



HYGIENETECH

Hygiene Technologies International, Inc.

3625 Del Amo Boulevard, Suite 180
Torrance, California 90503-1643
(310) 370-8370
(310) 370-7026 FAX
www.hygienetech.com

July 30, 2009

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

Document No. 20907001.2

Attention: David Gau

Regarding: Limited Fungal Growth Exposure Assessment Survey
Elevator Shaft Encapsulation Monitoring

Dear Mr. Gau:

On July 17 through 19, 2009, industrial hygienists with Hygiene Technologies International, Inc. (HygieneTech) monitored elevator shaft encapsulation work within the State of California Board of Equalization (BOE) building being performed by JLS Environmental Services, Inc. (JLS) in accordance with the protocols set forth in the document "Letter Summary Report – Elevator Shaft Mitigation Procedures", prepared by BioMax Environmental, LLC, dated March 19, 2009. During the monitored period, air samples for fungal spores were collected in random elevator lobby areas and within the elevator cars while the encapsulation was ongoing and at the conclusion of the elevator car cleaning. The survey findings, along with the analytical data, conclusions, and conclusions appear below.

On the survey dates, air samples were collected for total (viable and nonviable) fungi analyses using a Zefon brand Bio-Pump™ equipped with Zefon Air-O-Cell™ cassettes. 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 assessment analytical data with supporting and background information appear in the enclosed table.

As presented in Table 20907001-2, the airborne spore count data recorded showed mostly common fungal spore types outdoors, such as *Alternaria*, ascospores, basidiospores, *Bipolaris/Drechslera* group, *Botrytis*, *Chaetomium*, *Cladosporium*, colorless spores typical of *Penicillium* and *Aspergillus* species, *Nigrospora*, *Oidium*, other brown, *Pithomyces*, rusts, smuts, *Stemphylium*, and/or *Torula*, with basidiospores or *Cladosporium* predominating. The data in the interior elevator cars and elevator lobby areas showed low airborne concentrations of common fungal spore types that were consistent with those found outdoors, and the overall data within these areas were well below the overall data recorded outdoors. Please note that once the elevator shaft encapsulation was finished, the interior of the elevator cars were vacuumed with equipment having high efficiency particulate air (HEPA) filtration and then wet wiped by JLS personnel. Collectively, these data are 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.



Be advised that the data provided in this report only represent limited fungal growth 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.

A handwritten signature in black ink, appearing to read 'Kenny', is written over a horizontal line.

Kenny K. Hsi, CIH
Technical Director



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

**TABLE 20907001-2
AIRBORNE TOTAL FUNGI RESULTS
ELEVATOR SHAFT ABATEMENT
SACRAMENTO, CALIFORNIA
JULY 17, 18, AND 19, 2009**

Page 1

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

SAMPLE NUMBER	20907001-TM61OUTLS	20907001-TM62LS	20907001-TM63LS	20907001-TM64LS
SAMPLING LOCATION/ACTIVITIES	Outdoors; about 20 feet north of building; approximately five feet above floor/Normal outdoor activities	22 nd Floor; Elevator Lobby; about center; approximately five feet above floor/Sampling activities only	21 st Floor; Elevator Lobby; about center; approximately five feet above floor/Sampling activities only	18 th Elevator Lobby; about center; approximately five feet above floor/Sampling activities only
DATE	07-17-09	07-17-09	07-17-09	07-18-09
START/STOP	19:52:00/19:57:00	22:21:00/22:26:00	23:52:00/23:57:00	00:51:00/00:56:00
SAMPLE TIME	5 minutes	5 minutes	5 minutes	5 minutes
Alternaria	27			
Ascospores	160			
Aureobasidium				
Basidiospores	800		160	53
Bipolaris/Drechslera group				
Botrytis				
Chaetomium	40			
Cladosporium	1,300	53		53
Curvularia				
Epicoccum				
Nigrospora	13			
Oidium				
Other brown				
Penicillium/Aspergillus types	270	160		
Pithomyces				
Rusts				
Smuts, Periconia, Myxomycetes	130			
Stachybotrys				
Stemphylium				
Torula				
Ulocladium				
Hyphal fragments	190	<13	13	<13
Background debris*	2+	2+	2+	1+
TOTAL**	2,700	210	160	110

*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+.

**Note that all reported counts have been rounded to no more than two significant figures based on the sampling and analytical methods used, and therefore the total count may not equal the sum of the individual counts in a column.

HYGIENE TECHNOLOGIES INTERNATIONAL, INC.

APPENDIX A



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

**TABLE 20907001-2
AIRBORNE TOTAL FUNGI RESULTS
ELEVATOR SHAFT ABATEMENT
SACRAMENTO, CALIFORNIA
JULY 17, 18, AND 19, 2009**

Page 2

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

SAMPLE NUMBER	20907001- TM65LS	20907001- TM66LS	20907001- TM67OUTLS	20907001- TM81OUTLS
SAMPLING LOCATION/ACTIVITIES	1 st Floor; High Rise Elevator Lobby; about center; approximately five feet above floor/Sampling activities only	11 th Floor; southern hallway; about two feet south of High Rise Elevator Lobby; about center; approximately five feet above floor/Sampling activities only	Outdoors; about 20 feet north of building; approximately five feet above floor/Normal outdoor activities	Outdoors; about 20 feet north of building; approximately five feet above floor/Normal outdoor activities
DATE	07-18-09	07-18-09	07-18-09	07-18-09
START/STOP	01:16:00/1:21:00	02:19:00/02:24:00	02:25:00/02:30:00	11:01:00/11:06:00
SAMPLE TIME	5 minutes	5 minutes	5 minutes	5 minutes
Alternaria			13	80
Ascospores			110	320
Aureobasidium				
Basidiospores	160		1,600	1,200
Bipolaris/Drechslera group				
Botrytis			13	
Chaetomium			13	40
Cladosporium			1,100	3,900
Curvularia				
Epicoccum				
Nigrospora				
Oidium				93
Other brown				13
Penicillium/Aspergillus types	53		160	270
Pithomyces				
Rusts			13	
Smuts, Periconia, Myxomycetes			40	330
Stachybotrys				
Stemphylium				67
Torula				13
Ulocladium				
Hyphal fragments	13	<13	93	150
Background debris*	1+	<1+	2+	2+
Total	210	<13	3,000	6,300

*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+.

**Note that all reported counts have been rounded to no more than two significant figures based on the sampling and analytical methods used, and therefore the total count may not equal the sum of the individual counts in a column.



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

**TABLE 20907001-2
AIRBORNE TOTAL FUNGI RESULTS
ELEVATOR SHAFT ABATEMENT
SACRAMENTO, CALIFORNIA
JULY 17, 18, AND 19, 2009**

Page 3

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

SAMPLE NUMBER	20907001- TM82LS	20907001- TM83LS	20907001- TM84OUTLS	20907001- TM301OUTWF
SAMPLING LOCATION/ACTIVITIES	1 st Floor; Low Rise Elevator Lobby; about center; approximately five feet above floor/Sampling activities only	23 rd Floor; southern hallway; about two feet south of elevator lobby; approximately five feet above floor/Sampling activities	Outdoors; about 20 feet north of building; approximately five feet above ground/Normal outdoor activities	Outdoors; about 25 feet east of building; approximately five feet above floor/Normal outdoor activities
DATE	07-18-09	07-18-09	07-18-09	07-19-09
START/STOP	11:09:00/11:14:00	14:06:00/14:11:00	19:21:00/19:26:00	15:22:00/15:27:00
SAMPLE TIME	5 minutes	5 minutes	5 minutes	5 minutes
Alternaria			13	53
Ascospores				110
Aureobasidium				
Basidiospores			910	1,600
Bipolaris/Drechslera group				13
Botrytis			27	
Chaetomium			40	
Cladosporium	53	210	1,800	3,400
Curvularia				
Epicoccum				
Nigrospora				
Oidium			40	13
Other brown				
Penicillium/Aspergillus types	53		110	570
Pithomyces			13	
Rusts		13		
Smuts, Periconia, Myxomycetes		13	390	230
Stachybotrys				
Stemphylium				
Torula		13		
Ulocladium				
Hyphal fragments	<13	<13	160	170
Background debris*	1+	2+	2+	2+
TOTAL**	110	250	3,300	6,000

*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+.

**Note that all reported counts have been rounded to no more than two significant figures based on the sampling and analytical methods used, and therefore the total count may not equal the sum of the individual counts in a column.

HYGIENE TECHNOLOGIES INTERNATIONAL, INC.

APPENDIX A



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

**TABLE 20907001-2
AIRBORNE TOTAL FUNGI RESULTS
ELEVATOR SHAFT ABATEMENT
SACRAMENTO, CALIFORNIA
JULY 17, 18, AND 19, 2009**

Page 4

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

SAMPLE NUMBER	20907001- TM302WF	20907001- TM303WF	20907001- TM304WF	20907001- TM305WF
SAMPLING LOCATION/ACTIVITIES	22 nd Floor; Elevator Lobby; about center; approximately five feet above floor/Sampling activities only	1 st Floor; High Rise Elevator Lobby; about center; approximately five feet above floor/Sampling activities only	1 st floor; Elevator Car #6; about center; approximately five feet above floor/Post abatement; sampling activities only	1 st floor; Elevator Car #5; about center; approximately five feet above floor/ Post abatement; sampling activities only
DATE	07-19-09	07-19-09	07-19-09	07-19-09
START/STOP	15:44:00/15:49:00	18:34:00/18:39:00	18:40:00/18:45:00	18:57:00/19:02:00
SAMPLE TIME	5 minutes	5 minutes	5 minutes	5 minutes
Alternaria			27	13
Ascospores			110	53
Aureobasidium				
Basidiospores	110		370	160
Bipolaris/Drechslera group				
Botrytis				
Chaetomium				
Cladosporium	110	53	110	320
Curvularia				
Epicoccum			13	
Nigrospora				
Oidium				
Other brown			27	
Penicillium/Aspergillus types			53	
Pithomyces				
Rusts			27	27
Smuts, Periconia, Myxomycetes	27		67	40
Stachybotrys				
Stemphylium				
Torula			13	
Ulocladium				
Hyphal fragments	<13	<13	53	80
Background debris*	2+	1+	3+	4+
TOTAL**	240	53	810	610

*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+.

**Note that all reported counts have been rounded to no more than two significant figures based on the sampling and analytical methods used, and therefore the total count may not equal the sum of the individual counts in a column.



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

**TABLE 20907001-2
AIRBORNE TOTAL FUNGI RESULTS
ELEVATOR SHAFT ABATEMENT
SACRAMENTO, CALIFORNIA
JULY 17, 18, AND 19, 2009**

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

SAMPLE NUMBER	20907001- TM306OUTWF			
SAMPLING LOCATION/ACTIVITIES	Outdoors; about 25 feet north of building; approximately five feet above floor/Normal outdoor activities	This column intentionally left blank	This column intentionally left blank	This column intentionally left blank
DATE	07-19-09			
START/STOP	19:25:00/19:30:00			
SAMPLE TIME	5 minutes			
Alternaria	27			
Ascospores	160			
Aureobasidium				
Basidiospores	1,000			
Bipolaris/Drechslera group				
Botrytis				
Chaetomium				
Cladosporium	3,000			
Curvularia				
Epicoccum				
Nigrospora	13			
Oidium	13			
Other brown				
Penicillium/Aspergillus types	430			
Pithomyces				
Rusts	40			
Smuts, Periconia, Myxomycetes	250			
Stachybotrys				
Stemphylium	27			
Torula				
Ulocladium				
Hyphal fragments	200			
Background debris*	3+			
TOTAL**	5,000			

*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+.

**Note that all reported counts have been rounded to no more than two significant figures based on the sampling and analytical methods used, and therefore the total count may not equal the sum of the individual counts in a column.



EMLab P&K

Report for:

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

Regarding: Project: 20907001
 EML ID: 561980

Approved by:

Lab Manager
Malcolm Moody

Dates of Analysis:
Spore trap analysis: 07-20-2009

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: 20907001

Date of Receipt: 07-20-2009
Date of Report: 07-20-2009

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	20907001-TM61OUTLS		20907001-TM62LS		20907001-TM63LS		20907001-TM64LS	
Comments (see below)	None		None		None		None	
Lab ID-Version‡:	2493013-1		2493014-1		2493015-1		2493016-1	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Alternaria	2	27						
Arthrinium								
Ascospores*	3	160						
Aureobasidium								
Basidiospores*	15	800			3	160	1	53
Bipolaris/Drechslera group								
Botrytis								
Chaetomium	3	40						
Cladosporium	24	1,300	1	53			1	53
Curvularia								
Epicoccum								
Fusarium								
Myrothecium								
Nigrospora	1	13						
Other colorless								
Penicillium/Aspergillus types†	5	270	3	160				
Pithomyces								
Rusts*								
Smuts*, Periconia, Myxomycetes*	10	130						
Stachybotrys								
Stemphylium								
Torula								
Ulocladium								
Zygomycetes								
Background debris (1-4+)††	2+		2+		2+		1+	
Hyphal fragments/m3	190		< 13		13		< 13	
Pollen/m3	53		13		< 13		< 13	
Skin cells (1-4+)	< 1+		< 1+		< 1+		< 1+	
Sample volume (liters)	75		75		75		75	
§ TOTAL SPORE/m3		2,700		210		160		110

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.
§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.
TestAmerica Environmental Microbiology Laboratory, Inc.

Client: Hygiene Technologies International, Inc.:
Northern California
C/O: Mr. Wes Frey
Re: 20907001

Date of Receipt: 07-20-2009
Date of Report: 07-20-2009

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	20907001-TM65LS		20907001-TM66LS		20907001-TM67OUTLS	
Comments (see below)	None		None		None	
Lab ID-Version‡:	2493017-1		2493018-1		2493019-1	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Alternaria					1	13
Arthrinium						
Ascospores*					2	110
Aureobasidium						
Basidiospores*	3	160			30	1,600
Bipolaris/Drechslera group						
Botrytis					1	13
Chaetomium					1	13
Cladosporium					20	1,100
Curvularia						
Epicoccum						
Fusarium						
Myrothecium						
Nigrospora						
Other colorless						
Penicillium/Aspergillus types†	1	53			3	160
Pithomyces						
Rusts*					1	13
Smuts*, Periconia, Myxomycetes*					3	40
Stachybotrys						
Stemphylium						
Torula						
Ulocladium						
Zygomycetes						
Background debris (1-4+)††	1+		< 1+		2+	
Hyphal fragments/m3	13		< 13		93	
Pollen/m3	< 13		< 13		40	
Skin cells (1-4+)	< 1+		< 1+		< 1+	
Sample volume (liters)	75		75		75	
§ TOTAL SPORE/m3		210		< 13		3,000

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.

§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.
TestAmerica Environmental Microbiology Laboratory, Inc.

Client: Hygiene Technologies International, Inc.:
Northern California
C/O: Mr. Wes Frey
Re: 20907001

Date of Receipt: 07-20-2009
Date of Report: 07-20-2009

MoldRANGE™: Extended Outdoor Comparison**Outdoor Location: 20907001-TM61OUTLS**

Fungi Identified	Outdoor data	Typical Outdoor Data by Date†				Typical Outdoor Data by Location‡			
		Month: July				State: CA			
	spores/m3	low	med	high	freq %	low	med	high	freq %
Generally able to grow indoors*									
Alternaria	27	7	40	470	67	7	27	220	57
Bipolaris/Drechslera group	-	7	13	250	22	7	13	120	13
Chaetomium	40	7	13	120	16	7	13	120	19
Cladosporium	1,300	53	760	9,800	97	53	640	6,800	97
Curvularia	-	7	25	730	21	7	13	230	7
Nigrospora	13	7	13	170	14	7	13	170	8
Penicillium/Aspergillus types	270	27	210	2,600	83	33	210	2,500	86
Stachybotrys	-	7	13	370	4	7	13	290	5
Torula	-	7	13	160	15	7	13	150	12
Seldom found growing indoors**									
Ascospores	160	13	210	6,700	83	13	110	1,900	71
Basidiospores	800	13	360	22,000	94	13	210	7,000	93
Botrytis	-	7	13	230	12	7	20	200	19
Rusts	-	7	13	240	24	7	13	250	28
Smuts, Periconia, Myxomycetes	130	7	53	1,900	79	8	40	490	70
TOTAL SPORES/M3	2,740								

† 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: 20907001

Date of Receipt: 07-20-2009
Date of Report: 07-20-2009

MoldRANGE™: Extended Outdoor Comparison**Outdoor Location: 20907001-TM67OUTLS**

Fungi Identified	Outdoor data	Typical Outdoor Data by Date†				Typical Outdoor Data by Location‡			
		Month: July				State: CA			
	spores/m3	low	med	high	freq %	low	med	high	freq %
Generally able to grow indoors*									
Alternaria	13	7	40	470	67	7	27	220	57
Bipolaris/Drechslera group	-	7	13	250	22	7	13	120	13
Chaetomium	13	7	13	120	16	7	13	120	19
Cladosporium	1,100	53	760	9,800	97	53	640	6,800	97
Curvularia	-	7	25	730	21	7	13	230	7
Nigrospora	-	7	13	170	14	7	13	170	8
Penicillium/Aspergillus types	160	27	210	2,600	83	33	210	2,500	86
Stachybotrys	-	7	13	370	4	7	13	290	5
Torula	-	7	13	160	15	7	13	150	12
Seldom found growing indoors**									
Ascospores	110	13	210	6,700	83	13	110	1,900	71
Basidiospores	1,600	13	360	22,000	94	13	210	7,000	93
Botrytis	13	7	13	230	12	7	20	200	19
Rusts	13	7	13	240	24	7	13	250	28
Smuts, Periconia, Myxomycetes	40	7	53	1,900	79	8	40	490	70
TOTAL SPORES/M3	3,062								

† 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: 20907001

Date of Receipt: 07-20-2009
 Date of Report: 07-20-2009

MoldSTAT™: Supplementary Statistical Spore Trap Report

Outdoor Summary: 20907001-TM61OUTLS:

Species detected	Outdoor sample spores/m3				Typical outdoor ranges (North America)	Freq. %
	<100	1K	10K	>100K		
Alternaria				27	7 - 27 - 400	52
Ascospores				160	13 - 160 - 4,600	76
Basidiospores				800	13 - 320 - 15,000	91
Chaetomium				40	7 - 13 - 130	12
Cladosporium				1,300	27 - 510 - 8,900	93
Nigrospora				13	7 - 13 - 210	15
Penicillium/Aspergillus types				270	27 - 210 - 2,500	80
Smuts, Periconia, Myxomycetes				130	7 - 40 - 840	69
Total				2,740		

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: 20907001-TM62LS

% 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: 4 Result: 2.5333 Critical value: 9.4877 Inside Similar: Yes	Result: 0.4000	dF: 8 Result: 0.6607 Critical value: 0.6190 Outside Similar: Yes	Score: 122 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
	Cladosporium				53
	Penicillium/Aspergillus types				160
	Total				213

Client: Hygiene Technologies International, Inc.:
 Northern California
 C/O: Mr. Wes Frey
 Re: 20907001

Date of Receipt: 07-20-2009
 Date of Report: 07-20-2009

MoldSTAT™: Supplementary Statistical Spore Trap Report

Location: 20907001-TM63LS

% 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: 4 Result: 2.5333 Critical value: 9.4877 Inside Similar: Yes	Result: 0.2222	dF: 8 Result: 0.5714 Critical value: 0.6190 Outside Similar: No	Score: 112 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Basidiospores					160
Total					160

Location: 20907001-TM64LS

% 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: 4 Result: 2.5333 Critical value: 9.4877 Inside Similar: Yes	Result: 0.4000	dF: 8 Result: 0.7857 Critical value: 0.6190 Outside Similar: Yes	Score: 102 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Basidiospores					53
Cladosporium					53
Total					106

Location: 20907001-TM65LS

% 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: 4 Result: 2.5333 Critical value: 9.4877 Inside Similar: Yes	Result: 0.4000	dF: 8 Result: 0.6012 Critical value: 0.6190 Outside Similar: No	Score: 110 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Basidiospores					160
Penicillium/Aspergillus types					53
Total					213

Client: Hygiene Technologies International, Inc.:
 Northern California
 C/O: Mr. Wes Frey
 Re: 20907001

Date of Receipt: 07-20-2009
 Date of Report: 07-20-2009

MoldSTAT™: Supplementary Statistical Spore Trap Report

Location: 20907001-TM66LS

% 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: 4 Result: 2.5333 Critical value: 9.4877 Inside Similar: Yes	Result: 0.0000	dF: N/A Result: N/A Critical value: N/A Outside Similar: N/A	Score: 100 Result: Low
Species Detected		Spores/m3		
		<100	1K	10K
				>100K
None Detected				N/A

* 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: 20907001

Date of Receipt: 07-20-2009
 Date of Report: 07-20-2009

MoldSTAT™: Supplementary Statistical Spore Trap Report

Outdoor Summary: 20907001-TM67OUTLS:

Species detected	Outdoor sample spores/m3				Typical outdoor ranges (North America)	Freq. %
	<100	1K	10K	>100K		
Alternaria				13	7 - 27 - 400	52
Ascospores				110	13 - 160 - 4,600	76
Basidiospores				1,600	13 - 320 - 15,000	91
Botrytis				13	7 - 20 - 230	11
Chaetomium				13	7 - 13 - 130	12
Cladosporium				1,100	27 - 510 - 8,900	93
Penicillium/Aspergillus types				160	27 - 210 - 2,500	80
Rusts				13	7 - 15 - 310	22
Smuts, Periconia, Myxomycetes				40	7 - 40 - 840	69
Total				3,062		

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: 20907001-TM62LS

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)	
Result: 6%	dF: 4 Result: 2.5333 Critical value: 9.4877 Inside Similar: Yes	Result: 0.3636	dF: 9 Result: 0.6417 Critical value: 0.5833 Outside Similar: Yes	Score: 124 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
	Cladosporium				53
	Penicillium/Aspergillus types				160
	Total				213

Client: Hygiene Technologies International, Inc.:
 Northern California
 C/O: Mr. Wes Frey
 Re: 20907001

Date of Receipt: 07-20-2009
 Date of Report: 07-20-2009

MoldSTAT™: Supplementary Statistical Spore Trap Report

Location: 20907001-TM63LS

% 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: 4 Result: 2.5333 Critical value: 9.4877 Inside Similar: Yes	Result: 0.2000	dF: 9 Result: 0.6917 Critical value: 0.5833 Outside Similar: Yes	Score: 108 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Basidiospores					160
Total					160

Location: 20907001-TM64LS

% 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: 4 Result: 2.5333 Critical value: 9.4877 Inside Similar: Yes	Result: 0.3636	dF: 9 Result: 0.8042 Critical value: 0.5833 Outside Similar: Yes	Score: 101 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Basidiospores					53
Cladosporium					53
Total					106

Location: 20907001-TM65LS

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)	
Result: 6%	dF: 4 Result: 2.5333 Critical value: 9.4877 Inside Similar: Yes	Result: 0.3636	dF: 9 Result: 0.7417 Critical value: 0.5833 Outside Similar: Yes	Score: 107 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Basidiospores					160
Penicillium/Aspergillus types					53
Total					213

Client: Hygiene Technologies International, Inc.:
 Northern California
 C/O: Mr. Wes Frey
 Re: 20907001

Date of Receipt: 07-20-2009
 Date of Report: 07-20-2009

MoldSCORE™: Spore Trap Report

Outdoor Sample: 20907001-TM61OUTLS

Fungi Identified	Outdoor sample spores/m3				Raw count	Spores/m3
	<100	1K	10K	>100K		
Generally able to grow indoors*						
Alternaria					2	27
Bipolaris/Drechslera group					ND	< 13
Chaetomium					3	40
Cladosporium					24	1,300
Curvularia					ND	< 13
Nigrospora					1	13
Penicillium/Aspergillus types†					5	270
Stachybotrys					ND	< 13
Torula					ND	< 13
Seldom found growing indoors**						
Ascospores††					3	160
Basidiospores††					15	800
Rusts					ND	< 13
Smuts, Periconia, Myxomycetes††					10	130
Total						2,740

Location: 20907001-TM62LS

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					1	53
Curvularia					ND	< 13
Nigrospora					ND	< 13
Penicillium/Aspergillus types†					3	160
Stachybotrys					ND	< 13
Torula					ND	< 13
Seldom found growing indoors**						
Ascospores††					ND	< 13
Basidiospores††					ND	< 13
Rusts					ND	< 13
Smuts, Periconia, Myxomycetes††					ND	< 13
Total						213

MoldSCORE‡			Score
100	200	300	
			100
			100
			100
			100
			100
			100
			122
			100
			100
Seldom found growing indoors**			
			100
			100
			100
			100
Final MoldSCORE			122

Client: Hygiene Technologies International, Inc.:
 Northern California
 C/O: Mr. Wes Frey
 Re: 20907001

Date of Receipt: 07-20-2009
 Date of Report: 07-20-2009

MoldSCORE™: Spore Trap Report

Location: 20907001-TM63LS

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
Penicillium/Aspergillus types†					ND	< 13				100
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
Seldom found growing indoors**										
Ascospores††					ND	< 13				100
Basidiospores††					3	160				112
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes††					ND	< 13				100
Total						160				Final MoldSCORE 112

Location: 20907001-TM64LS

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†					ND	< 13				100
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
Seldom found growing indoors**										
Ascospores††					ND	< 13				100
Basidiospores††					1	53				102
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes††					ND	< 13				100
Total						106				Final MoldSCORE 102

Client: Hygiene Technologies International, Inc.:
 Northern California
 C/O: Mr. Wes Frey
 Re: 20907001

Date of Receipt: 07-20-2009
 Date of Report: 07-20-2009

MoldSCORE™: Spore Trap Report

Location: 20907001-TM65LS

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
Penicillium/Aspergillus types†	█				1	53	█			105
Stachybotrys					ND	< 13	█			100
Torula					ND	< 13	█			100
Seldom found growing indoors**										
Ascospores††					ND	< 13	█			100
Basidiospores††	█				3	160	█			110
Rusts					ND	< 13	█			100
Smuts, Periconia, Myxomycetes††					ND	< 13	█			100
Total						213				Final MoldSCORE 110

Location: 20907001-TM66LS

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
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						N/A				Final MoldSCORE 100

Client: Hygiene Technologies International, Inc.:
Northern California
C/O: Mr. Wes Frey
Re: 20907001

Date of Receipt: 07-20-2009
Date of Report: 07-20-2009

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.

Client: Hygiene Technologies International, Inc.:
 Northern California
 C/O: Mr. Wes Frey
 Re: 20907001

Date of Receipt: 07-20-2009
 Date of Report: 07-20-2009

MoldSCORE™: Spore Trap Report

Outdoor Sample: 20907001-TM67OUTLS

Fungi Identified	Outdoor sample spores/m3				Raw count	Spores/m3
	<100	1K	10K	>100K		
Generally able to grow indoors*						
Alternaria	█				1	13
Bipolaris/Drechslera group					ND	< 13
Chaetomium	█				1	13
Cladosporium	█	█	█	█	20	1,100
Curvularia					ND	< 13
Nigrospora					ND	< 13
Penicillium/Aspergillus types†	█				3	160
Stachybotrys					ND	< 13
Torula					ND	< 13
Seldom found growing indoors**						
Ascospores††	█				2	110
Basidiospores††	█	█	█	█	30	1,600
Botrytis	█				1	13
Rusts	█				1	13
Smuts, Periconia, Myxomycetes††	█				3	40
Total						3,062

Location: 20907001-TM62LS

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	█				1	53
Curvularia					ND	< 13
Nigrospora					ND	< 13
Penicillium/Aspergillus types†	█				3	160
Stachybotrys					ND	< 13
Torula					ND	< 13
Seldom found growing indoors**						
Ascospores††					ND	< 13
Basidiospores††					ND	< 13
Rusts					ND	< 13
Smuts, Periconia, Myxomycetes††					ND	< 13
Total						213

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

Client: Hygiene Technologies International, Inc.:
 Northern California
 C/O: Mr. Wes Frey
 Re: 20907001

Date of Receipt: 07-20-2009
 Date of Report: 07-20-2009

MoldSCORE™: Spore Trap Report

Location: 20907001-TM63LS

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
Penicillium/Aspergillus types†					ND	< 13				100
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
Seldom found growing indoors**										
Ascospores††					ND	< 13				100
Basidiospores††					3	160				108
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes††					ND	< 13				100
Total						160				Final MoldSCORE 108

Location: 20907001-TM64LS

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†					ND	< 13				100
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††					ND	< 13				100
Total						106				Final MoldSCORE 101

Client: Hygiene Technologies International, Inc.:
 Northern California
 C/O: Mr. Wes Frey
 Re: 20907001

Date of Receipt: 07-20-2009
 Date of Report: 07-20-2009

MoldSCORE™: Spore Trap Report

Location: 20907001-TM65LS

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
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				105
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes††					ND	< 13				100
Total						213				Final MoldSCORE 107

Location: 20907001-TM66LS

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
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						N/A				Final MoldSCORE 100



EMLab P&K

Report for:

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

Regarding: Project: 20907001
 EML ID: 561977

Approved by:

Lab Manager
Malcolm Moody

Dates of Analysis:
Spore trap analysis: 07-20-2009

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: 20907001

Date of Receipt: 07-20-2009
Date of Report: 07-20-2009

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	20907001- TM81OUTLS		20907001- TM82LS		20907001- TM83LS		20907001- TM84OUTLS	
Comments (see below)	None		None		None		None	
Lab ID-Version‡:	2493009-1		2493010-1		2493011-1		2493012-1	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Alternaria	6	80					1	13
Arthrinium								
Ascospores*	6	320						
Aureobasidium								
Basidiospores*	23	1,200					17	910
Bipolaris/Drechslera group								
Botrytis							2	27
Chaetomium	3	40					3	40
Cladosporium	73	3,900	1	53	4	210	33	1,800
Curvularia								
Epicoccum								
Fusarium								
Myrothecium								
Nigrospora								
Oidium	7	93					3	40
Other brown	1	13						
Penicillium/Aspergillus types†	5	270	1	53			2	110
Pithomyces							1	13
Rusts*					1	13		
Smuts*, Periconia, Myxomycetes*	25	330			1	13	29	390
Stachybotrys								
Stemphylium	5	67						
Torula	1	13			1	13		
Ulocladium								
Background debris (1-4+)††	2+		1+		2+		2+	
Hyphal fragments/m3	150		< 13		< 13		160	
Pollen/m3	110		< 13		< 13		53	
Skin cells (1-4+)	< 1+		< 1+		1+		< 1+	
Sample volume (liters)	75		75		75		75	
§ TOTAL SPORE/m3		6,300		110		250		3,300

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.

§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.
TestAmerica Environmental Microbiology Laboratory, Inc.

Client: Hygiene Technologies International, Inc.:
 Northern California
 C/O: Mr. Wes Frey
 Re: 20907001

Date of Receipt: 07-20-2009
 Date of Report: 07-20-2009

MoldRANGE™: Extended Outdoor Comparison

Outdoor Location: 20907001-TM81OUTLS

Fungi Identified	Outdoor data	Typical Outdoor Data by Date†				Typical Outdoor Data by Location‡			
		Month: July				State: CA			
	spores/m3	low	med	high	freq %	low	med	high	freq %
Generally able to grow indoors*									
Alternaria	80	7	40	470	67	7	27	220	57
Bipolaris/Drechslera group	-	7	13	250	22	7	13	120	13
Chaetomium	40	7	13	120	16	7	13	120	19
Cladosporium	3,900	53	760	9,800	97	53	640	6,800	97
Curvularia	-	7	25	730	21	7	13	230	7
Nigrospora	-	7	13	170	14	7	13	170	8
Other brown	13	7	13	93	34	7	13	83	36
Penicillium/Aspergillus types	270	27	210	2,600	83	33	210	2,500	86
Pithomyces	-	7	14	570	17	7	13	120	4
Stachybotrys	-	7	13	370	4	7	13	290	5
Stemphylium	67	7	13	53	7	7	13	67	9
Torula	13	7	13	160	15	7	13	150	12
Seldom found growing indoors**									
Ascospores	320	13	210	6,700	83	13	110	1,900	71
Basidiospores	1,200	13	360	22,000	94	13	210	7,000	93
Botrytis	-	7	13	230	12	7	20	200	19
Oidium	93	7	13	250	19	7	13	190	20
Rusts	-	7	13	240	24	7	13	250	28
Smuts, Periconia, Myxomycetes	330	7	53	1,900	79	8	40	490	70
TOTAL SPORES/M3	6,326								

Client: Hygiene Technologies International, Inc.:
 Northern California
 C/O: Mr. Wes Frey
 Re: 20907001

Date of Receipt: 07-20-2009
 Date of Report: 07-20-2009

MoldRANGE™: Extended Outdoor Comparison

Outdoor Location: 20907001-TM84OUTLS

Fungi Identified	Outdoor data	Typical Outdoor Data by Date†				Typical Outdoor Data by Location‡			
		Month: July				State: CA			
	spores/m3	low	med	high	freq %	low	med	high	freq %
Generally able to grow indoors*									
Alternaria	13	7	40	470	67	7	27	220	57
Bipolaris/Drechslera group	-	7	13	250	22	7	13	120	13
Chaetomium	40	7	13	120	16	7	13	120	19
Cladosporium	1,800	53	760	9,800	97	53	640	6,800	97
Curvularia	-	7	25	730	21	7	13	230	7
Nigrospora	-	7	13	170	14	7	13	170	8
Other brown	-	7	13	93	34	7	13	83	36
Penicillium/Aspergillus types	110	27	210	2,600	83	33	210	2,500	86
Pithomyces	13	7	14	570	17	7	13	120	4
Stachybotrys	-	7	13	370	4	7	13	290	5
Stemphylium	-	7	13	53	7	7	13	67	9
Torula	-	7	13	160	15	7	13	150	12
Seldom found growing indoors**									
Ascospores	-	13	210	6,700	83	13	110	1,900	71
Basidiospores	910	13	360	22,000	94	13	210	7,000	93
Botrytis	27	7	13	230	12	7	20	200	19
Oidium	40	7	13	250	19	7	13	190	20
Rusts	-	7	13	240	24	7	13	250	28
Smuts, Periconia, Myxomycetes	390	7	53	1,900	79	8	40	490	70
TOTAL SPORES/M3	3,343								

Client: Hygiene Technologies International, Inc.:
Northern California
C/O: Mr. Wes Frey
Re: 20907001

Date of Receipt: 07-20-2009
Date of Report: 07-20-2009

MoldRANGE™: Extended Outdoor Comparison

† 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: 20907001

Date of Receipt: 07-20-2009
 Date of Report: 07-20-2009

MoldSTAT™: Supplementary Statistical Spore Trap Report

Outdoor Summary: 20907001-TM81OUTLS:

Species detected	Outdoor sample spores/m3				Typical outdoor ranges (North America)	Freq. %
	<100	1K	10K	>100K		
Alternaria					7 - 27 - 400	52
Ascospores					13 - 160 - 4,600	76
Basidiospores					13 - 320 - 15,000	91
Chaetomium					7 - 13 - 130	12
Cladosporium					27 - 510 - 8,900	93
Oidium					7 - 13 - 230	15
Other brown					7 - 13 - 110	32
Penicillium/Aspergillus types					27 - 210 - 2,500	80
Smuts, Periconia, Myxomycetes					7 - 40 - 840	69
Stemphylium					7 - 13 - 67	5
Torula					7 - 13 - 160	11
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: 20907001-TM82LS

% 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: 1 Result: 1.8000 Critical value: 3.8415 Inside Similar: Yes	Result: 0.3077	dF: 11 Result: 0.5773 Critical value: 0.5273 Outside Similar: Yes	Score: 108 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
	Cladosporium				
	Penicillium/Aspergillus types				
	Total				

Client: Hygiene Technologies International, Inc.:
 Northern California
 C/O: Mr. Wes Frey
 Re: 20907001

Date of Receipt: 07-20-2009
 Date of Report: 07-20-2009

MoldSTAT™: Supplementary Statistical Spore Trap Report

Location: 20907001-TM83LS

% 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: 1 Result: 1.8000 Critical value: 3.8415 Inside Similar: Yes	Result: 0.4000	dF: 12 Result: 0.2133 Critical value: 0.4965 Outside Similar: No	Score: 105 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Cladosporium					210
Rusts					13
Smuts, Periconia, Myxomycetes					13
Torula					13
Total					249

* 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: 20907001

Date of Receipt: 07-20-2009
 Date of Report: 07-20-2009

MoldSTAT™: Supplementary Statistical Spore Trap Report

Outdoor Summary: 20907001-TM84OUTLS:

Species detected	Outdoor sample spores/m3				Typical outdoor ranges (North America)	Freq. %
	<100	1K	10K	>100K		
Alternaria				13	7 - 27 - 400	52
Ascospores				ND	13 - 160 - 4,600	76
Basidiospores				910	13 - 320 - 15,000	91
Botrytis				27	7 - 20 - 230	11
Chaetomium				40	7 - 13 - 130	12
Cladosporium				1,800	27 - 510 - 8,900	93
Oidium				40	7 - 13 - 230	15
Penicillium/Aspergillus types				110	27 - 210 - 2,500	80
Pithomyces				13	7 - 13 - 500	12
Smuts, Periconia, Myxomycetes				390	7 - 40 - 840	69
Total				3,343		

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: 20907001-TM82LS

% 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: 1 Result: 1.8000 Critical value: 3.8415 Inside Similar: Yes	Result: 0.3636	dF: 9 Result: 0.6208 Critical value: 0.5833 Outside Similar: Yes	Score: 108 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
	Cladosporium				53
	Penicillium/Aspergillus types				53
	Total				106

Client: Hygiene Technologies International, Inc.:
 Northern California
 C/O: Mr. Wes Frey
 Re: 20907001

Date of Receipt: 07-20-2009
 Date of Report: 07-20-2009

MoldSTAT™: Supplementary Statistical Spore Trap Report

Location: 20907001-TM83LS

% 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: 1 Result: 1.8000 Critical value: 3.8415 Inside Similar: Yes	Result: 0.3077	dF: 11 Result: 0.1886 Critical value: 0.5273 Outside Similar: No	Score: 105 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Cladosporium					210
Rusts					13
Smuts, Periconia, Myxomycetes					13
Torula					13
Total					249

* 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: 20907001

Date of Receipt: 07-20-2009
 Date of Report: 07-20-2009

MoldSCORE™: Spore Trap Report

Outdoor Sample: 20907001-TM81OUTLS

Fungi Identified	Outdoor sample spores/m3				Raw count	Spores/m3
	<100	1K	10K	>100K		
Generally able to grow indoors*						
Alternaria					6	80
Bipolaris/Drechslera group					ND	< 13
Chaetomium					3	40
Cladosporium					73	3,900
Curvularia					ND	< 13
Nigrospora					ND	< 13
Other brown					1	13
Penicillium/Aspergillus types†					5	270
Stachybotrys					ND	< 13
Stemphylium					5	67
Torula					1	13
Seldom found growing indoors**						
Ascospores††					6	320
Basidiospores††					23	1,200
Oidium					7	93
Rusts					ND	< 13
Smuts, Periconia, Myxomycetes††					25	330
Total						6,326

Location: 20907001-TM82LS

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					1	53
Curvularia					ND	< 13
Nigrospora					ND	< 13
Penicillium/Aspergillus types†					1	53
Stachybotrys					ND	< 13
Torula					ND	< 13
Seldom found growing indoors**						
Ascospores††					ND	< 13
Basidiospores††					ND	< 13
Rusts					ND	< 13
Smuts, Periconia, Myxomycetes††					ND	< 13
Total						106

MoldSCORE‡		Score
100	200	
		100
		100
		100
		100
		100
		100
		108
		100
		100
		100
		100
		100
		100
Final MoldSCORE		108

Client: Hygiene Technologies International, Inc.:
 Northern California
 C/O: Mr. Wes Frey
 Re: 20907001

Date of Receipt: 07-20-2009
 Date of Report: 07-20-2009

MoldSCORE™: Spore Trap Report

Location: 20907001-TM83LS

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	█				4	210	█			104
Curvularia					ND	< 13	█			100
Nigrospora					ND	< 13	█			100
Penicillium/Aspergillus types†					ND	< 13	█			100
Stachybotrys					ND	< 13	█			100
Torula	█				1	13	█			105
Seldom found growing indoors**										
Ascospores††					ND	< 13	█			100
Basidiospores††					ND	< 13	█			100
Rusts	█				1	13	█			105
Smuts, Periconia, Myxomycetes††	█				1	13	█			100
Total						249				Final MoldSCORE 105

*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
 C/O: Mr. Wes Frey
 Re: 20907001

Date of Receipt: 07-20-2009
 Date of Report: 07-20-2009

MoldSCORE™: Spore Trap Report

Location: 20907001-TM83LS

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	█				4	210	█	█	█	105
Curvularia					ND	< 13	█	█	█	100
Nigrospora					ND	< 13	█	█	█	100
Penicillium/Aspergillus types†					ND	< 13	█	█	█	100
Stachybotrys					ND	< 13	█	█	█	100
Torula	█				1	13	█	█	█	105
Seldom found growing indoors**										
Ascospores††					ND	< 13	█	█	█	100
Basidiospores††					ND	< 13	█	█	█	100
Rusts	█				1	13	█	█	█	105
Smuts, Periconia, Myxomycetes††	█				1	13	█	█	█	100
Total						249	Final MoldSCORE 105			

*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: 20907001
 EML ID: 561987

Approved by:

Lab Manager
Malcolm Moody

Dates of Analysis:
Spore trap analysis: 07-20-2009

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: 20907001

Date of Sampling: 07-19-2009
Date of Receipt: 07-20-2009
Date of Report: 07-20-2009

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	20907001- TM301OUTWF		20907001- TM302WF		20907001- TM303WF		20907001- TM304WF	
Comments (see below)	A		None		None		None	
Lab ID-Version‡:	2492998-1		2492999-1		2493000-1		2493001-1	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Alternaria	4	53					2	27
Arthrinium								
Ascospores*	2	110					2	110
Aureobasidium								
Basidiospores*	30	1,600	2	110			7	370
Bipolaris/Drechslera group	1	13						
Botrytis								
Chaetomium								
Cladosporium	64	3,400	2	110	1	53	2	110
Curvularia								
Epicoccum							1	13
Fusarium								
Myrothecium								
Nigrospora								
Oidium	1	13						
Other brown							2	27
Penicillium/Aspergillus types†	31	570					1	53
Pithomyces								
Rusts*							2	27
Smuts*, Periconia, Myxomycetes*	17	230	2	27			5	67
Stachybotrys								
Stemphylium								
Torula							1	13
Ulocladium								
Zygomycetes								
Background debris (1-4+)††	2+		2+		1+		3+	
Hyphal fragments/m3	170		< 13		< 13		53	
Pollen/m3	67		< 13		< 13		93	
Skin cells (1-4+)	< 1+		1+		< 1+		2+	
Sample volume (liters)	75		75		75		75	
§ TOTAL SPORE/m3		6,000		240		53		810

Comments: A) 27 of the 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.

§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.
TestAmerica Environmental Microbiology Laboratory, Inc.

Client: Hygiene Technologies International, Inc.:
 Northern California
 C/O: Mr. Wes Frey
 Re: 20907001

Date of Sampling: 07-19-2009
 Date of Receipt: 07-20-2009
 Date of Report: 07-20-2009

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	20907001-TM305WF		20907001-TM306OUTWF	
Comments (see below)	None		None	
Lab ID-Version‡:	2493002-1		2493003-1	
	raw ct.	spores/m3	raw ct.	spores/m3
Alternaria	1	13	2	27
Arthrinium				
Ascospores*	1	53	3	160
Aureobasidium				
Basidiospores*	3	160	19	1,000
Bipolaris/Drechslera group				
Botrytis				
Chaetomium				
Cladosporium	6	320	57	3,000
Curvularia				
Epicoccum				
Fusarium				
Myrothecium				
Nigrospora			1	13
Oidium			1	13
Other brown				
Other colorless				
Penicillium/Aspergillus types†			8	430
Pithomyces				
Rusts*	2	27	3	40
Smuts*, Periconia, Myxomycetes*	3	40	19	250
Stachybotrys				
Stemphylium			2	27
Torula				
Ulocladium				
Zygomycetes				
Background debris (1-4+)††	4+		3+	
Hyphal fragments/m3	80		200	
Pollen/m3	< 13		67	
Skin cells (1-4+)	2+		< 1+	
Sample volume (liters)	75		75	
§ TOTAL SPORE/m3		610		5,000

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.

§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.
 TestAmerica Environmental Microbiology Laboratory, Inc.

Client: Hygiene Technologies International, Inc.:
Northern California
C/O: Mr. Wes Frey
Re: 20907001

Date of Sampling: 07-19-2009
Date of Receipt: 07-20-2009
Date of Report: 07-20-2009

MoldRANGE™: Extended Outdoor Comparison

Outdoor Location: 20907001-TM301OUTWF

Fungi Identified	Outdoor data	Typical Outdoor Data by Date†				Typical Outdoor Data by Location‡			
		Month: July				State: CA			
	spores/m3	low	med	high	freq %	low	med	high	freq %
Generally able to grow indoors*									
Alternaria	53	7	40	470	67	7	27	220	57
Bipolaris/Drechslera group	13	7	13	250	22	7	13	120	13
Chaetomium	-	7	13	120	16	7	13	120	19
Cladosporium	3,400	53	760	9,800	97	53	640	6,800	97
Curvularia	-	7	25	730	21	7	13	230	7
Nigrospora	-	7	13	170	14	7	13	170	8
Penicillium/Aspergillus types	570	27	210	2,600	83	33	210	2,500	86
Stachybotrys	-	7	13	370	4	7	13	290	5
Stemphylium	-	7	13	53	7	7	13	67	9
Torula	-	7	13	160	15	7	13	150	12
Seldom found growing indoors**									
Ascospores	110	13	210	6,700	83	13	110	1,900	71
Basidiospores	1,600	13	360	22,000	94	13	210	7,000	93
Oidium	13	7	13	250	19	7	13	190	20
Rusts	-	7	13	240	24	7	13	250	28
Smuts, Periconia, Myxomycetes	230	7	53	1,900	79	8	40	490	70
TOTAL SPORES/M3	5,989								

† 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: 20907001

Date of Sampling: 07-19-2009
Date of Receipt: 07-20-2009
Date of Report: 07-20-2009

MoldRANGE™: Extended Outdoor Comparison

Outdoor Location: 20907001-TM306OUTWF

Fungi Identified	Outdoor data	Typical Outdoor Data by Date†				Typical Outdoor Data by Location‡			
		Month: July				State: CA			
	spores/m3	low	med	high	freq %	low	med	high	freq %
Generally able to grow indoors*									
Alternaria	27	7	40	470	67	7	27	220	57
Bipolaris/Drechslera group	-	7	13	250	22	7	13	120	13
Chaetomium	-	7	13	120	16	7	13	120	19
Cladosporium	3,000	53	760	9,800	97	53	640	6,800	97
Curvularia	-	7	25	730	21	7	13	230	7
Nigrospora	13	7	13	170	14	7	13	170	8
Penicillium/Aspergillus types	430	27	210	2,600	83	33	210	2,500	86
Stachybotrys	-	7	13	370	4	7	13	290	5
Stemphylium	27	7	13	53	7	7	13	67	9
Torula	-	7	13	160	15	7	13	150	12
Seldom found growing indoors**									
Ascospores	160	13	210	6,700	83	13	110	1,900	71
Basidiospores	1,000	13	360	22,000	94	13	210	7,000	93
Oidium	13	7	13	250	19	7	13	190	20
Rusts	40	7	13	240	24	7	13	250	28
Smuts, Periconia, Myxomycetes	250	7	53	1,900	79	8	40	490	70
TOTAL SPORES/M3	4,960								

† 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: 20907001

Date of Sampling: 07-19-2009
 Date of Receipt: 07-20-2009
 Date of Report: 07-20-2009

MoldSTAT™: Supplementary Statistical Spore Trap Report

Outdoor Summary: 20907001-TM301OUTWF:

Species detected	Outdoor sample spores/m3				Typical outdoor ranges (North America)	Freq. %
	<100	1K	10K	>100K		
Alternaria				53	7 - 27 - 400	52
Ascospores				110	13 - 160 - 4,600	76
Basidiospores				1,600	13 - 320 - 15,000	91
Bipolaris/Drechslera group				13	7 - 13 - 200	18
Cladosporium				3,400	27 - 510 - 8,900	93
Oidium				13	7 - 13 - 230	15
Penicillium/Aspergillus types				570	27 - 210 - 2,500	80
Smuts, Periconia, Myxomycetes				230	7 - 40 - 840	69
Total				5,989		

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: 20907001-TM302WF

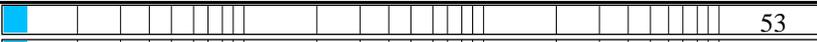
% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)		
Result: 4%	dF: 3 Result: 18.0900 Critical value: 7.8147 Inside Similar: No	Result: 0.5455	dF: 8 Result: 0.8095 Critical value: 0.6190 Outside Similar: Yes	Score: 105 Result: Low		
Species Detected		Spores/m3				
		<100	1K	10K	>100K	
	Basidiospores					110
	Cladosporium					110
	Smuts, Periconia, Myxomycetes					27
	Total					247

Client: Hygiene Technologies International, Inc.:
 Northern California
 C/O: Mr. Wes Frey
 Re: 20907001

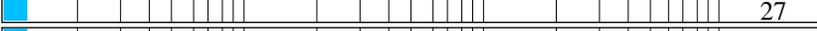
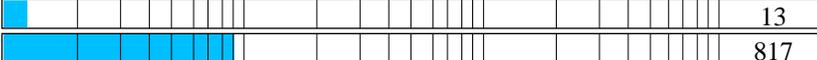
Date of Sampling: 07-19-2009
 Date of Receipt: 07-20-2009
 Date of Report: 07-20-2009

MoldSTAT™: Supplementary Statistical Spore Trap Report

Location: 20907001-TM303WF

% 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: 3 Result: 18.0900 Critical value: 7.8147 Inside Similar: No	Result: 0.2222	dF: 8 Result: 0.6726 Critical value: 0.6190 Outside Similar: Yes	Score: 101 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Cladosporium					53
Total					53

Location: 20907001-TM304WF

% 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: 3 Result: 18.0900 Critical value: 7.8147 Inside Similar: No	Result: 0.6667	dF: 12 Result: 0.7448 Critical value: 0.4965 Outside Similar: Yes	Score: 134 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Alternaria					27
Ascospores					110
Basidiospores					370
Cladosporium					110
Epicoccum					13
Other brown					27
Penicillium/Aspergillus types					53
Rusts					27
Smuts, Periconia, Myxomycetes					67
Torula					13
Total					817

Client: Hygiene Technologies International, Inc.:
 Northern California
 C/O: Mr. Wes Frey
 Re: 20907001

Date of Sampling: 07-19-2009
 Date of Receipt: 07-20-2009
 Date of Report: 07-20-2009

MoldSTAT™: Supplementary Statistical Spore Trap Report

Location: 20907001-TM305WF

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)	
Result: 10%	dF: 3 Result: 18.0900 Critical value: 7.8147 Inside Similar: No	Result: 0.7143	dF: 9 Result: 0.6208 Critical value: 0.5833 Outside Similar: Yes	Score: 106 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Alternaria					13
Ascospores					53
Basidiospores					160
Cladosporium					320
Rusts					27
Smuts, Periconia, Myxomycetes					40
Total					613

* 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: 20907001

Date of Sampling: 07-19-2009
 Date of Receipt: 07-20-2009
 Date of Report: 07-20-2009

MoldSTAT™: Supplementary Statistical Spore Trap Report

Outdoor Summary: 20907001-TM306OUTWF:

Species detected	Outdoor sample spores/m3				Typical outdoor ranges (North America)	Freq. %
	<100	1K	10K	>100K		
Alternaria				27	7 - 27 - 400	52
Ascospores				160	13 - 160 - 4,600	76
Basidiospores				1,000	13 - 320 - 15,000	91
Cladosporium				3,000	27 - 510 - 8,900	93
Nigrospora				13	7 - 13 - 210	15
Oidium				13	7 - 13 - 230	15
Penicillium/Aspergillus types				430	27 - 210 - 2,500	80
Rusts				40	7 - 15 - 310	22
Smuts, Periconia, Myxomycetes				250	7 - 40 - 840	69
Stemphylium				27	7 - 13 - 67	5
Total				4,960		

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: 20907001-TM302WF

% 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: 3 Result: 18.0900 Critical value: 7.8147 Inside Similar: No	Result: 0.4615	dF: 10 Result: 0.7848 Critical value: 0.5515 Outside Similar: Yes	Score: 106 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
	Basidiospores				110
	Cladosporium				110
	Smuts, Periconia, Myxomycetes				27
	Total				247

Client: Hygiene Technologies International, Inc.:
 Northern California
 C/O: Mr. Wes Frey
 Re: 20907001

Date of Sampling: 07-19-2009
 Date of Receipt: 07-20-2009
 Date of Report: 07-20-2009

MoldSTAT™: Supplementary Statistical Spore Trap Report

Location: 20907001-TM303WF

% 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: 3 Result: 18.0900 Critical value: 7.8147 Inside Similar: No	Result: 0.1818	dF: 10 Result: 0.6424 Critical value: 0.5515 Outside Similar: Yes	Score: 101 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Cladosporium					53
Total					53

Location: 20907001-TM304WF

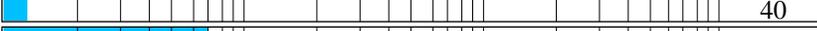
% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)	
Result: 16%	dF: 3 Result: 18.0900 Critical value: 7.8147 Inside Similar: No	Result: 0.7000	dF: 13 Result: 0.7665 Critical value: 0.4780 Outside Similar: Yes	Score: 133 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Alternaria					27
Ascospores					110
Basidiospores					370
Cladosporium					110
Epicoccum					13
Other brown					27
Penicillium/Aspergillus types					53
Rusts					27
Smuts, Periconia, Myxomycetes					67
Torula					13
Total					817

Client: Hygiene Technologies International, Inc.:
 Northern California
 C/O: Mr. Wes Frey
 Re: 20907001

Date of Sampling: 07-19-2009
 Date of Receipt: 07-20-2009
 Date of Report: 07-20-2009

MoldSTAT™: Supplementary Statistical Spore Trap Report

Location: 20907001-TM305WF

% 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: 3 Result: 18.0900 Critical value: 7.8147 Inside Similar: No	Result: 0.7500	dF: 10 Result: 0.7545 Critical value: 0.5515 Outside Similar: Yes	Score: 106 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Alternaria					
Ascospores					
Basidiospores					
Cladosporium					
Rusts					
Smuts, Periconia, Myxomycetes					
Total					

* 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: 20907001

Date of Sampling: 07-19-2009
 Date of Receipt: 07-20-2009
 Date of Report: 07-20-2009

MoldSCORE™: Spore Trap Report

Outdoor Sample: 20907001-TM301OUTWF

Fungi Identified	Outdoor sample spores/m3				Raw count	Spores/m3
	<100	1K	10K	>100K		
Generally able to grow indoors*						
Alternaria					4	53
Bipolaris/Drechslera group					1	13
Chaetomium					ND	< 13
Cladosporium					64	3,400
Curvularia					ND	< 13
Nigrospora					ND	< 13
Penicillium/Aspergillus types†					31	570
Stachybotrys					ND	< 13
Torula					ND	< 13
Seldom found growing indoors**						
Ascospores††					2	110
Basidiospores††					30	1,600
Oidium					1	13
Rusts					ND	< 13
Smuts, Periconia, Myxomycetes††					17	230
Total						5,989

Location: 20907001-TM302WF

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					2	110
Curvularia					ND	< 13
Nigrospora					ND	< 13
Penicillium/Aspergillus types†					ND	< 13
Stachybotrys					ND	< 13
Torula					ND	< 13
Seldom found growing indoors**						
Ascospores††					ND	< 13
Basidiospores††					2	110
Rusts					ND	< 13
Smuts, Periconia, Myxomycetes††					2	27
Total						247

MoldSCORE‡			
100	200	300	Score
			100
			100
			100
			100
			100
			100
			100
			100
			100
			100
			105
			100
			104
Final MoldSCORE			105

Client: Hygiene Technologies International, Inc.:
 Northern California
 C/O: Mr. Wes Frey
 Re: 20907001

Date of Sampling: 07-19-2009
 Date of Receipt: 07-20-2009
 Date of Report: 07-20-2009

MoldSCORE™: Spore Trap Report

Location: 20907001-TM303WF

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†					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 101			

Location: 20907001-TM304WF

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	█				2	27	108			
Bipolaris/Drechslera group					ND	< 13	100			
Chaetomium					ND	< 13	100			
Cladosporium	█				2	110	100			
Curvularia					ND	< 13	100			
Epicoccum	█				1	13	105			
Nigrospora					ND	< 13	100			
Other brown	█				2	27	111			
Penicillium/Aspergillus types†	█				1	53	100			
Stachybotrys					ND	< 13	100			
Torula	█				1	13	105			
Seldom found growing indoors**										
Ascospores‡‡	█				2	110	138			
Basidiospores‡‡	█	█			7	370	116			
Rusts	█				2	27	111			
Smuts, Periconia, Myxomycetes‡‡	█				5	67	107			
Total						817	Final MoldSCORE 134			

Client: Hygiene Technologies International, Inc.:
 Northern California
 C/O: Mr. Wes Frey
 Re: 20907001

Date of Sampling: 07-19-2009
 Date of Receipt: 07-20-2009
 Date of Report: 07-20-2009

MoldSCORE™: Spore Trap Report

Location: 20907001-TM305WF

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					6	320				
Curvularia					ND	< 13				
Nigrospora					ND	< 13				
Penicillium/Aspergillus types†					ND	< 13				
Stachybotrys					ND	< 13				
Torula					ND	< 13				
Seldom found growing indoors**										
Ascospores††					1	53				
Basidiospores††					3	160				
Rusts					2	27				
Smuts, Periconia, Myxomycetes††					3	40				
Total						613	Final MoldSCORE 106			

*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
 C/O: Mr. Wes Frey
 Re: 20907001

Date of Sampling: 07-19-2009
 Date of Receipt: 07-20-2009
 Date of Report: 07-20-2009

MoldSCORE™: Spore Trap Report

Location: 20907001-TM303WF

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†					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 101			

Location: 20907001-TM304WF

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	█				2	27	█			109
Bipolaris/Drechslera group					ND	< 13	█			100
Chaetomium					ND	< 13	█			100
Cladosporium	█				2	110	█			100
Curvularia					ND	< 13	█			100
Epicoccum	█				1	13	█			105
Nigrospora					ND	< 13	█			100
Other brown	█				2	27	█			111
Penicillium/Aspergillus types†	█				1	53	█			100
Stachybotrys					ND	< 13	█			100
Torula	█				1	13	█			105
Seldom found growing indoors**										
Ascospores††	█				2	110	█	█		133
Basidiospores††	█	█			7	370	█	█		122
Rusts	█				2	27	█			108
Smuts, Periconia, Myxomycetes††	█				5	67	█			105
Total						817	Final MoldSCORE 133			

Client: Hygiene Technologies International, Inc.:
 Northern California
 C/O: Mr. Wes Frey
 Re: 20907001

Date of Sampling: 07-19-2009
 Date of Receipt: 07-20-2009
 Date of Report: 07-20-2009

MoldSCORE™: Spore Trap Report

Location: 20907001-TM305WF

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					6	320				
Curvularia					ND	< 13				
Nigrospora					ND	< 13				
Penicillium/Aspergillus types†					ND	< 13				
Stachybotrys					ND	< 13				
Torula					ND	< 13				
Seldom found growing indoors**										
Ascospores††					1	53				
Basidiospores††					3	160				
Rusts					2	27				
Smuts, Periconia, Myxomycetes††					3	40				
Total						613	Final MoldSCORE 106			

*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.

