

C1 19788

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
NUMBER1 2 3 6
(THIS NUMBER IS TO BE PUNCHED
IN COLS. 3-6 ON ALL CARDS)

ST/CO USE ONLY

DATE Received

MM DD YY
01 04 13

DATE WELL COMPLETED

MM DD YY
12 13 12

Depth of Well

22 375 26
(TO NEAREST FOOT)PERMIT NO.
FROM "PERMIT TO DRILL WELL"H0-93-2422
28 29 30 31 32 33 34 35 36 37OWNER D'KANE BRIAN
WELL SITE ADDRESS 4831 WHARF LANE TOWN ELLICOTT CITY LOT 21043
SUBDIVISION _____ SECTION _____

WELL LOG

Not required for driven wells

GROUTING RECORD

WELL HAS BEEN GROUTED
(Circle Appropriate Box)yes no
☒ ☐
44 44

TYPE OF GROUTING MATERIAL (Circle one)

CEMENT ☒ BENTONITE CLAY ☒NO. OF BAGS 32 NO. OF POUNDS 1600GALLONS OF WATER 800

DEPTH OF GROUT SEAL (to nearest foot)

from 0 TOP 52 ft. to 375 BOTTOM 58 ft.
(enter 0 if from surface)

CASING RECORD

casing
types
insert
appropriate
code
below☒ ☒
STEEL CONCRETE
☒ ☒
PLASTIC OTHERMAIN
CASING
TYPENominal diameter
top (main) casing
(nearest inch)Total depth
of main casing
(nearest foot)

60 61 63 64 66 70

OTHER CASING (if used)

EACH CASING diameter depth (feet)
inch from toscreen type
or open hole

SCREEN RECORD

(insert
appropriate
code
below)☒ ☒ ☒
STEEL BRASS OPEN
BRONZE HOLE
☒ ☒
PLASTIC OTHER

C2 DEPTH (nearest ft.)

E 1 8 9 11 15 17 21
A 2 23 24 26 30 32 36
C 3 38 39 41 45 47 51
R
E
E
SLOT SIZE 1 2 3DIAMETER
OF SCREEN (NEAREST
INCH)56 60
from toGRAVEL PACK IF WELL DRILLED
WAS FLOWING WELL
INSERT F IN BOX 68 68MDE USE ONLY
(NOT TO BE FILLED IN BY DRILLER)

T (E.R.O.S.) W Q

70 72 74 75 76
TELESCOPE LOG
CASING INDICATOR OTHER DATA

C3

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)

☒ air ☒ piston ☒ turbine
☒ centrifugal ☒ rotary ☒ other
☒ jet ☒ submersible
(describe below)

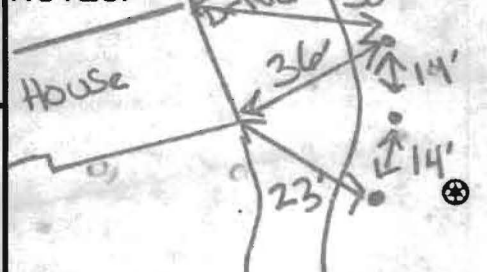
PUMP INSTALLED

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 29CAPACITY:
GALLONS PER MINUTE
(to nearest gallon) 31 35

PUMP HORSE POWER 37 41

PUMP COLUMN LENGTH
(nearest ft.) 43 47CASING HEIGHT (circle appropriate box
and enter casing height)
+ above } LAND SURFACE
- below } (nearest
foot)LATITUDE 39.23969
LONGITUDE 76.77526
(DEFAULT COORD. WGS 84)

NOTES:



NUMBER OF UNSUCCESSFUL WELLS:

WELL HYDROFRACTURED

yes no
☒ ☐

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
WELLI 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. MWD 355

DRILLERS SIGNATURE

(MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO. MWD 066SITE SUPERVISOR (sign. of driller or journeyman
responsible for sitework if different from permittee)

B 1 1 2 3 6 <u>18603</u>	SEQUENCE NO. (MDE USE ONLY)	STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL <u>538046-B</u> please type	STATE PERMIT NUMBER <u>H0-95-2422</u> <small>fill in this form completely</small>
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OWNER INFORMATION Date Received (APA) <u>01/13/12</u> <small>8 MM DD YY 13</small> 15 <u>O'Kane</u> Last Name <u>Bryant</u> Owner First Name 34 36 <u>6319 Arbor Way</u> Street or RFD 55 57 <u>EIKridge</u> Town 70 <u>MD</u> State 72 <u>21075</u> Zip 76	LOCATION OF WELL B 3 <u>Howard</u> COUNTY 21 <u>O'Kane Property</u> SUBDIVISION 42 SECTION <u>44</u> LOT <u>48</u> <u>Columbia</u> NEAREST TOWN 71
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DRILLER INFORMATION Driller's Name <u>Michael Barlow</u> MW D355 Firm Name <u>Barlow Well Drilling</u> Address <u>522 Underwood Lane</u> Signature <u>[Signature]</u> Date <u>9/9/12</u>	SOURCES OF DRILLING WATER B 4 1. <u>Well</u> 2. 3.
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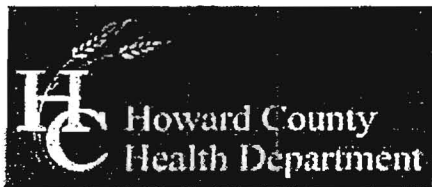
WELL INFORMATION APPROX. PUMPING RATE (GAL. PER MIN.) <u>0</u> AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) <u>0</u>	4831 Wharff Lane STREET ADDRESS ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX) 34 <u>250</u> 37 DISTANCE FROM ROAD ENTER FT OR MI <u>38</u> 39 TAX MAP: <u>31</u> BLK: <u>10</u> PARCEL <u>634</u>
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USE FOR WATER (CIRCLE APPROPRIATE BOX) <input type="checkbox"/> DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION <input type="checkbox"/> FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION) <input checked="" 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>3 bores x 375'</u>	NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL <u>Howard</u> COUNTY NAME <u>(13) P538097</u> COUNTY NO. STATE SIGNATURE _____ INSERT S → _____ DATE ISSUED <u>10/16/2012</u> <u>Brian Baker</u> <u>10/16/2013</u> 43 MM DD YY 48 CO SIGNATURE EXP. DATE
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APPROXIMATE DEPTH OF WELL <u>375'</u> FEET APPROXIMATE DIAMETER OF WELL <u>4</u> 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 <u>860/510</u> <u>Wharff Lane</u> <u>ILchester Rd</u> <u>Rt 103</u>
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METHOD OF DRILLING (circle one) BORED (or Augered) JETTED Jetted & DRIVEN 30 AIR-ROTARY AIR-PERCussion ROTARY (Hydraulic Rotary) 37 CABLE REVERSE-ROTARY DRIVE-POINT other _____	REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX) <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 checked="" 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 DEEPEM AN EXISTING WELL PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED (IF AVAILABLE) 41 _____ 52
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Not to be filled in by driller (MDE OR COUNTY USE ONLY) APPROP. PERMIT NUMBER _____ PERMIT No. <u>H0-95-2422</u>	SPECIAL CONDITIONS <small>NOTE APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED</small>
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Bureau of Environmental Health
7178 Columbia Gateway Drive, Columbia, MD 21046-2147
(410) 313-2640 Fax (410) 313-2648
TDD (410) 313-2323 Toll Free 1-866-313-6300
website: www.hchealth.org

Peter L. Beilenson, 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: O'KANE 634 4831 WHARFF LANE
Subdivision/Property Name Lot# Road Name

☒ The well site has been staked by Point to Point Land Surveyors
(professional land surveyor or company employing professional land surveyors)
on Jan. 13, 2012 (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



3-12-12

ROSEMARY MORTMAN
8384/95
TAX MAP 371



3/29/12
Well Site Location
Approved. Stated by
"Point to Point" Surveyors.
(Knu)

SEPTIC
FIELD

N/
CITIBANK
TRUSTEE
12498/276
TAX MAP 371
PARCEL 635

MACADAM DRIVEWAY
COMMON
EASEMENT
DRIVEWAY

**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: 4832 Wharff 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

PARCEL 634
217,830 S.F.
5.000 AC.

ADDITIONAL SUPER SILT FENCE
IN THE DIRECTION OF THE SEDIMENT
CONTROL INSPECTOR

CONSERVATION
MEANS
RETENTION

DRAINAGE AREA
31,821 S.F.

SEPTIC FIELD
AREA: 11,340 S.F.

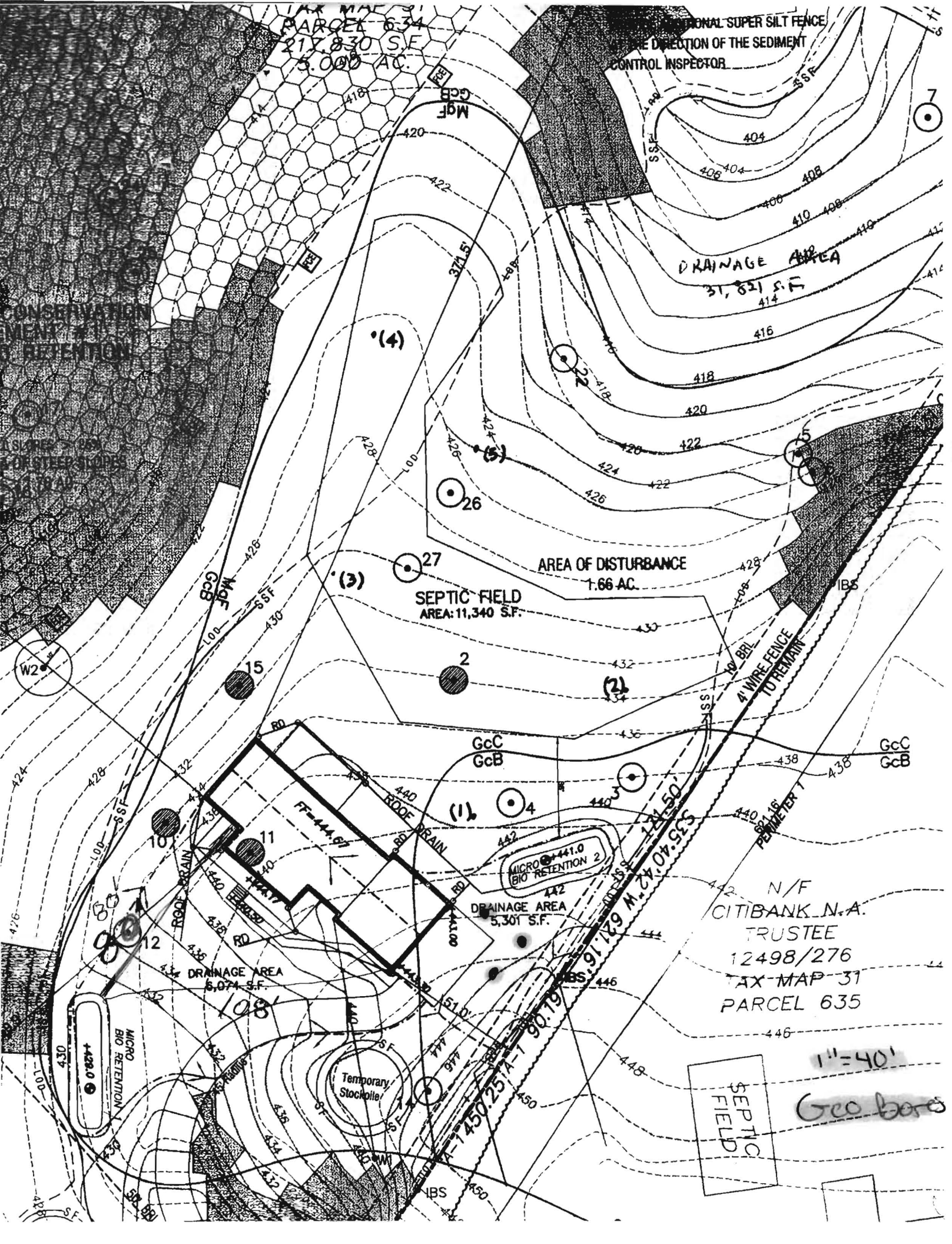
AREA OF DISTURBANCE
1.66 AC.

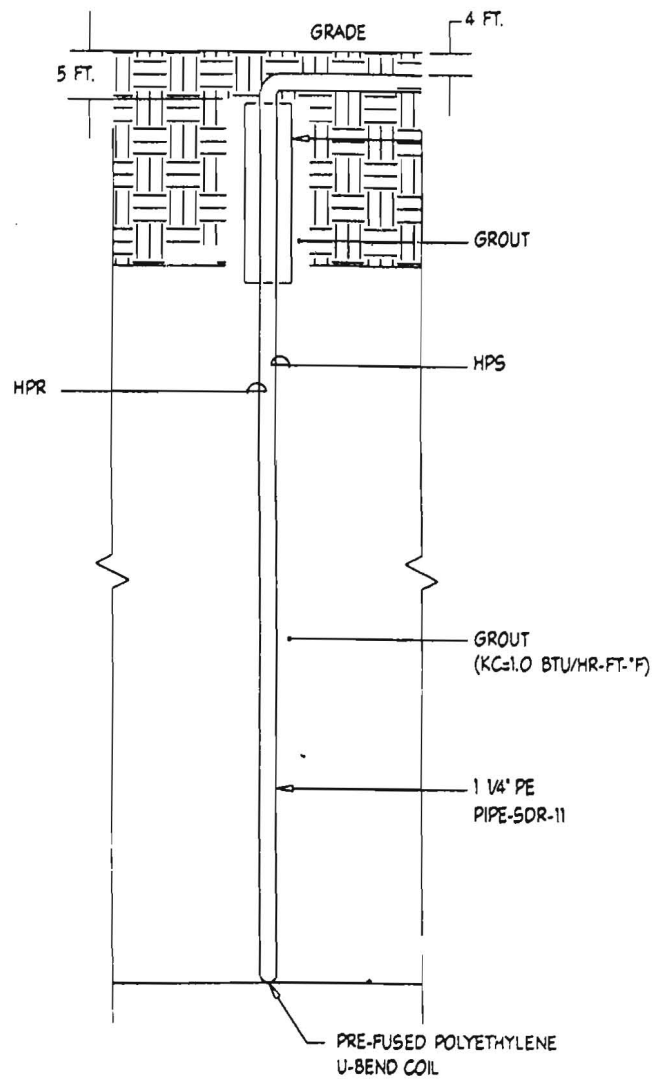
N/F
CITIBANK N.A.
TRUSTEE
12498/276
TAX-MAP-31
PARCEL 635

1"=40'

Geo bars

SEPTIC
FIELD





4 TYPICAL BORE HOLE DETAIL
 M1.00 NOT TO SCALE

FILE INQUIRY NOTES

[illegible]

M1 2000960

B 1 48603 <small>1 2 3 4 5 6</small>		SEQUENCE NO. (MDE USE ONLY) STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL please type: 33044-B		STATE PERMIT NUMBER HO-95-2422 <small>70 fill in this form completely 79</small>	
Date Received (APA) 07/15/12 <small>8 MM DD YY 13</small> OWNER INFORMATION 15 Last Name O'Kane Owner First Name Bryant 34 35 Street or RFD 6319 Arbor Way 55 57 Town Elkridge MD 21075 State 72 Zip 76			LOCATION OF WELL 8 COUNTY Howard 21 23 SUBDIVISION O'Kane Property 42 SECTION 44 45 LOT 48 50 52 NEAREST TOWN Columbia 71		
DRILLER INFORMATION Driller's Name Michael Borlowi MWD 355 76 License No. 81 Firm Name Borlowi Well Drilling Address 537 Underwood Lane 21014 Signature [Signature] Date 9/9/12			SOURCES OF DRILLING WATER 1 well 2 3 4831 Wharff Lane 11 STREET ADDRESS 30 ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX) 34 250 37 WEST EAST SOUTH DISTANCE FROM ROAD ENTER FT OR MI 38 39 TAX MAP: 31 BLK: 10 PARCEL 634		
WELL INFORMATION APPROX. PUMPING RATE (GAL. PER MIN.) 8 12 AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 14 20			NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL COUNTY NAME Howard COUNTY NO. (13) P538097 STATE SIGNATURE _____ INSERT S _____ 41 DATE ISSUED 10/16/2012 Brian Rubin 10/16/2013 43 MM DD YY 48 CO SIGNATURE EXP. DATE		
USE FOR WATER (CIRCLE APPROPRIATE BOX) 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 3600 x 375'			APPROXIMATE DEPTH OF WELL 375' FEET 24 26 APPROXIMATE DIAMETER OF WELL _____ INCH NEAREST INCH		
METHOD OF DRILLING (circle one) BORED (or Augered) JETTED Jetted & DRIVEN 30 AIR-ROTARY AIR-PERCUSSION ROTARY (Hydraulic Rotary) 37 CABLE REVERSE-ROTARY Drive POINT other _____			REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX) 39 <input type="checkbox"/> THIS WELL WILL NOT REPLACE AN EXISTING WELL <input checked="" type="checkbox"/> THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED <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 DEEPEMED 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) APPROX. PERMIT NUMBER _____ G _____ PERMIT No. HO-95-2422 70 71 72 73 74 75 76 77 78 79		
SPECIAL CONDITIONS <small>NOTE: APPROVING AUTHORITY SHOULD USE SEPARATE SHEET IF NEEDED</small>			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 860/510 Wharff Lane ILchester Rd Rt 103 N		

CONTROL INSPECTOR

DO NOT REMOVE THIS TAG
DEPARTMENT OF THE ENVIRONMENT
WELL PERMIT NUMBER

HO-95-2422

INFORMATION - GIVE NUMBER AND WRITE
1800 WASHINGTON BLVD.
BAL. MDRE. MARYLAND 21200

CONSERVATION LEAF PUBLICATION

DRAINAGE AREA

AREA OF DISTURBANCE
1.55 AC

SEPTIC FIELD
AREA: 11,340 S.F.

N/F
 CITIBANK N.A.
 FUSTEE
 2498/276
 EX MAP 31
 PARCEL 635

1"=40'

10/16/2012

SEPTIC
FIELD

New
Borehole
Locations.
(BB)

SEP 10
FIELD

10/25/12

Applications for mechanical
permits for Geothermal sent
to Health 10/24/12. Please
attach plot plans to these
applications. Thank
You

Lorrie Manning
DIP
410-313-3960

RECEIVED

OCT 26 2012

CLAY COUNTY HEALTH DEPT
BUREAU OF ENVIRONMENTAL HEALTH