

C1 56415 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.

1 2 3 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3 ON ALL CARDS)

COUNTY NUMBER (All)

ST/CO USE ONLY DATE RECEIVED MM DD 05 18

DATE WELL COMPLETED 05 21 18 Depth of Well 200 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" HO 17-0280

OWNER Elm Street Development WELL SITE ADDRESS HOWARD LODGE DRIVE TOWN Sykesville SUBDIVISION WALKER MEADOWS SECTION LOT 34

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, Tan Shale, SAND, Gray Rock.

GROUTING RECORD yes no

WELL HAS BEEN GROUTED (Circle Appropriate Box) Well GROUT 44 44 TYPE OF GROUTING MATERIAL (Circle one) CEMENT [CM] BENTONITE CLAY [BC] NO. OF BAGS 25 NO. OF POUNDS 1875 GALLONS OF WATER 125 DEPTH OF GROUT SEAL (to nearest foot) from 0 ft. to 66 ft.

CASING RECORD

ST STEEL CO CONCRETE PL PLASTIC OT OTHER MAIN CASING TYPE ST Nominal diameter top (main) casing (nearest inch) 6 Total depth of main casing (nearest foot) 66

OTHER CASING (if used) diameter inch PL 4.12 depth (feet) from 60 180

SCREEN RECORD screen type or open hole (insert appropriate code below) ST STEEL BR BRASS HO OPEN HOLE PL PLASTIC OT OTHER

DEPTH (nearest ft.) HO 66 200

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.) 120 METHOD USED TO MEASURE PUMPING RATE water bucket WATER LEVEL (distance from land surface) BEFORE PUMPING 3 WHEN PUMPING 85 TYPE OF PUMP USED (for test) 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 36 PUMP HORSE POWER 37 41 PUMP COLUMN LENGTH (nearest ft.) 43 47 CASING HEIGHT (circle appropriate box and enter casing height) + above LAND SURFACE - below (nearest foot) 50 51

LATITUDE 3 934113 LONGITUDE 7 693927 (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. 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.

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, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC NO. M 4355

DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION) IC. NO. D 109

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

TAG = 7/10/18

B 1
4213

SEQUENCE NO.
(MDE USE ONLY)

STATE OF MARYLAND
APPLICATION FOR PERMIT TO DRILL WELL
522439-2 please type

STATE PERMIT NUMBER
HO-17-0280
fill in this form completely

Date Received (APA) 02/18
OWNER INFORMATION
Elm Street Development
6820 Elm St, Suite 200
McLean, VA 22101

B 3 LOCATION OF WELL
Howard
Walker Meadows
Sikesville

DRILLER INFORMATION
Michael Barron MWD 355
Barron Well Drilling
522 Underwood Ln, 21014
2/12/18

B 4 SOURCES OF DRILLING WATER
1. Well
HOWARD Lodge Drive
ON WHICH SIDE OF ROAD
DISTANCE FROM ROAD
ENTER FT OR MI
TAX MAP: 9 BLK: 6 PARCEL 66

B 2 WELL INFORMATION
APPROX. PUMPING RATE (GAL. PER MIN.) 5
AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 750

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

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL
Howard 13
COUNTY NAME COUNTY NO.
DATE ISSUED 3/16/18
CO SIGNATURE
EXP. DATE 3/16/19
DNI
DON: 5/1/18 @ DOG: 5/4/18 @ DOY: 5/21/2018 @

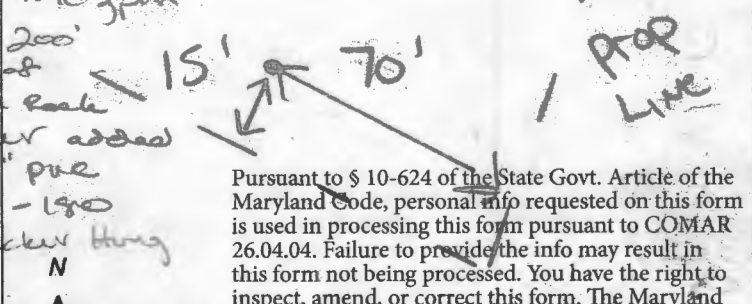
APPROXIMATE DEPTH OF WELL 300 FEET
APPROXIMATE DIAMETER OF WELL 6 INCH NEAREST

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

METHOD OF DRILLING (circle one)
BORED (or Augered) JETTED Jetted & DRIVEN
AIR-ROTARY AIR-PERCUSSION ROTARY (Hydraulic Rotary)
CABLE REVERSE-ROTARY DRIVE-POINT

66' steel casing
bedrock @ 152'
H2O @ 80', 125'
~10 gpm
200'
Loss of broken rock
liner added
4 1/2" PVC
60' - 180'
Packer string

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
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 DEEPEAN AN EXISTING WELL
PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED (IF AVAILABLE) 41



Not to be filled in by driller (MDE OR COUNTY USE ONLY)
APPROX. PERMIT NUMBER HD 2016G004
PERMIT No. HO-17-0280

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SPECIAL CONDITIONS must use 4 1/2" casing which extends 50' at least or 10' into competent bedrock AND well must be drilled at least 200'



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: May 21, 2018

Well Depth: 200 feet

Customer Elm Street Development
 Road Howard Lodge Drive
 City Clarksville
 State Maryland

Permit # HO-17-0280
 Subdivision Walker Meadows
 Section _____
 Lot # 34

Time	Water Level In Feet	Time to Fill 1-gallon bucket seconds	G.P.M.
2:15 PM	3	5	12.00
2:30 PM	37	5	12.00
2:45 PM	55	5	12.00
3:00 PM	74	5	12.00
3:15 PM	85	5	12.00
3:30 PM	85	5	12.00
3:45 PM	85	5	12.00
4:00 PM	85	5	12.00
4:15 PM	85	5	12.00
4:30 PM	85	5	12.00
4:45 PM	85	5	12.00
5:00 PM	85	5	12.00
5:15 PM	85	5	12.00
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.			

FIELD DATA SHEET
 HOWARD COUNTY WELL YIELD TEST

Well Permit No. HO - 17-0280
 Location of property (road) HOWARD LODGE
 Subdivision WALKER MEADOWS Lot 34 Block N/A Plat N/A Sec. N/A
 Well Driller BARLOW Owner N/A

Depth of well _____
 Distance of measuring point (M.P.) above ground _____
 Static water level (S.W.L.) below M.P. _____

I. High rate pumping -- reservoir drawdown

Time pump started 14:00 DRAW DOWN START Pumping rate _____
 Total time _____ to reach pumping water level _____ ft. below M.P.

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

TIME (in 15 minute intervals)	WATER LEVEL below M.P.	PUMPING RATE time to fill 5 gallon bucket	FLOW METER READING (if used)	CALCULATED FLOW (gallons per minute)

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: Pauls Well Pump & Water Treatment, LLC Telephone #: 410 795 5670
Address: 560 Obrecht Rd
Sykesville, 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 Clogie License# MSD220

*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: NVE INC Telephone #: _____
Subdivision: Walker Meadows Lot #: 34 Well Tag #: HO-17-0280 (SD)
Site Address: 12249 Mayapple Dr
Sykesville, MD 21784

Submersible Pump Data

Make: Grundfos
Model #: TH503422
Pump Capacity: 7
Well Yield: 12 gpm

Pitless Adapter

Make: Rumpell+
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

Depth of well encountered at time of pump installation: 200 (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

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): 0'
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: 9/15/2020

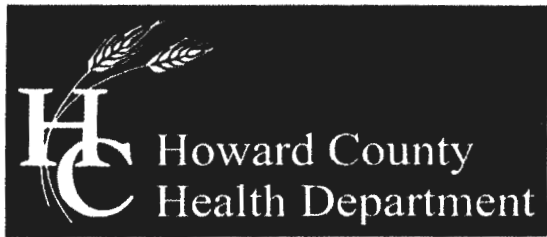
For Health Department Use Only - Not to be completed by Installer

Date Insp. Requested: 9/15/20 Date Insp. Approved: 9/15/20 Inspector: (SD)
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

44"
36"
24"



(Revised form 10/24/2018)



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

Twitter: HowardCoHealthDep

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

TO ALL INTERESTED PARTIES

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

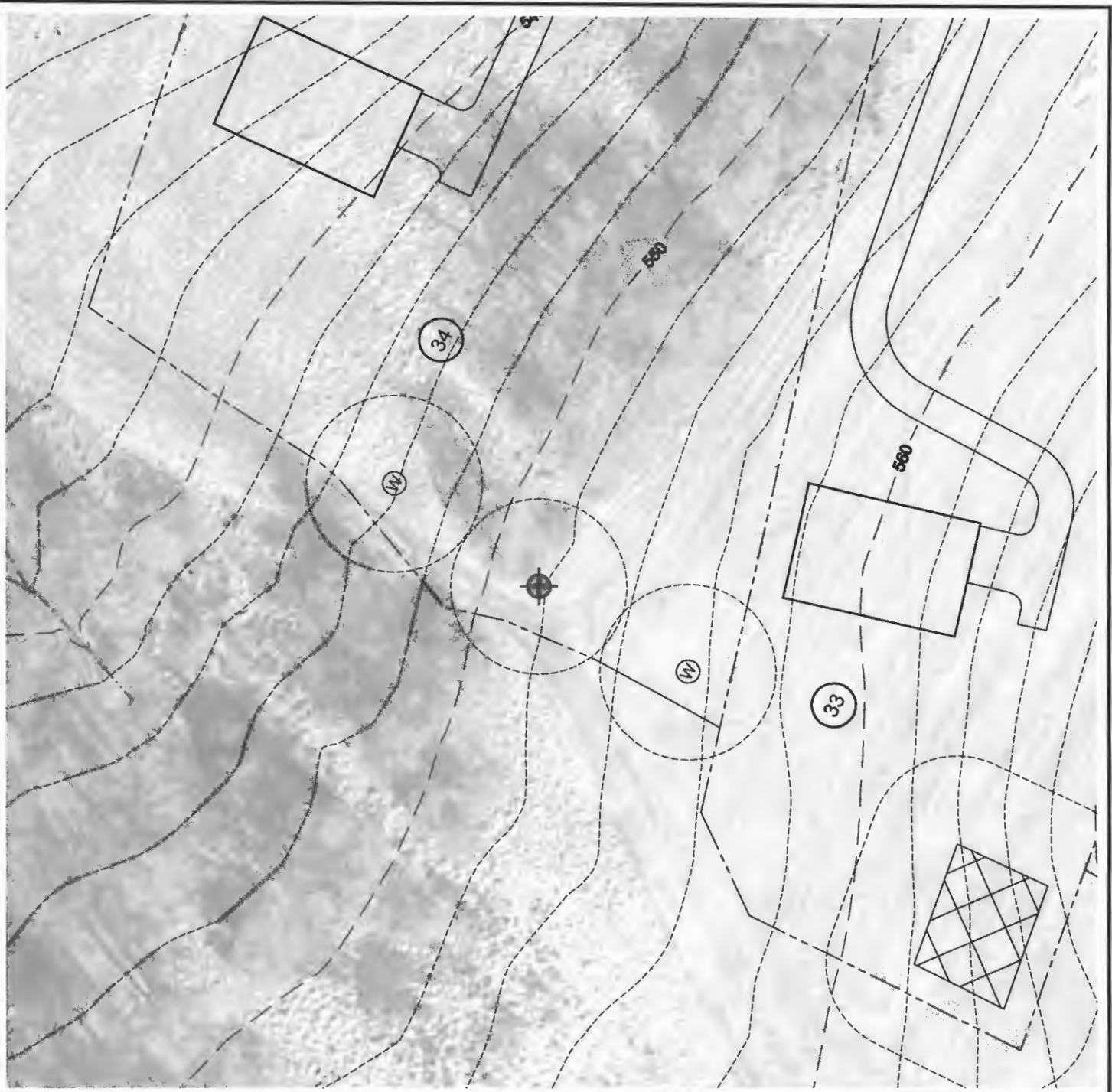
Well Site Location:

<u>WALKER MEADOWS</u>	<u>17</u>	<u>- STEPPING PLAKE</u>
Subdivision/Property Name	Lot #	Road Name
	<u>22-32, 34, BPPA'</u>	<u>MAPPLE DRIVE</u>

The well site has been staked by DEVELOPMENT DESIGN CONSULTANTS
(professional land surveyor or company employing professional land surveyors)
on 2-09-2018 (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.

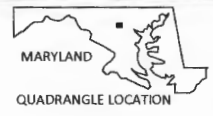
This sheet, along with two copies of an acceptable well site plan, must be attached to the green well permit application.



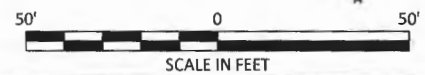
LEGEND




well sites ok
RF 3/16/18



QUADRANGLE LOCATION



client:			
Elm Street Development			
project location:			
Sykesville, Howard County, Maryland			
		project:	
		Water Supply Development Lot #34 Proposed Test Well Location Map	
file no:		ESD-WM-Report Set.dwg	
drawn:	M. Swam	date:	02/09/18
checked:	J. Lindsay	date:	02/09/18
approved:	M. Hauffer	date:	02/09/18
www.hydro-terra.com			1

NOTE:

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

INTERIM CERTIFICATE OF POTABILITY

Expiration Date – May 6, 2021

November 6, 2020

Homeowner
12249 Mayapple Drive
West Friendship, MD 21794

**RE: Walker Meadows, Lot 34
12249 Mayapple Drive
Building Permit: B20002097
Well Permit: HO-17-0280**

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 **11/5/2020**. Final approval of the well line connection to the dwelling was granted on **9/15/2020**. The well construction was completed on **5/21/2018**. Water samples were collected on **10/27/2020, 11/4/2020**.

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-17-0280. Although the submitted sample results are in compliance with COMAR standards, the Health Department does not guarantee water supplies.

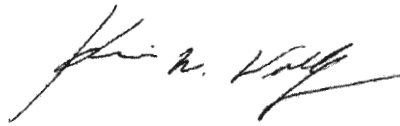
This Interim Certificate of Potability will expire **six months** from the date of issuance. Submission of a second bacteriological test indicating the water is free of coliform and fecal coliform bacteria is required prior to the expiration date, after which time a Final Certificate of Potability will 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 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 FAX (410) 848-0298

REPORT OF ANALYSIS

Laboratory ID #:	140779	Account #:	1933
Reference:	Walker Meadows Lot 34	Company:	Fogles Well Pump & Treatment
Location:	12249 Mayapple Drive Sykesville, MD 21784	Requested By:	Dave Fogle
Date/ Time Collected:	10/27/2020 0730	Source:	Well Water
Date/Time Rec'd:	10/27/2020 0935	Site:	Kitchen Sink
Chlorine ppm:	Free: ND Total: ND	Treatment:	None
Collected By:	J. Evans 0309JE	pH:	6.1
		Well #:	HO-17-0280

Bacteria, Coliform, Total, MPN	5.3	MPN/ 100 ml	<1.0	SM20 9223B	10/28/2020 / 0900 / CRS
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	10/28/2020 / 0900 / CRS
Nitrate	1.80	mg/L	10	601	10/27/2020 / 1100 / CRS
Turbidity	1.40	NTU	<10	SM20 2130B	10/27/2020 / 1150 / CRS
Sand	ND	mg/L	5	Visual/Gravimetric	10/27/2020 / 1150 / CRS

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

Reason for Test : Use & Occupancy

Building Permit # : B200002097

Date Reported: 10/28/2020

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 #:	140989	Account #:	1933
Reference:	Walker Meadows Lot 34	Company:	Fogles Well Pump & Treatment
Location:	12249 Mayapple Drive Sykesville, MD 21784	Requested By:	Dave Fogle
Date/ Time Collected:	11/4/2020 1030	Source:	Well Water
Date/Time Rec'd:	11/4/2020 1116	Site:	Kitchen Tap
Chlorine ppm:	Free: ND Total: ND	Treatment:	None
Collected By:	B. Wilkerson 9315BW	pH:	6.0
		Well #:	HO-17-0280

Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	11/5/2020 / 0900 / CRS
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	11/5/2020 / 0900 / CRS

NOTES

- 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 sampling.
- 3 Sample collected by client, analyzed as received
- 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 & Occupancy

Building Permit # : B20002097

Date Reported: 11/5/2020

Diehl Prop: Lot 2
Lot 3/4/5

FILE INQUIRY NOTES

DATE	RESULTS OF REVIEW FOR FILE
6/25	Well casing requirement
	Casing must be steel. Set ^(install) casing to 50-foot depth, or 10 feet into competent bedrock,
Buck	which ever is deeper.