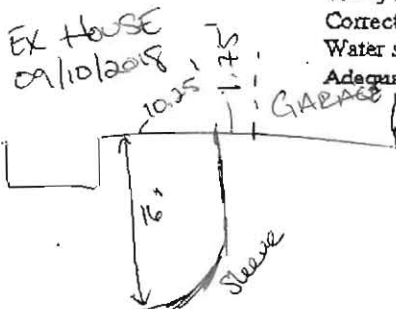
The water supply line is required to be at least ten feet from the septic tank, pump chamber, sewage piping, distribution box, drainfields, and sewage reserve tank. If this cannot be accomplished, contact this office for approval prior to installation.

Signature of company representative responsible for installation William E. Griffith

date 9.5.2018

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

Date Insp. Requested: 09/06/2018 Date Insp. Approved: 09/07/2018 Inspector: 40
Inspection Data: Pitless adapter watertight & water supply line at least 36" below grade ✓ 40" 09/06/2018
Two piece cap installed and attached to casing securely ✓
Elec. conduit extends at least 18" below grade/attached to cap properly ✓ 32" 09/06/2018
Safety rope not outside of well cap/casing ✓
Correct well tag attached properly and casing 8" above finished grade ✓ 29" 09/06/2018
Water supply line sleeved adequately at house connection ✓ 16" 09/06/2018
Adequate grout observed below pitless adapter ✓



09/06/2018 ⊕ Confirm grout is 20"
Below Pitless.
09/07/2018 ⊕ - formation was grout
contractor confirm. Removed grout
to install pitless.

Williams, Jeffrey

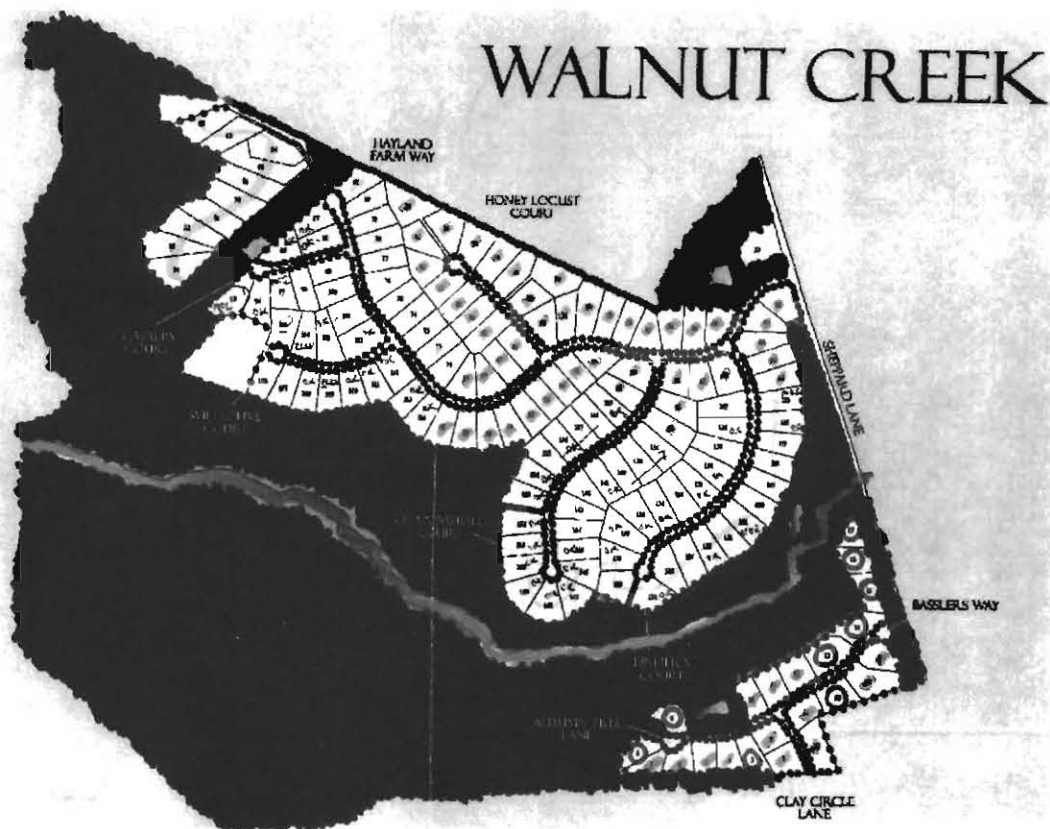
From: Williams, Jeffrey
Sent: Friday, May 16, 2014 12:16 PM
To: Tim Feaga
Subject: Walnut Creek Radium testing
Attachments: Walnut Creek radium.pdf; Walnut Creek radium_2.pdf

Hi Tim. I met with Bert regarding possible easement of radium testing at all lots in Walnut Creek. I've attached a map showing the additional lots that we would like to still be tested to ensure that there is not an area of concern in the remaining lots. The lots in the green cloud have been tested and passed. The lots in the red cloud are lots that we would like to be tested. The lots at the top corner (82-86, 90-94) fall within the radium testing boundary. We want the lots near the river tested to prove whether the stream is in fact acting as a natural buffer from the positive tests on the other side and the passing lots above them. Furthermore, we'd like some representative lots tested in the other section near the upper testing boundary to prove that there are no hot spots. If these are also passing, then we would likely be comfortable waiving the remaining.

We'd be happy to meet with you to discuss if you prefer. Thanks.

Jeff Williams
Program Supervisor, Well & Septic Program
Bureau of Environmental Health
Howard County Health Dept.
410-313-4261
jewilliams@howardcountymd.gov

CONFIDENTIALITY NOTICE





Bureau of Environmental Health
8930 Stanford Blvd | Columbia, MD 21045
410.313.2640 - Voice/Relay
410.313.2648 - Fax
1.866.313.6300 - Toll Free

Maura J. Rossman, M.D., Health Officer

INTERIM CERTIFICATE OF POTABILITY

Expiration Date – JUNE 17, 2019

December 17, 2018

Homeowner
4988 Wild Olive Court
Ellicott City, MD 21042

RE: **Walnut Creek, Lot 104**
4988 Wild Olive Court
Building Permit: B18002053
Well Permit: HO-14-0037

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 **12/17/2017**. Final approval of the well line connection to the dwelling was granted on **9/7/2018**. The well construction was completed on **6/24/2014**. Water samples were collected on **12/10/2018**.

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 **3/3/2015**. Results showed a combined level for radium 226 and 228 to be **1.2 pCi/L**. The radium 226, 228 combined maximum contaminant level (MCL) of **3.01 pCi/L** was below the target level of **5pCi/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-14-0037. 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.**



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Maura J. Rossman, M.D., Health Officer

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>

In closing, please refer to our "Homeowner Fact Sheet" for understanding your onsite sewage disposal system. You will also find a link to Maryland Department of the Environment website which elaborates in further detail operation and maintenance of your Septic System.

Approving Authority,

Kevin M Wolf, L.E.H.S., REHS/R.S., Supervisor
Groundwater Management Section
Well & Septic Program

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



Bureau of Environmental Health

8930 Stanford Boulevard, Columbia, MD 21045

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

Maura Rossman, M.D., Health Officer

August 27, 2014

Bassler Venture LLC
Attn: Tim Feaga
15950 North Avenue, P.O. Box 482
Lisbon, Maryland 21765

RE: Walnut Creek Lot 104
Wild Olive Court
Well Tag: HO - 14 - 0037

Dear Mr. Feaga:

A sample was collected during a yield test on June 26, 2014 and submitted to the Department of Health & Mental Hygiene 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 27.7 ± 3.4 picocuries/liter (pCi/L), while the **Gross Beta** level was 5.9 ± 2.1 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 targeted value of 50 pCi/L (roughly equivalent to the **annual dose rate** of 4 millirems/year).

At the time of testing and with respect to these parameters, the future well water supply **does not** meet EPA regulatory standards. Given elevated reading for **Gross Alpha**, additional testing for **these parameters** will be required to secure the future Use & Occupancy. The installation of a water softener system and / or a reverse osmosis system may be necessary. If treatment is installed, **pre and post short and long term Gross Alpha and Beta, plus a post Radium 226 / 228** will be needed to properly evaluate the effectiveness of the installed treatment(s). Alternatively, you may collect raw water samples for **short and long term Gross Alpha and Beta, plus Radium 226 / 228** to see if all values are below existing standards. Given that it typically takes up to one month to perform and receive back the **Radium** analyses, plan accordingly. **Please note** that other standard testing parameters (bacteria, nitrate, turbidity and sand) will still be required to help secure Use & Occupancy.

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.

Sincerely,

A handwritten signature in cursive script that reads 'Bert Nixon'.

Bert Nixon, Director
Bureau of Environmental Health

Enclosure
cc: Property file



Bureau of Environmental Health

8930 Stanford Boulevard, Columbia, MD 21045

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

Maura Rossman, M.D., Health Officer

April 28, 2015

Land Marketing Consultants, Inc.
Attn. Tim Feaga
15950 North Avenue, P.O. Box 482
Lisbon, Maryland 21765

RE: Walnut Creek Lot 104
Wild Olive Court
Well Tag: HO - 14 - 0037

Dear Mr. Feaga:

Follow-up sampling was collected at the well head on March 3rd and April 7th, 2015 and submitted to NTS Laboratory to verify/confirm the presence of **Gross Alpha, Gross Beta, Radium 226/228 and Uranium** in the future well 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 and in some instances, detected during earlier sampling of this future supply.

Results from this follow-up short-term screening (sample collected April 7, 2015) revealed a **Gross Alpha** of 3.1 ± 1.2 picocuries/liter (pCi/L), while the **Gross Beta** level was 5.7 ± 1.5 pCi/L. The **Gross Alpha** result was below its **maximum contaminant level (MCL)** of 15 pCi/L, while the **Gross Beta** level was below its targeted value of 50 pCi/L (roughly equivalent to the **annual dose rate** of 4 millirems/year).

Long-term testing performed on March 3, 2015 revealed a **Gross Alpha** of 1.7 ± 1.2 pCi/L, while the **Gross Beta** level was 4.1 ± 1.5 pCi/L. Here the **Gross Alpha** result was below its MCL of 15 pCi/L, while the **Gross Beta** level was below its targeted value of 50 pCi/L.

Additionally, testing for **Radium 226/228 and Uranium** was also performed on March 3, 2015. This testing revealed a **Radium 226** level of 0.5 ± 0.2 pCi/L; while the **Radium 228** level was $< 0.7 \pm 0.4$ pCi/L. These naturally occurring isotopes of radium are considered the most important due to their longer half-lives and health significance. Here the **combined Radium 226 / 228** was below the MCL of 5 pCi/L. With respect to **Uranium**, the finding of $< 0.4 \pm 0.4$ pCi/L was well below the MCL of 30 µg/L (approx. 20 pCi/L).

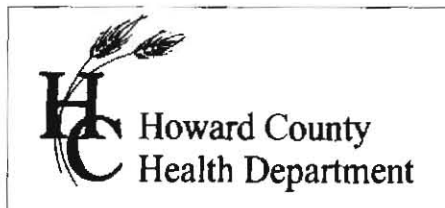
At the time of testing and with respect to these parameters, the future well water supply **currently** meets EPA regulatory standards. Additional testing for **these parameters** will not be required to secure the future Use & Occupancy. Please also note that other standard testing parameters (bacteria, nitrate, turbidity and sand) will still be required to help secure Use & Occupancy.

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

Sincerely,

Bert Nixon, Director
Bureau of Environmental Health

✓ Enclosures
cc: Property file



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

Peter L. Bielensohn, 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:

Walnut Creek Phase 3	104	Wild Olive Ct.
Subdivision/Property Name	Lot #	Road Name

☒ The well site has been staked by Fisher, Collins and Carter, Inc.,
(professional land surveyor or company employing professional land surveyors)
on 05/07/14 (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 3/11/07

WELL LOCATION INFORMATION:
 NORTHING = 572,491.78 EASTING = 1,325,894.66
 LATITUDE = N39°14'19" LONGITUDE = W76°57'08"

LOT 104 WELL MAP

WALNUT CREEK

PHASE THREE

Lots 89 - 114, Non-Buildable Preservation Parcels
 Parcel 'U' and Buildable Bulk Parcel 'U'

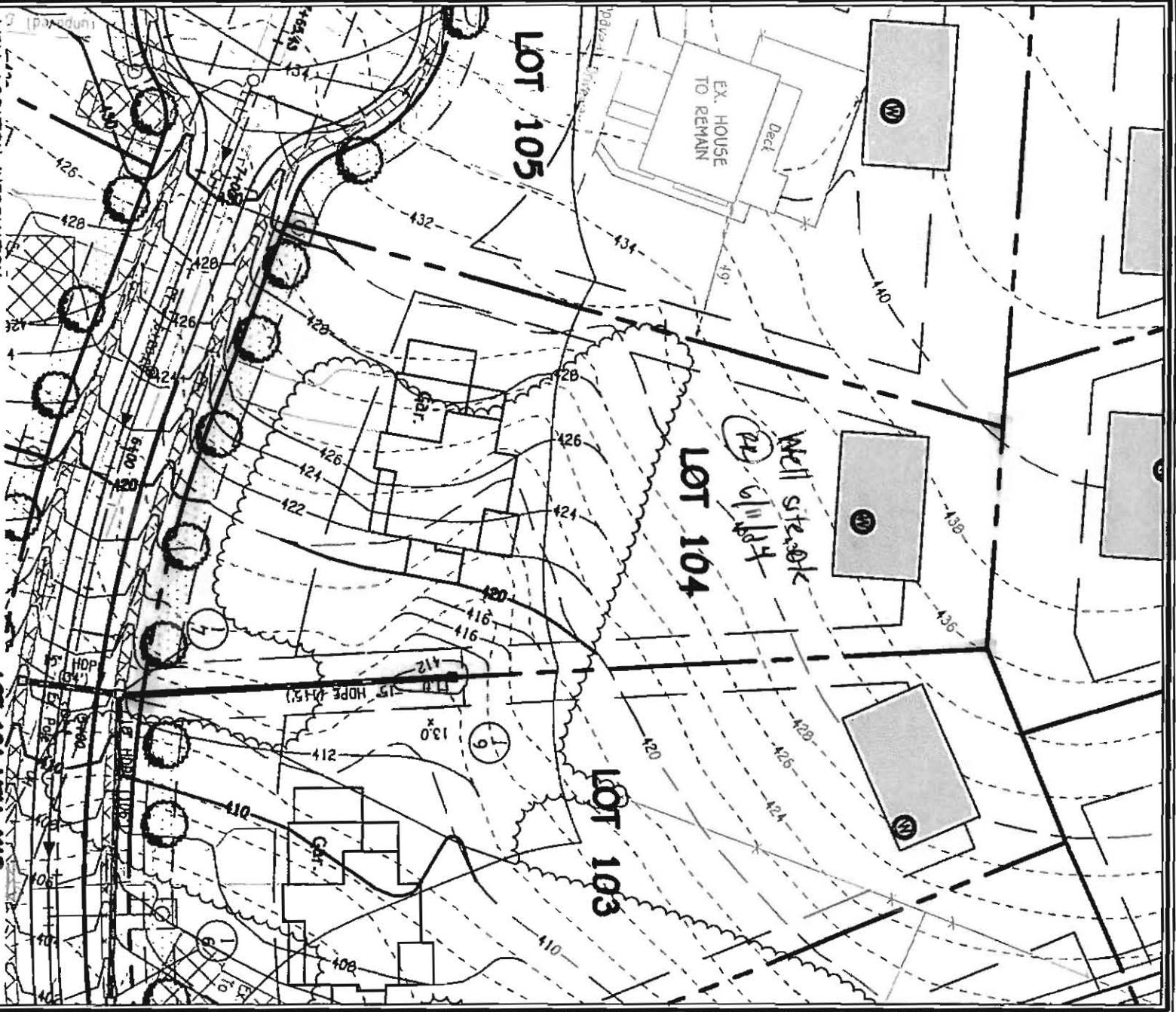
Parcel 'T' and Buildable Bulk Parcel 'U'

ZONE: EC-OED & EC-OED

TAX MAP No. 28 GRD Nos. 4, 5, 10-12, 17, AND 18
 FIFTH ELECTION DISTRICT
 DATE: MAY 1, 2014

SCALE: 1" = 50'

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 1111 CENTRAL SQUARE OFFICE PARK - 10075 BALDWIN ROAD, #100
 CUMMINGTON, MASSACHUSETTS 01022
 (413) 481-2293





Fredericktowne Labs Inc.

ENVIRONMENTAL TESTING

3020 Ventrie Court • P.O. BOX 245 • Myersville, MD 21773 • 800-332-3340 • FAX 301-293-2368
www.fredericktownelabs.com • info@fredericktownelabs.com

Certificate of Analysis

Acct. No. 3948 - 2221-1

Field Record

Site visit performed on: Monday, December 10, 2018 4:08 PM
by: Brian Kepler State ID No. 1063BK
Affiliation: Tri-County Pump Service
Property Owner: Craftmark Homes
Property Address: 4988 Wild Olive Ct
Ellicott City, MD 21042
Sample Source: 1st Floor Powder Room Sink
Treatment Devices Noted: No Treatment Devices
Well No.: HO-14-0035
Field pH: 7.5
Free Res. Cl.: 0.0 mg/l

Laboratory Report

Sample Received at laboratory: 12/11/2018 7:59 AM

Bacteriological results:

Total Colif. (/100ml)	E.coli. (/100ml)	Start		End		Method	Analyst
		Date	Time	Date	Time		
<1	<1	12/11/18	11:23	12/12/18	13:05	9223B	JD

Bacteriological analysis of this sample indicates the water is safe for human consumption and meets federal, state and local requirements. Analysis was performed according to the 20th edition of Standard Methods

Inorganic Chemical results:

Parameter	Result	Units	MCL	Date of Analysis	Method	Analyst
Nitrate-Nitrogen	6.5	mg/l	10	12/11/2018	300.0	PH
Sand	<2	mg/l	5	12/11/2018	0.065mm Filter	JD
Turbidity	1.7	NTU	<10	12/11/2018	180.1	KMW

Reported by:

Cathy Phelps 12/12/18
Name Date

Fredericktowne Labs, Inc. is a State Certified Water Quality Laboratory
Maryland Cert. No. 116 Virginia Cert. No. 00444
MDOT WBE Cert. No.: 91-158

12/12/2018 4:24:23 PM

Page 1 of 1
EM



Maryland State Certified Laboratory #318

NTS - BALTIMORE
Formerly Trace Laboratories, Inc.
5 North Park Drive
Hunt Valley, MD 21030 USA
Telephone: 410/584-9099 / Fax: 410/584-9117
www.nts.com

LETTER OF RESULTS

Requester:

Land Marketing Consultants, Inc.
P.O. Box 482
Lisbon, Maryland 21765

S/O Number: 98951-5A

Report Date: April 13, 2015

Listed below are results of drinking water analyses on a sample collected by client and delivered to National Technical Systems (NTS) for analysis:

Date/Time Collected in Field: April 7, 2015 9:00 am
Date/Time Received in Lab: April 7, 2015 2:15 pm

Information Provided By Client:

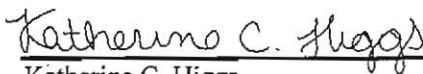
Property Location: Walnut Creek Lot 104
Sample Location: Wellhead
Well Tag #: HO-14-0037
Sampler ID #: Ralph Mayne

PARAMETER	METHOD	MCL	RESULT (pCi/L)	COMMENT
Gross Alpha (Short-Term)	EPA 900.0	15 pCi/L	3.1 ± 1.2	Pass
Gross Beta (Short-Term)	EPA 900.0	50 pCi/L	5.7 ± 1.5	Pass

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

Note: The primary sources of gross alpha activity in water are Radium-224, Radium-226, and/or Uranium. Gross alpha 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. Gross beta activity in water may be due to Radium-228 or any combination of beta-emitting elements.

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 NTS.


Katherine C. Higgs
Manager - Drinking Water Testing

NOTE: NTS is not responsible for the collection or the transportation of the sample
Analyzed by Lab #278

Report 2 of 2 Page 5 of 5

NOTE LAB 278 - FLORIDA RADIOCHEMISTRY



Maryland State Certified Laboratory #318

NTS - BALTIMORE
Formerly Trace Laboratories, Inc.
5 North Park Drive
Hunt Valley, MD 21030 USA
Telephone: 410/584-9099 / Fax: 410/584-9117
www.nts.com

LETTER OF RESULTS

Requester:

Land Marketing Consultants, Inc.
P.O. Box 482
Lisbon, Maryland 21765

S/O Number: 98951-5

Report Date: March 31, 2015

Listed below are results of drinking water analyses on a sample collected by client and delivered to National Technical Systems (NTS) for analysis:

Date/Time Collected in Field: March 3, 2015 10:30 am
Date/Time Received in Lab: March 4, 2015 10:22 am

Information Provided By Client:

Property Location: Walnut Creek Lot 104
Sample Location: Wellhead
Well Tag #: HO-14-0037
Sampler ID #: Ralph Mayne

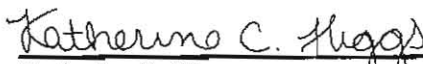
PARAMETER	METHOD	MCL	RESULT (pCi/L)	COMMENT
Gross Alpha (Long-Term)	EPA 900.0	15 pCi/L	1.7 ± 1.2	Pass
Gross Beta (Long-Term)	EPA 900.0	50 pCi/L	4.1 ± 1.5	Pass
Radium 226	EPA 903.1	5 pCi/L Combined	0.5 ± 0.2	Pass
Radium 228	EPA Ra-05		<0.7 ± 0.4	
Uranium	EPA 908.0	30 µg/L [*]	<0.4 ± 0.4	Pass

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

[*] According to EPA's Implementation Guidance for Radionuclides, 1 µg/L uranium is equal to 0.67 pCi/L.

Note: The primary sources of gross alpha activity in water are Radium-224, Radium-226, and/or Uranium. Gross alpha 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. Gross beta activity in water may be due to Radium-228 or any combination of beta-emitting elements.

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 NTS.


Katherine C. Higgs
Manager - Drinking Water Testing

NOTE: NTS is not responsible for the collection or the transportation of the sample
Analyzed by Lab #278

Report 1 of 2 Page 5 of 5

SEND REPORT TO: Bob Nixon DEPARTMENT OF HEALTH AND MENTAL HYGIENE

Howard County Health Department
Bureau of Environmental Health
8930 Stanford Blvd.
Columbia, Maryland 21045

Laboratories Administration
 201 W. Preston St., Baltimore, MD 21201
 Robert A. Myers, Ph.D., Director

Lab No.

E002890 327

RADIATION ANALYSIS REQUEST FORM

Plant/Site Name: Walnut Creek - Lot (104) County: Howard

Sample Source: Wild Olive Court Location: HO-14-0037
 (Well no., lab sink, sample tap, etc.)

Radon-222 Bottle A HO KW0037 Radon-222 Field Blank Bottle A FB KW 62614
 Bottle B _____ Bottle B _____

County 113 Plant No.

--	--	--	--	--	--	--	--	--	--

CHECK (one per Box)

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

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

Point of Collection	
Source (Raw)	<input checked="" type="checkbox"/>
Distribution (treated)	<input type="checkbox"/>
MCL	<input type="checkbox"/>

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

Submitters Code: Federal Project:

Collector: K Wolf Telephone No.: 410 313 2645

Date Collected: 6-26-14 Time Collected: _____ a.m. 11 p.m.

Field pH: Field Chlorine:

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

Remarks: Sample collected @ Yard

<input checked="" type="checkbox"/>	TEST	EPA Code	Lab No.	Method No.	Results (pCi/L)	Date Analyzed	Analyst	Date Reported
<input checked="" type="checkbox"/>	Gross Alpha	4000	2990	EPA 910.0	2.7 ± 3.4	7/1/14	MA	7/2/14
<input checked="" type="checkbox"/>	Gross Beta	4100	2990	"	5.9 ± 2.1	7/1/14	J	7/2/14
<input type="checkbox"/>	Radium-226	4020						
<input type="checkbox"/>	Radium-228	4030						
<input type="checkbox"/>	Total Uranium	4006						
<input type="checkbox"/>	Radon-222 (Bottle A)	4004						
<input type="checkbox"/>	Radon-222 (Bottle B)	4004						
<input type="checkbox"/>	Radon Field Blank A	4004						
<input type="checkbox"/>	Radon Field Blank B	4004						
<input type="checkbox"/>	Tritium							
<input type="checkbox"/>								

Date Received: 06/27/14 Received By: C. W. H. - Boyd

Data Release Signature: Deborah Moller - JMR Date: 7/3/14

Lab Use Only	Yes	No	N/A
Sample Intact upon arrival?	<input checked="" type="checkbox"/>		
Sample pH < 2.0?	<input checked="" type="checkbox"/>		
Received within holding time?	<input checked="" type="checkbox"/>		

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

Howard County Health Department
Bureau of Environmental Health
8930 Stanford Blvd.
Columbia, Maryland 21045

Laboratories Administration
201 W. Preston St., Baltimore, MD 21201
Robert A. Myers, Ph.D., Director

Lab No.

2887 327

RADIATION ANALYSIS REQUEST FORM

Plant/Site Name: HCHD

County: Howard

Sample Source: Distilled H₂O

Location: Lab

(Well no., lab sink, sample tap, etc.)

Radon-222 Bottle A

Radon-222 Field Blank

Bottle A FBKW62614

Bottle B

Bottle B

County 13

Plant No.

CHECK (one per Box)

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

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

Point of Collection	
Source (Raw)	<input checked="" type="checkbox"/>
Distribution (treated)	<input type="checkbox"/>
MCL	<input type="checkbox"/>

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

Submitters Code:

Federal Project: ☐

Collector: K. Wolf

Telephone No.: 410 313 7645

Date Collected: 6-26-14

Time Collected: a.m. 4 p.m.

Field pH:

Field Chlorine:

Nitric Acid Preserved: Yes ☒ No ☐

Iced: Yes ☒ No ☐

Remarks: Field Blank for Cross d, B

<input checked="" type="checkbox"/>	TEST	EPA Code	Lab No.	Method No.	Results (pCi/L)	Date Analyzed	Analyst	Date Reported
<input type="checkbox"/>	Gross Alpha	4000	2887	EPA 910.0	<2.0	7/1/14	MA	7/5/14
<input type="checkbox"/>	Gross Beta	4100	2887	"	<4.0	"	"	"
<input type="checkbox"/>	Radium-226	4020						
<input type="checkbox"/>	Radium-228	4030						
<input type="checkbox"/>	Total Uranium	4006						
<input type="checkbox"/>	Radon-222 (Bottle A)	4004						
<input type="checkbox"/>	Radon-222 (Bottle B)	4004						
<input type="checkbox"/>	Radon Field Blank A	4004						
<input type="checkbox"/>	Radon Field Blank B	4004						
<input type="checkbox"/>	Tritium							
<input checked="" type="checkbox"/>	Radon Field Blank							

Date Received: 06/27/14 Received By: C. W. Kelly Boyd

Data Release Signature: Sebastian Miller-Jurk Date: 7/3/14

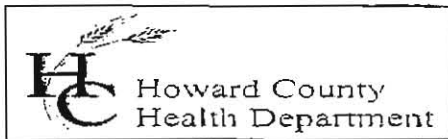
Lab Use Only	Yes	No	N/A
Sample Intact upon arrival?	<input checked="" type="checkbox"/>		
Sample pH <2.0?	<input checked="" type="checkbox"/>		
Received within holding time?	<input checked="" type="checkbox"/>		

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

FORM REVISED 01/13
DHMH 4540 01/13

CUSTOMER COPY 1

ORIG MAILED 7/24/14



Invoice

Bureau of Environmental Health
Attn: Bert Nixon, Director

DATE: JULY 24, 2014
DATES OF SERVICE: JUNE 25, 26, & JULY 1, 3 2014
INVOICE #: 2014-014

8930 Stanford Boulevard, Columbia, MD 21045
Phone 410-313-2640 Fax 410-313-2648
www.hchealth.org

BILL TO Heritage Reality and Land Development
Attn: Tim Feaga
15950 North Ave P.O. Box 482
Lisbon, MD 21765

COMMENTS Payment due upon receipt. Letter and results will be released upon receipt of payment.

DATE	DESCRIPTION	BALANCE	AMOUNT
06/25/14	Gross alpha/beta testing performed for Walnut Creek, Lots # 76 And 97 HO - 95 - 2667 HO - 14 - 0033		\$90.00
06/26/14	Gross alpha/beta testing performed for Walnut Creek Lot # 104 HO - 14 - 0037		\$45.00
07/01/14	Gross alpha/beta testing performed for Walnut Creek Lots # 108 And 109 HO - 14 - 0039 HO - 14 - 0040		\$90.00
07/03/14	Gross alpha/beta testing performed for Walnut Creek Lot # 96 HO - 14 - 0032		\$45.00
			AMOUNT DUE
			\$270.00

Please detach and return with payment.

REMITTANCE	
Invoice #	2014-014
Site Information	Walnut Creek Lots 76, 96, 97, 104, 108, 109
Amount Due	\$270.00

Receipt 54598
8/26/14

Make Checks Payable to: **Director of Finance** Mail Payments to: **Bureau of Env. Health**