

COASTAL ENVIRONMENTAL P.O. BOX 167 HAMMONTON, NJ 08330

# **Certificate of Mold Analysis**

Prepared for:	COASTAL ENVIRONMENTAL
Phone Number:	(609) 820-9312
Fax Number:	(609) 561-6197
Project Name:	PLEASANTVILLE HIGH SCHOOL
Test Location:	
	,
Chain of Custody #:	598811
Received Date:	August 9, 2012
Report Date:	August 10, 2012

Sume

John D. Shane Ph.D., Technical Manager

Currently there are no Federal regulations for evaluating potential health effects of fungal contamination and remediation. This information is subject to change as more information regarding fungal contaminants becomes available. For more information visit http://www.epa.gov/mold or www.nyc.gov/html/doh/html/epi/mold.shtml. This document was designed to follow currently known industry guidelines for the interpretation of microbial sampling, analysis, and remediation. 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. PRO-LAB/SSPTM Inc. 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. PRO-LAB/SSPTM Inc. reserves the right to properly dispose of all samples after the testing of such samples are sufficiently completed or after a 7 day period, whichever is greater.



For more information please contact PRO-LAB at (954) 384-4446 or email info@prolabinc.com



1675 North Commerce Parkway, Weston, FL 33326 (954) 384-4446

## Prepared for : COASTAL ENVIRONMENTAL

Test Address : PLEASANTVILLE HIGH SCHOOL

ANALYSIS METHOD	Spore trap analysis			Spore trap analysis		Spore trap analysis			Spore trap analysis			
LOCATION	Ambient			Nurse Office		Nurse Treat Mt Room			Nurse Main			
COC / LINE #	598811-1			598811-2		598811-3			598811-4			
SAMPLE TYPE & VOLUME	AIR-O-CELL - 75L			AIR-O-CELL - 75L		AIR-O-CELL - 75L			AIR-O-CELL - 75L			
SERIAL NUMBER		18188432		18187380		18188326			18189319			
COLLECTION DATE	Aug 7, 2012			Aug 7, 2012		Aug 7, 2012			Aug 7, 2012		2	
ANALYSIS DATE	Aug 10, 2012		Aug 10, 2012		Aug 10, 2012			Aug 10, 2012				
CONCLUSION	CONTROL		NOT ELEVATED		NOT ELEVATED			NOT ELEVATED				
IDENTIFICATION	Raw Count	Spores per m <sup>3</sup>	Percent of Total	Raw Count	Spores per m <sup>3</sup>	Percent of Total	Raw Count	Spores per m <sup>3</sup>	Percent of Total	Raw Count	Spores per m <sup>3</sup>	Percent of Total
Alternaria				4	53	20						
Cladosporium	4	53	8									
Epicoccum												
Other Ascospores	8	110	17									
Other Basidiospores	24	320	50	4	53	20				4	53	33
Penicillium/Aspergillus	12	160	25	12	160	60	4	53	100	4	53	33
Pithomyces										4	53	33
Rusts												
Unidentified Spores												
TOTAL SPORES	48	643	100	20	266	100	4	53	100	12	159	100
MINIMUM DETECTION LIMIT <sup>*</sup>	1	53		1	53		1	53		1	53	
BACKGROUND DEBRIS	Light		Light		Light		Light					
Cellulose Fiber				8	110		4	53				
Fiberglass	4	53		4	53							
Insect Fragments				4	53							
Plant Fragments	4	53		4	53							
Pollen	4	53										
<b>OBSERVATIONS &amp; COMMENTS</b>												

Background debris qualitatively estimates the amount of particles that are not pollen or spores and directly affects the accuracy of the spore counts. The categories of Light, Moderate, Heavy and Too Heavy for Accurate Count, are used to indicate the amount of deposited debris. Increasing amounts of debris will obscure small spores and can prevent spores from impacting onto the slide. The actual number of spores present in the sample is likely higher than reported if the debris estimate is 'Heavy' or 'Too Heavy for Accurate Count'. All calculations are rounded to two significant figures and therefore, the total percentage of spore numbers may not equal 100%.

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Spores that were observed from the samples submitted are listed on this report. If a spore is not listed on this report it was not observed in the samples submitted.

Interpretation Guidelines: A determination is added to the report to help users interpret the mold analysis results. A mold report is only one aspect of an indoor air quality investigation. The most important aspect of mold growth in a living space is the availability of water. Without a source of water, mold generally will not become a problem in buildings. These determinations are in no way meant to imply any health outcomes or financial decisions based solely on this report. For questions relating to medical conditions you should consult an occupational or environmental health physician or professional. CONTROL is a baseline sample showing what the spore count and diversity is at the time of sampling. The control sample(s) is usually collected outside of the structure being tested and used to determine

CONTROL is a baseline sample showing what the spore count and diversity is at the time of sampling. The control sample(s) is usually collected outside of the structure being tested and used to determine if this sample(s) is similar in diversity and abundance to the inside sample(s). ELEVATED means that the amount and/or diversity of spores, as compared to the control sample(s), and other samples in our database, are higher than expected. This can indicate that fungi have grown

ELEVALED means that the amount and/or diversity of spores, as compared to the control sample(s), and other samples in our database, are nigher than expected. This can indicate that tung have grown because of a water leak or water intrusion. Fungi that are considered to be indicators of water damage include, but are not limited to: *Chaetomium, Fusarium, Memnoniella, Stachybotrys, Ulocladium.* NOT ELEVATED means that the amount and/or the diversity of spores, as compared to the control sample and other samples in our database, are lower than expected and may indicate no problematic fungal growth.

UNUSUAL means that the presence of current or former growth was observed in the analyzed sample. An abundance of spores are present, and/or growth structures including hyphae and/or fruiting bodies are present and associated with one or more of the types of mold/fungi identified in the analyzed sample.

NORMAL means that no presence of current or former growth was observed in the analyzed sample. If spores are recorded they are normally what is in the air and have settled on the surface(s) tested.



1675 North Commerce Parkway, Weston, FL 33326 (954) 384-4446

#### **Prepared for :** COASTAL ENVIRONMENTAL

Test Address : PLEASANTVILLE HIGH SCHOOL

ANALYSIS METHOD	Direct Microscopic Exam	Direct Microscopic Exam	Direct Microscopic Exam	Direct Microscopic Exam	
LOCATION	Under Counter Treatroom	Soft Chair Rear Room	Bk Room Bed Nurse	Door Tn Nurse Office	
COC / LINE #	598811-5	598811-6	598811-7	598811-8	
SAMPLE TYPE & VOLUME	SWAB	SWAB	SWAB	SWAB	
SERIAL NUMBER	None supplied	None supplied	None supplied	None supplied	
COLLECTION DATE	Aug 7, 2012	Aug 7, 2012	Aug 7, 2012	Aug 7, 2012	
ANALYSIS DATE	Aug 10, 2012	Aug 10, 2012	Aug 10, 2012	Aug 10, 2012	
CONCLUSION	NORMAL	NORMAL	NORMAL	NORMAL	
IDENTIFICATION	Mold Present	Mold Present	Mold Present	Mold Present	
Alternaria					
Cladosporium					
Epicoccum					
Other Ascospores					
Other Basidiospores					
Penicillium/Aspergillus					
Pithomyces					
Rusts					
Unidentified Spores					
TOTAL SPORES	NA	NA	NA	NA	
MINIMUM DETECTION LIMIT	NA	NA	NA	NA	
BACKGROUND DEBRIS	Not Applicable	Not Applicable	Not Applicable	Not Applicable	
<b>OBSERVATIONS &amp; COMMENTS</b>	No Fungi Detected.	No Fungi Detected.	No Fungi Detected.	No Fungi Detected.	

Background debris qualitatively estimates the amount of particles that are not pollen or spores and directly affects the accuracy of the spore counts. The categories of Light, Moderate, Heavy and Too Heavy for Accurate Count, are used to indicate the amount of deposited debris. Increasing amounts of debris will obscure small spores and can prevent spores from impacting onto the slide. The actual number of spores present in the sample is likely higher than reported if the debris estimate is 'Heavy' or 'Too Heavy for Accurate Count'. All calculations are rounded to two significant figures and therefore, the total

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## Prepared for : COASTAL ENVIRONMENTAL

Test Address : PLEASANTVILLE HIGH SCHOOL

ANALYSIS METHOD	Spore trap analysis			Spore trap analysis		Spore trap analysis			Direct Microscopic Exam			
LOCATION	Cst-1			Cst-2		Cst-3			Desh Office Cst		Cst	
COC / LINE #	598811-9			598811-10		598811-11			598811-12			
SAMPLE TYPE & VOLUME	AIR-O-CELL - 75L			AIR-O-CELL - 75L			AIR-O-CELL - 75L			SWAB		
SERIAL NUMBER	18188263			18188198		18189439			None supplied		d	
COLLECTION DATE	Aug 7, 2012			Aug 7, 2012		Aug 7, 2012			Aug 7, 2012			
ANALYSIS DATE	Aug 10, 2012		Aug 10, 2012		Aug 10, 2012			Aug 10, 2012		2		
CONCLUSION	NOT ELEVATED		NOT ELEVATED		NOT ELEVATED			NORMAL				
IDENTIFICATION	Raw Count	Spores per m <sup>3</sup>	Percent of Total	Raw Count	Spores per m <sup>3</sup>	Percent of Total	Raw Count	Spores per m <sup>3</sup>	Percent of Total		Mold Present	
Alternaria	4	53	6									
Cladosporium	4	53	6									
Epicoccum	4	53	6									
Other Ascospores				4	53	17						
Other Basidiospores	4	53	6									
Penicillium/Aspergillus	44	590	65	16	210	66	12	160	75			
Pithomyces				4	53	17						
Rusts	4	53	6									
Unidentified Spores	4	53	6				4	53	25			
TOTAL SPORES	68	908	100	24	316	100	16	213	100		NA	
MINIMUM DETECTION LIMIT <sup>*</sup>	1	53		1	53		1	53			NA	
BACKGROUND DEBRIS		Light		Light		Light		Not Applicable		9		
Cellulose Fiber	16	210		8	110		4	53				
Fiberglass	4	53										
Insect Fragments							4	53				
Plant Fragments	4	53		4	53							
Pollen												
<b>OBSERVATIONS &amp; COMMENTS</b>										No Fungi [	Detected.	

Background debris qualitatively estimates the amount of particles that are not pollen or spores and directly affects the accuracy of the spore counts. The categories of Light, Moderate, Heavy and Too Heavy for Accurate Count, are used to indicate the amount of deposited debris. Increasing amounts of debris will obscure small spores and can prevent spores from impacting onto the slide. The actual number of spores present in the sample is likely higher than reported if the debris estimate is 'Heavy' or 'Too Heavy for Accurate Count'. All calculations are rounded to two significant figures and therefore, the total percentage of spore numbers may not equal 100%.

Minimum Detection Limit. Based on the volume of air sampled, this is the lowest number of spores that can be detected and is an estimate of the lowest concentration of spores that can be read in the sample. NA = Not Applicable.

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Test Address : PLEASANTVILLE HIGH SCHOOL

ANALYSIS METHOD	Direct Microscopic Exam	Direct Microscopic Exam	Direct Microscopic Exam	INTENTIONALLY BLANK		
LOCATION	Book Shell Cst	Soft Chair Cst	Carpet Cst			
COC / LINE #	598811-13	598811-14	598811-15			
SAMPLE TYPE & VOLUME	SWAB	SWAB	SWAB			
SERIAL NUMBER	None supplied	None supplied	None supplied			
COLLECTION DATE	Aug 7, 2012	Aug 7, 2012	Aug 7, 2012			
ANALYSIS DATE	Aug 10, 2012	Aug 10, 2012	Aug 10, 2012			
CONCLUSION	NORMAL	NORMAL	NORMAL			
IDENTIFICATION	Mold Present	Mold Present	Mold Present	Raw Spores Percent Count per m <sup>3</sup> of Total		
Alternaria						
Cladosporium						
Epicoccum						
Other Ascospores						
Other Basidiospores						
Penicillium/Aspergillus						
Pithomyces						
Rusts						
Unidentified Spores						
TOTAL SPORES	NA	NA	NA			
MINIMUM DETECTION LIMIT <sup>*</sup>	NA	NA	NA			
BACKGROUND DEBRIS	Not Applicable	Not Applicable	Not Applicable			
<b>OBSERVATIONS &amp; COMMENTS</b>	No Fungi Detected.	No Fungi Detected.	No Fungi Detected.			

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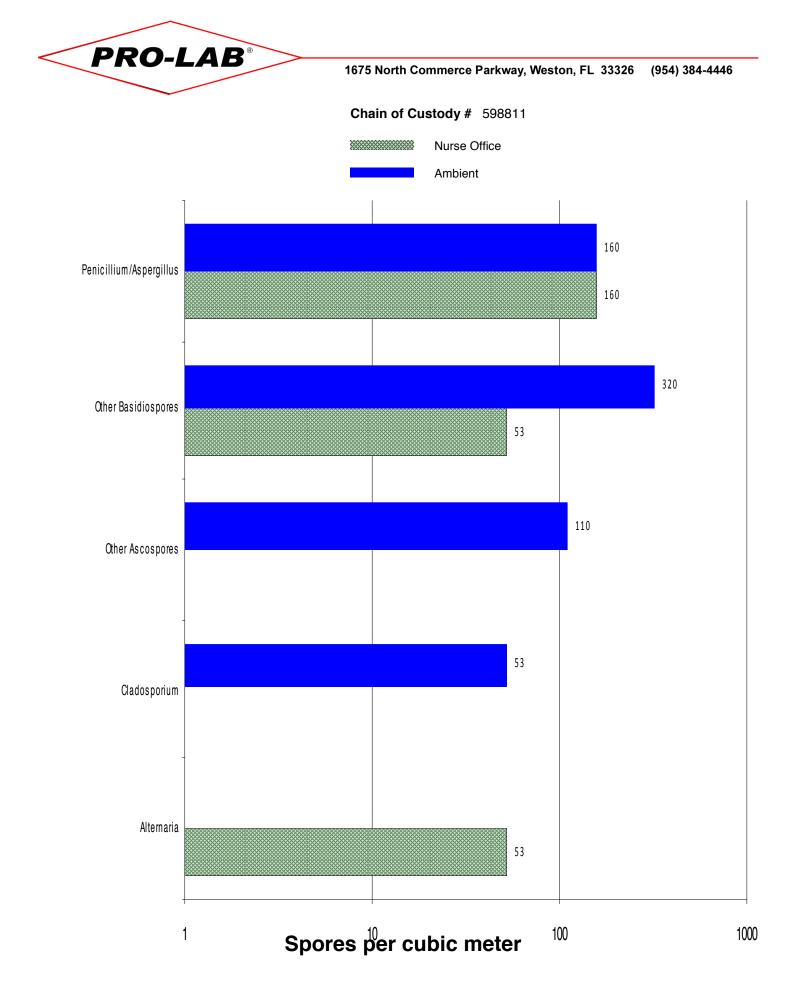
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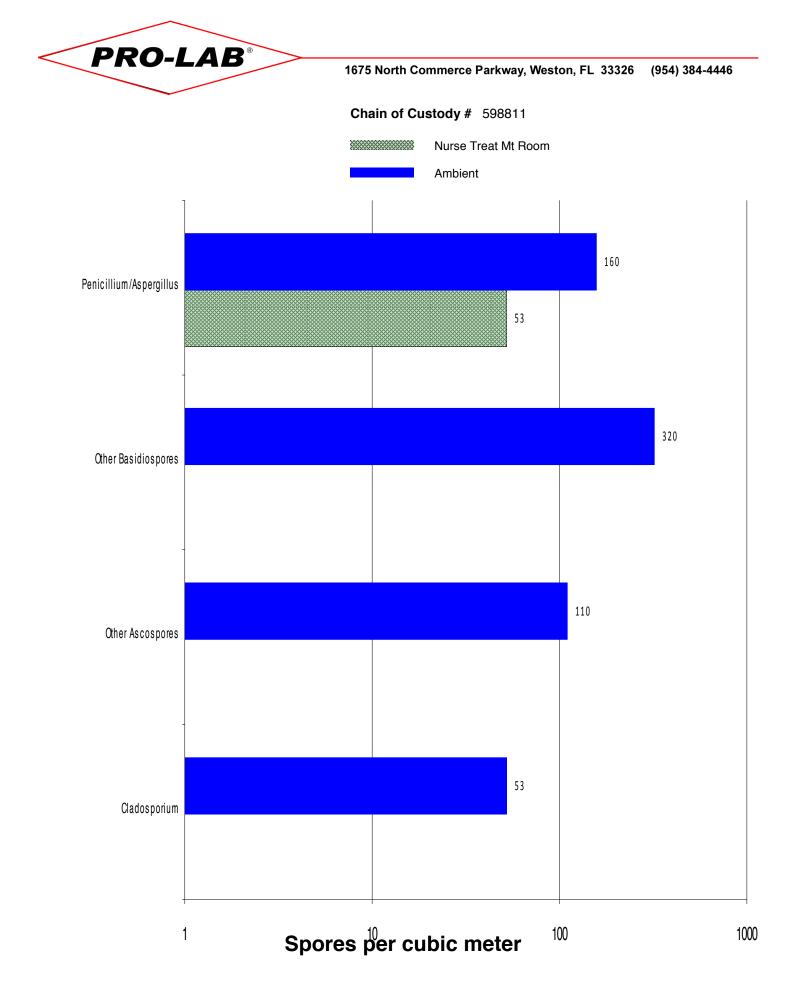
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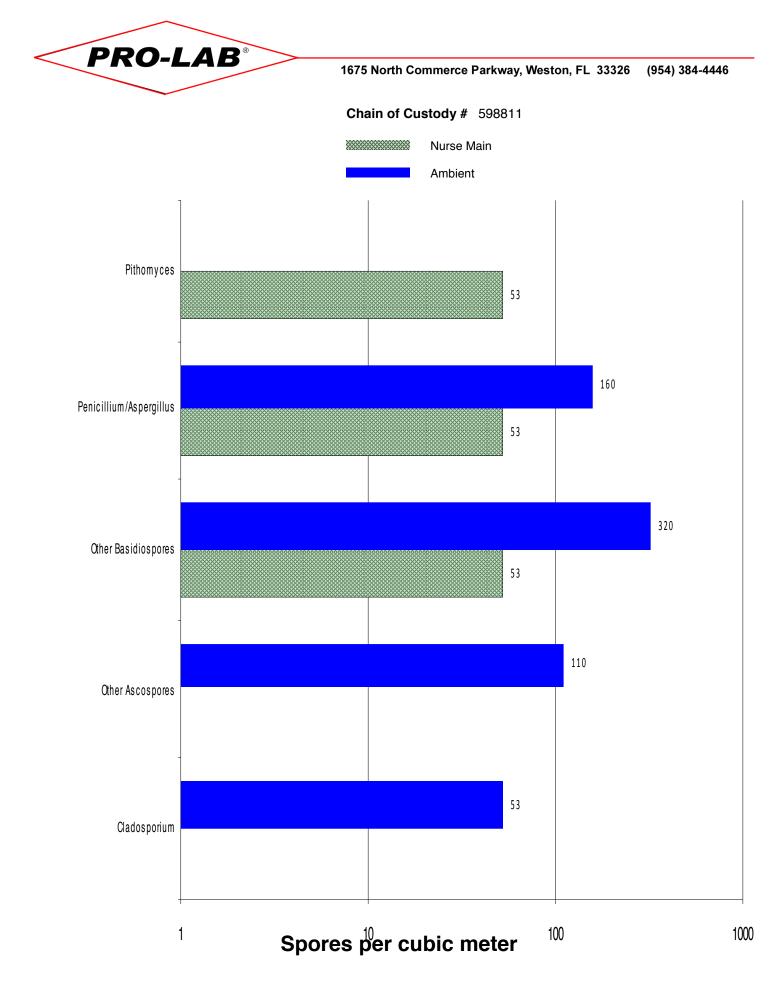
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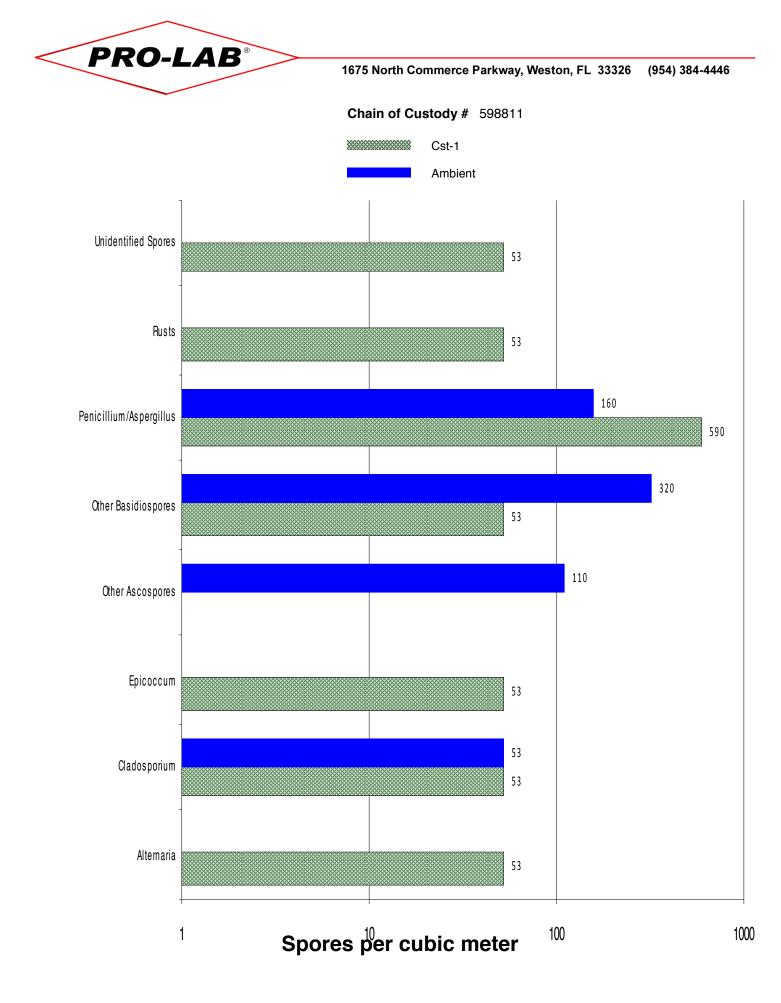
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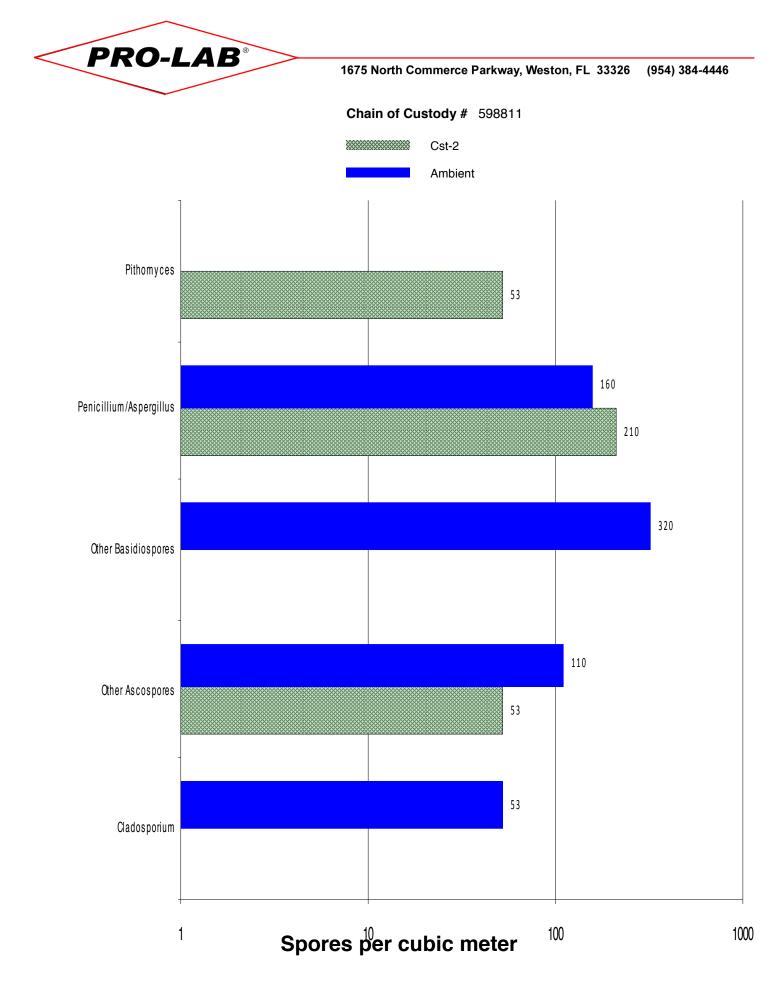
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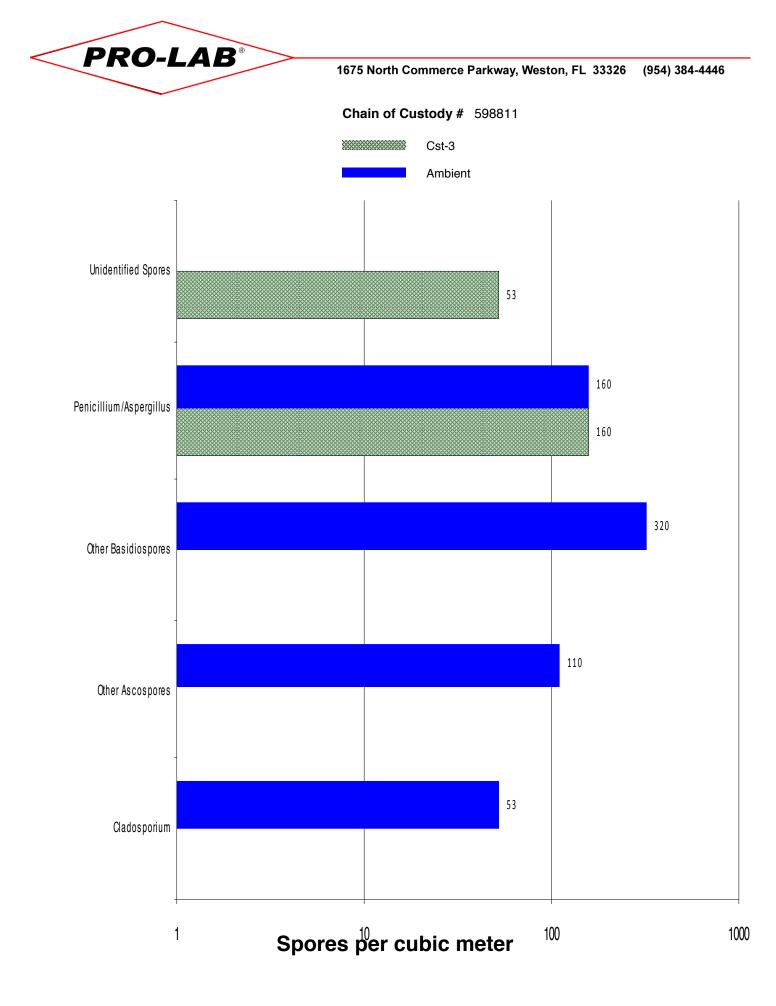














# 1675 North Commerce Parkway, Weston, FL 33326 (954) 384-4446

Identification	Outdoor Habitat	Indoor Habitat	Allergic Potential	Comments
Alternaria	One of the most commonly reported airborne spores worldwide; Soil, dead or dying plants, foodstuffs, textiles	Wallboard paper backing, wood, other various cellulose-containing materials. Common in settled dust on carpets, drapes, textiles, etc.	Common allergen. Type I allergies (hay fever and asthma); Type III hypersensitivty pneumonitis. Common cause of extrinsic asthma.	Alternaria is commonly found in elevated numbers on wet-intruded building materials and in higher spore numbers in the air with respect to the outside when growth on wet building materials occurs.
Cladosporium	The most common spore type reported in the air worldwide. Found on dead and dying plant litter, and soil.	Commonly found on wood and wallboard. Commonly grows on window sills, textiles and foods.	Type I (hay fever and asthma), Type III (hypersensitivity pneumonitis) allergies.	A very common and important allergen source both outdoors and indoors.
Epicoccum	Commonly found everywhere. Grows on plant debris, insects and soil.	Capable of growing on several different substrates, notably wallboard and paper.	Type I (hay fever and asthma) allergies.	Very common in the summer, especially in the midwest and during harvest time.
Ascospores	Common everywhere. Constitutes a large part of the airspora outside. Can reach very high numbers in the air outside during the spring and summer. Can increase in numbers during and after rainfalls.	Very few of this group grow inside. The notable exception is Chaetomium and Ascotricha.	Little known for most of this group of fungi. Dependent on the type (see Chaetomium and Ascotricha).	
Basidiospores	Commonly found everywhere, especially in the late summer and fall.	Not normally found growing indoors. Can grow on wet lumber, especially in crawlspaces.	Some allergenicity reported. Type I (hay fever, asthma) and Type III (hypersensitivity pneumonitis).	Among this group are dry rot fungi Serpula and Poria that are particularly destructive to buildings.
Penicillium/Aspergillus	Common everywhere. Normally found in the air in small amounts in outdoor air. Grows on nearly everything.	Wetted wallboard, wood, food, leather, etc. Able to grow on many substrates indoors.	Type I (hay fever and asthma) allergies and Type III (hypersensitivity pneumonitis) allergies.	This is a combination group of Penicillium and Aspergillus and is used when only the spores are seen. The spores are so similar that they cannot be reliably separated into their respective genera.
Pithomyces	Commonly seen everywhere growing dead leaves, soil and grasses.	Not normally found growing indoors, sometimes on wallboard.	None known.	
Rusts	Common everywhere growing on grasses, trees and other living plants.	Does not grow indoors.	Type I (hay fever and asthma) allergies.	Rust requires a living plant host to complete part of its lifecycle and thus, is not normally found growing indoors except perhaps on an infected house plant.
Unidentified Spores	Common everywhere. Grow on decaying plant litter and other plant-derived material.	Wetted cellulosic material.	None known.	This group of spores is reserved for spores whose identity is unknown. These kinds of spores have usually never been seen before in spore traps by our laboratory and/or are of such morphology that they cannot be identified with any degree of certainty to a particular genus.