

TAG: 6/29/17 (SO)

B 1 <div style="font-size: 2em; font-weight: bold; margin-top: 10px;">58645</div>	SEQUENCE NO. (MDE USE ONLY)	STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL please type <div style="font-size: 1.5em; font-weight: bold; margin-top: 10px;">300595A</div>	STATE PERMIT NUMBER <div style="font-size: 1.5em; font-weight: bold; margin-top: 10px;">#0 - 17 - 0129</div> <div style="font-size: 0.8em;">fill in this form completely</div>
OWNER INFORMATION Date Received (APA) <u>04/04/17</u> 8 MM DD YY 13 Heritage Land Development 15 Last Name Owner First Name 34 P.O. Box 482 36 Street or RFD 55 Lisbon MD 21765 57 Town 70 State 72 Zip 76		B 3 LOCATION OF WELL Howard 8 COUNTY 21 Linden Grove 23 SUBDIVISION 42 SECTION 44 46 LOT 48 50 Lisbon 52 NEAREST TOWN 71	
DRILLER INFORMATION Michael Barlow MWD 355 76 Driller's Name License No. 81 Barlow Well Drilling Firm Name 522 Underwood Lane 21014 Address [Signature] 3/28/17 Signature Date		B 4 SOURCES OF DRILLING WATER 1. well 2. 3. Daisy Road 11 STREET ADDRESS 30 ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX) NORTH WEST <input checked="" type="radio"/> EAST SOUTH 34 300 37 DISTANCE FROM ROAD ENTER FT OR MI 38 39 TAX MAP: 8 BLK: 7 PARCEL 5	
B 2 WELL INFORMATION APPROX. PUMPING RATE (GAL. PER MIN.) 8 12 150 AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 14 20		NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL Howard COUNTY NAME COUNTY NO. 13 STATE SIGNATURE INSERT S DATE ISSUED 05/01/17 43 MM DD YY 48 CO SIGNATURE EXP. DATE 08/23/17 DONI DNI DONI	
USE FOR WATER (CIRCLE APPROPRIATE BOX) [D] DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION [F] FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION) [I] INDUSTRIAL, COMMERCIAL, DEWATERING [P] PUBLIC WATER SUPPLY WELL [T] TEST, OBSERVATION, MONITORING [O] OPEN LOOP GEOTHERMAL [C] CLOSED LOOP GEOTHERMAL		PROPOSED LOCATION OF WELL ON LOT SHOW PERMANENT STRUCTURES SUCH AS BUILDINGS, SEPTIC SYSTEM, ROADS AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCE MEASUREMENTS TO WELL Prop Lines 6/23 - drillers wt on site - 150-200' drilled? 6/26 - well drilled, 85' PVC casing - 300' deep - 8 gpm - water @ 110' 135' 150'	
APPROXIMATE DEPTH OF WELL <u>350</u> FEET 24 28 APPROXIMATE DIAMETER OF WELL <u>6</u> INCH NEAREST INCH		METHOD OF DRILLING (circle one) BORED (or Augered) JETTED Jetted & DRIVEN 30 AIR-ROTary AIR-PERCussion ROTARY (Hydraulic Rotary) 37 CABLE REVERSE-ROTary DRIVE-POINT other	
REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX) [N] THIS WELL WILL NOT REPLACE AN EXISTING WELL [Y] THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED 39 [S] THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS [D] THIS WELL WILL DEEPMEN AN EXISTING WELL PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED (IF AVAILABLE) 41 52		Pursuant to § 10-624 of the State Govt. Article of the Maryland 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 have the right to inspect, amend, or correct this form. The Maryland Department of the Environment is subject to the Maryland Public Information 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 agencies, if not protected by federal or State Law.	
Not to be filled in by driller (MDE OR COUNTY USE ONLY) APPROP. PERMIT NUMBER <u>G</u> PERMIT No. <u>40-17-0129</u> 70 71 72 73 74 75 76 77 78 79			
SPECIAL CONDITIONS NOTE APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED			

C 1	52440	SEQUENCE NO. (MDE USE ONLY)	STATE OF MARYLAND WELL COMPLETION REPORT		THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.
(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)		FILL IN THIS FORM COMPLETELY PLEASE TYPE		COUNTY NUMBER <u>XIII</u>	
ST/CO USE ONLY DATE Received MM <u>10</u> DD <u>25</u> YY <u>17</u>		DATE WELL COMPLETED MM <u>08</u> DD <u>23</u> YY <u>17</u>		Depth of Well <u>300</u> (TO NEAREST FOOT)	
				PERMIT NO. FROM "PERMIT TO DRILL WELL" <u>H0 - 17 - 0129</u>	
OWNER <u>Heritage Land Development</u>					
WELL SITE ADDRESS <u>Daisy Rd</u> TOWN <u>Lisbon</u>					
SUBDIVISION <u>Linden Grove</u> SECTION <u>2</u> LOT <u>2</u>					

WELL LOG Not required for driven wells			GROUTING RECORD			C 3		
STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING			WELL HAS BEEN GROUTED (Circle Appropriate Box)			PUMPING TEST		
DESCRIPTION (Use additional sheets if needed)	FEET		CEMENT <input checked="" type="checkbox"/> CM BENTONITE CLAY <input checked="" type="checkbox"/> BC			HOURS PUMPED (nearest hour) <u>3</u>		
	FROM	TO	NO. OF BAGS <u>32</u> NO. OF POUNDS <u>2400</u>			PUMPING RATE (gal. per min.) <u>6.67</u>		
Soil	0	4	GALLONS OF WATER <u>160</u>			METHOD USED TO MEASURE PUMPING RATE <u>water/bucket</u>		
Brown Shale	4	25	DEPTH OF GROUT SEAL (to nearest foot) from <u>0</u> TOP <u>52</u> ft. to <u>85</u> BOTTOM <u>58</u> ft. (enter 0 if from surface)			WATER LEVEL (distance from land surface)		
Tan Shale	25	40	CASING RECORD			BEFORE PUMPING <u>32</u> ft.		
Brown Shale	40	82	casing types insert appropriate code below			WHEN PUMPING <u>85</u> ft.		
Med Gravel	82	300	<input checked="" type="checkbox"/> ST STEEL <input checked="" type="checkbox"/> CO CONCRETE <input checked="" type="checkbox"/> PL PLASTIC <input type="checkbox"/> OT OTHER			TYPE OF PUMP USED (for test)		
Rock	135	✓	MAIN CASING TYPE <u>PL</u> Nominal diameter top (main) casing (nearest inch) <u>6</u> Total depth of main casing (nearest foot) <u>85</u>			<input checked="" type="checkbox"/> A air <input type="checkbox"/> P piston <input type="checkbox"/> T turbine <input checked="" type="checkbox"/> C centrifugal <input type="checkbox"/> R rotary <input type="checkbox"/> O other (describe below) <input type="checkbox"/> J jet <input checked="" type="checkbox"/> S submersible		
			OTHER CASING (if used)			PUMP INSTALLED		
			EACH CASING			DRILLER INSTALLED PUMP (CIRCLE) (YES OR NO) <u>YES</u>		
			screen type or open hole <input checked="" type="checkbox"/> ST STEEL <input type="checkbox"/> BR BRASS <input type="checkbox"/> HO OPEN HOLE (insert appropriate code below) <input type="checkbox"/> PL PLASTIC <input type="checkbox"/> OT OTHER			IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.		
NUMBER OF UNSUCCESSFUL WELLS: <u>0</u>			C 2			TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29 <u>29</u>		
WELL HYDROFRACTURED <input checked="" type="checkbox"/> Y <input type="checkbox"/> N			DEPTH (nearest ft.)			CAPACITY: GALLONS PER MINUTE (to nearest gallon) <u>31</u> <u>35</u>		
CIRCLE APPROPRIATE LETTER			1 <u>85</u> <u>300</u> 2 <u>23</u> <u>24</u> <u>26</u> <u>30</u> <u>32</u> <u>36</u> 3 <u>38</u> <u>39</u> <u>41</u> <u>45</u> <u>47</u> <u>51</u> SLOT SIZE 1 <u>2</u> 3 <u>3</u>			PUMP HORSE POWER <u>37</u> <u>41</u>		
A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED E ELECTRIC LOG OBTAINED P TEST WELL CONVERTED TO PRODUCTION WELL			DIAMETER OF SCREEN (NEAREST INCH) <u>56</u> <u>60</u> from to			PUMP COLUMN LENGTH (nearest ft.) <u>43</u> <u>47</u>		
I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.			GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68 <u>68</u>			CASING HEIGHT (circle appropriate box and enter casing height) <input checked="" type="checkbox"/> + above <u>49</u> <input type="checkbox"/> - below <u>1</u> (nearest foot)		
DRILLERS LIC. NO. <u>M WD 355</u>			MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)			LATITUDE <u>39.32738</u> LONGITUDE <u>77.06276</u> (DEFAULT COORD. WGS 84)		
DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)			T (E.R.O.S.) W Q			Pursuant to §10-624 of the State Govt. Article of the Maryland 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 have the right to inspect, amend, or correct this form. The Maryland Department of the Environment is subject to the Maryland Public Information 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 agencies, if not protected by federal or state law.		
LIC. NO. <u>WRD 113</u>			70 72 74 75 76			TELESCOPE CASING LOG INDICATOR OTHER DATA		
SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)								

Well Permit No. HO - 17-0129
Location of property (road) Daisy Road
Subdivision Lenden Grove Lot 2 Block _____ Plat _____ Sec. _____
Well Driller Barlow Owner _____

Depth of well 300'
Distance of measuring point (M.P.) above ground ~1.5'
Static water level (S.W.L.) below M.P. 30'

Pump set @ 120

Time pump started 17:45 Pumping rate 12 gpm
Total time to reach pumping water level 95 ft. below M.P.

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

HD-224



MICHAEL BARLOW WELL DRILLING & SERVICE, INC.
522 Underwood Lane **Bel Air, Maryland 21014**
(410) 838-6910 **Fax (410) 838-3582**

WELL YIELD REPORT

Date Test Completed: August 23, 2017

Well Depth: 300 feet

Customer	Heritage Land Development	Permit #	HO-17-0129
Road	Daisy Road	Subdivision	Linden Grove
City	Lisbon	Section	
State	Maryland	Lot #	2

Time	Water Level In Feet	Time to Fill 1-gallon bucket seconds	G.P.M.
1:00 PM	32	5	12.00
1:15 PM	85	9	6.67
1:30 PM	85	9	6.67
1:45 PM	85	9	6.67
2:00 PM	85	9	6.67
2:15 PM	85	9	6.67
2:30 PM	85	9	6.67
2:45 PM	85	9	6.67
3:00 PM	85	9	6.67
3:15 PM	85	9	6.67
3:30 PM	85	9	6.67
3:45 PM	85	9	6.67
4:00 PM	85	9	6.67
4:15 PM	85	9	6.67
This yield test report is for informational purposes only. Please note the yield may increase or decrease over time and the GPM indicated above is not a guarantee.			

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

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: Fogarty Well Pump & Water Treatment, LLC Telephone #: 410 795 5670
Address: 5800 Obrecht Rd
Syracuse, MD 21784

Must circle one: Licensed Plumber / Licensed Well Driller / Licensed Well Pump Installer

License # and name of individual responsible for the field installation:

Name (Print): David C Fogarty License #: MSD226

*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: Toll Brothers Telephone #: _____
Subdivision: Linden Grove Lot #: 2 Well Tag #: HO-17-0124
Site Address: 15609 Linden Grove Lane
Woodbine, MD 21797

Submersible Pump Data

Make: Grundfos
Model #: ISSGEO7-180
Pump Capacity: 15
Well Yield: 6.6

Depth of well encountered at time of pump installation: 300 (feet)
If pump capacity exceeds well yield, a low water cut off switch is required by NSPC 1990 Section 17.8.4

Must circle one: Torque arrestors / Cable guards / Other acceptable method used

Safety rope, if used, attached to brass rope adapter or other acceptable method inside of well casing NA

Pitless Adapter

Make: Campbell
Model #: NA
GPM Depth: 36" (36" min)
GPM NSF/WSC approved: YES

Well Cap and Electric Conduit

Two piece watertight cap: YES
Screened, vented well cap: YES
Cap secured to casing: YES
Conduit min 18" B.G.: YES
Conduit secured to well cap: YES

Piping to house

Type: 1" poly pipe
PSI: 200 (160 psi min)
Depth of supply line: 36" (36" min)

House Connection

PVC sleeve to undisturbed soil at wall penetration: YES
Length of sleeve (5' minimum from foundation): 6'
Sleeve sealed properly: YES

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

Signature of company representative responsible for installation: David C Fogarty

date: 6/15/2021

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

Date Insp. Requested: 6/15/21 Date Insp. Approved: 6/15/21 Inspector: RP

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

(Revised form 10/24/2018)

INTERIM CERTIFICATE OF POTABILITY**Expiration Date – April 5, 2022**

October 5, 2021

Homeowner
15609 Linden Grove Lane
Woodbine, MD 21797**RE: Linden Grove, Lot 2
15609 Linden Grove Lane
Building Permit: B21000029
Well Permit: HO-17-0129**

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 **8/17/2021**. Final approval of the well line connection to the dwelling was granted on **6/15/2021**. The well construction was completed on **10/25/2017**. Water samples were collected on **9/23/2021**.

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-17-0129. 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 "[Homeowner Fact Sheet](#)" 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,

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

FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

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

REPORT OF ANALYSIS

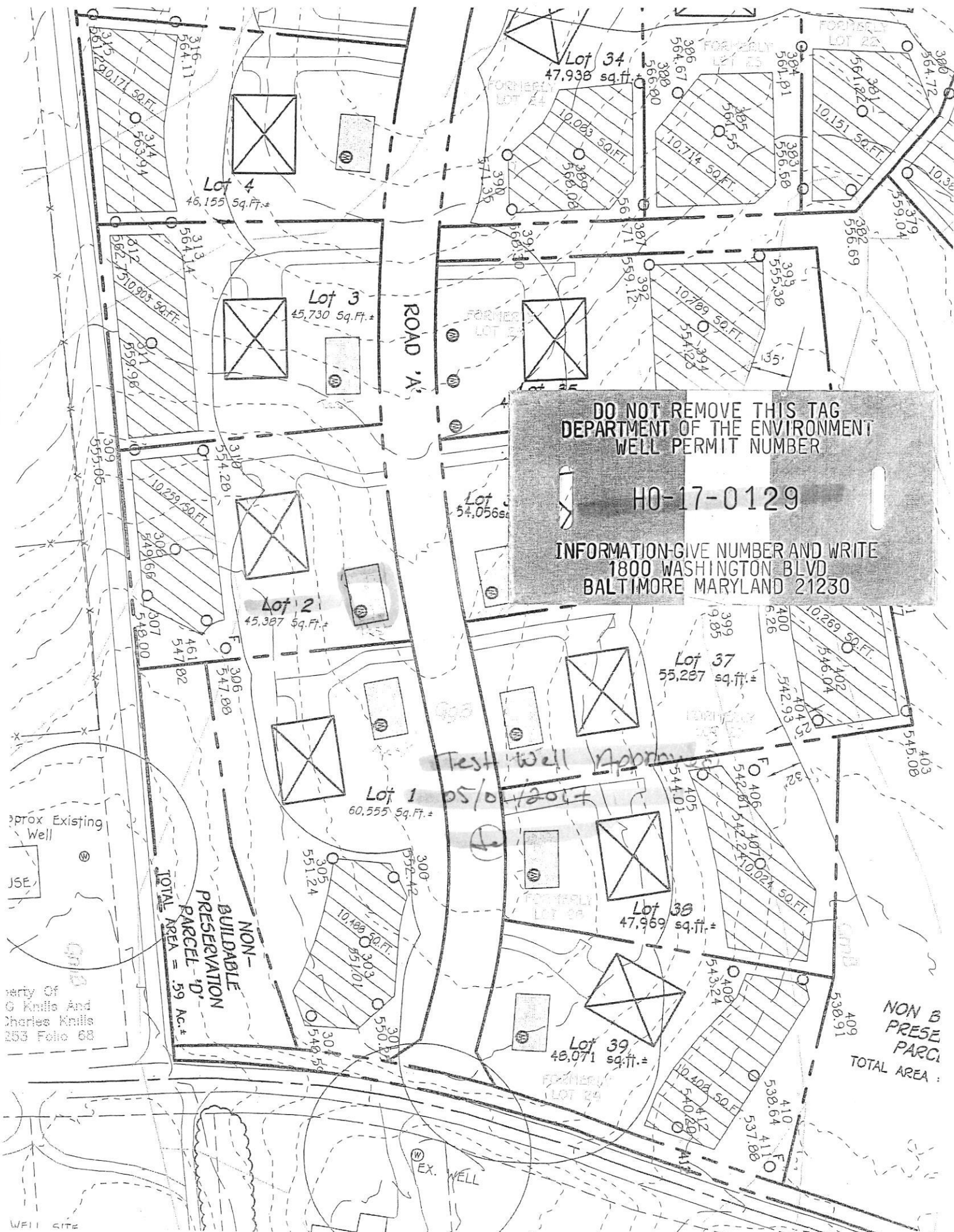
Laboratory ID #:	147528	Account #:	1933
Reference:	Linden Grove Lot 2	Client:	Fogle's Well Pump & Treatment
Location:	15609 Linden Grove Lane	Requested By:	Dave Fogle
	Woodbine, MD 21797	Source:	Well Water
Date/ Time Collected:	9/23/2021 1510	Site:	Pressure Tank
Date/Time Rec'd:	9/23/2021 1600	Treatment:	None
Chlorine ppm:	Free: ND Total: ND	pH:	6.6
Collected By:	J. Evans 0309JE	Well #:	HO-17-0129

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	9/24/2021 / 1015 / CRS
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	9/24/2021 / 1015 / CRS
Nitrate	3.45	mg/L	10	601	9/23/2021 / 1630 / TSD
Turbidity	0.87	NTU	<10	SM20 2130B	9/24/2021 / 1030 / CRS
Sand	>5	mg/L	5	Visual/Gravimetric	9/23/2021 / 1625 / TSD

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

Reason for Test : Use & Occupancy**Building Permit # :** B21000029Date Reported: 9/24/2021



DO NOT REMOVE THIS TAG
DEPARTMENT OF THE ENVIRONMENT
WELL PERMIT NUMBER

H0-17-0129

INFORMATION-GIVE NUMBER AND WRITE
1800 WASHINGTON BLVD
BALTIMORE MARYLAND 21230

Test Well Approved
05/01/2014

approx Existing Well

USE

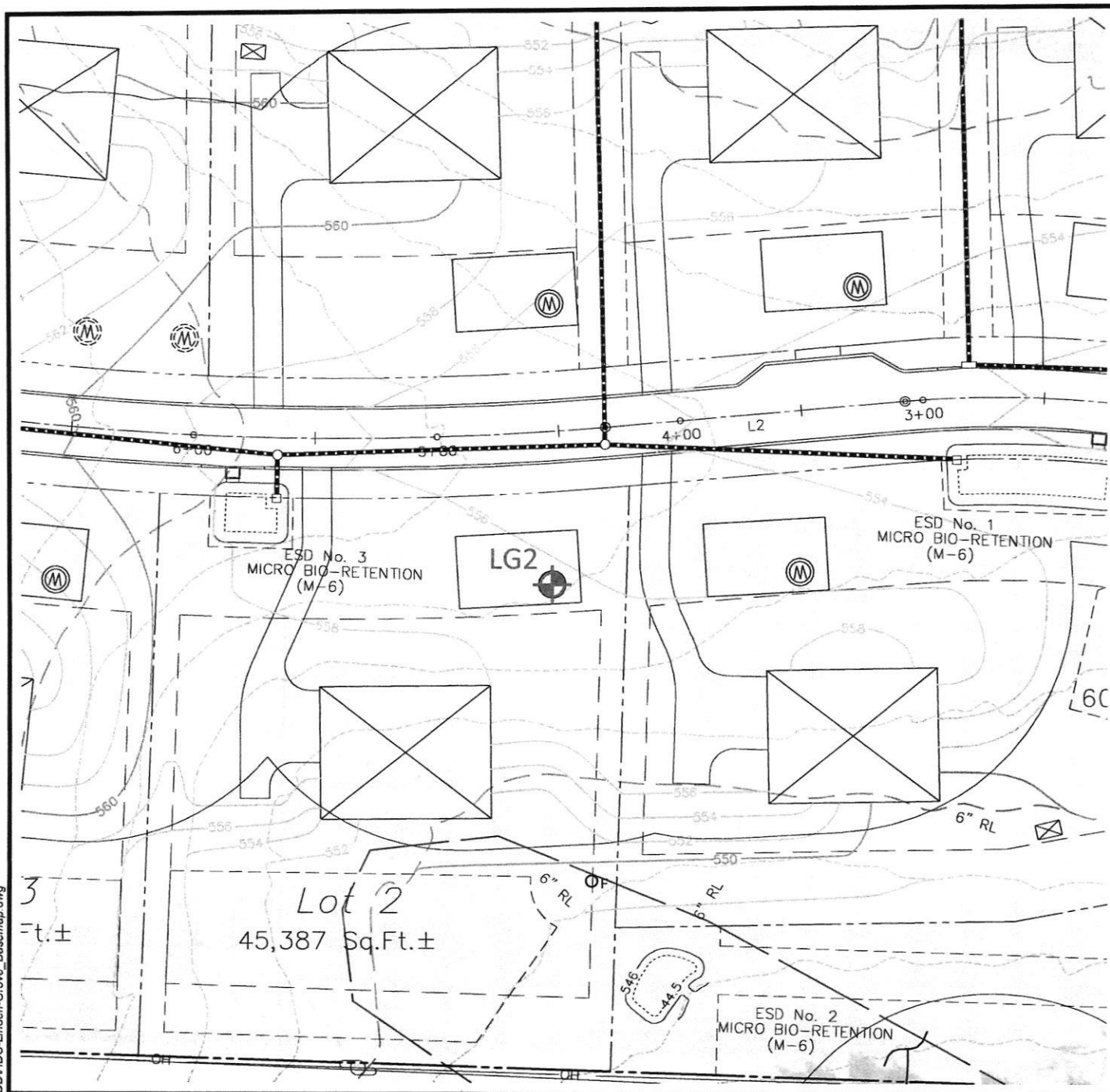
Property Of
O Knills And
Charles Knills
253 Folio 68

NON-BUILDABLE
PRESERVATION
PARCEL 'D'
TOTAL AREA = .59 AC.±

NON B
PRESE
PARC
TOTAL AREA :

WELL SITE

H:\Projects\Heritage Land Development\Linden Grove\CADD\HDC-Linden-Grove_Basemap.dwg



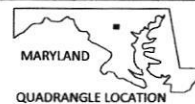
LEGEND



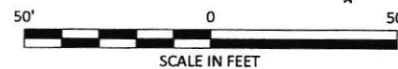
Proposed Test Well Site

NOTE:

Aerial Photo Base was obtained from the State of Maryland iMap Imagery website (<http://imap.maryland.gov>), categorized as "Howard2016 SixInchImagery" dated 2016.



QUADRANGLE LOCATION



SCALE IN FEET

client: Heritage Development, LLC	
project location: Lisbon, Howard County, Maryland	
project: Linden Grove Water Supply Permitting Proposed Test Well LG2 Location Map	
file no. HDC-Linden-Grove_Basemap.dwg	
drawn: M. Swam	date: 03/07/17
checked: J. Lindaw	date: 03/07/17
approved: M. Haufley	date: 03/07/17
Figure: b	

Plotted on: March 23, 2017

**MICHAEL BARLOW WELL DRILLING
522 UNDERWOOD LANE
BEL AIR, MD 21014
410-838-6910**

Howard County Health Dept
8930 Stanford Blvd
Columbia, MD 21046
Attn: Kevin Wolf

June 11, 2018

Re: Linden Grove

Mr. Wolf,

Our firm drilled test wells on lots 1, 2, 3, 30, 36 & 37 at Linden Grove last year for testing required as part of the GAP process. Heritage Land Development would now like to convert those lots to production wells. This letter serves as a formal request for those conversions. Please advise me if permit fees were paid when we applied for the permits or if they are due to your office.



Michael Barlow
MWD355



HOWARD COUNTY HEALTH DEPARTMENT

63027

Received
From

Kimberly/ Heritage

PHONE #

DATE *6/15/18*

☐ CASH
☒ CHECK

For

*Well Completion Reports -
lot 1, 2, 3, 30, 36, 37 Linden Grove*

NO. *1099*

Nine hundred sixty

Dollars

\$ *960.00*

Received By

J King