C 1 8766 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 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)	FILL IN THIS FORM COMPLETELY PLEASE TYPE	COUNTY (13) A517422
ST/CO USE ONLY DATE Received MM DD YY DATE WELL COMPL	7 - 1	FROM "PERMIT TO DRILL WELL"
8 13 15	(TO NEAREST FOOT)	28 29 30 31 32 33 34 35 36 37
OWNER JE FRANCIS	ridae Lane first name TOMAL	tarksville
STREET OR RFD WAINUT Grov	SECTIONTOWN	LOT 41
WELL LOG	GROUTING RECORD NO	C 3
Not required for driven wells STATE THE KIND OF FORMATIONS PENETRATED, THEIR	(Circle Appropriate Box)	PUMPING TEST
COLOR, DEPTH, THICKNESS AND IF WATER BEARING	TYPE OF GROUTING MATERIAL (Circle one) CEMENT C BENTONITE CLAY B C	HOURS PUMPED (nearest hour)
DESCRIPTION (Use additional sheets if needed) FROM TO bearing	NO. OF BAGS NO. OF POUNDS	PUMPING RATE (gal. per min.)
Top 501 01	GALLONS OF WATER DEPTH OF GROUT SEAL (to nearest foot)	METHOD USED TO BLOCK 15 MEASURE PUMPING RATE
Clay 1 11	from 48 TOP 52 ft. to 54 BOTTOM 58 ft. (enter 0 if from surface)	WATER LEVEL (distance from land surface)
SALJU 11 50 V	casing CASING RECORD	BEFORE PUMPING 17 20 ft.
Shul Houx 50 55	types insert appropriate code	WHEN PUMPING 44 ft.
34-4 100	below PLASTIC OTHER	TYPE OF PUMP USED (for test)
MICKA 55 95	MAIN Nominal diameter Total depth CASING top (main) casing of main casing	A air P piston T turbine
Shud have 95	CASING top (main) casing of main casing TYPE (nearest inch)! (nearest foot)	C centrifugal R rotary O other (describe below)
MICICA 100 240	60 61 63 64 66 70	J jet S submersible
Sand Stank 240 245	E OTHER CASING (if used) A diameter depth (feet)	27 27
MICKA 345 300	c St jach, from 613	PUMP INSTALLED
	A S -	DRILLER INSTALLED PUMP YES NO (CIRCLE) (YES or NO)
	g	IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.
	screen type or open hole ST BR HO	TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29.
	insert STEEL BRASS OPEN BRONZE HOLE	CAPACITY: GALLONS PER MINUTE
	code below PL OT OTHER	(to nearest gallon) 31 35
		PUMP HORSE POWER 37 41
NUMBER OF UNSUCCESSFUL WELLS:	DEPTH (nearest-ft.)	PUMP COLUMN LENGTH (nearest ft.)
WELL HYDROFRACTURED Yes Y	E A 9 11 15 17 21	CASING HEIGHT (circle appropriate box and enter casing height)
CIRCLE APPROPRIATE LETTER	C 2 H 23 24 26 30 32 36	+ above LAND SURFACE
A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED	s C 3	below (nearest) foot)
P TEST WELL CONVERTED TO PRODUCTION	R 38 39 41 45 47 51 E	49 50 51 LOCATION OF WELL ON LOT
I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN	E SLOT SIZE 1 2 3	SHOW PERMANENT STRUCTURE SUCH AS
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.	DIAMETER (NEAREST INCH) 56 60	BUILDING, SEPTIC TANKS, AND /OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES
DRILLERS LIC NO. MS D	from to	(MEASUREMENTS TO WELL)
DRILLERS SIGNATURE	IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 88 68	Phop 50 1
(MUST MATCH SIGNATURE ON APPLICATION)	MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)	LIVE 50
LIC. NO.1	T (E.R.O.S.) W Q	
	7072	Phop Line &
SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)	TELESCOPE LOG 74 75 76 CASING INDICATOR OTHER DATA	
DENV-CR00	COUNTY	A COLUMN TO A SECOND SECOND

B 1 0555 SEQUENCE NO.	STATE OF	MARYLAND	STATE PERMIT NUMBER
(MIDE USE CINLY)		ERMIT TO DRILL WELL	Hn-95-1594
		se type	70 70 70
Date Received (APA)	02012	B 3 //	fill in this form completely
OWNER INFOR	MATION	B 3 Howand	LOCATION OF WELL
8 MM DD YY 13		8 COUNTY	21
LANd MANKeting (O)	usultants	WALnut	Growt
15 Last Name Owner	First Name 34	23 SUBDIVISION	42
36 Street or BFD		SECTION	LOT 4/
36 Street or RFD	0, 1, 25	744 46	48 50
57 Town 70 State 7	72 Zip 76	52 NEAREST TOWN	71
DRILLER INFORMATION			
VEALAL E. MAUNE M	Sn //2 .	MILES FROM TOWN (ente	r 0 if in town)
Driller's Name 76	License No. 81	B 4	
KAULE MAYNE IN	C	1 2 DIRECTION OF WELL FROM	WATKING BRIDGE CA,
Firm Name	1 . 111	TOWN (CIRCLE BOX)	11 NEAR WHAT ROAD 30
17024 HANDY Rd. MIT.	1714 MA 21721		ON WHICH SIDE OF ROAD NORTH
Address	> 11-11-01	8-9 B-9	(CIRCLE APPROPRIATE BOX)
Signature	Date	W TOWN E	34 260 37 WEST STAST
B 2 WELL INFORMATION	5	W TOWN E	DISTANCE FROM ROAD
1 2 APPROX. PUMPING RATE (GAL. PER MIN.) 8	7 12	5	ENTER FT OR MI 38 39
AVERAGE DAILY QUANTITY NEEDED	500"	S 8-9	TAX MAP: 28 BLK: 18 PARCEL 74
(GAL PER DAY) 14	20	8	TAX WAF BEN FANCEL
USE FOR WATER (CIRCLE APP	PROPRIATE BOX)		BE FILLED IN BY DRILLER DEPARTMENT APPROVAL
DOMESTIC POTABLE SUPPLY & RESIDEN	TIAL	// HEALIF	A = 17/100
IRRIGATION A ACRIMATERING & ACRIMATERING	OLU TUDAL	COUNTY NAME	COUNTY NO.
F FARMING (LIVESTOCK WATERING & AGRIC	JULTURAL	STATE	COUNTY NO.
22 INDUSTRIAL, COMMERICIAL, DEWATERING	G	SIGNATURE	INSERT S ———————————————————————————————————
P PUBLIC WATER SUPPLY WELL		DATE ISSUED	ruant Saper 12/19/2007
T TEST, OBSERVATION, MONITORING		43 MM DD YY 48	CO SIGNATURE EXP DATE
G GEO-THERMAL			0 0 GRID 8/5 0 0 0
GEO-THENMAL		50	55 57 63
15-1	,	SHOW MAJOR FEATURES BOX & LOCATE WELL	OF
APPROXIMATE DEPTH OF WELL	FEET	WITH AN X	00
6'	NEAREST	SOURCES OF DRILLING V	VATER
APPROXIMATE DIAMETER OF WELL	——— INCH	1. well	
METHOD OF DRILLING	(circle one)	3.	2/22/07 Radium Sample Taken Dura Yield Test
BORED (or Augered) JETTED	Jetted & DRIVEN		- Valorum
	ROTARY (Hydraulic Rotary)	WRITE THE BOX NUMBER	Sample Taken Dur
37 CABLE REVerse-ROTary	DRive-POINT	FROM THE MAP HERE	Ville
other	* * * * * * * * * * * * * * * * * * * *	815	field lest
REPLACEMENT OR DEEPE		E -	
(CIRCLE APPROPRIATE N THIS WELL WILL NOT REPLACE AN EXISTIN		N 508	- 000
THIS WELL WILL REPLACE A WELL THAT W		DRAW A SKETCH BELOW	SHOWING LOCATION OF WELL IN
ABANDONED AND SEALED			DWNS AND ROADS AND GIVE
39 THIS WELL WILL REPLACE A WELL THAT W AS A STANDBY-CONTACT LOCAL APPROVI			O NEAREST ROAD JUNCTION
FOR POLICY ON STANDBY WELLS		WA	rein /
D THIS WELL WILL DEEPEN AN EXISTING WE		N. C.	155
PERMIT NUMBER OF WELL TO BE REPLACED OF (IF AVAILABLE) 41	DEEPENED 52	N	1260' / NULL
		and individual to	and of an
Not to be filled in by driller (MDE OR CO	1		ar for c
APPROP. PERMIT NUMBER # 020	05 G 006		/\
HO	95 0594		
PERMIT No. 70 71 72	73 74 75 76 77 78 79		
SPECIAL CONDITIONS 4 /// 7	1 M - 1 CH	ID 1: 0	17 VIITA
NOTE . APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET F REEDED	ot. Must Collec	+ Radium Samo	ole During Yield leste
DENV-Permit 97	@ cou	INTY	

ď	e	v	1	e	W		

FIELD DATA SHEET HOWARD COUNTY WELL YIELD TEST

Well Permit No. HO - 95-0594 Location of property (road) Watkins B	oridae Lane
Subdivision Walnut Grove	Lot 44 Block Plat Sec.
	owner De Francis
Depth of well Distance of measuring point (M.P.) above Static water level (S.W.L.) below M.P.	
I. High rate pumping reservoir drawdown Time pump started ///30 Total time 15 min to reach pumping w	Pumping rate 5 6 Pm water level 44 ft. below M.P.

II. Recovery pump test data - observations to be recorded every 15 minutes

TIME (in 15 minute in- tervals	WATER LEVEL below M.P.	PUMPING I time to s gallon by	fill F	FLOW METER READING (if used)	(gallons per minute)
£ 11:45	BAY A	54	50		15 Blm
				Test Strated	
8 12:00	44 /	4	Sec		15 GPM
9 12:15	44 K	4	Sec		15 Om
8 17:30	44 #	4	Sec		15 G/M
9 12:45	44 "	4	17		15 11
\$ 1:00	44 1	4	4		15 11
1:15	44 11	4	11		15 11
9 1130	44 6	4	Sec		15 GPM
1:45	44 1	4	See		15 6Pm
H 2100	44 /	4	Sec		15 GPm
1 215	.44 "	4.	/,		18 11
1 2:30	44 "	4	10		15 11
F 2.45	44 8	4	Sec		15 6/m
73;a	44 M	4	Sec		15 61m

HOWARD COUNTY HEALTH DEPARTMENT

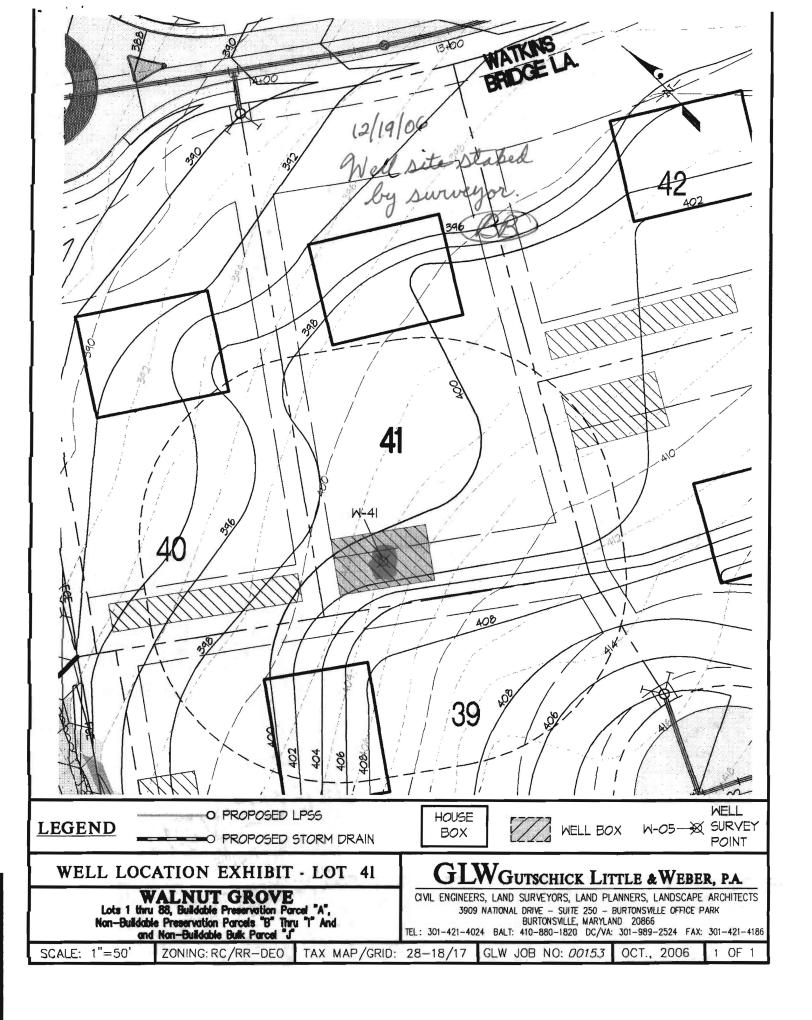
BUREAU OF ENVIRONMENTAL HEALTH WATER AND SEWERAGE PROGRAM

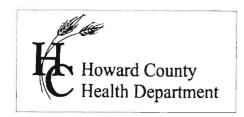
TEL: (410)313-2640 FAX: (410)313-2648

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: Address:	Telephone	#:
(Must circle one) Licensed Plumber License # and name of individual respons Name (Print): *A licensed individual must perform the supervision of a licensed journeyman of subjected to field verification.	sible for the field installation: ne actual installation. Appr	· · · · · · · · · · · · · · · · · · ·
Name of Property Owner:	Telepho	one #:
Subdivision: Walnut Goore	Lot #:	one #: <u> </u>
Site Address: 12411 Watkins	Bridge Ln	
	Make: Model#: (36" min) NSF approved: (feet) In pinstallation: (feet) In water cut off switch is requarred – Must circle one of well casing with eye bolt House Connection PVC sleeved to undisturb Approximate length of sleeve caulked and seale et at least ten feet from the seale	ped soil at wall penetration:
	,	
Signature of company representative resp	ponsible for installation	date
For Health Depar	rtment Use Only - Not to be	completed by Installer
Inspection Data: Pitless adapter and wa Two piece cap installe Elec. conduit extends a Safety rope installed in Correct well tag attach Water supply line slee	ter supply line at least 36" bel d and attached to casing secu at least 18" below grade/attac	rely hed to cap properly ove finished grade





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

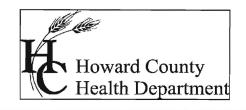
Penny E. Borenstein, M.D., M.P.H., Health Officer

TO ALL INTERESTED PARTIES

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

Well Site	e Location:			
	Walnut Grove		W	atkins Bridge Lane
Subdivisio	n/Property Name	Lot #	Road Na	me
	Staking to take place after i		iew (as discu	ssed with Bob Weber).
	(professional land surveyor or co			sional land surveyors) require a site inspection.
	The well driller, builder or to schedule a time to meet i location.			
	t, along with two copies of an en well permit application.	n accepta	ble well site p	olan, must be attached

Revised 3/11/05



Bureau of Environmental Health 7178 Columbia Gateway Drive Columbia, Maryland 21046-2132

(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

May 19, 2011

Homeowner 12411 Watkins Bridge Lane Clarksville, MD 21029

RE:

Walnut Grove, Lot 41 12411 Watkins Bridge Lane BP# B10003969 Well Tag: HO-95-0594

Dear Homeowner:

This is to advise you that the septic system for the above referenced property has been installed and inspected. Final approval of the septic system was granted on 05/09/2011. Final approval of the well line connection to the dwelling was approved on 04/19/2011.

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. The water sample results were found to be in compliance with COMAR water quality standards.

Gross Alpha and Beta samples were also collected on 02/22/2007 & 5/11/2011. The sample results from 02/22/2007 indicated Gross Alpha levels above the maximum contamination level suggested by the EPA. A reverse osmosis system was subsequently installed and samples were taken from the treated tap on 5/11/2011. Those sample results indicated that Gross Alpha results were below the targeted value of 15 pCi/L and the Gross Beta results were below the targeted value of 50 pCi/L. At the time of the testing and with respect to these parameters, the future well water supply appears safe for all uses. No additional testing **for these parameters** will be required to secure the future Use and Occupancy.

However, this treatment system must be properly operated and maintained continuously in accordance with the service contract for the life of the residence to assure future compliance. Water used for internal consumption should come from this treated tap. If the house is sold the new homeowners must be made aware of this condition.

INTERIM CERTIFICATE OF POTABILITY

The initial sampling requirements of COMAR 26.04.04 "Well Regulations" have been met for the water supply system installed under well permit #HO-95-0594. Although the submitted sample results are in compliance with COMAR standards, the Health Department does not guarantee water supplies. Based upon satisfactory

investigation and evaluation, the Howard County Health Department as authorized by the Maryland Department of the Environment accepts this well system as required by COMAR 26.04.04.

This certificate may become final upon completion of the second bacteriological test, which is to be taken by the county health department within six months of receipt of this letter. Please contact (410) 313-1773 to schedule a final water sample appointment. Currently, there is no charge for this final sampling.

Date of Bacterial, etc. Water Sample(s): 05/03/2011

Date of Well Completion: 02/22/2007

Approving Authority,

Jeff Williams, R.S., REHS, MAS

Well & Septic Program

cc: Building Inspector's Office

Community Health Services

File



TRACE LABORATORIES, INC

5 North Park Drive Hunt Valley, MD 21030 USA

Telephone: 410/584-9099 / Fax: 410/584-9117 Website: www.tracelabs.com / Email: info/@tracelabs.com

Maryland State Certified Laboratory #318

CERTIFICATE OF ANALYSIS

Requester:

S/O Number: 81297

NV Homes, Inc.

Report Date: May 18, 2011

6085 Marshalee Drive Suite 130 Elkridge, Maryland 21075

Property Sampled:

12411 Watkins Bridge Lane, 21029

Building Permit #:

B10003969

Sample Location:

Reverse Osmosis (R/O) Tap

Sampler ID #:

9813AM

Residual Chlorine:

<0.1 mg/L

Samples Iced:

Yes

County: Map:

Howard

28

Subdivision:

Walnut Grove

41

Parcel:

74

Lot #:

Date/Time Collected in Field:

May 11, 2011 @ 12:15 pm

Date/Time Received in Lab:

May 11, 2011 @ 4:15 pm

Well Tag #:

HO-95-0594

Well Condition:

2-Piece Cap, Satisfactory

Water Treatment/Conditioning:

Softener, Neutralizer, Reverse Osmosis (R/O)

PARAMETER	метнор	DETECTION LIMIT	MCL*	RESULT	ACCEPTABILITY
Gross Alpha	EPA 900.0	0.9 pCi/L	15 pCi/L	<0.9 ± 0.7 pCi/L	Acceptable
Gross Beta	EPA 900.0	1.9 pCi/L	50 pCi/L	$2.1 \pm 1.3 \text{ pCi/L}$	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. The acceptability of this sample is based on these requirements.

Administrative Assistant



TRACE LABORATORIES, INC

5 North Park Drive

Hunt Valley, MD 21030 USA

Telephone: 410/584-9099 / Fax: 410/584-9117 Website: www.tracelabs.com / Email: info@tracelabs.com

Maryland State Certified Laboratory #318

CERTIFICATE OF ANALYSIS

Requester:

S/O Number: 81178

NV Homes, Inc.

Report Date: May 3, 2011

6085 Marshalee Drive Suite 130 Elkridge, Maryland 21075

Property Sampled:

12411 Watkins Bridge Lane, 21029

Building Permit #:

B10003969

Sample Location:

Pressure Tank

Sampler ID #:

9813AM

Residual Chlorine:

<0.1 mg/L

Samples Iced:

Yes

County:

Howard

Subdivision:

Walnut Grove

Map:

28

Parcel:

74

Lot #:

41

Date/Time Collected in Field:

May 2, 2011 @ 11:30 am

Date/Time Received in Lab:

May 2, 2011 @ 2:40 pm

Well Tag #:

HO-95-0594

Well Condition:

2-Piece Cap, Satisfactory

Water Treatment/Conditioning:

Softener, Neutralizer

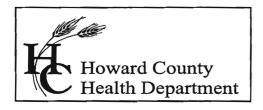
PARAMETER	METHOD	MCL/*SMCL	RESULT	PASS/FAIL
Total Coliform	SM 9223B	Absent	Absent	Pass
E. coli	SM 9223B	Absent	Absent	Pass
Nitrate	SM 4500D	10 mg/L as N	5.5 mg/L as N	Pass
Turbidity	EPA 180.1	10 NTU	<1.0 NTU	Pass
рН	EPA 150.1	*6.5-8.5 Units	7.6 Units	***Acceptable
Sand		Negative	Negative	

Katherine C. Higgs Administrative Assistant

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.



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

March 5 2007

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

> RE: Walnut Grove Subdivision, Lot 41 Well Tag: HO – 95 – 0594

To Whom It May Concern:

A sample was collected during a yield test on February 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 30.4 ± 3.1 picocuries/liter (pCi/L); while the Gross Beta level was 7.7 ± 1.4 pCi/L. The Gross Alpha result was above its maximum contaminant level (MCL) of 15 pCi/L, while the Gross Beta level was below its target value of 50 pCi/L (roughly equivalent to the MCL of 4 millirem/year).

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

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

Sincerery

Bert Nixon, Deputy Director
Bureau of Environmental Health

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

Send	Report To:	State of Maryland DHMH - Laboratories Administration Division of Environmental Chemistry RADIATION LABORATORY						
	201 W. Preston Street, Baltimore, Maryland 21201							
-			Boy, Dr. P.H., Direc					
			Y ANALYSIS RE	QUEST				
Samp	WG41BB950 le Bottle No. A:		Field Blank B	ottle No. A:	No. B:			
Plant	Site Name: Walnut	Grove - Lot	- 41	County:				
Samp	le Source: Watkins	Bridge Lane	Location: _	(well no., lab sink, san	94 iple tap, etc.)			
Coun	ty:	Plant No.			1			
	CK (one per box)							
Drink Landf Stream Other	m \square	Community Non-community Private Other	Source (raw water) Distribution (treated) MCL	Emergence Routine Recheck Special	ey			
Collec		ker	Telephone No:		~ -			
Date	Collected: 2 / 22	12007	Time Collecte	d: a.m.	2:00 p.m.			
Nitric	Acid Preserved: Yes	No □	Iced: Yes	□ No □				
Subm	itters Code: 🔲 🗀	Federal Project	t: D Field Data:					
Rema	rks: Woter Sa	mple Taken	During Yie	pH Ch	lorine			
\checkmark	Test	EPA Code	Laboratory No.	Results (pCi/L)	Date Reported			
	Gross Alpha	4000	702106-001	30.4 = 3.1	2/26/07			
~	Gross Beta	4100		7.7=1.4				
	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:	//						

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

Property Sampled: Walnut Grove Property

County:

Howard

Subdivision:

Walnut Grove

Tax Map #:

N/A

July 31, 2007

S/O Number: 64290-4

Report Date:

Lot #:

41

Parcel #:

N/A

Date/Time Collected: Date/Time Received:

July 11, 2007 at 12:41 pm 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-95-0594

Well Condition:

N/A

Water Conditioning/Treatment:

None

PARAMETER	RESULT	METHOD	DETECTION LIMIT
Radium 226	3.6 +/- 0.5 pCi/L	EPA 903.1	0.2 pCi/L
Radium 228	1.0 +/- 0.5 pCi/L	EPA Ra-05	0.8 pCi/L
Uranium	27.4 +/- 3.3 pCi/L	EPA 908.0	0.8 pCi/L

Allison R. Milburn

Manager-Drinking Water Testing

Circuit Court for HADRAL CHEMIC THE COURT. HEAR OF THE COURT. HEART CERT WENTER ON THE COURT.

(4(8) 315-2011

Drwy Gack on Block: Sind Ref 17-NED ANDER: ANDER: Inv 40 Link WE 20.80 Silink No FER SIDIAN 20.80

HHOROCOMY-A (.85 boain Au: 41.50

TGT-ALL AMARGEST 4 LINE

FAYBERIS CHECK 44.49 Check 1.96

U) AL TEMBERSO: 41.46

- Easmi**er: (ON** Se**o A MU**er: - Ropt + - 5831) Jotes Meu 17. Sull - Cames Aásbi ca

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 Swag icon Hu ("the Owner").
WHEREAS, the Owner owns a tract of land at street address 12411 Wattern Bridge Ly
where BAS, the Owner owns a tract of land at street address 12411 Watum 1270 47,
the Land Records of Howard County, Maryland, Tax Map # Block # _ 9997
Percel # 711 Deed Reference # 100/61/ and Tay Account # 419
Parcel # 74. Deed Reference # 10961/ and Tax Account # 449072
(marrapary).

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.

10-95-059 WHEREAS, the Owner has installed a residential drinking well under well permit 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.

Lot Block

Community Walnut Grane

WATER WELL ACKNOWLEDGMENT

The undersigned P	urchaser has entered into a Purch	ase Agreement for the J	Property known as
LOT W	urchaser has entered into a Purch and located in the	Walnut G	(the
Property").		7.0001-0	

By signing below, Purchaser acknowledges they have been informed of and understand the following information relating to the Property:

This community is located within an area of Howard County which contains higher than normal levels of radium in some water wells. Due to this occurrence, the County is requiring (i) certain remediation treatment devices to be installed on those wells selected by the County, (ii) each property owner to enter into an Agreement for Approval of an Individual Drinking Well With an On-Site Treatment System (attached hereto and made a part hereof), and (iii) disclosure of these matters by the homebuilder to the home purchaser.

Please refer to Sections 12.0, 12.3 and 15.0 in the NVHomes Homeowner's Manual for a description of the limited warranty provided for plumbing and for water wells.

For more information regarding the radium in water wells or about the Howard County requirements, please contact the Howard County Health Department, Bureau of Environmental Health at www.hchealth.org.

ACKNOWLEDGED BY PURCHASER:

3Dly

Purchaser: (SAM XIOXANIES SHOUXIANY HU

Date: ///2//0

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

- 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).
- 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.
- 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.
- 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.
11/17/10	Slu
Date	OWNERSAM XLOXX SHOUXIANG HU
Date 5/19/2011	They Plefon
Date / /	Howard County Health Department
	BURTRUM NIXON



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@connext .net www.tracelabs.co m

Maryland State Certified Water Quality Laboratory No. 318





CERTIFICATE OF ANALYSIS

Requester:

Heritage Realty & Land Development

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

S/O Number: 64290-4

Report Date: July 31, 2007

Property Sampled:	Walnut Grove Propert	у						
County: Subdivision: Lot #:	Howard Walnut Grove 41	Tax Map #: Parcel #:	N/A N/A	sat a				
Date/Time Collected: Date/Time Received:	July 11, 2007 at 12:41 p July 11, 2007 at 3:40 pr	n	110	org Correct Mo				
Sample Location: Sampler ID: Samples Iced: Residual Cl ₂ <0.1 mg/	Pump 6308KW Yes L: Yes	Nox	cepabient	nath Corn				
Well Tag Number: Well Condition :	HO-95-0594 N/A	. (2 amb Evo					
Water Conditioning/Tre atment: None								
PARAMETER	RESULT	METHOD	DETECTION LIMIT					
Radium 226 Radium 228 Uranium	3.6 +/- 0.5 pCi/L 1.0 +/- 0.5 pCi/L 27.4 +/- 3.3 pCi/L	EPA 903.1 EPA Ra-05 EPA 908.0	0.2 pCi/L 0.8 pCi/L 0.8 pCi/L					

Allison million

Allison R. Milburn Manager-Drinking Water Testing

Samples analyzed by Laboratory #E83033