C 1 8746 SEQUENCE NO. (MDE USE ONLY)			STATE OF MARYLAND WELL COMPLETION REPORT	THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.
"1 2 3" 6 (THIS NUMBER IS TO BE PU IN COLS. 3-6 ON ALL CARD	JNCHED		FILL IN THIS FORM COMPLETELY PLEASE TYPE	COUNTY (3) A517422
ST/CO USE ONLY DATE Received	DATE WEL	L COMPL	ETED Depth of Well	PERMIT NO.
MM DD YY 8 13	OT 3	22 0	22 26 7 \ TO NEAREST FOOT)	28 29 30 31 32 33 34 35 36 37
	Dr Fm	NCIS	(TO NEARLEST POOT)	2233123333
OWNERSTREET OR RFD	Romning	Fen	ce Lane first name TOWN	larksviller
SUBDIVISION	lalnut	Gr	OVE SECTION	LOT 15
WELL		121		C 3
Not required for STATE THE KIND OF FORMAT		THEIR	(Circle Appropriate Box)	PUMPING TEST
COLOR, DEPTH, THICKNESS	AND IF WATER BE	ARING	TYPE OF GROUTING MATERIAL (Circle one) CEMENT C M BENTONITE CLAY B C	HOURS PUMPED (nearest hour)
DESCRIPTION (Use additional sheets if needed)	FEET TO	if water bearing	NO. OF BAGS 46) 9 NO. OF POUNDS 45 46	PUMPING RATE (gal. per min.)
Top Soil	01		GALLONS OF WATER	METHOD USED TO
Clay	1 10	-	DEPTH OF GROUT SEAL (to nearest foot) from	WATER LEVEL (distance from land surface)
Can Stout	10 40	1	(enter 0 if from surface)	BEFORE PUMPING 10 ft.
MICKA	40 120		types types ISIT CO	WHEN PUMPING ft.
SAM Stoud	120 125	1	appropriate code below PL OT	TYPE OF PUMP USED (for test)
MICKA			MAIN Nominal diameter Total depth	A air P piston T turbine
11111111	125 200		CASING top (main) casing of main casing TYPE (nearest inch)! (nearest foot)	C centrifugal R rotary O other (describe below)
			60 61 63 64 66 70	J jet S submersible
			E OTHER CASING (if used) A diameter depth (feet) inch from to	7
		40	inch from to	DRILLER INSTALLED PUMP YES NO
			S	(CIRCLE) (YES or NO) IF DRILLER INSTALLS PUMP, THIS SECTION
			screen type SCREEN RECORD	MUST BE COMPLETED FOR ALL WELLS. TYPE OF PUMP INSTALLED PLACE (A.C.J.P.R.S.T.O) 29
			or open hole ST BR HO	PLACE (A,C,J,P,R,S,T,O) 29 IN BOX 29. CAPACITY:
			(appropriate code below BRONZE P L O T	GALLONS PER MINUTE (to nearest gallon) 31 35
			PLASTIC OTHER	PUMP HORSE POWER 37 41
NUMBER OF UNSUCCESSE	UL WELLS:	0	DEPTH (nearest ft.)	PUMP COLUMN LENGTH (nearest ft.)
WELL HYDROFRACTURED	yes Y	(N)	E A 8 9 11 15 17 21	CASING HEIGHT (circle appropriate box and enter casing height)
CIRCLE APPROP			C 2 4 26 30 32 36	+ above LAND SURFACE
A WELL WAS ABANDONI	COMPLETED		S C 3	below (nearest)
E ELECTRIC LOG OBTAINE TEST WELL CONVERTED		N	R 38 39 41 45 47 51	49 50 51
I HEREBY CERTIFY THAT THIS WEL	LL HAS BEEN CONST	RUCTED IN	E SLOT SIZE 1 2 3	SHOW PERMANENT STRUCTURE SUCH AS
ACCORDANCE WITH COMAR 26.04.0 IN CONFORMANCE WITH ALL CONI CAPTIONED PERMIT, AND THAT T HEREIN IS ACCURATE AND COM KNOWLEDGE.	04 "WELL CONSTRUC DITIONS STATED IN THE INFORMATION F	TION" AND THE ABOVE PRESENTED	DIAMETER	BUILDING, SEPTIC TANKS, AND /OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)
DRILLERS LIC. NO. 1	150/1	2.	GRAVEL PACK	Par Prop Line
DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)			WAS FLOWING WELL INSERT F IN BOX 68 68	Line / 100
LIC. NO.1 1			MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER) T (E.R.O.S.) W Q	
8 une			70 72	85, 00
SITE SUPERVISOR (sign. of responsible for sitework if diff			TELESCOPE LOG 74 75 76 CASING INDICATOR OTHER DATA	, well
DENV-CR00			COUNTY	The state of the s

B 1 0539 SEQUENCE NO. (MDE USE ONLY)	STATE OF	MARYLAND	STATE FERMIT NOWBER
1 2 3 6	APPLICATION FOR PI	ERMIT TO DRILL WELL	H0-95-0572
	525642 pleas	se type	70 fill in this form completely 79
Data Data di ADA)	323672		LOCATION OF WELL
Date Received (APA)	DIMATION	B 3 Howan	LECATION OF WELL
8 MM DD YY 13	HIMATION	8 COUNTY	21
(And Manlatin Cour	cut tants	1. Istal wut	GNOUK
15 Last Name Owner	First Name 34	23 SUBDIVISION	42
13060 Rt. 82			15
36 Street or RFD	55	SECTION 44 46	LOT 48 50
GLENWOOD MA	21238	Cloules	UILLE
57 Town 70 State	72 Zip 76	52 NEAREST TOWN	71
DRILLER INFORMATION	,		2
RALLE MAYE	4 Sp 112	MILES FROM TOWN (ente	er 0 if in town) M 1 73 76 77 78
Driller's Name	M D // 81	B 4	0
DADI & MAYNE 3	ENP	1 2	Running Fence LA
Firm Name	Salar de la company de la comp	DIRECTION OF WELL FROM TOWN (CIRCLE 80X)	11 NEAR WHAT ROAD 30
12024 Handy Of Mt B	my MD 71221.	(N)	NORTH
Address	9	W 8 NE	ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)
Jet & Merne	11-11-06	8-9	WEST CHAST
Signature	Date	W TOWN E	34 240 37 SOUTH
B 2 WELL INFORMATION	5	W TOWN E 8	DISTANCE FROM ROAD
1 2 APPROX. PUMPING RATE (GAL. PER MIN.)	8 12	18 18	ENTER FT OR MI 38 39
21 - William Control	500 "	S _W S _E 8-9	TAX MAP: 28 BLK: 18 PARCEL
AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 14	20	8	TAX MAP: BER: FARCEL
USE FOR WATER (CIRCLE A	PPROPRIATE BOX)		D BE FILLED IN BY DRILLER
OMESTIC POTABLE SUPPLY & RESIDE	MTIAI	HEALT	H DEPARTMENT APPROVAL
IRRIGATION	MINE	Howard	(3) A5/7422
F FARMING (LIVESTOCK WATERING & AG	RICULTURAL	COUNTY NAME	COUNTY NO.
- IRRIGATION		STATE SIGNATURE	INSERT.S -
22 I INDUSTRIAL, COMMERICIAL, DEWATER	ING	DATE ISSUED /	D D 1 1 141
P PUBLIC WATER SUPPLY WELL	The state of the s	12/4/2006 R	Trian 12aber 12/4/2007
T TEST, OBSERVATION, MONITORING		43 MM DD YY 48	CO SIGNATURE EXP./DATE
	. 5		00 GRID 8 7 000
G GEO-THERMAL		50	55 57 63
	and the second second	SHOW MAJOR FEATURE	
APPROXIMATE DEPTH OF WELL	FEET	BOX & LOCATE WELL '- WITH AN X	
24	28	SOURCES OF DRILLING	WATER
APPROXIMATE DIAMETER OF WELL6	NEAREST INCH	1. well	
		2.	
METHOD OF DRILLING		3.	
BORED (or Augered) JETTED	Jetted & DRIVEN	The Late of the La	7
AIR-ROTary AIR-PERcussion	ROTARY (Hydraulic Retary)	WRITE THE BOX NUMBE	R Kadium
37 CABLE REVerse-ROTary	DRive-POINT	FROM THE MAP HERE	Cala Lakena
other		0,0	Radium Sauple taken on
REPLACEMENT OR DEEP	ENED WELLS	E 017	000 1/22/07 der
(CIRCLE APPROPRIAT		509	000
THIS WELL WILL NOT REPLACE AN EXIST		N	Told not B
THIS WELL WILL REPLACE A WELL THAT ABANDONED AND SEALED	WILL BE		V SHOWING LOCATION OF WELL IN OWNS AND ROADS AND GIVE
THE WELL WILL BEDLACE A WELL THAT	WILL DE HOED.		TO NEAREST ROAD JUNCTION
39 S AS A STANDBY-CONTACT LOCAL APPRO			
FOR POLICY ON STANDBY WELLS			
THIS WELL WILL DEEPEN AN EXISTING V		_/	INEXE
PERMIT NUMBER OF WELL TO BE REPLACED ((IF AVAILABLE) 41	DR DEEPENED 52	N	T. exc. no
			11
Not to be filled in by driller (MDE OR	COUNTY USE ONLY)		
APPROP. PERMIT NUMBER # 020	05G 006	1	
THO THE ELIVER HOWDEN			1 200
PERMIT No. HO	-45-0572		Running Fenge, sega
70 71	72 73 74 75 76 77 78 79		24-1
SPECIAL CONDITIONS NOTE - APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED	Need Radi	um 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: Do: It Plumbing: Heating Lifetephone #: 240-882-0069 Address: 9955 010 mill rd E.C. 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 C. lbe, t 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: TBF Telephone #: 410-480-0023
Subdivision: Well Tag #: HO - 95 - 05 72
Site Address: 12200 Running Fence LN.
- Clarks Mr. md
Submersible Pump Data Pitless Adapter Well Cap and Electric Conduit
Make: Myers Make: American Groundy Two piece watertight cap: 485
Model #: 25772-12 ρ11 = 14-1 Model #: ρΤ800 Screened, vented well cap: 1/e5
Pump Capacity /2 GPM Depth: Yes (36" min) Cap secured to casing: Yes
Well Yield: 15 GPM NSF approved: 48 Conduit min 18" B.G.: 485
Depth of well encountered at time of pump installation: Zeo (feet) Conduit secured to well cap: 465
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
The bound is a second of the s
Piping to house House Connection
Type: Plastic - one ach PVC sleeved to undisturbed soil at wall penetration: Ves
PSI: $\sqrt{e_s}$ (160 psi min) Approximate length of sleeve: $\sqrt{e_s}$ Depth of supply line: $\sqrt{e_s}$ (36" min) Sleeve caulked and sealed properly: $\sqrt{e_s}$
Depth of supply line: 4e3 (36" min) Sleeve caulked and sealed properly: 4es
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:
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

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Two piece watertight cap: Submersible Pump Data Pitless Adapter Make: Make: Screened, vented well cap:

(36" min) Cap secured to casing: Model#: Model #: Depth:____ Pump Capacity ___ 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: Well Yield: 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 House Connection Type: ______(160 psi min) PVC sleeved to undisturbed soil at wall penetration: Approximate length of sleeve: Depth of supply line: (36" min) 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 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 to 7+ Relow Grade. HD-215(Rev. 8/00)



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 – June 13, 2013

December 13, 2012

Homeowner 12200 Running Fence Lane Clarksville, MD 21029

RE: Walnut Grove Lot 15

12200 Running Fence Lane Building Permit: B11000137 Well Permit: HO-95-0572

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 12/12/12. Final approval of the well line connection to the dwelling was granted on 04/19/12. The well construction was completed on 01/22/07. Water samples were collected on 11/29/12.

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 11/29/12. Results showed a Gross Alpha level of 60.5 ± 4.1 pCi/L and Gross Beta level of 18.6 ± 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(kitchen tap reverse osmosis system), post-treatment water samples were collected on 11/29/12 and indicated a Gross Alpha level of 1.0 ± 0.6 pCi/L, a Gross Beta level of 0.9 ± 0.7 pCi/L, and a Radium 226/228 level of 0.2 ± 0.1 , 0.9 ± 0.7 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 <u>yearly</u> 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-95-0572. 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,

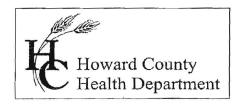
Kevin Wolf

Environmental Sanitarian Well & Septic Program

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

Community Hygiene Program

File



Bureau of Environmental Health

7178 Columbia Gateway Drive (410) 313-2640 F. TDD (410) 313-2323 To

e Columbia, MD 21046 Fax (410) 313-2648 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 Netsere Tesfayohannes and Eden Kahsay ("the Owner").

WHEREAS, the Owner owns a tract of land at street address 12200 Running Fence Ln.. 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, Block # 18, Parcel # 74, Deed Reference # 13662/043 and Tax Account # 05-448743 ("the Property").

WHEREAS, the Property lacks an available public drinking water source and is required to have and 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-95-0572 that has been tested by the Health Department (or a private laboratory certified to perform testing) for radionuclide particles. The results of the tests have shown that the gross alpha particle content and/or the gross beta particle content and/or the combined radium 226/228 levels exceeds the standards of 15 picocuries per liter (pCi /L), 4 millirems per year (mrem/yr) and/or 5pCi/L respectively.

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

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

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

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

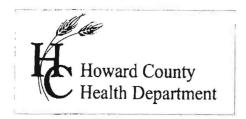
WHEREAS, neither the Owner nor the Health Department has knowledge of an alternative safe source of water for the Property.

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

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

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

Date	Netsere Tesfayohannes	Owner
Date	Eden Kahsay	Owner
Date	Howard County Health D	epartment
Witness		
Witness		



7178 Columbia Gateway Dr., Columbia, MD 21046

(410) 313-2640 TDD (410) 313-2323 Fax (410) 313-2648 Toll Free 1-866-313-6300

website: www.hchealth.org

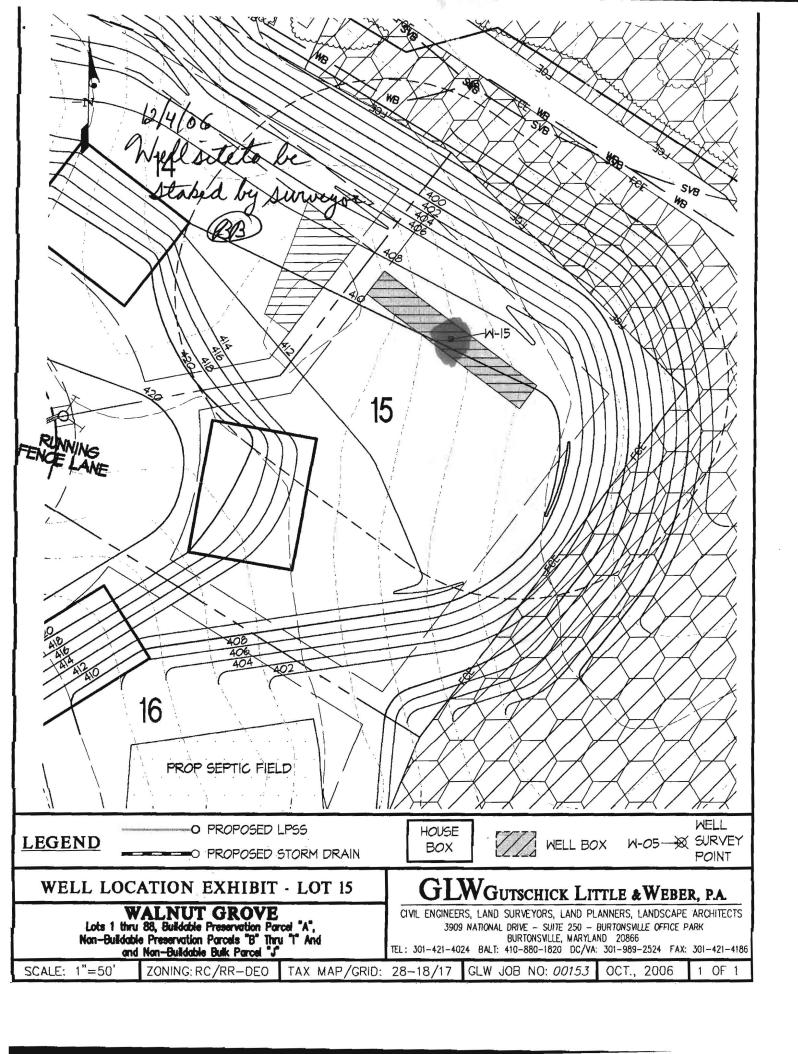
Penny E. Borenstein, M.D., M.P.H., Health Officer

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:		
	Walnut Grove	15	Running Fence Lane
Subdivision	n/Property Name	Lot #	Road Name
	Staking to take place after i	nitial reviev	w (as discussed with Bob Weber).
	The well site has been stake	ed by	
	(professional land surveyor or co	ompany empl	oying professional land surveyors)
	on	(date) and	d does not require a site inspection.
			oner will call the Health Deparatment to verify the proposed well site
	, along with two copies of an en well permit application.	n acceptable	e well site plan, must be attached

Revised 3/11/05



Clerkob The Court

WG 15
Reund Rapionuchile Cetter

lational Document Solutions, LLC (800) 325-3120 T-70209

Circuit Court for HOWARD COUNTY Clark of the Court. MARCARET D. CAPPAPORT 8360 COURT AVENUE ELLICOTT CITY, ND 21043-(410) 313-2111

ransaction Block:	3005
1964: 245 1ISC IMP FO SURE \$5 RECORDING FEE \$20.60	AMOUNT 40.00 20.00
:UBTOTAL:	60.00
TOTAL CHARGES.	69.96
'AYMENTS CHECK	60.00
'OYAL TENDERED:	69.95

Cashier: VLB Reg # H098 Rcpt # 74252 Date: Nov 29, 2012 Times 11:14 am



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, Maryland 21043

Residual Chlorine:

S/O Number: 87410-2

Report Date: December 11, 2012

Treated Sample

Property Sampled: Sample Location:

12200 Running Fence Lane, 21029

Reverse Osmosis (R/O) Tap

<0.1 mg/L

Building Permit #:

Sampler ID #: Samples Iced:

B11000137 7483AM

Yes

County: Map:

Howard

28

Subdivision:

Parcel:

Walnut Grove 74

Lot #:

15

Date/Time Collected in Field:

Date/Time Received in Lab:

November 29, 2012 @ 3:11 - 3:20 pm

November 29, 2012 @ 4:20 pm

Well Tag #:

HO-95-0572

Well Condition:

2-Piece Cap, Satisfactory

Water Treatment/Conditioning:

Sediment Filter, Softener, Reverse Osmosis (R/O)

PARAMETER	METHOD	MCL* (pCi/L)	MDL (pCi/L)	RESULT (pCi/L)	ACCEPTABILITY
Radium 226	EPA 903.1	5 pCi/L	0.2	0.2 ± 0.1	Aggentable
Radium 228	EPA Ra-05	Combined	0.8	$<0.8 \pm 0.5$	Acceptable

*Note: There are no established limits set forth by the EPA for radionuclide particles in private well water. The limits for public water are instead provided as MCLs in this report and the acceptability of this sample is based on these requirements. Gross Alpha levels under 5 pCi/L are acceptable. Levels between 5 and 15 pCi/L are considered moderate, and levels greater than 15 pCi/L are considered high. When levels are moderate or high, treatment or further testing is recommended and in certain cases may be required by the health department.

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.

Manager - Drinking Water Testing

Katherino C. Hie

MDL: Method Detection Limit

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

Analyzed by Lab # 278

Report 2 of 2 Page 2 of 2



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

Report Date: December 11, 2012

CERTIFICATE OF ANALYSIS

Requester:

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

Property Sampled:

Residual Chlorine:

Sample Location:

12200 Running Fence Lane, 21029

Pressure Tank Tap

<0.1 mg/L

Howard

28

Subdivision: Parcel:

Walnut Grove

74

Lot #:

Building Permit #:

Sampler ID #:

Samples Iced:

S/O Number: 87410-1

15

Raw Sample

B11000137

7483AM

Yes

Date/Time Collected in Field: Date/Time Received in Lab:

November 29, 2012 @ 2:18 pm November 29, 2012 @ 4:20 pm

Well Tag #:

County: Map:

HO-95-0572

Well Condition:

2-Piece Cap, Satisfactory

Water Treatment/Conditioning:

Sediment Filter, Softener, Reverse Osmosis (R/O)

PARAMETER	METHOD	MCL* (pCi/L)	MDL (pCi/L)	RESULT (pCi/L)	ACCEPTABILITY
Gross Alpha (Long-Term)	EPA 900.0	15	1.0	60.5 ± 4.1	HIGH
Gross Beta (Long-Term)	EPA 900.0	50	1.6	18.6 ± 1.7	Acceptable
Radium 226	EPA 903.1	5 pCi/L	0.2	1.0 ± 0.2	A
Radium 228	EPA Ra-05	Combined	0.9	1.8 ± 0.7	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

Manager - Drinking Water Testing

MDL: Method Detection Limit

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

Analyzed by Lab # 278

Report 1 of 2 Page 2 of 2



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: 87410-2

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

Report Date: December 11, 2012

Building Permit #:

Treated Sample

Property Sampled: Sample Location:

12200 Running Fence Lane, 21029

Sampler ID #:

B11000137

Reverse Osmosis (R/O) Tap

Samples Iced:

7483AM

Residual Chlorine:

<0.1 mg/L

Walnut Grove

Yes

County: Map:

Howard

28

Subdivision:

Parcel:

Lot #:

15

Date/Time Collected in Field:

November 29, 2012 @ 2:25 – 2:50 pm

Date/Time Received in Lab:

November 29, 2012 @ 4:20 pm

Well Tag #:

HO-95-0572

Well Condition:

2-Piece Cap, Satisfactory

Water Treatment/Conditioning:

Sediment Filter, Softener, Reverse Osmosis (R/O)

PARAMETER	METHOD	MCL* (pCi/L)	MDL (pCi/L)	RESULT (pCi/L)	ACCEPTABILITY
Gross Alpha (Short-Term)	EPA 900.0	15	0.7	1.0 ± 0.6	Acceptable Ro
Gross Beta (Short-Term)	EPA 900.0	50	1.3	65.6 ± 2.1	HIGH Re
Gross Alpha (Long-Term)	EPA 900.0	15	0.9	0.9 ± 0.7	Acceptable
Gross Beta (Long-Term)	EPA 900.0	50	1.7	58.3 ± 2.7	HIGH R

*Note: There are no established limits set forth by the EPA for radionuclide particles in private well water. The limits for public water are instead provided as MCLs in this report and the acceptability of this sample is based on these requirements. Gross Alpha levels under 5 pCi/L are acceptable. Levels between 5 and 15 pCi/L are considered moderate, and levels greater than 15 pCi/L are considered high. When levels are moderate or high, treatment or further testing is recommended and in certain cases may be required by the health department.

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

Katherine C. Higgs

Manager - Drinking Water Testing

MDL: Method Detection Limit

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

Analyzed by Lab # 278

Report 2 of 2 Page 1 of 2



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: 87410-1

Trinity Homes/TBI Homes 3675 Park Avenue, Suite 301

Report Date: December 11, 2012

Ellicott City, Maryland 21043

Raw Sample

Property Sampled:

12200 Running Fence Lane, 21029

Building Permit #:

B11000137

Sample Location:

Pressure Tank Tap

Sampler ID #:

7483AM

Residual Chlorine:

<0.1 mg/L

Samples Iced:

Yes

County: Map:

Howard

28

Subdivision: Parcel:

Walnut Grove

Lot #:

1 12/12/12

Date/Time Collected in Field:

November 29, 2012 @ 2:18 pm

Date/Time Received in Lab:

November 29, 2012 @ 4:20 pm

Well Tag #:

HO-95-0572

Well Condition:

2-Piece Cap, Satisfactory

Water Treatment/Conditioning:

Sediment Filter, Softener, Reverse Osmosis (R/O)

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	1.3 mg/L as N	Pass /
Turbidity	EPA 180.1	10 NTU	<1.0 NTU	Pass
pН	EPA 150.1	*6.5-8.5 Units	8.0 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.

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.

Report 1 of 2 Page 1 of 2



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

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.tracelabsco m

Maryland State Certified Water Quality Laboratory No. 318





CERTIFICATE OF ANALYSIS

Requester: Heritage Realty & Land Development **S/O Number:** 64290-1 **Report Date:** July 31, 2007

Attn: Jeremy Rutter P.O. Box 482 Lisbon, MD 21765

Property Sampled: Walnut Grove Property

County: Howard

Subdivision: Walnut Grove Tax Map #: N/A Lot #: 15 Parcel #: N/A

Date/Time Collected: July 11, 2007 at 11:50 am July 11, 2007 at 3:40 pm

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

Well Tag Number: HO-95-0572
Well Condition: N/A

Water Conditioning/Tre atment: None

PARAMETER	RESULT	METHOD	DETECTION LIMIT
Radium 226	0.6 +/- 0.2 pCi/L	EPA 903.1	0.1 pCi/L
Radium 228	<0.9 +/- 0.6 pCi/L	EPA Ra-05	0.9 pCi/L
Uranium	107 +/- 6.4 pCi/L	EPA 908.0	1.0 pCi/L

Allison necemin

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





Requester:

Heritage Realty & Land Development

Attn: Jeremy Rutter P.O. Box 482 Lisbon, MD 21765

S/O Number: 64290-1

Report Date:

July 31, 2007

Property Sampled:

Walnut Grove Property

County:

Howard

Subdivision:

Walnut Grove

Tax Map #:

N/A

Lot #:

15

Parcel #:

N/A

Date/Time Collected: Date/Time Received: July 11, 2007 at 11:50 am 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-95-0572

Well Condition:

N/A

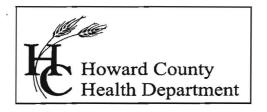
Water Conditioning/Treatment:

None

PARAMETER	RESULT	METHOD	DETECTION LIMIT
Radium 226	0.6 +/- 0.2 pCi/L	EPA 903.1	0.1 pCi/L
Radium 228	<0.9 +/- 0.6 pCi/L	EPA Ra-05	0.9 pCi/L
Uranium	107 +/- 6.4 pCi/L	EPA 908.0	1.0 pCi/L

Allison R. Milburn

Manager-Drinking Water Testing



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

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

February 21 2007

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

> RE: Walnut Grove Subdivision, Lot 15 Well Tag: HO – 95 – 0572

To Whom It May Concern:

A sample was collected during a yield test on January 22, 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 14.8 ± 2.0 picocuries/liter (pCi/L); while the Gross Beta level was 10.6 ± 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 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.

Bureau of Environmental Health

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

1		RADIATI	Environmental Chemistry ION LABORATORY		
	*		reet, Baltimore, Maryland 2 Boy, Dr. P.H., Directo		
			Y ANALYSIS RE		
			II ANALISIS NE	30L31	
Samp	le Bottle No. A: KWI5	No. B:	Field Blank Bo	ottle No. A:	_ No. B:_
Plant	Site Name: Walnus	- Gove	6+15	County:	verd
•	le Source: Runnho		Location:	0 - 95 - 05 7 (well no., lab sink, sar	
•				(well no., lab sink, sar	nple tap, etc.) ■
Coun	ty: 🖽 🖾	Plant No.			1
_	CK (one per box)	Community		Emergen	
Land Stream Other	fill	Non-community Private Other	Source (raw water) Distribution (treated) MCL	Emergen Routine Recheck Special	
	100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Other			311
Colle		-	Telephone No:	4.5	
Date	Collected:/_/_23	107	Time Collected	i:/ a.m	
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	Acid Preserved: Yes	No □	Iced: Yes	I No □	
Nitrio	Acid Preserved: Yes	No D Federal Project			
Nitrio Subm	nitters Code:	Federal Project	et: Field Data: _	-	nlorine
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Nitric Subm Rema	Test Gross Alpha Gross Beta Radon-222	EPA Code 4000 4100	et: Field Data:	pH Ch	
Nitric Subm Rema	Test Gross Alpha Gross Beta Radon-222 Bottle A Radon-222	EPA Code 4000 4100 4004	et: Field Data:	pH Ch	
Nitric Subm Rema	Test Gross Alpha Gross Beta Radon-222 Bottle A Radon-222 Bottle B	EPA Code 4000 4100 4004	et: Field Data:	pH Ch	
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Nitric Subm Rema	Test Gross Alpha Gross Beta Radon-222 Bottle A Radon-222 Bottle B Field Blank A Field Blank B	EPA Code 4000 4100 4004 4004	et: Field Data:	pH Ch	
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Nitric Subm Rema	Test Gross Alpha Gross Beta Radon-222 Bottle A Radon-222 Bottle B Field Blank A Field Blank B Tritium Ra - 226 Ra - 228	EPA Code 4000 4100 4004 4004 4004 4004 4004 4004 4000 4000 4000	et: Field Data:	pH Ch	