

EMERGENCY/TEMP NO. IF ANY TAG: 3/22/17 STATE PERMIT NUMBER SEQUENCE NO. **STATE OF MARYLAND** (MDE USE ONLY) APPLICATION FOR PERMIT TO DRILL WELL 40-15- 6388 please type 70 fill in this form completely LOCATION OF WELL Date Received (APA) 3 B 0 30 15 OWNER INFORMATION 1)AK 13 DD YY DODESION & DEVELOPMEN 8 COUNTY FAIRLAN 15 Last Name First Name 34 23 SUBDIVISION 42 SWITE, DZ Street or RFD 36 55 SECTION L 11 46 LICOT Town 70 State 72 Zip 76 NEAREST TOWN 71 52 DRILLER INFORMATION MICHAGI M D B 4 Driller's Name License No. 76 81 BAR1 10 SOURCES OF DRILLING WATER WELL Firm Name 1; STREET ADDRESS 30 520 2. ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX) 3. Address WZE SOUTH Signature Date 34 37 B 2 WELL INFORMATION DISTANCE FROM ROAD APPROX. PUMPING RATE ENTER FT OR MI 38 39 (GAL. PER MIN.) 12 AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) > BLK PARCEL TAX MAP: 20 14 NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL USE FOR WATER (CIRCLE APPROPRIATE BOX) DOMESTIC POTABLE SUPPLY & RESIDENTIAL D IRRIGATION F FARMING (LIVESTOCK WATERING & AGRICULTURAL toward COUNTY NO. **IRRIGATION**) COUNTY NAME STATE SIGNATURE INDUSTRIAL, COMMERCIAL, DEWATERING 1 22 INSERT S PUBLIC WATER SUPPLY WELL 41 P DATE ISSUED Т TEST OBSERVATION MONITORING 19/17 12/9/16 EXP. DATE CO SIGNATURE 0 **OPEN LOOP GEOTHERMAL** 43 MM DD YY 48 DNI DNI C CLOSED LOOP GEOTHERMAL 3/2/17 DON: 2/2/17 SC 10 PROPOSED LOCATION OF WELL ON LOT SHOW PERMANENT STRUCTURES SUCH AS BUILDINGS, SEPTIC SYSTEM, APPROXIMATE DEPTH OF WELL J FEET ROADS AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO 24 28 DISTANCE MEASUREMENTS TO WELL NEAREST APPROXIMATE DIAMETER OF WELL 3/22 2/2/17 METHOD OF DRILLING (circle one) Na, U. + TDS Sample BORED (or Augered) JETTED **Jetted & DRIVEN** 40' PUC casing set collected after 1-hr 30 AIR-ROTary AIR-PERcussion **ROTARY** (Hydraulic Rotary) 100 white on site pump of well 37 CABLE DRive-POINT **REVerse-ROTary** hit at 100 other Water REPLACEMENT OR DEEPENED WELLS (CIRCLE APPROPRIATE BOX) IN THIS WELL WILL NOT REPLACE AN EXISTING WELL THIS WELL WILL REPLACE A WELL THAT WILL BE Y ABANDONED AND SEALED THIS WELL WILL REPLACE A WELL THAT WILL BE USED S 39 AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS. D THIS WELL WILL DEEPEN AN EXISTING WELL PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPENED (IF AVAILABLE) 41 52 Not to be filled in by driller (MDE OR COUNTY USE ONLY) b 0 2 0 1 5 G 0 0 4(0)APPROP. PERMIT NUMBER HO - 15 - 0388 70 71 72 73 74 75 76 77 78 79 PERMIT No. SPECIAL CONDITIONS 0 odium. + TDS samples NOTE APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED chloride. 2 COUNTY MDE/WMA/PER 071



MICHAEL BARLOW WELL DRILLING & SERVICE, INC.

522 Underwood Lane (410) 838-6910

Bel Air, Maryland 21014 Fax (410) 838-3582

WELL YIELD REPORT

	Date Test Completed:		March 2, 2017
	Well Depth:	300	_feet
Customer	Land Design & Development	Permit #	HO-15-0388
Road	Galaxy Drive	Subdivision	Fairlane Farm
City	Woodbine	Section	
State	Maryland	Lot #	40

Time	Water Level feet	Time to Fill 1-gallon bucket seconds	G.P.M.
1:15 PM	40	4	15.00
1:30 PM	45	4	15.00
1:45 PM	45	4	15.00
2:00 PM	45	4	15.00
2:15 PM	45	4	15.00
2:30 PM	45	4	15.00
2:45 PM	45	4	15.00
3:00 PM	45	4	15.00
3:15 PM	45	4	15.00
3:30 PM	45	4	15.00
3:45 PM	45	4	15.00
4:00 PM	45	4	15.00
4:15 PM	45	4	15.00
	or informational purposes only. Please ndicated above is not a guarantee.	note the yield may increase or decrease	•

HOWARD COUNTY HEALTH DEPARTMENT SUREAD OF ENVIRONMENTAL HEALTH WELL & SEPTIC PROGRAM TEL: (410)513-1771 FAX: (410)513-2648

Information Form for the Installation of the Well Pump, Piffess Adapter. and Supply Fining

NGH: The installer is responsible for requesting ze inspection prior to 9 zm on the dzy 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 Occumancy approval.

Regiment. LL Company Name: FUGIES RIMO & WORD 30 Address Objecht RC SUKESVILLE, MD 21784

NUR IN(Telephonie # Name of Property Owner Subdivision Lot= 4 () Well Tag # HO-15 FOILLANDE 1074 Site Address Thunderbird WOODDINE mp 79 Pitiess Adapter Well Can and Electric Condmit Submersible Pum Data Make: . (JWID) Two piece waterfight cap. Make Campbell VP Model ALA Screened, vented well cap: Model # 749 Depth: 3(0" (36 mm) Promp Capacity GPM Cap secured to casing: Well Yield GPM NSE/WSC approved 110 Conduit min 18 B.G. Depth of well encountered at time of pump installation: 3(V) (red) Conduit second to well cap: Erpunny capacity exceeds well yield, 2 low water count switch is required by NSPC 1990 Section 17.8.4 Torque anestors, Cable guards, or other acceptable method used-Must circle one Safety rope, if used, suitached in bress rope adapter or other acceptable method inside of well cesing.

•••		· ·			•		
Prome to house	House Connection	· · ·	100 - 100 - 100 -	•.	·	•	
TYPE 1" PONIPIOE	PVC sheve to undisturbed	d soil at wall penetrat	ion VPS				•
PST-2(YOL60 psi.min)	_Lengthofsleevers_minimu	n finn fromdation)	1 1				
Depth of supply Ine: 3(0 (36" min)							
		1 Cont			5		1

The water supply fine is required to be at least ter feet from the septic tank, pump chamber, sewage piping, distribution bor, drainfields, and sewage reservence. If this <u>cannot</u> be accomplished, contact this office for approval prior to installation.

date Signature of company representative ble forinstallation

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

Date Insp. Requested: 8/24/18 Date Insp. Approved: 8/24/18 Inspector	SC
Inspection Datar Pitless adapter watertight & water supply line at least 36" below grade	
Two piece cap installed and attached to casing securely	1
Elec. conduit extends at least 18" bolow grade/attached to cap property	1
12 V - well Safety mpe not outside of well captasing	1
Concer well tag attached properly and casing 5" above funshed grade	V
Water supply line sleeved adequately at house connection	1
Adequate grout observed below pilless adapter	. V
Λ	



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 – APRIL 17, 2019

October 17, 2018

Homeowner 1024 Thunderbird Drive Woodbine, MD 21797

RE: Fairlane Farm, Lot 40 1024 Thunderbird Drive Building Permit: B18001570 Well Permit: HO-15-0388

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 9/10/2018. Final approval of the well line connection to the dwelling was granted on 8/24/2018. The well construction was completed on 3/2/2017. Water samples were collected on 10/15/2018.

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. 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-15-0388. Although the submitted sample results are in compliance with COMAR standards, the Health Department does not guarantee water supplies.

This Interim Certificate of Potability will expire six months from the date of issuance. Submission of a second bacteriological test indicating the water is free of coliform and fecal coliform bacteria is required prior to the expiration date, after which time a Final Certificate of Potability will be issued. Failure to submit an additional sample and obtain a Final Certificate of Potability will result in a Notice of Violation and is punishable as a misdemeanor under the Annotated Code of Maryland, Environment Article, 9-1311, subject to a fine of up to \$500 or imprisonment not to exceed three months.

Please contact (410) 313-1773 to schedule a final water sample appointment or contact a Maryland certified water laboratory to schedule a water sample. A list of laboratories certified by the state of Maryland may be found at the following website: http://www.mde.state.md.us/assets/document/WSP-Labs-2010apr16.pdf



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

In closing, please refer to our "<u>Homeowner Fact Sheet</u>" which illustrates a better understanding for your Onsite Sewage Disposal System. You will also find a link to Maryland Department of the Environments website which describes in further detail operation and maintenance of your septic system.

Approving Authority,

- h. Wall

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

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



Bureau of Environmental Health 8930 Stanford 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

February 22, 2018

Homeowner 1024 Thunderbird Drive Woodbine, MD 21797

Dear Homeowner,

The Health Department received results from the testing for sodium, chloride, and total dissolved solids (TDS) from the well on your property.

Elevated sodium levels in drinking water may affect individuals on low-salt diets. The action level for sodium is 20 milligrams per liter (mg/L); sodium from your well measured 11.54 mg/L.

Chloride and TDS are both considered secondary contaminants, meaning high concentrations may affect taste, color, odor, or corrosive properties of water but present no risk to health. The secondary maximum contaminant level for chloride is 250 mg/L; **chloride from your well measured 24 mg/L**. The secondary maximum contaminant level for TDS is 500 mg/L; **TDS from your well measured 164 mg/L**.

Levels of contaminants in groundwater may change over time due to construction activities or seasonal variation in weather. Given the intermediate level of sodium in the water at the time of sample collection, you should consider future testing.

Feel free contact me at the number or email below with any questions regarding the results of water sampling.

Sincerely,

Sah alli

Sarah Collins, L.E.H.S. Howard County Health Department Well & Septic Program <u>SCollins@howardcountymd.gov</u> 410-313-6287

Cc: 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 #:	125613			Account #:	1933	
Reference:	Fairlane Farms Lot 39			Company:	Fogles Well Pu	ump & Treatment
Location:	1028 Thunderbird Drive			Requested By	-	
	Woodbine, M	D 21797		Source:	Well Water	
Date/ Time Collected	: 10/8/2018	1420		Site:	Kitchen Sink	
Date/Time Rec'd:	10/8/2018	1530		Treatment:	None	
Chlorine ppm:	Free: ND	Total	: ND	pH:	5.5	
Collected By:	A. Berchock	1233	AB	Well #:	HO-17-0004	
PARAMETERS		RESULTS	UNITS I	REFERENCE	METHOD D.	ATE/TIME/ANALYST
Bacteria, Coliform, Total,	MPN	3.1	MPN/ 100 m	1 <1.0	SM20 9223B	10/9/2018 / 1000 / RER
Bacteria, E. coli, MPN		<1.0	MPN/ 100 m	<1.0	SM20 9223B	10/9/2018 / 1000 / RER
Nitrate		7.27	mg/L	10	601	10/9/2018 / 0910 / RER
Turbidity		1.16	NTU	<10	SM20 2130B	10/9/2018 / 0915 / RER
Sand		NS	mg/L	5	Visual/Gravimetric	10/9/2018 / 0915 / RER

NOTES

- 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)
- 4 NTU = Nephelometric Turbidity Units
- 5 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
- 6 Sample collected by client, analyzed as received
- 7 ND:None Detected
- 8 Visual well check: Sealed, vented cap
- 9 pH and Chlorine level tested in lab (pH tested after recommended holding time)

Reason for Test :	Use & Occupancy
Building Permit # :	1800167H

Date Reported: <u>10/9/2018</u>

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 #: Reference: Location: Date/ Time Collected: Date/Time Rec'd: Chlorine ppm: Collected By:	125863 Fairlane Farr 1028 Thunde Woodbine, N 10/15/2018 10/15/2018 Free: ND A. Berchock	erbird Drive AD 21797 0940 1540 Total:	ND AB	Account #: Company: Requested By Source: Site: Treatment: pH: Wall #:	: Dave Fogle Well Water Kitchen Sin None 5.3	r nk
Collected By:	A. Berchock	12337	AB	Well #:	HO-17-000)4
PARAMETERS		RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total,	MPN	<1.0	MPN/ 100 r	mi <1.0	SM20 9223B	10/16/2018 / 1000 / RER

MPN/ 100 ml

<1.0

SM20 9223B

10/16/2018 / 1000 / RER

NOTES

Bacteria, E. coli, MPN

1 MPN/ 100 ml = Most Probable Number [of viable bacteria] per 100 ml of sample.

<1.0

- 2 Results less than or within the reference range are considered satisfactory and within potable water limits at the time of sampling.
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- 4 ND:None Detected
- 5 Visual well check: Sealed, vented cap
- 6 pH and Chlorine level tested in lab (pH tested after recommended holding time)

Reason for Test :Use & OccupancyBuilding Permit # :1800167H



State of Maryland Department of Health Laboratories Administration Division of Environmental Sciences 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:	E17003703	Date Coll.:	03/22/2017	Date Received:	03/23/2017	Submitted By:	Collins
Field ID: HO-15-0388 Lab No.: E17003703006							
Method	Element	-		Result		Units	Date Analyzed
EPA 200.7	Sodium	;		11.54		ppm	03/24/2017

Comments:

Approved by: Sadia Muneco

Approval date: 04/04/2017

**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.

S:\EnviroFinal-Metals.rpt

H 	nd Report To: Bert Nixon Sward Co. Health Dept Burgen of Environmental Division of Environmental Chemistry HealtHINORGANICS ANALYTICAL LABORATORY 1770 Ashland Ave Baltimore, Maryland 21205 WATER ANALYSIS	E17003702006 Received: 03/23/2017 Inorganic Ho-15-0388 Do not write above this line.
S A M P L E I D	Location Thunderbird Drive Woodbine	Image: County Code Image: Code Data Category Code Image: Code Data Category Code Image: Code Image: Code Image: Code
F I E L D	Notes to Lab/Remarks: Sample callected during yield test.	Acid Type of Acid

CHECK TESTS	TESTS	Error Code	RESULTS
	Alkalinity (Total)	The second second	
-	Ammonia - N		
	Chloride		
	Conductance*, Spec.	and the second	
\checkmark	Dissolved Solids (Total)		and a star and a star
-	Hardness		There bearing a realist
	Fluoride		
-	Nitrite, N		- Control of Englished Agrices - 34
- And	Nitrate - Nitrite, N		
10	Sulfate		
	Total Solids		
	Turbidity*		
	Other:		
10.00			
			1991年1月1日日日 1991年1月1日 1991年1月11日 1991年1月11日 1991年1月11日 1991年1月11日 1991年1月11日 1991年1月11日 1991 1991年1111 1991 1991 1991 1991 1
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* Results reported in Units, all others in milligrams per liter (ppm)

Number of Tests Requested DHMH 90-A 6/15

16

Section Chief_

Date Reported

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

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

REPORT OF ANALYSIS

Laboratorv ID #: Reference: Location: Date/ Time Collected Date/Time Rec'd: Chlorine ppm: Collected By:	125862 Fairlane Farr 1024 Thunde Woodbine, M : 10/15/2018 10/15/2018 Free: ND A. Berchock	erbird Drive 4D 21797 0930 1540 Total	: ND	Account #: Company: Requested By Source: Site: Treatment: pH: Well #:	2 	r ank
PARAMETERS	35 3 36 3	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total,	, MPN	<1.0	MPN/ 100 m	nl <1.0	SM20 9223B	10/16/2018 / 1000 / RER
Bacteria, E. coli, MPN		<1.0	MPN/ 100 m	ป <1.0	SM20 9223B	10/16/2018 / 1000 / RER
Nitrate		3.80	mg/L	10	601	10/16/2018 / 0925 / RER
Turbidity		0.62	NTU	<10	SM20 2130B	10/16/2018 / 0930 / RER

mg/L

5

Visual/Gravimetric 10/16/2018 / 0930 / RER

NOTES

Sand

- 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.

NS

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- 9 pH and Chlorine level tested in lab (pH tested after recommended holding time)

Reason for Test : Use & Occupancy

Building Permit # : 18001570

Date Reported: 10/16/2018



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 NoE17003702 Date Coll. 03/22/2017 Date Received 03/23/2017 Submitted By:S. Collins

Field ID: Ho-15-0388 Lab No.: E17003702006				
Analyte	Method	Result	<u>Units</u>	Date Analyzed
Chloride	SM 4500-CI E	24	mg/L	03/27/2017
Total Dissolved Solids	SM 2540C	164	mg/L	03/24/2017

Comments:

Approved by:

Shahler andi

Approval date: 04/03/2017

*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.

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.

Collins, Sarah

From: Sent: To: Subject: Mike Isom <misom@mbwd.us> Friday, December 09, 2016 11:38 AM Collins, Sarah Re: Fairlane lot 18

I'll make a site visit to place flags in the well boxes for max separation.

Sincerely,

Michael Isom Project Manager Michael Barlow Well Drilling Service Phone: (410) 838-6910 Fax: (410) 838-3582 522 Underwood Lane Bel Air, MD 21014 www.michaelbarlowwelldrilling.com www.thermalloopcorp.com Click HERE to like us on Facebook! On 12/9/2016 10:56 AM, Collins, Sarah wrote:

Hi Mike,

I had some time in the office this morning and I went through the rest of the Fairlane permits. Lots 25 & 26, lots 29 & 30, and lots 40 & 41 have well boxes that are close- please have the driller drill as far as possible from the neighboring lot or we may need to do simultaneous yield testing if yields are low.

Thanks, Sarah

From: Mike Isom [mailto:misom@mbwd.us] Sent: Friday, December 09, 2016 9:03 AM To: Collins, Sarah Subject: Re: Fairlane lot 18

Mail them please.

No yield testing today, but Monday for sure.

Sincerely,

Michael Isom Project Manager Michael Barlow Well Drilling Service Phone: (410) 838-6910 Fax: (410) 838-3582 522 Underwood Lane



3525 H Ellicott Mills Drive, Ellicott City, MD 21043 (410) 313-2640 Fax (410) 313-2648 TDD (410) 313-2323 Toll Free 1-866-313-6300 wobsite: www.hchealth.org

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

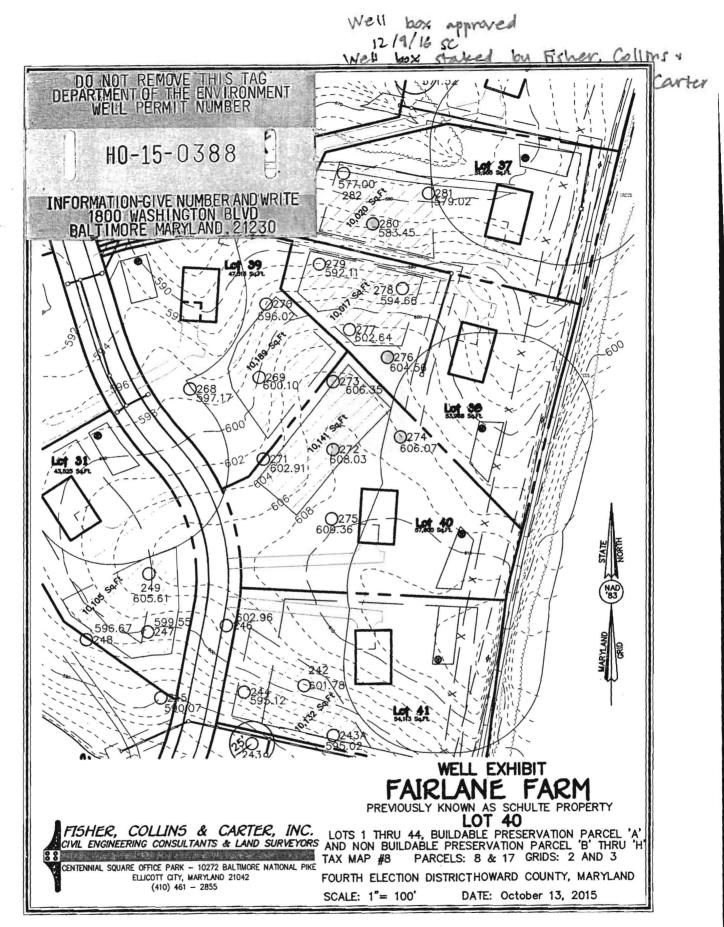
Subdivision TO ALL INTERESTED PARTIES

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

- The well site has been staked by Fisher Collins + Carter (professional land surveyor or company employing professional land surveyors) on 3/29/16 (date) and does not require a site inspection.
- The well driller, builder or property owner will call the Health Department to schedule a time to meet in the field to verify the proposed well site location.

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

Revised 6/10/03



I:\2005\05106\dwg\05106 Well Exhibits.dwg, 10/14/2015 11:32:04 AM, 1:1

