

C1 41989

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)

COUNTY NUMBER

ST/CO USE ONLY

DATE WELL COMPLETED

Depth of Well

PERMIT NO. FROM "PERMIT TO DRILL WELL"

DATE Received MM DD YY

MM DD YY 07 07 16

22 360 26 (TO NEAREST FOOT)

OK 7/19/16 SC

28 29 30 31 32 33 34 35 36 37

OWNER Shivers last name Brian / Christina first name
WELL SITE ADDRESS 12801 Forrest view CT TOWN Sykesville
SUBDIVISION Amber Woods SECTION 1 LOT 10

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. Rows include: TOP Soil (0-2), Sandy silt (2-50), grey gneiss (50-360).

GROUTING 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 19 NO. OF POUNDS 950

GALLONS OF WATER 361

DEPTH OF GROUT SEAL (to nearest foot) from 0 ft. to 360 ft.

CASING RECORD

ST CO PL OT STEEL CONCRETE PLASTIC OTHER

MAIN CASING TYPE Nominal diameter top (main) casing Total depth of main casing

OTHER CASING (if used) diameter depth (feet)

SCREEN RECORD screen type or open hole ST BR HO STEEL BRASS OPEN HOLE PL BRONZE HOLE OTHER PLASTIC OTHER

DEPTH (nearest ft.)

Table with columns: E A C H S R E E N, rows for casing and screen depths.

SLOT SIZE 1 2 3 DIAMETER OF SCREEN (NEAREST INCH)

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

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

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 J jet S submersible

PUMP INSTALLED

DRILLER INSTALLED PUMP 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) 31 35

PUMP HORSE POWER 37 41

PUMP COLUMN LENGTH (nearest ft.) 43 47

CASING HEIGHT (circle appropriate box and enter casing height)

LAND SURFACE 2 (nearest foot)

LATITUDE 39.341469

LONGITUDE 76.965406

(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 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 572

DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

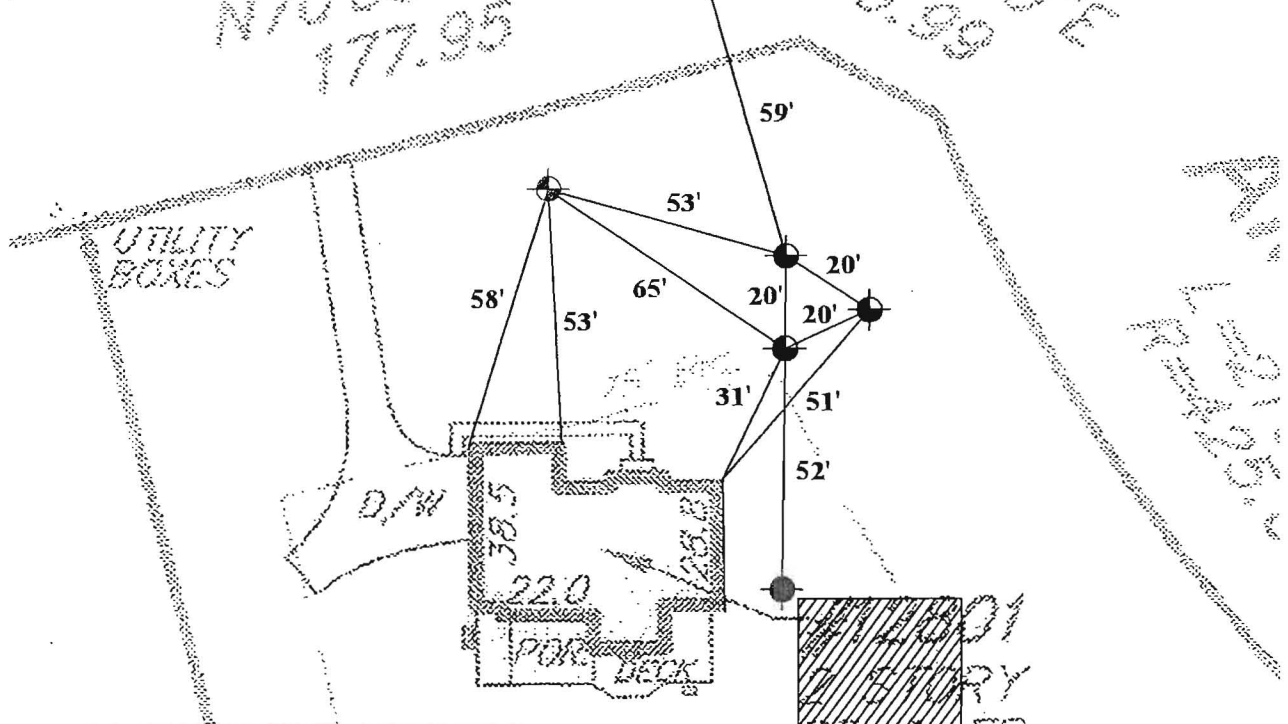
LIC. NO. 1 WRD 064

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

B 1	SEQUENCE NO. (MDE USE ONLY) <u>46377</u>	STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL please type	STATE PERMIT NUMBER <u>HO-15-0272</u>
1 2 3	4 5 6 7	70 fill in this form completely 79	
Date Received (APA) <u>06 24 16</u>		B 3 LOCATION OF WELL	
OWNER INFORMATION		8 COUNTY <u>Howard</u> 21	
8 MM DD YY	13 Shivers/Shivers Brian/Christina	23 SUBDIVISION <u>Amberwoods</u> 42	
15 Last Name	Owner First Name 34	SECTION <u>1</u> LOT <u>10</u>	
36	Street or RFD 55	44 46 48 50	
57	Town 70 State 72 Zip 76	52 NEAREST TOWN <u>Sikesville</u> 71	
12801 Forest View Ct Sikesville MD 21784		SOURCES OF DRILLING WATER	
DRILLER INFORMATION		1. <u>Private</u>	
Samuel A. Connelly MWD 572 Driller's Name 76 License No. 81		2. <u>12801 Forest View Ct</u>	
Connelly + Associates Firm Name		11 STREET ADDRESS 30	
200 Interstate Ct Frederick, MD 21704 Address		ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)	
Samuel A. Connelly 6/24/16 Signature Date		NORTH W 33 E S EAST SOUTH	
B 2 WELL INFORMATION		34 <u>60</u> 37 DISTANCE FROM ROAD FT	
1 2	APPROX. PUMPING RATE (GAL. PER MIN.) 8 12	ENTER FT OR MI 38 39	
AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 14 20		TAX MAP: <u>9</u> BLK: <u>10</u> PARCEL <u>333</u>	
USE FOR WATER (CIRCLE APPROPRIATE BOX)		NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL	
<input type="checkbox"/> DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION		Howard <u>(13)</u> COUNTY NO.	
<input type="checkbox"/> FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)		STATE SIGNATURE _____ INSERT S → 41	
<input type="checkbox"/> INDUSTRIAL, COMMERCIAL, DEWATERING		DATE ISSUED <u>6/30/16</u> <u>S.A. Connelly</u> <u>6/30/17</u>	
<input type="checkbox"/> PUBLIC WATER SUPPLY WELL		43 MM DD YY 48 CO SIGNATURE EXP. DATE	
<input type="checkbox"/> TEST, OBSERVATION, MONITORING			
<input type="checkbox"/> OPEN LOOP GEOTHERMAL			
<input checked="" type="checkbox"/> CLOSED LOOP GEOTHERMAL			
APPROXIMATE DEPTH OF WELL <u>355</u> FEET		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	
APPROXIMATE DIAMETER OF WELL <u>6</u> NEAREST INCH			
METHOD OF DRILLING (circle one)			
BORED (or Augered) JETTED Jetted & DRIVEN			
30 AIR-ROTARY AIR-PERCussion ROTARY (Hydraulic Rotary)			
37 CABLE REVERSE-ROTARY DRIVE-POINT			
other _____			
REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX)			
<input checked="" type="checkbox"/> THIS WELL WILL NOT REPLACE AN EXISTING WELL			
<input type="checkbox"/> THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED			
39 <input type="checkbox"/> THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS			
<input type="checkbox"/> THIS WELL WILL DEEPEM AN EXISTING WELL			
PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED (IF AVAILABLE) 41 _____ 52			
Not to be filled in by driller (MDE OR COUNTY USE ONLY)			
APPROX. PERMIT NUMBER _____ G _____			
PERMIT No. <u>HO-15-0272</u>			
70 71 72 73 74 75 76 77 78 79			
SPECIAL CONDITIONS		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.	
NOTE APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED		N ↑	

STVIEW
N70°35'51"E
177.95

S86°52'30"E
36.99



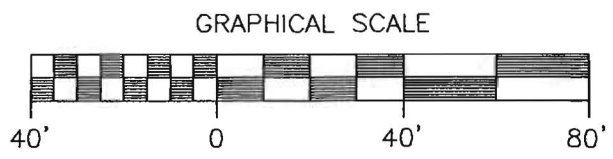
DO NOT REMOVE THIS TAG
DEPARTMENT OF THE ENVIRONMENT
WELL PERMIT NUMBER
H0-15-0272
INFORMATION-GIVE NUMBER AND WRITE
1800 WASHINGTON BLVD
BALTIMORE MARYLAND. 21230

1201
2 STORY
DR & FR
W/ BSMT

Well sites approved
6/30/16 SC

L E G E N D

- PROPOSED GEOTHERMAL WELL LOCATION
- APPROXIMATE DOMESTIC WELL LOCATION
- APPROXIMATE SEPTIC TANK LOCATION
- APPROXIMATE DRAINAGE FIELD LOCATION



260 Interstate Court (301) 696-8820
Frederick, Maryland 21704 (301) 696-0327 fax

SHIVERS RESIDENCE
12801 FORESTVIEW COURT, SYKESVILLE, MARYLAND

PROPOSED GEOTHERMAL WELL
LOCATION PLAN

Scale:
AS SHOWN

Fig.

Date:
JUNE 2016

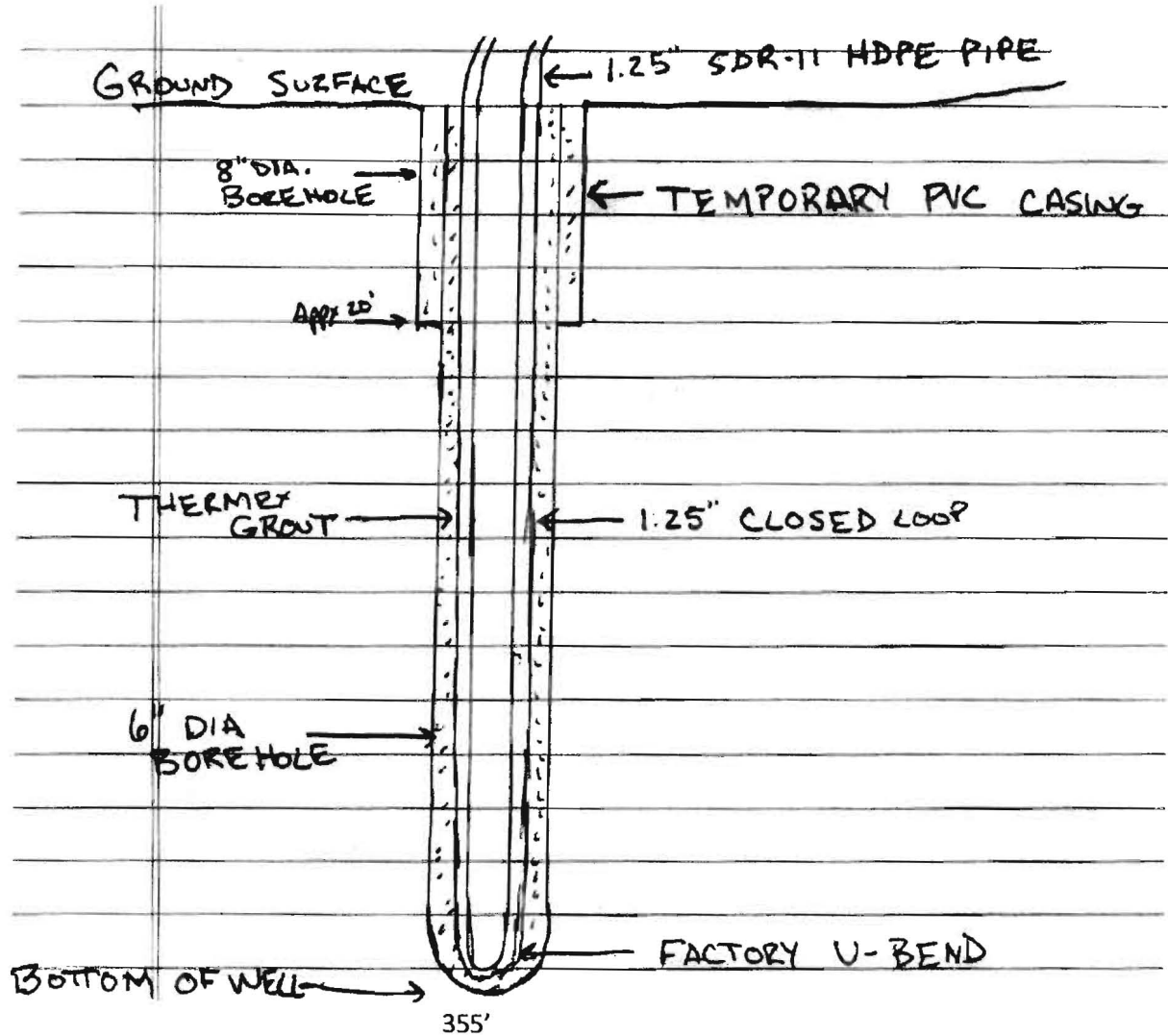
Drawn By:
J.A.

Checked By:
E.S.

Project No.:
00000

1

Geothermal Closed Loop – 12801 Forestview Court, Sykesville, MD



Grout information for this property is as follows:

Thermex grout mixture of 50 lb. grout to 19 gallons water, placed in the well using the tremie method, from bottom to top.