

C1 61470

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

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

FILL IN THIS FORM COMPLETELY PLEASE TYPE

COUNTY NUMBER

ST/CO USE ONLY

DATE WELL COMPLETED

Depth of Well

PERMIT NO. FROM "PERMIT TO DRILL WELL"

DATE Received MM 08 21

MM 7 21

22 400' 26 (TO NEAREST FOOT)

Approved 9/12/21

HO - 20 - 0105

OWNER CAMP BELL ARTIEL WELL SITE ADDRESS 7270 MEADOW WOOD WAY TOWN CLARKSVILLE SUBDIVISION Simpson Woods SECTION LOT 6

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. Includes handwritten entries: soft brown, hard gray rock, 14 installed 1 1/4" loops.

GROUTING RECORD yes no WELLS HAS BEEN GROUTED (Circle Appropriate Box)

TYPE OF GROUTING MATERIAL (Circle one) CEMENT CM BENTONITE CLAY BC NO. OF BAGS 24 NO. OF POUNDS 480

CASING RECORD casing types insert appropriate code below 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 screen type or open hole insert appropriate code below ST BR HO PL OT

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

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)

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 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) 49 50 51

LATITUDE 39.177690 LONGITUDE 76.922312 (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. 1 MWD 304 DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO. 1 WRD 107 DRILLERS SIGNATURE

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

C 2

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

70 72 74 75 76 TELESCOPE CASING LOG INDICATOR OTHER DATA

B 1 67830

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL

STATE PERMIT NUMBER

40-20-0105 fill in this form completely

OWNER INFORMATION: Date Received (APA) 05/25/21, Campbell Ariel, 7270 Meadow Wood Way, Clarksville MD 21029

LOCATION OF WELL: Howard County, Simpson Woods Subdivision, Section 44, Lot 6, Clarksville

DRILLER INFORMATION: David Kelly, MWD 304, Jones Well Drilling, 3700 Rush Rd Jarrettsville MD 21024

SOURCES OF DRILLING WATER: 7270 Meadow Wood Way, Potable well, WYO-BEN, ON WHICH SIDE OF ROAD: 255 FT, TAX MAP: 0041, PARCEL: G427

WELL INFORMATION: APPROX. PUMPING RATE 0 GAL. PER MIN., AVERAGE DAILY QUANTITY NEEDED 0 GAL. PER DAY

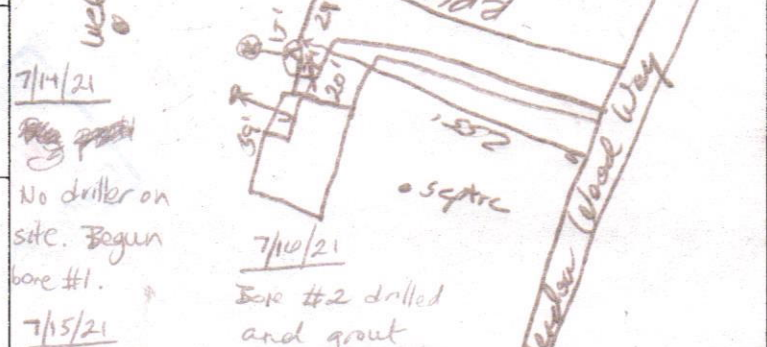
NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL: Howard County, State Signature, Date Issued 06/21/21, CO Signature, EXP. DATE 06/21/22

USE FOR WATER (CIRCLE APPROPRIATE BOX): [C] CLOSED LOOP GEOTHERMAL 2 holes

APPROXIMATE DEPTH OF WELL 400 FEET, APPROXIMATE DIAMETER OF WELL 6 INCH, NEAREST TOWN

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



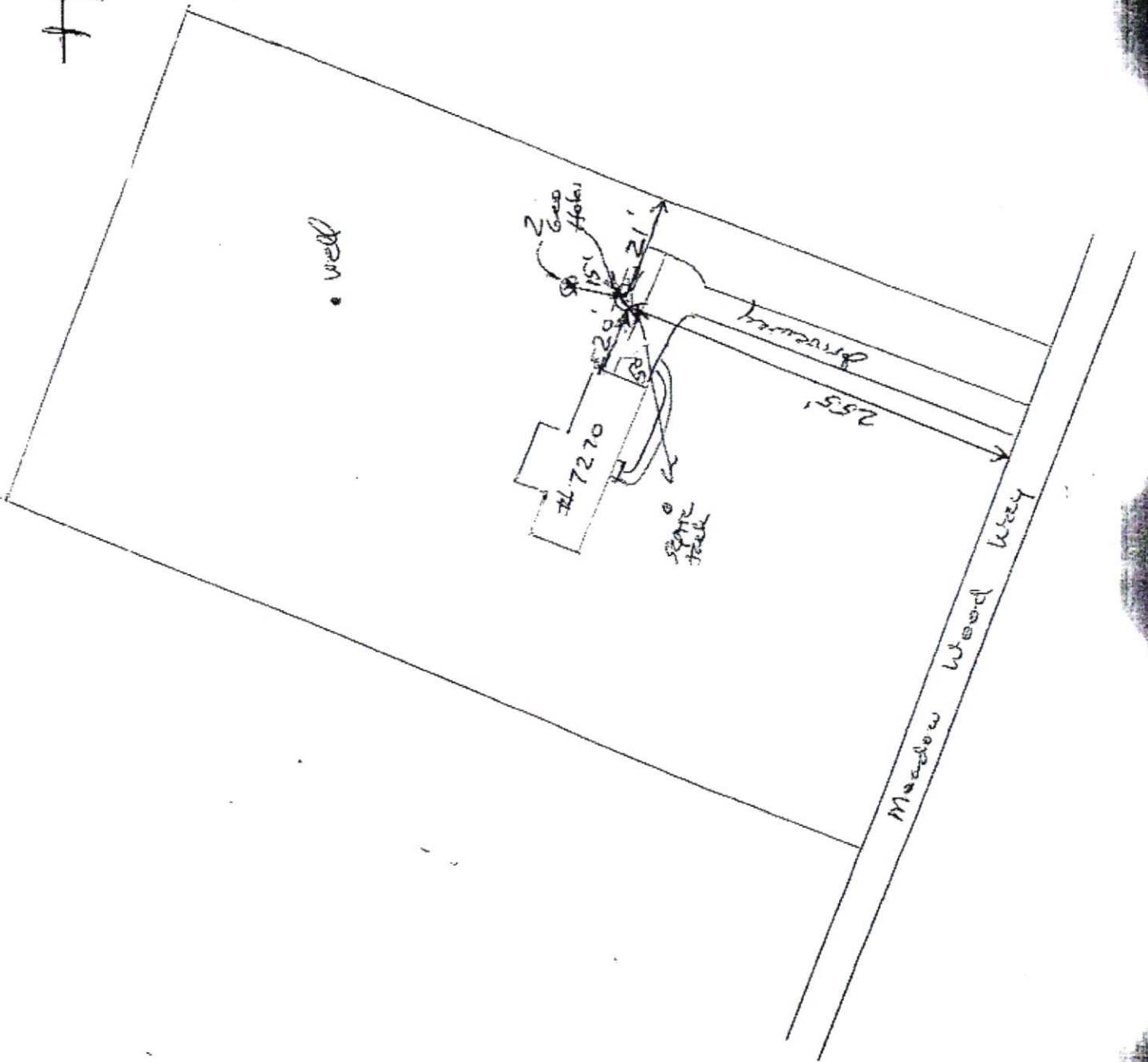
REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX): [N] THIS WELL WILL NOT REPLACE AN EXISTING WELL, [S] THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS

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Not to be filled in by driller (MDE OR COUNTY USE ONLY): APPROX. PERMIT NUMBER G, PERMIT No. 40-20-0105

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

Revised Site Plan  
6/16/21



Not to Scale

Owner: Ariel Campbell

Approved  
6/21/21 (35)  
Stated by driller

7270 Meadow Wood Way  
Clarksville MD 21229  
301-257-8007

HVAC  
Contractor

Waterville Geothermal  
Joe Opatka  
410-879-0292

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

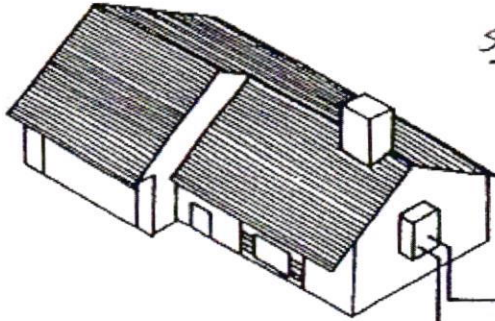
HO-20-0105

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

Driller: Jones Well Drilling  
contact: David Kelly  
410-692-6981

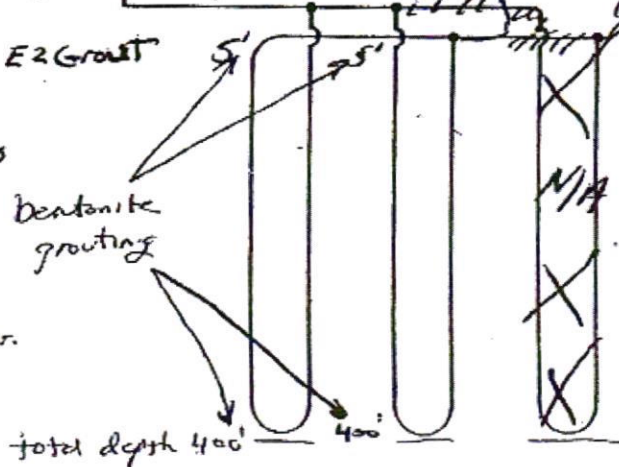
site: 7270 Meadow Wood Way  
Clarksville MD 21029

H0-20-0105



bury depth 5' below grade

Wyo-Ben bentonite-E2 GROUT  
GROUT (50 lb. bags)  
Mixed with 24 gallons  
of water per  
manufacturer specs  
yields 27 gal slurry  
with a 0.42 btu/ft-hr.  
thermal conductivity



Earth Coil Type: Vertical - Single U-Bend

Water Flow: Parallel

Pipe Sizes: 1 1/4" double Loop

Bore Lengths: 400' x 2 holes (800' vertical bore)

Pipe Lengths: 800 x 2 (1600 vertical pipe)

FIGURE 4.5: Parallel Vertical Ground Heat Exchanger