

**C 1** 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 **13**

ST/CO USE ONLY DATE RECEIVED DATE WELL COMPLETED Depth of Well PERMIT NO. FROM "PERMIT TO DRILL WELL"

DATE RECEIVED: 11-18-24 DATE WELL COMPLETED: 11-18-24 DEPTH OF WELL: 320 PERMIT NO.: HO-20-0161

OWNER: Tan P. P. P. P. WELL SITE ADDRESS: 3425 Murphy Rd TOWN: Lacret, MD

SUBDIVISION: \_\_\_\_\_ SECTION: \_\_\_\_\_ LOT: \_\_\_\_\_

**WELL LOG**  
Not required for driven wells

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

DESCRIPTION (Use additional sheets if needed)	FEET		check if water bearing
	FROM	TO	
Top Soil	0	1	
Subsoil	1	25	
Weathered Gray Rock	25	35	
Sandy Rock	35	320	

**GROUTING RECORD**  
WELL HAS BEEN GROUTED (Circle Appropriate Box) **Y** **N**

TYPE OF GROUTING MATERIAL (Circle one) CEMENT **CM** BENTONITE CLAY **BC**

NO. OF BAGS 45 32 NO. OF POUNDS 45 1600

GALLONS OF WATER 600

DEPTH OF GROUT SEAL (to nearest foot) 320 ft. from 0 TOP to 54 BOTTOM

**CASING RECORD**  
casing types insert appropriate code below

**ST** STEEL **CO** CONCRETE **PL** PLASTIC **OT** OTHER

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

60 81 63 64 66 70

**OTHER CASING (if used)**  
diameter inch depth (feet) from to

E A C H C A S I N G

**SCREEN RECORD**  
screen type or open hole insert appropriate code below

**ST** STEEL **BR** BRASS **HO** OPEN HOLE **PL** PLASTIC **OT** OTHER

**C 2** DEPTH (nearest ft.)

1 2

E A C H S C R E E N

8 9 11 15 17 21

23 24 26 30 32 36

38 39 41 45 47 51

SLOT SIZE 1 \_\_\_\_\_ 2 \_\_\_\_\_ 3 \_\_\_\_\_

DIAMETER OF SCREEN (NEAREST INCH) from \_\_\_\_\_ to \_\_\_\_\_

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 58

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)

T (E.R.O.S.) W Q

70 \_\_\_\_\_ 72 \_\_\_\_\_ 74 75 76

TELESCOPE CASING LOG INDICATOR OTHER DATA

**C 3** **PUMPING TEST**

HOURS PUMPED (nearest hour) 8 9

PUMPING RATE (gal. per min.) 11 15

METHOD USED TO MEASURE PUMPING RATE \_\_\_\_\_

WATER LEVEL (distance from land surface)

BEFORE PUMPING 17 20 ft.

WHEN PUMPING 22 25 ft.

TYPE OF PUMP USED (for test) **A** air **P** piston **T** turbine **C** centrifugal **R** rotary **O** other (describe below) **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 29

CAPACITY: GALLONS PER MINUTE (to nearest gallon) 31 35

PUMP HORSE POWER 37 41

PUMP COLUMN LENGTH (nearest ft.) 43 47

CASING HEIGHT (circle appropriate box and enter casing height) **+** above **-** below LAND SURFACE (nearest foot) 49 51

LATITUDE 39.14003

LONGITUDE 76.91596

(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.

12/12/24

05-341795

B 1 SEQUENCE NO. (MDE USE ONLY) STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL please type 587851 STATE PERMIT NUMBER HO-22-0161 fill in this form completely

Date Received (APA) 10/31/24

OWNER INFORMATION  
 8 MM DD YY 13  
 15 Last Name First Name 34  
 36 Street or RFD 55  
 57 Town 70 State 72 Zip 76  
 Laukiolis Preston J  
 8425 Murphy Road  
 Laurel MD 20723

B 3 LOCATION OF WELL  
 8 COUNTY 21  
 23 SUBDIVISION 42  
 SECTION 44 48 LOT 48 50  
 52 NEAREST TOWN 71  
 Howard  
 Sarah E Payne  
 Laurel

DRILLER INFORMATION  
 76 License No. 81  
 10/30/24  
 Driller's Name MWD 598  
 Firm Name Allied Well Drilling  
 Address 129 Annapolis Junction MD 20701  
 Signature Wesley A Wolfe Date

B 4 SOURCES OF DRILLING WATER  
 1. Public  
 2.  
 3.  
 11 STREET ADDRESS 30  
 ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)  
 NORTH N  
 WEST W EAST E  
 SOUTH S  
 34 x 75' 37  
 DISTANCE FROM ROAD  
 ENTER FT OR MI 38 39  
 TAX MAP: 0046 BLK: PARCEL 0019

B 2 WELL INFORMATION  
 1 2 APPROX. PUMPING RATE (GAL. PER MIN.) 8 12  
 AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 14 20

USE FOR WATER (CIRCLE APPROPRIATE BOX)  
 22  
 DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION  
 FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)  
 INDUSTRIAL, COMMERCIAL, DEWATERING  
 PUBLIC WATER SUPPLY WELL  
 TEST, OBSERVATION, MONITORING  
 OPEN LOOP GEOTHERMAL  
 CLOSED LOOP GEOTHERMAL 2 Loops

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL  
 Howard County 13  
 COUNTY NAME COUNTY NO.  
 STATE SIGNATURE INSERT S → 41  
 DATE ISSUED 11/13/2024 26m Per 11/13/2025  
 43 MM DD YY 48 CO SIGNATURE EXP. DATE

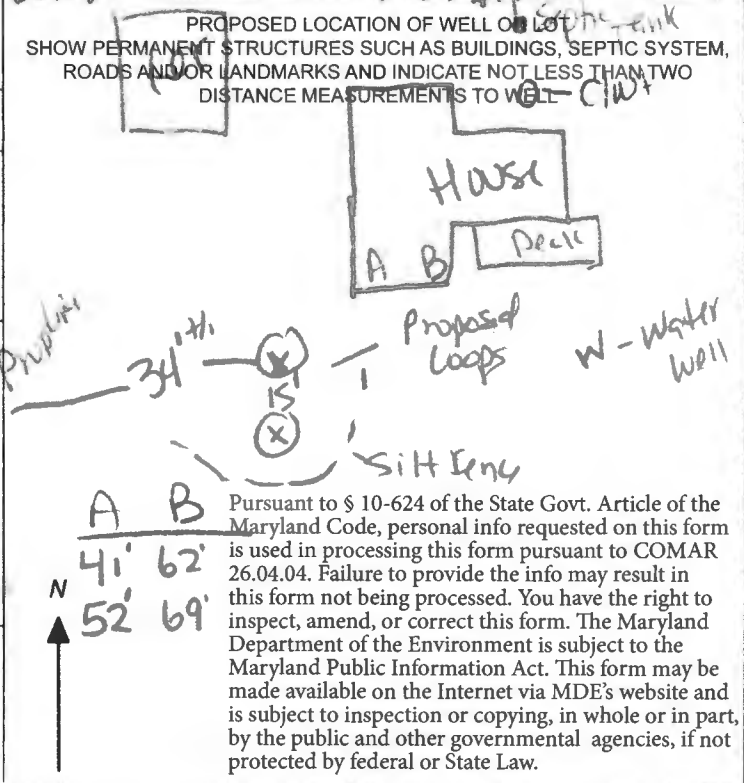
APPROXIMATE DEPTH OF WELL 320 FEET  
 24 28

APPROXIMATE DIAMETER OF WELL 6 INCH  
 NEAREST INCH

METHOD OF DRILLING (circle one)  
 30 BORED (or Augered) JETTED Jetted & DRIVEN  
 AIR-ROTary AIR-PERCussion ROTARY (Hydraulic Rotary)  
 37 CABLE REVerse-ROTary DRive-POINT  
 other

REPLACEMENT OR DEEPENEED WELLS (CIRCLE APPROPRIATE BOX)  
 39  
 THIS WELL WILL NOT REPLACE AN EXISTING WELL  
 THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED  
 THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS  
 THIS WELL WILL DEEPEEN AN EXISTING WELL  
 PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPENEED (IF AVAILABLE) 41 52

Not to be filled in by driller (MDE OR COUNTY USE ONLY)  
 APPROP. PERMIT NUMBER G  
 PERMIT No. HO-22-0161  
 70 71 72 73 74 75 76 77 78 79



SPECIAL CONDITIONS Borehole must be grouted from bottom to top.

NOTE APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED.  
 MDE/WMA/PER.071 Runoff must be kept from going downhill to street & nearby lake.

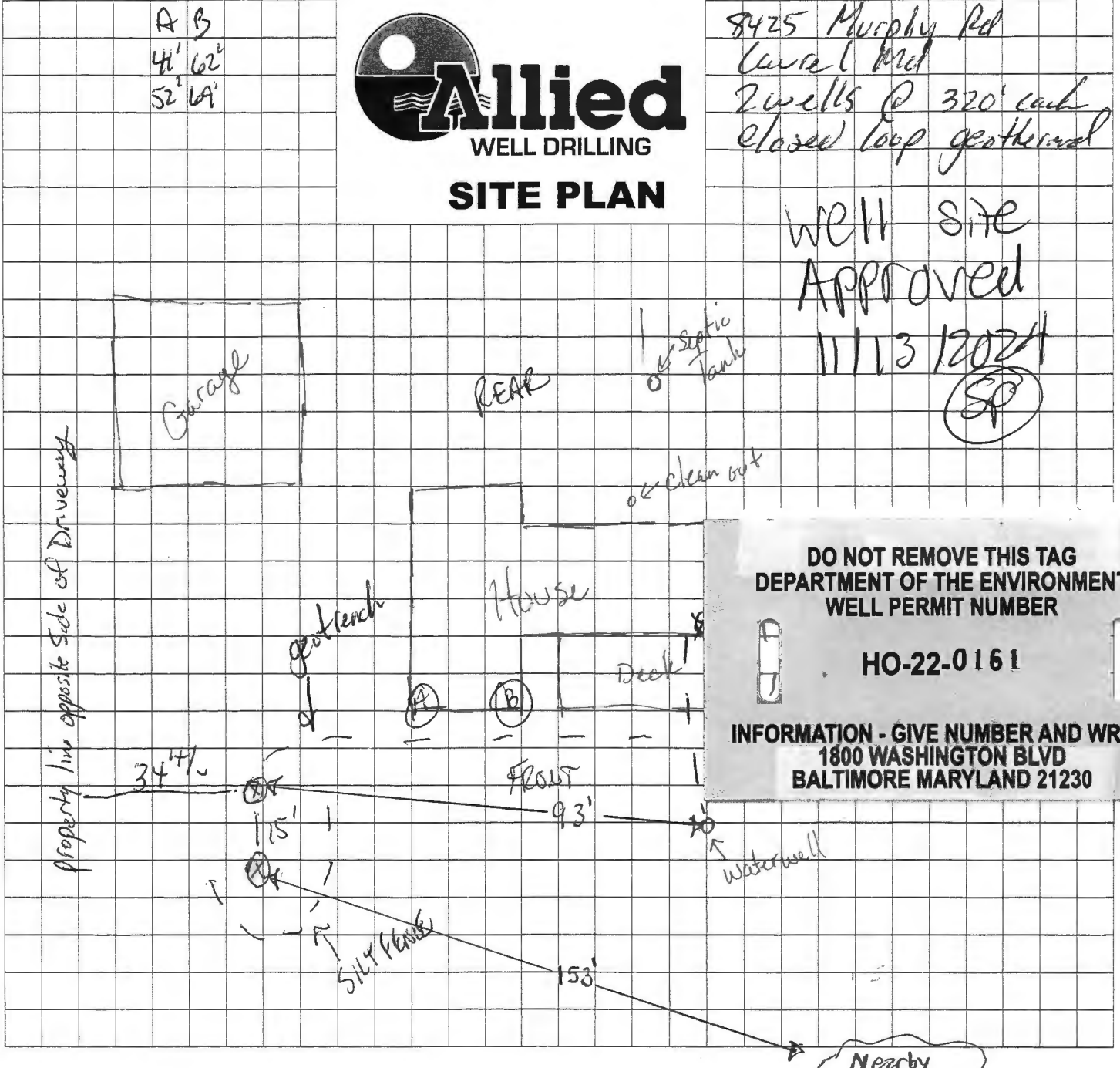
A B  
4' 62"  
52' 64'



**SITE PLAN**

8425 Murphy Rd  
Lural Md  
2 wells @ 320' each  
closed loop geothermal

Well site  
Approved  
11/13/2021  
SP



**DO NOT REMOVE THIS TAG**  
DEPARTMENT OF THE ENVIRONMENT  
WELL PERMIT NUMBER  
**HO-22-0161**  
INFORMATION - GIVE NUMBER AND WRITE  
1800 WASHINGTON BLVD  
BALTIMORE MARYLAND 21230

Sediment Control Protocol: SILT FENCE

Distance From House: 41'  
From Septic: 50' +  
From Sewer: N/A  
From Property Line: 34' +/-  
From Street: 75' +/-

Trees Nearby: Yes, OK!  
Utility Issues: Well line for trench  
Mats Needed: Yes  
Access For H/U: Yes  
Neighboring Tags: See Comp S

Comments: \_\_\_\_\_

Person Completing Form: Wes Walk

# FILE INQUIRY NOTES

DATE	RESULTS OF REVIEW FOR FILE
11/9/24	Initial review of geothermal permit plan. Plan looks OK
	Notified driller of status. (SP)
11/8/24	Geothermal Bore Staked per plan. Stakes meet setbacks to
	septic system, well, street, & driveway.
	Nearby lake seen downhill while onsite. (SP)
11/13/24	Released permit w/ condition to keep runoff
	off of street & lake. (SP)

**RECEIPT**

Howard County, MD  
HOWARD COUNTY HEALTH DEPARTMENT  
ASCEND ONE BUILDING  
Columbia, MD 21045  
8930 STANFORD BLVD

**Application:** WS-WP-24-03178

**Application Type:** EnvHealth/Well and Septic/Installation/Application

**Address:** 8425 MURPHY RD, Laurel, 20723

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<b>Receipt No.</b>	11028					
<b>Payment Method</b>	<b>Ref Number</b>	<b>Amount Paid</b>	<b>Payment Date</b>	<b>Cashier ID</b>	<b>Received</b>	<b>Comments</b>
Check	33863	\$160.00	10/31/2024	SMARTIN		

**Owner Info.:**  
TAUKULIS PRESTON J  
8425 MURPHY RD  
LAUREL, MD 20723

**Work Description:**

## **HOWARD COUNTY GROUTING PROCEDURE**

Boreholes will be grouted from the bottom to the top via a tremie pipe and positive displacement pump. Bentonite grout, known as Quik-Grout will be used according to the manufacturer's specifications to achieve a consistency of at least 20% solids (24 gallons potable water/50 lb. sack of grout) and a permeability no more than  $2.5 \text{ E}(-08) \text{ cm/sec}$ . Grouting will be completed immediately after installing the geothermal loop and no later than twenty-four (24) hours after installing the geothermal loop. Open boreholes/annular space will be protected as necessary to prevent the entry of surface water or pollutants.

GRADE

EACH BORE HOLE (TYP.)

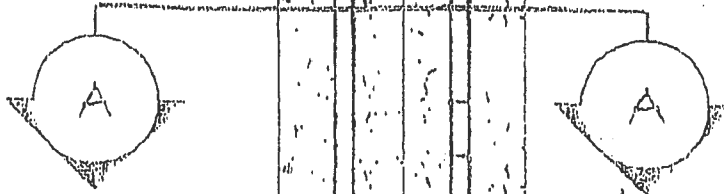
MINIMUM  
HORIZONTAL BURY  
DEPTH 4 FT

FOR CONT.  
SEE PLANS

HORIZONTAL  
PIPING

GROUT ENTIRE ANNULAR  
SPACE AND VERTICAL  
U-TUBE WITH (BENTONITE)  
GROUT.

BORE DEPTH



DEPTH MARKINGS IN FEET TO  
INDICATE DEPTH OF INSERTION

TAPE

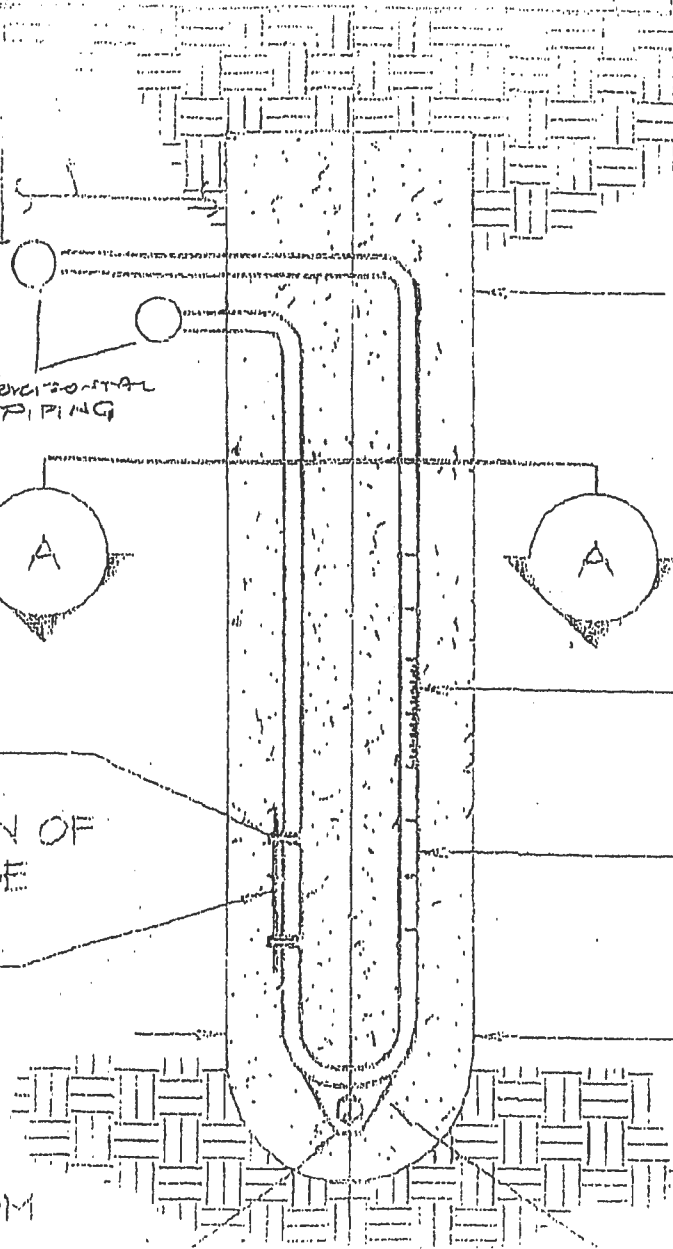
5 TO 10 FOOT SECTION OF  
REBAR TO GUIDE TUBE  
INTO BORE DURING  
INSTALLATION

TYPICAL VERTICAL U TUBE  
1.5 INCHES

TYPICAL BORE DIAMETER  
6.0 INCHES

ANCHOR FITTING TO  
PREVENT U-TUBE FROM  
SURFACING AFTER  
INSTALLATION

TYPICAL SOCKET U-BEND



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

September 20, 2021

Emailed to: [ksmith@fromthegroundupcontractors.com](mailto:ksmith@fromthegroundupcontractors.com)

Keith Smith  
8425 Murphy Road  
Laurel, MD 20723

**RE: Water Sample Results**  
**8425 Murphy Road**  
**Invoice # 36432**

Dear Mr. Smith,

We have received the results from the testing of the water sample(s) taken from the above referenced property on September 1, 2021. A description of the results and the established standards for each test is included below. Standards such as maximum contaminant levels (MCL), secondary maximum contaminant levels (SMCL), and drinking water equivalency levels (DWEL) are established by the EPA and other agencies to provide a reference for determining when action should be taken. These standards help to improve the overall quality of your water or ensure that steps are taken to treat the water to prevent you and your family from getting sick. Typically, no water is completely free of contamination but you should be concerned if the level of contamination for a particular test exceeds the standard.

A sample was collected from the kitchen sink, after the Reverse Osmosis, to determine the Nitrate level in your water supply. The nitrate level was 4.07 parts per million. The MCL for nitrate is 10.0 parts per million.

Please contact the Health Department at (410) 313-1773 between 8:30 a.m. and 4:30 p.m., Monday through Friday if you have any questions regarding these test results.

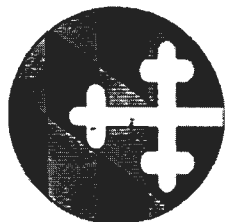
Sincerely,



Kathleen Cook, R.S.  
Community Hygiene Program

Enclosures





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

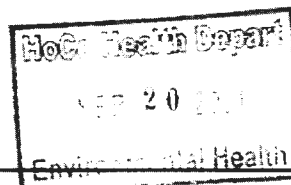
HOWARD CO ENVIRONMENTAL HLTH  
8930 STANFORD BLVD  
COLUMBIA, MD 21045

Lab Project NoE22000756 Date Coll. 09/01/2021 Date Received: 09/01/2021 Submitted By: Boleslav Shklyar

Field ID: HC8425  
Lab No.: E22000756001

<u>Analyte</u>	<u>Method</u>	<u>Result</u>	<u>Units</u>	<u>Date Analyzed</u>
Nitrate + Nitrite, as N	EPA 353.2	4.07	mg N/L	09/03/2021

### Comments:



Approved by: \_\_\_\_\_

Approval date: 09/10/2021

\*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.



# Well Testing - Service Results



FAX TO 410.510.1203

## Access. Convenience. Expertise.

### NATURE OF TESTING - Full / Modified / Initial / Annual

**Modified**

PLEASE NOTE: Complete all information as requested. Submitting this completed report is evidence of your work.

Attached list of special tests are required. Do not fully explain any unusual situations.

COMPLETE THIS FORM NEATLY, sign and date the form - This report will be provided to the customer.

For more information on our services, visit [www.welgard.com](http://www.welgard.com) or call 866.WEL.GARD

Contact: Keith Smith/Contractor Who will be there? Keith Smith/Contractor

Phone (day): 410.630.6900 Request dates: 04.06.2021

Property Address: 8425 Murphy Rd For office use only:

City: Laurel State MD Zip 20723

County: Howard Please answer Yes or No *Please Note: Water cannot be used*

Well information(\*) to be completed Outside faucet available? YES *prior to, or during the Yield Test, as*

Well Permit # Unknown Is well pipe above ground? YES *this may distort / lower test results.*

Depth (if known) Unknown Is this a property transfer? YES *Min 350 gallons required for testing*

Initial yield (if known) Unknown

### TESTING

Tests Requested : Potability YES Real Estate Yield Test NO Modified Yield Test YES Basic Report YES

Bacteria Yes Nitrate Yes pH Yes Turbidity Yes Sand Yes

Iron No Lead No Nitrite No Chlorine No Hardness No

Other Water Analysis Tests: VOC No TDS No Other: NONE

Laboratory to be Used: #N/A Water Sampler Certificate # #N/A

Assigned To: #N/A Date Scheduled 04.06.2021 Date Completed \_\_\_\_\_

*Tester is to respond to each question; if not observed or determined, state "Unknown"*

### EQUIPMENT

Age of Well: Unknown Well Obstructions? If Yes, Describe: No - on hill

*Well Report (based on visual observations and readings) - applicable only on date of completion*

Distance to house 30' Casing Type: steel Well Cap Secure? Yes 2 Piece? Yes

Est. Static Water Level: 40' Pressure Switch/Gauge OK? Yes Replace? NO

Pump-Type (if known) \_\_\_\_\_ Model \_\_\_\_\_ HP \_\_\_\_\_ Amps \_\_\_\_\_ Condition OK? NO

Pump - Type 3 wire Model Franklin HP 1/2 Amps 5.5 Condition OK? Yes

Tank - Type WellXtrol Model 203 GAL 32 PSI Setting 40/60 Condition OK? Yes

Control Box Condition: OK  Replace  Wire Type 12/3 Eligible for PT Protection? \_\_\_\_\_

Water Conditioning Equipment: \_\_\_\_\_

### WATER

Time Water Drawn: \_\_\_\_\_ Location: \_\_\_\_\_ Sample Iced? Yes

Description of Water (Check all that apply):

Clear  Sediment  Orange/Brown  Odor-Rotten Egg  Chlorine  Field pH   
Colored  Stains  Blue/Green  Odor-Musty  Leaks  Other

Collected By: \_\_\_\_\_ Signed: on file

Released By: \_\_\_\_\_ Signed: on file

Notes/Comments: \_\_\_\_\_



Well Testing - Service Results



FAX TO 410.510.1203

Access. Convenience. Expertise.

THESE RESULTS ARE AS OF THE DATE OF TESTING ONLY, AND SHOULD NOT BE UNDERSTOOD AS ANY WARRANTY OR GUARANTEE OF FUTURE PERFORMANCE.

YIELD TESTING BY >>>>

Table with columns: Time, Cycle Time, PSI, Pumping Rate\*, Total Gal, Calc. Flow, Yield, Minutes. Includes a summary row for Total Gallons Pumped: 313.

\* Time (sec) to fill 5 Gal

YIELD TEST COMPLETED BY SPECIFIC REQUEST IS Modified Yield Test

Well Guardian Corporation (WGC) is requested to perform the above services; Service Professionals performing these services require access to the property for such purpose. WGC will not be held responsible for damages to the well components resulting from normal test procedures.

To be signed if Well Test Request not signed.

Authorized By: Well Guardian Corp

Signed:

Date 03.26.2021

THANK YOU!!

For WGC only: Received 03.26.2021

Taken By: Al Baker

Table with 3 columns: Yield Test By, Water sampler, Lab. Includes dates and lab numbers.



*Well Testing - Service Results*

*Access. Convenience. Expertise.*



**Description/Details:**

**Modified Yield Test -**

- performed by a certified WelGard® professional (Licensed only as required)
- objective to extract the average daily water use for a 3 person family
- generally lasts for 60 to 90 minutes with consistent flow
- purpose of test -- to determine if well system qualifies for WelGard® Protection\*
- is reported on standard Well Inspection & Yield Test Report

\* Recipient must join WelGard Membership within 60 days from inspection or by date of settlement.

***THESE RESULTS ARE AS OF THE DATE OF TESTING ONLY, AND PROVIDES  
NO WARRANTY OR GUARANTEE OF FUTURE PERFORMANCE.***

# FOUNTAIN VALLEY ANALYTICAL LABORATORY, INC.

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

## REPORT OF ANALYSIS

Laboratory ID #: 143734 Account #: 7615  
Reference: Keith Smith Company: Welgard/ Well Guardian  
Location: 8425 Murphy Road Requested By: Gary C. Baker  
Laurel, MD 20723 Source: Well Water  
Date/ Time Collected: 4/6/2021 1030 Site: Bath Sink  
Date/Time Rec'd: 4/6/2021 1140 Treatment: Neutralizer  
Chlorine ppm: Free: ND Total: ND pH: 6.5  
Collected By: G. Wenger 3992GW Well #: N/A

PARAMETERS	RESULTS	UNITS	REFERENCE	METHOD	DATE/TIME/ANALYST
Bacteria, Coliform, Total, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	4/7/2021 / 0930 / CRS
Bacteria, E. coli, MPN	<1.0	MPN/ 100 ml	<1.0	SM20 9223B	4/7/2021 / 0930 / CRS
Nitrate	14.4	mg/L	10	601	4/6/2021 / 1200 / CRS
Turbidity	<0.30	NTU	<10	SM20 2130B	4/6/2021 / 1230 / CRS
Sand	ND	mg/L	5	Visual/Gravimetric	4/6/2021 / 1300 / 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 ND = None Detected; N/A: Not Available
- 6 Sample collected by client, analyzed as received
- 7 pH and Chlorine level tested in lab (pH tested after recommended holding time)

Reason for Test : Real Estate

Date Reported: 4/7/2021



KEITH SMITH  
FROM THE GROUND UP CONTRACTORS LLC  
036 DUCKEYS RUN RD.  
CLARK RIDGE MD 21075

HEALTH DEPARTMENT  
ROBERT BKICKEK

PROJECT NAME: B425 MURPHY ROAD

Permit: B20003959

RECEIVED

JUN 21 2021

LICENSES & PERMITS  
DIVISION