

C1 19780

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

22 300 26

HO-95-2398

OWNER Scott last name CHARLIE first name
WELL SITE ADDRESS 5312 Aerie Court TOWN Clarksu.lk
SUBDIVISION Eagle Point Landing SECTION LOT 6

WELL LOG

Not required for driven wells

GROUTING RECORD

WELL HAS BEEN GROUTED (Y) (N)
TYPE OF GROUTING MATERIAL (Circle one)
CEMENT (CM) BENTONITE CLAY (BC)
NO. OF BAGS 30 NO. OF POUNDS 1500
GALLONS OF WATER 750
DEPTH OF GROUT SEAL (to nearest foot) from 0 to 300

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

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

Table with columns: DESCRIPTION, FEET (FROM, TO), check if water bearing. Rows: SOIL 0-8, Red clay 8-12, Brown shale 12-45, Schist 45-300. Includes note: 7 Bores x 300 Feet

CASING RECORD

MAIN CASING TYPE Nominal diameter top (main) casing (nearest inch) Total depth of main casing (nearest foot)
60 61 63 64 66 70

OTHER CASING (if used)

diameter inch depth (feet) from to

SCREEN RECORD

screen type or open hole (ST) (BR) (HO) (PL) (OT)
STEEL BRASS OPEN HOLE PLASTIC OTHER

DEPTH (nearest ft.)

Table with columns: 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, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100

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. M W D 355

DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO. A W D 902

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

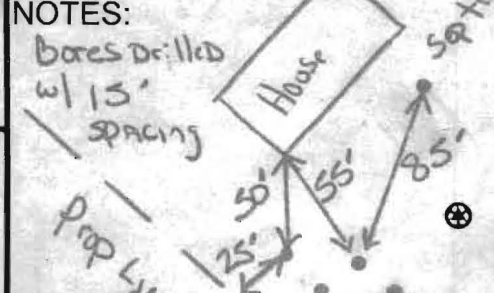
70 72 74 75 76

TELESCOPE CASING LOG INDICATOR OTHER DATA

PUMP INSTALLED

DRILLER INSTALLED PUMP (CIRCLE) (YES or NO) 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 (nearest foot)
+ above }
- below }

LATITUDE 39.22431
LONGITUDE 76.97363
(DEFAULT COORD. WGS 84)



B 1 18602 SEQUENCE NO. (MDE USE ONLY) STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL STATE PERMIT NUMBER Ho-95-2398
 1 2 3 6 70 79
 please type

Date Received (APA) 09/13/12
 8 MM DD YY 13
OWNER INFORMATION
 15 Last Name Scott Owner Charlie First Name 34
 36 Street or RFD 5312 Aerie Ct 55
 57 Town Clarksville 70 State MD 72 Zip 21029 76

B 3 **LOCATION OF WELL**
 8 COUNTY Howard 21
 23 SUBDIVISION Eagle Point Landing 42
 SECTION 44 46 LOT 6 48 50
 52-NEAREST TOWN Dartmouth 71

DRILLER INFORMATION
 76 Driller's Name Michael Barlow License No. MW D355 81
 Firm Name Barlow Well Drilling
 Address 522 Underwood Lane 21014
 Signature [Signature] Date 9/9/12

B 4 **SOURCES OF DRILLING WATER**
 1. Well
 2.
 3.
 11 STREET ADDRESS 5312 Aerie Ct 30
 ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)
 NORTH WEST EAST SOUTH
 34 350 37 DISTANCE FROM ROAD
 ENTER FT OR MI 38 39
 TAX MAP: 28 BLK: 15 PARCEL: 388

B 2 **WELL INFORMATION**
 1 2 APPROX. PUMPING RATE (GAL. PER MIN.) 0 8 12
 AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 0 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 6 bores x 320

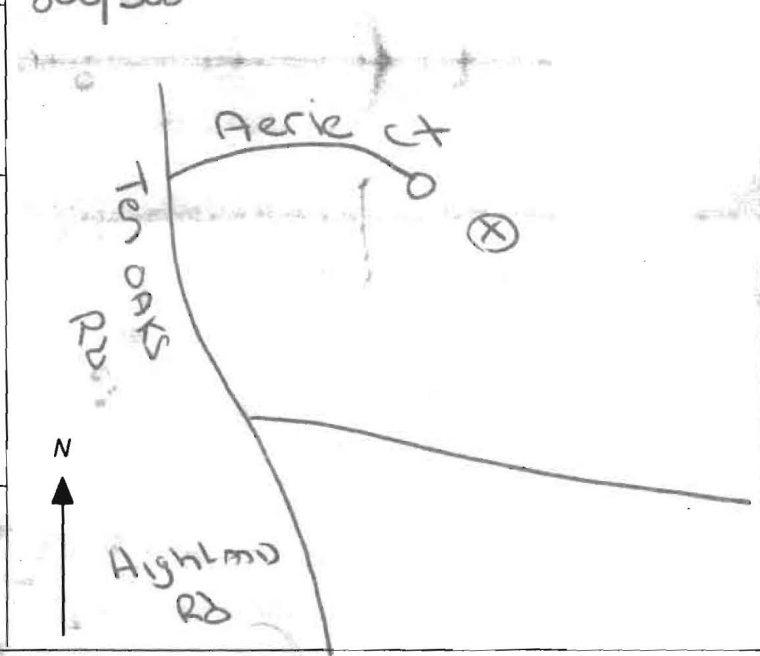
NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL
 COUNTY NAME Howard COUNTY NO. (13) A537379
 STATE SIGNATURE _____ INSERT S _____ 41
 DATE ISSUED 9/26/2012 CO SIGNATURE Brian Baber EXP. DATE 9/26/2013
 48 MM DD YY 48

APPROXIMATE DEPTH OF WELL 320 FEET 24 28
 APPROXIMATE DIAMETER OF WELL 6 NEAREST INCH

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
800/500

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 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. HO-95-2398
 70 71 72 73 74 75 76 77 78 79

**MICHAEL BARLOW WELL DRILLING
522 UNDERWOOD LANE
BEL AIR, MD 21014
410-838-6910**

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

September 9, 2012

Re: 5312 Aerie Court, Clarksville

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

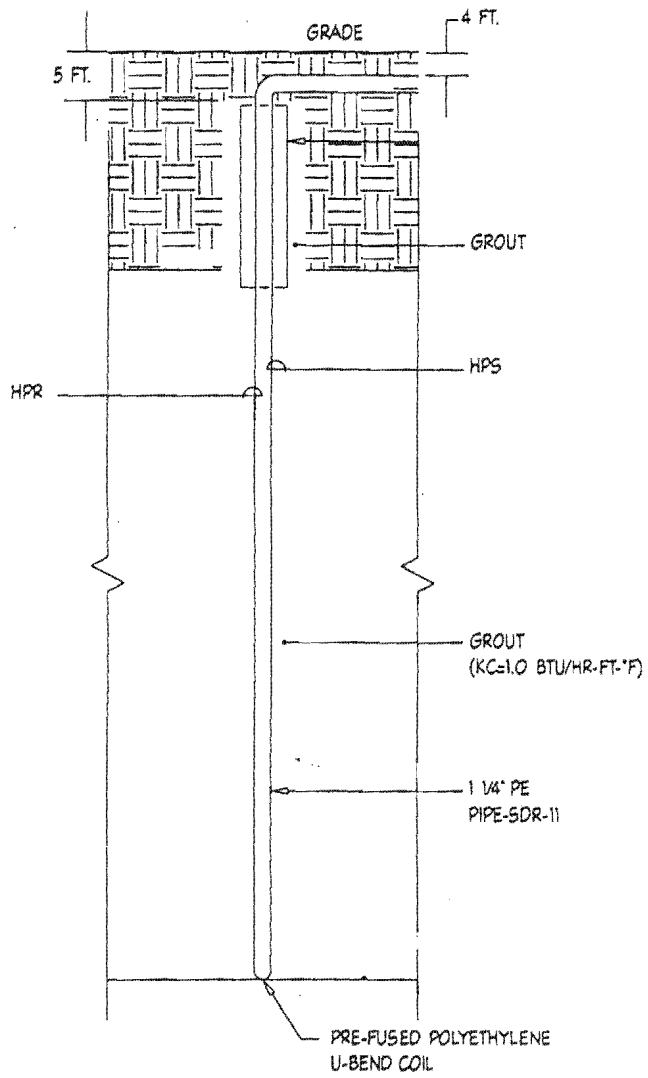
Also attached is a cross section diagram of the bore hole.

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



4 TYPICAL BORE HOLE DETAIL
 M1.00 NOT TO SCALE