

C1 5353

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.1 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

8 13

DATE WELL COMPLETED

01-07-12

Depth of Well

320

(TO NEAREST FOOT)

2/29/2012

OK (RB)

PERMIT NO.
FROM "PERMIT TO DRILL WELL"

H0-95-2231

OWNER

STREET OR RFD

SUBDIVISION

Schlanger

3920 Sharp Road

Dill

first name

TOWN

Glenwood

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 TO

check
if water
bearingSoft Brown
Soft Tan
Hard Gray

0

84

84

95

95

320

GROUTING RECORD

WELL HAS BEEN GROUTED
(Circle Appropriate Box)

yes no

Y N

TYPE OF GROUTING MATERIAL (Circle one)

CEMENT CM

BENTONITE CLAY BC

NO. OF BAGS 19

NO. OF ROUNDS 950

GALLONS OF WATER

DEPTH OF GROUT SEAL (to nearest foot)

from 48 TOP 52 ft. to 54 BOTTOM 58 ft.

(enter 0 if from surface)

(enter 0 if from surface)

(enter 0 if from surface)

Casing types insert appropriate code below

STEEL CO

PLASTIC OT

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 depth (feet)

inch from to

EACH CASING

screen type or open hole

insert appropriate code below

STEEL BR HO

BRASS BRONZE PL OT

PLASTIC OTHER

SCREEN RECORD

STEEL BR HO

BRASS BRONZE PL OT

PLASTIC OTHER

SCREEN RECORD

STEEL BR HO

BRASS BRONZE PL OT

PLASTIC OTHER

SCREEN RECORD

STEEL BR HO

BRASS BRONZE PL OT

PLASTIC OTHER

SCREEN RECORD

STEEL BR HO

BRASS BRONZE PL OT

PLASTIC OTHER

SCREEN RECORD

STEEL BR HO

BRASS BRONZE PL OT

PLASTIC OTHER

SCREEN RECORD

STEEL BR HO

BRASS BRONZE PL OT

PLASTIC OTHER

SCREEN RECORD

STEEL BR HO

BRASS BRONZE PL OT

PLASTIC OTHER

SCREEN RECORD

STEEL BR HO

BRASS BRONZE PL OT

PLASTIC OTHER

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED

yes

Y

no

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. 1

MW D304

DRILLERS SIGNATURE

(MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO. 1

AW D897

JOSH HOLMES

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

C 3

1 2

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 (describe below)

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

LAND SURFACE

- below

(nearest foot)

LOCATION OF WELL ON LOT

SHOW PERMANENT STRUCTURE SUCH AS

BUILDING, SEPTIC TANKS, AND /OR

LANDMARKS AND INDICATE NOT LESS

THAN TWO DISTANCES

(MEASUREMENTS TO WELL)

Cat 39-263871 01-25

Long 77-013184 01-28

02-42

03-48

Sharp Road

C1 5352

SEQUENCE NO.
(MDE USE ONLY)STATE OF MARYLAND
WELL COMPLETION REPORTFILL IN THIS FORM COMPLETELY
PLEASE TYPETHIS 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 2/29/2012

ST/CO USE ONLY

DATE RECEIVED

MM 02 23 12

DATE WELL COMPLETED

01:02:12 27

Depth of Well

22 240

(TO NEAREST FOOT)

PERMIT NO.
FROM "PERMIT TO DRILL WELL"

#1 BB 10-95-2231

OWNER

STREET OR RFD

SUBDIVISION

Schlanger

last name

3920

Sharp Road

first name

TOWN

Glenwood

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

TO

check
if water
bearingSoft Brown
Soft Tan
Hard Gray0 34
34 95
95 240✓
✓
✓

GROUTING RECORD

WELL HAS BEEN GROUTED
(Circle Appropriate Box)yes no
Y N
44 44

TYPE OF GROUTING MATERIAL (Circle one)

CEMENT CM

BENTONITE CLAY BC

NO. OF BAGS 45 45

NO. OF POUNDS 350

GALLONS OF WATER 345

DEPTH OF GROUT SEAL (to nearest foot)

from 0 ft. to 240 ft.
48 TOP 52 54 BOTTOM 58 ft.
(enter 0 if from surface)

CASING RECORD

casing
types
insert
appropriate
code
belowST
STEELCO
CONCRETEPL
PLASTICOT
OTHERMAIN
CASING
TYPENominal diameter
top (main) casing
(nearest inch)Total depth
of main casing
(nearest foot)

60 61 63 64 65 66 67 68 69 70

OTHER CASING (if used)

diameter

depth (feet)

inch

from to

screen type
or open hole

SCREEN RECORD

(insert
appropriate
code
below)ST
STEELBR
BRASSHO
OPEN
HOLEPL
PLASTICOT
OTHER

C 2

DEPTH (nearest ft.)

E 1 8 11 15 17 21
A 2 23 24 26 30 32 36
C 3 38 39 41 45 47 51
S
R
E
E
N

SLOT SIZE 1 2 3

DIAMETER
OF SCREEN (NEAREST
INCH)56 60
from to

GRAVEL PACK

IF WELL DRILLED

WAS FLOWING WELL

INSERT F IN BOX 68

MDE USE ONLY
(NOT TO BE FILLED IN BY DRILLER)
(E.R.O.S.)

W Q

70
TELESCOPE
CASING72
LOG
INDICATOR74 75 76
OTHER DATA

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
(describe
below)

J jet

S submersible

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)

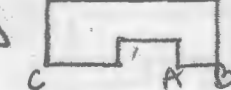
+ above

LAND SURFACE

- below

(nearest
foot)

LOCATION OF WELL ON LOT

SHOW PERMANENT STRUCTURE SUCH AS
BUILDING, SEPTIC TANKS, AND /OR
LANDMARKS AND INDICATE NOT LESS
THAN TWO DISTANCES
(MEASUREMENTS TO WELL)Lot 39.26381
Long 77.013184A1-25'
A2-19'
B1-28'
B2-42'
C3-48'

DRILLERS LIC. NO. MW D 304

DRILLERS SIGNATURE
(MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO. AW D 897

SITE SUPERVISOR (sign. of driller or journeyman
responsible for sitework if different from permittee)

C1 5360

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.1 2 3 4 5 6
(THIS NUMBER IS TO BE PUNCHED
IN COLUMNS 3-6 ON ALL CARDS)COUNTY
NUMBER

ST/CO USE ONLY

DATE Received
MM DD YY
02 23 12

DATE WELL COMPLETED

01 07 12

Depth of Well

2 x 22 240
(TO NEAREST FOOT)PERMIT NO.
FROM "PERMIT TO DRILL WELL"
Borehole #22912 Ho-95-2231
29 30 31 32 33 34 35 36 37

OWNER

STREET OR RFD

SUBDIVISION

Schlanger
3920 Sharp Road
Dill

first name

TOWN

Glenwood

SECTION

LOT

4

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

check
if water
bearingSoft Brown
Broken Tan
Hard Gray
Soft Tan
Hard GrayFROM TO
0 75
75 87
87 100
100 107
107 240

✓

GROUTING RECORD

WELL HAS BEEN GROUTED
(Circle Appropriate Box)yes no
Y N
44 44

TYPE OF GROUTING MATERIAL (Circle one)

CEMENT CM BENTONITE CLAY BC

NO. OF BAGS 15 NO. OF POUNDS 250

GALLONS OF WATER 345

DEPTH OF GROUT SEAL (to nearest foot)

from 0 ft. to 240 ft.
48 TOP 52 54 BOTTOM 58
(enter 0 if from surface)

CASING RECORD

casing
types
insert
appropriate
code
belowST
STEELCO
CONCRETEPL
PLASTICOT
OTHERMAIN
CASING
TYPENominal diameter
top (main) casing
(nearest inch)Total depth
of main casing
(nearest foot)

60 61 63 64 66 70

EACH
CASING

OTHER CASING (if used)

diameter depth (feet)
inch from to
ST 5 70 112screen type
or open hole
(insert
appropriate
code
below)

SCREEN RECORD

ST
STEELBR
BRASSHO
OPEN
HOLEPL
PLASTICOT
OTHER

C 2

DEPTH (nearest ft.)

1 2
E 6 9 11 15 17 21
A 23 24 26 30 32 36
C 36 39 41 45 47 51
S
R
E
N
SLOT SIZE 1 2 3DIAMETER
OF SCREEN(NEAREST
INCH)

from to

GRAVEL PACK
IF WELL DRILLED
WAS FLOWING WELL
INSERT F IN BOX 68MDE USE ONLY
(NOT TO BE FILLED IN BY DRILLER)

T

(E.R.O.S.)

W Q

70

72

74 75 76

TELESCOPE
CASINGLOG
INDICATOR

OTHER DATA

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
(describe
below)

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

LAND SURFACE Scan
(nearest
foot)

- below

49 50 51

LOCATION OF WELL ON LOT

SHOW PERMANENT STRUCTURE SUCH AS
BUILDING, SEPTIC TANKS, AND /OR
LANDMARKS AND INDICATE NOT LESS
THAN TWO DISTANCES
(MEASUREMENTS TO WELL)Lat 39.263871 A1-25'
Long 77.013184 A2-19'
B1-28'
B2-42'
C3-48'

x3 Driveway

A B

Sharp Road

2 of 2

DRILLERS LIC. NO.

M WD 304

DRILLERS SIGNATURE

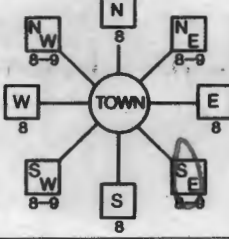
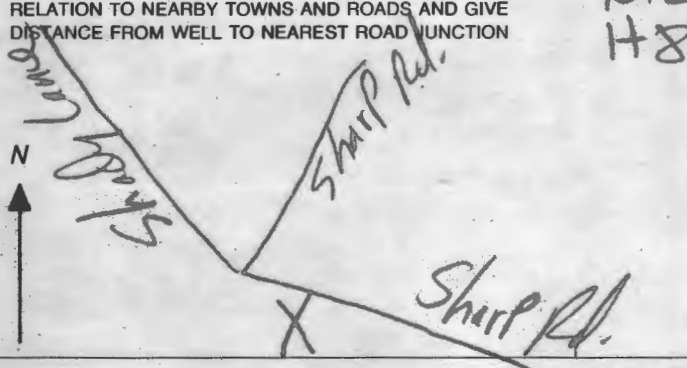
(MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO.

A WD 897

Josh Holmes

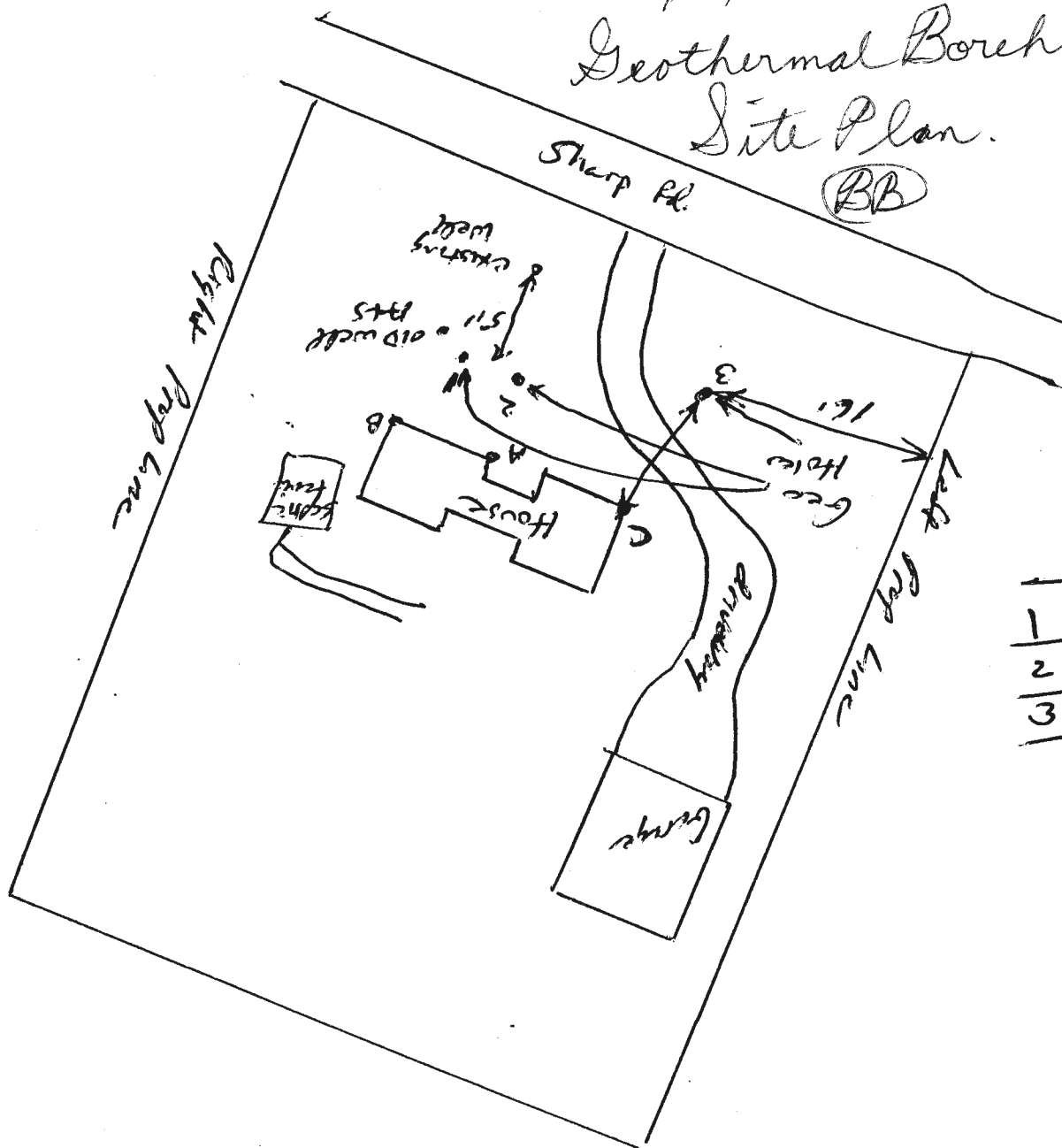
SITE SUPERVISOR (sign. of driller or journeyman
responsible for sitework if different from permittee)

B 1 9152 <small>1 2 3 6</small>	SEQUENCE NO. (MDE USE ONLY)	STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL 536050 please type	STATE PERMIT NUMBER Ho-95-2231 <small>fill in this form completely</small>
Date Received (APA) 11-29-11 <small>8 MM DD YY 13</small> OWNER INFORMATION Last Name: Schlanger Owner: Sara First Name: Sara 3920 Sharp Road Glenwood MD 21738 <small>36 Street or RFD 55</small> <small>57 Town 70 State 72 Zip 76</small>		B 3 LOCATION OF WELL COUNTY: Howard SUBDIVISION: Dill Subdivision SECTION: 44 LOT: 48 NEAREST TOWN: Glenwood MILES FROM TOWN (enter 0 if in town) 2 M I <small>73 76 77 78</small>	
DRILLER INFORMATION Driller's Name: David Kelly M W D 304 Firm Name: Jones Well Drilling, Inc. Address: 3700 Rush Rd. Jarr. MD 21084 Signature: David Kelly Date: 11-29-11 <small>76 License No. 81</small>		B 4 DIRECTION OF WELL FROM TOWN (CIRCLE BOX)  NEAR WHAT ROAD: 3920 Sharp Road ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX) NORTH [] WEST [] EAST [] SOUTH [] DISTANCE FROM ROAD: 80 FT ENTER FT OR MI: 38 39 TAX MAP: 0021 BLK: 17 PARCEL: 0101	
B 2 WELL INFORMATION APPROX. PUMPING RATE (GAL. PER MIN.) 0 AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 0 <small>1 2 8 12 14 20</small>		NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL Howard (13) PH9139 COUNTY NAME COUNTY NO. STATE SIGNATURE INSERT S 41 DATE ISSUED 12/7/2011 Brian Baker 12/7/2012 <small>43 MM DD YY 48</small> CO SIGNATURE EXP. DATE NORTH GRID 521 000 EAST GRID 796 000 <small>50 55 57 63</small>	
USE FOR WATER (CIRCLE APPROPRIATE BOX) <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 checked="" type="checkbox"/> GEO-THERMAL 2-240' 1-320'		APPROXIMATE DEPTH OF WELL 240 FEET <small>24 28</small> APPROXIMATE DIAMETER OF WELL 6 INCH METHOD OF DRILLING (circle one) BORED (or Augered) JETTED Jetted & DRIVEN AIR-ROTARY AIR-PERCUSION ROTARY (Hydraulic Rotary) CABLE REVERSE-ROTARY DRIVE-POINT other	
REPLACEMENT OR DEEPENED WELLS (CIRCLE APPROPRIATE BOX) <input 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 <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		SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X SOURCES OF DRILLING WATER 1. 2. 3. WRITE THE BOX NUMBER FROM THE MAP HERE E 70130 N 391545 000 X 000 DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION 4812 H8 	
Not to be filled in by driller (MDE OR COUNTY USE ONLY) APPROX. PERMIT NUMBER _____ G _____ PERMIT No. Ho-95-2231 <small>70 71 72 73 74 75 76 77 78 79</small>			
SPECIAL CONDITIONS <small>NOTE - APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED -</small>			



12/6/2011
Geothermal Borehole
Site Plan.

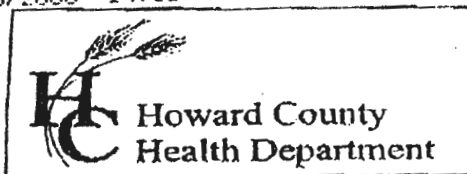
(BB)



	A	B	C
1	25	28	
2	19	42	
3			48

Not to Scale

Owner: Sarah Schlenger
3920 Sharp Rd.
Oakwood MD 21738



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:

3920 Sharp Road

Subdivision/Property Name	Lot#	Road Name
---------------------------	------	-----------

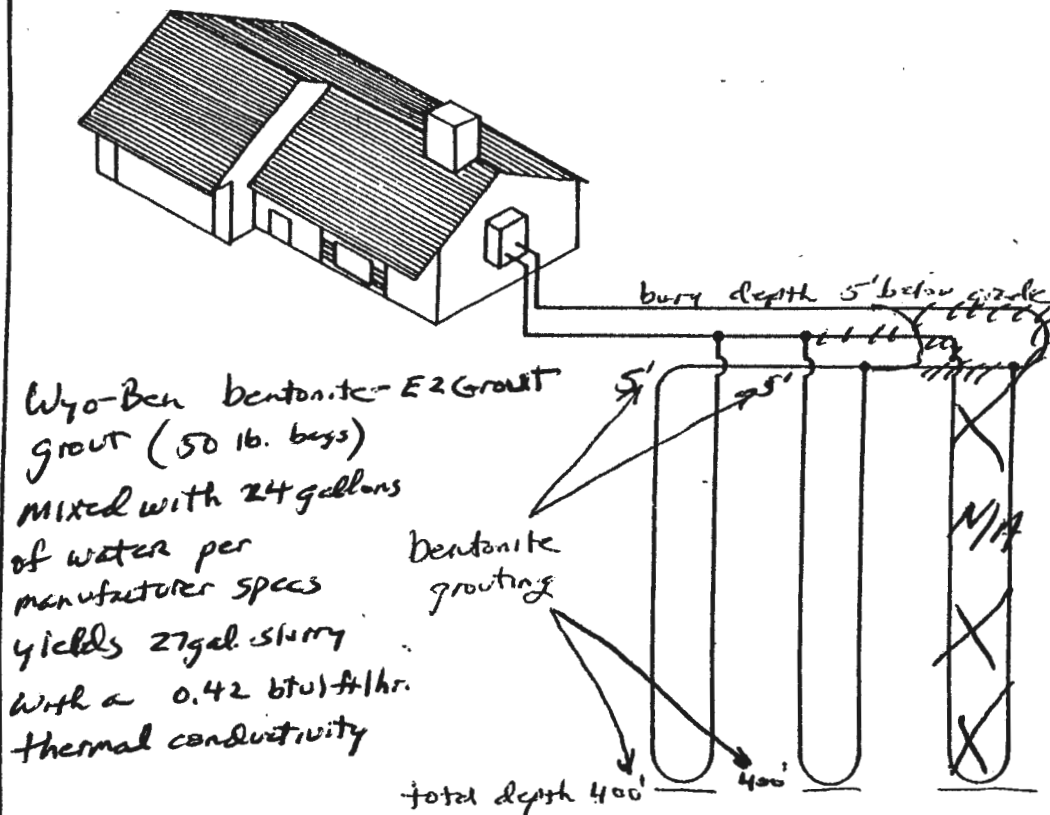
- ☐ The well site has been staked by _____,
(professional land surveyor or company employing professional land surveyors)
on _____ (date) and does not require a site inspection.

- ☒ ^{staked} 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

Driller: Jones Well Drilling Inc.
 contact: David Kelly
 410-692-6981



Earth Coil Type: Vertical - Single U-Bend

Water Flow: Parallel

Pipe Sizes: 1 1/4" double Loop

Bore Lengths: 320' x 1 hole
 400' x 2 holes (800' vertical bore)

Pipe Lengths: 800 x 2 (1600 vertical pipe)
 640 x 1

FIGURE 4.5: Parallel Vertical Ground Heat Exchanger