

B 1	1565	SEQUENCE NO. (MDE USE ONLY)	STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL 5366661 please type	STATE PERMIT NUMBER 40-95-2232 fill in this form completely
Date Received (APA) 12 7 2011		OWNER INFORMATION		
8 MM DD YY 13		15 Last Name Colombel Owner ERIC First Name 34		
36 Street or RFD 10169 CAPE ANN DRIVE 55		57 Town COLUMBIA 70 State MARYLAND 72 Zip 21046 76		
DRILLER INFORMATION				
Driller's Name JACK MILLER 76 License No. MS D 206 81		Firm Name NORTHERN VIRGINIA DRILLING 20109		
Address 11856 INDUSTRIAL ROAD MANASSAS VA		Signature [Signature] 12/7/11 Date		
B 2 WELL INFORMATION				
1 2 APPROX. PUMPING RATE (GAL. PER MIN.)		8 12		
AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY)		14 20		
USE FOR WATER (CIRCLE APPROPRIATE BOX)				
<input type="checkbox"/> D DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION <input type="checkbox"/> F FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION) <input type="checkbox"/> I INDUSTRIAL, COMMERCIAL, DEWATERING <input type="checkbox"/> P PUBLIC WATER SUPPLY WELL <input type="checkbox"/> T TEST, OBSERVATION, MONITORING <input checked="" type="checkbox"/> G GEO-THERMAL				
APPROXIMATE DEPTH OF WELL 450 FEET				
APPROXIMATE DIAMETER OF WELL 6 INCH				
METHOD OF DRILLING (circle one)				
BORED (or Augered) <input checked="" type="checkbox"/> JETTED <input type="checkbox"/> Jetted & DRIVEN <input type="checkbox"/> 30 AIR-ROTARY <input checked="" type="checkbox"/> AIR-PERCussion <input type="checkbox"/> ROTARY (Hydraulic Rotary) <input type="checkbox"/> 37 CABLE <input type="checkbox"/> REVERSE-ROTARY <input type="checkbox"/> Drive-POINT <input type="checkbox"/> other _____				
REPLACEMENT OR DEEPEENED WELLS (CIRCLE APPROPRIATE BOX)				
<input checked="" type="checkbox"/> N THIS WELL WILL NOT REPLACE AN EXISTING WELL <input type="checkbox"/> Y THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED 39 <input type="checkbox"/> S 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"/> D 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)				
APPROX. PERMIT NUMBER _____ G _____				
PERMIT No. 40-95-2232				
SPECIAL CONDITIONS See attached memo				

LOCATION OF WELL

B 3

8 COUNTY **Howard** 21

23 SUBDIVISION **Village Kings CONTRIVANCE** 42

SECTION **44** 46 LOT **262** 48 50

52 NEAREST TOWN **Columbia** 71

73 MILES FROM TOWN (enter 0 if in town) **2 1/2** M 76 77 78

B 4

1 2 DIRECTION OF WELL FROM TOWN (CIRCLE BOX)

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)

SHAKER DRIVE

11 NEAR WHAT ROAD 30

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)

34 600 37 DISTANCE FROM ROAD FT

ENTER FT OR MI 38 39

TAX MAP: **0042** BLK: _____ PARCEL **0422**

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Howard COUNTY NAME **(13)** COUNTY NO.

STATE SIGNATURE _____ INSERT S → 41

DATE ISSUED **12/14/11** CO SIGNATURE **[Signature]** EXP. DATE **12/14/11**

43 MM DD YY 48 NORTH GRID **N/A** 50 55 EAST GRID **N/A** 57 63

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

SOURCES OF DRILLING WATER

1. PUBLIC WATER

2.

3.

WRITE THE BOX NUMBER FROM THE MAP HERE

E

N

000

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

COLUMBIA

SHAKER DRIVE

PATUXENT FWY

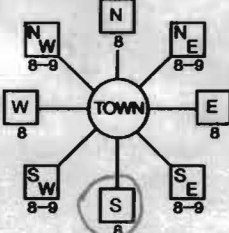
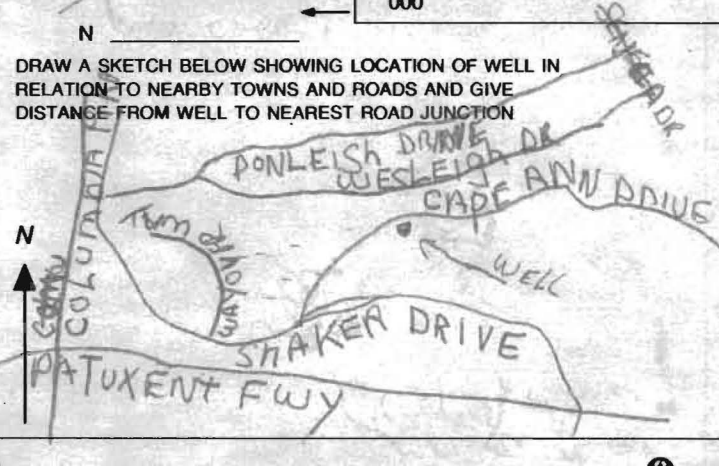
WELL

CAPE ANN DRIVE

WESLEY DR

DONLEIGH DRIVE

SEAFIELD DR

B 1 1 2 3 6 1565	SEQUENCE NO. (MDE USE ONLY)	STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL please type 5366661	STATE PERMIT NUMBER 40-95-2232 70 79 fill in this form completely
Date Received (APA) 12 7 2011 8 MM DD YY 13 15 Last Name COHOMBEL 36 Street or RFD 10169 CAPE ANN DRIVE 57 Town COLUMBIA 70 State 72 Zip 21046 76		B 3 LOCATION OF WELL 8 COUNTY HOWARD 21 23 SUBDIVISION VILLAGE KINGS CON CONTRIVANCE 42 SECTION 44 46 LOT 262 48 50 COLUMBIA 52 NEAREST TOWN 71 MILES FROM TOWN (enter 0 if in town) 2 1/2 M I 73 76 77 78	
OWNER INFORMATION Driller's Name JACK MILLER 76 License No. MS D 206 81 Firm Name NORTHERN VIRGINIA DRILLING 20109 Address 11856 INDUSTRIAL ROAD MANASSAS VA Signature [Signature] Date 12/7/11		B 4 1 2 DIRECTION OF WELL FROM TOWN (CIRCLE BOX)  11 NEAR WHAT ROAD SHAKER DRIVE 30 ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX) NORTH WEST EAST SOUTH 34 600 37 DISTANCE FROM ROAD ENTER FT OR MI 38 39 TAX MAP: 0042 BLK: PARCEL 0422	
B 2 WELL INFORMATION APPROX. PUMPING RATE (GAL. PER MIN.) 8 12 AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 14 20		USE FOR WATER (CIRCLE APPROPRIATE BOX) <input checked="" type="checkbox"/> D DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION <input type="checkbox"/> F FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION) <input type="checkbox"/> I INDUSTRIAL, COMMERCIAL, DEWATERING <input type="checkbox"/> P PUBLIC WATER SUPPLY WELL <input type="checkbox"/> T TEST, OBSERVATION, MONITORING <input checked="" type="checkbox"/> G GEO-THERMAL	
APPROXIMATE DEPTH OF WELL 450 FEET 24 28 APPROXIMATE DIAMETER OF WELL 6 INCH 30 37		NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL COUNTY NAME HOWARD COUNTY NO. 13 STATE SIGNATURE DATE ISSUED 12/14/11 43 MM DD YY 48 CO SIGNATURE EXP. DATE 12/14/11 NORTH GRID 50 000 55 EAST GRID 57 N/A 000 63	
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		SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X SOURCES OF DRILLING WATER 1. PUBLIC WATER 2. 3. WRITE THE BOX NUMBER FROM THE MAP HERE E N 000 000	
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Not to be filled in by driller (MDE OR COUNTY USE ONLY) APPROP. PERMIT NUMBER _____ G _____ PERMIT No. 40-95-2232 70 71 72 73 74 75 76 77 78 79			
SPECIAL CONDITIONS See attached memo NOTE - APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED			



Howard County
Health Department

Bureau of Environmental Health
7178 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


Peter L. Beilenson, M.D., M.P.H., Health Officer

December 14, 2011

IMPORTANT

MEMORANDUM - Geothermal Wells

TO: Northern Virginia Drilling, Inc.
Attn: Neil Self
FILE

FROM: Kevin M Wolf, R.S., R.E.H.S. 
Well and Septic Program
Groundwater Mgmt. Sec.

RE: **Geothermal Wells**
10169 Cape Ann Drive, 2937 Southview Road

The following comments apply the above aforementioned geothermal well application:

When submitting completion reports for geothermal wells, please indicate the type of grout used and the mixture ratios on each report. If you can not fit this information on the completion report(s), please use a separate sheet of paper. Also, all wells must have gps coordinates (lat, long) and these coordinates must be written on the completion reports for that particular well.

Remember, bentonite alone should be mixed at a ratio of 2 lbs or greater per gallon of water. If *thermal-enhanced* grout is to be used, remember to follow manufactures specifications when mixing. Health Department Sanitarians can inspect this type of grout by requesting the well driller to collect a sample of the grout in a bucket. If it the sand settles out within 1 hour, the grout mix is improper. Thermal enhanced bentonite grouts are a mixture of bentonite and quartz sand. The sand stays suspended in the clay for the life of the well. Please refer to the NGWA published article "Guidelines for the Construction of Vertical Boreholes for Closed Loop Heat Pump Systems" (1997)

Geothermal Wells may be permitted by cluster. The size of the cluster shall be determined by the Delegated Approving Authority.

Any questions please feel free to call me. 410-313-1771

10169 CAPE ANNE



B 25"11

A 60"2



450 FT ~~closed~~ loop



Public
has to
know

