

C 1 33179

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 RECEIVED

DATE WELL COMPLETED

Depth of Well

PERMIT NO. FROM "PERMIT TO DRILL WELL"

OWNER Maple Lawn Farm LLC WELL SITE ADDRESS 1160 Federal St. TOWN Fulton MD

WELL LOG Not required for driven wells

Table with columns: DESCRIPTION, FEET (FROM, TO), check if water bearing. Includes entries like Red Clay, Brn Clay + Sand, etc.

GROUTING RECORD WELL HAS BEEN GROUTED (Circle Appropriate Box)

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

CASING RECORD 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 71 72 73 74 75 76

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 (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) LAND SURFACE (nearest foot)

LATITUDE 39.16147 LONGITUDE 76.91635 (DEFAULT COORD. WGS 84) NOTES:



NUMBER OF UNSUCCESSFUL WELLS:

WELL HYDROFRACTURED yes Y no 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...

DRILLERS LIC. NO. MWD 553

DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION) LIC. NO. WR 0697

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

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

US-59173

EMERGENCY/TEMP NO. IF ANY

<b>B 1</b>	SEQUENCE NO. (MDE USE ONLY) <b>45583</b>	STATE OF MARYLAND <b>APPLICATION FOR PERMIT TO DRILL WELL</b> 554431 please type	STATE PERMIT NUMBER <b>H0-15-0172</b> 70 <i>fill in this form completely</i> 79
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**OWNER INFORMATION**

Date Received (APA) 10/27/15  
8 MM DD YY 13

Maple Lawn Farm LLC  
15 Last Name Owner First Name 34

1829 Reistersstam Rd #300  
36 Street or RFD 55

Baltimore MD - 21208  
57 Town 70 State 72 Zip 76

**B 3 LOCATION OF WELL**

Howard  
8 COUNTY 21

Maple Lawn Farms  
23 SUBDIVISION 42

SECTION 44 46 LOT 28 48 50

Fulton  
52 NEAREST TOWN 71

**DRILLER INFORMATION**

C. John Hess MWD 553  
Driller's Name 76 License No. 81

Allied Environmental Services  
Firm Name

PO Box 129 Annapolis Junction MD 20701  
Address

C. John Hess 10/26/15  
Signature Date

**B 4 SOURCES OF DRILLING WATER**

1. Public  
2.  
3.

11640 Federal Street  
11 STREET ADDRESS 30

ON WHICH SIDE OF ROAD  
(CIRCLE APPROPRIATE BOX)

NORTH  
 WEST  
 EAST  
 SOUTH

34 40' 37  
DISTANCE FROM ROAD FT

ENTER FT OR MI 38 39

TAX MAP: 0041 BLK: \_\_\_\_\_ PARCEL 0110

**B 2 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 3 loops

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

Howard COUNTY NAME COUNTY NO. 13

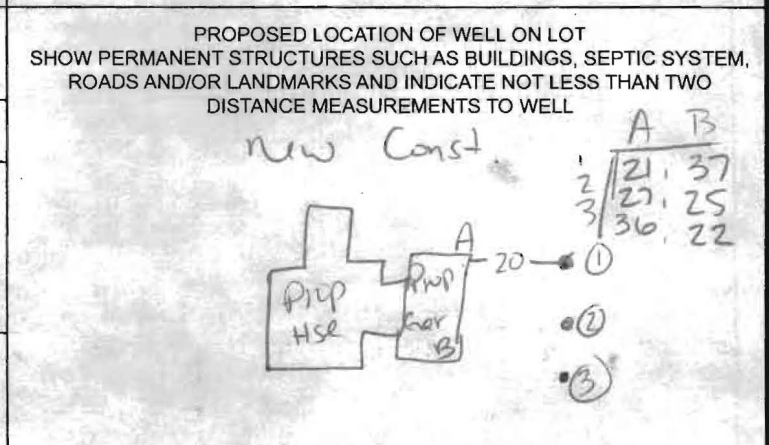
STATE SIGNATURE \_\_\_\_\_ INSERT S →

DATE ISSUED 11/4/2015 CO SIGNATURE [Signature] EXP. DATE 11/4/16

43 MM DD YY 48

APPROXIMATE DEPTH OF WELL 300 FEET  
24 \_\_\_\_\_ 28

APPROXIMATE DIAMETER OF WELL 6 INCH  
NEAREST 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 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 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)**

APPROP. PERMIT NUMBER \_\_\_\_\_ G \_\_\_\_\_

PERMIT No. H0-15-0172  
70 71 72 73 74 75 76 77 78 79

**SPECIAL CONDITIONS**  
NOTE APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED- Wells must be grouted from bottom to top.



W. Metcalf



GRADE

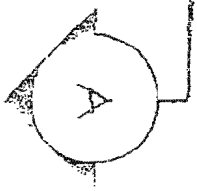
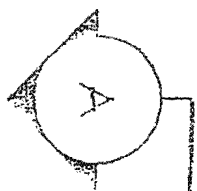
EACH BORE HOLE (TYP.)

HORIZONTAL BURY  
DEPTH 4 FT

FOR CONT.  
SEE PLANS.

Horizontal  
Piping

BORE DEPTH



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

DEPTH MARKINGS IN FEET TO  
INDICATE DEPTH OF INSERTION

TYPICAL VERTICAL U-TUBE  
1.5 INCHES

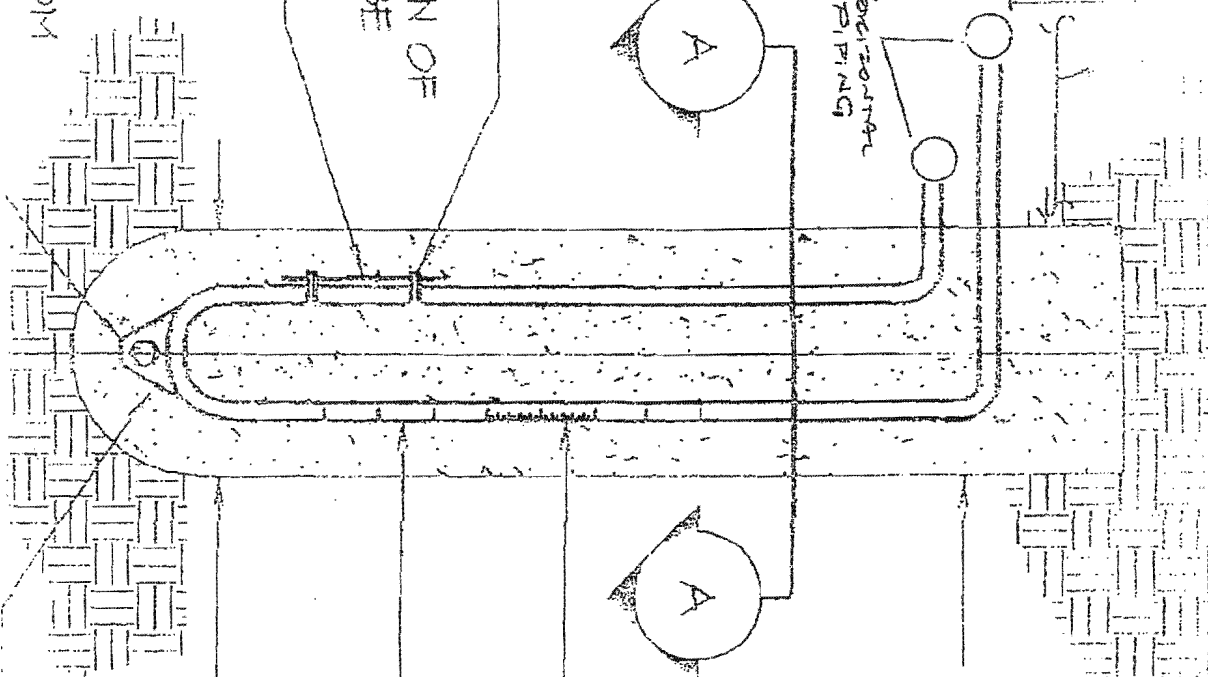
TYPICAL BORE DIAMETER  
6.0 INCHES

TYPICAL SOCKET U-TUBE

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

TAPE

ANCHOR FITTING TO  
PREVENT U-TUBE FROM  
SURFACING AFTER  
INSTALLATION



## 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.

