

C 1 04803

SEQUENCE NO.
(MDE USE ONLY)STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE TYPETHIS REPORT MUST BE SUBMITTED AFTER
WELL IS COMPLETED.COUNTY
NUMBER

ST/CO USE ONLY

DATE Received
MM DD YY
8 13

DATE WELL COMPLETED

MM DD YY
9-21-14

Depth of Well

22 375 26
(TO NEAREST FOOT)

PERMIT NO.

FROM "PERMIT TO DRILL WELL"

4/10/15 SC H0-14 0092
28 29 30 31 32 33 34 35 36 37

OWNER

STREET OR RFD

SUBDIVISION

last name

Marcelo Napoleon - Isabel

first name

Springwood Ct

TOWN

Ellicott City MD

SECTION

LOT

B

WELL LOG

Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR
COLOR, DEPTH, THICKNESS AND IF WATER BEARINGDESCRIPTION (Use
additional sheets if needed)

FEET

FROM

TO

check
if water
bearing

Top Soil 0 1
Brn Soil 1 9
Hard Brn Soil 9 20
Tan Soil 20 38
Med Hard Clay 38 375

14 bags x 26 gal = 364 gal / 375 = 0.97 gal/ft

NUMBER OF UNSUCCESSFUL WELLS:

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.

M D 553

DRILLERS SIGNATURE

(MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO.

55 D 144

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

GROUTING RECORD

WELL HAS BEEN GROUTED
(Circle Appropriate Box)yes no
Y N
44 44

TYPE OF GROUTING MATERIAL (Circle one)

CEMENT CM

BENTONITE CLAY BC

NO. OF BAGS

NO. OF POUNDS

GALLONS OF WATER

DEPTH OF GROUT SEAL (to nearest foot)

from 48 TOP 52 ft. to 54 BOTTOM 58 ft.
(enter 0 if from surface)

CASING RECORD

casing
types
insert
appropriate
code
belowST
STEELCO
CONCRETEPL
PLASTICOT
OTHERMAIN
CASING
TYPENominal diameter
top (main) casing
(nearest inch)!Total depth
of main casing
(nearest foot)

60 61

63 64

66 67

70

E
A
C
H
C
A
S
I
N
G

OTHER CASING (if used)

diameter
inchdepth (feet)
from toscreen type
or open hole

SCREEN RECORD

insert
appropriate
code
belowST
STEELBR
BRASSPL
PLASTICHO
OPEN
HOLEOT
OTHER

C 2

DEPTH (nearest ft.)

1 2
E 8 9 11 15 17 21
A 23 24 26 30 32 36
C 38 39 41 45 47 51
S
R
E
E
N
SLOT SIZE 1 2 3
DIAMETER
OF SCREEN (NEAREST
INCH)
56 60
from to

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
CASINGLOG
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
27P piston
27T turbine
27C centrifugal
27R rotary
27O other
(describe
below)
27J jet
27S submersible
27

PUMP INSTALLED

DRILLER INSTALLED PUMP YES NO
(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

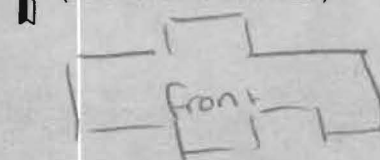
LAND SURFACE

49

- below

(nearest
foot)
50 51

LOCATION OF WELL ON LOT

SHOW PERMANENT STRUCTURES
AND INDICATE NOT LESS THAN
TWO DISTANCES
(MEASUREMENTS TO WELL)

4139.26083 / 3426083 / 39.26083
76.97703 / 76.97707 / 76.97713

05-409306

B 1 37382 SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND
APPLICATION FOR PERMIT TO DRILL WELL
554605-B please type

STATE PERMIT NUMBER HO - 14 0092
fill in this form completely

Date Received (APA) 01/02/14

OWNER INFORMATION
8 MM DD YY 13
15 Last Name Marcelo Owner First Name Napoleon + Isabel T/E
36 Street or RFD 13302 Springwood Ct
57 Town Ellicott City MD 70 State MD 72 Zip 21042 76

DRILLER INFORMATION
Driller's Name C. John Hess M W D 553
Firm Name Allied Environmental Services
Address PO Box 129 Annapolis Junction MD 20701
Signature C. John Hess Date 08/28/14

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)
22 ☐ 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

APPROXIMATE DEPTH OF WELL 375 FEET
24 28

APPROXIMATE DIAMETER OF WELL 6 INCH
NEAREST INCH

METHOD OF DRILLING (circle one)
30 ☒ BORED (or Augered) ☐ JETTED ☐ Jetted & DRIVEN
37 ☒ AIR-ROTARY ☐ AIR-PERCussion ☐ ROTARY (Hydraulic Rotary)
☐ CABLE ☐ REVERSE-ROTARY ☐ DRIVE-POINT
other _____

REPLACEMENT OR DEEPEINED WELLS (CIRCLE APPROPRIATE BOX)
39 ☒ 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)
APPROX. PERMIT NUMBER _____ G _____
PERMIT No. HO-14-0092
70 71 72 73 74 75 76 77 78 79

SPECIAL CONDITIONS Crust bores bottom to top.
NOTE: APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED.

B 3 **LOCATION OF WELL**
Howard COUNTY 21
Ridgewood SUBDIVISION 42
SECTION 44 46 LOT 13 48 50
Ellicott City NEAREST TOWN 71

B 4 **SOURCES OF DRILLING WATER**
1. Public
2.
3.

13302 Springwood Ct STREET ADDRESS 30
ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)
NORTH
WEST EAST
SOUTH
34 37
DISTANCE FROM ROAD
ENTER FT OR MI 38 39
TAX MAP: 0022 BLK: 005 PARCEL 0160

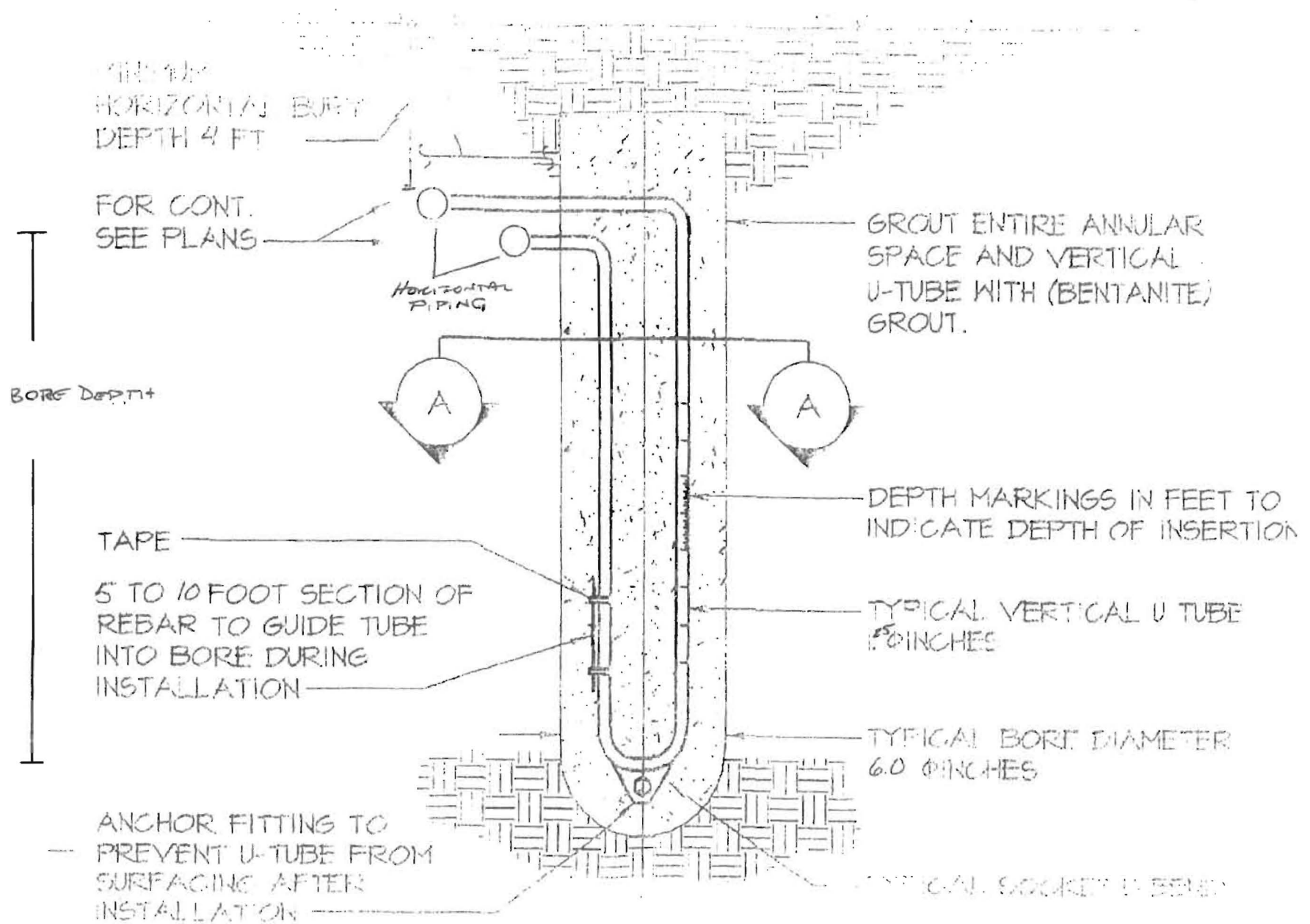
NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL
Howard COUNTY NAME 13 COUNTY NO.
STATE SIGNATURE _____ INSERT S → 41
DATE ISSUED 9/11/14 43 MM DD YY 45 CO SIGNATURE [Signature] EXP. DATE 9/11/15

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

septic 36 house gauge 30 60-0 well
13302 Springwood Ct Read

GRADE

EACH BORE HOLE (TYP.)



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 2.5×10^{-8} 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.