

COASTAL ENVIRONMENTAL

PO 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: LEEDS CLEARANCE

Test Location:

Chain of Custody #: 881683

Received Date: September 3, 2015

Report Date: September 4, 2015



Erika Piechowski, Technical Manager



Carlos Ochoa, Quality Control 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](http://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.



LAB # 163230

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

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Test Address : LEEDS CLEARANCE

ANALYSIS METHOD	Spore trap analysis	Spore trap analysis	Spore trap analysis	Spore trap analysis
LOCATION	AMBIENT	RM 104	RM 306	RM 128
COC / LINE #	881683-1	881683-2	881683-3	881683-4
SAMPLE TYPE & VOLUME	AIR-O-CELL - 75L	AIR-O-CELL - 75L	AIR-O-CELL - 75L	AIR-O-CELL - 75L
SERIAL NUMBER	21734921	21734963	21735074	21735042
COLLECTION DATE	Sep 3, 2015	Sep 3, 2015	Sep 3, 2015	Sep 3, 2015
ANALYSIS DATE	Sep 4, 2015	Sep 4, 2015	Sep 4, 2015	Sep 4, 2015
CONCLUSION	CONTROL	NOT ELEVATED	NOT ELEVATED	NOT ELEVATED

IDENTIFICATION	Raw Count	Spores <sub>3</sub> per m <sup>3</sup>	Percent of Total	Raw Count	Spores <sub>3</sub> per m <sup>3</sup>	Percent of Total	Raw Count	Spores <sub>3</sub> per m <sup>3</sup>	Percent of Total	Raw Count	Spores <sub>3</sub> per m <sup>3</sup>	Percent of Total
Alternaria	4	53	1									
Cladosporium	376	5,000	85	8	110	40						
Coelomycetes	4	53	1									
Ganoderma	4	53	1									
Other Ascospores	4	53	1									
Other Basidiospores	24	320	5	4	53	19						
Penicillium/Aspergillus	16	210	4	8	110	40	4	53	100	8	110	100
Smuts, myxomycetes	4	53	1									
Unidentified Spores	4	53	1									

<b>TOTAL SPORES</b>	440	5,848	100	20	273	100	4	53	100	8	110	100
<b>MINIMUM DETECTION LIMIT*</b>	1	53		1	53		1	53		1	53	

BACKGROUND DEBRIS	Light			Light			Light			Light		
Cellulose Fiber	4	53		12	160		4	53		4	53	
Fiberglass				4	53							
Insect Fragments	4	53										
Plant Fragments	4	53		4	53		4	53		4	53	
Pollen												

OBSERVATIONS & COMMENTS				
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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.

**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 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 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*, *Scopulariopsis*, *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.

Prepared for : COASTAL ENVIRONMENTAL

Test Address : LEEDS CLEARANCE

ANALYSIS METHOD	Spore trap analysis	Direct Microscopic Exam	Direct Microscopic Exam	Direct Microscopic Exam
LOCATION	LIBRARY	DOOR GLASS OFF	104 DOOR	128 DOOR
COC / LINE #	881683-5	881683-6	881683-7	881683-8
SAMPLE TYPE & VOLUME	AIR-O-CELL - 75L	SWAB	SWAB	SWAB
SERIAL NUMBER	21735003	None supplied	None supplied	None supplied
COLLECTION DATE	Sep 3, 2015	Sep 3, 2015	Sep 3, 2015	Sep 3, 2015
ANALYSIS DATE	Sep 4, 2015	Sep 4, 2015	Sep 4, 2015	Sep 4, 2015
CONCLUSION	NOT ELEVATED	NORMAL	NORMAL	NORMAL

IDENTIFICATION	Raw Count	Spores per m <sup>3</sup>	Percent of Total	Mold Present	Mold Present	Mold Present	Mold Present
Alternaria							
Cladosporium							
Coelomycetes							
Ganoderma							
Other Ascospores							
Other Basidiospores	4	53	50				
Penicillium/Aspergillus	4	53	50				
Smuts, myxomycetes							
Unidentified Spores							

TOTAL SPORES	8	106	100	NA	NA	NA	NA
MINIMUM DETECTION LIMIT*	1	53		NA	NA	NA	NA

BACKGROUND DEBRIS	Light		Not Applicable		Not Applicable		Not Applicable	
Cellulose Fiber	16	210						
Fiberglass								
Insect Fragments	4	53						
Plant Fragments	8	110						
Pollen	4	53						

OBSERVATIONS & COMMENTS	No Fungi Detected.	No Fungi Detected.	No Fungi Detected.
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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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ANALYSIS METHOD	Spore trap analysis	Direct Microscopic Exam	Direct Microscopic Exam	INTENTIONALLY BLANK
LOCATION	PRINCIPAL SUITE	M.O. VENT GRILL	PREN SUITE VENT GRILL	
COC / LINE #	881683-9	881683-10	881683-11	
SAMPLE TYPE & VOLUME	AIR-O-CELL - 75L	SWAB	SWAB	
SERIAL NUMBER	21734982	None supplied	None supplied	
COLLECTION DATE	Sep 3, 2015	Sep 3, 2015	Sep 3, 2015	
ANALYSIS DATE	Sep 4, 2015	Sep 4, 2015	Sep 4, 2015	
CONCLUSION	NOT ELEVATED	NORMAL	NORMAL	

IDENTIFICATION	Raw Count	Spores <sub>3</sub> per m <sup>3</sup>	Percent of Total	Mold Present	Mold Present	Raw Count	Spores <sub>3</sub> per m <sup>3</sup>	Percent of Total
Alternaria								
Cladosporium								
Coelomycetes								
Ganoderma								
Other Ascospores								
Other Basidiospores								
Penicillium/Aspergillus	12	160	100					
Smuts, myxomycetes								
Unidentified Spores								

TOTAL SPORES	12	160	100	NA	NA
MINIMUM DETECTION LIMIT*	1	53		NA	NA

BACKGROUND DEBRIS	Light	Not Applicable	Not Applicable
Cellulose Fiber	8	110	
Fiberglass			
Insect Fragments			
Plant Fragments	4	53	
Pollen			

OBSERVATIONS & COMMENTS	No Fungi Detected.	No Fungi Detected.
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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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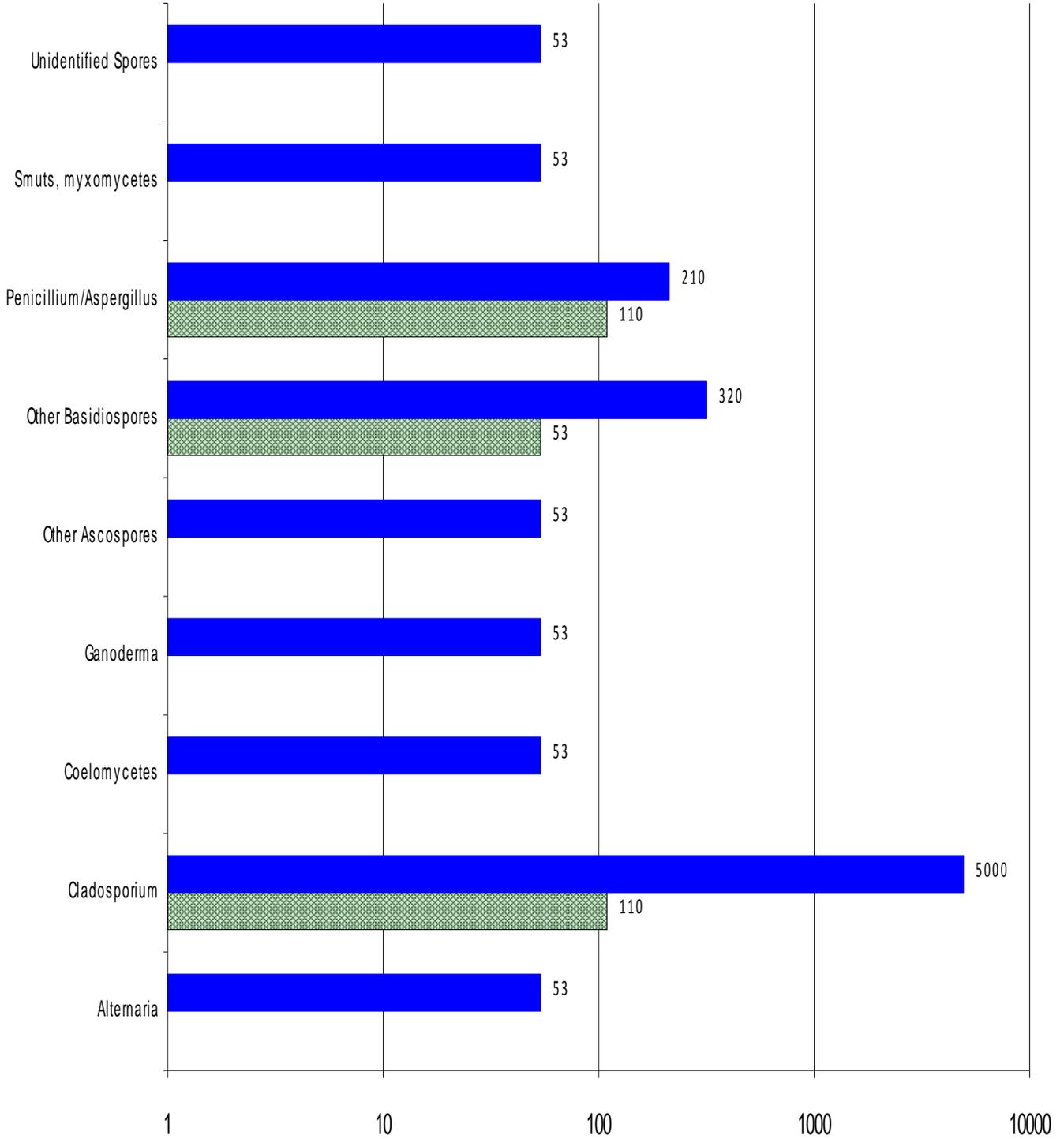
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**Chain of Custody # 881683**

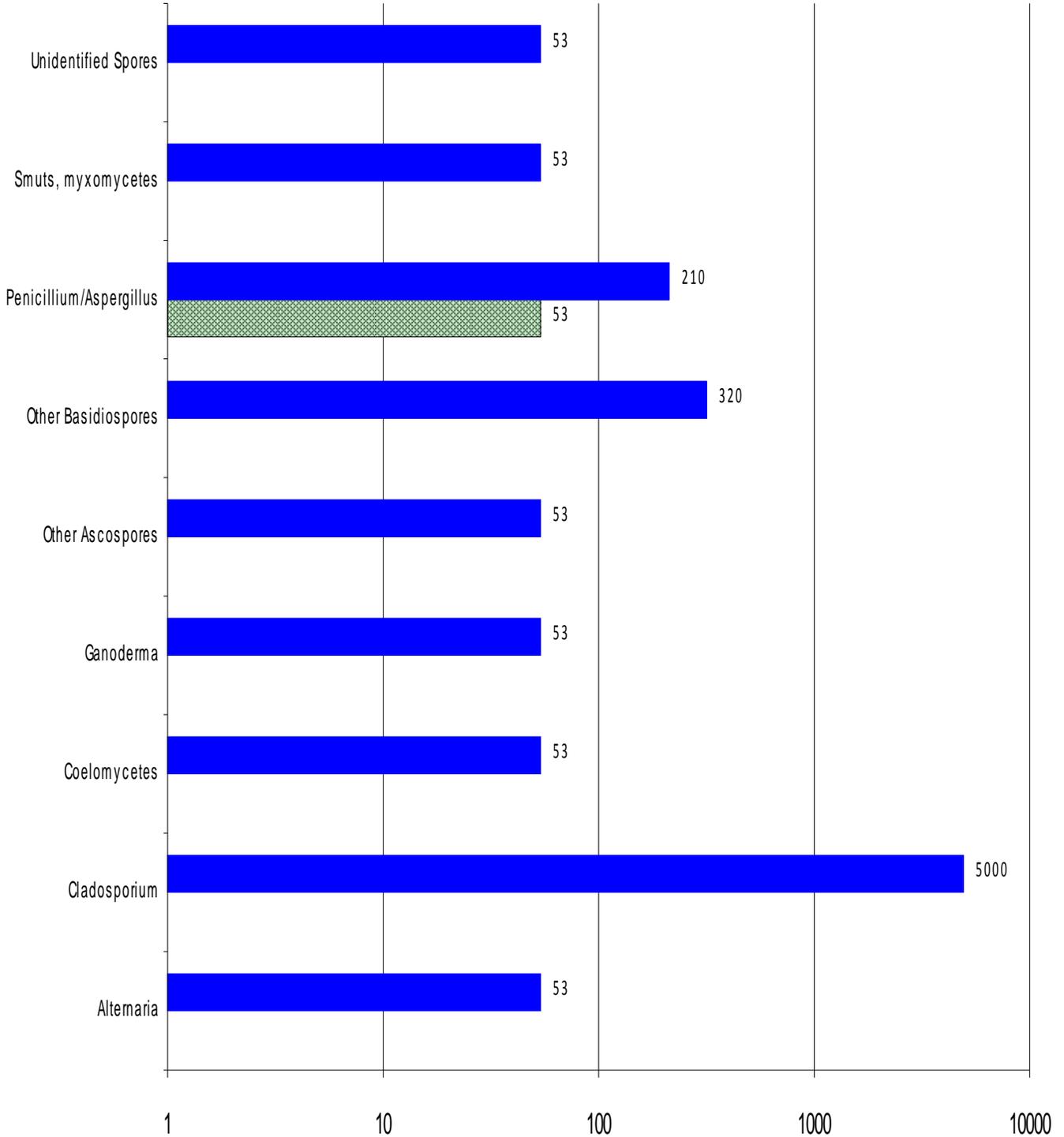
 Rm 104  
 Ambient



**Spores per cubic meter**

**Chain of Custody # 881683**

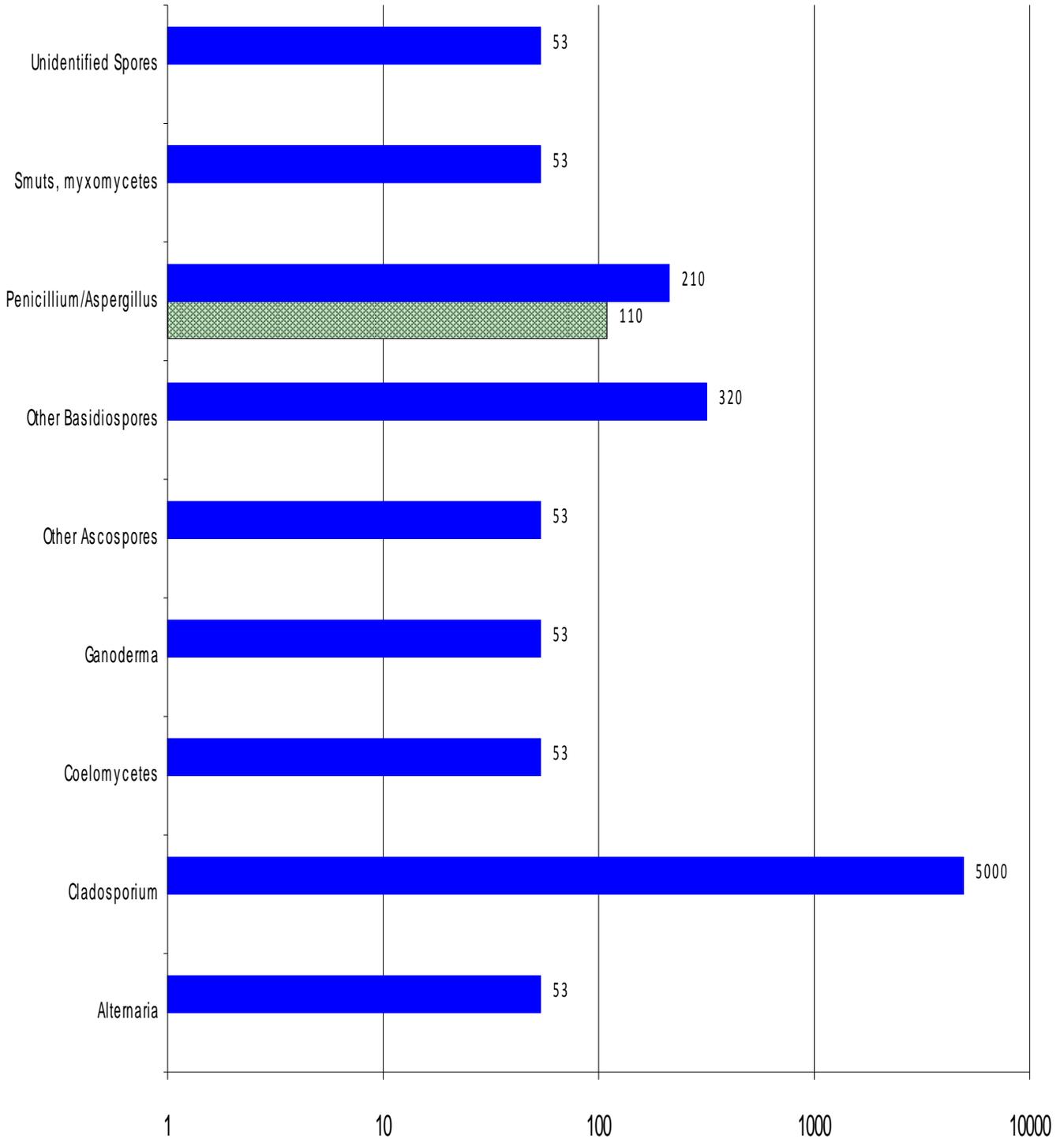
 Rm 306  
 Ambient



**Spores per cubic meter**

**Chain of Custody # 881683**

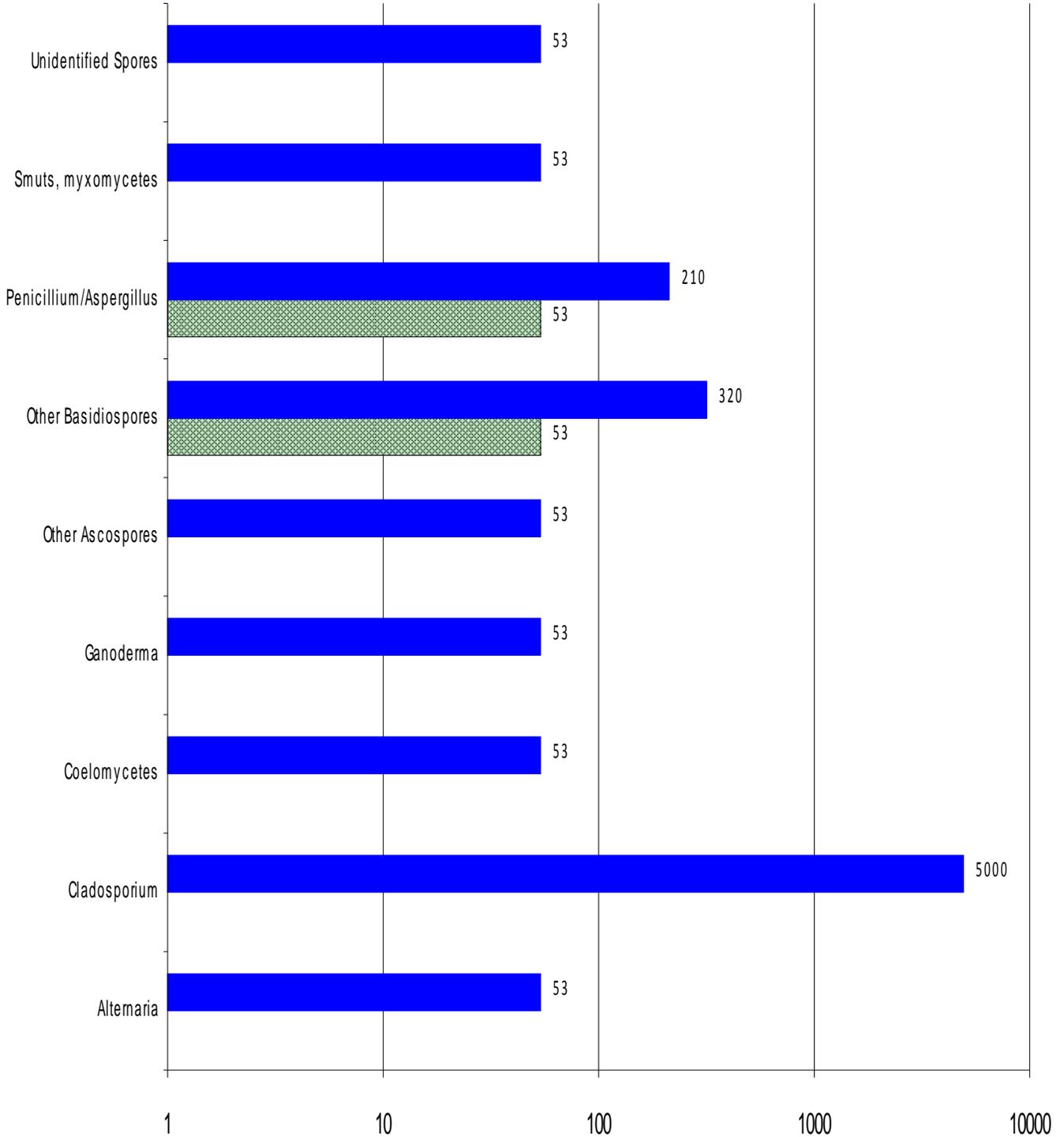
 Rm 128  
 Ambient



**Spores per cubic meter**

**Chain of Custody # 881683**

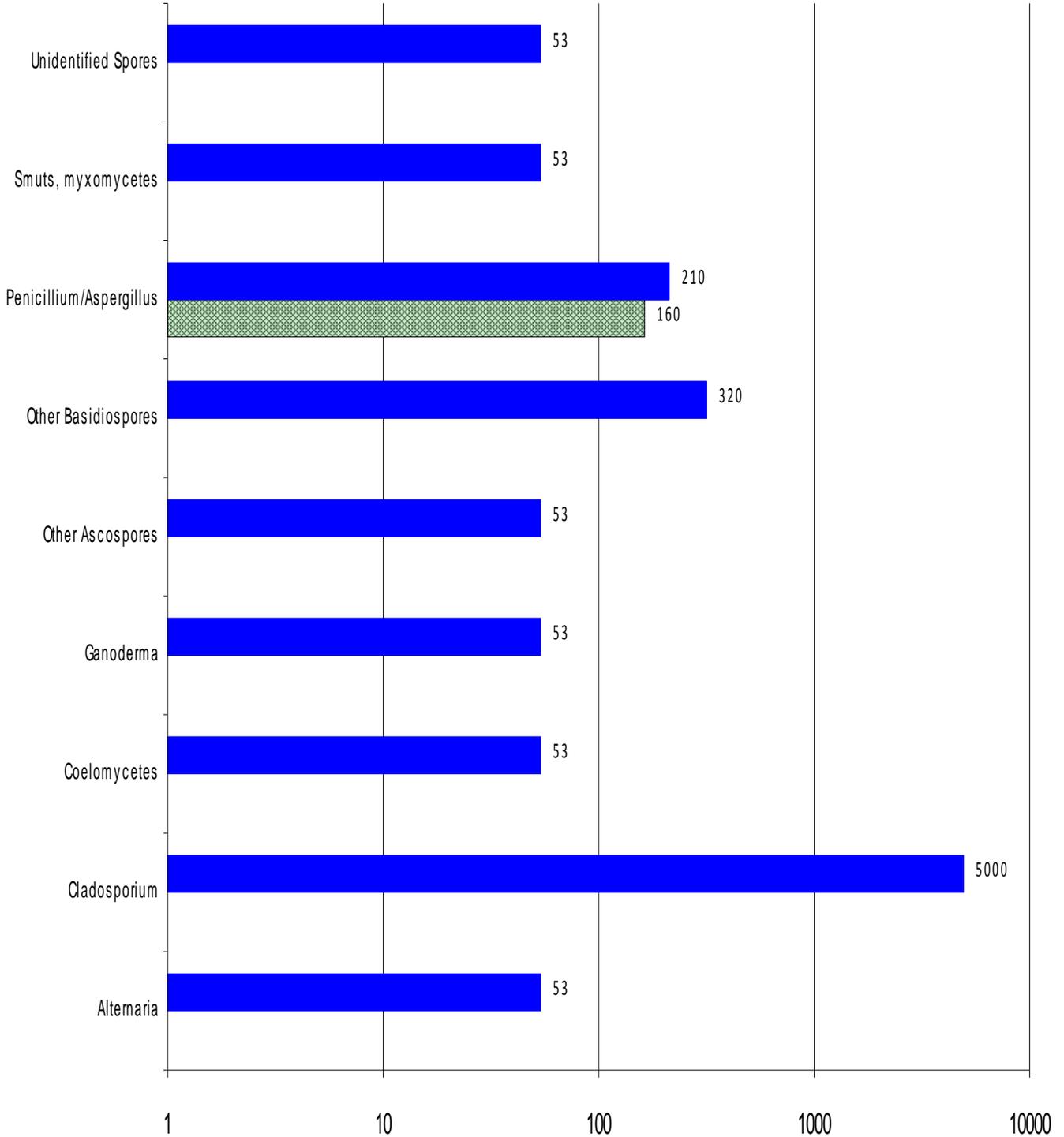
Library  
Ambient



**Spores per cubic meter**

**Chain of Custody # 881683**

Principal Suite  
Ambient



**Spores per cubic meter**

Identification	Outdoor Habitat	Indoor Habitat	Possible Allergic Potential Not an opinion or interpretation	Comments
Alternaria	One of the most commonly reported airborne spores worldwide. Often common in outdoor air. Usually not observed in large numbers in outdoor air. Soil, dead or dying plants, foodstuffs, textiles	Wallboard paper backing, wood, other various cellulose-containing materials. Commonly found in settled dust and as normal settled spores on carpets, drapes, textiles, etc.	Common allergen. Type I allergies (hay fever and asthma); Type III hypersensitivity pneumonitis. Common cause of extrinsic asthma.	Alternaria is commonly found in elevated numbers on water-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.
Coelomycetes	Commonly found everywhere growing on plants and animals.	Can grow on ceiling tiles, wood, paper	Type I (hay fever and asthma) allergies.	Rarely reported in the air because they are formed in fruiting bodies and generally slimy and therefore, difficult to be sent airborne.
Ganoderma	Common everywhere growing on hardwood trees.	None known.	None known.	
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, Ascotricha and Peziza.	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. These spores are from Mushrooms.	Mushrooms are not normally found growing indoors, but can grow on wet lumber, especially in crawlspaces. Sometimes mushrooms can be seen growing in flower pots indoors.	Some allergenicity reported. Type I (hay fever, asthma) and Type III (hypersensitivity pneumonitis).	Among the group of Mushrooms (Basidiomycetes) 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.
Smuts, myxomycetes	Commonly found everywhere, especially on logs, grasses and weeds.	Smuts don't normally grow indoors, but can occasionally be found on things brought from outside and stored in the house. Myxomycetes can occasionally grow indoors, but need lots of water to be established.	Type I (hay fever and asthma) allergies.	Smuts and myxomycetes are a combined group of organisms because their spores look so similar and cannot be reliably distinguished from each other.

<b>Identification</b>	<b>Outdoor Habitat</b>	<b>Indoor Habitat</b>	<b>Possible Allergic Potential</b> Not an opinion or interpretation	<b>Comments</b>
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.