

C1 36827

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)

FILL IN THIS FORM COMPLETELY PLEASE TYPE

COUNTY NUMBER 13

ST/CO USE ONLY

DATE WELL COMPLETED

Depth of Well

PERMIT NO. FROM "PERMIT TO DRILL WELL"

DATE Received MM DD YY 10/11/16

MM DD YY 09/12/16

22 320 26 (TO NEAREST FOOT)

OK 10/17/16 SC

HO-15-0296

OWNER Bishop James, WELL SITE ADDRESS 7400 Mink Hollow Road, TOWN Highland, MD 20777-9778

SUBDIVISION SECTION LOT

WELL LOG

Not required for driven wells

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

DESCRIPTION (Use additional sheets if needed) FEET FROM TO check if water bearing

Silty Sand, Tri Mica. Dry medium stiff 0 10

Weathered Rock dry, medium Hard 10 25

Rock, gray hard 25 320

Installed 1.25" closed loop geothermal.

GROUTING RECORD

WELL HAS BEEN GROUTED (Circle Appropriate Box) Y N

TYPE OF GROUTING MATERIAL (Circle one)

CEMENT CM BENTONITE CLAY BC

NO. OF BAGS 16 NO. OF POUNDS 800

GALLONS OF WATER 400

DEPTH OF GROUT SEAL (to nearest foot) from 3 ft. to 320 ft.

CASING RECORD

ST CO PL OT STEEL CONCRETE PLASTIC OTHER

MAIN CASING TYPE Nominal diameter top (main) casing (nearest inch) Total depth of main casing (nearest foot)

OTHER CASING (if used)

diagram showing casing diameters and depths

SCREEN RECORD

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

DEPTH (nearest ft.)

Diagram showing well depth intervals from 1 to 68 feet

DIAMETER OF SCREEN (NEAREST INCH) 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) T (E.R.O.S.) W Q

TELESCOPE CASING LOG INDICATOR OTHER DATA

C 3

PUMPING TEST

HOURS PUMPED (nearest hour) N/A

PUMPING RATE (gal. per min.) N/A

METHOD USED TO MEASURE PUMPING RATE N/A

WATER LEVEL (distance from land surface)

BEFORE PUMPING 8 ft.

WHEN PUMPING N/A ft.

TYPE OF PUMP USED (for test)

A air P piston T turbine C centrifugal R rotary O other J jet S submersible

PUMP INSTALLED

DRILLER INSTALLED PUMP (CIRCLE) 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 3 (nearest foot)

LATITUDE 39.170603 LONGITUDE 76.997650 (DEFAULT COORD. WGS 84)

Pursuant to §10-624 of the State Govt. Article of the Maryland Code personal info. requested on this form is used in processing this form pursuant to COMAR 26.04.04.

B 1	SEQUENCE NO. (MDE USE ONLY) 43392	STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL 558831 please type	STATE PERMIT NUMBER Ho-15-0296 70 fill in this form completely 79
------------	--	--	--

OWNER INFORMATION

Date Received (APA) 8/18/16

8 MM DD YY 13

15 Bishop James
Last Name Owner First Name 34

36 7400 Mink Hollow Road
Street or RFD 55

57 Highland, Maryland 20777-9778
Town 70 State 72 Zip 76

B 3 LOCATION OF WELL

8 Howard County COUNTY 21

23 0000 SUBDIVISION 42

SECTION 44 46 LOT 48 50

52 Highland NEAREST TOWN 71

DRILLER INFORMATION

Driller's Name Jeff Corran License No. MWD 567 76 81

Firm Name Chesapeake Geosystems, Inc.

Address 6720 Fort Smallwood Rd Balt. 21226

Signature [Signature] Date 8/15/16

B 4 SOURCES OF DRILLING WATER

1. municipal

2.

3.

11 7400 Mink Hollow Road STREET ADDRESS 30

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)

NORTH
 WEST
 EAST
 SOUTH

34 260 37 DISTANCE FROM ROAD FT

ENTER FT OR MI 38 39

TAX MAP: 0040 BLK: 0007 PARCEL 0275

B 2 WELL INFORMATION

APPROX. PUMPING RATE (GAL. PER MIN.) N/A 8 12

AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) N/A 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

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Howard COUNTY NAME COUNTY NO. (13)

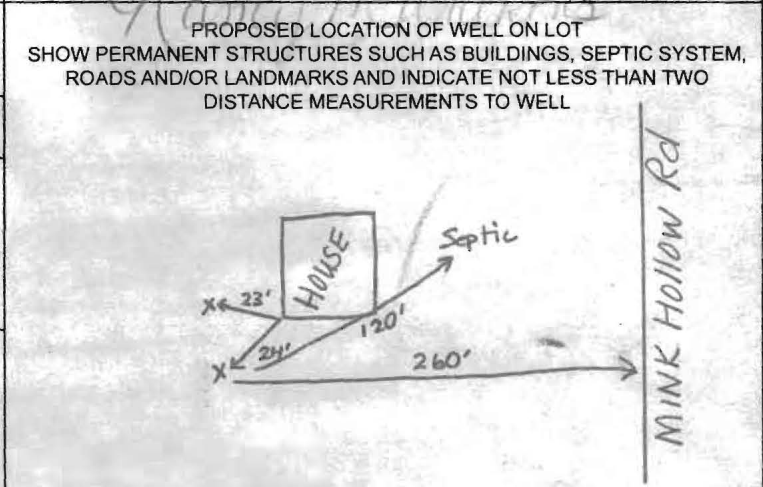
STATE SIGNATURE _____ INSERT S → 41

DATE ISSUED 8/24/16 CO SIGNATURE [Signature] EXP. DATE 8/24/17

43 MM DD YY 48

APPROXIMATE DEPTH OF WELL 320 FEET 24 28

APPROXIMATE DIAMETER OF WELL 6 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)

THIS WELL WILL NOT REPLACE AN EXISTING WELL

THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED

39 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)

APPROX. PERMIT NUMBER _____ **G** _____

PERMIT No. Ho-15-0296

70 71 72 73 74 75 76 77 78 79

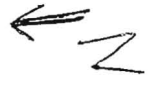
SPECIAL CONDITIONS

NOTE APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED-

Must protect septic area from @ county cuttings + runoff.

39.170603 -76.997650

Bishop Residence



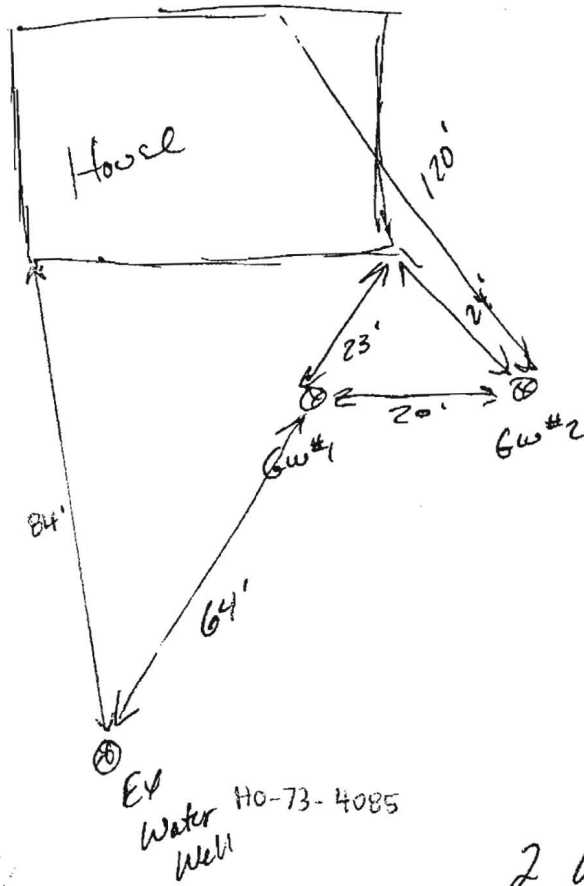
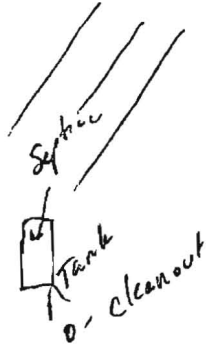
Mink Hollow Rd

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

HO-15-0296

INFORMATION-GIVE NUMBER AND WRITE
 1800 WASHINGTON BLVD
 BALTIMORE MARYLAND. 21230

Well sites approved
8/24/16 SC



2 Wells @ 320'
1.25" factory U-Bend
Closed Loops

60 x 40 x 20

WELL SCHEMATIC FORM

GROUND SURFACE

PERMANENT OUTER CASING

PERMANENT OUTER CASING

CONFINING UNIT

CONFINING UNIT

PERMANENT OUTER CASING (if area contaminated)

MATERIAL _____

DIAMETER _____

LENGTH _____

DEPTH INTO CONFINING UNIT _____

TUBE CASING (if not regular, single loop)

ATTACH HORIZONTAL SCHEMATIC _____

NUMBER OF TUBES PER BOREHOLE 2

DIAMETER OF TUBES 1.25"

MATERIAL HDPE

SHAPE AND LENGTH _____

TUBE CONNECTION METHOD Fusion

TUBE CONNECTION MATERIAL HDPE

LOOP PIPE CASING (regular, single loop)

MATERIAL HDPE? YES NO

DIAMETER 1.25"

LENGTH 320'

GROUT

MATERIAL Thermex / Bentonite

PERMEABILITY _____

WATER / GROUT RATIO 24 / 50

PERCENT SOLIDS 20

TREMIE GROUTED FROM BOTTOM OF BOREHOLE? YES NO

USING A POSITIVE DISPLACEMENT PUMP? YES NO

DEPTH TO THE BOTTOM OF HOLE 320'

DIAMETER OF BOREHOLE 6"

WELL ADDRESS Richard Bishop

LOT NUMBER: _____

SQUARE NUMBER: _____

WELL OWNER: Richard Bishop

OWNER ADDRESS: 7400 Mink Hollow Rd Highland Md

PLAT MAP

Borrower: James Bishop File No.: 13-02335
 Property Address: 7400 Mink Hollow Road Case No.: Bishop
 City: Highland State: MD Zip: 20777
 Lender: Howard Bank

