

COASTAL ENVIRONMENTAL
PO BOX 167
HAMMONTON, NJ 08330

Certificate of Mold Analysis

Prepared for: COASTAL ENVIRONMENTAL
Phone Number:
Fax Number:
Project Name: SMSS CLEARANCE
Test Location:
,
Chain of Custody #: 1163080
Received Date: August 28, 2018
Report Date: August 29, 2018



Carlos Ochoa, Technical and 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. 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

Prepared for : COASTAL ENVIRONMENTAL

Test Address : SMSS CLEARANCE

ANALYSIS METHOD	Spore trap analysis	Spore trap analysis	Spore trap analysis	Spore trap analysis
LOCATION	AMBIENT	RM 104	RM 106	RM 109
COC / LINE #	1163080-1	1163080-2	1163080-3	1163080-4
SAMPLE TYPE & VOLUME	AIR-O-CELL - 75L	AIR-O-CELL - 75L	AIR-O-CELL - 75L	AIR-O-CELL - 75L
SERIAL NUMBER	26497927	26498059	26498136	26498044
COLLECTION DATE	Aug 27, 2018	Aug 27, 2018	Aug 27, 2018	Aug 27, 2018
ANALYSIS DATE	Aug 29, 2018	Aug 29, 2018	Aug 29, 2018	Aug 29, 2018
CONCLUSION	CONTROL	NOT ELEVATED	NOT ELEVATED	ELEVATED

IDENTIFICATION	Raw Count	Spores per m ³	Percent of Total	Raw Count	Spores per m ³	Percent of Total	Raw Count	Spores per m ³	Percent of Total	Raw Count	Spores per m ³	Percent of Total
Curvularia												
Ganoderma	8	110	9									
Other Ascospores	16	210	16				4	53	25	4	53	2
Other Basidiospores	48	640	50	4	53	8	8	110	51	8	110	3
Penicillium/Aspergillus	8	110	9	32	430	67	4	53	25	236	3,100	95
Pithomyces	8	110	9									
Smuts, myxomycetes	8	110	9									
Spegazzinia				4	53	8						
Torula				8	110	17						

TOTAL SPORES	96	1,290	100	48	646	100	16	216	100	248	3,263	100
MINIMUM DETECTION LIMIT*	4	53		4	53		4	53		4	53	

BACKGROUND DEBRIS	Moderate			Moderate			Moderate			Moderate		
Cellulose Fiber	8	110		4	53		8	110		8	110	
Fiberglass	4	53		4	53		4	53				

OBSERVATIONS & COMMENTS	Non biological debris present.	Non biological debris present.	Non biological debris present.	Non biological debris present.
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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. Light (None to up to 25% obstruction); Medium (26% to up to 75% obstruction); Heavy (76% to up to 90% obstruction); Too Heavy (Greater than 90% obstruction). 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.

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Test Address : SMSS CLEARANCE

ANALYSIS METHOD	Spore trap analysis	Spore trap analysis	Spore trap analysis	Spore trap analysis
LOCATION	RM 110	RM 120	RM 121	RM 128
COC / LINE #	1163080-5	1163080-6	1163080-7	1163080-8
SAMPLE TYPE & VOLUME	AIR-O-CELL - 75L	AIR-O-CELL - 75L	AIR-O-CELL - 75L	AIR-O-CELL - 75L
SERIAL NUMBER	26497945	26497983	26498214	26498032
COLLECTION DATE	Aug 27, 2018	Aug 27, 2018	Aug 27, 2018	Aug 27, 2018
ANALYSIS DATE	Aug 29, 2018	Aug 29, 2018	Aug 29, 2018	Aug 29, 2018
CONCLUSION	NOT ELEVATED	NOT ELEVATED	NOT ELEVATED	NOT ELEVATED

IDENTIFICATION	Raw Count	Spores per m ³	Percent of Total	Raw Count	Spores per m ³	Percent of Total	Raw Count	Spores per m ³	Percent of Total	Raw Count	Spores per m ³	Percent of Total
Curvularia				8	110	67						
Ganoderma												
Other Ascospores												
Other Basidiospores				4	53	33	4	53	14	4	53	33
Penicillium/Aspergillus	8	110	100				24	320	86	8	110	67
Pithomyces												
Smuts, myxomycetes												
Spegazzinia												
Torula												

TOTAL SPORES	8	110	100	12	163	100	28	373	100	12	163	100
MINIMUM DETECTION LIMIT*	4	53		4	53		4	53		4	53	

BACKGROUND DEBRIS	Moderate			Moderate			Moderate			Moderate		
Cellulose Fiber	4	53		8	110		8	110		4	53	
Fiberglass	8	110		4	53		4	53				

OBSERVATIONS & COMMENTS	Non biological debris present.	Non biological debris present.	Non biological debris present.	Non biological debris present.
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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. Light (None to up to 25% obstruction); Medium (26% to up to 75% obstruction); Heavy (76% to up to 90% obstruction); Too Heavy (Greater than 90% obstruction). 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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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.

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ANALYSIS METHOD	Direct Microscopic Exam	Direct Microscopic Exam	Direct Microscopic Exam	Direct Microscopic Exam
LOCATION	104 CHAIRS	106 COMP TABLE	109 TAB 6	110 KITCHEN SET
COC / LINE #	1163080-9	1163080-10	1163080-11	1163080-12
SAMPLE TYPE & VOLUME	SWAB	SWAB	SWAB	SWAB
SERIAL NUMBER	104	106	109	110
COLLECTION DATE	Aug 27, 2018	Aug 27, 2018	Aug 27, 2018	Aug 27, 2018
ANALYSIS DATE	Aug 29, 2018	Aug 29, 2018	Aug 29, 2018	Aug 29, 2018
CONCLUSION	NORMAL	NORMAL	NORMAL	NORMAL

IDENTIFICATION		Mold Present		Mold Present		Mold Present		Mold Present
Curvularia								
Ganoderma								
Other Ascospores								
Other Basidiospores								
Penicillium/Aspergillus		X				X		
Pithomyces								
Smuts, myxomycetes								
Spegazzinia								
Torula								

TOTAL SPORES		NA		NA		NA		NA
MINIMUM DETECTION LIMIT*		NA		NA		NA		NA

BACKGROUND DEBRIS	Not Applicable	Not Applicable	Not Applicable	Not Applicable
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OBSERVATIONS & COMMENTS	No presence of current or former growth observed. Only normally settled spores observed.	No Fungi Detected.	No presence of current or former growth observed. Only normally settled spores observed.	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. Light (None to up to 25% obstruction); Medium (26% to up to 75% obstruction); Heavy (76% to up to 90% obstruction); Too Heavy (Greater than 90% obstruction). 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	Direct Microscopic Exam	Direct Microscopic Exam	Direct Microscopic Exam	INTENTIONALLY BLANK
LOCATION	120 TABLE	121 CABINET	128 COMP TABLE	
COC / LINE #	1163080-13	1163080-14	1163080-15	
SAMPLE TYPE & VOLUME	SWAB	SWAB	SWAB	
SERIAL NUMBER	120	121	128	
COLLECTION DATE	Aug 27, 2018	Aug 27, 2018	Aug 27, 2018	
ANALYSIS DATE	Aug 29, 2018	Aug 29, 2018	Aug 29, 2018	
CONCLUSION	NORMAL	NORMAL	NORMAL	

IDENTIFICATION	Mold Present	Mold Present	Mold Present	Raw Count	Spores per m ³	Percent of Total
Curvularia						
Ganoderma						
Other Ascospores						
Other Basidiospores						
Penicillium/Aspergillus		X				
Pithomyces						
Smuts, myxomycetes						
Spegazzinia						
Torula						

TOTAL SPORES	NA	NA	NA			
MINIMUM DETECTION LIMIT*	NA	NA	NA			

BACKGROUND DEBRIS	Not Applicable	Not Applicable	Not Applicable	
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OBSERVATIONS & COMMENTS	No Fungi Detected.	No presence of current or former growth observed. Only normally settled spores observed.	No Fungi Detected.	
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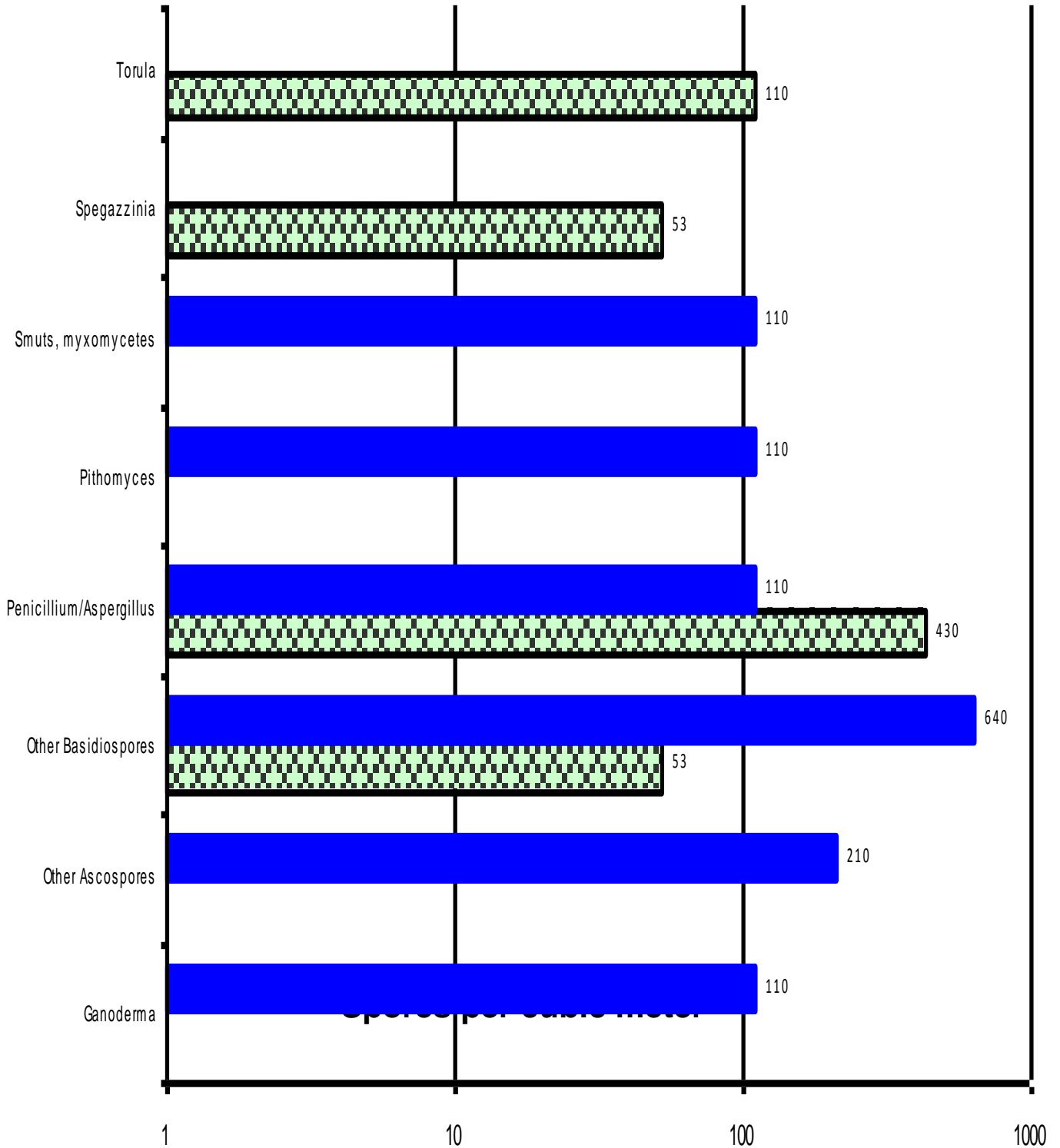
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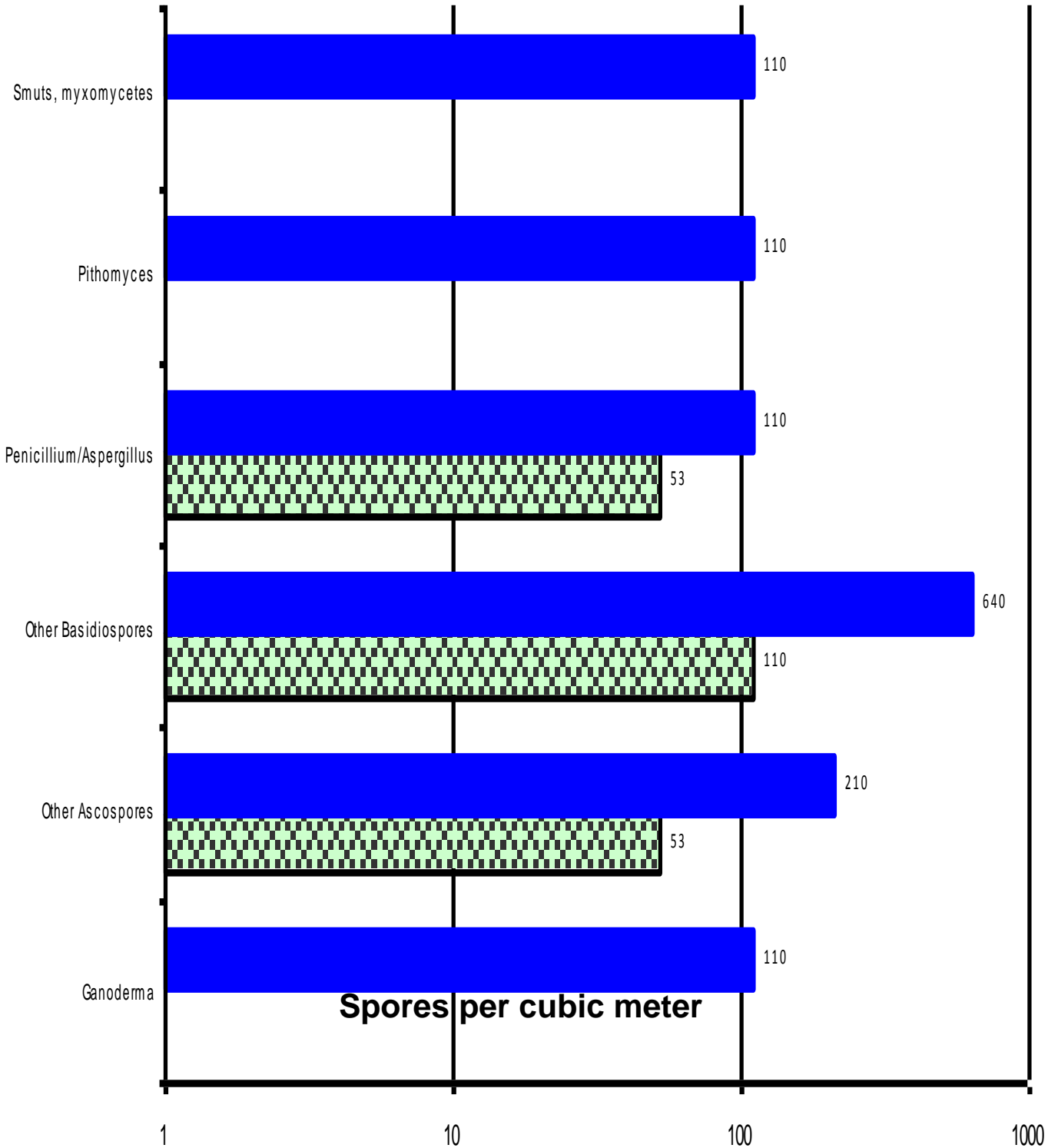
Chain of Custody # 1163080

■ Rm 104
■ Ambient





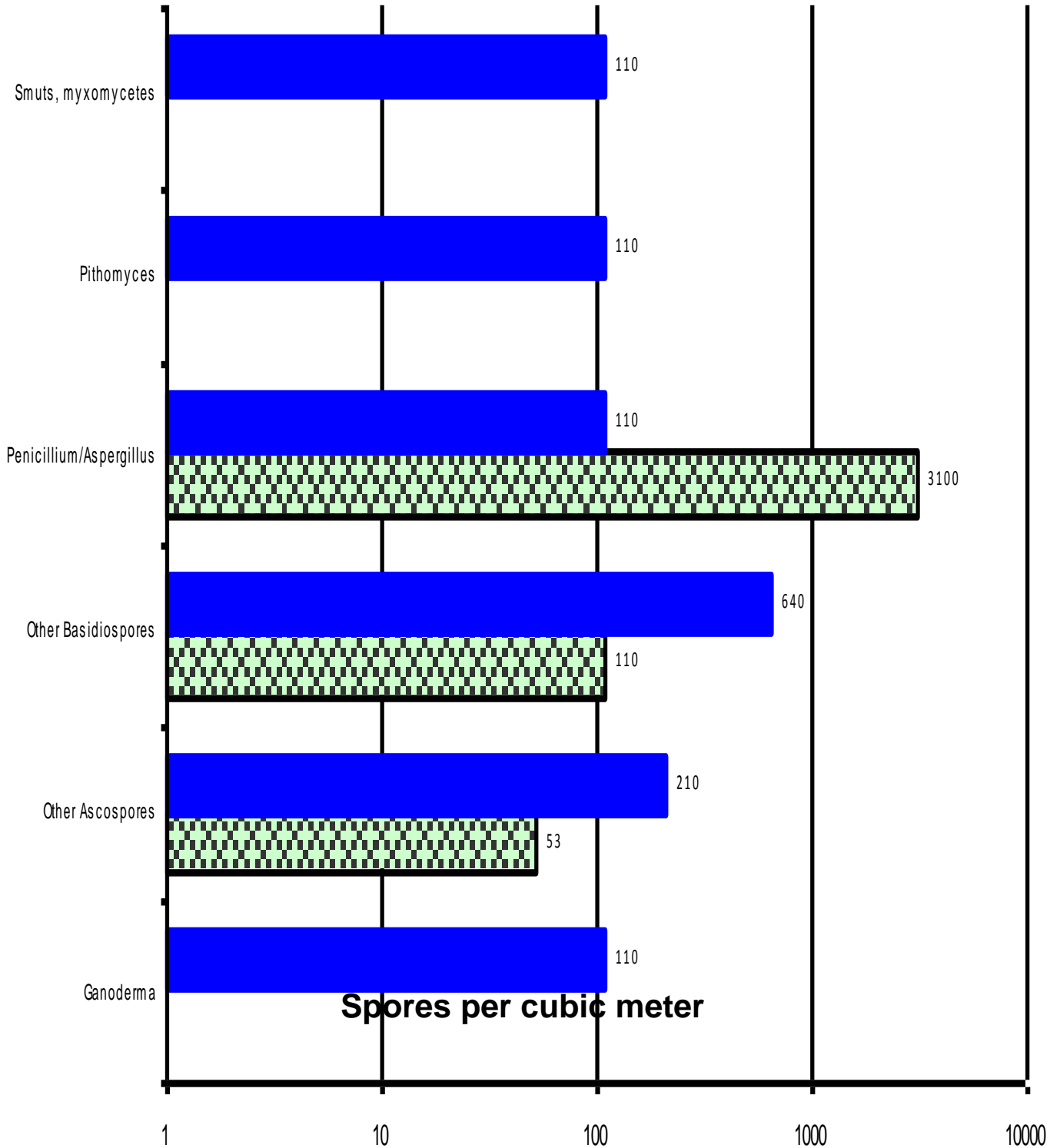
Chain of Custody # 1163080

■ Rm 106
■ Ambient





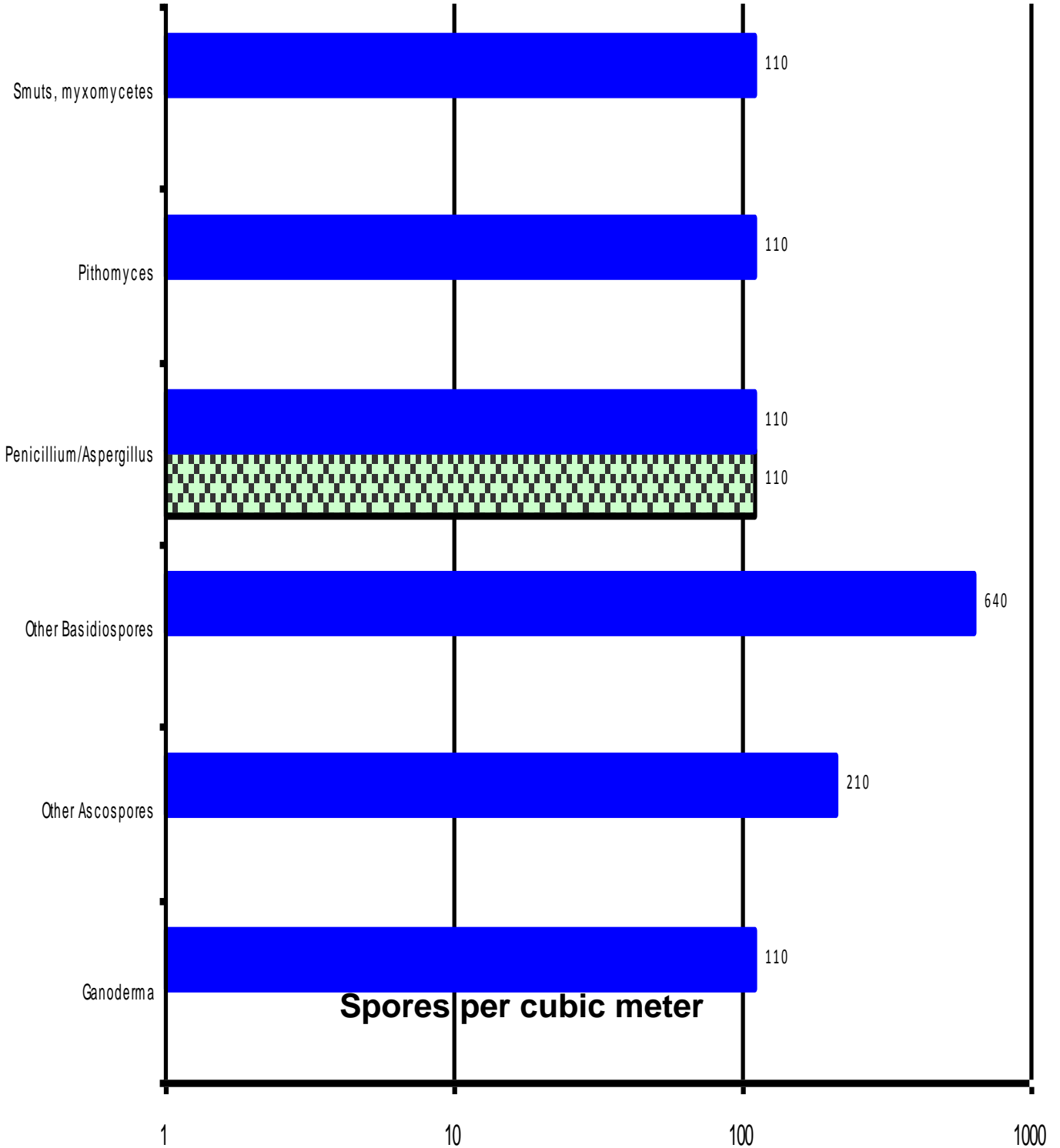
Chain of Custody # 1163080

 Rm 109
 Ambient





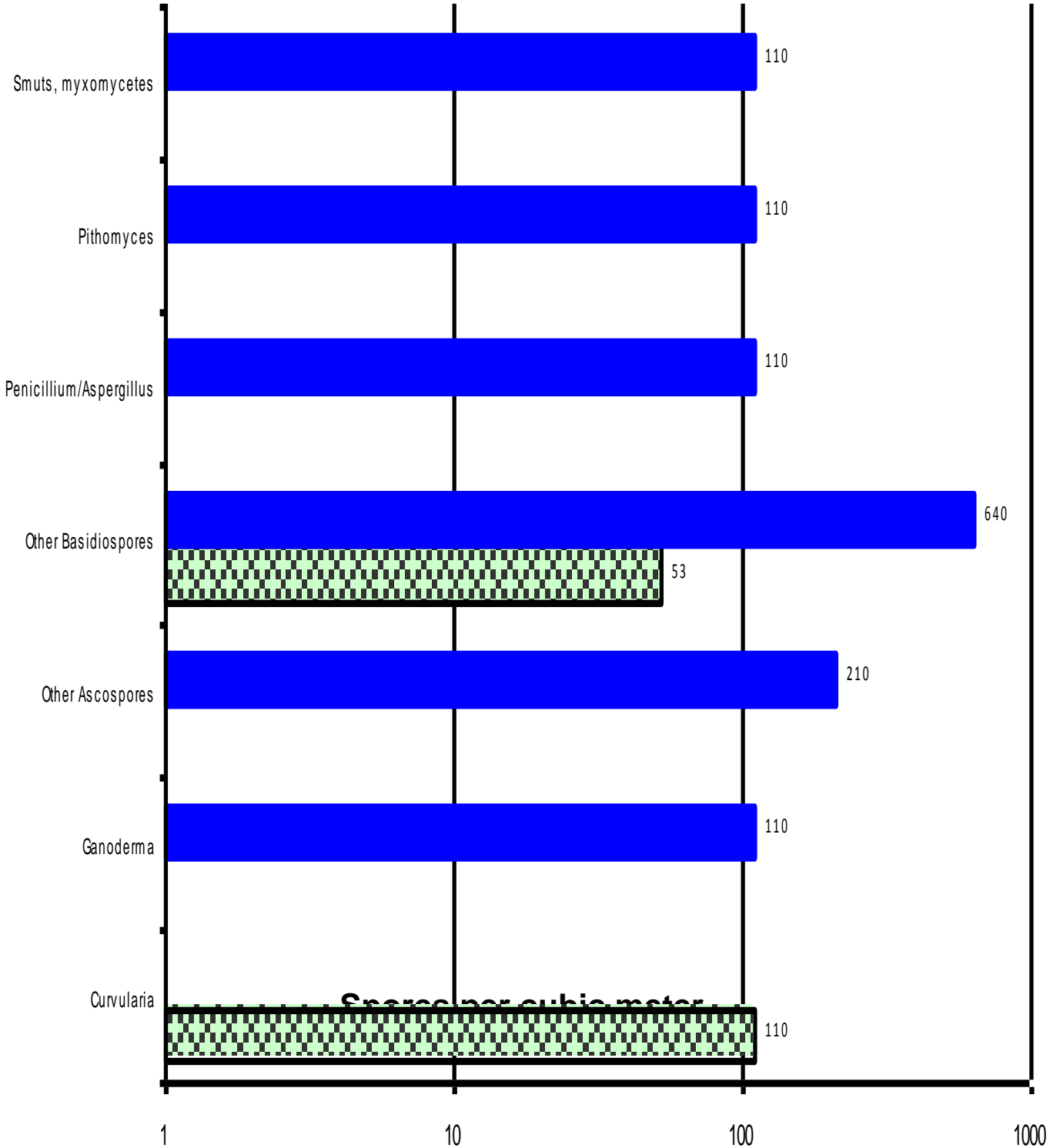
Chain of Custody # 1163080

 Rm 110
 Ambient





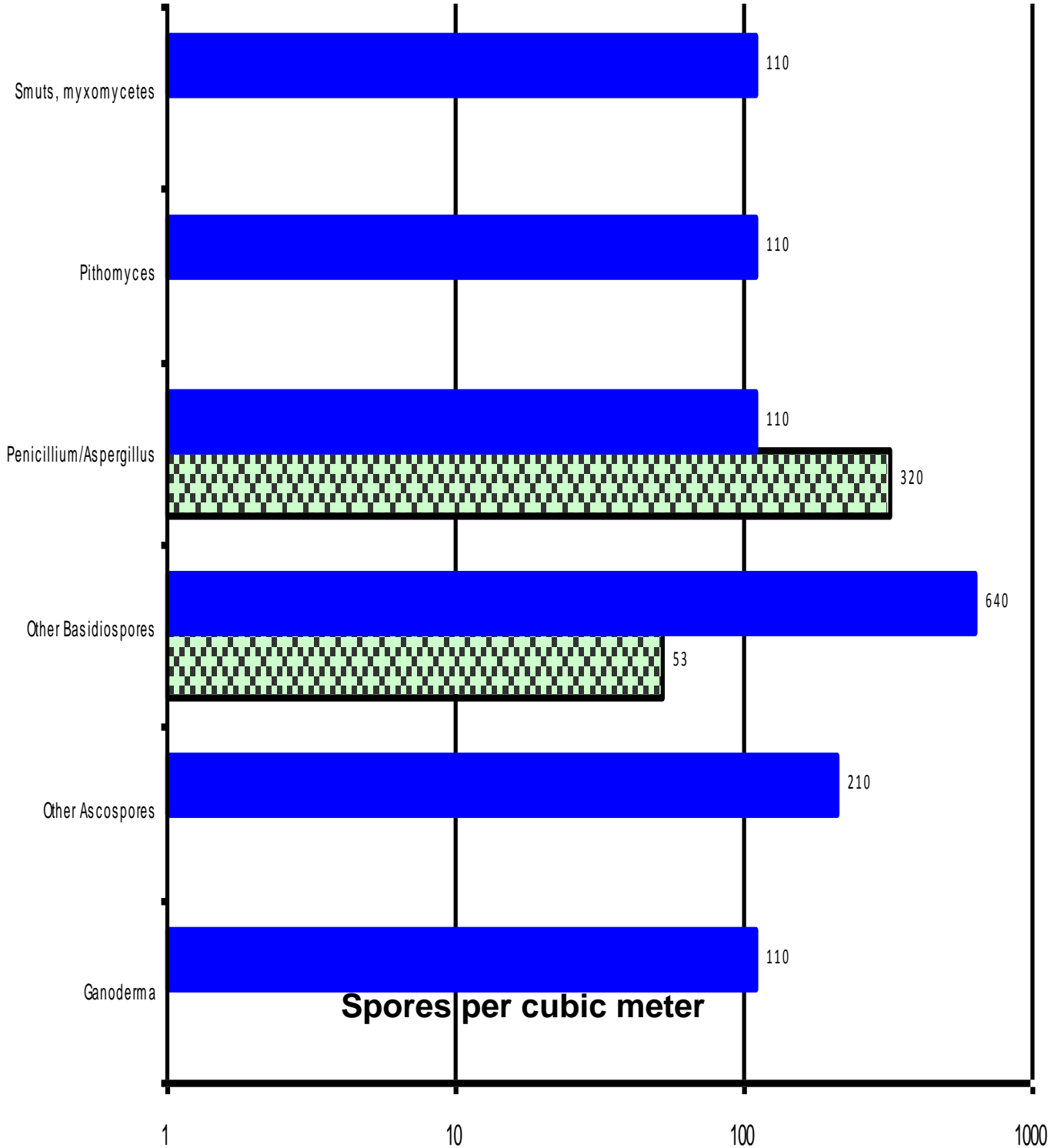
Chain of Custody # 1163080

 Rm 120
 Ambient





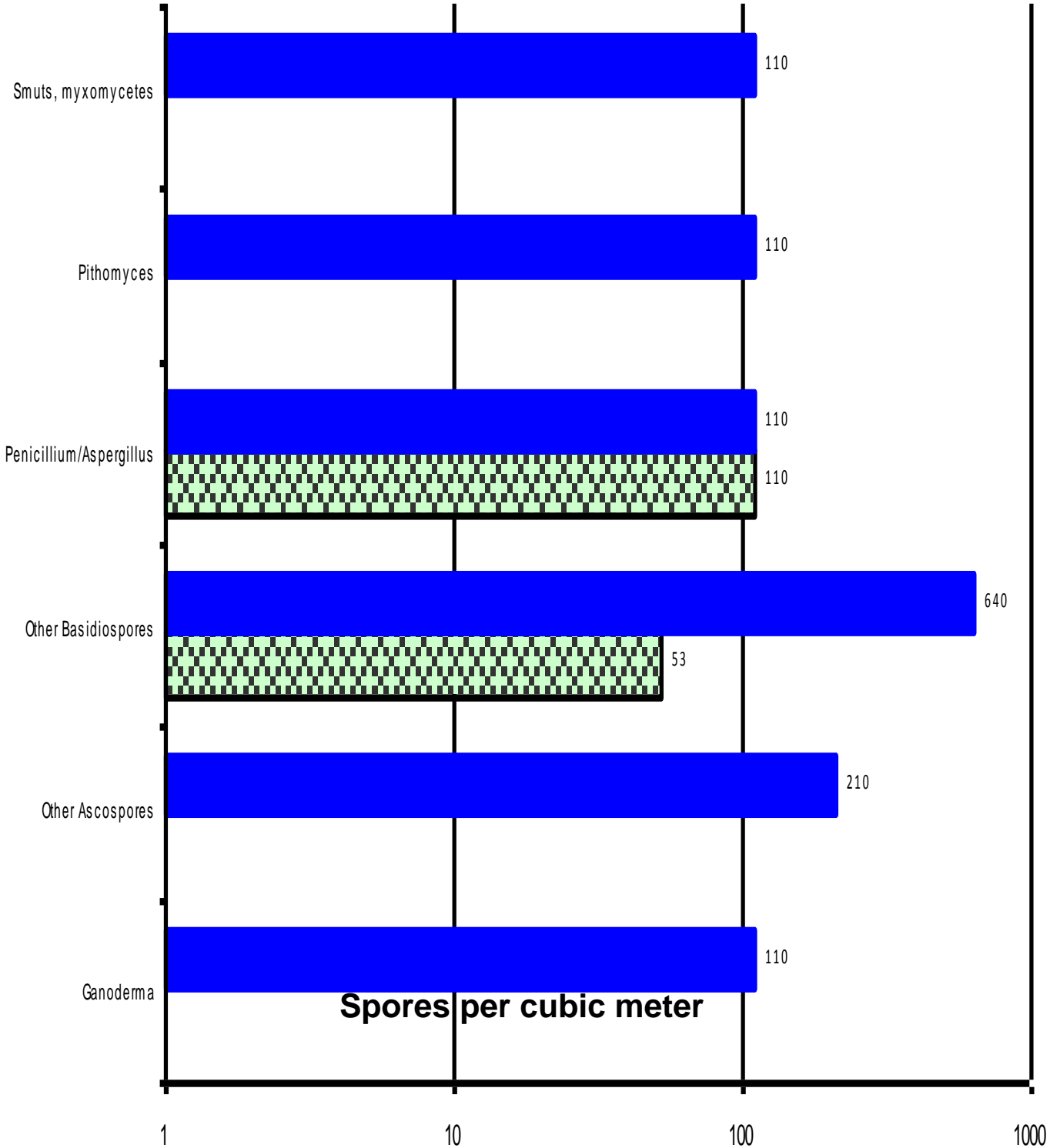
Chain of Custody # 1163080

 Rm 121
 Ambient



Chain of Custody # 1163080

 Rm 128
 Ambient



Identification	Outdoor Habitat	Indoor Habitat	Possible Allergic Potential Not an opinion or interpretation	Comments
Curvularia	Commonly found everywhere on soil and plant debris.	Capable of growing on many cellulytic substrates like wallboard and wood.	Type I (hay fever and asthma) and common cause of allergenic sinusitis.	
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.
Pithomyces	Commonly seen everywhere growing dead leaves, soil and grasses.	Not normally found growing indoors, sometimes on wallboard.	None known.	
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.
Spegazzinia	Not commonly observed, but widely distributed.	Not known to grow indoors.	None known.	Frequently seen especially in southern United States.
Torula	Common everywhere growing on soil, decaying and dead leaves, and grasses.	Wallboard and other cellulose-based materials.	Type I (hay fever and asthma) allergies.	