c1 27647	(MDE USE ONLY)	STATE OF MARYLAND	THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.
(THIS NUMBER IS TO BE P		WELL COMPLETION REPORT FILL IN THIS FORM COMPLETELY PLEASE TYPE	COUNTY NUMBER A 520074- B
ST/CO USE ONLY	DATE WELL COM		OF FROM "PERMIT NO DRILL WELL"
DATE Received MM DO VV 8 13	15 97	2015 22 400 28 (TO NEAREST FOOT)	9/25/15 SC 28 29 30 31 32 33 34 35 36 37
OWNER	Joodstock	Kond LAC	
WELL SITE ADDRESS	1699 Was		woodstock md
SUBDIVISION_Puta	ick Costell	a Prop - SECTION_	LOT
WELL		GROUTING RECORD NO	C 3
Not required for		WELL HAS BEEN GROUTED (Circle Appropriate Box)	1 2 PUMPING TEST
STATE THE KIND OF FORMA COLOR, DEPTH, THICKNESS	S AND IF WATER BEARING	TYPE OF GROUTING MATERIAL (Circle one)	HOURS PUMPED (nearest hour)
DESCRIPTION (Use additional sheets if needed)	FROM TO bear	ter Dini	PUMPING RATE (gal. per min.) 4 •
- sand	0 29	GALLONS OF WATER DEPTH OF GROUT SEAL (to nearest foot)	METHOD USED TO MEASURE PUMPING RATE Bucket
	00/1/00/10	from 0 ft. to 27 ft.	WATER LEVEL (distance from land surface)
· Mica Rock	29 400 0	(enter 0 if from surface)  Casing CASING RECORD	BEFORE PUMPING 24 tt.
		types insert appropriate ST CO CONCRETE	WHEN PUMPING 282 ft.
Water	119	code below PL OT	TYPE OF PUMP USED (for test)
		MAIN Nominal diameter Total depth	A air P piston T turbine
		CASING top (main) casing of main casing (nearest foot)	C centrifugal R rotary O (describe below)
		60 61 63 64 66 70	J jet S submersible
		E OTHER CASING (if used) A diameter depth (feet)	7
		inch from to	DRILLER INSTALLED PUMP YES (NO
		Ğ — L	(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
		insert STEEL BRASS OPEN	IN BOX 29.  CAPACITY:
		code below PL OT	GALLONS PER MINUTE (to nearest gallon) 31 35
		PLASTIC OTHER	PUMP HORSE POWER 37 41
NUMBER OF UNSUCCESS	tale calculates	DEPTH (nearest ft.)	PUMP COLUMN LENGTH (nearest ft.)
WELL HYDROFRACTURED	Yes 06	E 1 9 11 15 17 21	CASING HEIGHT (circle appropriate box and enter casing height)
CIRCLE APPROF ▲ A WELL WAS ABANDON	NED AND SEALED	H 2 23 24 26 30 32 36 S	LAND SURFACE
WHEN THIS WELL WAS	COMPLETED	Ca	below) 3 (nearest) foot)
P TEST WELL CONVERTE		R 38 39 41 45 47 51 E SLOT SIZE 1 2 3	LATITUDE 3 9. 3 2494
I HEREBY CERTIFY THAT THIS WE ACCORDANCE WITH COMAR 26.04 IN CONFORMANCE WITH ALL COM- CAPTIONED PERMIT, AND THAT	04 "WELL CONSTRUCTION" AI IDITIONS STATED IN THE ABO THE INFORMATION PRESENT	IN DIAMETER (NEAREST OF SCREEN INCH)	LONGITUDE 7 6 . 8 7 6 0 0 (DEFAULT COORD. WGS 84)
HEREIN IS ACCURATE AND CO- KNOWLEDGE	MPLETE TO THE BEST OF	from to	NOTES:
DRILLERS LIC. NO.1		IF WELL DRILLED	Bbags
DRILLERS SIGNATURE (MUST MATCH SIGNATURE C	on application)	WAS FLOWING WELL INSERT F IN BOX 68 68  MDE USE ONLY	2.7 = 2.96 bags/101 V
	MSD027	CALOT TO BE SUITED IN DAY BROWN SENT	
	Layer Mr	70 72	⊕
SITE SUPERVISOR (sign.) responsible for sitework if di		TELESCOPE LOG 74 75 76 CASING INDICATOR OTHER DATA	

8 1 37568 SEQUENCE NO.	STATE OF MARY	TAND	STATE PERMIT NUMBER
1 2 3 6 (MDE USE ONLY)	APPLICATION FOR PERMIT	THE REAL PROPERTY AND ADDRESS OF THE PARTY O	HO-15 -0124 -
Think I be to shake	5950 please type		70 fill in this form completely 79
Date Received (APA)	BIS	3	OCATION OF WELL
OTITO OWNER INFOR		4/4	SONTION OF WELL
8 MM DD YY 13	L	COUNTY	21
15 Last Name Owner	66	C. At. b	Protelly P. south.
300- 8-11 8 8	First Name 34	3 SUBDIVISION	42
36 Osthany Jane Au	55 SE	CTION L	LOT   /
Ellerott lite md	21042	44 46	48 50
	72 Zip 76	Woods	tock
DRILLER INFORMATION	5.	2 NEAREST TOWN	
I harry IN affer V	150027 DI		the state of the s
Driller's Name 76		ES OF DRILLING WATER	1101111 1 + 1 01
Firm Name		ell	11 STREET ADDRESS 30
SEID Ride RAMEA	ma 0 1001   2		NORTH
Address	3.		ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)
ention dona L	7-14-20151		WESTCHAST
Signature	Date		34 30 37 SOUTH
B 2 WELL INFORMATION APPROX PUMPING RATE —	5		DISTANCE FROM ROAD F4
(GAL PER MIN.)	12		ENTER FT OR MI 38 39
AVERAGE DAILY QUANTITY NEEDED (GAL PER DAY) 14	500		TAX MAP: BLK: PARCEL
USE FOR WATER (CIRCLE AP		NOT TO	BE FILLED IN BY DRILLER
D DOMESTIC POTABLE SUPPLY & RESIDE			DEPARTMENT APPROVAL
IRRIGATION		The roll Isites	A F2=0=11 A
F FARMING (LIVESTOCK WATERING & AGE IRRIGATION)	Carlo Car	DUNTY NAME OF	A 5200 74-B 13 COUNTY NO.
22 I INDUSTRIAL, COMMERCIAL, DEWATERIN	NG ST	ATEN ATEN	and the second s
P PUBLIC WATER SUPPLY WELL	SIG	SNATURE 2	INSERT S 41
T TEST, OBSERVATION, MONITORING	DA I	TE ISSUED 20 C	8/15/15
O OPEN LOOP GEOTHERMAL	43	MM DD YY 48.	CO SIGNATURE EXP. DATE
C CLOSED LOOP GEOTHERMAL			다양대 가는 그렇게 된 원이 가는 다시
THE PROPERTY OF THE PARTY OF TH	CALOROPESTIC APPLICA	PPOPOSE	D LOCATION OF WELL ON LOT
APPROXIMATE DEPTH OF WELL 2		W PERMANENT STRUC	CTURES SUCH AS BUILDINGS, SEPTIC SYSTEM,
24			MARKS AND INDICATE NOT LESS THAN TWO E MEASUREMENTS TO WELL
APPROXIMATE DIAMETER OF WELL	6 NEAREST INCH	DISTANC	E MEASUREMENTS TO WELL
METHOD OF DRILLING	Rac	drum, sodrum	The state of the s
BORED (or Augered) JETTED	Coll dies College		The state of the s
20	BOTADY (Mudraulie Detand	ovide + TDS s	
37 CABLE REVerse-ROTary	DRIVE-POINT CO !	rected 9/11	115 SC / 34 /
other		TV III	- 4
REPLACEMENT OR DEEPE	NED WELLS	Q	
(CIRCLE APPROPRIATE			5/ /8
N THIS WELL WILL NOT REPLACE AN EXISTI	Total Control of the		130
THIS WELL WILL REPLACE A WELL THAT I	VILL BE	THE STATE OF	Q 3 / Woodstock
THIS WELL WILL REPLACE A WELL THAT	WILL BE USED		·
39 S AS A STANDBY-CONTACT LOCAL APPROVI			13
THIS WELL WILL DEEPEN AN EXISTING WE	ELL		/ N
PERMIT NUMBER OF WELL TO BE REPLACED OF	THE RESERVE OF THE PROPERTY OF		128
(IF AVAILABLE) 41			10
Not to be filled in by driller (MDE OR C	OUNTY USE ONLY)		/
APPROP PERMIT NUMBER	G	-	
APPROP. PERMIT NUMBER		MORT	0
PERMIT No. HO -	15 -0124	1-1	79
70 71 7		wield tost	and the excisting to
SPECIAL CONDITIONS PARTIUM SOLI MOTE APPRIATE SPECIAL PROPERTY OF STREET SPECIAL SPECI		the property	MUST be sealed and
Inches or on	© COUNTY		abandonned.
MDEWMAPER 071	because and a second		

Page	01
Date	9-11-2015

Review				
VeATEN	-	 	-	_

### FIELD DATA SHEET HOWARD COUNTY WELL YIELD TEST

Well Permit No. HO - 15-0124 Location of property (road) 1684 W. Subdivision S. Patrick Costellar Page	oodst	rk Rd	Plat	Sec.	
Well Driller Jay & Mayri	Owner	Woodet	reter Kan		
Depth of well #00' Distance of measuring point (M.P.) about Static water level (S.W.L.) below H.P.					*
I. High rate pumping reservoir drawdown		The state of the s	+		
Time pump scarted _ '7:15'	צטא		20 900		
Total time 30 min to reach pumping	water lev	/el 28	L ft. bel	OW H.P.	

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

TIME (in 15 minute in- tervals	WATER LEVEL below H.P.	time to fill 5/ gallon bucket	FLOW HETER. READING (if used)	(gallons per minute)
7:30	176'	3000		20000
2:45	282	4 sec		15
8:00	282	15ou		4
8:15	282	· 15 su		4
8:30	282	15 pec		4.
8:45	282	15 am		4
9: 00	282	15 sec	0	· H
9:15	282	15 acc		4
9:30	282	15 per		4
9:45	282	. 15 su		. 4
10100	282	15 ,000		. H
10:15	282	15 su		4
10:30	282	15 sec		4
10:45	282	15 sec		#
1				
٠,				7.
3				

Page	01
Dace	9-11-2015

Review	

### FIELD DATA SHEET HOWARD COUNTY WELL YIELD TEST

Locatio	sion S. Patrick Costiles Prop. Lot / Block Plat Sec.
Well Dr	111er Joseph & Mayre Owner Woodstock Kand KLC
	Depth of well 400' Distance of measuring point (M.P.) above ground 3'
	Static water level (S.W.L.) below M.P. 24'
I. Hi	igh rate pumping reservoir drawdown
	rime pump scarted 7:15 Pumping rate 205pm

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

WATER LEVEL below M.P.	PUMPING RATE time to fill 5/ gallon bucket	FLOW METER. READING (if used)	CALCULATED FLOW (gallons per minute)
176'	3000		20 gpm
282	4 sec		15
282	15eu		4
282	15 su		4
282			4
282			4
282			4
282	15 acc		4
282	15 200		4
282	·. 15 sec		4
282	15 AC		H.
282	15 sec		4
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282	15 see		4
		٠	
	below M.P.  176' 282 282 282 282 282 282 282 282 282 28	below M.P. time to fill \$1 gallon bucket  176' 3 arc  282 4 arc  282 15 arc	below H.P. time to fill \$1 (if used)  176' 3 arc  282 4 arc  282 15 arc

### MARYLAND DEPARTMENT OF THE ENVIRONMENT, WATER MANAGEMENT ADMINISTRATION 1800 Washington Blvd., Baltimore, Maryland 21230 (410) 537-3784

### SUBMIT COPIES OF COMPLETED FORM TO:

COUNTY ENVIRONMENTAL AGENCY (contact MDE, WMA if address needed)

DATE WELL ABANDONED: 9-1/- 2015 (month/day/year)

- WELL OWNER
- MDE, WATER MANAGEMENT ADMINISTRATION, WELL PROGRAM

OY	1
9/28	1/15 sc)
	/

PERMIT NUMBER OF ABANDONED WELL (if any)

PERMIT NUMBER OF REPLACEMENT WELL:

OWNER'S NAME: Woodstock Land

PERSON ABANDONING WELL: WELL DRILLER'S LICENSE NUMBER: MISO 0 27

CIRCLE: MWD / MSD / MGD

WELL LOCATION:

COUNTY: Howard

NEAREST TOWN: Woodstock

BLOCK PARCEL TAX MAP

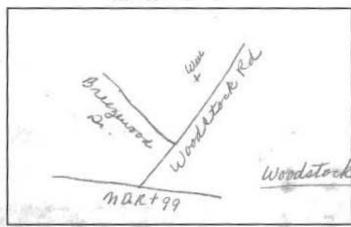
SUBDIVISION: CASTILLA Prosecty SECTION:\_

STREET ADDRESS: 16 84 Woodstock

LATITUDE 3 9. 3 2 5 0 8

LONGITUDE 7 6 . 8 7 6 2 9

### SITE LOCATION MAP



TYPE OF WELL BEING ABANDONED:

✓ DRILLED

JETTED

BORED

HAND DUG OTHER (specify)

USE CODE:

DOMESTIC

MUNICIPAL/PUBLIC

IRRIGATION INDUSTRIAL

TEST/OBSERVATION GEOTHERMAL

TYPE OF CASING:

STEEL

PLASTIC

CONCRETE OTHER (specify)

INCHES IN DIAMETER SIZE OF CASING:

DEPTH OF WELL:\_

WAS ANY CASING REMOVED?\_\_\_YES \_\_ V NO

If yes, length removed, in feet:\_\_\_\_

WAS CASING RIPPED OR PERFORATED? YES ✓NO

SIGNATURE-MASTER WELD DRILLER OR SURERVISING SANITARIAN LICENSE#

LOG OF SEALING MATERIAL

MATERIAL	FEET		
	FROM	то	
Cement , go and	0	47	
- I Kenney - No		2 2	
and the second			

VOLUME OF MATERIAL USED

15 Base I cement

MWD / MSD / MGS

CIRCLE ONE

The State of		1800 Washington Blvd., Baltimore, M	Maryland 21230 (410) 537-3784	HERMITERATION)	
*************		WATER WELL ABANDONMENT	SEALING REPORT FORM	***************************************	*************
		WATER WELL ADAIDONMENT	**************************************		
* COUNT * WELL ( * MDE, W	OWNER	GENCY (contact MDE, WMA if a ADMINISTRATION, WELL PRO	01-1-15018		
- Louis 1 18				1- 01	24
* PERMIT	NUMBER OF ABANDO	ONED WELL (if any)		15 - 01	47
	NUMBER OF REPLACE				- 45.454
- Table - 199			WELL DRILLER'S LICENSE NU CIRCLE: 1	MBER: MSD/M	GD 627
* OWNER	C'S NAME: Woods	tock hand LLC	SITE LOC	CATION MAP	
COUNT NEARE TAX MA SUBDIV SECTIO STREET	ST TOWN: Word  APBLOCK VISION: 5. Patrick	PARCEL Property LOT: Woodstock Rd.	mo 9	130cm	Woodstok
·	A CHARLES		LOG OF SEAL	LING MATERIA	
LONGI	TUDE 7 4. 3 7	5 - 5 -	200 07 02/1		ET
	Mary Street	2-26-0	MATERIAL	FROM	то
- 4	F WELL BEING ABANI DRILLED BORED DTHER (specify)	OONED: JETTED HAND DUG	Cement + gravel mixed.	0	400'
4		48	The state of the s	4.8	1.00
1	DOMESTIC RRIGATION	MUNICIPAL/PUBLIC INDUSTRIAL GEOTHERMAL			
	DOMESTIC			MATERIAL USED	
* TYPE O	OOMESTIC RRIGATION CEST/OBSERVATION OF CASING: STEEL CONCRETE  SING: LINCHES	INDUSTRIAL GEOTHERMAL  PLASTIC OTHER (specify)  S IN DIAMETER	Pursuant to § 10-624 of Maryland Code, persona is used in processing this 26.04.04. Failure to prove this form not being proceinspect, amend, or correct Department of the Environment o	the State Govt. Artill info requested on sorm pursuant to order the info may reessed. You have the ct this form. The Monment is subject to	cle of the this form of comary lander of the arylander of the this form of the comary lander
* TYPE 6  SIZE OF CAS  DEPTH OF V  WAS ANY C  If yes, le	OOMESTIC RRIGATION TEST/OBSERVATION F CASING: STEEL CONCRETE SING: VELL: 400 FEET D	PLASTIC OTHER (specify)  S IN DIAMETER DEEP YESNO	Pursuant to § 10-624 of the Maryland Code, persona is used in processing this	the State Govt. Article info requested on some pursuant to conde the info may reessed. You have the cut this form. The Monment is subject to ation Act. This form ternet via MDE's wer copying, in whole covernmental agen	cle of the this form of the soult in cright of the may be not website and

COUNTY

## MARYLAND DEPARTMENT OF THE ENVIRONMENT, WATER MANAGEMENT ADMINISTRATION 1800 Washington Blvd., Baltimore, Maryland 21230 (410) 537-3784

1800 Washington Blvd., Baltimore, Mar	yland 21230 (410) 537-3784		
WATER WELL ABANDONMENT-SI	FALING REPORT FORM	******	***********
***************************************	***************************************		
SUBMIT COPIES OF COMPLETED FORM TO:  COUNTY ENVIRONMENTAL AGENCY (contact MDE, WMA if add	race needed)		
WELLOWNER	ress needed)		
MDE, WATER MANAGEMENT ADMINISTRATION, WELL PROGR	RAM .		
DATE WELL ABANDONED: 9:11-2015 (m	onth/day/year)		
PERMIT NUMBER OF ABANDONED WELL (if any)	120126 -	-	
PERMIT NUMBER OF ABANDONED WELL (II ally)		_	- ' '
PERMIT NUMBER OF REPLACEMENT WELL:	Ho - 1	5 -01	24.
PERSON ABANDONING WELL: 11 11 11 11 11 11 11 11 11 11 11 11 11	VELL DRILLER'S LICENSE NUI	WD/MSD/M	GD A
* OWNER'S NAME: Mandatacle has a ALC	CIRCLE: B	WDIMSDIM	<u>uu</u>
Comment of the Commen			
WELL LOCATION;	SITE LOCA	TION MAP	
COUNTY: Y/mward			11.
TAX MAP BLOCK PARCEL			1 .
SUBDIVISION: Partitle Parsis In	3	. J /. W	,
SECTION: LOT:		Wx /T	
STREET ADDRESS: 16 34 Wood of tack. Role	1 30	1/3	
LATITUDE 3 9. 3 2 5 0 8 _	St. Steen and	150	
LATTIODE 3 4. 2 2 2 2 8 -	4. 4.	10	
LONGITUDE 7 6 . 8 7 6 2 4 _	* >	Sp.	16
100000000000000000000000000000000000000	/.	J)	Woodsto
S. O.			COODUCTO
	alux to	9	
A CAMP A SECURITION OF THE SEC			
* TYPE OF WELL BEING ABANDONED:  V DRILLED JETTED	LOGOESI	EALING MATE	TRIAT.
BORED JETTED HAND DUG	200 01 3	STEETING MITTER	aurus ,
OTHER (specify)	4	P	EET .
45 T T T T T T T T T T T T T T T T T T T	MATERIAL		T
■ USE CODE:		FROM	TO .
VOOMESTICMUNICIPAL/PUBLIC		-	
IRRIGATIONINDUSTRIAL	Cement, grand	. 0	47
TEST/OBSERVATIONGEOTHERMAL	ショントラント でし		76
4.20	100		
* TYPE OF CASING:			
VSTEELPLASTIC			
CONCRETEOTHER (specify)		8 994	
		, 5 5 6	
/:			
SIZE OF CASING: GINCHES IN DIAMETER			
DEPTH OF WELL: 47 FEET DEEP			4 + " 4
	VOLUME OF	MATERIAL USE	D
WAS ANY CASING REMOVED? YES UNO	15 Lage I am,		1.6621 -
If yes, length removed, in feet:	coo the grand	- 17.74	. (62) -
WAS CASING RIPPED OR PERFORATED? YES 1/NO	COO SCALE PROPERTY		
V when Ill line	DIC DC 27 MWD/ MSD/ M	4GS 0. 14	2015
SIGNATURE-MASTER WELDDRICLER OR SURERVISING SANITARIAN LICENSES	CIRCLE ONE		DATE

MD DHMH Laboratories Administration 1770 Ashland Avenue Baltimore City, MD 21205

Send Report To: Berl Nixon

Wealth Dept. Buteau of Environmental Heal ENVIRONMENTAL METALS SECTION BARO Stanford Blud.

Columbia MD 21045

Division of Environmental Chemistry

201 W. Preston Street, Baltimore, Maryland 21201 Robert A. Myers Ph.D. Director

Lab No. Date Received

E16001063001 Received: 09/14/2015 HO-15-0124

Do not write above this line

### LABORATORY ANALYSIS REQUEST **Please Print**

reserve	d By: □ Field	□ F	ESRL	□ WMI	RL 🗆 C
	Preserva	tive Used: HNO	Aud	was added in	RL of C
ype:	□/Drin	king Water	□ Land	Ifill Source	e (Raw Water)
gory	□ Con □ Non □ Priv		□ Strea	m □ Distril ment □ Other	bution (Treated)
	/cpwa	= NBDEC = CW	4 = DC	D	D 1
rogram	: LISDWA	□ NPDES □ CW	A LI RC	RA 🗆 Consumer	Products   Othe
ample I	Proporation	Total Metals	□ Tota	Metals TCLP	☐ Dissolved Metals
	reparation.	Li Total Mictals	_ 10tu		
	reparation.	in Total Wictars	_ Tota	1 1	(field preparation required)
Sam	inte taken	duina uie	1d : I	infally, other ,	(field preparation required)
Sam	ple taken	during yie	1d : I	whally there	(field preparation required)
Sam	iple taken	during yie	1d : 1	without there	(field preparation required)
: Sam	iple taken	during yie	id : I	withally, other ,	(field preparation required)
:_Sam	Element	Results (ppm)	Id : T	enfieldy, other o	(field preparation required
:_Sam	iple taken	during yie	ld : T	withally, other ,	(field preparation required)
✓ Anti	Element imony (Sb)	during yie	1d : T	Element Copper (Cu)	(field preparation required)
Anti Arse	Element imony (Sb) enic (As)	during yie	1d : 1:	Element Copper (Cu) Lead (Pb)	(field preparation required)
Anti Arso Bari Bery	Element imony (Sb) enic (As) um (Ba)	during yie	1d : 1:	Element Copper (Cu) Lead (Pb) Silver (Ag)	(field preparation required)
Anti Arse Bari Bery Cad	Element imony (Sb) enic (As) um (Ba) yllium (Be)	during yie	1d : T	Element Copper (Cu) Lead (Pb) Silver (Ag) Zinc (Zn)	(field preparation required)
Anti Arse Bari Bery Cad	Element imony (Sb) enic (As) ium (Ba) yllium (Be) mium (Cd)	during yie	1d : 1:	Element Copper (Cu) Lead (Pb) Silver (Ag) Zinc (Zn) Aluminum (Al)	Results (ppm)
Anti Arso Bari Bery Cad Chro	Element imony (Sb) enic (As) eum (Ba) yllium (Be) mium (Cd) omium (Cr)	during yie	1d : T	Element Copper (Cu) Lead (Pb) Silver (Ag) Zinc (Zn) Aluminum (Al) Iron (Fe)	Results (ppm)
Anti Arse Bari Bery Cad Chro	Element imony (Sb) enic (As) um (Ba) yllium (Be) mium (Cd) omium (Cr) cury (Hg)	during yie	1d : 1:	Element Copper (Cu) Lead (Pb) Silver (Ag) Zinc (Zn) Aluminum (Al) Iron (Fe) Manganese (Mn)	(field preparation required)
Anti Arse Bari Bery Cad Chro Mer Nick	Element imony (Sb) enic (As) eum (Ba) yllium (Be) mium (Cd) omium (Cr) eury (Hg) cel (Ni) enium (Se)	Results (ppm)	1d : 1:	Element Copper (Cu) Lead (Pb) Silver (Ag) Zinc (Zn) Aluminum (Al) Iron (Fe) Manganese (Mn) Calcium (Ca)	Results (ppm)
Anti- Arse Bari Bery Cad Chro Mer Nick Sele	Element imony (Sb) enic (As) eum (Ba) yllium (Be) mium (Cd) omium (Cr) cury (Hg) cel (Ni)	Results (ppm)	1d : 1:	Element Copper (Cu) Lead (Pb) Silver (Ag) Zinc (Zn) Aluminum (Al) Iron (Fe) Manganese (Mn) Calcium (Ca) Magnesium (Mg)	Results (ppm)

# Send Report To: Bert Nixon Howard Co. Health Dept.

State of Maryland **DHMH-Laboratories Administration** Bureau of Environmental HealtDivision of Environmental Chemistry
INORGANICS ANALYTICAL LABORATORY 1770 Ashland Ave

E16001061001 Received: 09/14/2015

Inorganic

HO-15-0124

8930 Stanford

Baltimore, Maryland 21205

D. 111		WATER ANALYSIS	no not write above this line.
Bottle Number	. Ho-15-0124 Na	me Woodstock	County Howard County 13
	1684 Woodstock Rd.		Data Category Code
Locatio		Collector & -	THE RESERVE THE PARTY AND ADDRESS OF THE PARTY
100	ed; Date 9/11/15 Time 10	145 Am Phone S. Callins	410-313-62.67 Code
CHECK	(cone per box)  ng Water Community Non-community	Source (raw water)	Emergency S
Landfi Stream Other	Non-community	Source (raw water) Distribution (treated) MCL	Emergency Routine Recheck Recheck Special Federal Project
Plant	No. Sampling Station	Preservation: Ic	ed Acid Type of Acid
Г	The State of		Specific Specific
PHL	Chlorine: Free	Total Land	Conductance
Notes	to Lab/Remarks: Sample taken	during yield test	the state of the state of
10			
CHECK TESTS	TESTS	Error Code	RESULTS
	Alkalinity (Total)	Code	Decker Shows are works
	Ammonia - N	Carry Transfer	
1	Chloride	A mind	
March 1	Conductance*,Spec.		
/	Dissolved Solids (Total)		
	Hardness	· · · · · · · · · · · · · · · · · · ·	
A.E.	Fluoride		Million of the same of the same of the
7.39	Nitrite, N	<b>设施</b>	See
120	Nitrate - Nitrite, N		
	Sulfate	A CONTRACTOR OF THE PARTY OF TH	STATE OF THE STATE
10	Total Solids		
4.55	Turbidity*		
	Other:		
3			A Transport State Control
7.00			THE RESERVE AND ADDRESS OF THE PARTY OF THE
2			A VIII TO THE RESERVE
-10			
RITE.	We sell to the let		
ALCOHOL: N			



### State of Maryland **DHMH-Laboratories Administration** Division of Environmental Chemistry TRACE METALS LABORATORY 1770 Ashland Avenue, Baltimore, Maryland 21205 Robert Myers, Ph.D., Director



### Certificate of Analysis

HOWARD CO ENVIRONMENTAL HLTH 8930 STANFORD BLVD

COLUMBIA, MD 21045

Lab Project No: E16001063 Date Coll.: 09/11/2015

Date Received 09/14/2015

Submitted By: Collins

Field ID: HO-15-0124 Lab No.: E16001063001

Method

Element

Result

Units

Date Analyzed

EPA 200.7

Sodium

126.10

ppm

09/15/2015

RECEIVED

SEP 2 3 2015

HOWARD COUNTY HEALTH DEPT.

COMMENTY STRIBBS PROSEAM

Comments:

Approved by:

Approval date: 09/18/2015

\*\*The following methods are included in our A2LA Scope of Accreditation: EPA 200.7, EPA 200.8, EPA 245.1.

This document contains confidential health information that is privileged, confidential and exempt from disclosure under law. If you have received this information in error, please call (410) 767-6944 and arrange for return or destruction.

Telephone: (443) 681 - 3853

Fax: (443) 681-4507

S:\EnviroFinal-Metals.rpt



State of Maryland
DHMH-Laboratories Administration
Division of Environmental Chemistry
INORGANICS ANALYTICAL LABORATORY
1770 Ashland Avenue, Baltimore, Maryland 21205
Robert Myers, Ph.D., Director



### Certificate of Analysis

HOWARD CO ENVIRONMENTAL HLTH 8930 STANFORD BLVD COLUMBIA, MD 21045

Lab Project NoE16001061	Date Coll.	09/11/2015	Date Received	09/14/2015	Submitted By:S.	Collins
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Field ID: HO-15-0124 Lab No.: E16001061001

 Analyte
 Method
 Result
 Units
 Date Analyzed

 Chloride
 SM 4500-CI E
 457
 mg/L
 09/21/2015

 Total Dissolved Solids
 SM 2540C
 1255
 mg/L
 09/16/2015

### Comments:

Approved by:

Shahler andi

Approval date: 09/22/2015

This document contains confidential health information that is privileged, confidential and exempt from disclosure under law. If you have received this information in error, please call (410) 767-6190 and arrange for return or destruction.

Telephone: (443) 681 - 3855

Fax: (443) 681 - 4507

S:\EnviroFinal-InorganicsA.rpt

<sup>\*</sup>The following methods are included in our A2LA Scope of Accreditation: EPA150.1, EPA 353.2, EPA 375.2, SM4500F C, SM 4500-CN G & QCM-CN, QCM-CN.



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 - SEPTEMBER 27, 2018

March 27, 2018

Homeowner 1684 Woodstock Road Woodstock, MD 21163

RE:

Costello Property, P. 157 1684 Woodstock Road Building Permit: B17003495 Well Permit: HO-17-0164

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 2/28/2018. Final approval of the well line connection to the dwelling was granted on 3/1/2018. The well construction was completed on 9/26/2017. Water samples were collected on 3/13/2018, 3/20/2018.

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 9/26/2017. Results showed a Gross Alpha level of 3.2 ± 1.2 pCi/L and Gross Beta level of 5.1 ± 1.9 pCi/L. The Gross Alpha was below the maximum contaminant level (MCL) of 15 pCi/L and the Gross Beta was below the target level of 50pCi/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-17-0164. 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.

Website: www.hchealth.org Facebook: www.facebook.com/hocohealth Twitter: @HoCoHealth



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

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: <a href="http://www.mde.state.md.us/assets/document/WSP-Labs-2010apr16.pdf">http://www.mde.state.md.us/assets/document/WSP-Labs-2010apr16.pdf</a>

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 Environments 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

. M. Walf

Groundwater Management Section

Well & Septic Program

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

Community Hygiene Program

File

### FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

1413 Old Taneytown Rd. Westminster, MD (410) 848-1014 (410) 876-4554

FAX (410) 848-0298

### REPORT OF ANALYSIS

Laboratory ID #: 120481 Account #:

Reference: Lot 4 Forty West Builders Company:

1684 Woodstock Road Location: Requested By: John Walker Woodstock, MD 21163 Well Water Source:

Date/ Time Collected: 3/13/2018 1110 Pressure Tank Site:

Date/Time Rec'd: 3/13/2018 1510 None \*\* Treatment: Free: ND Total: ND Chlorine ppm: 6.7 pH:

3799GL Collected By: G. Lana Well #: HO-17-0164

PARAMETERS	RESULTS	UNITS RE	FERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	45.3	MPN/ 100 ml	<1.0	SM20 9223	3/14/2018 / 1000 / CRS
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223	3/14/2018 / 1000 / CRS
Nitrate	8.36	mg/L	10	601	3/13/2018 / 1550 / RER
Turbidity	3.18	NTU	<10	SM20 2130B	3/13/2018 / 1615 / RER
Sand	NS	mg/L	5	Visual/Gravimetri	c 3/13/2018 / 1615 / RER



### NOTES

- \*\*Sample collected prior to Sediment Filter 1
- mg/L = milligrams per liter (also, parts per million) 2
- MPN/ 100 ml = Most Probable Number [of viable bacteria] per 100 ml of sample. 3
- NS = None Seen (NS indicates less than 5 mg/L)
- 5 NTU = Nephelometric Turbidity Units
- Results less than or within the reference range are considered satisfactory and within potable water limits at the time of
- 7 Sample collected by client, analyzed as received
- ND:None Detected
- Visual well check: Sealed, vented cap
- pH & Chlorine level tested on site

Client's Information Reason for Test:

B17003495 Building Permit#:

Date Reported: 3/14/2018

### FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

1413 Old Taneytown Rd. Westminster, MD (410) 848-1014 (410) 876-4554 FAX (410) 848-0298

### REPORT OF ANALYSIS

Laboratory ID #:

120600

40-977-2276

Patrick Castello

Postelloso fortywest.com

Reference:

Lot 4

Account #:

Forty West Builders

Company: Requested By:

John Walker

Location:

1684 Woodstock Road Woodstock, MD 21163

Source:

Well Water

Date/ Time Collected: 3/20/2018

1100 1306 Site: Treatment:

Pressure Tank None \*\*

Date/Time Rec'd:

3/20/2018 Free: ND

Total: ND

pH:

6.5

1935

Chlorine ppm: Collected By:

J. Yeager

6176JY

Well #:

HO-17-0164

PARAMETERS	RESULTS	UNITS I	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223	3/21/2018 / 0915 / CRS
Bacteria, E. coli, MPN	<1.0	MPN/ 100 m	<1.0	SM20 9223	3/21/2018 / 0915 / CRS

#### NOTES

- \*\*Sample collected prior to Sediment Filter 1
- MPN/ 100 ml = Most Probable Number [of viable bacteria] per 100 ml of sample. 2
- Results less than or within the reference range are considered satisfactory and within potable water limits at the time of 3 sampling.
- ND:None Detected
- 5 Visual well check: Sealed, vented cap
- pH & Chlorine level tested on site

Reason for Test:

Use & Occupancy

Building Permit #:

B17003495

Date Reported:

3/21/2018

THIS MANUSER IS TO BUILDING MALE WELL COMPLETED  Doptin of Well  DOPTIN OF WELL SITE ADDRESS (	C 1 364/3 (MDE	JENCE NO. USE ONLY)	STATE OF MARYLAND WELL COMPLETION REPORT	THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.
DATE PROMOTED TO THE PLANT TO T	(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)		PA-	NUMBER
WELL LOS  Not required for driven wishs  WELL LOS  Not required for driven wishs  PALT Florid To be serving  SECTION LOS  Not required for driven wishs  CESCHEPTON LOS  SECTION LOS  PALT Florid To be serving  GROUTEN REPORT Florid Florid Brown  GROUTEN REPORT Florid Florid Florid Brown  GROUTEN REPORT Florid Florid Brown	DATE Received	.00	2017 2 300 26 (0)	FROM "PERMIT TO DRILL WELL"
SUBDIVISION STANDARD CONTROL METERS SECTION WELL LOS GROUTING RECORD WELL LOS GROUTING RECORD STANDARD RECORD		tock	Land LLC	
WELL LOSS DE RECORD  Not required for driven wells  STOTIC FILE PROCESSOR TO STORY THE PROCESSOR	THE RESERVE OF THE PARTY OF THE PARTY.	The second second	7	
Not required for driven wells.  VELL HAS BEEN GROUTE  COCKO FORMATIONER PORT TREET TREET  COCKO FORMATIONER SAN OF WAVER BEARING  TYPE OF GROUTS GARRING COCKO ON THE STORY  COCKO FORMATION FOR SAN OF WAVER BEARING  COCKO FORMATION FOR SAN OF WAVER BEARING  COCKO FORMATION FOR SAN OF WAVER BEARING  COCKO FORMATION FORMATION  STEEL STORY OF GROUTS SAN OF WAVER BEARING  COCKO FORMATION FOR SAN OF WAVER BEARI		FLARES		
THE GOLD OF FORMATION BRANTANTED, MICHAEL CORRENT (CIRCLE ORD CO.ON, CROPT HE		Same 7	/ /	1 2
DESCRIPTION (Liberations) Find a feature of the particular of the	STATE THE KIND OF FORMATIONS PENETE COLOR, DEPTH, THICKNESS AND IF WATE	ATED, THEIR R BEARING	TYPE OF GROUTING MATERIAL (Circle one)	3
SOURCE POWER SERVICE WELLS:  WELL HYDROFACTURED  WILL CONFEREND TO POWER SERVICE WELLS:  OCTIONED AND SERVICE WEST AND SERVICE WELLS:  OCTIONED AND SERVICE WELLS	DESCRIPTION (OSE	if water		8 9
DEPTH OF GROUT SEA. (to nearest bod)  Walter Rock 72 300  Walter Rock 72 300  Walter Rock 72 300  DEPTH OF GROUT SEA. (to nearest bod)  Tom 48 100 5 8 80150M s 8 80150M s 9 8000M s 9 80	and a stock of the	10 bearing	100	PUMPING RATE (gal. per min.)
Casing propriate place of the p	Sand 0 7	2	DEPTH OF GROUT SEAL (to nearest foot)	METHOD USED TO MEASURE PUMPING RATE Bucket
NUMBER OF UNSUCCESSFUL WELLS:  OCITIER CASHNG (# used)  FILE DOTTER  MAIN CASHNG (# used)  FOR DOTTER CASHNG (# us	Mia Rock 72 3	00 -	(enter 0 if from surface)	BEFORE PUMPING 54 tt.
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SCREEN RECORD  SCREEN RECORD  Or open hole  Inject appropriate  DEPTH (nearest ft.)  DEPTH (n		-	A S I	(CIRCLE) (YES or NO)
NUMBER OF UNSUCCESSFUL WELLS:  WELL HYDROFRACTURED  WELL HYDROFRACTURED  WELL HYDROFRACTURED  WELL HYDROFRACTURED  OPEN  WELL HYDROFRACTURED  WELL WAS ABANDONED AND SEALED  WHEN THIS WELL WAS COMPLETED  PEST WELL CONVERTED TO PRODUCTION  WELL  HELEBY CERTEY THAT THE WILL HAS BEEN CONSTRUCTED IN AND IN CONVENIENCE OF CONVENIENCE OF SCREEN  OF SCREEN  OF SCREEN  OF SCREEN  MDE USE ONLY  OF SCREEN  MDE USE ONLY  MDE USE ONLY  NOWLEDGE  STITE SUPERVISOR (sign. of driller or journeyman parts) by the pulic and other governmental subject to the Maryland Public Talorm, and that Act. This form in this form is used in processed. You have the right to inspect, amend, or correct this form. The Maryland Department of the Binst convenience of the Maryland Public Talorm, and That In this form to be fing processed. You have the right to inspect, amend, or correct this form. The Maryland Department of the Binst convenience or public to the Maryland Public Talorm, and That In this form to propriate in this form. The Maryland Department of the Binstronmark or maryland public to the Maryland Public Talorm, and That In this form to propriate in the form more propriate in the form to propriate in	U-Housest ne	200	Screen type	MUST BE COMPLETED FOR ALL WELLS.  TYPE OF PUMP INSTALLED
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WELL HYDROFRACTURED  VESTOR  CIRCLE APPROPRIATE LETTER  A WELL WAS ABANDONED AND SCALED WHEN THIS WELL WAS COMPLETED  E ELECTRIC LOG OBTAINED  P TEST WELL CONVERTED TO PRODUCTION WELL  I HERBY CERTEY THAT THIS WELL HAS SEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 260 x 01 "WELL CONSTRUCTION" AND TO COMPORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED  OF SCREEN  DRILLERS SIGNATURE  CRAVEL PACK  WELL BRILLERS LIC. NO. 1 M 2 D 2 1  GRAVEL PACK  WELL BRILLERS SIGNATURE  CRAVEL PACK  WELL BRILLERS SIGNATURE  CRAVEL PACK  WELL BRILLERS  SIGNATURE  CRAVEL PACK  WELL BRILLERS  SIGNATURE  CRAVEL PACK  WELL BRILLERS  SIGNATURE  CRAVEL PACK  WELL BRILLERS  SIGNATURE  CRAVEL PACK  WELL BRILLERS  SIGNATURE  CRAVEL PACK  WELL BRILLERS  SIGNATURE  CRAVEL PACK  WELL BRILLERS  SIGNATURE  CRAVEL PACK  WELL BRILLERS  SIGNATURE  TO TO BE FILLED IN BY DRILLERS)  TO 72  SITE SUPERVISOR (sign. of driller or journeyman)  TELESCOPE  LOG  TA 75 76  TELESCOPE  LOG  CASING HEIGHT  (circle appropriate box  and enter casing height)  LAND SURFACE  LAND SURFACE  LAND SURFACE  (CICRO appropriate box  and enter casing height)  LAND SURFACE  LAND SURFACE  (NEAREST NOW)  (NEAREST NOH)  DIAMETER  OF SCREEN  OF SCREEN  FOR THE NOW 86  MDE USE ONLY  (NOT TO BE FILLED IN BY DRILLER)  TO 72  TO 72  THE ESCOPE  TO 74 75 76  THE ESCOPE  LOG  TO 74 75 76  THE ESCOPE  LOG  CASING HEIGHT  (circle appropriate box  and enter casing height)  LAND SURFACE  LAND SURFACE  LAND SURFACE  LAND SURFACE  (NOE AS 10 MB SURFACE  LAND SURFACE  A 43 TO 70  TO 80 MB SUPERVISOR  TO 10 MB SUPERVISOR	Tables and	A 5	C 2 DEPTH (nearest ft.)	PUMP COLUMN LENGTH 37 41
CIRCLE APPROPRIATE LETTER  A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED  E ELECTRIC LOG OBTAINED P TEST WELL CONVERTED TO PRODUCTION WELL  INERIEBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN N CONFORMANCE WITH COMAN 26 04 04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED OF SCREEN  DRILLERS LIC. NO. 1 M D D D 1 FOR WITH COMMAN 26 04 04 "WELL CONSTRUCTION" AND INCOMPLETE TO THE BEST OF MY KNOWLEDGE  DRILLERS LIC. NO. 1 M D D D 1 FOR WITH COMPLETE TO THE BEST OF MY NOWLEDGE  DRILLERS SIGNATURE ON APPLICATION)  MOE USE ONLY (NOT TO BE FILLED IN BY DRILLER)  TO 72  SITE SUPERVISOR (sign. of driller or journeyman reasonable for sidework if different from parmittee)  TELESCOPE LOG  TA 75 76  LAND SURFACE  LAND SURFACE  LONG SURFACE	country yes	The same of the sa		CASING HEIGHT (circle appropriate box
E ELECTRIC LOG OBTAINED P TEST WELL CONVERTED TO PRODUCTION WELL  INEREBY CENTERY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMMA 86.06 AN "WELL CONSTRUCTED" IN ACCORDANCE WITH COMMA 86.06 AN "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTONER BY ACCUPANTE AND COMPLETE TO THE BEST OF MY NOCWLEDGE.  DRILLERS LIC. NO. 1 M S D S 1  DRILLERS SIGNATURE ON APPLICATION)  LIC. NO. 1 D S 1  SITE SUPERVISOR (sign. of driller or journeyman teasopposable for silewark if different from permittee)  TELESCOPE  LOG STATES  LATITUDE 3 9. 32.6 91  LATITUDE 3 9. 32.6 91  LONGITUDE 7 6. 8 7 7 9 7 9  LONGITUDE 7 6. 8 7 7 9 7 9  LONGITUDE 7 6. 8 7 7 9 7 9  LONGITUDE 7 6. 8 7 7 9 7 9  LONGITUDE 7 6. 8 7 7 9 7 9  LONGITUDE 7 6. 8 7 7 9 7 9  LONGITUDE 7 6. 8 7 7 9 7 9  LONGITUDE 7 6. 8 7 7 9 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	CIRCLE APPROPRIATE LETT	R	H 2 23 24 26 30 32 36	( + / above )
WELL  I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26 04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONSTRUCTION THE BEST OF MY INCOMEDICAL PACK.  DRILLERS LIC. NO. 1 M D D D D 1  GRAVEL PACK INCOMEDICAL PACK INCO	E ELECTRIC LOG OBTAINED  TEST WELL CONVERTED TO PRODU	HILL THAT HE	C 3 R 38 39 41 45 47 51 E	49 50 51 1001)
DRILLERS LIC. NO. 1 M S D Q 2 7 1  GRAVEL PACK  WAS FLOWING WELL	WELL  I HEREBY CERTIFY THAT THIS WELL HAS BEEN C ACCORDANCE WITH COMAR 26 04 (34 "WELL CONS IN CONFORMANCE WITH ALL CONDITIONS STATE CAPTIONED PERMIT, AND THAT THE INFORMAT HEREM IS ACCURATE AND COMPLETE TO THE	TRUCTION" AND D IN THE ABOVE ON PRESENTED	DIAMETER (NEAREST INCH) 56 60	LONGITUDE 7 6 . 2 7 7 9 7 (DEFAULT COORD. WGS 84)
LIC. NO. 1 D T (E.R.O.S.) W Q  SITE SUPERVISOR (sign. of driller or journeyman responsible for silework if different from parmittee)  TELESCOPE LOG  MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)  Form. The Maryland Department of the Environment is subject to the Maryland Public liaformation Act. This form may be made available on the Internet via MDE's website and is subject to inspection or copying, in whole or in part, by the public and other governmental services if not protected by federal or state law.	DRILLERS LIC. NO. 1 M S D C	un	GRAVEL PACK  # WELL DRILLED  WAS FLOWING WELL	the Maryand Code personal info. requested on this form is used in processing this form pursuant to COMAR 26,04.04. Failure to provide the info, may result in this form not being processed. You
SITE SUPERVISOR (sign. of driller or journeyman  TELESCOPE LOG  TO THE SUPERVISOR (sign. of driller or journeyman parmittee)  TELESCOPE LOG	All and a second states	5	(NOT TO BE FILLED IN BY DRILLER) T (E.R.O.S.) W Q	form. The Maryland Department of the Environment is subject to the Maryland Public Taformation Act. This form may be made available on the Internet via MDE's website and is
			TELESCOPE LOG 74 75 76	part, by the pulic and other governmental

Page | of | pate | 09 | 76 | 1017

Review CABAHUS
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### FIELD DATA SHEET HOWARD COUNTY WELL YIELD TEST

Well Permit No Location of pr	operty (road)	684 WARDSTAC	k PD Block Plan	
Subdivision _		Lot	Block Plan	Sec.
Well Driller _	Mayre, Ja	SepH Owner	er	
	2	4		
Distanc	e of measuring p	oint (M.P.) above gr	round 1	
Static	water level (S.W	oint (M.P.) above g: (.L.) below M.P.	54'	
	pumping rese			
			Pumping rate 20	0.200
Total ti	me to	reach pumping water	Pumping rate 20 It.	below M.P.
			recorded every 15 minu	
TIME (in 15 minute in-	below M.P.	time to fill &	FLOW METER READING (if used)	(gallons per
tervals	201011111	gallon bucket	(11 0360)	minute)
9:00	193	123		5
	_	_		
9:30	193	125	NEEDY NAMED IN	5
1.00				
		-		
ML				

Page	of	
Date	9-26-	2017

Review				

## FIELD DATA SHEET HOWARD COUNTY WELL YIELD TEST

Subd	ivision & Patrick Costello Property Lot Block Plat Sec Driller Gough & Mayre Sr. Owner Wood stock Land LLC
	Depth of well 300' Distance of measuring point (M.P.) above ground Static water level (S.W.L.) below M.P. 54'
I.	High rate pumping reservoir drawdown
	Time pump started 7:30 Pumping rate 20 9 pm Total time 30 min to reach pumping water level 193 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 RATE time to fill % 1 gallon bucket	FLOW METER READING (if used)	CALCULATED FLOW (gallons per minute)
7:45	129'	3 mec.		20 9PM
8:00	193	344		20
8: 15	193	12 sec		5
8: 30	193	12 sec.		5
81.45	193	12 Acc .		حي ا
9:00	193	12 Ale.		5
9:15	193	12 με		5
9:30	193	12 010		5
9:45	199	12 100		5
10:00	193	15 ALC		5
10:15	193	12 200		5
16:30	199	1200		5
10:45	193	12 200		5
11:00	199	12 ser.		5

### HOWARD COUNTY HEALTH DEPARTMENT BUREAU OF ENVIRONMENTAL HEALTH

WELL & SEPTIC PROGRAM
TEL: (419)313-1771 FAX: (410)313-2648

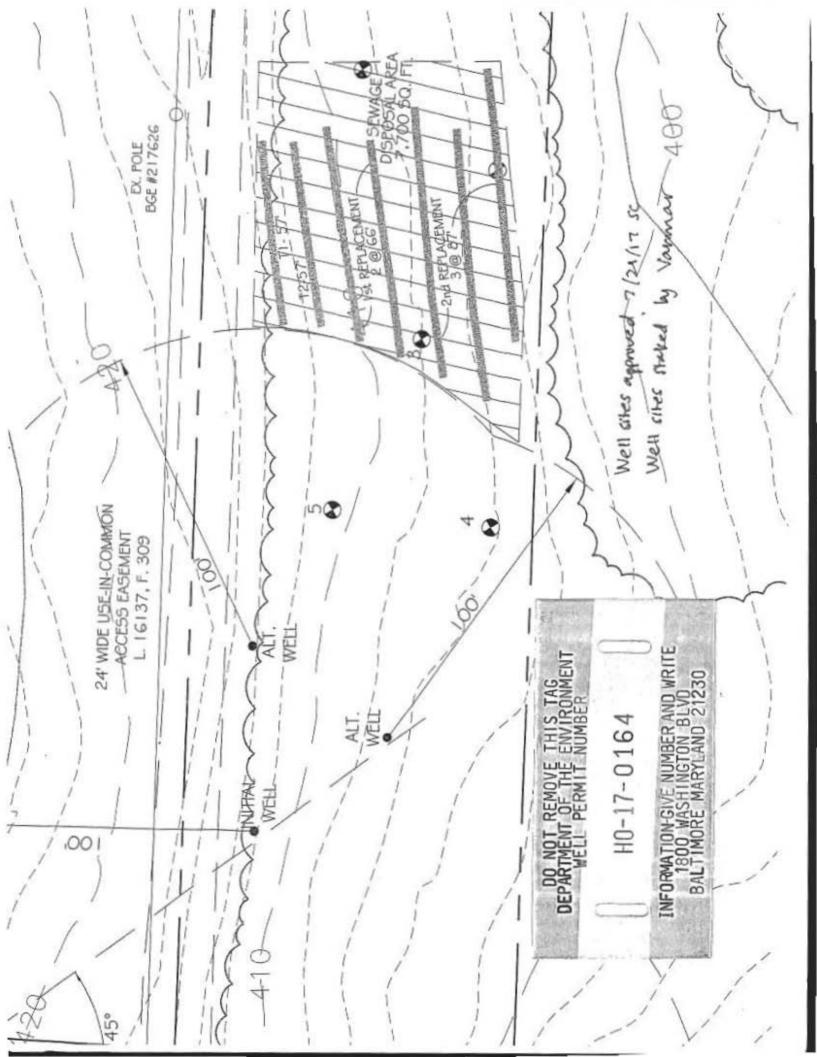
### Information Form for the Installation of the Well Pump, Pitless Adapter, and Supply Piping

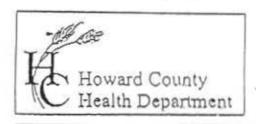
NOTE: The installer is responsible for requesting an inspection prior to 9 am on the day of the desired
inspection. No work is to be covered until approved by the Health Department. All installations must comply with the National Standard Plumbing Code (NSPC, as amended locally) and COMAR 26.04.04 (MD Well
Construction Regulations). Submission of a complete form is required prior to Use and Occupancy appraval.
Company Name: Shellan Himbing, Telephone #: 4/11 716-2/27
Address: 1113 Geren Vaffey Hd.
United Little get 1965 STORY
(Must circle one) Cicensed Plumber Licensed Well Driller Licensed Well Pump Installer License # and name of individual responsible for the field installation:
Name (Print): George Shelton, Jr License 16905
*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. Forty 185+ Dilders Telephone #: 410 418-8900 Subdivision Stati-14 Cosk To Pick of Policy Lot #: Well Tag #: HO - 19 - 0164 21. 115
Site Address: Mrs 4 Nordstock Rd. Lot #:Well Tag #: HO - 17 - 6164 3
hostopine, mD
Submersible Pump Data  Make: Ceu Ce Make: Mell Cap and Electric Conduit  Two piece watertight cap:
Model #: 10C315 Model#: MBNL50 Screened, vented well cap:
Pump Capacity // GPM Depth: 2/11 (36" min) Cap secured to casing:
Well Yield: GPM NSF/WSC approved: Conduit min 18" B.G.:  Depth of well encountered at time of pump installation: (feet) Conduit secured to well cap:
If pump capacity exceeds well yield, a low water cut off switch is required by NSPC 1990 Section 17.8.4
Torque arrestors, Cable guards, or other acceptable method used- Must circle one
Safety rope, if used, attached to brass rope adapter or other acceptable method inside of well easing
Piping to house House Connection
Type: Odysth.  PVC sleeve to undisturbed soil at wall penetration:
PSI: // (160 psi min)  Depth of supply line: 3/; (36" min)  Length of sleeve(5" minimum from foundation): 10"  Sleeve sealed properly: 465
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
approved prior to installation
Signature of company representative responsible for installation date
Signature of company representative responsible for installation date
For Health Department Use Only - Not to be completed by Justailer
Date Insp. Requested: 3118 Date Insp. Approved: 3118 Inspector: D
Inspection Data: Pitless adapter watertight & water supply line at least 36" below grade 45" 3(18)
Two piece cap installed and attached to casing securely  Elec. conduit extends at least 18" below grade/attached to cap properly43" 3 \( \lambda \)
Safety rope not outside of well cap/casing
Correct well tag attached properly and casing 8" above finished grade [+ 3][[8]]e
Water supply line sleeved adequately at house connection  Adequate grout observed below pitless adapter
3/1/18 @_
Cop mss. mg Balt.
Conduit not sealed
* Fixed wefore Peauling and
13/5/18 * Fixed wefore leaving respection
Valent
A SEE SITE INSPECTION SHEET FOR DETAIL (C)

200 \$ 1840 D w/Shut

### SITE INSPECTION SHEET

		a postic	LOCATIOND		7700	7
SHARED FASTURNA	,			A 54' 3 78' A 306' 8 306'		
000	JEND DERGIZO ROPANE		SEWER LINE ROISING WHOE	E) * WELL	LINE CAPLING	





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

### TO ALL INTERESTED PARTIES

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

Well Site Location:	1684 Woodstock Rd
Subdivision/Property Name Lot#	Road Name
The well site has been staked	by Van Mai associates
(professional land surveyor or compa	iny employing professional land surveyors)  (e) and does not require a site inspection.
(00)	to and does not require a site mapeenon.

C) The well driller, builder or property owner will call the Health Department to schedule a time to meet in the field to verify the proposed well site location.

This sheet, along with two copies of an acceptable well site plan, must be attached to the green well permit application.

Revised 3/11/05

### Wolf, Kevin

From: John Boris -MDE- <john.boris@maryland.gov>

Sent: Thursday, June 02, 2016 3:00 PM

To: Williams, Jeffrey

Cc: Steven Krieg -MDE- (steven.krieg@maryland.gov); Wolf, Kevin; Naomi Howell -MDE-

Subject: Re: Certifying well for new house

Jeff,

Your answer to question #1 is that water quality is not consider demand in this section of regulation. You are correct in stating that the issue of backwash/reject water will be an issue on a lot of record. For question #2 this well will still require an FCOP regardless of whether this is a new well or replacement well.

If you have any further questions please feel free to contact me.

John A. Boris, Jr., LEHS Geologist Program Consultant Maryland Dept of the Environment Onsite Systems Division Office: (410) 537-3678 Cell: (443) 992-6195 Fax: (410) 537-3163

On Wed, Jun 1, 2016 at 12:08 PM, Williams, Jeffrey < jewilliams@howardcountymd.gov > wrote:

Hello gentlemen. Following up on a conversation Kevin had with John, I'd like to get MDE's take on an interpretation of the regs. We have a well that was recently drilled as a replacement well for an existing house. The well has extremely elevated Na, Cl, TDS levels. It has not yet been put into service for the existing house. The owner is instead pursuing a tear-down/rebuild on the lot. The two regulatory questions are:

- 1. 26.04.02.03F4 states that before issuing a building permit, we must certify the water system as "meeting the water demand." Can we use elevated levels of a secondary contaminant to state that the existing well is not capable of meeting the water demand and therefore they must drill a new well for the new house? Alternatively, could we use this section to state that it would either need to show details of a whole house r/o with room for backwash discharge or drill a new one for building permit approval? Or, would "water demand" be strictly interpreted to mean only yield?
- 2. Since this is a well being newly put into service to serve a new house, can we say it needs an ICOP, or would it not get one because it's the same type of use (residential)?

Thanks

Jeff Williams

Program Supervisor, Well & Septic Program

Bureau of Environmental Health

Howard County Health Dept.

410-313-4261

jewilliams@howardcountymd.gov

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### Wolf, Kevin

From:

Wolf, Kevin

Sent:

Friday, January 13, 2017 12:42 PM

To:

'Patrick Costello'

Subject:

RE: 1684 Woodstock Road

Attachments:

20170113124702913.pdf

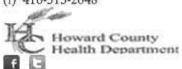
#### Patrick,

I've sketched out a possible well box. I am not sure if it is 1500sq ft or not. You may have to push the SDA south east some to get the 100' setback from the proposed well box. This is just a possibility of course. Ron may need to do some work but you see the 45° down-gradient from 1676 Woodstock Rd SDA. Need full topo of these lots. Plan may need to be larger.

Have him submit a Perc Cert (PC) along with this site plan. You can remove the notation on the original PC submittal requiring BAT for the new house.

Thanks,

Kevin M. Wolf, LEHS, REHS/RS Groundwater Mgmt. Sec. Supervisor Well & Septic Program Bureau of Environmental Health 8930 Stanford Blvd. Columbia, MD 21045 (o) 410-313-2645 (f) 410-313-2648



kwolf@howardcountymd.gov

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From: Patrick Costello [mailto:pcostello@fortywest.com]

Sent: Wednesday, January 11, 2017 5:00 PM

To: Wolf, Kevin

Subject: Re: 1684 Woodstock Road

Kevin -

Can you shoot me over your markup or sketch of what you were talking about with the well box and the 45 degrees?

Thanks,

From: "Wolf, Kevin" < <a href="mailto:KWolf@howardcountymd.gov">KWolf@howardcountymd.gov</a>>
Date: Wednesday, January 11, 2017 at 4:35 PM
To: Patrick Costello <a href="mailto:pcostello@fortywest.com">pcostello@fortywest.com</a>>

Subject: RE: 1684 Woodstock Road

Thanks Patrick. Forward a copy of that invoice to me and ill get your demo ready. I have a perc repair tomorrow all day so this will probably happen Friday.

Kevin

From: Patrick Costello [mailto:pcostello@fortywest.com]

Sent: Wednesday, January 11, 2017 3:19 PM

To: Wolf, Kevin

Subject: Re: 1684 Woodstock Road

Kevin -

Attached is well abandonment report from Mayne. At this point we plan to keep the drilled well to allow for a future owner to use for irrigation.

Fogles is coming out tomorrow to pump out old tank. I will forward invoice after they do so.

Best,

Pat

From: "Wolf, Kevin" < KWolf@howardcountymd.gov > Date: Wednesday, January 11, 2017 at 11:57 AM

To: Patrick Costello < pcostello@fortywest.com >

Subject: 1684 Woodstock Road

### Pat,

To confirm our previous phone conversation, we are ok to proceed with your demo request at this time. We will however need the following in order to issue the demo:

- abandonment of the pit well and the existing drilled well (Joe Mayne should supply you with an MDE Well Abandonment Form)
- . Copy of an invoice from a waste hauler that the existing septic tank and components have been pumped out.

Let me know how when VanMar will resubmit the perc cert and revised well site plan.

Thanks,

Kevin M. Wolf, LEHS, REHS/RS Groundwater Mgmt. Sec. Supervisor Well & Septic Program Bureau of Environmental Health 8930 Stanford Blvd. Columbia, MD 21045 (o) 410-313-2645 (f) 410-313-2648

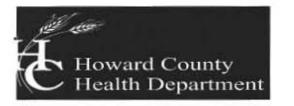


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### FILE INQUIRY NOTES

DATE	RESULTS OF REVIEW FOR FILE
9/9/15	On site after drilling, well 400', 3.5 gpm. 30' of pvc caring
	used (mil extend to 32' at request of homeowner) Well is
	location closest to road on site plan - COLLECT SODIUM,
	CHLORIDE, - TOS SAMPLES at yield along with radium.
	On site during yield test started pumping at 7:15 am, test
	started at 7:45 am 24' static water level, 4 gpm. 282'
	measuring point. Cosing depth will be 35' total ble homeour
	will raise grade around well. Already grouted - 8 bags
	cement used. Old well obandoned - 47' deep 15 bags
	Radium, sodium, chloride, + TDS samples collected at 10:45 am



### 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

October 16, 2015

Woodstock Land, LLC Attn: Patrick Costello 3230 Bethany Lane Suite 1 Ellicott City, Maryland 21042

> RE: 1684 Woodstock Road Woodstock, Maryland Well Tag: HO - 15 - 0124

Dear Mr. Costello:

A sample was collected during a yield test on September 11, 2015 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  $6.8 \pm 3.9$  picocuries/liter (pCi/L), while the Gross Beta level was  $13.3 \pm 4.0$  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).

At the time of testing and with respect to these parameters, the future well water supply is within EPA regulatory standards. Given these findings, additional testing for these parameters will not be required to secure the future Use & Occupancy. For these parameters, the installation of a water softener system and / or a reverse osmosis system most likely will not be necessary. If treatment is installed, this may further control these contaminants. Please note that other standard testing parameters (bacteria, nitrate, turbidity and sand) will still be required to potentially secure a Use & Occupancy for this well.

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,

Bert Nixon, Director

Bureau of Environmental Health

Enclosure cc: Property file

### SEND REPORT TO: BENT NOON Howard Co. Health Dept. 8930 Slambard Blad

Columbia, MD 21045

### DEPARTMENT OF HEALTH AND MENTAL HYGIENE

Laboratories Administration

Eureau of Environmental Health 201 W. Preston St., Baltimore, MD 21201-Robert A. Myers, Ph.D., Director

RADIATION ANALYSIS REQUEST FORM

Lab No.

Pla	ant/Site Name: Wood	stock			Coun	ty: Howa	rd -	N.
San	mple Source: \684	Wind	stock &	21	Locat	tion: Ho-	5-0124	
	don-222 Bottle A _ Bottle B _			THE COLUMN TWO IS NOT	-222 Field Blank		/ell no., lab sink, sar	mple tap, etc.)
Cor	unty 13			Plant	No.			100
CH	ECK (one per Box)		Mark Ma	460	NE STA		Fall of the	Thinks at
Lar	Type inking Water  of  indfill  eam  oner  of	1000		1 2 2 2 2 2	Point of Collection rce (Raw) tribution (treated) L	0 0	Testin Emergency Routine Recheck Special	g 5
Sul	bmitters Code:				Federal Project:			
	llector: S. Collin				Telephone No.:	410-313-	C2 87	and the same
	te Collected: 9/11	112	2 115		Time Collected:	10:45	The state of the s	p.m.
	S10.874.7	/ 15			Field Chlorine:			p.m.
	eld pH:	1			SHARWANI SHARWAN			
Nit	tric Acid Preserved:	Yes	/ No		Iced: Yes	No	A B	
Ren	marks: Sample	tak	en duri	ng yield				
		EPA	T.V.N.	Method No.	Powelle (o.C.)		1	
Ø	TEST		Lab No.		Results (pCi/L)	Date Analyzed	Analyst	Date Reported
0	Gross Alpha	Code 4000	D442	EPAGDOID	6,8±3,9	Q 16 IC	Analyst	Reported
0	Gross Alpha Gross Beta	4000 4100		- All Sances Comp		9/16/15		Reported
00	Gross Alpha Gross Beta Radium-226	4000 4100 4020	D442	EPAGDOID	6,8 + 3,9		LOT	Reported
0000	Gross Alpha Gross Beta Radium-226 Radium-228	4000 4100 4020 4030	D442	EPAGDOID	6,8 + 3,9	9/16/15	LOT	Reported
	Gross Alpha Gross Beta Radium-226 Radium-228 Total Uranium	4000 4100 4020 4030 4006	D442	EPAGDOID	6,8 + 3,9	9/16/15	LOT	Reported
00000	Gross Alpha Gross Beta Radium-226 Radium-228 Total Uranium Radon-222 (Bottle A)	4000 4100 4020 4030 4006 4004	D442	EPAGDOID	6,8 + 3,9	9/16/15	LOT	Reported
	Gross Alpha Gross Beta Radium-226 Radium-228 Total Uranium Radon-222 (Bottle A) Radon-222 (Bottle B)	4000 4100 4020 4030 4006 4004 4004	D442	EPAGDOID	6,8 + 3,9	9/16/15	LOT	Reported
0000000	Gross Alpha Gross Beta Radium-226 Radium-228 Total Uranium Radon-222 (Bottle A) Radon-222 (Bottle B) Radon Field Blank A	4000 4100 4020 4030 4006 4004 4004 4004	D442	EPAGDOID	6,8 + 3,9	9/16/15	LOT	Reported
	Gross Alpha Gross Beta Radium-226 Radium-228 Total Uranium Radon-222 (Bottle A) Radon-Field Blank A Radon Field Blank B	4000 4100 4020 4030 4006 4004 4004	D442	EPAGDOID	6,8 + 3,9	9/16/15	LOT	Reported
	Gross Alpha Gross Beta Radium-226 Radium-228 Total Uranium Radon-222 (Bottle A) Radon-222 (Bottle B) Radon Field Blank A	4000 4100 4020 4030 4006 4004 4004 4004	D442	EPAGDOID	6,8 + 3,9	9/16/15	LOT	Reported
	Gross Alpha Gross Beta Radium-226 Radium-228 Total Uranium Radon-222 (Bottle A) Radon-Field Blank A Radon Field Blank B	4000 4100 4020 4030 4006 4004 4004 4004	D442	EPAGDOID	6,8 + 3,9	9/16/15	LOT	Reported
Da	Gross Alpha Gross Beta Radium-226 Radium-228 Total Uranium Radon-222 (Bottle A) Radon-222 (Bottle B) Radon Field Blank A Radon Field Blank B Tritium	4000 4100 4020 4030 4006 4004 4004 4004	D442 O442	EPAGDOID	6,81 3,9 13,31 4.0	9/16/15	LOT	Reported
Da	Gross Alpha Gross Beta Radium-226 Radium-228 Total Uranium Radon-222 (Bottle A) Radon-222 (Bottle B) Radon Field Blank A Radon Field Blank B Tritium	4000 4100 4020 4030 4006 4004 4004 4004 4004	D442 O442	Received By:	6,81 3,9 13,31 4.0	9/16/15	LOT	Reported
Dar Dar San	Gross Alpha Gross Beta Radium-226 Radium-228 Total Uranium Radon-222 (Bottle A) Radon-222 (Bottle B) Radon Field Blank A Radon Field Blank B Tritium  te Received:  ta Release Signature:  Lab	4000 4100 4020 4030 4006 4004 4004 4004 14 [14	D442 O442	Received By:	6,823,9 13,354.0	9/16/15 9/16/15 12 Date:	LOT	Reported
Dar Dar San	Gross Alpha Gross Beta Radium-226 Radium-228 Total Uranium Radon-222 (Bottle A) Radon-222 (Bottle B) Radon Field Blank A Radon Field Blank B Tritium  te Received:	4000 4100 4020 4030 4006 4004 4004 4004 14 [14	D442 O442	Received By:	6,823,9 13,354.0	9/16/15 9/16/15 12 Date:	LOT	Reported

### SEND REPORT TO: Bert Nixor

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

Laboratories Administration

Provided to Health Dept Laboratories Administration
201 W. Preston St., Beltimore, MD 21201
Robert A. Myers, Ph.D., Director

2 Date:

Lab No.

Columbia, MD 20045

RADIATION ANALYSIS REQUEST FORM

	nt/Site Name: 5-eld	Blow	NE		Count	y	Navo	
San	ple Source: 111,0				Locat	COOK STATE OF THE PARTY OF THE	10 106	
Rad	on-222 Bottle A			Radon	-222 Field Blank		ell no., lab sink, sar	
	Bottle B_	0.5				Bottle	В	March Co.
Cot	inty 13			Plant ?	No.			
СН	ECK (one per Box)	150				455	Fall A	
	Type		Service		Point of Collection	- tale	Testin	g
Dri	nking Water	Com	munity	□ Sou	rce (Raw)	0	Emergency	0
	dfill 🖂	Non-	Community	Dist	ribution (treated)	*0	Routine	0
Stre	am 🗆	Priva		O MC		0	Recheck	
Oth	The Control of the Co	Other					Special	
Fie	te Collected: 0 / (1  Id pH:  ric Acid Preserved:	/15 Yes [	√ No		Fielephone No.: Fime Collected: Field Chlorine:	No l	3- 67.67 a.m.	);3,7 p.m
Fie Nit Rei	ld pH: ric Acid Preserved: marks:	/15	y No.		Field Chlorine:	No No	a.m	p.m
Fie Nit Ren	ld pH: ric Acid Preserved: marks: TEST	Yes [ EPA Code	Lab No.	Method No.	Field Chlorine: ced: Yes  Results (pCi/L)	No Date Analyzed	a.m.	Date Reported
Fie Nit Ren	Id pH:  ric Acid Preserved:  marks:  TEST  Gross Alpha	Yes [ EPA Code 4000	Lab No.	Method No.	Field Chlorine:  ced: Yes  Results (pCi/L)	Date Analyzed	Analyst	Date Reported
Fie Nitt Ren	Id pH: ric Acid Preserved: marks:  TEST  Gross Alpha Gross Beta	Yes [ EPA Code 4000 4100	Lab No.	Method No.	Field Chlorine: ced: Yes  Results (pCi/L)	No Date Analyzed	a.m.	Date Reported
Pie Nitt Ren	ric Acid Preserved: marks:  TEST  Gross Alpha Gross Beta Radium-226	Yes [ EPA Code 4000 4100 4020	Lab No.	Method No.	Field Chlorine:  ced: Yes  Results (pCi/L)	Date Analyzed	Analyst	Date Reported
Fie Nitt Ren	ric Acid Preserved: marks:  TEST  Gross Alpha Gross Beta Radium-226 Radium-228	Yes [ EPA Code 4000 4100 4020 4030	Lab No.	Method No.	Field Chlorine:  ced: Yes  Results (pCi/L)	Date Analyzed	Analyst	Date Reported
Fie Nitt Ren	ric Acid Preserved: marks:  TEST  Gross Alpha Gross Beta Radium-226 Radium-228 Total Uranium	Yes [ EPA Code 4000 4100 4020 4030 4006	Lab No.	Method No.	Field Chlorine:  ced: Yes  Results (pCi/L)	Date Analyzed	Analyst	Date Reported
Fie Nitt Ren	ric Acid Preserved: marks:  TEST  Gross Alpha Gross Beta Radium-226 Radium-228 Total Uranium Radon-222 (Bottle A)	Yes [ EPA Code 4000 4100 4020 4030 4006 4004	Lab No.	Method No.	Field Chlorine:  ced: Yes  Results (pCi/L)	Date Analyzed	Analyst	Date Reported
Ren d	ric Acid Preserved: marks:  TEST  Gross Alpha Gross Beta Radium-226 Radium-228 Total Uranium Radon-222 (Bottle A) Radon-222 (Bottle B)	Yes [ EPA Code 4000 4100 4020 4030 4006 4004 4004	Lab No.	Method No.	Field Chlorine:  ced: Yes  Results (pCi/L)	Date Analyzed	Analyst	Date Reported
Nit Ren	ric Acid Preserved: marks:  TEST  Gross Alpha Gross Beta Radium-226 Radium-228 Total Uranium Radon-222 (Bottle A) Radon-222 (Bottle B) Radon Field Blank A	Yes [ EPA Code 4000 4100 4020 4030 4006 4004 4004 4004	Lab No.	Method No.	Field Chlorine:  ced: Yes  Results (pCi/L)	Date Analyzed	Analyst	Date Reported
Fie	ric Acid Preserved: marks:  TEST  Gross Alpha Gross Beta Radium-226 Radium-228 Total Uranium Radon-222 (Bottle A) Radon-Field Blank A Radon Field Blank B	Yes [ EPA Code 4000 4100 4020 4030 4006 4004 4004	Lab No.	Method No.	Field Chlorine:  ced: Yes  Results (pCi/L)	Date Analyzed	Analyst	Date Reported
Nit Ren	ric Acid Preserved: marks:  TEST  Gross Alpha Gross Beta Radium-226 Radium-228 Total Uranium Radon-222 (Bottle A) Radon-222 (Bottle B) Radon Field Blank A	Yes [ EPA Code 4000 4100 4020 4030 4006 4004 4004 4004	Lab No.	Method No.	Field Chlorine:  ced: Yes  Results (pCi/L)	Date Analyzed	Analyst	Date Reported
Nit Ren	ric Acid Preserved: marks:  TEST  Gross Alpha Gross Beta Radium-226 Radium-228 Total Uranium Radon-222 (Bottle A) Radon-Field Blank A Radon Field Blank B	Yes [ EPA Code 4000 4100 4020 4030 4006 4004 4004 4004	Lab No.	Method No.	Field Chlorine:  ced: Yes  Results (pCi/L)	Date Analyzed	Analyst	Date Reported
Nit Ren	ric Acid Preserved: marks:  TEST  Gross Alpha Gross Beta Radium-226 Radium-228 Total Uranium Radon-222 (Bottle A) Radon-Field Blank A Radon Field Blank B	Yes [ EPA Code 4000 4100 4020 4030 4006 4004 4004 4004	Lab No.	Method No.	Field Chlorine:  ced: Yes  Results (pCi/L)	Date Analyzed	Analyst	Date Reported

Lab Use Only	Yes	No	N/A
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Sample pH <2.0?	V		
Received within holding time?			

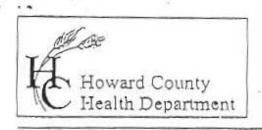
09/14/15

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

Received By:

Date Received:

Data Release Signature:



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

### TO ALL INTERESTED PARTIES

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

Well Site Location:

S. Patrick Costello Prop | 1684 Woodstock Rd

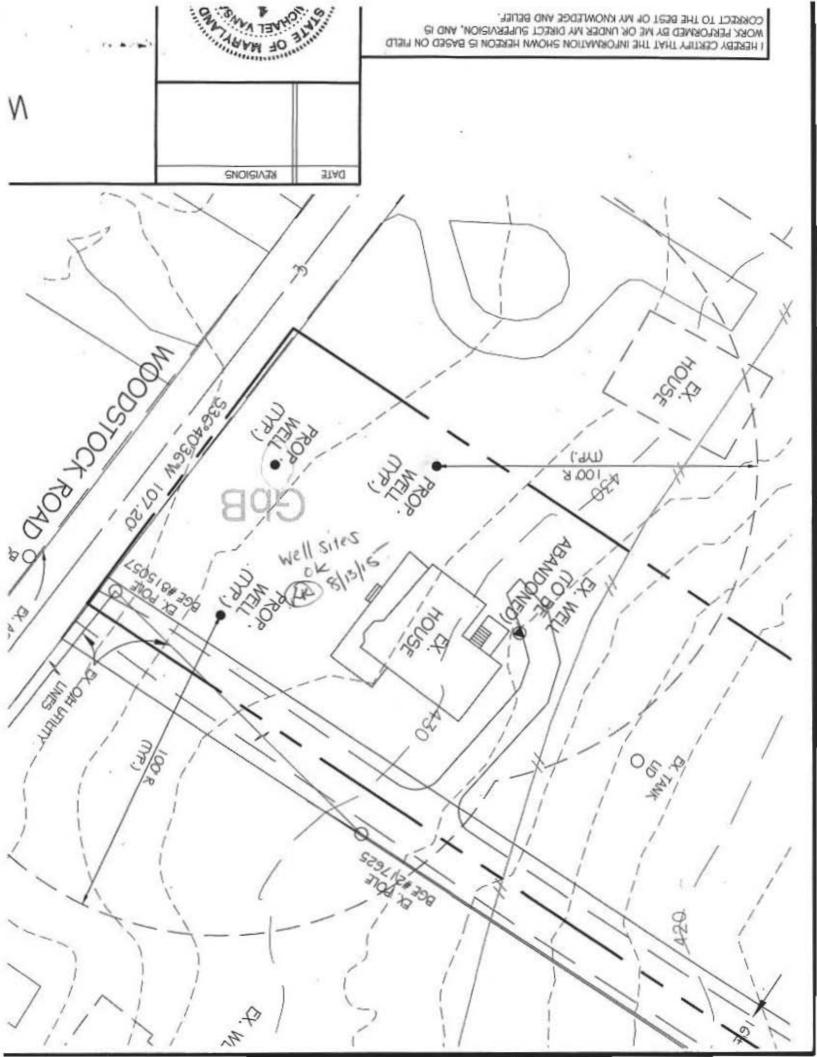
Subdivision/Property Name Lot# Road Name

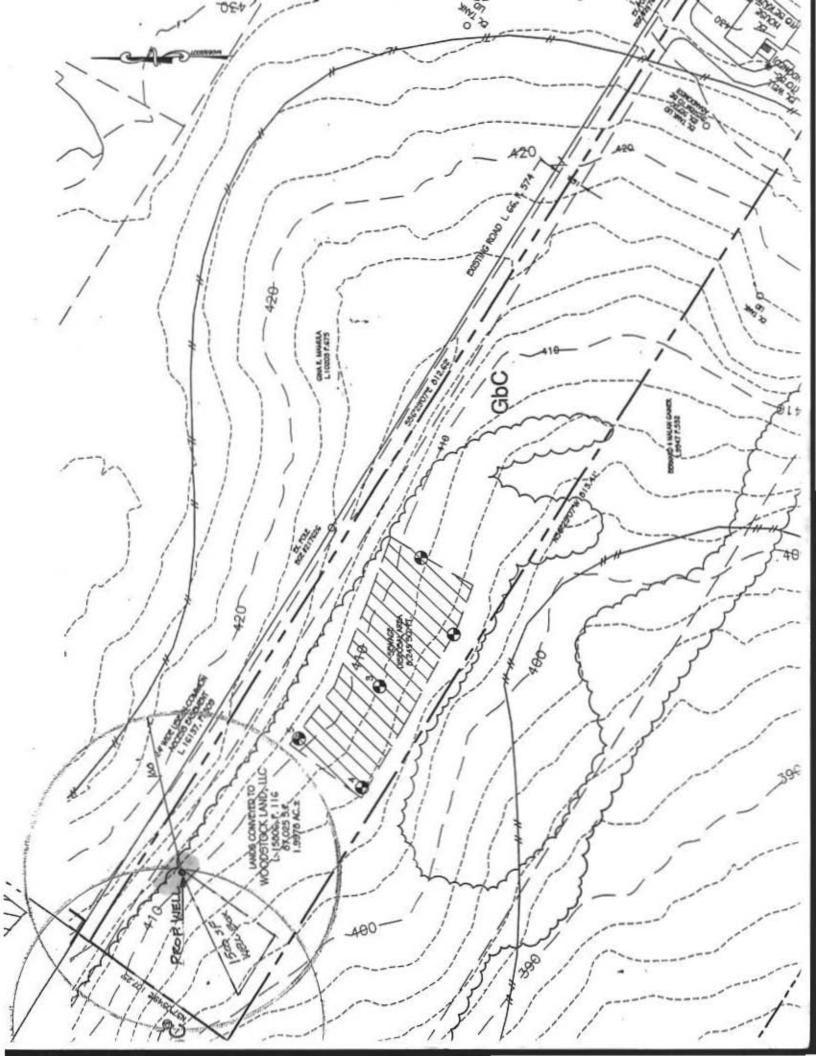
The well site has been staked by Van Man Associates Inc., (professional land surveyor or company employing professional land surveyors) on 7-8-2015 (date) and does not require a site inspection.

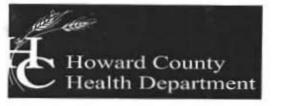
C) The well driller, builder or property owner will call the Health Department to schedule a time to meet in the field to verify the proposed well site location.

This sheet, along with two copies of an acceptable well site plan, must be attached to the green well permit application.

Revised 3/11/05







### Bureau of Environmental Health

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

October 6, 2017

Woodstock Land LLC 3230 Bethany Lane Suite 1 Ellicott City, Maryland 21042

> RE: Patrick Costello Property 1684 Woodstock Road Woodstock, Maryland 21163 Well Tag: HO - 17 – 0164

Dear Woodstock Land LLC:

A sample for a new well was collected during a yield test on September 26, 2017 and submitted to the Maryland Department of Health 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  $3.2 \pm 1.2$  picocuries/liter (pCi/L), while the Gross Beta level was  $5.1 \pm 1.9$  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).

At the time of testing and with respect to these parameters, the well water supply is within EPA regulatory standards. Additional testing for these parameters will not be required to secure the future Use & Occupancy. 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 or to schedule additional testing.

Sincerely

Bert Nixon, Director

Bureau of Environmental Health

Enclosure

cc: Property file

SEND REPORT TO: BEET NIXON State of Maryland Lab No. DHMH - Laboratories Administration **Howard County Health Department** Division of Environmental Chemistry RADIATION LABORATORY **Bureau of Environmental Health** 1770 Ashland Avenue 8930 Stanford Blvd. Baltimore, Maryland 21205 Columbia, Maryland 21045 LANDABORATORY ANALYSIS REQUEST FORM Plant/Site Name: 1684 Wood Stock County: Sample Source: -17-0164 Woodstock, MD Location: (Well no., lab sink, sample tap, etc.) Radon-222 Bottle A Radon-222 Field Blank Bottle B Bottle B Sample ID: HOJCABO164 Jant No. County CHECK (one per Box) Type Service Point of Collection Testing Source (Raw) Drinking Water Community CT. Emergency 0 Landfill Non-Community Distribution (treated) Routine Q. Stream MCL Recheck Private D п Other Other Special Submitters Code: Federal Project: Collector: Telephone No.: 410 313 7643 Date Collected: Time Collected: 09:00 a.m. p.m. Field Chlorine: Field pH: Nitric Acid Preserved: No Iced: No JCFB0164 is Frelablak Remarks: Date EPA TEST Results (pCi/L) Method No. Date Analyzed Analyst Lab No. Code Reported Gross Alpha 4000 EPAGODO 9 24 17 10/2/17 Gross Beta 4100 EPA 900.0 0695 5/29/17 (0)2117 Radium-226 4020 Radium-228 4030 Total Uranium 4006 Radon-222 (Bottle A) 4004 П Radon-222 (Bottle B) 4004 Radon Field Blank A 4004 Radon Field Blank B 4004 Tritium П W. Tuerku Date Received: Received By: Data Release Signature: Date: Lab Use Only Yes N/A Sample Intact upon arrival?

•Tel. No.: (443) 681-3766 •Fax No.: (443) 681-4507

Sample pH <2.0?

Received within holding time?

Pla	ant/Site Name:	ield	_ Div	State of Mary IMH - Laboratories vision of Environme RADIATION LAB 1770 Ashland / Baltimore, Maryla ORATORY ANA	Administration ntal Sciences ORATORY Avenue and 21205	ty: Ha	5 5 28 5 -Ds &c	64	- te
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