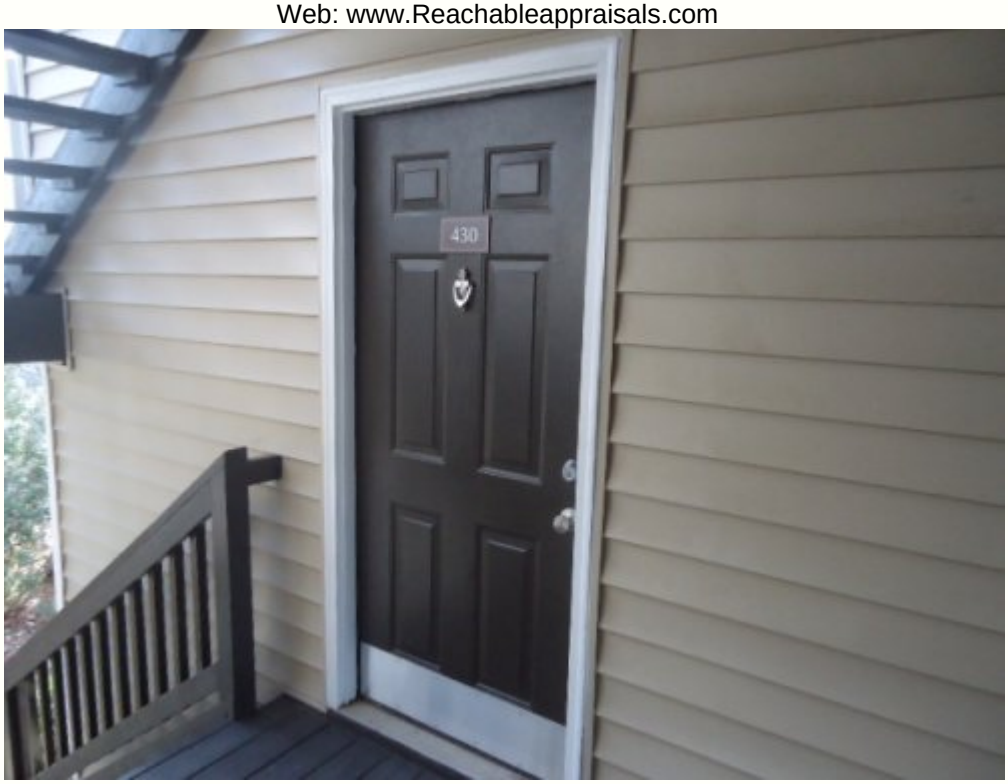
RAI Inspections

Justin Duke
95 Weslyan Way
Oxford, Ga 30054

Phone: (770)-760-1967
Web: www.Reachableappraisals.com



This report is solely for the benefit of the Client. Any person or party designated by the Client to receive information in this report shall be subject to the TERMS AND CONDITIONS contained herein. Such designation shall be provided in writing to the inspector.

Property Information:
430 Rosewood Lane
Cartersville Ga 30121

Summary

Microbial Samples

Microbial Sample

An air sample was taken from the bathroom air vent on January 10th, 2015. The results show as a count of 90 Ascospores (high), a 300 count of Aspergillus/Penicillium spores (slightly high), a 10 count of Bipolaris (from house plants) spores, a 90 count of Cladosporium spores (high), a 10 count of myxomycetes (smut) spores, a 10 count of Pithomyces (from paper) spores, for a total count of 510 spores. There was also a 40 count of pollen spores (quadruple the amount of pollen spores found outside).

There was a high count of Ascospores, a slightly high count of Aspergillus/Penicillium spores, and a high count of Cladosporium spores. Ascospores can potentially be known as an allergen, depending on the certain kind of genus and species. Aspergillus/Penicillium is known as an allergen and can produce toxins that may have significant health effects in humans. And Cladosporium are an important airborne allergen and common agent for hay fever, asthma, and other allergy related symptoms.It is found growing on HVAC vent covers and grills. It is recommended that a mold remediation specialist be contacted for further evaluation.

Microbial Sample

An air sample was taken from outside on January 10th, 2015. The outside air sample is taken to provide as a basis for what is inside the living space. There was a 200 count of Aspergillus/Penicillium spores, a count of 40 Epicoccum spores. and a 10 count of Pithomyces spores for a total count of 250 spores.

Showers / Tubs

Shower / Tub

There was a very high moisture reading on the wall above the shower from the opposite side of the door. It is recommended that the sheetrock be removed for further evaluation by a mold remediation specialist.

HVAC System

Our examination of the heating and cooling system includes a visual examination of the exposed and accessible heating equipment, venting and the means of air distribution including the filtration system, return air box, condensate drain and pump lines, humidifier, and ducts and vents. Our inspection of the heating and cooling system includes a visual examination of the accessible components listed. These items are examined for excessive or unusual wear, water damage, and microbial growth. Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Ducts & Vents

Condition: Professional Consultation

Problems

·There are signs of microbial growth.

Comments:
As noted in the microbial sample section (sample A) the sample was taken from the air vent in the bathroom. Please see the 'Microbial Sample' section for further details.

Microbial Samples

There are various ways to test mold for toxicity. The method used to test mold normally depends on the situation, the type of microbial growth observed, the location, and the accessibility of the sample. The inspector will get the clients authorization before taking a sample to be sent to a lab for analysis. Mold samples are collected in the manner that is most appropriate for each situation. All microbial growth should be considered hazardous until labratory analysis has determined otherwise.

Microbial Sample

Authorization: Authorized
Sample Type: Air

Sample Data

Location: Bathroom Air Vent
Volume: 75mL
Cassette Tape: 1197847 (A)

Comments:
An air sample was taken from the bathroom air vent on January 10th, 2015. The results show as a count of 90 Ascospores (high), a 300 count of Aspergillus/Penicillium spores (slightly high), a 10 count of Bipolaris (from house plants) spores, a 90 count of Cladosporium spores (high), a 10 count of myxomycetes (smut) spores, a 10 count of Pithomyces (from paper) spores, for a total count of 510 spores. There was also a 40 count of pollen spores (quadruple the amount of pollen spores found outside).
There was a high count of Ascospores, a slightly high count of Aspergillus/Penicillium spores, and a high count of Cladosporium spores. Ascospores can potentially be known as an allergen, depending on the certain kind of genus and species. Aspergillus/Penicillium is known as an allergen and can produce toxins that may have significant health effects in humans. And Cladosporium are an important airborne allergen and common agent for hay fever, asthma, and other allergy related symptoms.It is found growing on HVAC vent covers and grills. It is recommended that a mold remediation specialist be contacted for further evaluation.

Microbial Sample

Authorization: Authorized
Sample Type: Air

Sample Data

Location: Outside
Volume: 75mL
Cassette Tape: 1197852 (B)

Comments:
An air sample was taken from outside on January 10th, 2015. The outside air sample is taken to provide as a basis for what is inside the living space. There was a 200 count of Aspergillus/Penicillium spores, a count of 40 Epicoccum spores. and a 10 count of Pithomyces spores for a total count of 250 spores.

Showers / Tubs

Shower / Tub

Condition: Professional Consultation
Location: Master Bath

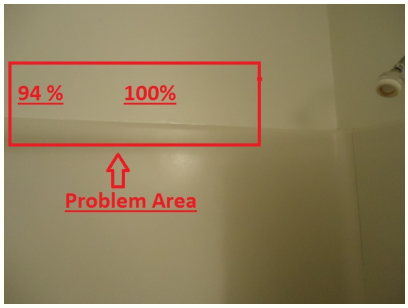
Problems

- There are signs of microbial growth.
- There are cracks / open penetrations observed.

Comments:
There was a very high moisture reading on the wall above the shower from the opposite side of the door. It is recommended that the sheetrock be removed for further evaluation by a mold remediation specialist.

94% Moisture Reading

100% Moisture Reading



Where high moisture levels are at

Different Mold Types

Alternaria (all-tur-nair'-ee-uh) – common allergen / contaminant / opportunistic pathogen(rarely), one of the most common molds found world wide in soil and on plants and can commonly can be found indoors (frequently appearing black on window frames). It is an important airborne allergen and common agent for hay fever, asthma, and other allergy related symptoms

Aspergillus (as-per-jill-us) – allergen / contaminant / opportunistic pathogen, Aspergillus is common on tape lift samples and air samples, but its spores are indistinguishable from Penicillium spores in most cases. There are a few exceptions but the species ID must be made from culture, and is still a difficult job. Health effects vary by species, but many are listed as allergens. Some species can produce toxins that may have significant health effects in humans. Aspergillus is listed as one of the most infectious type of mold, but infections are not common in normal healthy immune systems. However, if you are immune suppressed or compromised this should be discussed with your physician.

Basidiospores (bah-sid-ee-oh'-spores) - allergen / contaminant, a general class of spore formed on a structure known as a basidium, characteristic of the Basidiomycete class (that includes rusts, smuts and mushrooms). This category is commonly found in outdoor air samples. Many species are reported to be allergenic and some species are associated with dry rot in wood. Elevated airborne concentrations indoors might be indicative of water damage or too high of humidity

Chaetomium (k-toe-me-um) - contaminant, rarely involved in systemic and cutaneous disease and sometimes reported to be allergenic. Some species can produce toxins, and there is some research interest on whether these toxins can cause cancer. Chaetomium is one of the few Ascomycetes that will grow and produce spores indoors. It prefers to grow on cellulose for example paper and wood. Primary IAQ importance is that it will grow in the same conditions as Stachybotrys (wet cellulose) and sheetrock paper. Colonies of Chaetomium and Stachybotrys will be growing on top of one another. Also, found in soil and hay.

Cladosporium (clad-oh-spore-ee-um) – common allergen / contaminant / very rarely pathogenic, found everywhere, many times the most common and numerous mold found in outdoor air. Indoor concentrations are usually not as high, but it is an important airborne allergen and common agent for hay fever, asthma, and other allergy related symptoms. It can thrive in various indoor environments, appearing light green to black Cladosporium can be found in most air samples most of the time. It is very common. Cladosporium is one of the types of mold found growing on HVAC vent covers and grills. It can grow on leaves, textiles, wood, paper, and decaying vegetation.

Dematiaceous mold (dim-ah-tie-ay-shush) – Dematiaceous is not a specific type of mold but rather a very generic morphological description used for various brown molds. Sometimes the mold cannot be identified due to indistinguishable spore/structures or because too much environmental damage to the structures.

Hyphal-like fragments (high-full) – singular hyphae filamentous, branched structures with cell walls. If you think of hyphae in plant like terms, then the hyphae would be similar to the roots in a plant; the beginning stages of mold growth. Mold cannot be identified by hyphae alone. Again, like in a plant if you only had a hand full of plant roots and none of the other parts of the plant to go with it, identifying the plant would be extremely difficult if not impossible and mold is the same way.

Myxomycete / Rust / Smut (mix-oh'-my-seat) – general category for commonly found genera usually associated with living and decaying plants as well as decaying wood. Sometimes found indoors, and allergenic properties reported, but generally pose no health concerns to humans or animals.

Penicillium (pen-uh-sill'-ee-um) - contaminant / opportunistic pathogen. Penicillium species are usually a contaminant or a secondary invader in those cases the infections are typically pulmonary in nature. Some species are reported to produce toxins that are unhealthy for humans. It is one of the most common types of mold worldwide in soil and decaying vegetation and indoors in dust, food and various bldg. materials. Common bread mold is a type of Penicillium.

Stachybotrys (stack-ee-bought-ris) contaminant, saprophyte, allergen and some can produce a toxin. There are reports of itching, burning sensation of eye, mouth and throat. Found in decaying wood and soil. Found indoors primarily on wet cellulose containing material. It is the "toxic black mold" that has garnered much media attention in recent years. Some species can produce a potent toxin that is lethal to animals, although the dose effect on humans is not clear. Stachybotrys is sometimes difficult to detect indoors because many times it will grow unseen on the back side of walls where the paper backing on sheetrock is located.

PROFESSIONAL MOLD INSPECTION INSTITUTE

Certified Residential Mold Inspector (CRMI)

This certificate confirms that

Justin Duke

has successfully completed the Residential Mold Inspection course from Professional Mold Inspection Institute (PMII) and passed the final exam.

Course Approval License: 1856
Certificate #: CRMI0000024231
Award Date: 09-30-2014

Robert Graham, PMII President/CEO

EMSL Analytical, Inc.

2205 Corporate Plaza Parkway SE, Suite 200 Smyrna, GA 30080
Phone/Fax: (770) 956-9150 / (770) 956-9181
http://www.EMSL.com / atlantalab@emsl.com

Order ID:	071500144
Customer ID:	RAIS42
Customer PO:	cc 062069
Project ID:	

Attn: Mark Knight
REACHABLE APPRAISAL & INSPECTION SERVIC
PO Box 1197
Oxford, GA 30054

Phone: (770) 760-1967
Fax:
Collected: 01/10/2015
Received: 01/12/2015
Analyzed: 01/12/2015

Proj: 430 Rosewood Lane

Test Report: Allergenco-D(™) Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods EMSL 05-TP-003, ASTM D7391)

Lab Sample Number:	071500144-0001			071500144-0002		
Client Sample ID:	1197847 (A)			1197852 (B)		
Volume (L):	75			75		
Sample Location:	Bathroom Air Vent			Outside (Basis)		
Spore Types	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% of Total**
Alternaria	-	-	-	-	-	-
Ascospores	2	90	17.6	-	-	-
Aspergillus/Penicillium	6	300	58.8	4	200	80
Basidiospores	-	-	-	-	-	-
Bipolaris++	1*	10*	2	-	-	-
Chaetomium	-	-	-	-	-	-
Cladosporium	2	90	17.6	-	-	-
Curvularia	-	-	-	-	-	-
Epicoccum	-	-	-	1	40	16
Fusarium	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-
Myxomycetes++	1*	10*	2	-	-	-
Pithomyces	1*	10*	2	1*	10*	4
Rust	-	-	-	-	-	-
Scopulariopsis	-	-	-	-	-	-
Stachybotrys	-	-	-	-	-	-
Torula	-	-	-	-	-	-
Ulocladium	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-
Total Fungi	**13**	**510**	**100**	**6**	**250**	**100**
Hyphal Fragment	-	-	-	1*	10*	4
Insect Fragment	-	-	-	-	-	-
Pollen	1	40	7.8	1*	10*	4
Analyt. Sensitivity 600x	-	44	-	-	44	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-
Skin Fragments (1-4)	-	3	-	-	2	-
Fibrous Particulate (1-4)	-	1	-	-	1	-
Background (1-5)	-	4	-	-	3	-

Bipolaris++ = Bipolaris/Drechslera/Exserohilum
Myxomycetes++ = Myxomycetes/Periconia/Smut

No discernable field blank was submitted with this group of samples.

Daoxin Li, PhD, Lab Director
or Other Approved Signatory

High levels of background particulate can obscure spores and other particulates leading to underestimation. Background levels of 5 indicate an overloading of background particulates, prohibiting accurate detection and quantification. Present = Spores detected on overloaded samples. Results are not blank corrected unless othewise noted. The detection limit is equal to one fungal spore, structure, pollen, fiber particle or insect fragment. "*" Denotes particles found at 300X. *-* denotes not detected. EMSL maintains liability limited to cost of anaysis. 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. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical, Inc Smyrna, GA AIHA-LAP, LLC--EMLAP Lab 100662

Initial report from: 01/12/2015 12:11:17

For Information on the fungi listed in this report please visit the Resources section at www.emsl.com