

1 2 3 4 5 6 (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 MM 10 13 DATE WELL COMPLETED MM 15 DD 20 Y 22 Depth of Well 22 26 PERMIT NO. FROM "PERMIT TO DRILL WELL" HG-02-0448

OWNER ... WELL SITE ADDRESS ... TOWN ... 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	
<u>...</u>	<u>...</u>	<u>...</u>	<input type="checkbox"/>
<u>...</u>	<u>...</u>	<u>...</u>	<input type="checkbox"/>
<u>...</u>	<u>...</u>	<u>...</u>	<input type="checkbox"/>
<u>...</u>	<u>...</u>	<u>...</u>	<input type="checkbox"/>

GROUTING RECORD ybs no

WELL HAS BEEN GROUTED (Circle Appropriate Box)

TYPE OF GROUTING MATERIAL (Circle one)
CEMENT BENTONITE CLAY

NO. OF BAGS 45 46 NO. OF POUNDS 45 46

GALLONS OF WATER ...

DEPTH OF GROUT SEAL (to nearest foot)
from 48 TOP ft. to 54 BOTTOM ft. (enter 0 if from surface)

CASING RECORD

casing types insert appropriate code below

STEEL CONCRETE
 PLASTIC OTHER

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

60 61 63 64 66 70

OTHER CASING (if used)

EACH CASING	diameter (if used)		depth (feet)	
	inch	inch	from	to
<u>...</u>	<u>...</u>	<u>...</u>	<u>...</u>	<u>...</u>

SCREEN RECORD

screen type or open hole (insert appropriate code below)

STEEL BRASS OPEN HOLE
 PLASTIC OTHER

NUMBER OF UNSUCCESSFUL WELLS: ...

WELL HYDROFRACTURED

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 D 1
DRILLERS SIGNATURE ...
LIC. NO. D

C 2 DEPTH (nearest ft.)

E A C H S C R E E N	1		2		3	
	8	9	11	15	17	21
<u>...</u>	<u>...</u>	<u>...</u>	<u>...</u>	<u>...</u>	<u>...</u>	<u>...</u>
<u>...</u>	<u>...</u>	<u>...</u>	<u>...</u>	<u>...</u>	<u>...</u>	<u>...</u>
<u>...</u>	<u>...</u>	<u>...</u>	<u>...</u>	<u>...</u>	<u>...</u>	<u>...</u>

SLOT SIZE 1 ... 2 ... 3 ...

DIAMETER OF SCREEN (NEAREST INCH)
from 56 to 60

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

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

70 TELESCOPE CASING 72 LOG INDICATOR 74 75 76 OTHER DATA

C 3 **PUMPING TEST**

HOURS PUMPED (nearest hour) 8 9

PUMPING RATE (gal. per min.) 1 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)

air piston turbine
 centrifugal rotary other (describe below)
 jet 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 } LAND SURFACE
 below } (nearest foot)

LATITUDE 31.2415
LONGITUDE 76.1341
(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.

116-075159

EMERGENCY/TEMP NO. IF ANY

B 1	73972	SEQUENCE NO. (MDE USE ONLY)	STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL please type 586776	STATE PERMIT NUMBER Ho-22-0148 fill in this form completely
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Date Received (APA) 8/22/2024

OWNER INFORMATION

8 MM DD YY 13
Kopel Samuel + Olear Liam
9526 Pamplona Road
Columbia MD 21045

LOCATION OF WELL

8 COUNTY Howard
23 SUBDIVISION Vom Stevens first
SECTION 44 46 LOT 48 50 6
52 NEAREST TOWN Columbia

DRILLER INFORMATION

Wesley Wolfe MWD 598
Allied Well Drilling
PO Box 129 Annapolis Junction MD 20701
Wesley A Wolfe 08/16/24

SOURCES OF DRILLING WATER

1. Public
2.
3.
9526 Pamplona Rd
ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)
DISTANCE FROM ROAD 34' ~ 130'
ENTER FT OR MI 38 39
TAX MAP 0036 BLK: PARCEL 0311

WELL INFORMATION

APPROX. PUMPING RATE (GAL. PER MIN.) 8 12
AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 14 20

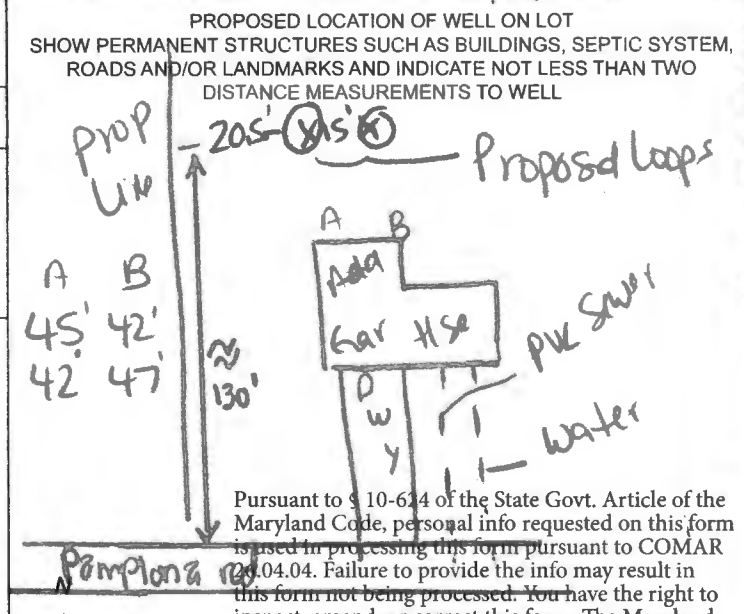
USE FOR WATER (CIRCLE APPROPRIATE BOX)

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 2 loops

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Howard County 13
STATE SIGNATURE _____ INSERT S → 41
DATE ISSUED 8/22/2024
CO SIGNATURE _____ EXP. DATE 8/22/2025
DON: 8/28/2024 DOG: 9/23/2024

APPROXIMATE DEPTH OF WELL 320 FEET
APPROXIMATE DIAMETER OF WELL 6 INCH



METHOD OF DRILLING (circle one)

BORED (or Augered) JETTED Jetted & DRIVEN
AIR-ROTary AIR-PERCussion ROTARY (Hydraulic Rotary)
CABLE REVERSE-ROTary Drive-POINT
other _____

REPLACEMENT OR DEEPEINED 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 DEEPEIN AN EXISTING WELL
PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEINED (IF AVAILABLE) 41 _____ 52

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

APPROP. PERMIT NUMBER _____ G _____
PERMIT No. HO-22-0148

SPECIAL CONDITIONS Grant Well from Bottom to Top. Must keep runoff away from nearby stream
NOTE: APPROVING AUTHORITIES SHOULD USE THE APPROPRIATE SHEET IF NEEDED.
Please Notify our office of drilling & Grant. (S)

A B
45' 42'
42' 42'



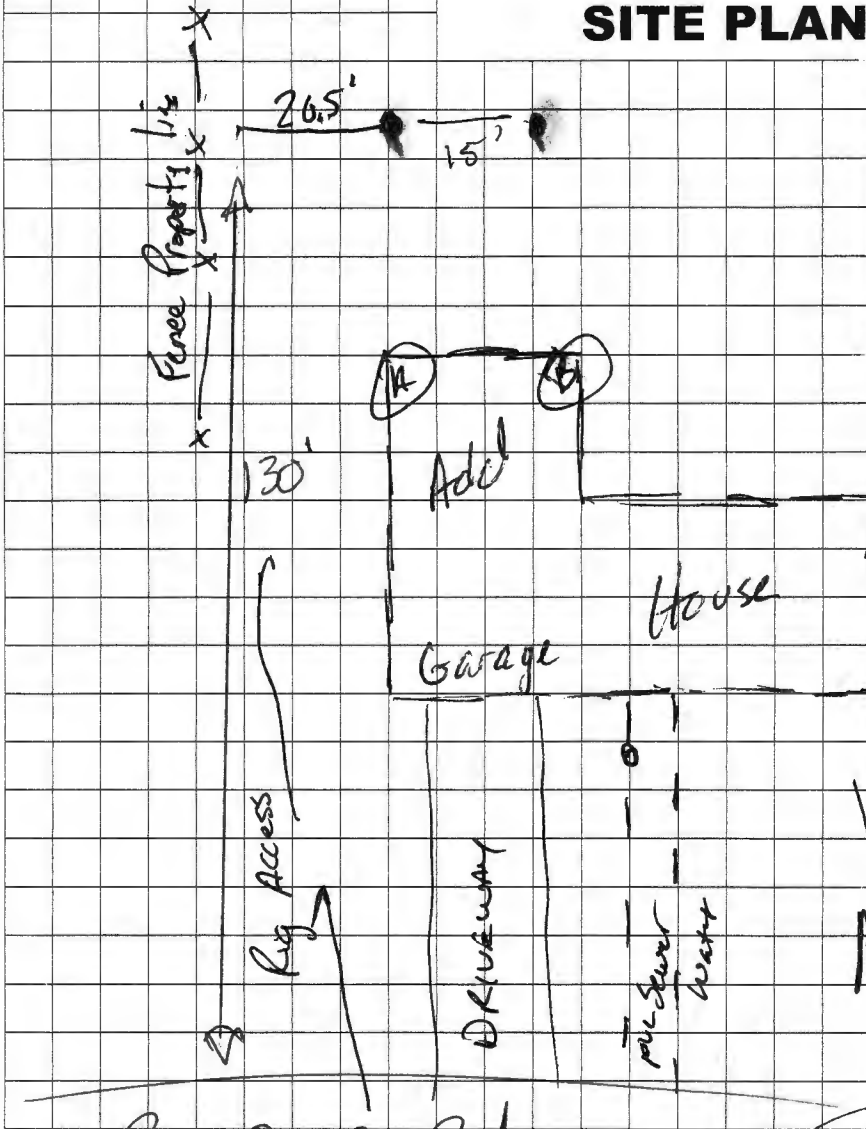
9526 Pamploona Rd
Columbia Md
2 wells @ 320' each
closed loop geothermal

SITE PLAN

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

HO-22-0148

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



Well Site
Approved

8/22/2024

Pamploona Rd

SP

Sediment Control Protocol: SILT Fence

Distance From House: 42'
From Septic: N/A
From Sewer: 50't, Sewer out front
From Property Line: 20.5'
From Street: 50't

Trees Nearby: YES TO DRIVE IN
Utility Issues: NO
Mats Needed: YES
Access For H/U: By others
Neighboring Tags: See Comp

Comments: Rig Access left side of house, trim tree bring rig in between tree & fence. Move wood if needed

Person Completing Form: Wes Wolf

GRADE

EACH BORE HOLE (TYP.)

MINIMUM

HORIZONTAL BURY
DEPTH 4 FT

FOR CONT.
SEE PLANS

HORIZONTAL
PIPING

BORE DEPTH

TAPE

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

ANCHOR FITTING TO
PREVENT U-TUBE FROM
SURFACING AFTER
INSTALLATION

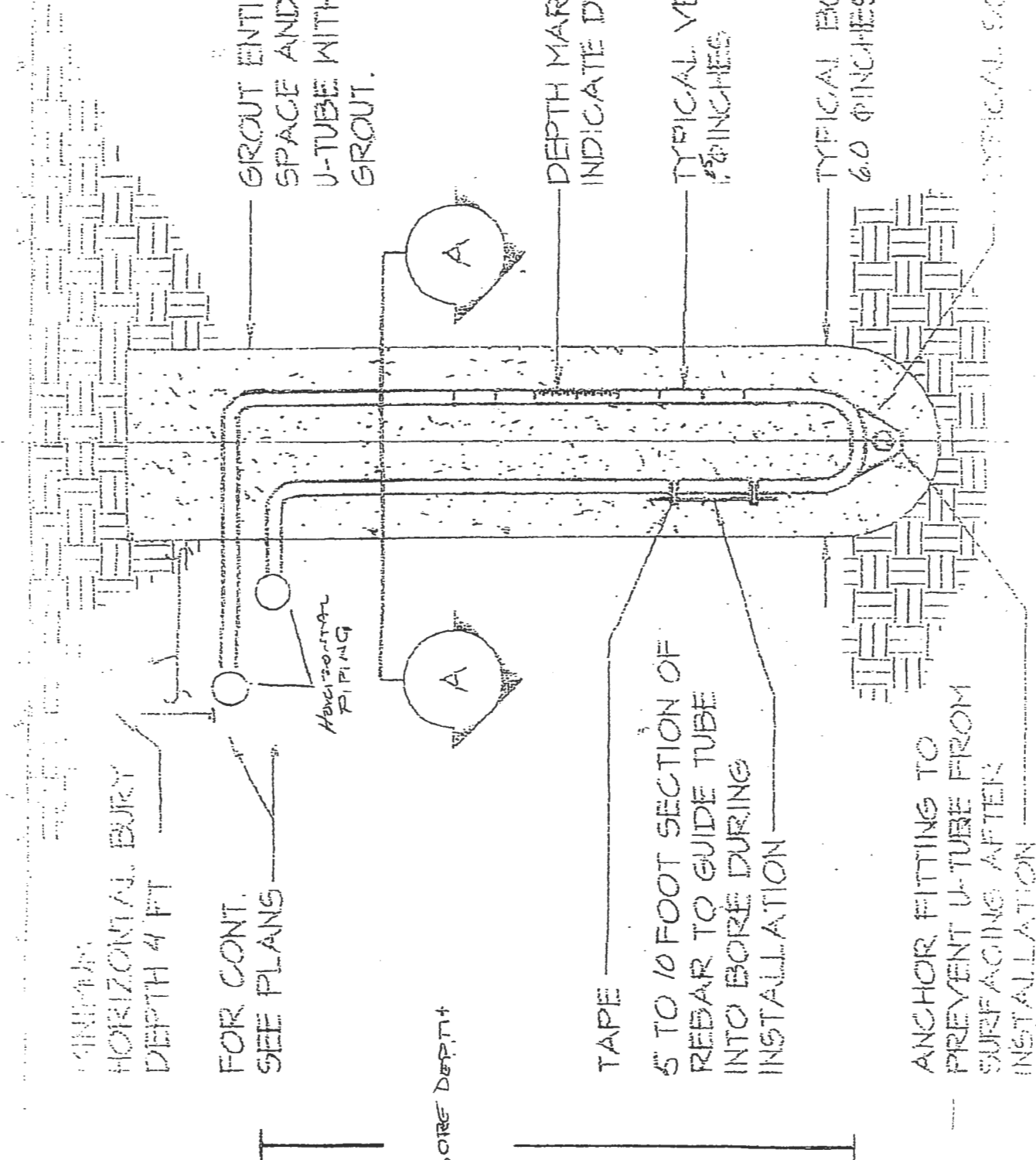
GROUT ENTIRE ANNULAR
SPACE AND VERTICAL
U-TUBE WITH (BENTONITE)
GROUT.

DEPTH MARKINGS IN FEET TO
INDICATE DEPTH OF INSERTION

TYPICAL VERTICAL U TUBE
1 1/2" PINCHES

TYPICAL BORE DIAMETER
6.0 PINCHES

TYPICAL SOCKET DEPTH



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.

FILE INQUIRY NOTES

DATE	RESULTS OF REVIEW FOR FILE
8/21/24	- Existing House on public water + sewer. Plan meets all setbacks.
	Site visit done to verify wells staked per plan. Met w/ Homeowner. Water + sewer @ front of house + painted utility colors. Wells staked per plan @ front of house. (SP) * Note stream downslope wells. (SP)
8/22/24	Released permit. (SP)

RECEIPT

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

Application: WS-WP-24-02368
Application Type: EnvHealth/Well and Septic/Installation/Application
Address: 9526 PAMPLONA RD, Columbia, 21045

Receipt No.	10422					
Payment Method	Ref Number	Amount Paid	Payment Date	Cashier ID	Received	Comments
Check	33227	\$160.00	08/08/2024	SMARTIN		

Owner Info.: KOPEL SAMUEL J
9526 PAMPLONA ROAD
COLUMBIA, MD 21045

Work Description: STEVENS FOREST LOT 6