

C1 3150

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT

THIS 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

ST/CO USE ONLY

DATE WELL COMPLETED

Depth of Well

PERMIT NO. FROM "PERMIT TO DRILL WELL"

DATE Received MM DD YY

MM DD YY

22 450 26

HO - 95 - 2018

OWNER Amerson, Kevin STREET OR RFD 3801 HOLY CREST DRIVE TOWN Duxton

WELL LOG Not required for driven wells

GROUTING RECORD WELL HAS BEEN GROUTED (Circle Appropriate Box) Y N

C 3 PUMPING TEST

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

TYPE OF GROUTING MATERIAL (Circle one) CEMENT CM BENTONITE CLAY BC

HOURS PUMPED (nearest hour) 8 9

DESCRIPTION (Use additional sheets if needed)

NO. OF BAGS 45 46 NO. OF POUNDS 45 46

PUMPING RATE (gal. per min.) 11 15

Table with columns: DESCRIPTION, FEET (FROM, TO), check if water bearing. Rows include Soil, clay, Brown shale, clay, schist.

GALLONS OF WATER 409

METHOD USED TO MEASURE PUMPING RATE

DEPTH OF GROUT SEAL (to nearest foot) from 48 TOP 52 ft. to 54 BOTTOM 58 ft.

WATER LEVEL (distance from land surface) BEFORE PUMPING 17 20 ft.

CASING RECORD casing types insert appropriate code below ST STEEL CO CONCRETE PL PLASTIC OT OTHER

WHEN PUMPING 22 25 ft.

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

TYPE OF PUMP USED (for test) A air P piston T turbine C centrifugal R rotary O other (describe below) J jet S submersible

OTHER CASING (if used) diameter inch depth (feet) from to

PUMP INSTALLED DRILLER INSTALLED PUMP (CIRCLE) (YES or NO) YES NO

NUMBER OF UNSUCCESSFUL WELLS: 0

SCREEN RECORD screen type or open hole insert appropriate code below ST STEEL BR BRASS HO OPEN HOLE PL PLASTIC OT OTHER

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.

WELL HYDROFRACTURED yes Y no N

DEPTH (nearest ft.) 1 2 3 8 9 11 15 17 21 23 24 26 30 32 36 38 39 41 45 47 51

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29

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

SLOT SIZE 1 2 3 DIAMETER OF SCREEN (NEAREST INCH) 56 60

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

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...

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

PUMP HORSE POWER 37 41

DRILLERS LIC. NO. 1 M WD 255 DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

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

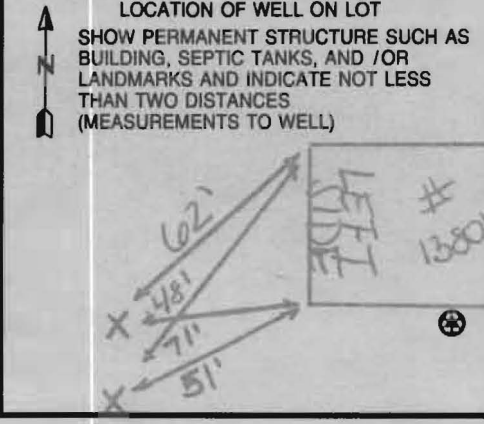
PUMP COLUMN LENGTH (nearest ft.) 43 47

LIC. NO. 1 D

TELESCOPE CASING LOG INDICATOR OTHER DATA

CASING HEIGHT (circle appropriate box and enter casing height) + above LAND SURFACE (nearest foot) - below 49 50 51

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



B 1 4668

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL please type

STATE PERMIT NUMBER

40-95-2018 fill in this form completely

Date Received (APA) 10/01/10

OWNER INFORMATION

Anderson Kevin Last Name Owner First Name 13801 Holly Crest Lane Street or RFD Dayton MD 21036 Town State Zip

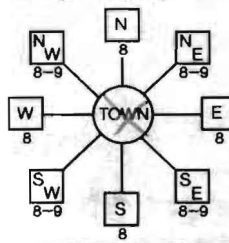
LOCATION OF WELL

Howard County Holly Crest Subdivision Dayton Nearest Town 0 Miles from Town

DRILLER INFORMATION

Michael Barlow MW D 355 Driller's Name License No. Barlow Well Drilling Firm Name 522 Underwood Lane 21014 Address 9/27/10 Date Signature

DIRECTION OF WELL FROM TOWN (CIRCLE BOX)



13801 Holly Crest Lane Near What Road ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX) DISTANCE FROM ROAD 40 FT TAX MAP: 28 BLK: 2 PARCEL 412

WELL INFORMATION APPROX. PUMPING RATE (GAL. PER MIN.) 0 AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 0

USE FOR WATER (CIRCLE APPROPRIATE BOX)

- Domestic Potable Supply & Residential Irrigation, Farming, Industrial, Commercial, Dewatering, Public Water Supply Well, Test, Observation, Monitoring, Geo-Thermal (circled) 2 bores x 450'

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Howard County No. A-59833-E STATE SIGNATURE DATE ISSUED 10/14/10 CO SIGNATURE 10/14/11 NORTH GRID 512 000 EAST GRID 0803 000

APPROXIMATE DEPTH OF WELL 450 FEET

APPROXIMATE DIAMETER OF WELL NEAREST INCH

METHOD OF DRILLING (circle one)

Bored (or Augered), Jetted, Jetted & Driven, Air-Rotary, Air-Per percussion, Rotary (Hydraulic Rotary), Cable, Reverse Rotary, Drive-Point

REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX)

- This well will not replace an existing well (circled), This well will replace a well that will be abandoned and sealed, 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 deepen an existing well, Permit number of well to be replaced or deepened

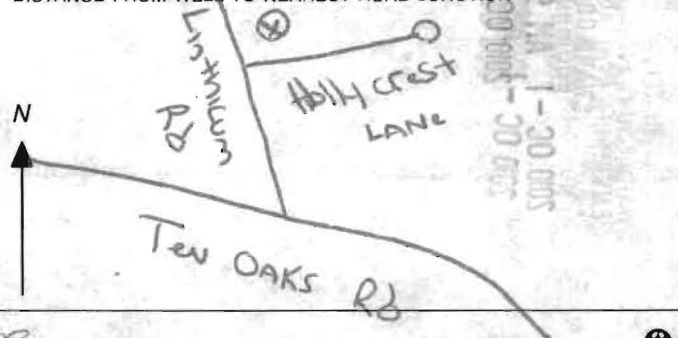
SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

SOURCES OF DRILLING WATER 1. Well

WRITE THE BOX NUMBER FROM THE MAP HERE

8003, 5102

DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION

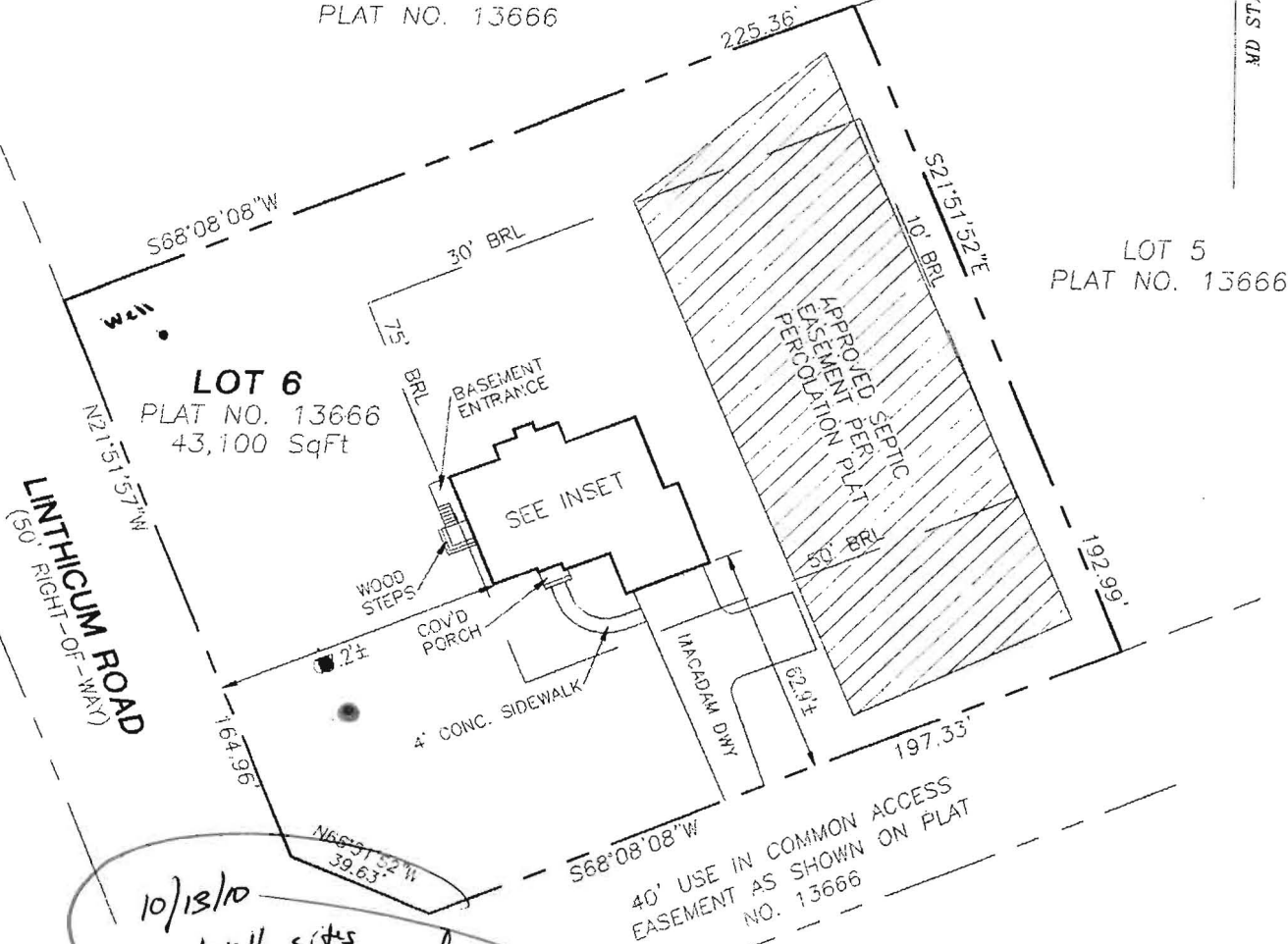


Not to be filled in by driller (MDE OR COUNTY USE ONLY)

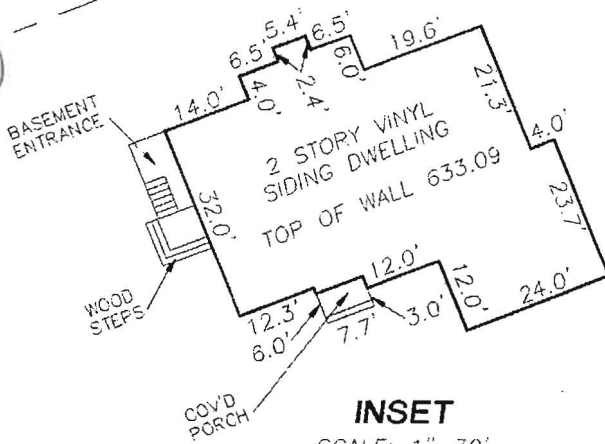
APPROX. PERMIT NUMBER G PERMIT No. 40-95-2018

SPECIAL CONDITIONS Circuit bores bottom to top.

PRESERVATION PARCEL 'A'  
PLAT NO. 13666



40' USE IN COMMON ACCESS  
EASEMENT AS SHOWN ON PLAT  
NO. 13666



**INSET**  
SCALE: 1"=30'

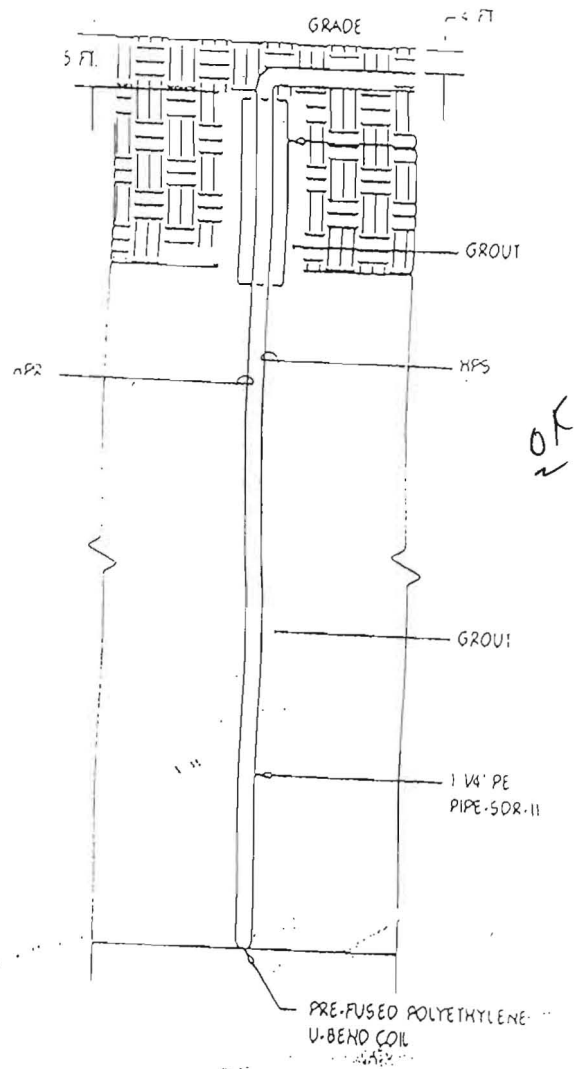
**Geo Bore**

THIS PLAT IS OF BENEFIT TO A CONSUMER ONLY INsofar AS IT IS REQUIRED BY THE LENDER OR TITLE INSURANCE COMPANY OR IT'S AGENT IN CONNECTION WITH CONTEMPLATED TRANSFER, FINANCING OR REFINANCING. THIS PLAT IS NOT TO BE RELIED UPON FOR THE ESTABLISHMENT OR LOCATION OF FENCES, GARAGES, BUILDINGS OR FUTURE IMPROVEMENTS. THIS PLAT DOES NOT PROVIDE THE ACCURATE IDENTIFICATION OF PROPERTY BOUNDARY LINES, BUT SUCH IDENTIFICATION MAY NOT BE REQUIRED FOR THE TRANSFER OF TITLE OR SECURING FINANCING OR REFINANCING. THIS PLAT CONTAINS A TOLERANCE OF ACCURACY OF 0.2' MORE OR LESS.

**RECORD REFERENCES**  
LIBER/FOLIO \_\_\_\_\_

**FINAL LOCATION**  
OF 1"=30'

**VOGEL & ASSOCIATES, INC.**  
CONSULTING ENGINEERS-SURVEYORS-PLANNERS  
3691 PARK AVE. #101 ELLICOTT CITY, MD 21043  
TELEPHONE (410)461-5828 FAX (410)465-3966



NOT

4 TYPICAL BORE HOLE DETAIL  
 M1.00 NOT TO SCALE



Providing Quality Systems for Over 20 Years  
Commercial & Residential Water Well Drilling  
Test Borings & Consulting • Geothermal Drilling & Systems  
NGWA & IGSHPA Certified

Howard County Health Department  
7178 Columbia Gateway Drive  
Columbia, MD 21046  
Fax: 410-313-2648

September 21, 2010

Re: 13801 Holly Crest Lane

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

DEPARTMENT OF INSPECTIONS, LICENSES & PERMITS 3430 COURT HOUSE DRIVE ELLCOTT CITY, MD 21043 PERMITS (410) 313-2455 INSPECTIONS (410) 313-1850	HOWARD COUNTY RESIDENTIAL HEATING-VENTILATION-AIR CONDITIONING AND REFRIGERATION PERMIT APPLICATION	HVACR PERMIT # <u>M10001044</u> BUILDING PERMIT #
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BUILDING ADDRESS:	SUITE/APT:	OWNERS NAME: <u>KEVIN ANDERSON</u>
SUBDIVISION:		ADDRESS: <u>13801 HOLLY CREST LANE</u>
CENSUS TRACT:	SECTION:	CITY: <u>DAYTON</u>
LOT:	TAX MAP: <u>9-H-13</u>	STATE: <u>MD,</u>
BLOCK:	ZONE:	ZIP CODE: <u>21036</u>
PROPERTY ID:	MAP COORDINATES: <u>9-H-13</u>	HOME PHONE: <u>443 896 8075</u>
TYPE OF IMPROVEMENTS:	USE:	WORK PHONE:

<u>CHECK ONE</u>	<u>HOW MANY</u>	COMPANY NAME: <u>ARUNDEL COOLING &amp; HTG. CO.</u>
SINGLE FAMILY DWELLING <input checked="" type="checkbox"/>	<u>2</u> ZONES	LICENSEE NAME: <u>JOHN L. VAN HORNE, SR.</u>
SINGLE FAMILY TOWNHOUSE <input type="checkbox"/>	___ ZONES	ADDRESS: <u>707 NURSERY RD.</u>
MULTI-FAMILY / HOTEL/MOTEL <input type="checkbox"/>	___ ROOMS	CITY: <u>LINTHICUM</u>
ASSISTED LIVING HOMES (16 OR FEWER RESIDENTS) <input type="checkbox"/>	___ ROOMS	STATE: <u>MD,</u>
		ZIP CODE: <u>21090</u>
		PHONE: <u>410 789-8300</u>
		HVACR LICENSE NO: <u>M-2612</u>

10/20/2010

New Heating and Air Conditioning  
 New Geo Thermal System  
 Heating System Only  
 Ductless Mini Splits  
 Other Work (Describe):  
 Thru The Wall Systems

Replacement  
 Heating  
 Air Conditioning  
 Heating and Air Conditioning

Additions and Alterations  
 Heating  
 Air Conditioning  
 Heating and Air Conditioning

Approved (BB)  
NEED PLOT PLAN

\*\*\*\*Replacement Geo Thermal Systems are not required; However, if a tax credit is being sought a permit is required\*\*\*\*

Zones	Rooms
Permit Fee = # of Zones x \$40 = <u>80</u>	Permit Fee = # of Rooms x \$80 = <u>      </u>
Technology Fee (10% of Permit Fee) = <u>8</u>	Technology Fee (10% of Permit Fee) = <u>      </u>
Plus Application Fee <u>\$50.00</u>	Plus Application Fee \$50 <u>\$50.00</u>
Total Fees Due = <u>138.00</u>	Total Fees Due = <u>      </u>

I HAVE CAREFULLY EXAMINED AND READ THIS APPLICATION AND KNOW IT IS TRUE AND CORRECT. THE WORK DESCRIBED HEREIN WILL BE PERFORMED BY A STATE HVACR LICENSED PERSON(S), AND ALL WORK WILL BE PERFORMED IN COMPLIANCE WITH APPLICABLE CODES AND STANDARDS OF HOWARD COUNTY THE STATE OF MARYLAND.

[Signature] 10-14-10  
SIGNATURE OF LICENSEE DATE

JOHN L. VAN HORNE, SR.  
PRINT NAME OF LICENSEE

ARUNDEL789 @ AOL.COM  
Email Address

<b>Validation</b>
Check Number: <u>20625</u>
Cash: <u>      </u>
Receipt Number: <u>221353</u>

Make check payable to: DIRECTOR OF FINANCE OF HOWARD COUNTY

Word doc: T:\Updated Forms\hvac application  
Rev:10.2009

Well + Septic