

**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

ST/CO USE ONLY DATE Received 06-30-24 DATE WELL COMPLETED 5-16-24 Depth of Well 400 PERMIT NO. FROM "PERMIT TO DRILL WELL" HO-22-0129

OWNER Mc Carville, Kathryn Trustee WELL SITE ADDRESS 10919 Batterssea Ln TOWN Columbia, MD SUBDIVISION \_\_\_\_\_ SECTION \_\_\_\_\_ LOT 105

**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	
Bm Soil	0	10	
Tan Sand	10	30	
lght Sand+clay	30	80	
Sand	80	95	
Gray Rock	95	400	

**GRROUTING RECORD** YES  NO

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

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

NO. OF BAGS 18 NO. OF POUNDS 450

GALLONS OF WATER \_\_\_\_\_

DEPTH OF GROUT SEAL (to nearest foot) from 0 ft. to 40 ft.

**CASING RECORD**

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

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

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

**SCREEN RECORD**

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

**C 3**

**PUMPING TEST**

HOURS PUMPED (nearest hour) \_\_\_\_\_

PUMPING RATE (gal. per min.) \_\_\_\_\_

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

WATER LEVEL (distance from land surface) BEFORE PUMPING \_\_\_\_\_ ft. WHEN PUMPING \_\_\_\_\_ 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

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED YES  NO

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 I.C. NO. 1 MW 0598  
DRILLERS SIGNATURE Whaley A. Wolfe  
LIC. NO. 1 D

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

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

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76

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

**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) \_\_\_\_\_

PUMP HORSE POWER \_\_\_\_\_

PUMP COLUMN LENGTH (nearest ft.) \_\_\_\_\_

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

LATITUDE 39.21519  
LONGITUDE 76.89068  
(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.

15-041374

EMERGENCY/TEMP NO. IF ANY

B 1	72762	SEQUENCE NO. (MDE USE ONLY)	STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL please type	STATE PERMIT NUMBER H0-22-0129 fill in this form completely
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Date Received (APA) 04/23/24

**OWNER INFORMATION**

McCarville Trustee Kathryn  
2219 Central Park  
Evanston IL 60201

**LOCATION OF WELL**

Howard  
Swansfield  
Columbia

**DRILLER INFORMATION**

Wesley Wolfe MWD 598  
Allied Well Drilling  
PO Box 129 Annapolis Junction MD 20701  
Wesley Wolfe 04/22/24

**SOURCE OF DRILLING WATER**

1. Public  
2. 4/16/2024 -  
3. Drill rig was here, no drillers seen operating here, not started.

10919 Batterssea Ln  
10919 BATTERSEA LN  
ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)  
DISTANCE FROM ROAD 34 33' 37  
ENTER FT OR MI  
TAX MAP: 0035 BLK: PARCEL 0267

**WELL INFORMATION**

APPROX. PUMPING RATE (GAL. PER MIN.)  
AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY)

**NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL**

Howard  
COUNTY NAME COUNTY NO. 13  
STATE SIGNATURE INSERT S  
DATE ISSUED 4/30/2024  
CO SIGNATURE EXP. DATE 4/30/2025

**USE FOR WATER (CIRCLE APPROPRIATE BOX)**

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

5/17/2024 - Driller @ 370' set 95' casing rock @ 92' Drill casing + water running of into road & neighboring property. Loop

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

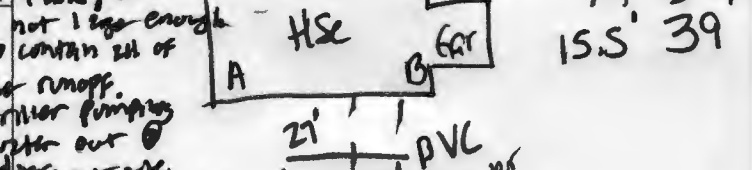
HSE GAR  
A B  
15.5' 39'

APPROXIMATE DEPTH OF WELL 400 FEET  
APPROXIMATE DIAMETER OF WELL 6 INCH

DRILLER HOLD TO STOP WORK & CONTAIN RISK  
DRILLER PUMPED WATER FROM WELL INTO WATER TANK, WATER TANK NOT 1/2 full enough to contain all of the runoff. Driller pumping water out @ different site & casing & well to pump rest of water from well out. Well

**METHOD OF DRILLING (circle one)**

BORED (or Augered) AIR-ROTARY  
 JETTED AIR-PERCussion  
 Jetted & DRIVEN ROTARY (Hydraulic Rotary)  
 CABLE REVERSE-ROTARY  
 DRIVE-POINT



**REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX)**

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 DEEPEAN AN EXISTING WELL

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

21' from Wtr  
27' from Sewer

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**Not to be filled in by driller (MDE OR COUNTY USE ONLY)**

APPROP. PERMIT NUMBER G  
PERMIT No. H0-22-0129

**SPECIAL CONDITIONS** Please Notify office of Drilling & Grant.



5/17/2024-

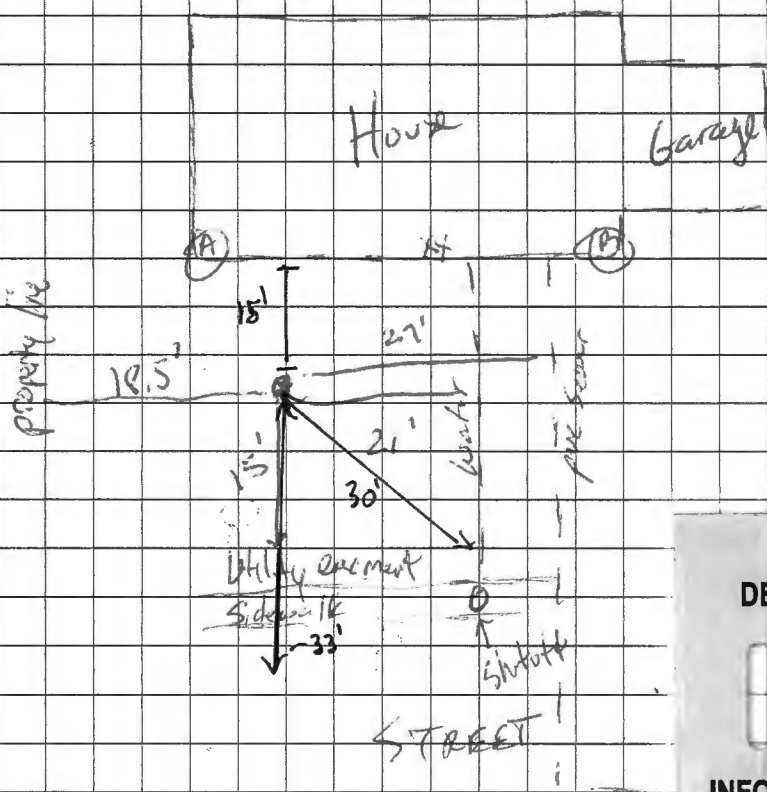


A B  
155 39'



10919 Ba Hersae Lane  
Columbia Md  
1 well @ 400'  
closed loop geothermal

well site  
Approved  
4/30/2024



DO NOT REMOVE THIS TAG  
DEPARTMENT OF THE ENVIRONMENT  
WELL PERMIT NUMBER  
  
HO-22-0129  
  
INFORMATION - GIVE NUMBER AND WRITE  
1800 WASHINGTON BLVD  
BALTIMORE MARYLAND 21230

Sediment Control Protocol: SILT Fence

Distance From House: 15'  
From Septic: N/A  
From Sewer: 27'  
From Property Line: 15' & 19'  
From Street: 18' to Sidewalk 28' to street

Trees Nearby: Yes, Protected  
Utility Issues: NO  
Mats Needed: Yes  
Access For H/U: Yes, Missile  
Neighboring Tags: See Comps

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

Person Completing Form: Wes Wolfe

**RECEIPT**

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

**Application:** WS-WP-24-01058

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

**Address:** 10919 BATTER SEA LN, COLUMBIA, MD 21044

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<b>Receipt No.</b>	9417					
<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	32448	\$160.00	04/23/2024	SMARTIN		

**Owner Info.:** KATHRYN MCCARVILLE  
2219 CENTRAL PARK  
EVANSTON, IL 60201

**Work Description:** GEOTHERMAL WELL



**Allied Well Drilling**  
P.O. Box 129  
Annapolis Junction, MD 20701  
Office #: 301-776-8370  
Fax #: 301-776-8374

Date: 04/29/2024

**County Health Department.**

Subject: Variance Letter

I **Kathryn McCarville** am aware, that the geothermal wells to be drilled on my property at  
10919 Battersea Lane Columbia MD Does not meet County set back requirements of 20' from  
building foundation. The distance will be 15', and I hereby authorize Allied Environmental Services, Inc.,  
permission to obtain the necessary variances which are required, to obtain a proper Well Permit.

Signed:  \_\_\_\_\_

## **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

TAPE

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

DEPTH MARKINGS IN FEET TO  
INDICATE DEPTH OF INSERTION

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

