



HYGIENETECH

Hygiene Technologies International, Inc.

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May 1, 2008

CACCCI
C/O California State Board of Equalization
450 N Street
Sacramento, California 94279

Document No. 20801001.1

Attention: David Gau

Regarding: Limited Fungal Growth Exposure Assessment Survey
First Floor Day Care
450 N Street, Sacramento, California

Dear Mr. Gau:

On October 19 and December 10, 2007, industrial hygienists with Hygiene Technologies International, Inc. (HygieneTech) visited the California State Board of Equalization building located at the above-referenced address for the purpose of conducting limited fungal growth exposure assessment surveys in the First Floor Day Care facility. Those survey findings, along with the analytical data, conclusions, recommendations, and discussions of the observations, appeared in HygieneTech Document No. 20710005.6 and 20712001.1, dated November 28, 2007 and January 7, 2008, respectively. Subsequently, on January 24, 2008, HygieneTech returned to the Day Care facility to performed a third follow up survey. Those survey findings, along with the analytical data, conclusions, and recommendations appear below.

At the time of the most recent survey, air samples were collected for total (viable and nonviable) fungi analyses using a Zefon brand Bio-Pump™ equipped with Allergenco-D™ cassettes. Air samples for viable fungi were collected using a Gast brand high volume air-sampling pump equipped with an Aerotech 6™ Single Stage Bioaerosol Sampler. Viable fungal spores were impacted onto suitable growth media (malt extract agar) and incubated prior to enumeration of colony-forming units per agar plate. 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 analytical data with supporting and background information appear in the enclosed tables.

As presented in Table 20801001-201, the airborne total spore count data showed common spore types outdoors such as ascospores, basidiospores, *Botrytis*, *Cladosporium*, colorless spores typical of *Penicillium* and *Aspergillus* species, and/or smuts, with basidiospores predominating in both outdoor samples. In the Day Care interior, the data showed airborne concentrations of common fungal spores that were below the levels recorded outdoors and were therefore considered unremarkable.



The airborne viable fungi data in Table 20801001-202 showed common fungi types outdoors such as *Cladosporium*, non-sporulating fungi, *Penicillium*, and/or yeasts. The colony types detected indoors included low levels of common fungi such as *Alternaria*, *Cladosporium*, non-sporulating fungi, *Penicillium*, and/or yeasts. All such data were also considered unremarkable.

The recorded data do not represent conditions that are expected to pose a health hazard to occupants above that posed by the outside environment where exposures to airborne and surface-borne fungi are known to exist. Such data are comparable to the unremarkable airborne fungi data recorded by HygieneTech on December 10, 2007; therefore, further testing in the First Floor Day Care is not warranted at this time.

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

Brian P. Daly, CIH, PE
President

HYGIENE TECHNOLOGIES INTERNATIONAL, INC.

APPENDIX A



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

TABLE 20801001-201
AIRBORNE TOTAL FUNGI RESULTS
1ST FLOOR DAY CARE
SACRAMENTO, CALIFORNIA
JANUARY 24, 2008

Page 1

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

SAMPLE NUMBER	20801001-TM01OUTWF	20801001-TM02WF	20801001-TM03WF	20801001-TM04WF
SAMPLING LOCATION/ACTIVITIES	Outdoors; about twenty feet west of Day Care entrance door; approximately five feet above ground/Normal outdoor activities	Entrance hallway; about five feet east of entrance door; approximately five feet above floor/Normal Day Care activities	Southern hallway; approximately seven feet west of eastern exit; approximately five feet above floor/Normal Day Care activities	Preschool Room; about four feet south of northern perimeter wall; approximately four feet west of eastern partition wall; approximately five feet above floor/Normal Day Care activities
START/STOP	10:56:00/11:01:00	11:10:00/11:15:00	11:19:00/11:24:00	11:45:00/11:50:00
SAMPLE TIME	5 minutes	5 minutes	5 minutes	5 minutes
Alternaria				
Arthrimum				
Ascospores	1,070	107	53	
Aureobasidium				
Basidiospores	1,440	533	160	213
Bipolaris/Drechslera group				
Botrytis	13			
Chaetomium				
Cladosporium	533	107	53	53
Curvularia				
Epicoccum				
Nigrospora				
Oidium				
Other brown		27	13	13
Penicillium/Aspergillus types	107		107	
Pithomyces				
Rusts				13
Smuts (Periconia, Myxomycetes)	13		13	13
Stachybotrys				
Stemphylium				
Torula				
Ulocladium				
Hyphal fragments	27	147	53	67
Background particulates*	1+	3+	3+	3+
TOTAL **	3,176	774	399	305

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 20801001-201
AIRBORNE TOTAL FUNGI RESULTS
1ST FLOOR DAY CARE
SACRAMENTO, CALIFORNIA
JANUARY 24, 2008

Page 2

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

SAMPLE NUMBER	20801001-TM05WF	20801001-TM06WF	20801001-TM07WF	20801001-TM08OUTWF
SAMPLING LOCATION/ACTIVITIES	Preschool Room; about six feet north of Preschool Room entrance; approximately five feet above floor/Normal Day Care activities	Toddler Room; eastern end; about center; approximately five feet above floor/Normal Day Care activities	Toddler Room; western end; about center; approximately five feet above floor/Normal Day Care activities	Outdoors; approximately twenty feet west of Day Care entrance door; approximately five feet above ground/Normal outdoor activities
START/STOP	11:53:00/11:58:00	11:27:00/11:32:00	11:36:00/11:41:00	12:02:00/12:07:00
SAMPLE TIME	5 minutes	5 minutes	5 minutes	5 minutes
Alternaria				
Arthrinium				
Ascospores		53		587
Aureobasidium				
Basidiospores	160	107	53	1,170
Bipolaris/Drechslera group				
Botrytis	13			
Chaetomium				
Cladosporium	53	107	53	320
Curvularia				
Epicoccum				
Myrothecium				
Nigrospora				
Oidium				
Other brown				
Penicillium/Aspergillus types	53		53	53
Pithomyces				
Rusts		13		
Smuts (Periconia, Myxomycetes)	13	13	13	
Stachybotrys				
Torula				
Ulocladium				
Hyphal fragments	80	27	13	40
Background particulates*	3+	3+	3+	1+
TOTAL**	292	293	172	2,130

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
450 N Street
Sacramento, California

TABLE 20711002-202
AIRBORNE VIABLE FUNGI RESULTS
1ST FLOOR, DAY CARE
SACRAMENTO, CALIFORNIA
JANUARY 24, 2007

Page 1

Results reported in colony forming units per cubic meter of air (CFU/M³)

SAMPLE NUMBER	20801001-VM01OUTWF	20801001-VM02WF	20801001-VM03WF	20801001-VM04WF
SAMPLING LOCATION/ACTIVITIES	Outdoors; about twenty feet west of Day Care entrance door; approximately five feet above ground/Normal outdoor activities	Entrance hallway; about five feet east of entrance door; approximately five feet above floor/Normal Day Care activities	Southern hallway; approximately seven feet west of eastern exit; approximately five feet above floor/Normal Day Care activities	Preschool Room; about four feet south of northern perimeter wall; approximately four feet west of eastern partition wall; approximately five feet above floor/Normal Day Care activities
START/STOP	11:08:00/11:10:00	11:13:00/11:15:00	11:20:00/11:22:00	11:47:00/11:49:00
SAMPLE TIME	2 minutes	2 minutes	2 minutes	2 minutes
Acremonium				
Alternaria				
Aspergillus flavus				
Aspergillus niger				
Aspergillus other				
Aspergillus versicolor				
Aureobasidium				
Beauveria				
Bipolaris/Drechslera group				
Botrytis				
Chaetomium				
Cladosporium	230	35	71	
Curvularia				
Epicoccum				
Nigrospora				
Memnoniella				
Myrothecium				
Non-sporulating fungi	53	35		
Others				
Paecilomyces				
Penicillium	106			
Phoma/coelomycetes				
Stachybotrys				
Trichoderma				
Ulocladium				
Yeasts		35	71	35
TOTAL	389	105	142	35

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Sacramento, California

TABLE 20711002-202
AIRBORNE VIABLE FUNGI RESULTS
1ST FLOOR, DAY CARE
SACRAMENTO, CALIFORNIA
JANUARY 24, 2007

Page 2

Results reported in colony forming units per cubic meter of air (CFU/M³)

SAMPLE NUMBER	20801001-VM05WF	20801001-VM06WF	20801001-VM07WF	20801001-VM08OUTWF
SAMPLING LOCATION/ACTIVITIES	Preschool Room; about six feet north of Preschool Room entrance; approximately five feet above floor/Normal Day Care activities	Toddler Room; eastern end; about center; approximately five feet above floor/Normal Day Care activities	Toddler Room; western end; about center; approximately five feet above floor/Normal Day Care activities	Outdoors; approximately twenty feet west of Day Care entrance door; approximately five feet above ground/Normal outdoor activities
START/STOP	11:55:00/11:57:00	11:30:00/11:32:00	11:40:00/11:42:00	12:04:00/12:06:00
SAMPLE TIME	2 minutes	2 minutes	2 minutes	2 minutes
Acremonium				
Alternaria		18		
Aspergillus flavus				
Aspergillus niger				
Aspergillus other				
Aspergillus versicolor				
Aureobasidium				
Beauveria				
Bipolaris/Drechslera group				
Botrytis				
Chaetomium				
Cladosporium	18	18	18	389
Curvularia				
Epicoccum				
Myrothecium				
Non-sporulating fungi				35
Others				
Paecilomyces				
Penicillium	18			88
Phoma/coelomycetes				
Sporobolomyces				
Stachybotrys				
Torula herbarum				
Trichoderma				
Ulocladium				
Yeasts	35			53
TOTAL	71	36	18	565



EMLab P&K

Report for:

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

Regarding: Project: 20801001
 EML ID: 381716

Approved by:

Lab Manager
Dr. Kamashwaran Ramanathan

Dates of Analysis:
Spore trap analysis: 01-30-2008

Project SOPs: 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: 20801001

Date of Sampling: 01-24-2008
Date of Receipt: 01-28-2008
Date of Report: 01-30-2008

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	20801001-TM01OUTWF		20801001-TM02WF		20801001-TM03WF		20801001-TM04WF	
Comments (see below)	None		None		None		None	
Lab ID-Version‡:	1676841-1		1676842-1		1676843-1		1676844-1	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Alternaria								
Arthrinium								
Ascospores*	20	1,070	2	107	1	53		
Aureobasidium								
Basidiospores*	27	1,440	10	533	3	160	4	213
Bipolaris/Drechslera group								
Botrytis	1	13						
Chaetomium								
Cladosporium	10	533	2	107	1	53	1	53
Curvularia								
Epicoccum								
Fusarium								
Myrothecium								
Nigrospora								
Other brown			2	27	1	13	1	13
Other colorless								
Penicillium/Aspergillus types†	2	107			2	107		
Pithomyces								
Rusts*							1	13
Smuts*, Periconia, Myxomycetes*	1	13			1	13	1	13
Stachybotrys								
Stemphylium								
Torula								
Ulocladium								
Zygomycetes								
Background debris (1-4+)††	1+		3+		3+		3+	
Hyphal fragments/m3	27		147		53		67	
Pollen/m3	27		< 13		< 13		< 13	
Skin cells (1-4+)	1+		3+		3+		3+	
Sample volume (liters)	75		75		75		75	
TOTAL SPORE/m3		3,176		774		399		305

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: 20801001

Date of Sampling: 01-24-2008
Date of Receipt: 01-28-2008
Date of Report: 01-30-2008

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	20801001-TM05WF		20801001-TM06WF		20801001-TM07WF		20801001-TM08OUTWF	
Comments (see below)	None		None		None		A	
Lab ID-Version‡:	1676845-1		1676846-1		1676847-1		1676848-1	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Alternaria								
Arthrinium								
Ascospores*			1	53			11	587
Aureobasidium								
Basidiospores*	3	160	2	107	1	53	22	1,170
Bipolaris/Drechslera group								
Botrytis	1	13						
Chaetomium								
Cladosporium	1	53	2	107	1	53	6	320
Curvularia								
Epicoccum								
Fusarium								
Myrothecium								
Nigrospora								
Other brown								
Other colorless								
Penicillium/Aspergillus types†	1	53			1	53	4	53
Pithomyces								
Rusts*			1	13				
Smuts*, Periconia, Myxomycetes*	1	13	1	13	1	13		
Stachybotrys								
Stemphylium								
Torula								
Ulocladium								
Zygomycetes								
Background debris (1-4+)††	3+		3+		3+		1+	
Hyphal fragments/m3	80		27		13		40	
Pollen/m3	27		40		13		< 13	
Skin cells (1-4+)	3+		3+		3+		None	
Sample volume (liters)	75		75		75		75	
TOTAL SPORE/m3		292		293		172		2,130

Comments: A) The 4 raw count *Penicillium/Aspergillus* type spores were present as a single clump.

* 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: 20801001

Date of Sampling: 01-24-2008
Date of Receipt: 01-28-2008
Date of Report: 01-30-2008

MoldRANGE™: Extended Outdoor Comparison**Outdoor Location: 20801001-TM01OUTWF**

Fungi Identified	Outdoor data	Typical Outdoor Data by Date†				Typical Outdoor Data by Location‡			
		Month: January				State: CA			
	spores/m3	low	med	high	freq %	low	med	high	freq %
Generally able to grow indoors*									
Alternaria	-	7	13	170	33	7	27	230	61
Bipolaris/Drechslera group	-	7	13	190	11	7	13	120	14
Chaetomium	-	7	13	150	8	7	13	110	19
Cladosporium	533	27	320	4,800	90	53	640	6,500	98
Curvularia	-	7	13	450	10	7	13	220	7
Nigrospora	-	7	13	140	9	7	13	170	8
Penicillium/Aspergillus types	107	27	210	2,300	85	44	210	2,500	89
Stachybotrys	-	7	13	740	3	7	13	320	5
Torula	-	7	13	180	5	7	13	150	13
Seldom found growing indoors**									
Ascospores	1,070	13	120	2,400	64	13	110	1,800	73
Basidiospores	1,440	13	320	11,000	87	13	270	7,100	95
Botrytis	13	7	14	240	11	7	20	200	21
Rusts	-	7	13	200	10	7	13	270	29
Smuts, Periconia, Myxomycetes	13	7	27	270	56	8	40	480	72
TOTAL SPORES/M3	3,176								

† 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.

Interpretation of the data contained in this report is left to the client or the persons who conducted the field work. This report is provided for informational and comparative purposes only and should not be relied upon for any other purpose. "Typical outdoor data" are based on the results of the analysis of samples delivered to and analyzed by EMLab P&K and assumptions regarding the origins of those samples. Sampling techniques, contaminants infecting samples, unrepresentative samples and other similar or dissimilar factors may affect these results. In addition, EMLab P&K may not have received and tested a representative number of samples for every region or time period. EMLab P&K hereby disclaims any liability for any and all direct, indirect, punitive, incidental, special or consequential damages arising out of the use or interpretation of the data contained in, or any actions taken or omitted in reliance upon, this report.

Client: Hygiene Technologies International, Inc.:
Northern California
C/O: Mr. Wes Frey
Re: 20801001

Date of Sampling: 01-24-2008
Date of Receipt: 01-28-2008
Date of Report: 01-30-2008

MoldRANGE™: Extended Outdoor Comparison**Outdoor Location: 20801001-TM08OUTWF**

Fungi Identified	Outdoor data	Typical Outdoor Data by Date†				Typical Outdoor Data by Location‡			
		Month: January				State: CA			
	spores/m3	low	med	high	freq %	low	med	high	freq %
Generally able to grow indoors*									
Alternaria	-	7	13	170	33	7	27	230	61
Bipolaris/Drechslera group	-	7	13	190	11	7	13	120	14
Chaetomium	-	7	13	150	8	7	13	110	19
Cladosporium	320	27	320	4,800	90	53	640	6,500	98
Curvularia	-	7	13	450	10	7	13	220	7
Nigrospora	-	7	13	140	9	7	13	170	8
Penicillium/Aspergillus types	53	27	210	2,300	85	44	210	2,500	89
Stachybotrys	-	7	13	740	3	7	13	320	5
Torula	-	7	13	180	5	7	13	150	13
Seldom found growing indoors**									
Ascospores	587	13	120	2,400	64	13	110	1,800	73
Basidiospores	1,170	13	320	11,000	87	13	270	7,100	95
Botrytis	-	7	14	240	11	7	20	200	21
Rusts	-	7	13	200	10	7	13	270	29
Smuts, Periconia, Myxomycetes	-	7	27	270	56	8	40	480	72
TOTAL SPORES/M3	2,130								

† 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.

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**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.

Interpretation of the data contained in this report is left to the client or the persons who conducted the field work. This report is provided for informational and comparative purposes only and should not be relied upon for any other purpose. "Typical outdoor data" are based on the results of the analysis of samples delivered to and analyzed by EMLab P&K and assumptions regarding the origins of those samples. Sampling techniques, contaminants infecting samples, unrepresentative samples and other similar or dissimilar factors may affect these results. In addition, EMLab P&K may not have received and tested a representative number of samples for every region or time period. EMLab P&K hereby disclaims any liability for any and all direct, indirect, punitive, incidental, special or consequential damages arising out of the use or interpretation of the data contained in, or any actions taken or omitted in reliance upon, this report.

Client: Hygiene Technologies International, Inc.:
 Northern California
 C/O: Mr. Wes Frey
 Re: 20801001

Date of Sampling: 01-24-2008
 Date of Receipt: 01-28-2008
 Date of Report: 01-30-2008

MoldSTAT™: Supplementary Statistical Spore Trap Report

Outdoor Summary: 20801001-TM01OUTWF:

Species detected	Outdoor sample spores/m3				Typical outdoor ranges (North America)	Freq. %
	<100	1K	10K	>100K		
Ascospores					13 - 160 - 4,300	76
Basidiospores					13 - 320 - 14,000	93
Botrytis					7 - 20 - 210	13
Cladosporium					50 - 530 - 8,500	95
Penicillium/Aspergillus types					27 - 210 - 2,600	86
Smuts, Periconia, Myxomycetes					7 - 40 - 770	71
Total						

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: 20801001-TM02WF

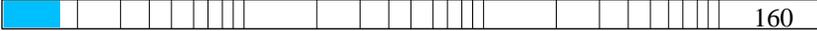
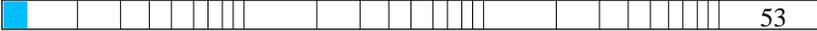
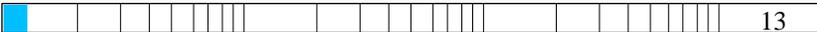
% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)	
Result: 24%	dF: 5 Result: 2.3571 Critical value: 11.0705 Inside Similar: Yes	Result: 0.6000	dF: 7 Result: 0.7500 Critical value: 0.6786 Outside Similar: Yes	Score: 119 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Ascospores					107
Basidiospores					533
Cladosporium					107
Other brown					27
Total					774

Client: Hygiene Technologies International, Inc.:
 Northern California
 C/O: Mr. Wes Frey
 Re: 20801001

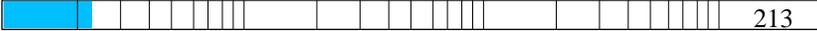
Date of Sampling: 01-24-2008
 Date of Receipt: 01-28-2008
 Date of Report: 01-30-2008

MoldSTAT™: Supplementary Statistical Spore Trap Report

Location: 20801001-TM03WF

% 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: 5 Result: 2.3571 Critical value: 11.0705 Inside Similar: Yes	Result: 0.8333	dF: 7 Result: 0.8036 Critical value: 0.6786 Outside Similar: Yes	Score: 115 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Ascospores					53
Basidiospores					160
Cladosporium					53
Other brown					13
Penicillium/Aspergillus types					107
Smuts, Periconia, Myxomycetes					13
Total					399

Location: 20801001-TM04WF

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)	
Result: 9%	dF: 5 Result: 2.3571 Critical value: 11.0705 Inside Similar: Yes	Result: 0.5455	dF: 8 Result: 0.2381 Critical value: 0.6190 Outside Similar: No	Score: 108 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Basidiospores					213
Cladosporium					53
Other brown					13
Rusts					13
Smuts, Periconia, Myxomycetes					13
Total					305

Client: Hygiene Technologies International, Inc.:
 Northern California
 C/O: Mr. Wes Frey
 Re: 20801001

Date of Sampling: 01-24-2008
 Date of Receipt: 01-28-2008
 Date of Report: 01-30-2008

MoldSTAT™: Supplementary Statistical Spore Trap Report

Location: 20801001-TM05WF

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)	
Result: 9%	dF: 5 Result: 2.3571 Critical value: 11.0705 Inside Similar: Yes	Result: 0.9091	dF: 6 Result: 0.4143 Critical value: 0.7714 Outside Similar: No	Score: 107 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Basidiospores					160
Botrytis					13
Cladosporium					53
Penicillium/Aspergillus types					53
Smuts, Periconia, Myxomycetes					13
Total					292

Location: 20801001-TM06WF

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)	
Result: 9%	dF: 5 Result: 2.3571 Critical value: 11.0705 Inside Similar: Yes	Result: 0.7273	dF: 7 Result: 0.6786 Critical value: 0.6786 Outside Similar: No	Score: 104 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Ascospores					53
Basidiospores					107
Cladosporium					107
Rusts					13
Smuts, Periconia, Myxomycetes					13
Total					293

Client: Hygiene Technologies International, Inc.:
 Northern California
 C/O: Mr. Wes Frey
 Re: 20801001

Date of Sampling: 01-24-2008
 Date of Receipt: 01-28-2008
 Date of Report: 01-30-2008

MoldSTAT™: Supplementary Statistical Spore Trap Report

Location: 20801001-TM07WF

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)	
Result: 5%	dF: 5 Result: 2.3571 Critical value: 11.0705 Inside Similar: Yes	Result: 0.8000	dF: 6 Result: 0.4143 Critical value: 0.7714 Outside Similar: No	Score: 107 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Basidiospores					53
Cladosporium					53
Penicillium/Aspergillus types					53
Smuts, Periconia, Myxomycetes					13
Total					172

* 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.

**** 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.

Interpretation of the data contained in this report is left to the client or the persons who conducted the field work. This report is provided for informational and comparative purposes only and should not be relied upon for any other purpose. "Typical outdoor ranges" are based on the results of the analysis of samples delivered to and analyzed by EMLab P&K and assumptions regarding the origins of those samples. Sampling techniques, contaminants infecting samples, unrepresentative samples and other similar or dissimilar factors may affect these results. With the statistical analysis provided, as with all statistical comparisons and analyses, false-positive and false-negative results can and do occur. EMLab P&K hereby disclaims any liability for any and all direct, indirect, punitive, incidental, special or consequential damages arising out of the data contained in, or any actions taken or omitted in reliance upon, this report.

Client: Hygiene Technologies International, Inc.:
 Northern California
 C/O: Mr. Wes Frey
 Re: 20801001

Date of Sampling: 01-24-2008
 Date of Receipt: 01-28-2008
 Date of Report: 01-30-2008

MoldSTAT™: Supplementary Statistical Spore Trap Report

Outdoor Summary: 20801001-TM08OUTWF:

Species detected	Outdoor sample spores/m3				Typical outdoor ranges (North America)	Freq. %
	<100	1K	10K	>100K		
Ascospores				587	13 - 160 - 4,300	76
Basidiospores				1,170	13 - 320 - 14,000	93
Cladosporium				320	50 - 530 - 8,500	95
Penicillium/Aspergillus types				53	27 - 210 - 2,600	86
Smuts, Periconia, Myxomycetes				ND	7 - 40 - 770	71
Total				2,130		

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: 20801001-TM02WF

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)	
Result: 36%	dF: 5 Result: 2.3571 Critical value: 11.0705 Inside Similar: Yes	Result: 0.7500	dF: 5 Result: 0.8750 Critical value: 0.8000 Outside Similar: Yes	Score: 111 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Ascospores					107
Basidiospores					533
Cladosporium					107
Other brown					27
Total					774

Client: Hygiene Technologies International, Inc.:
 Northern California
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Date of Sampling: 01-24-2008
 Date of Receipt: 01-28-2008
 Date of Report: 01-30-2008

MoldSTAT™: Supplementary Statistical Spore Trap Report

Location: 20801001-TM03WF

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)	
Result: 18%	dF: 5 Result: 2.3571 Critical value: 11.0705 Inside Similar: Yes	Result: 0.8000	dF: 6 Result: 0.8143 Critical value: 0.7714 Outside Similar: Yes	Score: 115 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Ascospores					53
Basidiospores					160
Cladosporium					53
Other brown					13
Penicillium/Aspergillus types					107
Smuts, Periconia, Myxomycetes					13
Total					399

Location: 20801001-TM04WF

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)	
Result: 14%	dF: 5 Result: 2.3571 Critical value: 11.0705 Inside Similar: Yes	Result: 0.4444	dF: 7 Result: 0.2946 Critical value: 0.6786 Outside Similar: No	Score: 108 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Basidiospores					213
Cladosporium					53
Other brown					13
Rusts					13
Smuts, Periconia, Myxomycetes					13
Total					305

Client: Hygiene Technologies International, Inc.:
 Northern California
 C/O: Mr. Wes Frey
 Re: 20801001

Date of Sampling: 01-24-2008
 Date of Receipt: 01-28-2008
 Date of Report: 01-30-2008

MoldSTAT™: Supplementary Statistical Spore Trap Report

Location: 20801001-TM05WF

% 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: 5 Result: 2.3571 Critical value: 11.0705 Inside Similar: Yes	Result: 0.6667	dF: 6 Result: 0.4143 Critical value: 0.7714 Outside Similar: No	Score: 107 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Basidiospores					160
Botrytis					13
Cladosporium					53
Penicillium/Aspergillus types					53
Smuts, Periconia, Myxomycetes					13
Total					292

Location: 20801001-TM06WF

% 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: 5 Result: 2.3571 Critical value: 11.0705 Inside Similar: Yes	Result: 0.6667	dF: 6 Result: 0.7286 Critical value: 0.7714 Outside Similar: No	Score: 104 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Ascospores					53
Basidiospores					107
Cladosporium					107
Rusts					13
Smuts, Periconia, Myxomycetes					13
Total					293

Client: Hygiene Technologies International, Inc.:
 Northern California
 C/O: Mr. Wes Frey
 Re: 20801001

Date of Sampling: 01-24-2008
 Date of Receipt: 01-28-2008
 Date of Report: 01-30-2008

MoldSTAT™: Supplementary Statistical Spore Trap Report

Location: 20801001-TM07WF

% 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: 5 Result: 2.3571 Critical value: 11.0705 Inside Similar: Yes	Result: 0.7500	dF: 5 Result: 0.2000 Critical value: 0.8000 Outside Similar: No	Score: 108 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Basidiospores					53
Cladosporium					53
Penicillium/Aspergillus types					53
Smuts, Periconia, Myxomycetes					13
Total					172

* 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.

**** 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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Client: Hygiene Technologies International, Inc.:
 Northern California
 C/O: Mr. Wes Frey
 Re: 20801001

Date of Sampling: 01-24-2008
 Date of Receipt: 01-28-2008
 Date of Report: 01-30-2008

MoldSCORE™: Spore Trap Report

Location: 20801001-TM03WF

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				100
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Other brown	█				1	13				105
Penicillium/Aspergillus types†	█				2	107				115
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
Seldom found growing indoors**										
Ascospores††	█				1	53				100
Basidiospores††	█				3	160				100
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes††	█				1	13				102
Total						399				Final MoldSCORE 115

Location: 20801001-TM04WF

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				100
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Other brown	█				1	13				105
Penicillium/Aspergillus types†					ND	< 13				100
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
Seldom found growing indoors**										
Ascospores††					ND	< 13				100
Basidiospores††	█				4	213				108
Rusts	█				1	13				105
Smuts, Periconia, Myxomycetes††	█				1	13				102
Total						305				Final MoldSCORE 108

Client: Hygiene Technologies International, Inc.:
 Northern California
 C/O: Mr. Wes Frey
 Re: 20801001

Date of Sampling: 01-24-2008
 Date of Receipt: 01-28-2008
 Date of Report: 01-30-2008

MoldSCORE™: Spore Trap Report

Location: 20801001-TM05WF

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				100
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Penicillium/Aspergillus types†	█				1	53				107
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
Seldom found growing indoors**										
Ascospores‡‡					ND	< 13				100
Basidiospores‡‡	█				3	160				103
Botrytis	█				1	13				105
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes‡‡	█				1	13				102
Total						292				Final MoldSCORE 107

Location: 20801001-TM06WF

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	█				2	107				104
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‡‡	█				1	53				100
Basidiospores‡‡	█				2	107				100
Rusts	█				1	13				105
Smuts, Periconia, Myxomycetes‡‡	█				1	13				102
Total						293				Final MoldSCORE 104

Client: Hygiene Technologies International, Inc.:
 Northern California
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 Re: 20801001

Date of Sampling: 01-24-2008
 Date of Receipt: 01-28-2008
 Date of Report: 01-30-2008

MoldSCORE™: Spore Trap Report

Location: 20801001-TM07WF

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	107			
Stachybotrys					ND	< 13	100			
Torula					ND	< 13	100			
Seldom found growing indoors**										
Ascospores††					ND	< 13	100			
Basidiospores††					1	53	100			
Rusts					ND	< 13	100			
Smuts, Periconia, Myxomycetes††					1	13	102			
Total						172	Final MoldSCORE 107			

*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.

Client: Hygiene Technologies International, Inc.:
 Northern California
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 Re: 20801001

Date of Sampling: 01-24-2008
 Date of Receipt: 01-28-2008
 Date of Report: 01-30-2008

MoldSCORE™: Spore Trap Report

Location: 20801001-TM03WF

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				100
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Other brown	█				1	13				105
Penicillium/Aspergillus types†	█				2	107				115
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
Seldom found growing indoors**										
Ascospores††	█				1	53				100
Basidiospores††	█				3	160				100
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes††	█				1	13				103
Total						399				Final MoldSCORE 115

Location: 20801001-TM04WF

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				100
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Other brown	█				1	13				105
Penicillium/Aspergillus types†					ND	< 13				100
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
Seldom found growing indoors**										
Ascospores††					ND	< 13				100
Basidiospores††	█				4	213				105
Rusts	█				1	13				105
Smuts, Periconia, Myxomycetes††	█				1	13				103
Total						305				Final MoldSCORE 108

Client: Hygiene Technologies International, Inc.:
 Northern California
 C/O: Mr. Wes Frey
 Re: 20801001

Date of Sampling: 01-24-2008
 Date of Receipt: 01-28-2008
 Date of Report: 01-30-2008

MoldSCORE™: Spore Trap Report

Location: 20801001-TM05WF

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				101
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Penicillium/Aspergillus types†	█				1	53				107
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
Seldom found growing indoors**										
Ascospores††					ND	< 13				100
Basidiospores††	█				3	160				100
Botrytis	█				1	13				105
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes††	█				1	13				103
Total						292				Final MoldSCORE 107

Location: 20801001-TM06WF

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	█				2	107				104
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††	█				1	53				100
Basidiospores††	█				2	107				100
Rusts					1	13				105
Smuts, Periconia, Myxomycetes††	█				1	13				103
Total						293				Final MoldSCORE 104

Client: Hygiene Technologies International, Inc.:
 Northern California
 C/O: Mr. Wes Frey
 Re: 20801001

Date of Sampling: 01-24-2008
 Date of Receipt: 01-28-2008
 Date of Report: 01-30-2008

MoldSCORE™: Spore Trap Report

Location: 20801001-TM07WF

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	108			
Stachybotrys					ND	< 13	100			
Torula					ND	< 13	100			
Seldom found growing indoors**										
Ascospores††					ND	< 13	100			
Basidiospores††					1	53	100			
Rusts					ND	< 13	100			
Smuts, Periconia, Myxomycetes††					1	13	103			
Total						172	Final MoldSCORE 108			

*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.



EMLab P&K

Report for:

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

Regarding: Project: 20801001
 EML ID: 381716

Approved by:

Lab Manager
Dr. Kamashwaran Ramanathan

Dates of Analysis:
Culturable air fungi (Incl. Asp spp.): 01-31-2008
Spore trap analysis: 01-30-2008

Project SOPs: Culturable air fungi (Incl. Asp spp.) (I100002), 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: 20801001

Date of Sampling: 01-24-2008
Date of Receipt: 01-28-2008
Date of Report: 01-31-2008

CULTURABLE AIR FUNGI REPORT

Location:	20801001-VM01OUT WF		20801001-VM02WF		20801001-VM03WF		20801001-VM04WF	
Comments (see below)	None		None		None		None	
Lab ID-Version‡:	1676833-1		1676834-1		1676835-1		1676836-1	
	raw ct.	cfu*/m3	raw ct.	cfu*/m3	raw ct.	cfu*/m3	raw ct.	cfu*/m3
Acremonium								
Alternaria								
Aspergillus flavus								
Aspergillus fumigatus								
Aspergillus nidulans								
Aspergillus niger								
Aspergillus ochraceus								
Aspergillus versicolor								
Aureobasidium								
Basidiomycetes								
Bipolaris/Drechslera group								
Botrytis								
Chaetomium								
Cladosporium	13	230	2	35	4	71		
Curvularia								
Epicoccum								
Fusarium								
Non-sporulating fungi	3	53	2	35				
Paecilomyces								
Penicillium	6	106						
Phoma								
Rhizopus								
Stachybotrys chartarum								
Ulocladium								
Yeasts			2	35	4	71	2	35
Positive Hole	400		400		400		400	
Sample volume (liters)	56.6		56.6		56.6		56.6	
TOTAL CFU*/M3		389		105		142		35

* cfu = colony forming units Positive hole correction chart used for all calculations

Comments:

Note: Interpretation is left to the company and/or persons who conducted the field work. Variation is an inherent part of biological sampling. The presence or absence of a few genera in small numbers should not be considered abnormal.
 NORMAL SPORE LEVELS: Indoor spore levels usually average 30 to 80% of the outdoor spore level at the time of sampling, with the same general distribution of spore types. Filtered air, air-conditioned air, or air remote from outside sources may average 5 to 15% of the outside air at the time of sampling. (These percentages are guidelines, only. A major factor is the accessibility of outdoor air. A residence with open doors and windows and heavy foot traffic may average 95% of the outdoor level while high rise office buildings with little air exchange may average 2%. Dusty interiors may exceed 100% of the outdoors to some degree, but will still mirror the outdoor distribution of spore types.)
 PROBLEM INTERIORS: A substantial increase of one or two spore types which are inconsistent with and non-reflective of the outside distribution of spore types is usually indicative of an indoor reservoir of mold growth.
 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: 20801001

Date of Sampling: 01-24-2008
Date of Receipt: 01-28-2008
Date of Report: 01-31-2008

CULTURABLE AIR FUNGI REPORT

Location:	20801001-VM05WF		20801001-VM06WF		20801001-VM07WF		20801001-VM08OUT WF	
Comments (see below)	None		None		None		None	
Lab ID-Version‡:	1676837-1		1676838-1		1676839-1		1676840-1	
	raw ct.	cfu*/m3	raw ct.	cfu*/m3	raw ct.	cfu*/m3	raw ct.	cfu*/m3
Acremonium								
Alternaria			1	18				
Aspergillus flavus								
Aspergillus fumigatus								
Aspergillus nidulans								
Aspergillus niger								
Aspergillus ochraceus								
Aspergillus versicolor								
Aureobasidium								
Basidiomycetes								
Bipolaris/Drechslera group								
Botrytis								
Chaetomium								
Cladosporium	1	18	1	18	1	18	21	389
Curvularia								
Epicoccum								
Fusarium								
Non-sporulating fungi							2	35
Paecilomyces								
Penicillium	1	18					5	88
Phoma								
Rhizopus								
Stachybotrys chartarum								
Ulocladium								
Yeasts	2	35					3	53
Positive Hole	400		400		400		400	
Sample volume (liters)	56.6		56.6		56.6		56.6	
TOTAL CFU*/M3		71		36		18		565

* cfu = colony forming units Positive hole correction chart used for all calculations

Comments:

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