

EMSL Analytical, Inc.

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EMSL Order: 392007470
Customer ID: MISC-SC
Customer PO:
Project ID:

Attention: Kim Duncan Auction & Realty
123 S. 10th St. Suite 318
Mount Vernon, IL 62864
Phone: (618) 521-7818
Fax:
Received Date: 08/13/2020 10:37 AM
Analysis Date: 08/18/2020
Collected Date:
Project: Kim Duncan Auction and Realty

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1		Various Non-Fibrous Homogeneous		18% Mica 82% Non-fibrous (Other)	None Detected

392007470-0001
Vermiculite is a problem matrix. Other analytical options are recommended such as EPA 600 PLM/TEM with milling prep or TEM Qualitative.

Analyst(s)
Sue Ferrario (1)

Jeffery W. Siria
Jeff Siria, Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method") but augmented with procedures outlined in the 1993 ("final") version of the method. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.
Samples analyzed by EMSL Analytical, Inc. Saint Louis, MO NVLAP Lab Code 200742-0

Initial report from: 08/18/2020 16:12:14

11794 East Richview Road Maintenance

Septic system:

Norm Fowler serviced the system annually 1999-2006 including the replacement of parts and motors.

RichviewConcrete installed:

2011 new motor, bucket and lid : \$1120 .

2014 new Jet Motor aerator, replace lift station and alarm: \$2000

Fence

Chain Fence Southern Illinois fence 35 foot chain link December 2001 \$1200

Roof

M and K Roofing (MikeKimmel) Sept 1999-- Installed 77 square feet o/d shingles Oakridge; SBS rubber in the valleys--- \$5500.00

Lane and Shelton on January 2002- Installed 1 bundle pewter grey dimensional shingles that blew off \$250

Metcalf roofing and construction- 2008 Replaced 12 ft. fascia metal and cemented all the way around the silo.

Lane and Shelton – March 2016 Replaced blown off shingles GAF Brand Pewter Grey. Used 2 buckets of Karnac roof cement to cement around the silo \$450

Electric/Gas

White lightning

Purcell

KT electric

Pool

Handyman Charles Bravard and his son-- maintained the pool with Evergreen etc

WaterWorld added systems and pool liner and cover \$2975.00

Southern Comfort installed the heater to heat up the water in the pool.

Southern Comfort to maintain and winterized the pool 2013.

Rightnowar serviced the pool heater in 2009

2001 Southern Comfort installed a Hot Springs Spa

Central air systems---

The heating and air conditioning systems appeared to work well in 2016. (* note the Donan HVAC forensic report for some of the units) .

Airex Heating and Air installed Carrier Model 58MCA100-16 90% efficient furnace and condenser in 2003 for \$2012 (furnace in the garage, condenser is outside to the north of the garage) which heated or cooled the areas of the kitchen , living area.

Yukon installed a Carrier (?) condenser A/C in 2002 for \$1302 (located south of the pool room and east of the family room) which cooled the family room and the main bedroom.

Holloway installed an Amana furnace with air bear filter in 1999 --- heated the family room and the main bedroom for \$2099 . In the basement is the Rudd (original to the purchase of the house) in 1999 Holloway installed a blower motor for the Rudd furnace which heated the pool room (was not needed because the heated water was adequate from the pool heater installed by Southern Comfort and Weilt plumbing.

In the attic of the double sink bathroom

Affordable H and C--- December 2014 Upstairs furnace: Ruud90000 BTU up-flow furnace 95% for \$2000 which warmed the upstairs three bedrooms and bathrooms.

The condenser to the west of the house worked during 2016 (it was a bit noisy but worked well).

Flue corrections made as necessary for the furnaces. Service calls were done by Airex, Holloway, Rightnowar and Affordable Heating and Cooling.

Alarm System- hardwired
Security alarm

A-1 Exterminators

No termites found

Serviced in 1998 with 10 year warranty

Serviced in 2015 with 10 year warranty

Plumbing for the water heaters, pool, bathrooms and kitchen serviced by

Wielt

Nadaski

Crawford

John G. Donan, Jr., P.E.
Chairman of the Board

J. Lyle Donan, P.E.
President, CEO



CORRESPOND TO:
HVAC Forensics
12450 Lake Station Place
Louisville, Kentucky 40299
Phone: 800-482-5611
Fax: 502-267-6976

October 3, 2016

At your request, on September 30, 2016, a study was made at the above location to determine whether the failure of the insured's heating, ventilating, and air conditioning (HVAC) system was the result of a lightning discharge or similar event.

Reported Collateral Damage

Items listed as failed: None reported.

Air Conditioner Description

Brand:	Carrier
Model:	597ANX030000AAAA
Serial Number:	2491E20781
Capacity:	2.5 ton
Manufacture Date:	June 1991
Refrigerant:	R-22

donan.com



FORENSIC ENGINEERING



FIRE INVESTIGATION



COMPONENT TESTING



HVAC FORENSICS

Findings – Air Conditioner

General Condition:	The unit's condition was typical for its age and use.
Wiring:	The wiring connections were tight and properly made.
Contactor:	The contactor displayed wear typical for its age and use. The resistance of the solenoid coil was within its normal limits.
Capacitor:	The dual run capacitor measured within its rated tolerances. The fan capacitor has failed.
Fan Motor:	The fan motor was in good condition. It rotated unimpeded and tested normal.
Compressor:	The compressor was energized during the site study without tripping the circuit breaker. The winding resistances were within their typical range. The insulation test indicated that the windings were within an operable range.
Refrigerant:	The refrigerant pressures and quantities were normal.

Furnace Description

Brand:	Ruud
Model:	R95PA0851521MSA
Serial Number:	W391409882
Manufacture Date:	September 2014
Position:	Up-flow
Location:	Basement

Findings – Furnace

General Condition:	The unit's condition was typical for its age and use.
Wiring:	The wiring had tight and properly-made connections.
Control Board:	The control board responded to calls from the thermostat.
Transformer:	The transformer was operational.
Gas Valve:	The gas valve was operational.
Blower Motor:	The blower motor was operational; amp draw was recorded during the site study.

Estimated Replacement Costs

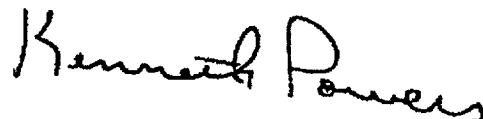
<u>Replacement</u>	<u>Estimated Cost</u>
5-ton furnace:	\$2,550

This report is based on relevant information known to Donan at the time the report is issued. Donan reserves the right to amend or supplement this report if additional relevant information becomes available.

We appreciate your confidence in our professional services.

Sincerely,

DONAN ENGINEERING CO., INC.



Kenneth R. Powers
Forensic Technician

John G. Donan, Jr., P.E.
Chairman of the Board

J. Lyle Donan, P.E.
President, CEO



DONAN

CORRESPOND TO:
HVAC Forensics
12450 Lake Station Place
Louisville, Kentucky 40299
Phone: 800-482-5611
Fax: 502-267-6976

October 3, 2016

Dear Mr. Nicklin:

At your request, on September 30, 2016, a study was made at the above location to determine whether the failure of the insured's heating, ventilating, and air conditioning (HVAC) system was the result of a lightning discharge or similar event.

Reported Collateral Damage

Items listed as failed: None reported.

Air Conditioner Description

Brand:	Ruud
Model:	UAKA060JAZ
Serial Number:	5721F250208034
Capacity:	5 ton
Manufacture Date:	June 2002
Refrigerant:	R-22

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FORENSIC ENGINEERING



FIRE INVESTIGATION



COMPONENT TESTING



HVAC FORENSICS

Blower Blades:

The condition of the blades was typical for their age and use.

Thermostat:

The thermostat was operational.

HVAC Systems Findings Summary

The HVAC system has not been damaged by a lightning-induced power surge. The HVAC system has failed due to normal wear and tear.

Recommendations:

The HVAC system can be repaired: replace the fan capacitor.

Estimated Repair Costs

<u>Repair</u>	<u>Estimated Cost</u>
Service call:	\$185
Replace the fan capacitor:	\$145
Total estimated repair costs:	\$330