

C104816SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE TYPE

THIS REPORT MUST BE SUBMITTED AFTER
WELL IS COMPLETED.
COUNTY
NUMBER

ST/CO USE ONLY
DATE Received
MM DD YY
8 13

DATE WELL COMPLETED
MM DD YY
10-24-14

Depth of Well
22 300 26
(TO NEAREST FOOT)

PERMIT NO.
FROM "PERMIT TO DRILL WELL"
4/10/15 SC HO-14-0118

OWNER
STREET OR RFD
SUBDIVISION

last name
Gaudermilk, Gary
6836 Santa Maria Ave

first name
TOWN
Nightland MD

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

Top Soil 0 10

Tan Sandstone 10 25

Tan Rock 25 165

Blk Rock 165 300

water @ 280'

18 bags x 26 gal / bag = 468 gal / 300' = 1.56 gal / ft

3 closed logs

GROUTING RECORD
yes no
WELL HAS BEEN GROUTED
(Circle Appropriate Box)
TYPE OF GROUTING MATERIAL (Circle one)
CEMENT CM BENTONITE CLAY BC
NO. OF BAGS 45 46 NO. OF POUNDS 45 46
GALLONS OF WATER
DEPTH OF GROUT SEAL (to nearest foot)
from 48 TOP 52 54 BOTTOM 58 ft. to
(enter 0 if from surface)

CASING RECORD
casing types insert appropriate code below
MAIN CASING TYPE
Nominal diameter top (main) casing (nearest inch!)
Total depth of main casing (nearest foot)
OTHER CASING (if used)
diameter inch depth (feet) from to
EACH CASING

SCREEN RECORD
screen type or open hole
(insert appropriate code below)
DEPTH (nearest ft.)
SLOT SIZE 1 2 3
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
70 72 74 75 76
TELESCOPE CASING LOG INDICATOR OTHER DATA

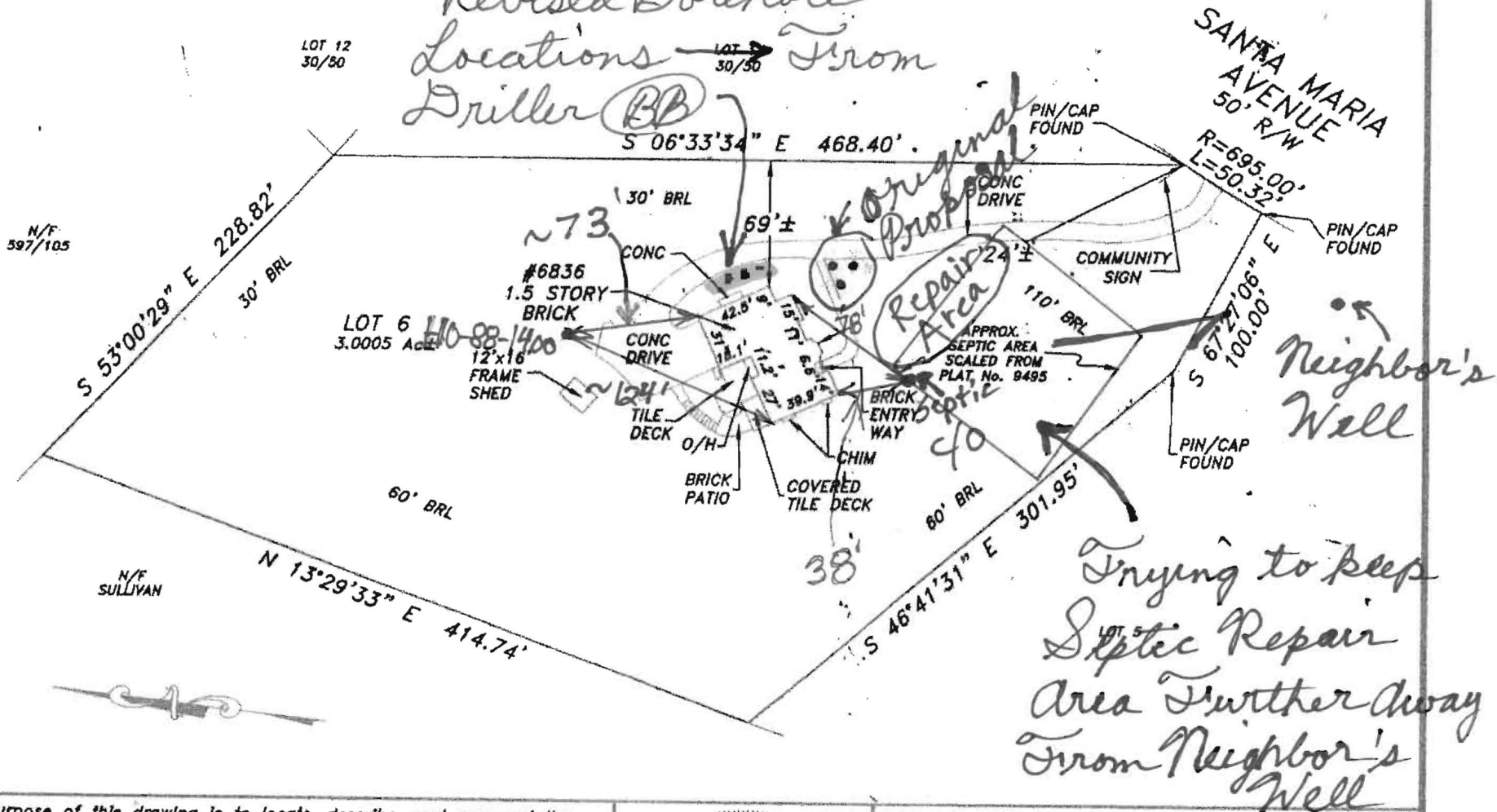
C3
PUMPING TEST
HOURS PUMPED (nearest hour)
PUMPING RATE (gal. per min.)
METHOD USED TO MEASURE PUMPING RATE
WATER LEVEL (distance from land surface)
BEFORE PUMPING
WHEN PUMPING
TYPE OF PUMP USED (for test)
A air P piston T turbine
C centrifugal R rotary O other (describe below)
J jet S submersible

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)
PUMP HORSE POWER
PUMP COLUMN LENGTH (nearest ft.)
CASING HEIGHT (circle appropriate box and enter casing height)
LAND SURFACE (nearest foot)
LOCATION OF WELL ON LOT
SHOW PERMANENT STRUCTURES AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)

B 1		37329		SEQUENCE NO. (MDE USE ONLY)		STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL please type		STATE PERMIT NUMBER 70 <u>HO-14-0118</u> 79 fill in this form completely	
Date Received (APA)						B 3 LOCATION OF WELL			
OWNER INFORMATION						Howard			
8 MM DD YY 13						8 COUNTY 21			
15 Last Name Owner First Name 34						Highland Oaks			
36 Street or RFD 55						23 SUBDIVISION 42			
57 Town 70 State 72 Zip 76						SECTION 44 46 LOT 48 50			
DRILLER INFORMATION						Highland			
C John Hess MWD 553						52 NEAREST TOWN 71			
Driller's Name 76 License No. 81						B 4			
Firm Name						SOURCES OF DRILLING WATER			
Allied Environmental Services						1. Public			
Address						2.			
P.O. Box 129 Annapolis Junction MD 20701						3.			
Signature Date						6836 Santa Maria Ave			
C John Hess 09/12/14						11 STREET ADDRESS 30			
B 2 WELL INFORMATION						ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)			
1 2						NORTH			
APPROX. PUMPING RATE (GAL. PER MIN.)						W			
8 12						E			
AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY)						S			
14 20						34 37 SOUTH			
USE FOR WATER (CIRCLE APPROPRIATE BOX)						DISTANCE FROM ROAD			
<input type="checkbox"/> DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION						ENTER FT OR MI 38 39			
<input type="checkbox"/> FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)						TAX MAP 0040 BLK: 0003 PARCEL 0036			
<input type="checkbox"/> INDUSTRIAL, COMMERCIAL, DEWATERING						NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL			
<input type="checkbox"/> PUBLIC WATER SUPPLY WELL						Howard (13) A43929			
<input type="checkbox"/> TEST, OBSERVATION, MONITORING						COUNTY NAME COUNTY NO.			
<input type="checkbox"/> OPEN LOOP GEOTHERMAL						STATE SIGNATURE INSERT S 41			
<input checked="" type="checkbox"/> CLOSED LOOP GEOTHERMAL 3 loops						DATE ISSUED 10/21/2014			
						43 MM DD YY 48 CO SIGNATURE Brian Baker EXP. DATE 10/21/2015			
APPROXIMATE DEPTH OF WELL 300 FEET						PROPOSED LOCATION OF WELL ON LOT			
24 28						SHOW PERMANENT STRUCTURES SUCH AS BUILDINGS, SEPTIC SYSTEM, ROADS AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCE MEASUREMENTS TO WELL			
APPROXIMATE DIAMETER OF WELL 6 INCH						House			
METHOD OF DRILLING (circle one)						Proposed Geothermal Loops			
BORED (or Augered) JETTED Jetted & DRIVEN						South Marie Ave			
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 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)									
APPROP. PERMIT NUMBER									
PERMIT No. HO-14-0118									
70 71 72 73 74 75 76 77 78 79									
SPECIAL CONDITIONS									
NOTE: APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED									

10/21/2014

Revised Borehole
Locations From
Driller (BB)



The purpose of this drawing is to locate, describe, and represent the positions of buildings and substantial improvements affecting the property shown hereon, being known as:

LOT 6, as shown on the plat entitled
"HIGHLAND OAKS"

recorded among the land records of Howard County, Maryland in
Plat Number 9495

This is to certify that I either personally prepared or was in responsible charge over the preparation of this drawing and the surveying work reflected in it, all set forth in Regulation .12 of Chapter 09.13.06 of the Code of Maryland Annotated Regulations.

This is page one of a two page document. The advice found on the affixed page is an integral part of this drawing, and is not valid without all pages.



James Carl Hudgins
Property Line Surveyor #96
Expiration Date: 3/11/16

LOCATION DRAWING
6836 SANTA MARIA AVENUE
5th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

NTT Associates, Inc.

16205 Old Frederick Rd.
Mt. Airy, Maryland 21771
Phone: (410) 442-2031
Fax: (410) 442-1315
www.nttsurveyors.com

Scale: 1" = 80'

Date: 5/8/2014

Field By: SCK

Drawn By: SCK

File No.: RA14-004

Page No.: 1 of 2

HOWARD COUNTY GROUTING PROCEDURE

Boreholes will be grouted from the bottom to the top via a tremie pipe and positive displacement pump. Bentonite grout, known as Quik-Grout will be used according to the manufacturer's specifications to achieve a consistency of at least 20% solids (24 gallons potable water/50 lb. sack of grout) and a permeability no more than 2.5×10^{-8} cm/sec. Grouting will be completed immediately after installing the geothermal loop and no later than twenty-four (24) hours after installing the geothermal loop. Open boreholes/annular space will be protected as necessary to prevent the entry of surface water or pollutants.

GRADE _____

EACH BORE HOLE (TYP.)

