

QCI TAMPA MOLD
SAMPLE REPORT FROM INDEPENDENT TESTING LAB

Mold Analysis Report prepared for

QCI, LLC

14171 Waterville Circle

Tampa, FL 33626

Ph. 727-686-7373

Job Number:

Job Name:

Date Sampled: 1/20/2012

Date Analyzed: 1/24/2012

AIHA EMPAT Laboratory ID# _____



LAB #

AIHA Accredited
Environmental Microbiology



Certified Clinical Microbiologist

Spore Trap Analysis

SOP #

121530

Customer QCI, LLC 14171 Waterville Circle Tampa, FL 33626 Ph. 727-686-7373	Job Number: Job Name:	Collected by: Steve Delgato Email: steve@qci-online.com Date Collected: 1/20/2012 Date Received: 1/23/2012 Date Reported: 1/24/2012
--	------------------------------	--

ID Number	121530 - 1		121530 - 2		-		-	
Sample ID #	124704		124738					
Sample Name	Exterior		Bathroom					
Sample Volume	75 Liters		75 Liters		Liters		Liters	
Limit of Detection	13 spores/M3		13 spores/M3		spores/M3		spores/M3	
Background	1+		2+					
Fragments	80 /M3		333 /M3		/M3		/M3	
Organism	Count / M ³	% of Total	Count / M ³	% of Total	Count / M ³	% of Total	Count / M ³	% of Total
Alternaria	427	3.6	147	1.4				
Ascospores	653	5.5	227	2.1				
Aspergillus/Penicillium	533	4.5	5973	55.5				
Basidiospores	240	2.0	40	0.4				
Bipolaris/Drechslera	280	2.4	133	1.2				
Chaetomium			80	0.7				
Cladosporium	7653	64.5	3813	35.4				
Curvularia	2080	17.5	293	2.7				
Epicoccum			53	0.5				
Fusarium								
Memnoniella								
Myxomycetes								
Pithomyces								
Stachybotrys								
Stemphylium								
Torula								
Trichothecium								
Ulocladium								
Unidentifiable spore								
Total	11867		10760					

Water Damage Indicators	Common Allergens	Slightly Higher than Outside Air	Significantly Higher than Outside Air	Ratio Abnormality
-------------------------	------------------	----------------------------------	---------------------------------------	-------------------

Signature: _____

Date: **1/24/2012**

Reviewed by: _____

Limit of Detection The Limit of Detection is the lowest number of spores that can be detected based on the total volume of the sample collected and the percentage of the slide that is counted. At Hayes Microbial, 100% of the slide is read so the LOD is based solely on the total volume. Raw spore counts that exceed 500 spores will be estimated.

Blanks Results have not been corrected for field or laboratory blanks.

Background The Background is the amount of debris that is present in the sample. This debris consists of skin cells, dirt, dust, pollen, drywall dust and other organic and nonorganic matter. As the background density increases, the likelihood of spores, especially small spores such as those of *Aspergillus* / *Penicillium* may be obscured. The background is rated on a scale of 1 to 4 and each level is determined as follows.

- ND** : No background detected. (Pump or cassette malfunction) Recollect sample.
- 1** : Extremely light background. No spores will be uncountable.
- 1+** : Very light background. Less than 1% of small spores may be uncountable.
- 2** : Light background. Less than 3% of small spores may be uncountable.
- 2+** : Moderate background. Less than 5% of small spores may be uncountable.
- 3** : Moderate/Heavy background. 5% to 25% of small spores and less than 5% of large spores may be uncountable.
- 3+** : Heavy background. More than 25% of small spores and more than 5% of large spores may be uncountable.
- 4** : Sample unreadable. Recollect sample.

Fragments Fragments are small pieces of fungal mycelium or spores. They are not identifiable as to type and when present in very large numbers, may indicate the presence of mold amplification.

Indoor / Outdoor Comparisons There are no 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 not exceed 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 counts 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.

Water Damage Indicators These molds are commonly seen in conditions of prolonged water intrusion and usually indicate a problem.

Common Allergens Although all molds are potential allergens, these are the most common allergens that may be found indoors.

Slightly Higher than Outside Air The spore count is slightly higher than the outside count and may or may not indicate a source of contamination.

Significantly Higher than Outside Air The spore count is significantly higher than the outdoor count and probably indicates a source of contamination.

Ratio Abnormality The types of spores found indoors should be similar to the ones that were identified in the outdoor sample. Significant increases (more than 25 or 30%) in the ratio of a particular spore type may indicate the presence of abnormal levels of mold, even if the total number of spores of that type is lower in the indoor environment than it was outdoors.

Note Fungi that are present in indoor samples at levels lower than 200 per cubic meter are considered insignificant. Insignificant spore counts are not color coded on the report.

Organism Descriptions

Alternaria	Habitat:	Commonly found outdoors in soil and decaying plants. Indoors it is commonly found on window sills and other horizontal surfaces.
	Health Effects:	A common allergen and has been associated with hypersensitivity pneumonitis. <i>Alternaria</i> is capable of producing toxic metabolites which may be associated with disease in humans or animals. Occasionally an agent of onychomycosis, ulcerated cutaneous infection and chronic sinusitis, principally in the immunocompromised patient.
Ascospores	Habitat:	A large group consisting of more than 3000 species of fungi. Common plant pathogens and outdoor numbers become very high following rain. Most of the genera are indistinguishable by spore trap analysis and are combined on the report.
	Health Effects:	Health affects are poorly studied, but many are likely to be allergenic.
Aspergillus / Penicillium	Habitat:	The most common fungi isolated from the environment. Very common in soil and on decaying plant material. Are able to grow well indoors on a wide variety of substrates.
	Health Effects:	This group contains common allergens and many can cause hypersensitivity pneumonitis. They may cause extrinsic asthma, and many are opportunistic pathogens. Many species produce mycotoxins which may be associated with disease in humans and other animals. Toxin production is dependent on the species and on the food source for the fungus. Some of these toxins have been found to be carcinogenic.
Basidiospores	Habitat:	A common group of Fungi that includes the mushrooms and bracket fungi. They are saprophytes and plant pathogens. In wet conditions they can cause structural damage to buildings.
	Health Effects:	Common allergens and are also associated with hypersensitivity pneumonitis.
Bipolaris	Habitat:	They are found in soil and as plant pathogens. Can grow indoors on a variety of substrates.
	Health Effects:	They may be allergenic and are very commonly involved in allergic fungal sinusitis. They are opportunistic pathogens but occasionally infect healthy individuals, causing keratitis, sinusitis and osteomyelitis.
Chaetomium	Habitat:	Ascomycete fungus, commonly isolated from soil and decaying plant materials. It is cellulolytic and grows well indoors on damp sheetrock and other paper substrates. It is often found growing with <i>Stachybotrys</i> .
	Health Effects:	It is reported to be allergenic and may produce toxins.
Cladosporium	Habitat:	One of the most common genera worldwide. Found in soil and plant debris and on the leaf surfaces of living plants. The outdoor numbers are lower in the winter and often relatively high in the summer, especially in high humidity. The outdoor numbers often spike in the late afternoon and evening. Indoors, it can be found growing on textiles, wood, sheetrock, moist window sills and in HVAC supply ducts.
	Health Effects:	A common allergen, producing more than 10 allergenic antigens and a common cause of hypersensitivity pneumonitis.
Curvularia	Habitat:	They exist in soil and plant debris, and are plant pathogens.
	Health Effects:	They are allergenic and a common cause of allergic fungal sinusitis. An occasional cause of human infection, including keratitis, sinusitis, onychomycosis, mycetoma, pneumonia, endocarditis and disseminated infection, primarily in immunocompromised
Epicoccum	Habitat:	It is found in soil and plant litter and is a plant pathogen. It can grow indoors on a variety of substrates, including paper and textiles and is commonly found on wet drywall.
	Health Effects:	It is a common allergen. No cases of infection have been reported in humans.