

C1 2945

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)

COUNTY NUMBER

ST/CO USE ONLY DATE Received MM DD YY

DATE WELL COMPLETED MM DD YY

Depth of Well 22 300 26 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" HO-95-2093

OWNER Ryals Ann STREET OR RFD 13588 Hunt Ridge Road TOWN Glen Elg SUBDIVISION Tridelphia Farms II SECTION LOT 11B

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: Soil, Clay, Brown shale, Gray Rock, 2 bores x 300 Feet.

GROUTING RECORD

WELL HAS BEEN GROUTED (Circle Appropriate Box) YES [Y] NO [N] TYPE OF GROUTING MATERIAL (Circle one) CEMENT [CM] BENTONITE CLAY [BC] NO. OF BAGS 61 NO. OF POUNDS 3050 GALLONS OF WATER 272 DEPTH OF GROUT SEAL (to nearest foot) from 2 ft. to 300 ft.

CASING RECORD

MAIN CASING TYPE Nominal diameter top (main) casing (nearest inch) Total depth of main casing (nearest foot) Includes checkboxes for Steel, Concrete, Plastic, Other.

OTHER CASING (if used)

Table for other casing with columns: diameter inch, depth (feet) from, to.

SCREEN RECORD

screen type or open hole insert appropriate code below Includes checkboxes for Steel, Brass, Open Hole, Plastic, Other.

Table for screen depth and slot size with columns: DEPTH (nearest ft.), SLOT SIZE 1, 2, 3, DIAMETER OF SCREEN (NEAREST INCH).

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 88

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

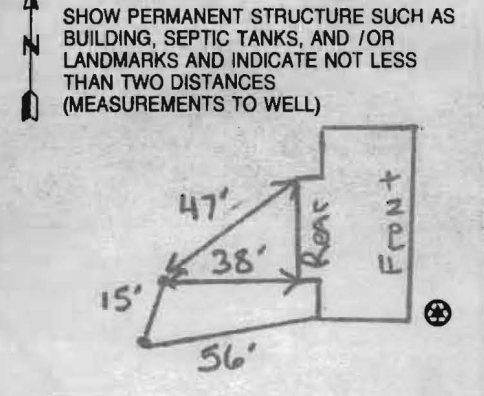
PUMPING TEST

HOURS PUMPED (nearest hour) 8 9 PUMPING RATE (gal. per min.) 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 (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] [- below] LAND SURFACE (nearest foot) 49 50 51

LOCATION OF WELL ON LOT



NUMBER OF UNSUCCESSFUL WELLS: 0 WELL HYDROFRACTURED YES [Y] NO [N] CIRCLE APPROPRIATE LETTER 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 28.04.04 "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 MW D355 DRILLERS SIGNATURE LIC. NO. 1 MS DOLCE SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

COUNTY

B 1 8884

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL

STATE PERMIT NUMBER

40-95-2093 fill in this form completely

534544 please type

Date Received (APA) 04 07 11

OWNER INFORMATION

Rivals ANN 13388 Hunt Ridge Rd Ellicott City MD 21042

LOCATION OF WELL

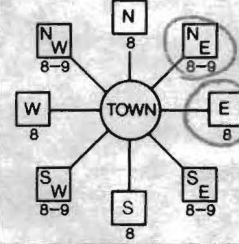
Howard County Triadelphia Farms II SECTION 44 46 LOT 48 50 Glenely NEAREST TOWN 1/2 MILES FROM TOWN

DRILLER INFORMATION

Michael Barlow MD 355 Barlow Well Drilling 522 Underwood Lane 21014

B 4

DIRECTION OF WELL FROM TOWN (CIRCLE BOX)



(13388) Hunt Ridge Rd NEAR WHAT ROAD

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX) NORTH SOUTH WEST EAST

250 DISTANCE FROM ROAD ENTER FT OR MI 38 39 TAX MAP: 22 BLK: 9 PARCEL 433

WELL INFORMATION APPROX. PUMPING RATE (GAL. PER MIN.) AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY)

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 GEO-THERMAL 2 bores x 300'

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Howard (13) P534054 COUNTY NAME COUNTY NO. STATE SIGNATURE DATE ISSUED 4/20/2011 Brian Baker 4/20/2012 CO SIGNATURE EXP. DATE NORTH GRID 522 000 EAST GRID 806 000

APPROXIMATE DEPTH OF WELL 300 FEET APPROXIMATE DIAMETER OF WELL NEAREST INCH

METHOD OF DRILLING (circle one)

BORED (or Augered) JETTED Jettied & DRIVEN AIR-ROTary AIR-PERCussion ROTARY (Hydraulic Rotary) CABLE REVERSE-ROTary Drive-POINT other

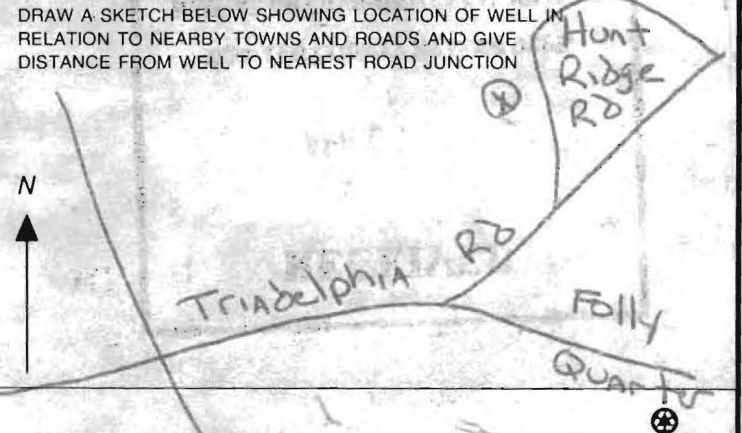
REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX)

- 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

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X SOURCES OF DRILLING WATER 1 Well 2. 3.

WRITE THE BOX NUMBER FROM THE MAP HERE

E 806 N 5202



Not to be filled in by driller (MDE OR COUNTY USE ONLY)

APPROX. PERMIT NUMBER G PERMIT No. 40-95-2093

SPECIAL CONDITIONS



**Providing Quality Systems for Over 20 Years
Commercial & Residential Water Well Drilling
Test Borings & Consulting • Geothermal Drilling & Systems
NGWA & IGSHPA Certified**

Howard County Health Department
7178 Columbia Gateway Drive
Columbia, MD 21046
Fax: 410-313-2648

March 31, 2011

Re: 13388 Hunt Ridge Road

Dear Department of Environment:

Please note unless otherwise specified all geothermal bores installed by our company will be installed as follows:

Grout: Bentonite Grout 20% solids minimum
Manufacture(s): Baroid or Wyo-Ben
Will be grouted from the bottom to the top with grout material

Piping: Polyethylene SDR 11 160 PSI as recommended per IGSHPA
Manufacture: EnDot or Charter Plastics or equal, Size 1" or 1 1/4"
IGSHPA Certification Number 12687

Also attached is a cross section diagram of the bore hole.

We would appreciate your help in getting this permit released as soon as possible so that we can expedite this project. If you have any questions, please do not hesitate to contact me.

Sincerely,

Michael Barlow