

C1 19798

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

ST/CO USE ONLY

DATE Received

MM DO YY

8 08 27 13

DATE WELL COMPLETED

MM DO YY  
06 25 13

Depth of Well

22 480 26  
(TO NEAREST FOOT)PERMIT NO.  
FROM "PERMIT TO DRILL WELL"28 29 30 31 32 33 34 35 36 37  
Ho-95-2533

OWNER

WELL SITE ADDRESS

SUBDIVISION

SECTION

LOT

## 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 TOcheck  
if water  
bearing

Soil 0 6  
Red clay 6 21  
Brown Shale 21 50  
Med Hard Gray Rock 50 480

## GROUTING RECORD

WELL HAS BEEN GROUTED  
(Circle Appropriate Box)

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 TOP 52 ft. to 480 BOTTOM 58 ft.  
(enter 0 if from surface)

## CASING RECORD

casing  
types  
insert  
appropriate  
code  
below☒ ST  
STEEL☒ CO  
CONCRETE☒ PL  
PLASTIC☒ OT  
OTHERMAIN  
CASING  
TYPENominal diameter  
top (main) casing  
(nearest inch)Total depth  
of main casing  
(nearest foot)E  
A  
C  
H  
C  
A  
S  
I  
N  
G

## OTHER CASING (if used)

diameter

inch

depth (feet)

from to

screen type  
or open hole(insert  
appropriate  
code  
below)

## SCREEN RECORD

☒ ST  
STEEL☒ BR  
BRASS☒ HO  
OPEN  
HOLE☒ PL  
BRONZE☒ PL  
PLASTIC☒ OT  
OTHER

C 2

DEPTH (nearest ft.)

1 8 9 11 15 17 21  
2 23 24 26 30 32 36  
3 38 39 41 45 47 51  
4 53 54 56 58 60 62  
5 64 65 67 69 71 73  
6 75 76 78 80 82 84  
7 86 87 89 91 93 95  
8 97 98 100 102 104 106  
9 108 110 112 114 116 118  
10 120 122 124 126 128 130  
11 132 134 136 138 140 142  
12 144 146 148 150 152 154  
13 156 158 160 162 164 166  
14 168 170 172 174 176 178  
15 180 182 184 186 188 190  
16 192 194 196 198 200 202  
17 204 206 208 210 212 214  
18 216 218 220 222 224 226  
19 228 230 232 234 236 238  
20 240 242 244 246 248 250  
21 252 254 256 258 260 262  
22 264 266 268 270 272 274  
23 276 278 280 282 284 286  
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26 312 314 316 318 320 322  
27 324 326 328 330 332 334  
28 336 338 340 342 344 346  
29 348 350 352 354 356 358  
30 360 362 364 366 368 370  
31 372 374 376 378 380 382  
32 384 386 388 390 392 394  
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34 408 410 412 414 416 418  
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36 432 434 436 438 440 442  
37 444 446 448 450 452 454  
38 456 458 460 462 464 466  
39 468 470 472 474 476 478  
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42 504 506 508 510 512 514  
43 516 518 520 522 524 526  
44 528 530 532 534 536 538  
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46 552 554 556 558 560 562  
47 564 566 568 570 572 574  
48 576 578 580 582 584 586  
49 588 590 592 594 596 598  
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30

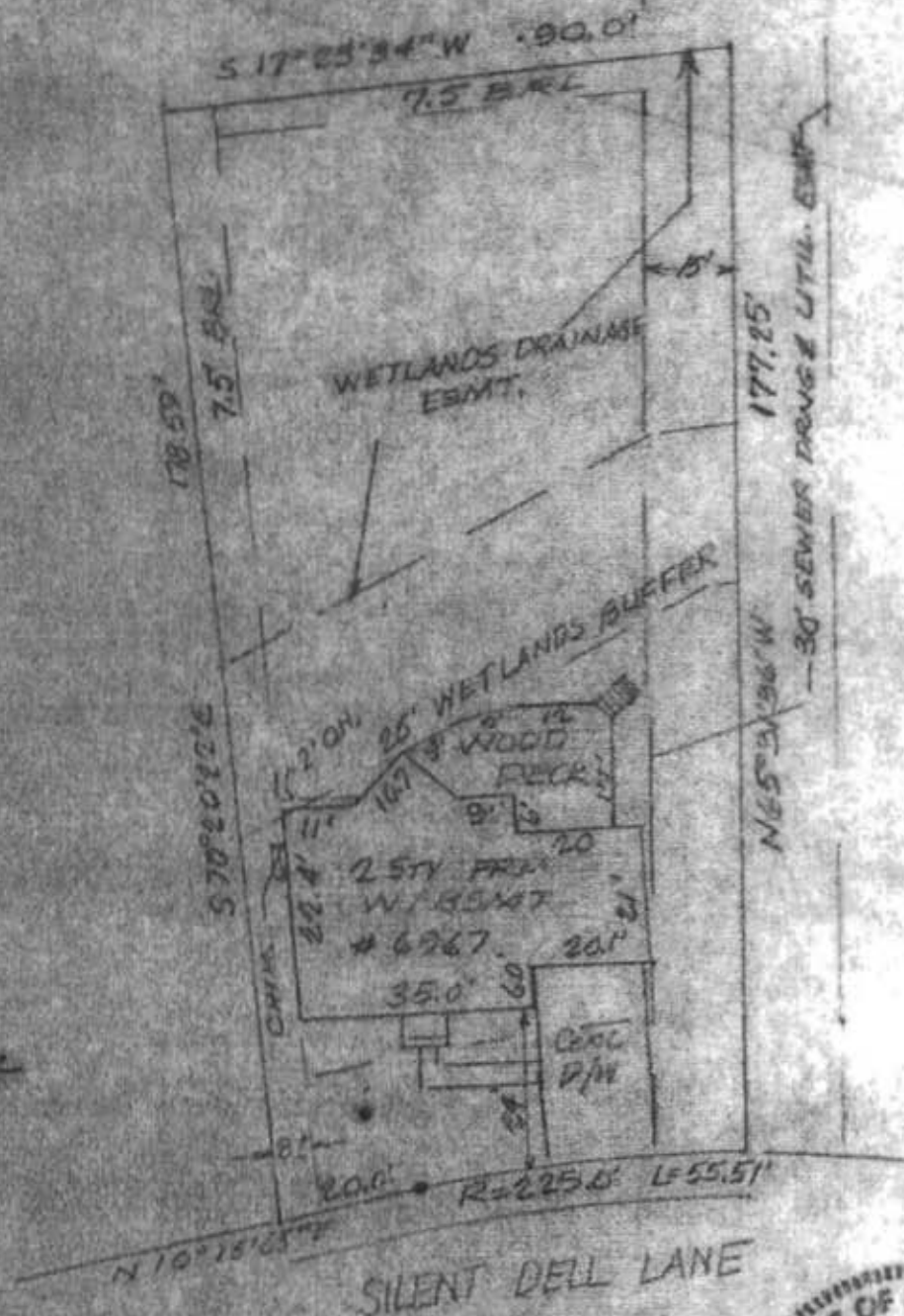
<b>B 1</b> <span style="font-size: 24pt; font-weight: bold;">18656</span> <small>1 2 3 6</small>	SEQUENCE NO. (MDE USE ONLY)	<b>STATE OF MARYLAND</b> <b>APPLICATION FOR PERMIT TO DRILL WELL</b> 545038-1 please type	STATE PERMIT NUMBER <span style="font-size: 24pt; font-weight: bold;">H0-95-2533</span> <small>fill in this form completely 79</small>
Date Received (APA) <span style="font-size: 24pt; font-weight: bold;">05/14/13</span> <small>8 MM DD YY 13</small> <b>OWNER INFORMATION</b> 15 Last Name <u>millican</u> Owner <u>George</u> First Name <u>George</u> 34 36 <u>6967 Silent Dell Lane</u> Street or RFD 55 57 <u>Columbia</u> MD <u>21044</u> 76 <small>57 Town 70 State 72 Zip 76</small>		<b>B 3</b> <b>LOCATION OF WELL</b> 8 COUNTY <u>Howard</u> 21 23 SUBDIVISION <u>Village of Hickory Ridge</u> 42 SECTION <u>4</u> LOT <u>4</u> <small>44 46 48 50</small> 52 NEAREST TOWN <u>Columbia</u> 71	
<b>DRILLER INFORMATION</b> 76 Driller's Name <u>Michael Barlow</u> MW <u>D355</u> License No. 81 Firm Name <u>Barlow Well Drilling</u> Address <u>522 Underwood Lane 21014</u> Signature <u>[Signature]</u> Date <u>5-13-13</u>		<b>B 4</b> <b>SOURCES OF DRILLING WATER</b> 1. <u>Well</u> 2. 3. <b>ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)</b> NORTH <input checked="" type="checkbox"/> WEST <input type="checkbox"/> EAST <input type="checkbox"/> SOUTH <input type="checkbox"/> 34 <u>20</u> 37 DISTANCE FROM ROAD <u>20</u> Ft ENTER FT OR MI <u>20</u> TAX MAP: <u>41</u> BLK: <u>6</u> PARCEL: <u>4601</u>	
<b>B 2</b> <b>WELL INFORMATION</b> 1 2 APPROX. PUMPING RATE (GAL. PER MIN.) <u>0</u> <small>8 12</small> AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) <u>0</u> <small>14 20</small>		<b>NOT TO BE FILLED IN BY DRILLER</b> <b>HEALTH DEPARTMENT APPROVAL</b> <u>Howard</u> <u>(13)</u> <u>Public</u> COUNTY NAME COUNTY NO. STATE SIGNATURE _____ INSERT S → DATE ISSUED <u>5/30/2013</u> <u>Brian Baker</u> <u>5/30/2014</u> <small>43 MM DD YY 48</small> CO SIGNATURE EXP. DATE	
<b>USE FOR WATER (CIRCLE APPROPRIATE BOX)</b> 22 <input type="checkbox"/> DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION <input type="checkbox"/> FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION) <input type="checkbox"/> INDUSTRIAL, COMMERCIAL, DEWATERING <input type="checkbox"/> PUBLIC WATER SUPPLY WELL <input type="checkbox"/> TEST, OBSERVATION, MONITORING <input type="checkbox"/> OPEN LOOP GEOTHERMAL <input checked="" type="checkbox"/> CLOSED LOOP GEOTHERMAL <u>1 Bore x 480'</u>		<b>PROPOSED LOCATION OF WELL ON LOT</b> SHOW PERMANENT STRUCTURES SUCH AS BUILDINGS, SEPTIC SYSTEM, ROADS AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCE MEASUREMENTS TO WELL 	
APPROXIMATE DEPTH OF WELL <u>480</u> FEET <small>24 28</small> APPROXIMATE DIAMETER OF WELL <u>6</u> INCH <b>METHOD OF DRILLING (circle one)</b> BORED (or Augered) JETTED Jetted & DRIVEN 30 AIR-ROTARY AIR-PERCussion ROTARY (Hydraulic Rotary) 37 CABLE REVERSE-ROTARY Drive-POINT other _____		<b>REPLACEMENT OR DEEPEENED WELLS (CIRCLE APPROPRIATE BOX)</b> <input checked="" type="checkbox"/> THIS WELL WILL NOT REPLACE AN EXISTING WELL <input type="checkbox"/> THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED 39 <input type="checkbox"/> THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS <input type="checkbox"/> THIS WELL WILL DEEPEEN AN EXISTING WELL PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEENED (IF AVAILABLE) 41 _____ 52	
Not to be filled in by driller (MDE OR COUNTY USE ONLY) APPROP. PERMIT NUMBER _____ G _____ PERMIT No. <u>H0-95-2533</u> <small>70 71 72 73 74 75 76 77 78 79</small>			
<b>SPECIAL CONDITIONS</b> <small>NOTE: APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED</small>			

ENGINEER  
SURVEYOR

VYFHUIS and ASSOCIATES

1001 Chestnut Avenue S.W. Atlanta, GA 30334

1" = 30'  
Geo Bore

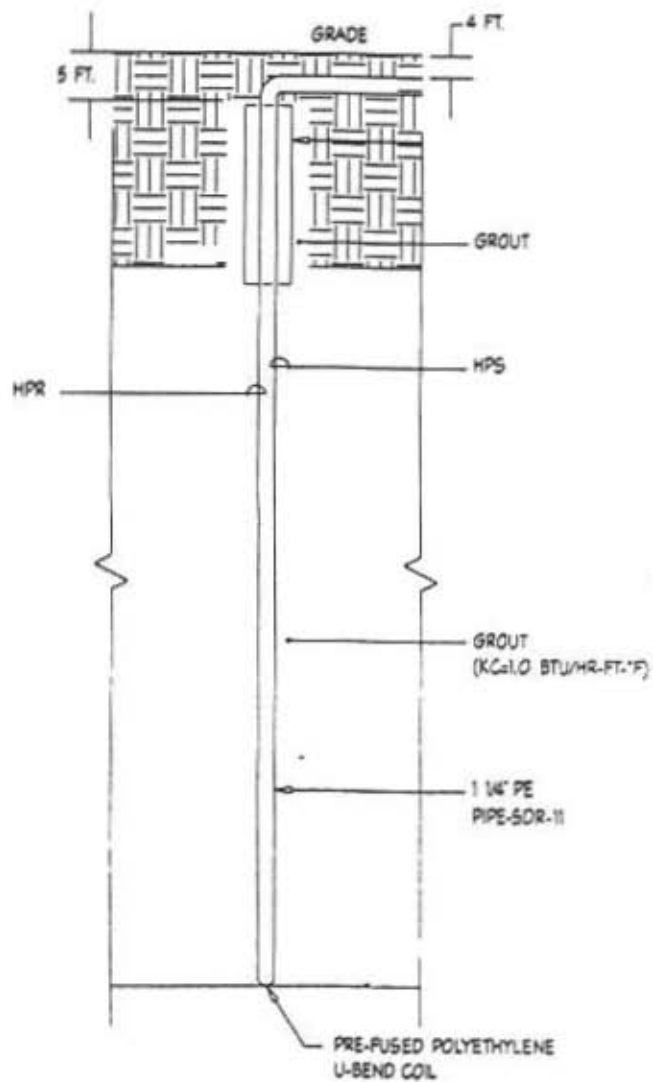


THIS PROPERTY IS NOT IN A 100 YEAR FLOOD PLAIN IN ACCORDANCE WITH NATIONAL FLOOD INSURANCE STUDIES

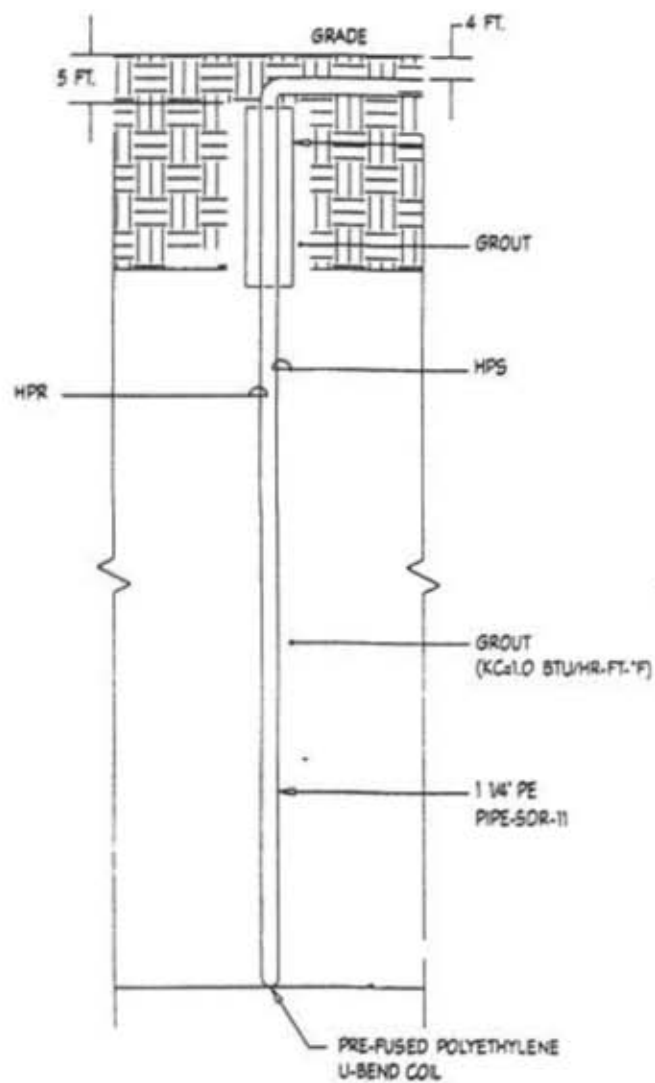
ZONE C FEMA MAP 24004A 0038B



HOUSE LOCATION PLAT	LOT 4	CERTIFICATION: I hereby certify that the plan shown hereon is correct, and the buildings have been located by actual measurement.
6967 SILENT DELL LANE	BLOCK	
VILLAGE OF HICKORY RIDGE	PLAT BK.	
	PLAT NO. 2458	



4 TYPICAL BORE HOLE DETAIL  
 1/16.00 NOT TO SCALE



4 TYPICAL BORE HOLE DETAIL  
 M1.00 NOT TO SCALE

**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

May 13, 2013

Re: 6967 Silent Dell Lane, Columbia

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