

C1 56781 SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT FILL IN THIS FORM COMPLETELY PLEASE TYPE

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER

ST/CO USE ONLY DATE Received MM 03 DD 13

DATE WELL COMPLETED 02 19 19

Depth of Well 400 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" HO 17 0392

OWNER Heritage Land Development WELL SITE ADDRESS Florence Road TOWN Mt Airy SUBDIVISION Patrick Family Property SECTION LOT 1

WELL LOG Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

Table with columns: DESCRIPTION (Use additional sheets if needed), FEET (FROM, TO), check if water bearing. Rows include SOIL, Brown shale, med GRAI, ROCK.

GROUTING RECORD yes no

WELL HAS BEEN GROUTED (Circle Appropriate Box) Well GROUT CEMENT CM BENTONITE CLAY BC NO. OF BAGS 29 NO. OF POUNDS 1500 GALLONS OF WATER 100 DEPTH OF GROUT SEAL (to nearest foot) from 0 ft. to 45 ft.

CASING RECORD casing types insert appropriate code below

MAIN CASING TYPE PL Nominal diameter top (main) casing (nearest inch)! 6 Total depth of main casing (nearest foot) 45

OTHER CASING (if used) diameter inch 4.2 depth (feet) from 120

SCREEN RECORD screen type or open hole insert appropriate code below ST BR HO PL OT

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED YES NO Y N

- CIRCLE APPROPRIATE LETTER A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED E ELECTRIC LOG OBTAINED P TEST WELL CONVERTED TO PRODUCTION WELL

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...

DRILLERS LIC. NO. MD 355

DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION) LIC. NO. WRB113

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

DEPTH (nearest ft.) Ho 45 400

SLOT SIZE 1 2 3 DIAMETER OF SCREEN (NEAREST INCH) from to

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER) T (E.R.O.S.) W Q

TELESCOPE CASING LOG INDICATOR OTHER DATA

PUMPING TEST

HOURS PUMPED (nearest hour) 3 PUMPING RATE (gal. per min.) 4.0 METHOD USED TO MEASURE PUMPING RATE Watch Bucket WATER LEVEL (distance from land surface) BEFORE PUMPING 37 WHEN PUMPING 84 TYPE OF PUMP USED (for test) A air P piston T turbine C centrifugal R rotary O other J jet S submersible

PUMP INSTALLED

DRILLER INSTALLED PUMP (CIRCLE) (YES or NO) YES NO IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS. TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29. CAPACITY: GALLONS PER MINUTE (to nearest gallon) 31 PUMP HORSE POWER 41 PUMP COLUMN LENGTH (nearest ft.) 43 CASING HEIGHT (circle appropriate box and enter casing height) LAND SURFACE (nearest foot)

LATITUDE 39.82804 LONGITUDE 77.14592 (DEFAULT COORD. WGS 84)

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.

TAG-2/8/19

B 1
62775

SEQUENCE NO.
(MDE USE ONLY)

STATE OF MARYLAND
APPLICATION FOR PERMIT TO DRILL WELL
please type

STATE PERMIT NUMBER
HO-17-0392
fill in this form completely

OWNER INFORMATION
Date Received (APA) 12/31/18
Heritage Land Development
Po Box 482
Lisbon MD 21765

LOCATION OF WELL
Howard
Patrick Family Limited prts p II
Mt Airy

DRILLER INFORMATION
Michael Barlow M WD 355
Barlow Well Drilling
522 Underwood Lane 21014

SOURCES OF DRILLING WATER
Well
Florence Road
200
65

WELL INFORMATION
APPROX. PUMPING RATE 5
AVERAGE DAILY QUANTITY NEEDED 750

USE FOR WATER (CIRCLE APPROPRIATE BOX)
D DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION

NOT TO BE FILLED IN BY DRILLER
HEALTH DEPARTMENT APPROVAL
Howard
COUNTY NAME
DATE ISSUED 1/15/20

APPROXIMATE DEPTH OF WELL 300 FEET
APPROXIMATE DIAMETER OF WELL 6 INCH

METHOD OF DRILLING (circle one)
AIR-PERCussion

REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX)
N THIS WELL WILL NOT REPLACE AN EXISTING WELL

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
2/5 - @ 45' - set 45' PVC casing - 37' static - started pumping 2/19 - 4.5 gpm @ 12:45 pm
2/6 - at 400' - 90' meas. pt. - collected NaCl
- 3-4 gpm - pump @ 100' + TDS sampled @ 1:45 pm
- will install 80' 5" Ener (to 120')
N

Not to be filled in by driller (MDE OR COUNTY USE ONLY)
APPROP. PERMIT NUMBER G
PERMIT No. HO-17-0392

SPECIAL CONDITIONS
Sodium chloride + TDS samples req'd at yield.

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: Foale's Well Pump & Water Treatment, LLC Telephone #: 410-795-5670
Address: 530 Obrecht Rd
Sylvestre, 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 Foale 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: CROSEN HOMES Telephone #: _____
Subdivision: Patrick Property Lot #: 1 Well Tag #: HO-17-0392 **(S)**
Site Address: 1600 Florence Rd
Woodbine, MD 21797

Submersible Pump Data

Make: Grundfos
Model #: 1550Q10-220
Pump Capacity: 15
Well Yield: 4
Depth of well encountered at time of pump installation: 100 (feet)

Pitless Adapter

Make: Campbell
Model #: WA
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

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**

Piping to house

Type: 1" PEX 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): 16'
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: [Signature] date: 11/5/2021

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

Date Insp. Requested: 11/5/2021 Date Insp. Approved: 1/5/2022 Inspector: [Signature]
Inspection Data: Pitless adapter watertight & water supply line at least 36" below grade YES
Two piece cap installed and attached to casing securely YES
Elec. conduit extends at least 18" below grade/attached to cap properly YES
Safety rope not outside of well cap/casing YES
Correct well tag attached properly and casing 8" above finished grade YES
Water supply line sleeved adequately at house connection YES
Adequate grout observed below pitless adapter YES

(S)
36"
18"
8"
6"

(Revised form 10/24/2018)

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

INTERIM CERTIFICATE OF POTABILITY

Expiration Date – DECEMBER 3, 2021

June 3, 2021

Homeowner
1600 Florence Road
Woodbine, MD 21797

RE: Patrick Family property, Lot 1
1600 Florence Road
Building Permit: B20001516
Well Permit: HO-17-0392

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 **4/26/2021**. Final approval of the well line connection to the dwelling was granted on **1/5/2021**. The well construction was completed on **2/19/2019**. Water samples were collected on **5/27/2021**.

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-17-0392. Although the submitted sample results are in compliance with COMAR standards, the Health Department does not guarantee water supplies.

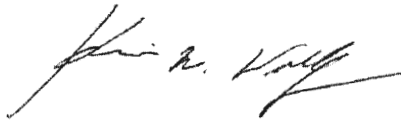
This Interim Certificate of Potability will expire **six months** from the date of issuance. Submission of a second bacteriological test indicating the water is free of coliform and fecal coliform bacteria is required prior to the expiration date, after which time a Final Certificate of Potability will 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>

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 Environment's 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

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

March 11, 2019

Heritage Land Development
PO Box 482
Lisbon, MD 21765

Re: Water sample results for well #HO-17-0392 at Patrick Family Limited Partnership II Lot 1 on Florence Road

Dear Heritage Land Development,

The Health Department received results from testing for sodium, chloride, and total dissolved solids (TDS) from the well #HO-17-0392 at Patrick Family Limited Partnership II Lot 1 on Florence Road.

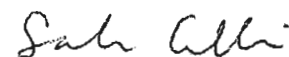
Elevated sodium levels in drinking water may affect individuals on low-salt diets. The action level for sodium is 20 milligrams per liter (mg/L); **sodium from the well measured 43.12 mg/L.**

Chloride and TDS are both considered secondary contaminants, meaning high concentrations can 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 the well measured 95 mg/ L.** The secondary maximum contaminant level for TDS is 500 mg/L; **TDS from the well measured 182 mg/ L.**

Sodium, chloride, and TDS are all secondary contaminants and will not affect the issuance of a Certificate of Potability for the well. Given the elevated levels of sodium, the builder or future homeowner may want to consult a plumber and/or water treatment company to discuss options. Please be aware that any backwash generated from a treatment system must be disposed of in a subsurface disposal system. Prior to installing a system that generates backwash, please contact the Health Department to ensure that all regulatory requirements are met.

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

Sincerely,



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

Cc: Community Hygiene Program
File

Send Report To: Bert Nixon

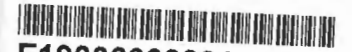
State of Maryland
DHMH - Laboratories Administration

Division of Environmental Sciences

TRACE METALS LABORATORY

1770 Ashland Avenue
Baltimore, Maryland 21205

Lab No. Date Received



E1900266001

Received: 02/21/2019

Metals

HO-170392

Digest

Do not write above this line

LABORATORY ANALYSIS REQUEST

SAMPLE TESTED AS RECEIVED

Sample ID No: HO-17-0392 Site Name: Patrick Family Trust - Lot 1 County: Howard

Sample Source: Florence Rd. M. Army Collector: S. Collins
Street Town or City Name

Date Collected: 2/19/2019 Time Collected: 1 a.m. / p.m. Phone #: 410-313-6287

Sample Preserved By: Field ESRL WMRL Central Lab

Preservative Used: HNO₃ mL pH: <2, SHS, 2/21/19

Sample Type: Drinking Water Landfill Source (Raw Water) Liquid
Data Category: Community Stream Distribution (Treated) Solid

Code Non-Community Sediment Other
4F Private

Specify Program: SDWA NPDES CWA RCRA Consumer Products Other

Type of Sample Preparation: Total Metals Total Metals TCLP Dissolved Metals
(field preparation required)

Remarks: Sample collected @ yield test

✓	Element	Lab Use	✓	Element	Lab Use	✓	Element	Lab Use
	Antimony (Sb)			Aluminum (Al)			Uranium (U)	
	Arsenic (As)			Calcium (Ca)			Vanadium (V)	
	Barium (Ba)			Cobalt (Co)			Zinc (Zn)	
	Beryllium (Be)			Copper (Cu)				
	Cadmium (Cd)			Iron (Fe)				
	Chromium (Cr)			Lead (Pb)				
	Mercury (Hg)			Magnesium (Mg)				
	Nickel (Ni)			Manganese (Mn)				
	Selenium (Se)			Molybdenum (Mo)				
✓	Sodium (Na)	SHS		Potassium (K)				
	Thallium (Tl)			Silver (Ag)				

RECEIVED

MAR 07 2019

Date Reported: / /
HOWARD COUNTY HEALTH DEPT
COMMUNITY HYGIENE PROGRAM

Lab Supervisor: _____

Phone: (443) 681 - 4596

Fax: (443) 681 - 4507



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: E19002660 Date Coll.: 02/19/2019 Date Received: 02/21/2019 Submitted By: S. Collins

Field ID: HO-17-392
Lab No.: E19002660001

<u>Method</u>	<u>Element</u>	<u>Result</u>	<u>Units</u>	<u>Date Analyzed</u>
EPA 200.7	Sodium	43.12	ppm	02/26/2019

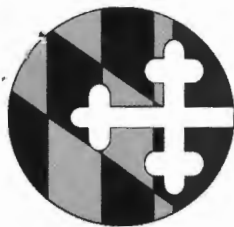
Comments:

Approved by: Radia Muneer

Approval date: 03/04/2019

**The following methods are included in our A2LA Scope of Accreditation: EPA 200.7, EPA 200.8, EPA 245.1. Samples are tested as received.

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.



State of Maryland
Department of Health
Laboratories Administration
Division of Environmental Sciences
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 NoE19002659 Date Coll. 02/19/2019 Date Received 02/21/2019 Submitted By: S. Collins

Field ID: HO-17-0392
Lab No.: E19002659001

<u>Analyte</u>	<u>Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Analyzed</u>
Chloride	SM 4500-Cl E	95	mg/L	03/01/2019
Total Dissolved Solids	SM 2540C	182	mg/L	02/25/2019

Comments:

Approved by:

Approval date: 03/05/2019

*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. Samples are tested as received.

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.

PATRICK FAMILY LIMITED
 PARTNERSHIP II
 L. 14957, F. 110
 EX. ZONING: RC-DEO
 LAND USE: AGRICULTURAL
 PART OF PARCEL: 65
 AGRICULTURAL LAND
 PRESERVATION EASEMENT
 HO-07-01-E

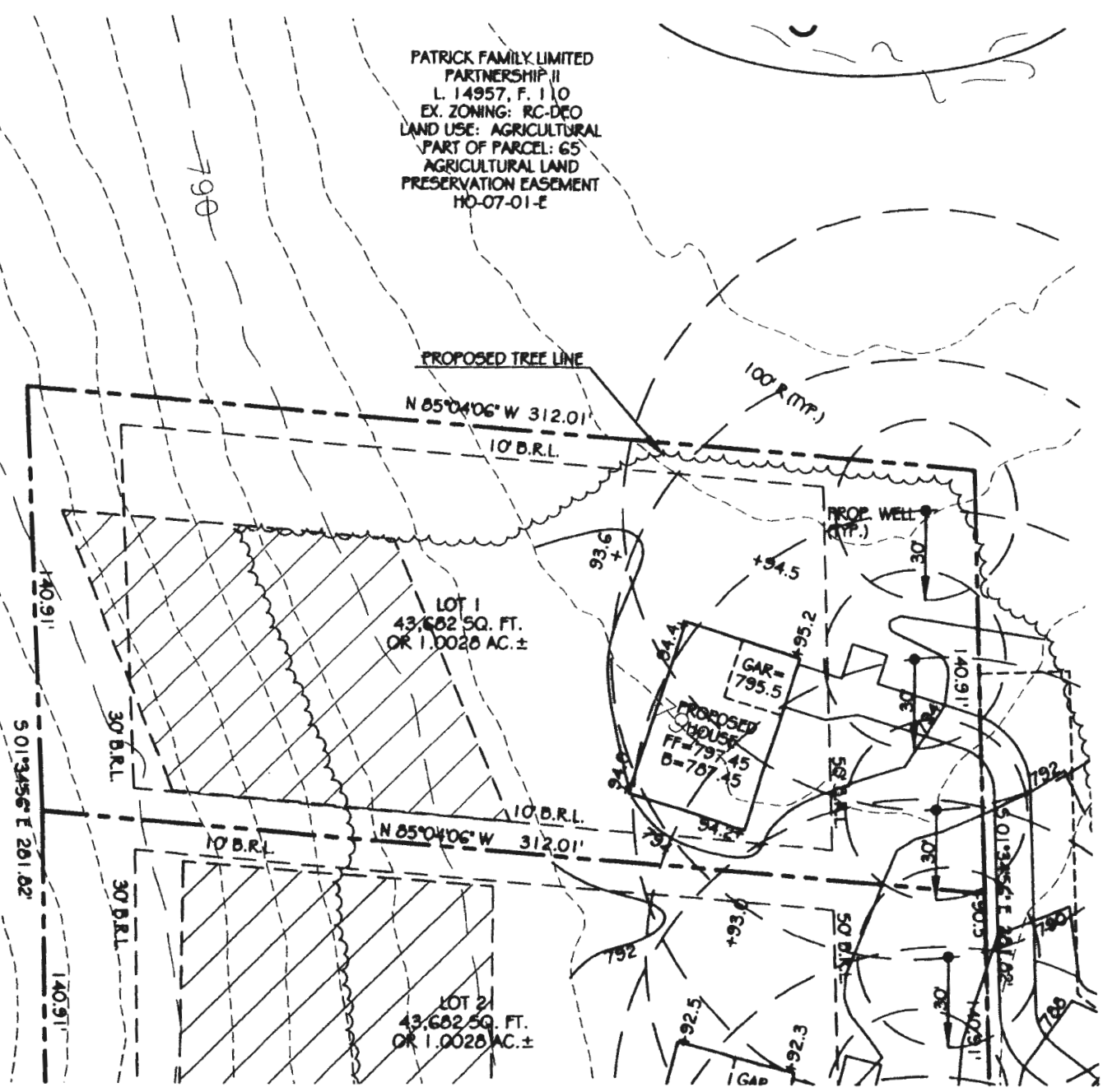
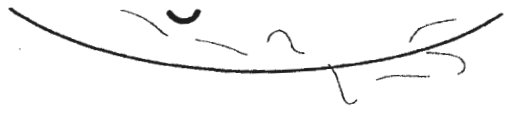
PROPOSED TREE LINE

N 85°04'06" W 312.01'

10' B.R.L.

LOT 1
 43,682 SQ. FT.
 OR 1.0028 AC. ±

LOT 2
 43,682 SQ. FT.
 OR 1.0028 AC. ±



WELL LOCATION EXHIBIT

LOT 1

PATRICK FAMILY LIMITED PARTNERSHIP II

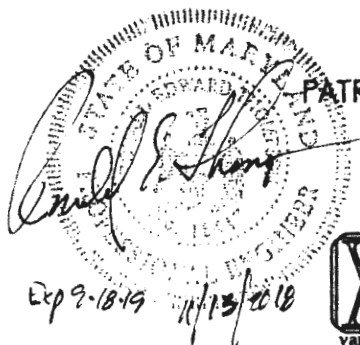
LIBER 14957 AT FOLIO 110

ELECTION DISTRICT: No. 4

HOWARD COUNTY, MARYLAND

NOVEMBER, 2018

SCALE: 1" = 50'



VANMAR
 ASSOCIATES, INC.
 Engineers Surveyors Planners

310 South Main Street Mount Airy, Maryland 21771
 (301) 828-2880 (301) 831-5018 (410) 548-2781

Fax (301) 831-5803 ©Copyright, Latest Date Shown



**Howard County
Health Department**

8930 Stanford Blvd, Columbia MD 21045
 (410) 313-6300 Fax (410) 313-2648
 TDD (410) 313-2323 Toll Free 1-866-313-6300
 website: www.askhealth@howardcountymd.gov

Bert Nixon, Director

TO ALL INTERESTED PARTIES

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

Well Site Location:

<u>Patrick Family LMT Partnership II</u>	<u>1</u>	<u>Florence</u>
Subdivision/Property Name	Lot #	Road Name

The well site has been staked by Vanmar Associates, Inc.,
 (professional land surveyor or company employing professional land surveyors)
 on 11/16/18 (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.

Certificate of Analysis

Acct. No. 10969 - 5-1

Field Record

Site visit performed on: Thursday, May 27, 2021 10:35 AM
by: Ronald Demory State ID No. 8072RD
Affiliation: Fredericktowne Labs, Inc.
Property Owner: Ed & Tara Meister
Property Address: 1600 Florence Road
Mt. Airy, MD 21771
Sample Source: Laundry Tub
Treatment Devices Noted: No Treatment Devices
Well No.: HO-17-0392
Field pH: 5.5
Free Res. Cl.: <0.1 mg/l
Temp: 15.5° C

Laboratory Report

Sample Received at laboratory: 5/27/2021 1:55 PM

Bacteriological results:

<u>Total Colif. (/100ml)</u>	<u>E.coli.(/100ml)</u>	<u>Start</u>		<u>End</u>		<u>Method</u>	<u>Analyst</u>
		<u>Date</u>	<u>Time</u>	<u>Date</u>	<u>Time</u>		
<1	<1	05/27/21	14:45	05/28/21	14:55	9223B	KMW

Bacteriological analysis of this sample indicates the water is safe for human consumption and meets federal, state and local requirements. Analysis was performed according to the 20th edition of Standard Methods

Inorganic Chemical results:

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>MCL</u>	<u>Date of Analysis</u>	<u>Method</u>	<u>Analyst</u>
Nitrate-Nitrogen	3.1	mg/l	10	5/27/2021	300.0	SR
Turbidity	0.4	NTU'	<10	5/27/2021	180.1	KMW
pH	5.5			5/27/2021	4500-H+B	RD
Sand	<2	mg/l	5	6/1/2021	0.065mmFilter	KB

Reported by:

Eden Mellott 6/2/21
Name Date

Fredericktowne Labs, Inc. is a State Certified Water Quality Laboratory
Maryland Cert. No. 116 Virginia Cert. No. 00444
MDOT WBE Cert. No.: 91-158