



HYGIENETECH

Hygiene Technologies International, Inc.

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April 16, 2008

California State Board of Equalization
450 N Street
Sacramento, California 94279

Document No. 20804001.2

Attention: David Gau

Regarding: Limited Fungal Growth Exposure Assessment Survey
First Floor Meeting Rooms 105, 106, 107, 108, 110, 111, and Adjacent Reception Area

Dear Mr. Gau:

On April 9, 2008, industrial hygienists with Hygiene Technologies International, Inc. (HygieneTech) conducted a limited fungal growth assessment survey involving the above referenced areas on the First Floor of the California State Board of Equalization (BOE) building. On that date, HygieneTech was informed by a BOE representative that wet carpet flooring had reportedly been observed by an employee in Room 107 that morning. The survey findings, along with the analytical data, conclusions, and recommendations appear below.

The interior building materials in the areas inspected included, but were not limited to, gypsum board walls that were painted or covered with a fabric material; metal framed perimeter curtain wall windows; suspended ceiling tiles; vinyl cove base at lower walls; and a concrete subfloor overlaid with carpet tiles.

Upon visual inspection, evidence of water intrusion was apparent in Rooms 105, 106, 107, 108, 110, and 111. Specifically, water stains, efflorescence and/or mineral deposits indicative of previous water exposure were observed on metal curtain wall window framing in Rooms 105 through 108 and Room 110 (Photos 3 through 6, 8, 9, and 13 through 18). In the planter area outside of the above mentioned rooms, moist soil surface was observed and numerous water marks were evident on the exterior north facing window panes, indicating that sprinklers in those areas had likely sprayed directly onto the building exterior (Photos 1, 2, and 7). Additionally, carpet tiles were moist to the touch along the curtain window walls in Rooms 105 through 108 and, to a lesser degree, in Rooms 110 and 111. Visible water staining was only observed on carpet tiles in Room 107 (Photos 10 through 12). Odors characteristic of fungal growth were observed at the carpet flooring tiles in Rooms 105 through 108, but no such odors were evident in Rooms 110, 111, or other adjacent areas.

At the time of survey, air samples were collected for total (viable and nonviable) fungi analyses using a Zefon brand Bio-Pump™ equipped with Allergenco-D™ cassettes. Surface samples were collected for fungal growth assessment using Zefon Bio-Tape® and from various carpet tile surfaces using Healthlink® Transporters™ (Rayon tipped swabs immersed in 0.5 ml modified Stuart's transport medium). All such samples were subsequently analyzed for fungi (including yeasts, molds, rusts, smuts, and mushrooms) by trained and experienced microbiologists at a laboratory accredited by the American Industrial Hygiene



Association (AIHA) and that successfully participates in the AIHA Environmental Microbiology Proficiency Analytical Testing (EMPAT) Program. The airborne fungi and surface assessment analytical data with supporting and background information appear in the enclosed tables.

As presented in Table 20804001-1, the airborne spore count data showed common spore types outdoors such as *Alternaria*, ascospores, basidiospores, *Chaetomium*, *Cladosporium*, colorless spores typical of *Penicillium* and *Aspergillus* species, *Oidium*, other brown, other colorless, rusts, and/or *Torula*, with colorless spores typical of *Penicillium* and *Aspergillus* species predominating in both samples collected. In the indoor areas tested, the data showed airborne concentrations of common fungal spores along with a low but detectable level of the less common or "indicator mold" *Stachybotrys* in Room 105. While the levels of colorless spores typical of *Penicillium* and *Aspergillus* species detected in Room 107, Room 105, and the reception area were well below the levels recorded outdoors, they were somewhat higher than the historic levels of colorless spores typical of *Penicillium* and *Aspergillus* species HygieneTech had previously recorded within the building. Such levels may be attributable to the proximity of these areas to the main front entrance of the building or potential fungal growth reservoirs in these areas. However, the data recorded were considered unremarkable and are not believed to pose a health risk beyond that posed by the outdoor environment where exposures to airborne fungi are expected.

The surface assessment data, which appear with supporting information in Table 20804001-2, indicated minor fungal growth involving *Cladosporium* on the eastern curtain wall window frame in Room 105 and brown hyphae with no associated spores on the reverse side of a carpet tile also in the same room.

By observation and upon review of the analytical data, HygieneTech has concluded that repeated water intrusion had likely occurred to varying degrees in Rooms 105, 106, 107, 108, 110, and 111 through the first floor curtain wall windows during outdoor landscape sprinkler operation in those areas. The minimal fungal growth found in Room 105 was likely the result of such water intrusion. Note that some degree of water intrusion may have occurred above the first floor due to the staining patterns observed on some of the metal curtain wall window frames that appeared to originate from above the ceiling line. Based on these findings, HygieneTech recommends that additional building investigative and/or remediation efforts are performed in Rooms 105, 106, 107, and 108.

Be advised that the data provided in this report only represent limited fungal growth and exposure potentials that existed at the time the survey was performed and at the precise sample locations indicated, the latter of which were selected based on the available background information provided. Note that fungal growth and exposure potentials may change due to changes in environmental conditions (such as those caused by water intrusion), use of mechanical systems, or other factors. Also be advised that additional fungal growth may exist at one or more locations in the structure that were not specifically assessed during the survey.

If you have any comments or questions regarding the information contained in this correspondence, please feel free to contact our offices directly at (310) 370-8370.

Sincerely,

HYGIENE TECHNOLOGIES INTERNATIONAL, INC.

Kenny K. Hsi, CIH
Technical Director

HYGIENE TECHNOLOGIES INTERNATIONAL, INC.

APPENDIX A



CLIENT: California State Board of Equalization
450 N Street
Sacramento, California 94279

TABLE 20804001-1
AIRBORNE TOTAL FUNGI RESULTS
1ST FLOOR
SACRAMENTO, CALIFORNIA
APRIL 9, 2008

Page 1

Results reported in spores per cubic meter of air (spores/M³)

SAMPLE NUMBER	20804001-TM01OUTCL	20804001-TM02CL	20804001-TM03CL	20804001-TM04CL
SAMPLING LOCATION/ACTIVITIES	Outdoors; about 25 feet east of building; approximately five feet above floor/Sampling activities only	Room 107; about center; approximately five feet above floor/Sampling activities only	Reception area; about five feet south of Room 107; approximately five feet above floor/Normal office activities	Room 105; about center; approximately five feet above floor/Sampling activities only
START/STOP	09:50:00/09:55:00	10:05:00/10:10:00	14:00:00/14:05:00	14:07:00/14:12:00
SAMPLE TIME	5 minutes	5 minutes	5 minutes	5 minutes
Alternaria	13		13	
Arthrimum				
Ascospores		107	53	
Aureobasidium				
Basidiospores	533	373	320	107
Bipolaris/Drechslera group			13	
Botrytis				
Chaetomium				
Cladosporium	373	160	320	
Curvularia				
Epicoccum				
Nigrospora				
Oidium	13		13	
Other colorless				13
Penicillium/Aspergillus types	2,350	640	853	267
Pithomyces				
Rusts			13	
Smuts (Periconia, Myxomycetes)			27	
Stachybotrys				13
Stemphylium				
Torula				
Ulocladium				
Hyphal fragments	67	13	53	27
Background debris*	3+	2+	2+	2+
TOTAL**	3,282	1,280	1,625	400

Background debris is an indication of the amount of non-biological particulate matter present on the slide and is graded (from least to greatest) as 1+ to 4+.

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TABLE 20804001-1
AIRBORNE TOTAL FUNGI RESULTS
1ST FLOOR
SACRAMENTO, CALIFORNIA
APRIL 9, 2008

Page 2

Results reported in spores per cubic meter of air (spores/M³)

SAMPLE NUMBER	20804001-TM05CL	20804001-TM06CL	20804001-TM07CL	20804001-TM08OUTCL
SAMPLING LOCATION/ACTIVITIES	Room 108; about center; approximately five feet above floor/Sampling activities only	Room 110; about center; approximately five feet above floor/Sampling activities only	Room 111; about center; approximately five feet above floor/Sampling activities only	Outdoors; about 25 feet east of building; approximately five feet above floor/Sampling activities only
START/STOP	14:15:00/14:20:00	14:23:00/14:28:00	14:30:/14:35:00	14:45:00/14:50:00
SAMPLE TIME	5 minutes	5 minutes	5 minutes	5 minutes
Alternaria			13	
Arthrimum				
Ascospores				107
Aureobasidium				
Basidiospores			107	213
Bipolaris/Drechslera group				
Botrytis				
Chaetomium				13
Cladosporium	53	53		427
Curvularia				
Epicoccum				
Nigrospora				
Other brown				80
Other colorless				13
Penicillium/Aspergillus types	53		107	1,920
Pithomyces				
Rusts	13			147
Smuts (Periconia, Myxomycetes)			13	
Stachybotrys				
Stemphylium				
Torula				13
Ulocladium				
Hyphal fragments	13	<13	<13	93
Background debris*	1+	1+	1+	3+
TOTAL**	119	53	240	2,933

Background debris is an indication of the amount of non-biological particulate matter present on the slide and is graded (from least to greatest) as 1+ to 4+.

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1ST FLOOR
SACRAMENTO, CALIFORNIA
APRIL 9, 2008

Page 3

Results reported in spores per cubic meter of air (spores/M³)

SAMPLE NUMBER	20804001-TM09CL			
SAMPLING LOCATION/ACTIVITIES	Room 106; about center; approximately five feet above floor/Sampling activities only			
START/STOP	15:15:00/15:20:00			
SAMPLE TIME	5 minutes			
Alternaria				
Arthrinium				
Ascospores				
Aureobasidium				
Basidiospores	160			
Bipolaris/Drechslera group				
Botrytis				
Chaetomium				
Cladosporium	63			
Curvularia				
Epicoccum				
Nigrospora				
Oidium				
Other brown	13			
Penicillium/Aspergillus types	160			
Pithomyces				
Rusts				
Smuts (Periconia, Myxomycetes)				
Stachybotrys				
Stemphylium				
Torula				
Ulocladium				
Hyphal fragments	13			
Background debris*	4+			
TOTAL **	386			

Background debris is an indication of the amount of non-biological particulate matter present on the slide and is graded (from least to greatest) as 1+ to 4+.

HYGIENE TECHNOLOGIES INTERNATIONAL, INC.

APPENDIX A



CLIENT: California State Board of Equalization
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Sacramento, California 94279

TABLE 20804001-2
SURFACE FUNGAL GROWTH POTENTIALS
1ST FLOOR
SACRAMENTO, CALIFORNIA
APRIL 9, 2008

Page 1

SAMPLE NUMBER	SAMPLING LOCATION	AMORPHOUS DEBRIS	MISCELLANEOUS FUNGI/POLLEN	FUNGI SEEN WITH UNDERLYING MYCELIAL AND/OR SPORULATING STRUCTURES**	OTHER COMMENTS	GENERAL IMPRESSION
20804001-TL01CL	Room 107; northern perimeter window frame; about center; approximately three inches above floor; from vertical surface of metal	Heavy	Very few	None	None	Normal trapping
20804001-TL02CL	Room 105; northern perimeter window frame; about five feet east of western partition wall; approximately one inch above floor; from vertical surface of metal	Moderate	Very few	<1 <i>Cladosporium</i> species (spores, hyphae)	None	Minimal mold growth
20804001-TL03CL	Room 108; northern perimeter window frame; about five feet west of eastern partition wall; approximately two inches above floor; from vertical surface of metal	Moderate	Very few	None	None	Normal trapping
20804001-TL04CL	Room 106; northern perimeter window frame; about center; approximately one inch above floor; from vertical surface of metal	Moderate	Very few	None	None	Normal trapping
20804001-S01CL	Room 105; floor; about six inches south of northern perimeter window frame; about five feet east of western partition wall; from reverse side of carpet tile	Moderate	Very few	<1+ brown hyphae with no associated spores, ID unknown (hyphae)	None	Minimal fungal growth
20804001-S02CL	Room 107; floor; about six inches south of northern perimeter window frame; about five feet east of western partition wall; from reverse side of carpet tile	Moderate	Very few	None	None	Normal trapping

* Includes basidiospores (mushroom spores), myxomycetes, plant pathogens such as ascospores, rusts and smuts, and a mix of saprophytic genera with no particular spore type predominating (indicative of normal trapping).

**Quantities of fungi are graded (from least to greatest) as <1+ to 4+.

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TABLE 20804001-2
SURFACE FUNGAL GROWTH POTENTIALS
1ST FLOOR
SACRAMENTO, CALIFORNIA
APRIL 9, 2008

Page 2

SAMPLE NUMBER	SAMPLING LOCATION	AMORPHOUS DEBRIS	MISCELLANEOUS FUNGI/POLLEN	FUNGI SEEN WITH UNDERLYING MYCELIAL AND/OR SPORULATING STRUCTURES**	OTHER COMMENTS	GENERAL IMPRESSION
20804001-S03CL	Room 108; floor; about six inches south of northern perimeter window frame; about five feet east of western partition wall; from reverse side of carpet tile	Heavy	Very few	None	None	Normal trapping
20804001-S04CL	Room 110; floor; about six inches south of northern perimeter window frame; about one foot east of western partition wall; from reverse side of carpet tile	Heavy	Very few	None	None	Normal trapping
20804001-S05CL	Room 111; floor; about six inches south of northern perimeter window frame; about five feet east of western partition wall; from reverse side of carpet tile	Moderate	Very few	None	None	Normal trapping
20804001-S06CL	Room 106; floor; about six inches south of northern perimeter window frame; about five feet east of western partition wall; from reverse side of carpet tile	Moderate	Very few	None	None	Normal trapping

* Includes basidiospores (mushroom spores), myxomycetes, plant pathogens such as ascospores, rusts and smuts, and a mix of saprophytic genera with no particular spore type predominating (indicative of normal trapping).

**Quantities of fungi are graded (from least to greatest) as <1+ to 4+.



1



Date	Address	Photo Location – Description	Up
04/09/08	450 N Street Sacramento, California	Outdoors; looking south; view of north facing window pane contiguous with Room 107; showing water marks indicative of prior sprinkler related water exposure	↑

2



Date	Address	Photo Location – Description	Up
04/09/08	450 N Street Sacramento, California	Outdoors; looking south; view of north facing exterior curtain wall metal and soil contiguous with Room 107; showing water marks indicative of prior sprinkler related water exposure and moist soil	↑



3



Date	Address	Photo Location – Description	Up
04/09/08	450 N Street Sacramento, California	First floor; Room 105; looking down and northwest; view of metal curtain wall window framing; showing efflorescence indicative of previous water exposure	↑

4



Date	Address	Photo Location – Description	Up
04/09/08	450 N Street Sacramento, California	First floor; Room 105; looking down and northeast; view of metal curtain wall window framing; showing water staining and efflorescence indicative of previous water exposure	↑



5			
			
Date	Address	Photo Location – Description	Up
04/09/08	450 N Street Sacramento, California	First floor; Room 105; looking up and northeast; view of metal curtain wall window framing; showing water staining	↑

6			
			
Date	Address	Photo Location – Description	Up
04/09/08	450 N Street Sacramento, California	First floor; Room 105; looking down and northeast; view of metal curtain wall window framing; showing water staining	↑



7



Date	Address	Photo Location – Description	Up
04/09/08	450 N Street Sacramento, California	First floor; Room 106; looking north; view of northern window pane; showing water marks indicative of sprinkler related water exposure on exterior pane	↑

8



Date	Address	Photo Location – Description	Up
04/09/08	450 N Street Sacramento, California	First floor; Room 106; looking down and north; view of metal curtain wall window frame; showing efflorescence indicative of previous water exposure	↑



9



Date	Address	Photo Location – Description	Up
04/09/08	450 N Street Sacramento, California	First floor; Room 106; looking down and northwest; view of metal curtain wall window frame; showing efflorescence indicative of previous water exposure	↑

10



Date	Address	Photo Location – Description	Up
04/09/08	450 N Street Sacramento, California	First floor; Room 107; looking down; view of carpet flooring adjacent to northern curtain wall window frame; showing water staining	↑



11



Date	Address	Photo Location – Description	Up
04/09/08	450 N Street Sacramento, California	First floor; Room 107; looking down; view of floor adjacent to northern curtain wall window; showing subfloor and reverse side of carpet	↑

12



Date	Address	Photo Location – Description	Up
04/09/08	450 N Street Sacramento, California	Close-up of Photo 5; showing visible moisture on subfloor and carpet adhesive	↑



13



Date	Address	Photo Location – Description	Up
04/09/08	450 N Street Sacramento, California	First floor; Room 107; looking down and north; view of metal curtain wall window frame; showing discoloration and efflorescence indicative of previous water exposure	↑

14



Date	Address	Photo Location – Description	Up
04/09/08	450 N Street Sacramento, California	First floor; Room 108; looking down and north; view of metal curtain wall window framing; showing efflorescence/mineral deposits indicative of previous water exposure	↑

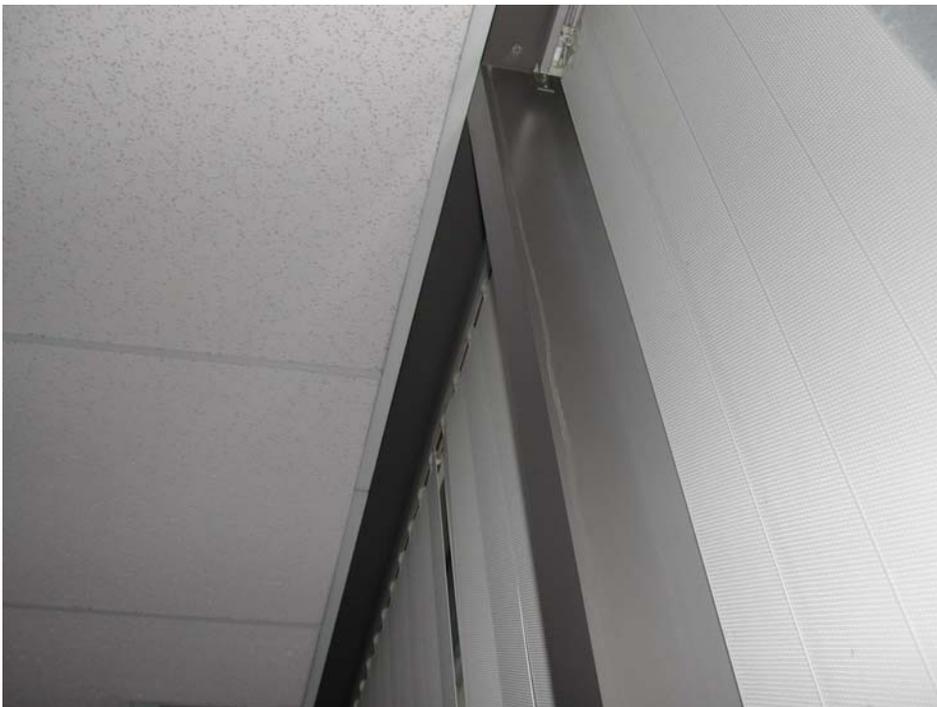


15



Date	Address	Photo Location – Description	Up
04/09/08	450 N Street Sacramento, California	First floor; Room 108; looking down and north; view of metal curtain wall window framing; showing efflorescence indicative of previous water exposure	↑

16



Date	Address	Photo Location – Description	Up
04/09/08	450 N Street Sacramento, California	First floor; Room 108; looking up and northwest; view of metal curtain wall window frame; showing water staining	↑



17



Date	Address	Photo Location – Description	Up
04/09/08	450 N Street Sacramento, California	First floor; Room 110; looking down and north; view of metal curtain wall window frame; showing efflorescence indicative of previous water exposure	↑

18



Date	Address	Photo Location – Description	Up
04/09/08	450 N Street Sacramento, California	First floor; Room 110; looking down and north; view of metal curtain wall window frame; showing efflorescence indicative of previous water exposure	↑



EMLab P&K

Report for:

Mr. Wes Frey
Hygiene Technologies International, Inc.: Northern California
3127 Bowen Island Street
West Sacramento, CA 95691

Regarding: Project: 20804001
 EML ID: 409357

Approved by:

Lab Manager
Dr. Kamashwaran Ramanathan

Dates of Analysis:
Direct microscopic exam (Qualitative): 04-10-2008
Spore trap analysis: 04-10-2008

Project SOPs: Direct microscopic exam (Qualitative) (I100005), Spore trap analysis (I100000)

This coversheet is included with your report in order to comply with AIHA and ISO accreditation requirements.

For clarity, we report the number of significant digits as calculated; but, due to the nature of this type of biological data, the number of significant digits that is used for interpretation should generally be one or two. All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. Due to the nature of the analyses performed, field blank corrections of results is not a standard practice. The results relate only to the items tested.

EMLab P&K ("the Company") shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Document Number: 200091 - Revision Number: 5

Client: Hygiene Technologies International, Inc.:
Northern California
C/O: Mr. Wes Frey
Re: 20804001

Date of Sampling: 04-09-2008
Date of Receipt: 04-10-2008
Date of Report: 04-10-2008

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	20804001-TM01OUTCL		20804001-TM02CL		20804001-TM03CL		20804001-TM04CL		20804001-TM05CL	
Comments (see below)	None		None		None		None		None	
Lab ID-Version‡:	1798025-1		1798026-1		1798027-1		1798028-1		1798029-1	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Alternaria	1	13			1	13				
Arthrinium										
Ascospores*			2	107	1	53				
Aureobasidium										
Basidiospores*	10	533	7	373	6	320	2	107		
Bipolaris/Drechslera group					1	13				
Botrytis										
Chaetomium										
Cladosporium	7	373	3	160	6	320			1	53
Curvularia										
Epicoccum										
Fusarium										
Myrothecium										
Nigrospora										
Oidium	1	13			1	13				
Other brown										
Other colorless							1	13		
Penicillium/Aspergillus types†	44	2,350	12	640	16	853	5	267	1	53
Pithomyces										
Rusts*					1	13			1	13
Smuts*, Periconia, Myxomycetes*					2	27				
Stachybotrys							1	13		
Stemphylium										
Torula										
Ulocladium										
Zygomycetes										
Background debris (1-4+)††	3+		2+		2+		2+		1+	
Hyphal fragments/m3	67		13		53		27		13	
Pollen/m3	253		< 13		107		53		27	
Skin cells (1-4+)	1+		1+		1+		1+		1+	
Sample volume (liters)	75		75		75		75		75	
TOTAL SPORE/m3		3,282		1,280		1,625		400		119

Comments:

* Most of these spore types are not seen with culturable methods (Andersen sampling), although some may appear as non-sporulating fungi. Most of the basidiospores are "mushroom" spores while the rusts and smuts are plant pathogens.
 † The spores of *Aspergillus* and *Penicillium* (and others such as *Acremonium*, *Paecilomyces*) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods. Also, some species with very small spores are easily missed, and may be undercounted.
 †† Background debris indicates the amount of non-biological particulate matter present on the trace (dust in the air) and the resulting visibility for the analyst. It is rated from 1+ (low) to 4+ (high). Counts from areas with 4+ background debris should be regarded as minimal counts and may be higher than reported. It is important to account for samples volumes when evaluating dust levels.
 The Limit of Detection is the product of a raw count of 1 and 100 divided by the percent read. The analytical sensitivity (counts/m3) is the product of the Limit of Detection and 1000 divided by the sample volume.
 ‡ A "Version" greater than 1 indicates amended data.

Client: Hygiene Technologies International, Inc.:
Northern California
C/O: Mr. Wes Frey
Re: 20804001

Date of Sampling: 04-09-2008
Date of Receipt: 04-10-2008
Date of Report: 04-10-2008

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	20804001-TM06CL		20804001-TM07CL		20804001-TM08OUTCL		20804001-TM09CL	
Comments (see below)	None		None		None		None	
Lab ID-Version‡:	1798030-1		1798031-1		1798032-1		1798033-1	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Alternaria			1	13				
Arthrinium								
Ascospores*					2	107		
Aureobasidium								
Basidiospores*			2	107	4	213	3	160
Bipolaris/Drechslera group								
Botrytis								
Chaetomium					1	13		
Cladosporium	1	53			8	427	1	53
Curvularia								
Epicoccum								
Fusarium								
Myrothecium								
Nigrospora								
Oidium					6	80		
Other brown					1	13	1	13
Other colorless								
Penicillium/Aspergillus types†			2	107	36	1,920	3	160
Pithomyces								
Rusts*					11	147		
Smuts*, Periconia, Myxomycetes*			1	13				
Stachybotrys								
Stemphylium								
Torula					1	13		
Ulocladium								
Zygomycetes								
Background debris (1-4+)††	1+		1+		3+		4+	
Hyphal fragments/m3	< 13		< 13		93		13	
Pollen/m3	13		13		453		40	
Skin cells (1-4+)	1+		2+		1+		3+	
Sample volume (liters)	75		75		75		75	
TOTAL SPORE/m3		53		240		2,933		386

Comments:

* Most of these spore types are not seen with culturable methods (Andersen sampling), although some may appear as non-sporulating fungi. Most of the basidiospores are "mushroom" spores while the rusts and smuts are plant pathogens.
 † The spores of *Aspergillus* and *Penicillium* (and others such as *Acremonium*, *Paecilomyces*) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods. Also, some species with very small spores are easily missed, and may be undercounted.
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 The Limit of Detection is the product of a raw count of 1 and 100 divided by the percent read. The analytical sensitivity (counts/m3) is the product of the Limit of Detection and 1000 divided by the sample volume.
 ‡ A "Version" greater than 1 indicates amended data.

Client: Hygiene Technologies International, Inc.:
Northern California
C/O: Mr. Wes Frey
Re: 20804001

Date of Sampling: 04-09-2008
Date of Receipt: 04-10-2008
Date of Report: 04-10-2008

MoldRANGE™: Extended Outdoor Comparison**Outdoor Location: 20804001-TM01OUTCL**

Fungi Identified	Outdoor data	Typical Outdoor Data by Date†				Typical Outdoor Data by Location‡			
		Month: April				State: CA			
	spores/m3	low	med	high	freq %	low	med	high	freq %
Generally able to grow indoors*									
Alternaria	13	7	27	230	51	7	27	230	60
Bipolaris/Drechslera group	-	7	13	130	13	7	13	120	14
Chaetomium	-	7	13	110	13	7	13	110	19
Cladosporium	373	40	370	4,200	94	53	640	6,500	98
Curvularia	-	7	13	190	6	7	13	210	7
Nigrospora	-	7	13	93	7	7	13	170	8
Other brown	-	7	13	89	36	7	13	80	37
Penicillium/Aspergillus types	2,350	27	160	1,500	81	40	210	2,500	88
Stachybotrys	-	7	13	310	4	7	13	330	5
Torula	-	7	13	170	13	7	13	150	13
Seldom found growing indoors**									
Ascospores	-	13	110	2,500	76	13	110	1,800	73
Basidiospores	533	13	240	5,300	91	13	270	6,900	95
Oidium	13	7	20	230	22	7	13	200	20
Rusts	-	7	20	240	26	7	13	270	29
Smuts, Periconia, Myxomycetes	-	7	38	430	63	8	40	470	71
TOTAL SPORES/M3	3,282								

† The Typical Outdoor Data by Date represents the typical outdoor spore levels across North America for the month indicated. The last column represents the frequency of occurrence. The low, medium, and high values represent the 2.5, 50, and 97.5 percentile values of the spore type when it is detected. For example, if the frequency of occurrence is 63% and the low value is 53, it would mean that the given spore type is detected 63% of the time and, when detected, 2.5% of the time it is present in levels above the detection limit and below 53 spores/m3. These values are updated periodically, and if enough data is not available to make a statistically meaningful assessment, it is indicated with a dash.

‡ The Typical Outdoor Data by Location represents the typical outdoor spore levels for the region indicated for the entire year. As with the Typical Outdoor Data by Date, the four columns represent the frequency of occurrence and the typical low, medium, and high concentration values for the spore type indicated. These values are updated periodically, and if enough data is not available to make a statistically meaningful assessment, it is indicated with a dash.

*The spores in this category are generally capable of growing on wet building materials in addition to growing outdoors. Building related growth is dependent upon the fungal type, moisture level, type of material, and other factors. *Cladosporium* is one of the predominant spore types worldwide and is frequently present in high numbers. *Penicillium/Aspergillus* species colonize both outdoor and indoor wet surfaces rapidly and are very easily dispersed. Other genera are usually present in lesser numbers.

**These fungi are generally not found growing on wet building materials. For example, the rusts and smuts are obligate plant pathogens. However, in each group there are notable exceptions. For example, agents of wood decay are members of the basidiomycetes and high counts of a single morphological type of basidiospore on an inside sample should be considered significant.

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Client: Hygiene Technologies International, Inc.:
Northern California
C/O: Mr. Wes Frey
Re: 20804001

Date of Sampling: 04-09-2008
Date of Receipt: 04-10-2008
Date of Report: 04-10-2008

MoldRANGE™: Extended Outdoor Comparison

Outdoor Location: 20804001-TM08OUTCL

Fungi Identified	Outdoor data	Typical Outdoor Data by Date†				Typical Outdoor Data by Location‡			
		Month: April				State: CA			
	spores/m3	low	med	high	freq %	low	med	high	freq %
Generally able to grow indoors*									
Alternaria	-	7	27	230	51	7	27	230	60
Bipolaris/Drechslera group	-	7	13	130	13	7	13	120	14
Chaetomium	13	7	13	110	13	7	13	110	19
Cladosporium	427	40	370	4,200	94	53	640	6,500	98
Curvularia	-	7	13	190	6	7	13	210	7
Nigrospora	-	7	13	93	7	7	13	170	8
Other brown	13	7	13	89	36	7	13	80	37
Penicillium/Aspergillus types	1,920	27	160	1,500	81	40	210	2,500	88
Stachybotrys	-	7	13	310	4	7	13	330	5
Torula	13	7	13	170	13	7	13	150	13
Seldom found growing indoors**									
Ascospores	107	13	110	2,500	76	13	110	1,800	73
Basidiospores	213	13	240	5,300	91	13	270	6,900	95
Oidium	80	7	20	230	22	7	13	200	20
Rusts	147	7	20	240	26	7	13	270	29
Smuts, Periconia, Myxomycetes	-	7	38	430	63	8	40	470	71
TOTAL SPORES/M3	2,933								

† The Typical Outdoor Data by Date represents the typical outdoor spore levels across North America for the month indicated. The last column represents the frequency of occurrence. The low, medium, and high values represent the 2.5, 50, and 97.5 percentile values of the spore type when it is detected. For example, if the frequency of occurrence is 63% and the low value is 53, it would mean that the given spore type is detected 63% of the time and, when detected, 2.5% of the time it is present in levels above the detection limit and below 53 spores/m3. These values are updated periodically, and if enough data is not available to make a statistically meaningful assessment, it is indicated with a dash.

‡ The Typical Outdoor Data by Location represents the typical outdoor spore levels for the region indicated for the entire year. As with the Typical Outdoor Data by Date, the four columns represent the frequency of occurrence and the typical low, medium, and high concentration values for the spore type indicated. These values are updated periodically, and if enough data is not available to make a statistically meaningful assessment, it is indicated with a dash.

*The spores in this category are generally capable of growing on wet building materials in addition to growing outdoors. Building related growth is dependent upon the fungal type, moisture level, type of material, and other factors. *Cladosporium* is one of the predominant spore types worldwide and is frequently present in high numbers. *Penicillium/Aspergillus* species colonize both outdoor and indoor wet surfaces rapidly and are very easily dispersed. Other genera are usually present in lesser numbers.

**These fungi are generally not found growing on wet building materials. For example, the rusts and smuts are obligate plant pathogens. However, in each group there are notable exceptions. For example, agents of wood decay are members of the basidiomycetes and high counts of a single morphological type of basidiospore on an inside sample should be considered significant.

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 Northern California
 C/O: Mr. Wes Frey
 Re: 20804001

Date of Sampling: 04-09-2008
 Date of Receipt: 04-10-2008
 Date of Report: 04-10-2008

MoldSTAT™: Supplementary Statistical Spore Trap Report

Outdoor Summary: 20804001-TM01OUTCL:

Species detected	Outdoor sample spores/m3				Typical outdoor ranges (North America)	Freq. %
	<100	1K	10K	>100K		
Alternaria				13	7 - 27 - 380	54
Ascospores				ND	13 - 160 - 4,200	76
Basidiospores				533	13 - 320 - 14,000	92
Cladosporium				373	40 - 530 - 8,400	94
Oidium				13	7 - 13 - 230	15
Penicillium/Aspergillus types				2,350	27 - 210 - 2,600	85
Smuts, Periconia, Myxomycetes				ND	7 - 40 - 760	70
Total				3,282		

The "Typical outdoor ranges" and "Freq. %" columns show the typical low, medium, and high spore counts per cubic meter and the frequency of occurrence for the given spore type. The low, medium, and high values represent the 2.5, 50, and 97.5 percentile values when the spore type is detected. For example, if the low value is 53 and the frequency of occurrence is 63%, it would mean that we typically detect the given spore type on 63 percent of all outdoor samples and, when detected, 2.5% of the time it is present in levels below 53 spores/m3.

Indoor Samples

Location: 20804001-TM02CL

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)	
Result: 39%	dF: 6 Result: 13.3750 Critical value: 12.5916 Inside Similar: No	Result: 0.6667	dF: 6 Result: 0.8286 Critical value: 0.7714 Outside Similar: Yes	Score: 118 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Ascospores					107
Basidiospores					373
Cladosporium					160
Penicillium/Aspergillus types					640
Total					1,280

Client: Hygiene Technologies International, Inc.:
 Northern California
 C/O: Mr. Wes Frey
 Re: 20804001

Date of Sampling: 04-09-2008
 Date of Receipt: 04-10-2008
 Date of Report: 04-10-2008

MoldSTAT™: Supplementary Statistical Spore Trap Report

Location: 20804001-TM03CL

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)	
Result: 49%	dF: 6 Result: 13.3750 Critical value: 12.5916 Inside Similar: No	Result: 0.7143	dF: 9 Result: 0.6917 Critical value: 0.5833 Outside Similar: Yes	Score: 113 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Alternaria					13
Ascospores					53
Basidiospores					320
Bipolaris/Drechslera group					13
Cladosporium					320
Oidium					13
Penicillium/Aspergillus types					853
Rusts					13
Smuts, Periconia, Myxomycetes					27
Total					1,625

Location: 20804001-TM04CL

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)	
Result: 12%	dF: 6 Result: 13.3750 Critical value: 12.5916 Inside Similar: No	Result: 0.4444	dF: 7 Result: 0.4375 Critical value: 0.6786 Outside Similar: No	Score: 121 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Basidiospores					107
Other colorless					13
Penicillium/Aspergillus types					267
Stachybotrys					13
Total					400

Client: Hygiene Technologies International, Inc.:
 Northern California
 C/O: Mr. Wes Frey
 Re: 20804001

Date of Sampling: 04-09-2008
 Date of Receipt: 04-10-2008
 Date of Report: 04-10-2008

MoldSTAT™: Supplementary Statistical Spore Trap Report

Location: 20804001-TM05CL

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)	
Result: 3%	dF: 6 Result: 13.3750 Critical value: 12.5916 Inside Similar: No	Result: 0.5000	dF: 6 Result: 0.4000 Critical value: 0.7714 Outside Similar: No	Score: 102 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Cladosporium					53
Penicillium/Aspergillus types					53
Rusts					13
Total					119

Location: 20804001-TM06CL

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)	
Result: 1%	dF: 6 Result: 13.3750 Critical value: 12.5916 Inside Similar: No	Result: 0.3333	dF: 5 Result: 0.2750 Critical value: 0.8000 Outside Similar: No	Score: 103 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Cladosporium					53
Total					53

Client: Hygiene Technologies International, Inc.:
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 Re: 20804001

Date of Sampling: 04-09-2008
 Date of Receipt: 04-10-2008
 Date of Report: 04-10-2008

MoldSTAT™: Supplementary Statistical Spore Trap Report

Location: 20804001-TM07CL

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)	
Result: 7%	dF: 6 Result: 13.3750 Critical value: 12.5916 Inside Similar: No	Result: 0.6667	dF: 6 Result: 0.5714 Critical value: 0.7714 Outside Similar: No	Score: 107 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Alternaria					13
Basidiospores					107
Penicillium/Aspergillus types					107
Smuts, Periconia, Myxomycetes					13
Total					240

Location: 20804001-TM09CL

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)	
Result: 11%	dF: 6 Result: 13.3750 Critical value: 12.5916 Inside Similar: No	Result: 0.6667	dF: 6 Result: 0.8143 Critical value: 0.7714 Outside Similar: Yes	Score: 110 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Basidiospores					160
Cladosporium					53
Other brown					13
Penicillium/Aspergillus types					160
Total					386

* The Friedman chi-square statistic is a non-parametric test that examines variation in a set of data (in this case, all indoor spore counts). The null hypothesis (H0) being tested is that there is no meaningful difference in the data for all indoor locations. The alternative hypothesis (used if the test disproves the null hypothesis) is that there is a difference between the indoor locations. The null hypothesis is rejected when the result of the test is greater than the critical value. The critical value that is displayed is based on the degrees of freedom (dF) of the test and a significance level of 0.05.

** An agreement ratio is a simple method for assessing the similarity of two samples (in this case the indoor sample and the outdoor summary) based on the spore types present. A score of one indicates that the types detected in one location are the same as that in the other. A score of zero indicates that none of the types detected indoors are present outdoors. Typically, an agreement of 0.8 or higher is considered high.

*** The Spearman rank correlation is a non-parametric test that examines correlation between two sets of data (in this case the indoor location and the outdoor summary). The null hypothesis (H0) being tested is that the indoor and outdoor samples are unrelated. The alternative hypothesis (used if the test disproves the null hypothesis) is that the samples are similar. The null hypothesis is rejected when the result of the test is greater than the critical value. The critical value that is displayed is based on the degrees of freedom (dF) of the test and a significance level of 0.05.

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MoldSTAT™: Supplementary Statistical Spore Trap Report

**** MoldSCORE™ is a specialized method for examining air sampling data. It is a score between 100 and 300, with 100 indicating a greater likelihood that the airborne indoor spores originated from the outside, and 300 indicating a greater likelihood that they originated from an inside source. The Result displayed is based on the numeric score given and will be either Low, Medium, or High, indicating a low, medium, or high likelihood that the spores detected originated from an indoor source. EMLab P&K reserves the right to, and may at anytime, modify or change the MoldScore algorithm without notice.

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MoldSTAT™: Supplementary Statistical Spore Trap Report

Outdoor Summary: 20804001-TM08OUTCL:

Species detected	Outdoor sample spores/m3				Typical outdoor ranges (North America)	Freq. %
	<100	1K	10K	>100K		
Ascospores				107	13 - 160 - 4,200	76
Basidiospores				213	13 - 320 - 14,000	92
Chaetomium				13	7 - 13 - 120	13
Cladosporium				427	40 - 530 - 8,400	94
Oidium				80	7 - 13 - 230	15
Other brown				13	7 - 13 - 93	35
Penicillium/Aspergillus types				1,920	27 - 210 - 2,600	85
Rusts				147	7 - 14 - 310	23
Smuts, Periconia, Myxomycetes				ND	7 - 40 - 760	70
Torula				13	7 - 13 - 160	12
Total				2,933		

The "Typical outdoor ranges" and "Freq. %" columns show the typical low, medium, and high spore counts per cubic meter and the frequency of occurrence for the given spore type. The low, medium, and high values represent the 2.5, 50, and 97.5 percentile values when the spore type is detected. For example, if the low value is 53 and the frequency of occurrence is 63%, it would mean that we typically detect the given spore type on 63 percent of all outdoor samples and, when detected, 2.5% of the time it is present in levels below 53 spores/m3.

Indoor Samples

Location: 20804001-TM02CL

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)
Result: 43%	dF: 6 Result: 13.3750 Critical value: 12.5916 Inside Similar: No	Result: 0.6154	dF: 9 Result: 0.8667 Critical value: 0.5833 Outside Similar: Yes	Score: 130 Result: Low
Species Detected	Spores/m3			
	<100	1K	10K	>100K
Ascospores				107
Basidiospores				373
Cladosporium				160
Penicillium/Aspergillus types				640
Total				1,280

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MoldSTAT™: Supplementary Statistical Spore Trap Report

Location: 20804001-TM03CL

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)	
Result: 55%	dF: 6 Result: 13.3750 Critical value: 12.5916 Inside Similar: No	Result: 0.6667	dF: 12 Result: 0.6381 Critical value: 0.4965 Outside Similar: Yes	Score: 121 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Alternaria					13
Ascospores					53
Basidiospores					320
Bipolaris/Drechslera group					13
Cladosporium					320
Oidium					13
Penicillium/Aspergillus types					853
Rusts					13
Smuts, Periconia, Myxomycetes					27
Total					1,625

Location: 20804001-TM04CL

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)	
Result: 13%	dF: 6 Result: 13.3750 Critical value: 12.5916 Inside Similar: No	Result: 0.3077	dF: 11 Result: 0.2545 Critical value: 0.5273 Outside Similar: No	Score: 121 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Basidiospores					107
Other colorless					13
Penicillium/Aspergillus types					267
Stachybotrys					13
Total					400

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MoldSTAT™: Supplementary Statistical Spore Trap Report

Location: 20804001-TM05CL

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)	
Result: 4%	dF: 6 Result: 13.3750 Critical value: 12.5916 Inside Similar: No	Result: 0.5000	dF: 9 Result: 0.8083 Critical value: 0.5833 Outside Similar: Yes	Score: 102 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Cladosporium					53
Penicillium/Aspergillus types					53
Rusts					13
Total					119

Location: 20804001-TM06CL

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)	
Result: 1%	dF: 6 Result: 13.3750 Critical value: 12.5916 Inside Similar: No	Result: 0.2000	dF: 9 Result: 0.5917 Critical value: 0.5833 Outside Similar: Yes	Score: 103 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Cladosporium					53
Total					53

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 Date of Report: 04-10-2008

MoldSTAT™: Supplementary Statistical Spore Trap Report

Location: 20804001-TM07CL

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)	
Result: 8%	dF: 6 Result: 13.3750 Critical value: 12.5916 Inside Similar: No	Result: 0.3077	dF: 11 Result: 0.2477 Critical value: 0.5273 Outside Similar: No	Score: 110 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Alternaria					13
Basidiospores					107
Penicillium/Aspergillus types					107
Smuts, Periconia, Myxomycetes					13
Total					240

Location: 20804001-TM09CL

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)	
Result: 13%	dF: 6 Result: 13.3750 Critical value: 12.5916 Inside Similar: No	Result: 0.6154	dF: 9 Result: 0.7042 Critical value: 0.5833 Outside Similar: Yes	Score: 114 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Basidiospores					160
Cladosporium					53
Other brown					13
Penicillium/Aspergillus types					160
Total					386

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MoldSTAT™: Supplementary Statistical Spore Trap Report

**** MoldSCORE™ is a specialized method for examining air sampling data. It is a score between 100 and 300, with 100 indicating a greater likelihood that the airborne indoor spores originated from the outside, and 300 indicating a greater likelihood that they originated from an inside source. The Result displayed is based on the numeric score given and will be either Low, Medium, or High, indicating a low, medium, or high likelihood that the spores detected originated from an indoor source. EMLab P&K reserves the right to, and may at anytime, modify or change the MoldScore algorithm without notice.

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MoldSCORE™: Spore Trap Report

Location: 20804001-TM03CL

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
Generally able to grow indoors*										
Alternaria	█				1	13	█			103
Bipolaris/Drechslera group	█				1	13	█			105
Chaetomium					ND	< 13	█			100
Cladosporium	█	█			6	320	█			109
Curvularia					ND	< 13	█			100
Nigrospora					ND	< 13	█			100
Penicillium/Aspergillus types†	█	█	█		16	853	█			100
Stachybotrys					ND	< 13	█			100
Torula					ND	< 13	█			100
Seldom found growing indoors**										
Ascospores††	█				1	53	█	█		121
Basidiospores††	█	█			6	320	█			106
Oidium	█				1	13	█			103
Rusts	█				1	13	█			105
Smuts, Periconia, Myxomycetes††	█				2	27	█			105
Total						1,625	Final MoldSCORE			113

Location: 20804001-TM04CL

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
Generally able to grow indoors*										
Alternaria					ND	< 13	█			100
Bipolaris/Drechslera group					ND	< 13	█			100
Chaetomium					ND	< 13	█			100
Cladosporium					ND	< 13	█			100
Curvularia					ND	< 13	█			100
Nigrospora					ND	< 13	█			100
Other colorless	█				1	13	█			105
Penicillium/Aspergillus types†	█	█			5	267	█			100
Stachybotrys	█				1	13	█	█		121
Torula					ND	< 13	█			100
Seldom found growing indoors**										
Ascospores††					ND	< 13	█			100
Basidiospores††	█				2	107	█			104
Rusts					ND	< 13	█			100
Smuts, Periconia, Myxomycetes††					ND	< 13	█			100
Total						400	Final MoldSCORE			121

Client: Hygiene Technologies International, Inc.:
 Northern California
 C/O: Mr. Wes Frey
 Re: 20804001

Date of Sampling: 04-09-2008
 Date of Receipt: 04-10-2008
 Date of Report: 04-10-2008

MoldSCORE™: Spore Trap Report

Location: 20804001-TM05CL

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
Generally able to grow indoors*										
Alternaria					ND	< 13	█			100
Bipolaris/Drechslera group					ND	< 13	█			100
Chaetomium					ND	< 13	█			100
Cladosporium	█				1	53	█			102
Curvularia					ND	< 13	█			100
Nigrospora					ND	< 13	█			100
Penicillium/Aspergillus types†	█				1	53	█			100
Stachybotrys					ND	< 13	█			100
Torula					ND	< 13	█			100
Seldom found growing indoors**										
Ascospores‡‡					ND	< 13	█			100
Basidiospores‡‡					ND	< 13	█			100
Rusts	█				1	13	█			105
Smuts, Periconia, Myxomycetes‡‡					ND	< 13	█			100
Total						119				
							Final MoldSCORE			102

Location: 20804001-TM06CL

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
Generally able to grow indoors*										
Alternaria					ND	< 13	█			100
Bipolaris/Drechslera group					ND	< 13	█			100
Chaetomium					ND	< 13	█			100
Cladosporium	█				1	53	█			103
Curvularia					ND	< 13	█			100
Nigrospora					ND	< 13	█			100
Penicillium/Aspergillus types†					ND	< 13	█			100
Stachybotrys					ND	< 13	█			100
Torula					ND	< 13	█			100
Seldom found growing indoors**										
Ascospores‡‡					ND	< 13	█			100
Basidiospores‡‡					ND	< 13	█			100
Rusts					ND	< 13	█			100
Smuts, Periconia, Myxomycetes‡‡					ND	< 13	█			100
Total						53				
							Final MoldSCORE			103

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 Date of Report: 04-10-2008

MoldSCORE™: Spore Trap Report

Location: 20804001-TM07CL

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
Generally able to grow indoors*										
Alternaria					1	13				
Bipolaris/Drechslera group					ND	< 13				
Chaetomium					ND	< 13				
Cladosporium					ND	< 13				
Curvularia					ND	< 13				
Nigrospora					ND	< 13				
Penicillium/Aspergillus types†					2	107				
Stachybotrys					ND	< 13				
Torula					ND	< 13				
Seldom found growing indoors**										
Ascospores††					ND	< 13				
Basidiospores††					2	107				
Rusts					ND	< 13				
Smuts, Periconia, Myxomycetes††					1	13				
Total						240	Final MoldSCORE 107			

Location: 20804001-TM09CL

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
Generally able to grow indoors*										
Alternaria					ND	< 13				
Bipolaris/Drechslera group					ND	< 13				
Chaetomium					ND	< 13				
Cladosporium					1	53				
Curvularia					ND	< 13				
Nigrospora					ND	< 13				
Other brown					1	13				
Penicillium/Aspergillus types†					3	160				
Stachybotrys					ND	< 13				
Torula					ND	< 13				
Seldom found growing indoors**										
Ascospores††					ND	< 13				
Basidiospores††					3	160				
Rusts					ND	< 13				
Smuts, Periconia, Myxomycetes††					ND	< 13				
Total						386	Final MoldSCORE 110			

Client: Hygiene Technologies International, Inc.:
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Re: 20804001

Date of Sampling: 04-09-2008
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Date of Report: 04-10-2008

MoldSCORE™: Spore Trap Report

*The spores in this category are generally capable of growing on wet building materials in addition to growing outdoors. Building related growth is dependent upon the fungal type, moisture level, type of material, and other factors. *Cladosporium* is one of the predominant spore types worldwide and is frequently present in high numbers. *Penicillium/Aspergillus* species colonize both outdoor and indoor wet surfaces rapidly and are very easily dispersed. Other genera are usually present in lesser numbers.

**These fungi are generally not found growing on wet building materials. For example, the rusts and smuts are obligate plant pathogens. However, in each group there are notable exceptions. For example, agents of wood decay are members of the basidiomycetes and high counts of a single morphological type of basidiospore on an inside sample should be considered significant.

†The spores of *Aspergillus* and *Penicillium* (and others such as *Acremonium*, *Paecilomyces*) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods.

††Most of these spore types are not seen with culturable methods (Anderson sampling), although some may appear as non-sporulating fungi. Most of the basidiospores are "mushroom" spores.

‡Rated on a scale from 100 to 300. A rating less than 150 is low and indicates a low probability of spores originating inside. A rating greater than 250 is high and indicates a high probability that the spores originated from inside, presumably from indoor mold growth. A rating between 150 and 250 indicates a moderate likelihood of indoor fungal growth. MoldSCORE is NOT intended for wall cavity samples. It is intended for ambient air samples in residences. Using the analysis on other samples (like wall cavity samples) will lead to misleading results.

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MoldSCORE™: Spore Trap Report

Outdoor Sample: 20804001-TM08OUTCL

Fungi Identified	Outdoor sample spores/m3				Raw count	Spores/m3
	<100	1K	10K	>100K		
Generally able to grow indoors*						
Alternaria					ND	< 13
Bipolaris/Drechslera group					ND	< 13
Chaetomium	█				1	13
Cladosporium	█	█			8	427
Curvularia					ND	< 13
Nigrospora					ND	< 13
Other brown	█				1	13
Penicillium/Aspergillus types†	█	█	█		36	1,920
Stachybotrys					ND	< 13
Torula	█				1	13
Seldom found growing indoors**						
Ascospores††	█				2	107
Basidiospores††	█	█			4	213
Oidium	█				6	80
Rusts	█				11	147
Smuts, Periconia, Myxomycetes††					ND	< 13
Total						2,933

Location: 20804001-TM02CL

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3
	<100	1K	10K	>100K		
Generally able to grow indoors*						
Alternaria					ND	< 13
Bipolaris/Drechslera group					ND	< 13
Chaetomium					ND	< 13
Cladosporium	█				3	160
Curvularia					ND	< 13
Nigrospora					ND	< 13
Penicillium/Aspergillus types†	█	█	█		12	640
Stachybotrys					ND	< 13
Torula					ND	< 13
Seldom found growing indoors**						
Ascospores††	█				2	107
Basidiospores††	█	█			7	373
Rusts					ND	< 13
Smuts, Periconia, Myxomycetes††					ND	< 13
Total						1,280

MoldSCORE‡			Score
100	200	300	
█			100
█			100
█			100
█			100
█			100
█			100
█			100
█			100
█			100
█	█		124
█	█		130
█			100
█			100
Final MoldSCORE			130

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MoldSCORE™: Spore Trap Report

Location: 20804001-TM03CL

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
Generally able to grow indoors*										
Alternaria	█				1	13	█			105
Bipolaris/Drechslera group	█				1	13	█			105
Chaetomium					ND	< 13	█			100
Cladosporium	█	█			6	320	█			105
Curvularia					ND	< 13	█			100
Nigrospora					ND	< 13	█			100
Penicillium/Aspergillus types†	█	█	█		16	853	█			100
Stachybotrys					ND	< 13	█			100
Torula					ND	< 13	█			100
Seldom found growing indoors**										
Ascospores††	█				1	53	█			100
Basidiospores††	█	█			6	320	█	█		121
Oidium	█				1	13	█			100
Rusts	█				1	13	█			100
Smuts, Periconia, Myxomycetes††	█				2	27	█			105
Total						1,625				Final MoldSCORE 121

Location: 20804001-TM04CL

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
Generally able to grow indoors*										
Alternaria					ND	< 13	█			100
Bipolaris/Drechslera group					ND	< 13	█			100
Chaetomium					ND	< 13	█			100
Cladosporium					ND	< 13	█			100
Curvularia					ND	< 13	█			100
Nigrospora					ND	< 13	█			100
Other colorless	█				1	13	█			105
Penicillium/Aspergillus types†	█	█			5	267	█			101
Stachybotrys	█				1	13	█	█		121
Torula					ND	< 13	█			100
Seldom found growing indoors**										
Ascospores††					ND	< 13	█			100
Basidiospores††	█				2	107	█			108
Rusts					ND	< 13	█			100
Smuts, Periconia, Myxomycetes††					ND	< 13	█			100
Total						400				Final MoldSCORE 121

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MoldSCORE™: Spore Trap Report

Location: 20804001-TM05CL

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
Generally able to grow indoors*										
Alternaria					ND	< 13	█			100
Bipolaris/Drechslera group					ND	< 13	█			100
Chaetomium					ND	< 13	█			100
Cladosporium	█				1	53	█			102
Curvularia					ND	< 13	█			100
Nigrospora					ND	< 13	█			100
Penicillium/Aspergillus types†	█				1	53	█			100
Stachybotrys					ND	< 13	█			100
Torula					ND	< 13	█			100
Seldom found growing indoors**										
Ascospores††					ND	< 13	█			100
Basidiospores††					ND	< 13	█			100
Rusts	█				1	13	█			103
Smuts, Periconia, Myxomycetes††					ND	< 13	█			100
Total						119				Final MoldSCORE 102

Location: 20804001-TM06CL

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
Generally able to grow indoors*										
Alternaria					ND	< 13	█			100
Bipolaris/Drechslera group					ND	< 13	█			100
Chaetomium					ND	< 13	█			100
Cladosporium	█				1	53	█			103
Curvularia					ND	< 13	█			100
Nigrospora					ND	< 13	█			100
Penicillium/Aspergillus types†					ND	< 13	█			100
Stachybotrys					ND	< 13	█			100
Torula					ND	< 13	█			100
Seldom found growing indoors**										
Ascospores††					ND	< 13	█			100
Basidiospores††					ND	< 13	█			100
Rusts					ND	< 13	█			100
Smuts, Periconia, Myxomycetes††					ND	< 13	█			100
Total						53				Final MoldSCORE 103

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MoldSCORE™: Spore Trap Report

Location: 20804001-TM07CL

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
Generally able to grow indoors*										
Alternaria					1	13				
Bipolaris/Drechslera group					ND	< 13				
Chaetomium					ND	< 13				
Cladosporium					ND	< 13				
Curvularia					ND	< 13				
Nigrospora					ND	< 13				
Penicillium/Aspergillus types†					2	107				
Stachybotrys					ND	< 13				
Torula					ND	< 13				
Seldom found growing indoors**										
Ascospores††					ND	< 13				
Basidiospores††					2	107				
Rusts					ND	< 13				
Smuts, Periconia, Myxomycetes††					1	13				
Total						240	Final MoldSCORE 110			

Location: 20804001-TM09CL

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
Generally able to grow indoors*										
Alternaria					ND	< 13				
Bipolaris/Drechslera group					ND	< 13				
Chaetomium					ND	< 13				
Cladosporium					1	53				
Curvularia					ND	< 13				
Nigrospora					ND	< 13				
Other brown					1	13				
Penicillium/Aspergillus types†					3	160				
Stachybotrys					ND	< 13				
Torula					ND	< 13				
Seldom found growing indoors**										
Ascospores††					ND	< 13				
Basidiospores††					3	160				
Rusts					ND	< 13				
Smuts, Periconia, Myxomycetes††					ND	< 13				
Total						386	Final MoldSCORE 114			

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MoldSCORE™: Spore Trap Report

*The spores in this category are generally capable of growing on wet building materials in addition to growing outdoors. Building related growth is dependent upon the fungal type, moisture level, type of material, and other factors. *Cladosporium* is one of the predominant spore types worldwide and is frequently present in high numbers. *Penicillium/Aspergillus* species colonize both outdoor and indoor wet surfaces rapidly and are very easily dispersed. Other genera are usually present in lesser numbers.

**These fungi are generally not found growing on wet building materials. For example, the rusts and smuts are obligate plant pathogens. However, in each group there are notable exceptions. For example, agents of wood decay are members of the basidiomycetes and high counts of a single morphological type of basidiospore on an inside sample should be considered significant.

†The spores of *Aspergillus* and *Penicillium* (and others such as *Acremonium*, *Paecilomyces*) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods.

††Most of these spore types are not seen with culturable methods (Anderson sampling), although some may appear as non-sporulating fungi. Most of the basidiospores are "mushroom" spores.

‡Rated on a scale from 100 to 300. A rating less than 150 is low and indicates a low probability of spores originating inside. A rating greater than 250 is high and indicates a high probability that the spores originated from inside, presumably from indoor mold growth. A rating between 150 and 250 indicates a moderate likelihood of indoor fungal growth. MoldSCORE is NOT intended for wall cavity samples. It is intended for ambient air samples in residences. Using the analysis on other samples (like wall cavity samples) will lead to misleading results.

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DIRECT MICROSCOPIC EXAMINATION REPORT

(Wet Mount)

Background Debris and/or Description	Miscellaneous Spores Present*	MOLD GROWTH: Molds seen with underlying mycelial and/or sporulating structures†	Other Comments††	General Impression
Lab ID-Version‡: 1798021-1: Tape sample 20804001-TL01CL				
Heavy	Very few	None	None	Normal trapping
Lab ID-Version: 1798022-1: Tape sample 20804001-TL02CL				
Moderate	Very few	< 1+ <i>Cladosporium</i> species (spores, hyphae)	None	Minimal mold growth
Lab ID-Version: 1798023-1: Tape sample 20804001-TL03CL				
Moderate	Very few	None	None	Normal trapping
Lab ID-Version: 1798024-1: Tape sample 20804001-TL04CL				
Moderate	Very few	None	None	Normal trapping
Lab ID-Version: 1798015-1: Swab sample 20804001-S01CL				
Moderate	Very few	< 1+ brown hyphae with no associated spores, ID unknown (hyphae)	None	Minimal mold growth
Lab ID-Version: 1798016-1: Swab sample 20804001-S02CL				
Moderate	Very few	None	None	Normal trapping
Lab ID-Version: 1798017-1: Swab sample 20804001-S03CL				
Heavy	Very few	None	None	Normal trapping
Lab ID-Version: 1798018-1: Swab sample 20804001-S04CL				
Heavy	Very few	None	None	Normal trapping
Lab ID-Version: 1798019-1: Swab sample 20804001-S05CL				
Moderate	Very few	None	None	Normal trapping

Background Debris and/or Description	Miscellaneous Spores Present*	MOLD GROWTH: Molds seen with underlying mycelial and/or sporulating structures†	Other Comments††	General Impression
Lab ID-Version‡: 1798020-1: Swab sample 20804001-S06CL				
Moderate	Very few	None	None	Normal trapping

‡ A "Version" greater than 1 indicates amended data.