

July 10. 05-396072

EMERGENCY/TEMP NO. IF ANY

B 1 2084
1 2 3 6

SEQUENCE NO.
(MDE USE ONLY)

STATE OF MARYLAND
APPLICATION FOR PERMIT TO DRILL WELL
W531029 please type

STATE PERMIT NUMBER
40-95-1776
70 fill in this form completely 79

Date Received (APA)

OWNER INFORMATION

8 MM DD YY 13
Gentile Brian O
15 Last Name Owner First Name 34
13738 Lakeside Dr
36 Street or RFD 55
Clarksville Md 21029
57 Town 70 State 72 Zip 76

B 3

LOCATION OF WELL

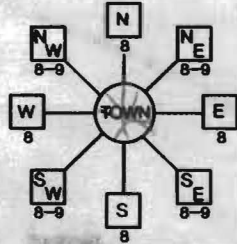
8 COUNTY 21
Howard
13 Brighton Pines
23 SUBDIVISION 42
SECTION 44 46 LOT 7 48 50
Clarksville
52 NEAREST TOWN 71
MILES FROM TOWN (enter 0 if in town) 0 MI 73 76 77 78

DRILLER INFORMATION

Marshal Arnette M 5 D 106
76 License No. 81
Arnett Environmental Services
Firm Name
PO Box 1242, Millersville Md 21108
Address
Marshal Arnette 6/3/09
Signature Date

B 4

1 2
DIRECTION OF WELL FROM TOWN (CIRCLE BOX)



11 30
13738 Lakeside Dr
NEAR WHAT ROAD
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: 34 BLK: 7 PARCEL 396

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)

- D DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION
- F FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)
- I INDUSTRIAL, COMMERCIAL, DEWATERING
- P PUBLIC WATER SUPPLY WELL
- T TEST, OBSERVATION, MONITORING
- G GEO-THERMAL 3 Closed Loops

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Howard 13 COUNTY NO.
STATE SIGNATURE INSERT S 41
DATE ISSUED 6/23/09
43 MM DD YY 48 CO SIGNATURE 6/23/10 EXP. DATE
NORTH GRID 500 000 EAST GRID 0803 000
50 55 57 63

APPROXIMATE DEPTH OF WELL 24 300 28 FEET

APPROXIMATE DIAMETER OF WELL 2 INCH NEAREST INCH

METHOD OF DRILLING (circle one)

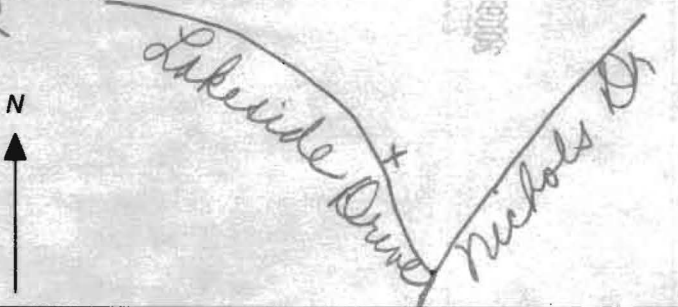
- BORED (or Augered) JETTED Jetted & DRIVEN
- AIR-ROTary AIR-PERCussion ROTARY (Hydraulic Rotary)
- CABLE REVERSE-ROTary DRIVE-POINT
- other

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

- SOURCES OF DRILLING WATER
- 1. Driller Well
- 2.
- 3.

WRITE THE BOX NUMBER FROM THE MAP HERE
E 08003
N 500

DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION



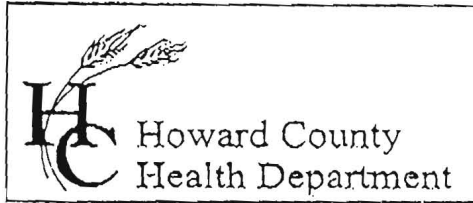
REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX)

- N THIS WELL WILL NOT REPLACE AN EXISTING WELL
 - Y THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
 - S THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS
 - D 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. 40-95-1776
70 71 72 73 74 75 76 77 78 79

SPECIAL CONDITIONS Completion Reports for each Bore need to be completed



7178 Columbia Gateway Drive, Columbia, MD 21046
 (410) 313-2640 Fax (410) 313-2648
 TDD (410) 313-2323 Toll Free 1-866-313-6300
 website: www.hchealth.org

Penny E. Borenstein, M.D., M.P.H., Health Officer

TO ALL INTERESTED PARTIES

When submitting a well permit application for a proposed well for new construction, please indicate one of the following:

Well Site Location:

Lot 7 Brighton Pines 7 13738 Lakeside Dr.
 Subdivision/Property Name Lot# Road Name

The well site has been staked by Owner - Brian Gentile, well site #3
 (professional land surveyor or company employing professional land surveyors)
 on 3-3-09 (date) and does not require a site inspection.

The well driller, builder or property owner will call the Health Department to schedule a time to meet in the field to verify the proposed well site location.

This sheet, along with two copies of an acceptable well site plan, must be attached to the green well permit application.

Revised 3/11/05



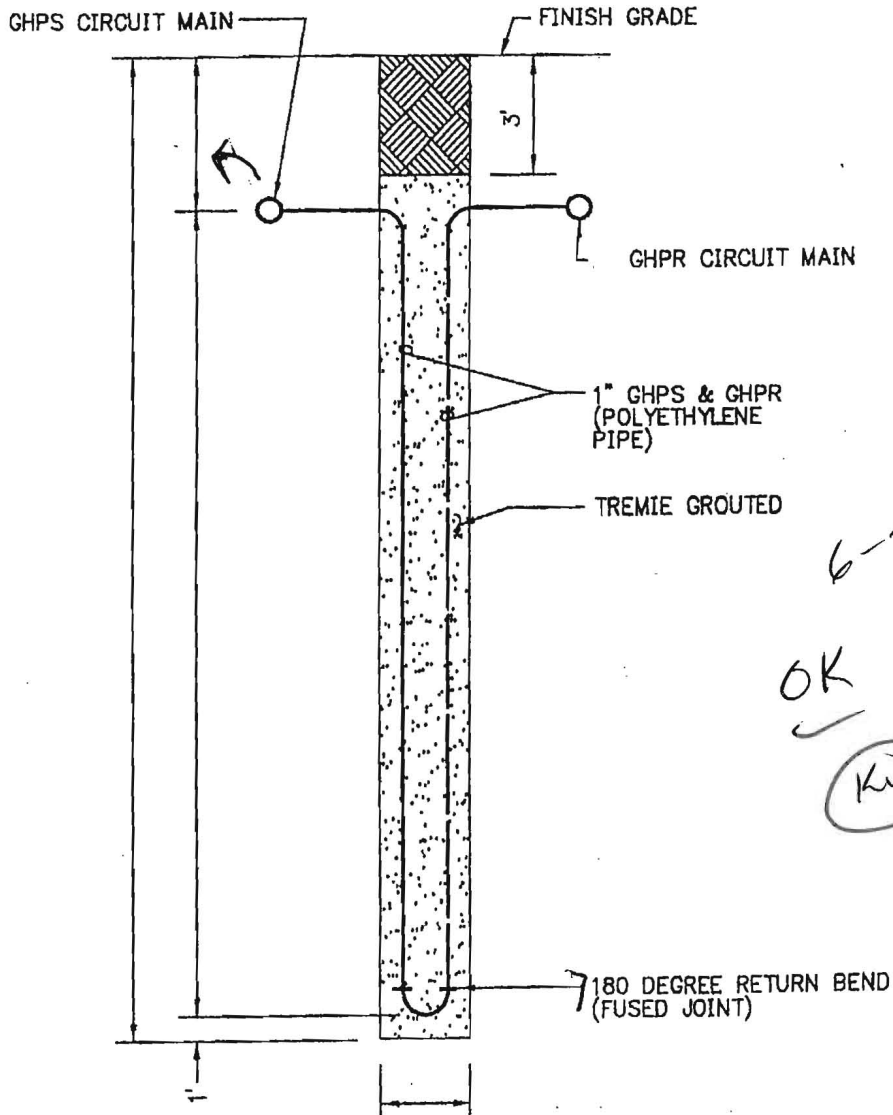
~~Brian Gentile will call for time to meet with County~~

4/2/09 Homeowner approved (staked) loc #3 in field under supervision of HD. KW

DETAIL $\frac{1}{M0.1}$

TYPICAL GHPS/GHPR CIRCUIT MAINS BELOW GRADE

NOT TO SCALE



6-23-07

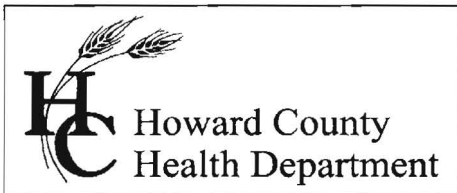
OK
KW

DETAIL $\frac{2}{M0.1}$

TYPICAL VERTICAL BOREHOLE

NOT TO SCALE

Grouted with bentonite clay from bottom to top



Bureau of Environmental Health
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TDD (410) 313-2323 Toll Free 1-866-313-6300
website: www.hchealth.org


Peter L. Beilenson, M.D., M.P.H., Health Officer

Wednesday, June 03, 2009

IMPORTANT

MEMORANDUM - Geothermal Wells

To: Allied Environmental Services
FILE

From: Kevin Wolf, Environmental Sanitarian 
Well and Septic Program

Re: **Geothermal Wells**
13738 Lakeside Dr., *Brian Gentile Property*

The well permit application has been reviewed by our office and the following comments need to be addressed prior to application release:

1) The site plan that was submitted is inaccurate. A certified plat of the property showing all pertinent structures on the property has been generated in April of this year. This plan, called the Percolation Certification Plan, needs to be used to show the exact locations of the geo-bores. The homeowner currently has a signed copy. Please re-submit this plan showing the exact locations of the geo-bores. Also, setback distances are as follows:

- 30' to wells
- 50' to septic components if bores are up-gradient
- 100' to septic components if bores are down-gradient

Remember, bentonite alone should be mixed at a ratio of 2 lbs or greater per gallon of water. If *thermal-enhanced* grout is to be used, remember to follow manufactures specifications when mixing. Health Department officials can inspect this grout by requesting the well driller to collect a sample of the grout in a bucket. If it the sand settles out within 1 hour, the grout mix is improper. Thermal enhanced bentonite grouts are a mixture of bentonite and quartz sand. The sand stays suspended in the clay for the life of the well. Please refer to the NGWA published article "Guidelines for the Construction of Vertical Boreholes for Closed Loop Heat Pump Systems" (1997)

Any questions please feel free to call me. 410-313-1771