

Department of Inspections Licenses and Permits 3430 Court House Drive Ellicott City, MD 21043 Permits (410) 313-2455 Opt. #4 Inspections (410) 313-1840	HOWARD COUNTY RESIDENTIAL HEATING-VENTILATION-AIR CONDITIONING AND REFRIGERATION PERMIT APPLICATION	HVACR PERMIT # <u>MA1000282</u> BUILDING PERMIT #
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SITE BUILDING ADDRESS: <u>7500 Flamewood Dr.</u> SUITE/APT: _____ SUBDIVISION: _____ TYPE OF IMPROVEMENTS: _____ USE: _____	OWNERS NAME: <u>Andrew Shobe</u> ADDRESS: <u>7500 Flamewood Dr.</u> CITY: <u>Clarksville</u> STATE: <u>MD</u> ZIP CODE: <u>21029</u> HOME PHONE: _____ CELL PHONE: <u>702-460-6632</u>
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<u>CHECK ONE</u>	<u>HOW MANY</u>	COMPANY NAME:
SINGLE FAMILY DWELLING <input type="checkbox"/>	<u>1</u> ZONES	<u>Total Comfort Heating & A/C</u>
SINGLE FAMILY TOWNHOUSE <input type="checkbox"/>	_____ ZONES	LICENSEE NAME: <u>James E. Aaron</u>
MULTI-FAMILY / HOTEL/MOTEL <input type="checkbox"/>	_____ ROOMS	ADDRESS: <u>12009 Margaret Dr.</u>
ASSISTED LIVING HOMES (16 OR FEWER RESIDENTS) <input type="checkbox"/>	_____ ROOMS	CITY: <u>Hagerstown</u> STATE: <u>MD</u> ZIP CODE: <u>21742</u> PHONE: <u>301-745-3700</u> HVACR LICENSE NO: <u>5833-01</u>

<u>New Construction</u> <input type="checkbox"/> Heating and Air Conditioning <input type="checkbox"/> Air Conditioning <input type="checkbox"/> Heating	<u>Additions and Alterations</u> <input type="checkbox"/> Heating <input type="checkbox"/> Air Conditioning <input type="checkbox"/> Heating and Air Conditioning	<input checked="" type="checkbox"/> Geo Thermal System <input type="checkbox"/> Gas Conversion (Make and Model of Equipment) <input type="checkbox"/> Ductless Mini Splits <input type="checkbox"/> Thru The Wall Systems <input type="checkbox"/> Other Work (Describe):
<u>Replacement</u> <input type="checkbox"/> Heating <input type="checkbox"/> Air Conditioning <input checked="" type="checkbox"/> Heating and Air Conditioning <u>Installation of a (4) ton waterfurnace geothermal heat pump. Vertical ground loop by Chesapeake Geosystems.</u> **Make and Model of Equipment is required** ****Replacement Geo Thermal Systems are not required; However, if a tax credit is being sought a permit is required****		

<u>Zones</u>	<u>Rooms</u>
Permit Fee = # of Zones x \$40 = <u>40.00</u> Technology Fee (10% of Permit Fee) = <u>4.00</u> Plus Application Fee <u>\$50.00</u> Total Fees Due = <u>94.00</u>	Permit Fee = # of Rooms x \$80 = _____ Technology Fee (10% of Permit Fee) = _____ Plus Application Fee \$50 <u>\$50.00</u> Total Fees Due = _____

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 HVAC LICENSED PERSON(S), AND ALL WORK WILL BE PERFORMED IN COMPLIANCE WITH APPLICABLE CODES AND STANDARDS OF HOWARD COUNTY THE STATE OF MARYLAND.

James E. Aaron 3/16/2021
 SIGNATURE OF LICENSEE DATE

James E. Aaron
 PRINT NAME OF LICENSEE

Jim@tchvac.net
 Email Address

Validation	
Check Number: <u>9842</u>	Money Order#: _____
Invoice Number: <u>654294</u>	

Make check payable to: DIRECTOR OF FINANCE OF HOWARD COUNTY

T:\Updated Forms\HVAC application Rev:09.2019 4/7/21 Approved 

Malwood 2

UNUSE #

B 1	SEQUENCE NO. (MDE USE ONLY)	STATE OF MARYLAND	STATE PERMIT NUMBER
	48281	APPLICATION FOR PERMIT TO DRILL WELL	HO-20-0061
1 2 3 4	572076	please type	70 fill in this form completely 79

OWNER INFORMATION

Date Received (APA) 11-20-20
 8 MM DD YY 13

15 Last Name Shube Owner First Name Andrew 34
 7500 Flannwood Drive
 36 Street or RFD 55
 57 Town Clarksville Md. 70 State 72 Zip 21029 78

LOCATION OF WELL

B 3

Howard
 8 COUNTY 21
2002 Flannwood
 23 SUBDIVISION 42
 SECTION 44 48 LOT 48 50
 52 NEAREST TOWN 71

DRILLER INFORMATION

Wesley Wolfe MWD 598
 78 Driller's Name License No. 81
Chesapeake Geosystems Inc
 Firm Name
6720 Ft Smallwood Rd Baltimore Md
 Address
Wesley A Wolfe 10-29-2020
 Signature Date

SOURCES OF DRILLING WATER

B 4

1. Public
 2.
 3.

7500 Flannwood Drive
 11 STREET ADDRESS 30
 ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)
 34 250 37
 DISTANCE FROM ROAD
 ENTER FT OR MI 38 39
 TAX MAP: 0041 BLK: _____ PARCEL 0415

WELL INFORMATION

B 2

1 2 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 2 bores

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Howard 13
 COUNTY NAME COUNTY NO.
 STATE SIGNATURE INSERT S → 41
 DATE ISSUED 12/3/20 R Wolfe 12/3/21
 43 MM DD YY 48 CO SIGNATURE EXP. DATE

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
 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

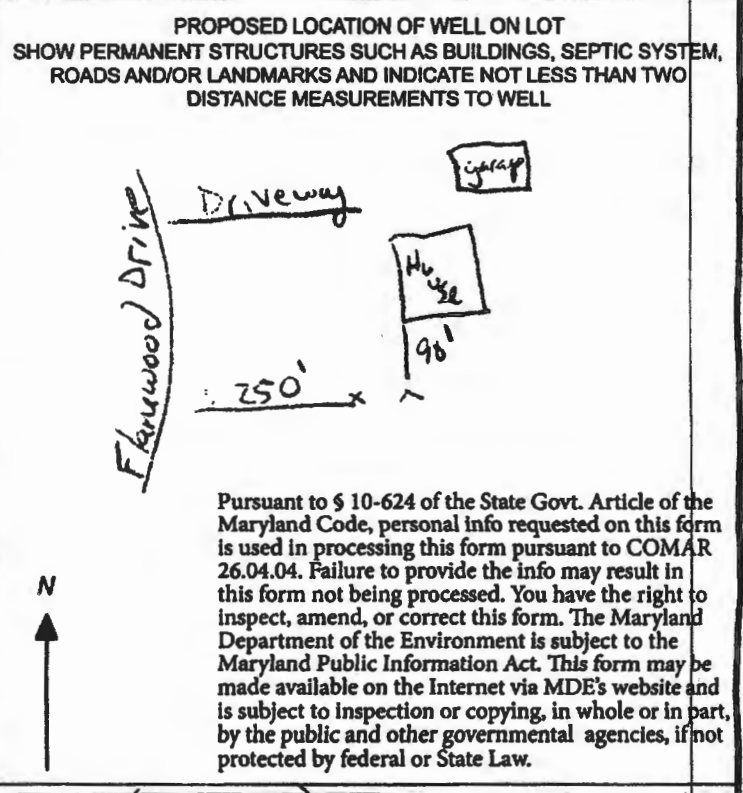
Not to be filled in by driller (MDE OR COUNTY USE ONLY)

APPROX. PERMIT NUMBER _____ G _____
 PERMIT No. HO-20-0061
 70 71 72 73 74 75 76 77 78 79

SPECIAL CONDITIONS

NOTE APPROVED AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED

grove bottom to top (two wells)



ma1000282



Load Short Form
Entire House
TOTAL COMFORT HTG. & A/C, INC.

Job:
 Date: 2016
 By:

12009 MARGARET DRIVE, HAGERSTOWN, MD 21742 Phone: 301-745-3700

Project Information

For: SHOBE RESIDENCE
 7500 FLAMEWOOD DR., CLARKSVILLE, MD 21029

Design Information

	Htg	Clg	Method	Infiltration	Simplified Average
Outside db (°F)	12	91	Construction quality		0
Inside db (°F)	70	75	Fireplaces		
Design TD (°F)	58	16			
Daily range	-	M			
Inside humidity (%)	30	50			
Moisture difference (gr/lb)	25	24			

HEATING EQUIPMENT

Make Goodman Mfg.
 Trade GOODMAN
 Model GSZ160301B*
 AHRI ref 201666224

Efficiency 8.5 HSPF
 Heating input
 Heating output 29000 Btuh @ 47°F
 Temperature rise 30 °F
 Actual air flow 907 cfm
 Air flow factor 0.019 cfm/Btuh
 Static pressure 0.50 in H2O
 Space thermostat
 Capacity balance point = 35 °F

COOLING EQUIPMENT

Make Goodman Mfg.
 Trade GOODMAN
 Cond GSZ160301B*
 Coil C(A,C,D,E)30C34+A*VC960403BNA*+TDR
 AHRI ref 201666224

Efficiency 12.0 EER, 15 SEER
 Sensible cooling 19040 Btuh
 Latent cooling 8160 Btuh
 Total cooling 27200 Btuh
 Actual air flow 907 cfm
 Air flow factor 0.032 cfm/Btuh
 Static pressure 0.50 in H2O
 Load sensible heat ratio 0.88

Backup:
 Input = 10 kW, Output = 32529 Btuh, 100 AFUE

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
FIRST FLOOR	1598	17807	12064	340	382
SECOND FLOOR	1428	20791	15850	397	502
BASEMENT	1598	8864	691	169	22
Entire House	4624	47462	28606	907	907
Other equip loads		0	0		
Equip. @ 0.96 RSM			27576		
Latent cooling			3738		
TOTALS	4624	47462	31314	907	907

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.