

C 1 12177 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

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

ST/CO USE ONLY DATE RECEIVED MM 12 DD 12 YEAR 12

DATE WELL COMPLETED 12-17-24

Depth of Well 320
 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL"
HU-22-0168

8 13 15 20 22 26 28 29 30 31 32 33 34 35 36 37

OWNER M. Kelly + Son

WELL SITE ADDRESS 20700 Woodbine Rd TOWN Woodbine

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	
Ben top Soil	0	5	
Red Yellow Clay	5	15	
Green Clay	15	25	
Gray Wk Rock	25	30	
Light Bm Rock	30	50	
Wk Rock	50	70	
Green Gray Rock	70	130	
Gray Rock	130	320	

(3) closed logs @ 300'

GROUTING RECORD
 WELL HAS BEEN GROUTED YES NO
 (Circle Appropriate Box)

TYPE OF GROUTING MATERIAL (Circle one)
 CEMENT BENTONITE CLAY

NO. OF BAGS 45 NO. OF POUNDS 2000

GALLONS OF WATER 1000

DEPTH OF GROUT SEAL (to nearest foot)
 from 0 ft. to 320 ft.
 (enter 0 if from surface)

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 61 63 64 66 70

OTHER CASING (if used)

diameter inch _____ depth (feet) from _____ to _____

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	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
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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

68

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.) _____

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

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) _____

PUMP HORSE POWER _____

PUMP COLUMN LENGTH (nearest ft.) _____

CASING HEIGHT (circle appropriate box and enter casing height)

+ above } LAND SURFACE (nearest foot)
 - below }

LATITUDE 39.32419
 LONGITUDE 77.04920
 (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 any other governmental agencies, if not protected by federal or state law.

B 1 73359

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL please type

STATE PERMIT NUMBER HO - 22 - 0168 fill in this form completely

OWNER INFORMATION: Date Received (APA), Castano Kelly, Owner, 2070 Woodbine Rd, Woodbine MD 21797

LOCATION OF WELL: Howard County, 23 SUBDIVISION, SECTION 44 46, LOT 48 50, NEAREST TOWN Woodbine

DRILLER INFORMATION: Driller's Name Wesley Wolfe, License No. MWD 598, Firm Name Allied Well Drilling, Address PO Box 129, Date 11/14/24

SOURCES OF DRILLING WATER: 1. Public, 2070 Woodbine Rd, ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX), DISTANCE FROM ROAD 0.21, ENTER FT OR MI 38 39, TAX MAP 007, BLK: PARCEL 0504

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): [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 3 loops

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL: Howard County, STATE SIGNATURE, DATE ISSUED 11/27/24, CO SIGNATURE, EXP. DATE 11/27/25

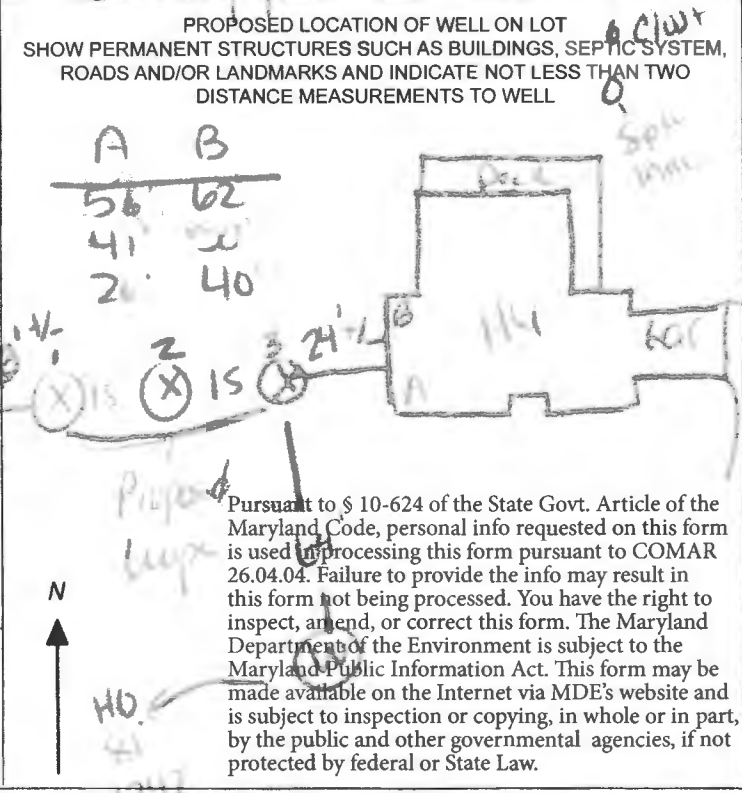
APPROXIMATE DEPTH OF WELL 320 FEET, APPROXIMATE DIAMETER OF WELL 6 INCH, NEAREST INCH

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

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): APPROP. PERMIT NUMBER, PERMIT No. HO - 22 - 0168

SPECIAL CONDITIONS: NOTE APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED



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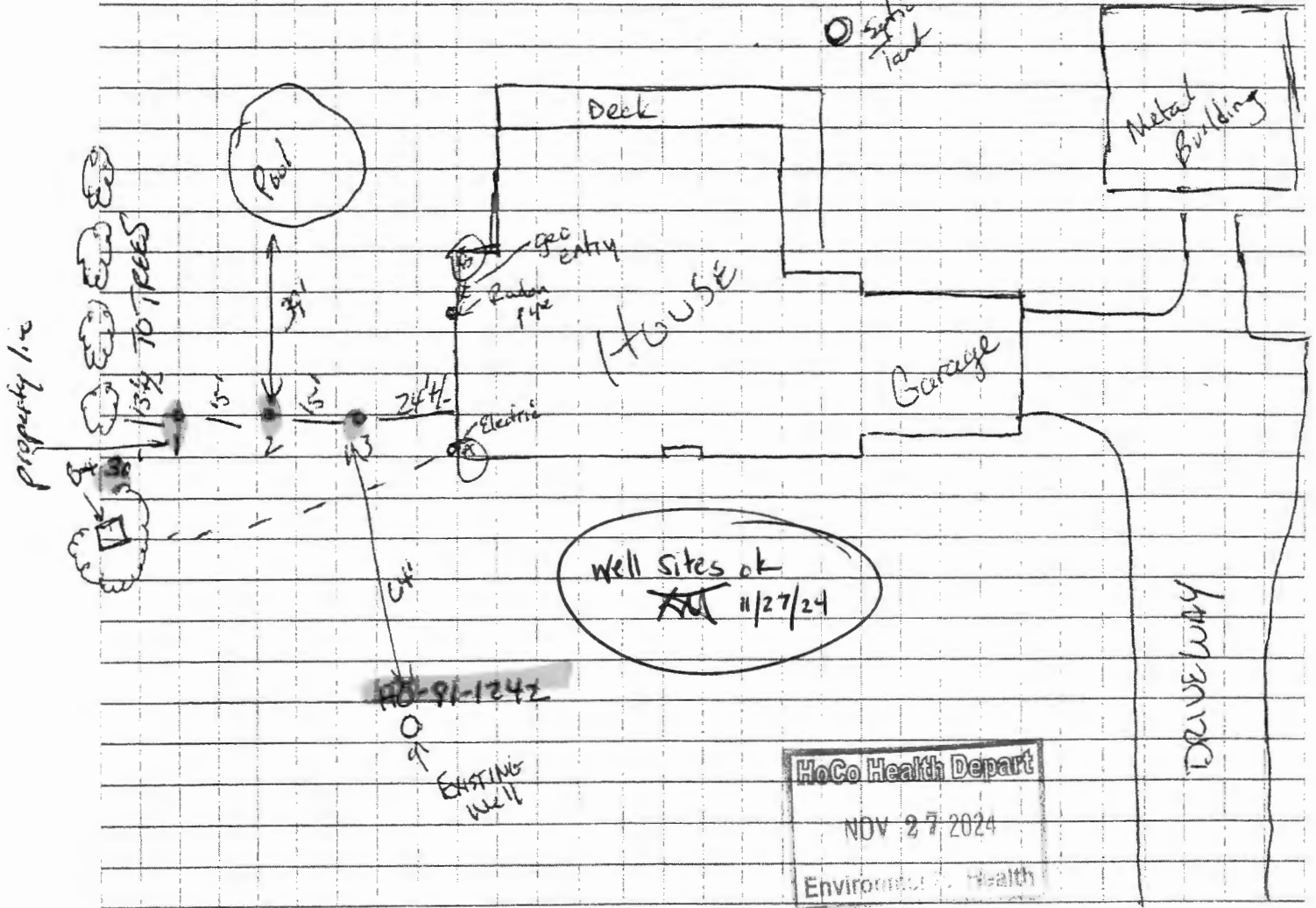
A 6
56'62"
41'50"
28'40"

Allied

WELL DRILLING

SITE PLAN

2070 Woodbine Rd
Woodbine Md
3 wells @ 320 each
closed loop geothermal



HoCo Health Depart
NOV 27 2024
Environmental Health

Sediment Control Protocol: SILT FENCE

Distance From House: 24' +/-
From Septic: 97' +/-
From Sewer: N/A
From Property Line: 13' +/- TO TREES, 30' TO P.L
From Street: 300' +/-

Trees Nearby: NO
Utility Issues: behind Electric
Mats Needed: Yes
Access For H/U: Yes
Neighboring Tags: HO-91-1242

Comments: Take Black Top driveway to left of gravel driveway

Person Completing Form: Wes Wolf


Well tag for geo bores: HO-22-0168

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

MEMORANDUM

Sent via email to Wes Wolfe at weswolfe@alliedwells.com on 11.22.2024.

TO: ALLIED WELL DRILLING
C/O Wes Wolfe

FROM: Ryan Rappaport, LEHS 
Well & Septic Program

DATE: November 22, 2024

RE: **Well Permit Application – 2070 Woodbine Road**

This is to advise that the Howard County Health Department requires that property lines be drawn and identified on the submitted well site plan for 2070 Woodbine Rd in Woodbine, Maryland. There is a setback for wells to property lines which is a part of every well site plan review. Failure to show the property lines on any well site plan submitted with well permit applications may result in a delay of the well permit issuance.

Cc: File

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.)

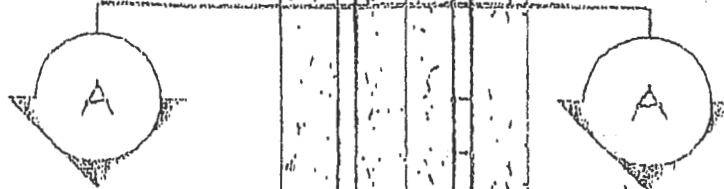
MINIMUM
HORIZONTAL BURY
DEPTH 4 FT

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

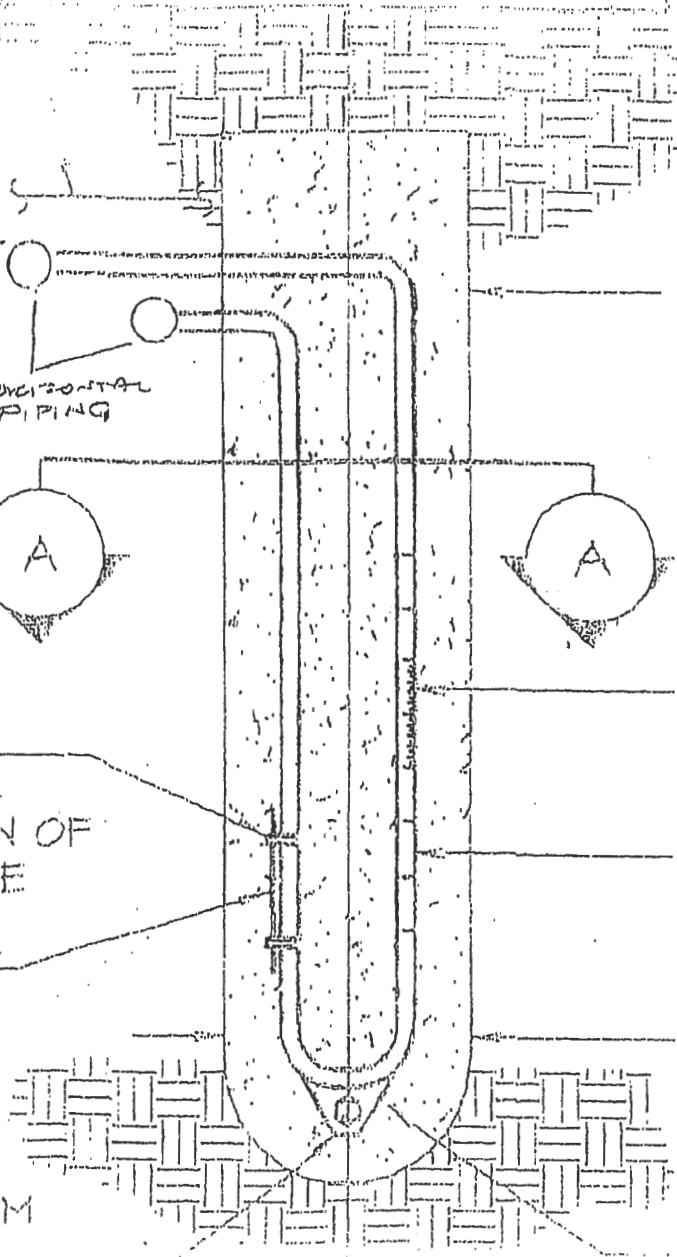
5 TO 10 FOOT SECTION OF
REBAR TO GUIDE TUBE
INTO BORE DURING
INSTALLATION

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



FILE INQUIRY NOTES

2070 Woodbine Rd.

DATE RESULTS OF REVIEW FOR FILE

5/4/22 Spoke w/ Kelly Costanzo (owner) about ex. septic
concerns. She explained to me that she had system
evaluated by Fugler (report in file) in Dec. 2021 which
found ex. trenches holding water. They moved into house
and had later (several months) contacted Hartfield's
came out to look @ septic. They determined system was
not failing. I asked owner to send me copy of that
report. Owner is reporting no issues w/ septic currently
and was only concerned for future, thus why she
completed repair perc application. Owner wishes to
hold off of perc / side eval. for now. May re-visit
w/ in 1 year. know