

Lab Analysis Report

Confirmation #: 00001
 Date Collected: 01/03/2015 19:18:18
 Date Received: 01/13/2015 16:02:39
 Date Analyzed: 01/15/2015 10:02:37
 Lab Analysis By:

Customer Information

Name: Jane Smith
 Phone: 404-555-1324
 Email: janesmith@gmail.com
 Date Reported: 1/3/2015 7:18:18 PM
 Property: Visible Mold, Musty Odors

Property Address: 132 Main St., Atlanta, GA 30318
 Property Type: Residential
 Relation: Owner
 Occupants: Allergy Sufferers, Complaints

Summary

Air Sample	 Bedroom Spore counts appear slightly elevated.	 Kitchen Some spore counts appear elevated.	 Living Room Spore counts appear normal.
Surface Sample	 Vent Spore counts appear normal.		

Outdoor vs. Indoor Mold Concentrations

Key:  Normal  Slightly Elevated  Elevated

Penicillium/Aspergillus Group



Hyphal Elements



Cladosporium



Basidiospores



Ascospores



MMD's® Conclusions

We are here to help! Your lab results have been reviewed by MyMoldDetective's® in-house Indoor Air Quality (IAQ) Department and we want to bring a few items to your attention:

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MMD's® Mold Testing Conclusion: ELEVATED - ACTION RECOMMENDED
 Due to the above notated spore counts, MMD® and the IAQ Industry recommends you have a local, qualified Indoor Air Quality (IAQ) Professional perform an Onsite Mold Assessment to take a closer look at your property. An Onsite Mold Assessment can result in customized recommendations to eliminate your home's elevated mold condition.
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MMD's® Property History Conclusion: ACTION RECOMMENDED
 Due to this property's history of water damage, MMD® and the IAQ Industry recommends you have a local, qualified Indoor Air Quality (IAQ) Professional (i.e. Certified Microbial Remediator - CMR) perform an Onsite Mold Assessment to take a closer look at your property. An Onsite Mold Assessment can result in customized recommendations to safeguard against and eliminate mold contamination.
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Onsite Evaluation
 We have a network of pre-screened, qualified and insured professionals that we will connect you with to help give you a more comprehensive view of your indoor air quality. If you would like MyMoldDetective® to refer a local professional in your area or have any questions about your Mold Analysis lab report, please do not hesitate to contact us.

Lab Analysis

Air Sample Results

Sample Location	Bedroom	Kitchen	Living Room	Outside
Client Sample Number	35091	36791	36761	35101
RESULT	 Slightly Elevated	 Elevated	 Normal	Control

Spore Identification	Raw Count	Spores per m ³	Percent of Total	In/Out	Raw Count	Spores per m ³	Percent of Total	In/Out	Raw Count	Spores per m ³	Percent of Total	In/Out	Raw Count	Spores per m ³	Percent of Total	In/Out
Alternaria	1	13	0.58	-	-	-	-	-	-	-	-	-	-	-	-	-
Ascospores	1	13	0.58	0.07:1	5	2167	3.5	0.36:1	2	27	1.47	0.14:1	2	27	1.47	0.14:1
Basidiospores	14	187	8.09	0.25:1	13	173	9.09	0.23:1	21	280	15.44	0.37:1	21	280	15.44	0.37:1
Botrytis	-	-	-	-	1	13	0.7	0.33:1	-	-	-	-	-	-	-	-
Cladosporium	25	333	14.45	0.31:1	40	1,533	27.97	0.5:1	26	347	19.12	0.32:1	26	347	19.12	0.32:1
Hyphal Elements	6	80	3.47	0.86:1	5	67	3.5	0.71:1	4	53	2.94	0.57:1	4	53	2.94	0.57:1
Penicillium/Aspergillus Group	124	1653	71.68	1.59:1	75	1000	52.45	0.96:1	80	1067	58.82	1.03:1	80	1067	58.82	1.03:1
Pithomyces	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rusts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Smuts, Periconia, Myxomycetes	2	27	1.16	0.18:1	2	27	1.4	0.18:1	3	40	2.21	0.27:1	3	40	2.21	0.27:1
Stachybotrys	-	-	-	-	1	13	0.7	-	-	-	-	-	-	-	-	-
Torula	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown	-	-	-	-	1	13	0.7	0.14:1	-	-	-	-	-	-	-	-
Total	173	2306	100%		143	1906	100%		136	1814	100%		136	1814	100%	
Debris Rating	3*				3*				3*				3*			
Analytical Sensitivity	13				13				13				13			
Sample Volume (L)	75				75				75				75			
Lab Sample Number	15000062-002				15000062-003				15000062-004				15000062-005			



MMD's® Conclusions

Air Sample Results

Sample Location	Vent
Lab Sample Number	15000062-006
Result	 Normal
Sample Location	
Results	Laboratory Observations
Occasional Cladosporium Seen	1-5 spores per cover slip

Footnotes & Additional Report Information

1. The results in this analysis pertain only to this sample location(s), collected on the stated date and should not be used in the interpretation of any other sample location(s). This report may not be duplicated, except in full, without the written consent of My Mold Detective, LLC. (MMD)
2. Neither the laboratory nor MMD bear any responsibility for sample collection activities, analytical method limitations, or your use of the test results. Interpretation and use of test results are your (consumer's) responsibility. Any reference to health effects or interpretation of mold levels is strictly the opinion of MMD. In no event, shall MMD or any of its employees be liable for lost profits or any special, incidental or consequential damages arising out of your use of the test results.
3. My Mold Detective (MMD) should not be used to verify if remediation activities are successful. Industry standards and some state legislation requires a qualified third-party Indoor Environmental Professional (IEP) to verify if a work area is successfully remediated. Third-party Post Remediation Verification Testing (PRVT) and assessments should always include: 1) onsite visual assessment 2) moisture readings (Rh & moisture content) 3) observations of active moisture intrusions 4) evaluation of remediation contractor's containments 5) analysis of potential cross contamination from work areas to adjacent non-remediated work areas 6) mold sampling as deemed applicable by qualified IEP.
4. There are no federal or national standards for the numbers of fungal spores that may be present in the indoor environment. As a general rule and guideline that is widely accepted in the indoor air quality field, the numbers and types of spores that are present in the indoor environment should be comparable to those that are present outdoors at any given time. There will always be some mold spores present in "Normal" indoor environments. The purpose of sampling and counting spores is to help determine whether an abnormal condition exists within the indoor environment and if it does, to help pinpoint the area of contamination. Spore count should not be used as the sole determining factor of mold contamination. There are many factors that can cause anomalies in the comparison of indoor and outdoor samples due to the dynamic nature of both of those environments.

Debris Rating Table

1. Minimal (less than 5%) particulate present	Reported values are minimally affected by particulate load.
2. 5% to 25% of the trace occluded with particulate	
3. 26% to 75% of the trace occluded with particulate	Negative bias is expected. The degree of bias increases directly with the percent of the trace that is occluded.
4. 76% to 90% of the trace occluded with particulate	
5. Greater than 90% of the trace occluded with particulate	Quantification not possible due to large negative bias. New samples should be collected at shorter time interval, or other measures taken to reduce the particulate load.

Learn About the Mold

Ascospores

Ascospores are produced by thousands of different fungi, growing on a very wide range of substrates, and result from sexual reproduction. They are usually produced inside microscopic to macroscopic fruit bodies before being forcibly ejected into the air for dispersal. They may be very small or quite large (though always microscopic). They can have a wide range of shapes, sizes, and number of cells, and can be colourless or darkly pigmented.

Basidiospores

Basidiospores are extremely small, usually unicellular spores produced by many thousands of fungi as a result of sexual reproduction (these fungi include mushrooms, bracket fungi, puffballs, etc.)

Chaetomium

Chaetomium is a fungus that is commonly called a mold, though unlike most other molds, it produces its spores inside a microscopic fruit body. It occurs worldwide, usually growing on food substrates containing cellulose - paper, wallboard, textiles (including carpets), seeds, etc. It produces many brown, single-celled spores shaped like a lemon or a football, and the tiny fruit bodies usually have coiled or branched appendages. The spores may trigger asthma or hay fever, but are almost never pathogenic. Chaetomium produces mycotoxins including chaetoglobosins and sterigmatocystin. It also produces cellulase enzymes, and is used in fabric testing.

Cladosporium

Cladosporium is a fungus known as a mold. It is found worldwide, and often makes up about 50% of airborne spores.

Curvularia

Curvularia is a fungus known as a mold. It occurs worldwide on leaves (especially those of grasses), on seeds, and in soil. It is found in buildings on various substrates, and enters with outdoor air. Its relatively large (though still microscopic) spores are several-septate, brown, dry, single, smooth-walled, and often curved; with the central cells usually larger and darker than end cells. In some species the spore walls are very thick. It may trigger hay fever and asthma, and allergic fungal sinusitis. Mostly in immunocompromised patients, it may cause infection of toenails, keratitis of the eye, sinusitis, internal heart infection, mycetoma, pneumonia, brain abscess, or disseminated infection (though most of these conditions are rare). It is not known to produce toxins.

Epicoccum

Epicoccum is a fungus that is generally called a mold. This fungus occurs all around the world; it requires a damp environment, and grows best on food substrates containing cellulose, such as paper, or textiles made of cotton, or on insects, and produces single, dry, many-celled, globose, rough-walled, pale brown spores in small cushion-like fructifications called sporodochia. The spores can become airborne and trigger respiratory allergies such as hay fever or asthma in susceptible individuals. Epicoccum is not, however, a disease-causing organism, and is able to grow only on dead organic substrates. It is not a toxin producer.

Hyphal Elements

Hyphal elements are fragments of the thallus (or rather diffuse body) of most true fungi. They are tubular, usually about 5 microns (one-five-thousandth of an inch) in width, and very variable in length. They may be colorless or pigmented. Having been broken off, they are open at one or both ends, and usually empty. The walls consist of a mixture of chitin and glucans, which may be allergenic. In the absence of spores or other diagnostic structures, they cannot be identified. They usually enter houses with outside air.

Penicillium

Penicillium is a fungus known as a mold. It is one of the most common fungi worldwide, occurring on a very large number of substrates. There are about 250 species, some of which can grow at low temperatures and often spoil food in the refrigerator. They produce very small (microscopic), unicellular, usually globose, waxy (hydrophobic) spores, in unbranched chains on distinctive broom-shaped structures. The spores are usually green-blue, greenish or grey green in mass. Some species may cause infections of humans, particularly in immunocompromised patients. Some species produce mycotoxins, and some may be allergenic. The spores, when present without the diagnostic structures that produce them, are impossible to differentiate visually from those of *Aspergillus*. A few *Penicillium* species are the source of the first major antibacterial antibiotic to be discovered, penicillin.

Smuts/Periconia/Myxomycetes

Smuts/Periconia/Myxomycetes. These are very different organisms which happen to produce similar spores, that tend to be globose, brown and with an ornamented wall. They occur on many different substrates. Smuts are parasitic on living plants, Periconia grows on dead plants, and myxomycetes usually eat bacteria and other microscopic food particles before producing spores.

Spegazzinia

Spegazzinia is a fungus known as a mold. It grows world-wide (though mainly in the tropics) on plants and soil. It produces very characteristic, microscopic, single, dry, usually 4-celled, darkly pigmented spores that develop many spiny outgrowths at maturity. It is not commonly recorded in houses, and nothing is known about its allergenic, pathogenic or toxigenic potential.

Stachybotrys

Stachybotrys is a fungus that is generally called a mold (this one is sometimes called the toxic black mold.) This fungus occurs all around the world; it requires a damp environment, and grows best on food substrates containing cellulose, such as paper and cardboard, or textiles made of cotton. It grows quite commonly in buildings on the paper covering one side of wallboard, if this is damp. It can develop extensive blackish colonies, producing very small (microscopic), single-celled ellipsoidal black spores. These spores are initially produced in slime, so stay in place for a long time, but when they eventually dry out they can become airborne if disturbed, and can trigger respiratory allergies such as hay fever or asthma in susceptible individuals. Stachybotrys is not, however, a disease-causing organism, and is able to grow only on dead organic substrates. It is a toxin producer, but it is almost impossible to imagine how anyone could ingest or inhale enough of the fungus to cause poisoning (Horses can become sick if they eat contaminated hay).

Footnotes

1. Dash (-) in this report, under the raw count column of the Air Sample Results table means 'not detected' (ND): otherwise 'not applicable' (NA).
2. The positive-hole correction factor is a statistical tool which calculates a probable count from the raw count, taking into consideration that multiple particles can impact on the same hole; for this reason the sum of calculated counts may be less than the positive hole corrected total.
3. Due to rounding totals may not equal 100%.
4. Minimum Reporting Limits (MRL) for BULKS, DUSTS, SWABS, and WATER samples are a calculation based on the sample size and the dilution plate on which the organism was counted. Results are a compilation of counts taken from multiple dilutions and multiple medias. This means that every genus of fungi or bacteria recovered can be counted on the plate on which it is best represented.
5. If the final quantitative result is corrected for contamination based on the blank correction is stated in the sample comments section of the report.
6. Analysis conducted on non-viable spore traps is completed using the Indoor Environmental Standards Organization Standard 2210.
7. The results in this report are related to this project and these samples only.

Disclaimer

This document was designed to follow currently known industry guidelines for the interpretation of microbial sampling and analysis. Since interpretation of mold analysis reports is a scientific work in progress, it may as such be changed at any time without notice. The client is solely responsible for the use or interpretation. My Mold Detective, LLC makes no express or implied warranties as to health of a property from only the samples sent to their laboratory for analysis. The client is hereby notified that due to the subjective nature of fungal analysis and the mold growth process, laboratory samples can and do change over time relative to the originally sampled material. My Mold Detective, LLC reserves the right to properly dispose of all samples after the testing of such samples is sufficiently completed or after a 7 day period, whichever is greater.